PROCEEDINGS

7th INTERNATIONAL SCIENTIFIC FORUM, ISF 2017,

7-9 February, Oxford, UK

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PROCEEDINGS

7th INTERNATIONAL SCIENTIFIC FORUM, ISF 2017,

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Table of Contents

Characteristics of the Market Value of Undeveloped Land in Health Resort Municipality of Kolobrzeg......1 Magdalena Lazarek-Janowska Agnieszka Czajka

Problems with Adaptation of Post-Accession Polish Migrants in Countries of the EU.....14 *Hab Czop Edyta*

Business Clusters and Innovativeness of the EU Economies......44 Szczepan Figiel Dominika Kuberska

Neets Phenomenon of Young Romanians Caught Between Never Endless Educational Reform and the Impenetrable Labor Market.....91 *Andreea Mihaela Niță*

Estonian Health Care System: Accomplishments and Challenges.....106 Sandra Victoria Nei

Sewage Sludge Composting and Pharmaceuticals......114 *Egge Haiba Lembit Nei*

"Please, Sir, I Want Some More.": (A Case Study of Child Mortality of Palghar District, State of Maharashtra, India, from August 2014 – October 2016).....122 Sharmishtha L. Matkar

Social Media Portals as a Modern Form of Social Communication: An Exemplification of Polish Mediasphere......147 Jaroslaw Kinal Michal Skora

Women in the Social Policy of the Second Polish Republic.....155 *Pawel Grata*

To Save Our Species But *How* **Do We Make Collective Decisions**?.....163 *Peter Emerson*

The Benefits Of Being Shy	
Fran Apprich	

Infrastructural Aspects of Intensification of Entrepreneurial Activity as A Vector of Modern Global Economy Development......203 *Tatiana Litvinova*

Development of Modern World Economy Through The Prism of "**Underdevelopment Whirlpools**"......226 *Elena Popkova*

Re-Industrialization of Europe: Industry4.0 and the Future of Work......249 *Magdalena Kotynkova*

The Role of Local Government in Supporting Ownership Transformation at Enterprises in Poland After 1990......270 *Slawomir Kamosiński*

Modelling Religion and Nationalism on a Godly-Civil Continuum.....290 *Eyal Lewin Etta Bick* **The Opportunity Cost in Health Care: Low Cost High Value......322** Elena Querci Patrizia Gazzola

Environmental Survey and Photographic Documentation of a Forest Edge Hamlet Situated in Buxa Tiger Reserve, India......336 *Sayan Bhattacharya*

The Connection Between the Quality of Life and Sustainable Ecological Development......**361** *Patrizia Gazzola Elena Querci*

Future Learning Environments for Tomorrow's Schools......385 Shimon Amar Netanel Bar David

Fiscal Responsibility in Autonomous Districts: New Profiles of Representation in the Case of the Special Regions of Italy......399 *Camilla Buzzacchi*

Confining Concrete Columns with FRP Materials	464
Sultan Erdemli Gunaslan	
Abdulhalim Karasin	

The Determinants of Efficiency in Turkish Banking Sector After Global Finacial Crisis......471 *Ferda Keskin Onen İbrahim Tunik*

Flood Routing Model Using Genetic Expression Programing......481 Onen Fevzi Ok Oral Safak

Mad Users' World - Paradox of Users and Polluters!! - Make A Breakthrough in Environmental Accounting......491 *M. Muninarayanappa L. Augustin Amaladas*

The System of Economic-Statistical Indicators of the Analysis of Foreign Economic Relations of the Country: A Case Study on Syria......506 Al Humssi Ahmad

Mhd Shaker Zeitoun

Environmental Disclosures and Size of Selected Indian Firms......516 Nidhi Sharma Sahore Anshul Verma

Work Stress Management in Constructions Industry and the Contractors' Commitment Level with the Labor Law......547 *Salloom, A., Al-Juboori Mohammad K. Alazemi*

Managing Cultural Diversity: The Case of Small & Medium Tourism Enterprises (SMTE)......563 Sinno Nadine

Law Enforcement and Investigation of Cybercrime in Albania......576 Desara Dushi Nertil Bërdufi

Key Conceptual a	and	Practical	Considerations	of	LTA	in	Term	of
LTS	••••			• • • • •			6	602
Laith H. Al-ossmi								
Hanadi F. AL-Mima	r							

Effect of the Economic Crisis on Housing Market in Poland......654 Joanna Cymerman Wojciech Cymerman

Legal	and	Social	Aspects	of	Employment	of	Disabled	Persons	in
Polanc	ł	•••••			•••••		• • • • • • • • • • • • • • • • • • • •	6	63
Jarosla	aw Ki	nal							
Michal	l Skor	a							

Characteristics of the Market Value of Undeveloped Land in Health Resort Municipality of Kolobrzeg

Magdalena Lazarek-Janowska, PhD The West Pomeranian Business School, Szczecin, Poland Agnieszka Czajka, MScEng Koszalin University of Technology, Poland

Abstract

The article presents a statistical analysis of selected properties of undeveloped real estate market in the municipality of Kolobrzeg. The municipality of Kolobrzeg is located in the West Pomeranian Vivodeship in the north-western part of Poland. Municipality of Kolobrzeg is mainly a health resort region utilising natural resources. The study has been conducted within the administrative boundaries of the municipality of Kolobrzeg between 2008-2014. The results of the study were examined using the multiple regression analysis method. The following attributes of the real estates were taken into consideration when conducting the aforementioned analysis: the price, size, location and environmental conditions. The analysis presented in this article is just a portion of a larger scale research conducted by the authors which will further be expanded upon.

Keywords: The value of real estate, land properties, the municipality of Kolobrzeg

Introduction

The real estate market just like any other market requires a thorough statistical analysis which may provide valuable data upon which the process of property valuation can be greatly simplified. According to Kalkowski L. who has conducted an analysis of the available estate in Poland allocated for the real estate market: "given the significance of acquired data such an important segment of the capital market which is the real estate market should be routinely analysed by the Central Statistical Office." (Kalkowski, 2001). The following article presents an analysis of the undeveloped real estate market in the municipality of Kolobrzeg.



Pic. 1. The administrative boundaries of the municipality of Kolobrzeg

Source: worldmap.pl/polska/ (05.01.2017)

The municipality of Kolobrzeg is an administrative region located within the borders of the Kolobrzeg county and is situated in the Western Pomeranian Voivodeship in north-western Poland. The municipality covers 144.75 square kilometres and is consisted of about 30 villages and settlements. Some of these settlements such as Grzybowo or Dzwirzyno are conveniently situated near the Baltic Sea thus giving them the status of health resorts.

The land real estates share many common characteristics. The literature regarding the subject identifies the following: physical, economical, institutionally legal. The physical characteristics include: the complexity of the physical stability of the site, stability over time, diversity, indivisibility. Among the economic characteristics the following can be identified: scarcity, location, interdependence, high capital intensity, low liquidity of real estate, the ability to generate profit, the ability to meet specific needs.

The characteristics of an undeveloped real estate The concept of property is regulated by the law. According to art. 46 of the Civil Code the real estate consists of parts of the earth's surface which are separate property (land), as well as buildings permanently connected with the ground or parts of such buildings, which under the specific provisions constitute to be separate from the land. A detailed definite one of the term real estate property can be found in the Real Estate Management Act, according to which the property is defined as the ground with all that comes connected with it in a permanent manner, with the exception of buildings and premises that are separate property (Act, 21.08.1997).

The land real estates share many common characteristics. The literature regarding the subject identifies the following: physical, economical, institutionally legal (Kucharska-Stasiak, 1999). The physical characteristics include: the complexity of the physical stability of the site, stability over time, diversity, indivisibility. Among the economic characteristics the

following can be identified: scarcity, location, interdependence, high capital intensity, low liquidity of real estate, the ability to generate profit, the ability to meet specific needs (Pawlikowska-Piechota, 1999).

Sales growth of the real estate plots in the municipality of Kołobrzeg

The number of transactions concluded during the period indicated a wide variation. Since 2008 a significant increase in the number of transactions of sale and purchase of land in the municipality of Kolobrzeg was observed. This trend continued well into 2012 after which a decline in the number of transactions, (approximately 10% decrease) was observed. The period between 2008 and 2012 was one in which the real estate market of undeveloped land concluded the largest number of transactions. The above was generally consistent with the predominant trend observed in Poland (Gierałtowska, Putek-Szelag, 2012). During this period the transaction prices of real estate plots in most Polish cities fell which significantly increased the number of finalised transactions. Since 2014 an overall increase in agricultural land prices has been noted (Dz.U.poz. 585, T.1). The main cause of that increase was an introduction of the legal act limiting sales of agricultural land which resulted in fewer transactions finalised.

Year	Number of transactions	Acreage (ha)		
2014	78	270,21		
2013	87	161,09		
2012	104	191,52		
2011	119	157,48		
2010	121	561,62		
2009	132	151,96		
2008	39	94,68		
Średnia	85	198,57		
	Source: own			

able 1.	A total number of finalised transaction and an averaged acreage of plot sold in the	
	municipality of Kolobrzeg between 2008-2014	

The structure of transactions

The analysis of transactions is presented taking into consideration the fact that there are 8 districts belonging to the municipality of Kolobrzeg: Budzistowo, Dzwirzyno, Grzybowo, Korzystno, Niekanin, Nowogardek, Obroty, Zieleniewo. As seen in table 2. the average plot prices in the area of Grzybowo and Dźwirzyno were much higher than in other districts. Within the analysed period the average price observed within those districts increased, peaking at 190%.

In conclusion and according to the analysed data the average asking price for the plot of land rises with the increased proximity to the shoreline and vice versa.

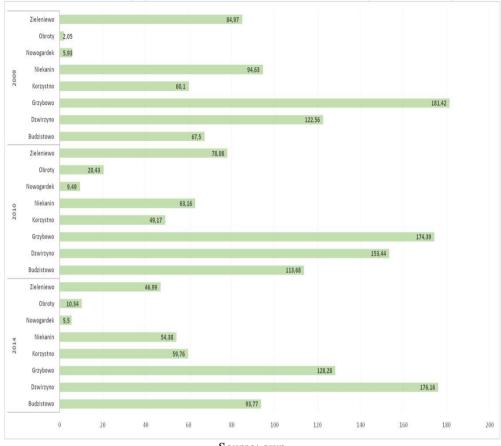


Table 2. Average price / m2 (PLN) in the within the municipality Kolobrzeg

Source: own

Conclusion

The results presented show the situation prevailing in the real estate market in the municipality of Kolobrzeg in the years 2008-2014. The study allows the following conclusions:

1. The property undeveloped land located in the immediate location of the Baltic Sea are characteristic by a higher price transaction, despite this fact does not decrease the number of transactions in this within,

2. Prices transactions more distant from the coastline are significantly lower, up to 190%

3. The real estate market of undeveloped land on the area of the municipality Kolobrzeg is characteristic by a mean increase in the number of transactions in the period from 2009 to 2012, which is identical to the situation prevailing in Poland. After this period slowed down.

4. The total area of land sold every year is variable, equivalent to the situation in the country, depending on the legislative power. The analysis shows that the market for undeveloped land in the municipality of Kolobrzeg

is characterised by frequent fluctuations and since 2012 the number of transactions has been steadily decreasing. The prices of land per square meter of real estate situated in direct line of the Baltic Sea - such as in Dzwirzyno and Grzybowo - are so high due to the fact that these settlements' main source of income is tourist traffic. The major investments made towards development of tourist accommodations such as hotels and resorts has been the major factor for the increase of the prices of real estate within that region.

References:

Burinskiene M., Rudzkiene V., Venckauskaite J.: Models of factors Influencing the real estate price. Environmental engineering The 8th International Conference 19-20 May 2011, Vilnius, Lithuania

Cymerman R(red.).,Wycena nieruchomości ochrona środowiska а (ekologiczne uwarunkowania wyceny nieruchomości), Educaterra Sp.z o.o., Olsztyn 2000.

Czyzycki R., Metody ilościowe w analizie wartości rynkowej nieruchomości gruntowych w Polsce, Szczecin 2004.

Gierałtowska, E. Putek-Szela g ,Rynek nieruchomosci komercyjnych w Szczecinie – analiza cen transakcyjnych w latach 2009-2012, Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania nr. 31, Szczecin. Kalkowski L., Rynek nieruchomości w Polsce, Warszawa 2001, Twigger.

Kucharska-Stasiak E., Nieruchomość a rynek, PWN, Warszawa 1999.

Pawlikowska-Piechotka A(Por.), Gospodarka nieruchomościami, Polskie Centrum Budownictwa Sp. z.o.o, Warszawa 1999. Ustawa z dnia 21 sierpnia 1997 r. o gospodarce nieruchomościami (Dz. U.

1997 nr 115 poz.741, z pozn. zm.).

Ustawa z dnia 14 kwietnia 2016 r. o wstrzymaniu sprzedaży nieruchomości Zasobu Własności Rolnej Skarbu Państwa oraz zmienia niektórych ustaw (Dz.U. Poz 585. T.1).

Ustawa z dnia 23 kwietnia 1964 r. Kodeks cywilny (t.j. Dz.U. z 2016 r. poz. 380, z poźn. zm.)

Advertising for Natural Beauty Products: The Shift in Cosmetic Industry

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Abstract

The following article aims to present and give an overview on the role played by advertisement for natural beauty products within the current social, environmental, and economic environment, taking into account the existing mechanism that regulates the current market and the way that the consumer is informed about specific products. Nowadays, the cosmetic industry returns to the "less is more" concept. As people have become increasing informed about potentially harmful chemicals in beauty products, they are learning to read labels of their skin-care products and cosmetics. Moreover, they have begun to recognize those substances less friendly to health and the environment, becoming more aware of what to avoid.

Keywords: Advertising, cosmetics, organic, beauty, marketing

Introduction

The desire to achieve beauty and to have a longer lifespan has always been a natural tendency that both women and men possess. The main reasons for this fact, as proven by research in diverse fields such as sociology, archeology etc., are rotted in environmental conditions, lifestyle, mentality, and especially the instinct of self-preservation. Throughout the history of beauty and of cosmetology, there has been an essential relationship between different people and nature and their unlimited resourcefulness to find cures, lotions, potions, and paints for both health and esthetic purposes. Over time, women's interest for beauty became more obvious, wanting to perfect themselves in order to be admired both by the opposite sex and fellow women. Beauty was a treasured concept in art, history, and literature, and many famous figures stressed with their thoughts and work the importance of beauty in every woman's life. Madame de Stael, who was appreciated by her contemporaries for her knowledge and wits, once stated that she was willing to give half of her knowledge, in exchange for a beautiful countenance. As technology evolved, cosmetics and medicine began to share purposes – like health, youthfulness, and beauty – which made them more accessible, highlighting a social progress of real importance. Chemistry also greatly contributed to supporting the cosmetics industry, as it is known today. However the whole process marked a slow removal and replacement of what was natural found in the cosmetics. While the present cosmetics industry gently rose, the marketing strategy revolving around such products slowly gained complexity through diverse branding, advertising, and communication strategies.

In an era of accelerating economic globalization, the importance of advertising increases as brand visibility requires promotional campaigns that are increasingly complicated to keep up with the new demands of the consumers. Advertising is one of the most visible forms of commercial communication; and taking this label into account, it is also likely to receive public criticism. As much as advertisements can attract and fascinate, they equally can be disliked and can even offend the public. Contemporary reality is flooded with advertising messages – whether it comes from traditional media (television, radio, film, and print media) or the new media form, whose content is available on the Internet through blogs, websites, and social media.

I.

The beauty products industry is surely one of the most prolific industries; in 2015 the industry generated \$56.2 billion in the United States, and in Europe the cosmetics market valued approximately 69 billion Euros in 2014. While the beauty industry's sales rise, so does the awareness of the consumer, paying more attention to the ingredients, natural formulas, and competitive performances in comparison to the "conventional" beauty products. Traditional, conventional cosmetics are based on synthetic ingredients that in other words, are saline substances that tend to harden the skin, whereas natural cosmetics with their organic ingredients tend to maintain the skin within its better physiological state. Real luxury is now represented by organic products manufactured in a sustainable (environmentally conscious) manner. Through the way that the niche product is displayed on the shelf and the advertisement is prepared, the present impact on the beauty market becomes obvious. The natural, original is turned into a public statement and many young people are willing to assume the glamour of the organic, but as soon as a new trend rises, new challenges appear among brands, with some of them resorting to misleading advertisements and fake "natural" cosmetics in order to beat their competitors. The consumer invests in the myth of status, in the impression that those around have of him, based on his purchases. Berger said in his collection of essays, *Ways of Seeing*, that advertising "proposes to each of us, that we transform ourselves, or our lives, by buying something more. The more, it proposes will make us in some way richer – even though we will be poorer by having spent our money" (Berger, 1972, p. 131). Also Berger stated that the true meaning of the word glamour is "the state of being envied" and that "advertising is the manufacturing of glamour" (Berger, 1972, p. 131). This convinces the viewer that his life will be transformed by the product, by showing people, whose lives were improved by buying something seemingly more. The American critic notes that "publicity is always about the future buyer, it offers him an image of himself made glamorous by the product or opportunity it is trying to sell" (Berger, 1972, p. 132). He puts emphasis on the link between the need of the individual for envy, in order to validate himself, the need to be noticed, to stand out. Therefore one can securely say that glamour is supported by envy. This is one reason why advertisements for cosmetics stand out, having an imaginative and embellished composition.

Today, young people are very much drawn to what is new, a phenomenon that may be linked to the values of modernity, stating that what is new is better. "Publicity speaks in the future tense and yet the achievement of this future is endlessly deferred" (Berger, 1972, p. 146). Berger is suggesting that the adoration of novelty can never be reached, because as soon as a product is purchased, the novelty disappears. In a globalized market, aesthetic innovation is fundamental for the competitive strategies of brands. The aesthetic dimension of a product is a novelty that gives value. In the field of fashion, the appearance of the products is the value most strongly perceived and is the main novelty. Therefore, the entire fashion industry is based on this. Nowadays, we witness a process of premature obsolescence. In short, what was trendy for a few months becomes outdated with the change of seasons. This results in a multitude of consumer products, pilled behind the cupboard and forgotten, only for something new to be presented on the shelves at the next social event. Fashion is considered "the child of capitalism" and "advertising is the engine of the capitalist machinery" (Baba, 2003, p. 205) or as Berger says "publicity is the life of this culture – in so far as without publicity, capitalism could not survive – and at the same time publicity is its dream" (Berger, 1972, p. 154). Fashion also acts as an expression of a certain state of mind, and by being up to date; it manages to establish an inner-connection between society and eras from which we take our "latest inspiration." Research has shown that individuals, particularly women, seek to identify novelty and try to transform into a better version of themselves. The ability to be liked and desired often provides a feeling of

accomplishment and as a consequence represents an element of happiness. Therefore, a woman may establish a balance between beauty and health in order to avoid the dangers of banality. Every phase of the human culture brought its own concepts about beauty to the table, which has been achieved through cosmetic means.

Recently, the cosmetic industry has returned to the concept of "less is more." As people are learning to read labels of their skin-care products and cosmetics, they begin to recognize those less friendly substances towards health and the environment, becoming more aware of what to avoid. If a product is labeled "organic," it means it is made only out of plants and other natural raw materials (leaves, bark of trees, roots). In order to be considered organic, raw materials should also be grown naturally without adding pesticides and synthetic chemicals in the process of growing or gathering them. Similarly, raw resources should not undergo significant chemical processing, including irradiation. Luckily, the attention to such aspects increased, and the products from companies that are converting to organic procedures are growing. Until a few years ago, there were only a few niche products that were difficult to find and also quite expensive; however, today's natural products take up most of the shelves in supermarkets of large retailers. Meanwhile this new accessibility has raised the question of whether or not the displayed cosmetic products are really organic. The truth is that while consumers are attracted by natural products, some companies and cosmetics producers brand their products as "natural" just to sell more. Two examples of this include the brand BioKap, which uses bright green packaging and the word "bio" in the name, and Bio-Oil, which has faced legal action for its misleading name that would make consumers think it was an organic product. Another statement that always attracts those who want to make responsible purchases is the one that stands on countless products: "Not tested on animals." But in reality, this statement is no need and is added simply to make an impression because cosmetic testing on animals has been banned since 11 March 2013. In fact, all types of cosmetic testing on animals were definitively prohibited; companies in Europe cannot test the finished products or the individual ingredients, and these also cannot be tested outside the European Community and then sold back in Europe. Although it is still possible to have detergents or medicine ingredients tested on animals, ingredients which can then also be used in cosmetics. But testing on animals only for cosmetic purposes is already prohibited. In a nutshell, this claim on the label is not an added value because this is now what the law already established.

Even though the consumer attempts to avoid hazardous chemicals by purchasing cosmetic products labeled "natural" or "organic," often with natural plant extracts and/or organic ingredients free from synthetic

chemicals, in reality, the organic cosmetics industry has a very complex mechanism for categorizing products as "natural" or "organic." In the United States, although both of these terms are used on the labels, few brands actually use them. Unfortunately, there is no single entity regulating the use of these labels. So the real issue is that the standards and the use of these fabers. So the real fistue is that the standards and requirements vary for each country, being derived from how each government considers that products should be labeled. In the United States, the body responsible for this is the Organic Trade Association, which originated from the organic food movement. At an international level, there are different certification bodies, including the Soil Association in the UK, the German BDIH, and the Italy's ICEA. The French label Ecocert means that one hundred percent of the ingredients are of natural origin, and this label is the only organic certification for color cosmetics (including skin care and make-up products). But that does not mean that only products sold in France carry the Ecocert label; in fact, some products sold in the United States, such as Physicians Formula Organic Wear line, carry this certification as well. The certification requirements for the German label NaTrue are much stricter than others. The Biodynamic Cosmetics are recognized as the best of the certified organic products. This label represents the fact that the companies that are growing organic ingredients used in the products are geared towards the development and the relationship between the soil, plants, and animals as a self-nourishing system without external inputs. Although the ability to control ingredients is limited, very often the Biodynamic products far exceed organic standards of purity and care for the Earth. Despite these requirements for labeling a product as "organic," it is still possible for any brand to claim that its product is "natural" as long as it does not contain any artificial ingredients or dyes and the product has undergone minimal processing. requirements vary for each country, being derived from how each minimal processing.

minimal processing. Yet, another issue seems to be the way the consumer is informed. Organic or not, the cosmetic product is not a medicine and the cosmetic nature of the product must be clear from the very beginning: a cosmetic cannot be assimilated or compared – either explicitly or indirectly – to a drug or cosmetic surgery. Although the main information about a product comes from the advertisement, this must be regulated by governmental associations and authorities that guarantee the equitability on the market (EU policies on fair trade). The cosmetic product cannot be labeled in any way that indicates it has curative or therapeutic properties that are able to intervene in a decisive and definitive way on the causes of imperfections. Also it is very important to pay attention to the results the product promises, the praise of specific and timely effectiveness – expressed in absolute or percentage terms, with an indication of tight deadlines and / or with a kit of particularly evocative images – based on a true and targeted scientific support and adequate testing. The effectiveness of a component does not support by itself the effectiveness of the product. If they are clearly referred to in an advertisement, clinical trials must be relevant and directly related to the effectiveness attributed to the product. In the message, compatibly with the available space, the company must specify the methodology, the measurements and parameters that were used. The scientific studies mentioned in advertising to support the performance of the cosmetic product must be adequately accessible – in full or comprehensive summary explanation – through referral to the web pages of the company website. In addition to this, a product has not presented reliable proof of effectiveness if the maximum value achieved in the trials is not the same as the efficacy of the product. However, James Curran (1998) stated in his article "Crisis of public communication: a reappraisal" that "all advertising-funded markets are imperfect. They operate through the sale of viewers' attention, producing a bias against quality and variety. The advertising system favors high ratings rather than highly rated programs. It also favors majority rather than minority programs because advertising is insensitive to intensities of demand (unlike, in principle, a direct consumer payments system where people can opt to pay more for what they especially like)"(p.89). On the other hand, Gillian Dyer states in the chapter, Semiotics and

more for what they especially like)"(p.89). On the other hand, Gillian Dyer states in the chapter, Semiotics and Ideology, the systematic function of advertisements in a very broad sense, saying that they are means of representation and meaning building ideology in themselves through the use of the external codes found in society "the ad will use images, notions, concepts, myths, etc. already available in the culture. An ad does not simply reflect ideology; it reworks it, thus producing new meanings. It uses objects which are signifiers of ideological systems and thought that already exist and then makes them signifiers of another structure (the ad). It's connotations process depends on our knowledge of the forms of ideology that advertisements employ". (Dyer 1982, p. 102). She goes on to argue that "texts resulted from the dynamic interplay of various semiotic, aesthetic, social and ideological processes within them which also operate in the culture outside them. The audience member is involved in the work of the text and the production of its meaning; his or her own knowledge, social position and ideological perspective is brought to bear on the process of the construction of meaning" (Dyer 1982, p. 92). In support of what was said, Dyer cites Judith Williamson, the latter explaining the allegorical character of the advertisements, not only that they underline the qualities of products they are trying to sell, but above this, they intend to create for us an emotional connection with these properties: "Advertisements are selling us something besides consumer goods; in providing us with a structure in which we, and those goods are interchangeable, they are selling us ourselves" (Dyer 1982, p. 92).

Conclusion

The current cosmetic industry assists to a new change, a new direction of the market towards the use of organic and natural ingredients. But the issue is still debatable, as there i both praise and also criticism around this trend, because some natural ingredients can be harmful as well. In this industry, the term "natural" can be relative, and can be translated as simply derived from nature. It may also be true that some natural ingredients could be harmful; but the organic certification labels cannot possibly contain such ingredients. Moreover, although each cosmetic may contain some natural or even organic ingredients, it still could be harmful (like aggressive shampoos, full of chemicals, which also contain a small amount of Argan oil). But products that receive the label of organic certification should contain the most truly organic ingredients. As a fact stated above, nowadays society tends to take the good parts of beauty (in fashion, cosmetics) from history, and also advertising must adjust to their requirements (for example, the vintage trend).

References:

Argital. (2014). Natural, conventional cosmetics and Demeter ingredients. Retrieved from http://www.argital.it/cosmesi-naturale-convenzionale-eingredienti-demeter/

Berger, J. (1990). Ways of Seeing. London: Penguin Books.

Corrigan, P. (2006). *The Sociology of Consumption*. London: Sage Publications Limited.

Dyer, G. (1982). Advertising as communication. London: Routledge.

European Commission. Ban on Animal Testing. Retrieved from ec.europa.eu/growth/sectors/cosmetics/animal-testing_en

Fonseca-Santos, B., Correa, M. A. & Chorilli, M. (2015). Sustainability, natural and organic cosmetics: consumer, products, efficacy, toxicological and regulatory considerations. *Brazilian Journal of Pharmaceutical Sciences*, *51(1)*, *17-26*. Retrieved from https://dx.doi.org/10.1590/S1984-82502015000100002

Huffington Post. (2014). 17 Organic and Eco-Friendly Beauty Products You Need This Earth Day. Retrieved from http://www.huffingtonpost.com/2014/04/22/organic-beauty-products-earth-day_n_5184712.html

Liebes, T., & Curran, J. (1998). *Media, Ritual and Identity*. Londra: Routledge.

Malefyt deWaal, T. & Moeran, B. (2003). *Advertising cultures*. Oxford: Berg Publishers Limited.

Marangon, F., Tempesta, T., Troiano, S. & Vecchiato, D. (2015). Sustainable Agriculture and No-Food Production: An Empirical Investigation on Organic Cosmetics. *Rivista di Studi sulla Sostenibilita* (1), 63-77.

NaTrue – True Friends of Natural and Organic Cosmetics. Retreived from http://www.natrue.org/

Nechita, F., & Briciu, A. (2013). *Mijloace de promovare: note de curs, aplicații, studii de caz.* Brașov: Editura Universității Transilvania.

Vişan, S., & Căpraru, A. M. (2012). Management Aspects Regarding the Market of Organic Products in Romania. *Review of International Comparative Management/Revista de Management Comparat International*, 13 (3): 436-448.

Problems with Adaptation of Post-Accession Polish Migrants in Countries of the EU

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Abstract

Starting from 1st May, 2004 countries of European Fifteen have gradually opened their labour markets for the new EU members, including the Poles. The first to take this step was Great Britain, Ireland and Sweden, the last - Germany and Austria.

For the new EU citizens, emerging opportunities were connected with benefits and wide possibilities, but also with limitations and adaptation difficulties. They had to deal with the language barrier as much as the different culture, accepted behaviours, traditions, work culture and model of spending leisure time. Mentality of migrants – whether they were able or not to immerse into the "new" – had impact on finding themselves in another environment. Most of those, who left Poland did not plan to settle, they were leaving "for some time", temporarily. Mentally, they were still connected with previous place of residence, more interested in environment left behind than new one. Such behaviour was not conducive to adaptation; on the contrary, it made adaptation harder. Migrants through listening to Polish radio, watching Polish television stations, using the Polish Internet portals and reading national press, separated themselves from the new environment. All of these was due to the assumption that engaging in new place has no point since their stay is only temporary. Their attitude to the kind of work and workplace was similar. Majority of migrants from the EU-8 countries was taking up secondary employment, regardless of educational background. Wages comparable with Polish were supposed to compensate depreciation on the labour market.

A wide spectrum of adaptation problems of Polish migrants is an issue raised in reports prepared by specialized research institutions, the Polish Ministry of Foreign Affairs and Polish Community organisations.

Keywords: Migration, Polish Community Abroad, the Poles, EU, adaptation

Introduction

Political changes in Poland in 1989, the opening of borders, gradual

abolition of visas for Polish citizens by countries of Western Europe, and finally accession to the EU in 2004 and a gradual opening of these labour markets had a strong impact on the mobility of Poles. The freedom of movement and freedom to seek employment in the EU countries contributed to the increasing number of migrants. In 2004 there were around a million Poles living abroad, including

In 2004 there were around a million Poles living abroad, including 750,000 in the area of the EU. Three years later the number of temporary migrants rose to 2,27 million, with 1,925,000 in European countries, of which 1,860,000 were in countries of the EU. Out of 15 EU countries, the majority were in the UK (690,000), Germany (490,000), Ireland (200,000), and the Netherlands (98,000). The decrease in the number of migrants recorded in the years 2008-2010 was associated with a global financial crisis. In 2008, there were about 2.2 million people outside Poland, and 2 million two years later. Another increase in migration took place in 2011 when the total number of Poles outside the country amounted to 2,060,000, of which 1,670,000 were in countries of the EU. Then the largest number of Poles resided in the UK (625,000), Germany (470,000), Ireland (120,000) and the Netherlands (95,000) [GUS, 2012].

Netherlands (95,000) [GUS, 2012]. In subsequent years, the number of Poles working and living outside the country grew. According to the data of the Central Statistical Office, in 2015 there were about 2,397,000 Poles remaining as migrants, of which almost 2.1 million were in Europe, including approx. 1,983,000 in the EU. Taking into account particular EU countries, the largest Polish diaspora was in the UK (720,000), Germany (655,000), the Netherlands (112,000), Ireland (111,000) and in Italy (94,000). According to contemporary estimates, about 80 per cent of temporary migrants stayed abroad for at least 12 months [http://www.money.pl/gospodarka/wiadomosci/artykul/ilu-polakowprzebywa-na-emigracji,54,0,2149430.html].

Post-accession migration included people coming from a wide spectrum of social classes and professions, various education, origin, age, and it resulted from different premises. Apart from economic reasons, worth noting are motives connected with the desire to test oneself, the desire for adventure, getting to know the world, or becoming independent. Departure was not treated as a last resort, but in many cases seen as a chance 'to taste' something new. Largely thanks to the modern means of communication, post-accession migrants did not feel as if they broke ties with their place of origin.

Among the post-accession migrants, young and educated persons constituted an important group. According to research from 2007, persons up to 34 years of age, with at least secondary education were in majority. Migrants with a short span (up to 3 years) were in majority in Ireland, the UK and in Norway, out of countries outside the EU. And in Austria, Germany, France, Sweden, Belgium and Italy, and outside the EU, in Switzerland migrants with experience of more than five years were in majority. [*Polscy emigranci w Europie*, 2007] According to research by CBOS (Public Opinion Research Centre),

According to research by CBOS (Public Opinion Research Centre), in 2013 every seventh adult Pole worked abroad since accession of Poland to the EU. At the same time, 13 per cent of respondents admitted that someone from their household worked abroad, and two thirds of respondents revealed that they had a family member or friend who lived outside the country. [*Informacja o rozmiarach i kierunkach czasowej emigracji z Polski w latach 2004 – 2013*, 2014].

Migration is connected with a range of positives but also problems. Migrants have to face new living and working conditions, climate, language, customs, and relationships in the workplace or at school. They are separated from their previous environment, family circle, friends, acquaintances, and nostalgia. On the one hand, leaving involves separation (at least temporary), the sense of loss, rejection, isolation, on the other hand also transformation, it teaches to notice and understand others. Migration can be beneficial provided the leaving person opens up to a new culture not rejecting their own [*Kto jest emigrantem?*, 1994; Wierzyński, 2008].

Those who decided to migrate to another country were faced with the need to adapt to a new, completely foreign environment. They had to face legal, social and cultural barriers. Among the legal and social barriers worth mentioning are the regulation of labour markets implemented in particular countries, the lack of sufficient information on fundamental issues, especially concering one's rights, even in the field of social and health insurance, poor orientation in current regulations, etc. On the other hand, among the most important cultural obstacles was no or poor knowledge of the language, which made it difficult to find work and participate in the socio-cultural life of the country of residence. Also the attitude of the society of the country of destination towards the issue of integration of immigrants is important [Plewko, 2010].

This paper discusses the problem of adaptation of Poles migrating to countries of the EU for economic reasons, but also in search of better living conditions. It focuses largely on several difficulties that affected migrants in the early post-accession period as it was then when the difficulty in adapting to new surroundings was most pronounced. The newcomers from Poland found themselves in a foreign

The newcomers from Poland found themselves in a foreign environment, among people who speak a different language, but also with a different directory of values, religious beliefs, political traditions, etc. They had to find themselves in different working and living conditions, under different laws, principles and customs. At the same time, migrants lost touch with their previous environment or the contact became less tight. This situation affected the attitudes and behaviour as well as perception of the new environment by the newcomers. For a migrant the first days of stay were often associated with positive attitudes towards the new country while negative experiences were played down or minimalized. The state changed over time [Czop, 2013; Kapiszewski, 1980]. The motives for leaving affected the behaviour in the new

The motives for leaving affected the behaviour in the new environment. Migrants' attitudes, expectations and adaptational and integrational opportunities depended on them. The first days of stay determined the fate and later doings [Wolff – Powęska, Schulz, 2000]. Depending on the adopted migration strategy the newcomers tried to take an active part in the life of the new society or stayed apart, choosing to live in the diaspora, and did not seek to get to know the new country. An adapted migrant adjusted to the new environment, complied with the law and the applicable rules. The process of adaptation could be slower or faster in different spheres, and its purpose was to provide stability to oneself and the family [Czop. 2013] family [Czop, 2013].

Migration strategies adopted after 2004 included short-term or cyclical migration. Persons who took a wait, waiting for the right incentive to stay or return and migrants planning to settle in the new country (although not necessarily realizing this plan) are also worth noting. Post-accession migrations took various forms, the preferred strategy could be changed for another under the influence of external factors, family situation etc. [Grabowska – Lusińska, Okólski, 2009].

[Grabowska – Lusińska, Okólski, 2009]. The attitude to work and professional career was also important. Those treating migration as an adventure, not following any career path, wanted to live like the locals, thus they sought to adapt quickly. They wanted to participate in the cultural life and entertainment of the new country, to pursue their hobbies. On the other hand, migrants focused on professional success, those who knew the language well were not afraid of contact with the natives. They were sure of their abilities, and in the event of such a need they were happy to take up training opportunities. In between these groups there were persons for whom stay and work abroad was a chance to improve the situation of the family. Usually they did not have the appropriate qualifications and powered secondary sectors of the labour market [Grabowska – Lusińska, Okólski, 2009]. Migrant workers who came only for 'some time', whose strategy included return, did not feel the need for deeper adaptation, not to mention integration. Such persons selectively adopted the elements of the new culture, sometimes involuntarily, during contact with other viewpoints or a different system of values. As incomplete migrants they lived in two worlds, not feeling comfortable or fully present in any. What is more, they showed a tendency to divide the world into 'we' and 'they'. They tried to live in a

'Polish world'. Post-accession migrants, just like those before accession, willingly surrounded themselves with people and things associated with Poland. In part, this behaviour was associated with the belief that the leave is temporary, with incomplete migration strategy. These persons never left the country completely and for good. Mentally and spiritually they were still in their home towns, thanks to modern communicators they followed the events taking place in the family and based economicators they followed the events

country completely and for good. Mentally and spiritually they were still in their home towns, thanks to modern communicators they followed the events taking place in the family and local community. In the case of the latter, with greater intensity than the events in the country of residence. [M. Okólski, 2006]. They used the Polish media, apart from the internet, the press, radio and television stations. In 2008, two-thirds of migrants watched Polish television channels and more than 50 per cent read Polish newspapers or listened to Polish radio stations. [*Polscy emigranci w Europie*, 2008] One should see a migrant through the prism of sending and receiving countries, more precisely both the social and professional position. Only then can one capture the ambiguity associated with promotion or social degradation. What from the perspective of the sending country may seem to be a fall in the professional and social position, in the perception of a migrant and the perspective of the country of destination is seen as a success or a step to success – a rise in the standard of living, financial independence, professional and personal development. On the other hand, there are cases of a simultaneous increase in the social status in the country of origin and degradation in the target country. [Kolbon, 2013] When writing about professional or social degradation, one must remember that for some migrants the very fact of living in a metropolis, in a multicultural environment is a source of satisfaction, regardless of the prestige of work and the earnings. They do not feel degraded, especially if they do not aspire to be a part of the new society. The difficulties in adapting to the life in the new country were influenced by the perception of migrants by the new community. This was especially important in the case of highly-qualified people. The warranty of recognition of diplomas inherent in the Treaty of Accession has not always been realized. Diplomas of many Polish universities were not recognized, and their owners we underestimated and their abilities were doubted. Some migrants took action, trying to get to know the language and the customs or upgrade their qualifications, while others gave up, not believing in their own abilities [Czop, 2013].

A lot of Polish migrants decided to take employment that was below

their skills and qualifications, taking advantage of the existing opportunities. Sometimes circumstances forced them to conceal their education. Some of them skilfully used the emerging opportunities moving from simple jobs to self-employment or to a higher segment. They managed to adjust to the foreign labour market and get promoted thanks to determination, but only within certain limits [Grabowska – Lusińska, Jaźwińska – Motylska, 2013].

Difficulties with adaptation are also associated with ethinic representation within certain professions. The host society succumbing to stereotypes would attribute a lower professional position to immigrants, even in verbal form. An example would be the treatment of Polish domestic help in Italy [Kolbon, 2013]. Especially women living at the employer's house were subject to discrimination and exploitation. Their work was perceived to be less prestigious, limited to the private sphere thus not requiring any legal regulations. Some migrants felt its menial nature as they were exposed to contempt and malice on the part of the employer's family. In this situation, migrants lost their self-esteem, and attempts to open up to new surroundings, taking up the language, or fighting for their rights required a lot of effort on their part. Employers themselves often made accommodation and adaptation of their workers difficult, making it difficult for them to even learn a language [Czop, 2014] Difficulties with adaptation are also associated with ethinic language [Czop, 2014]

An extreme example of marginalization is the problem of homelessness affecting migrants in different European cities. Also this group had to adopt survival strategies in order to adapt to the new living conditions. Homeless Poles formed their own small support groups; these could work in church counselling centres, but also 'in the street' [Garapich, 2011]. The problem of marginalization also applies in the case of persons employed in the secondary sectors, in professions of low social standing and with lower earnings, and above all illegal labour. It is worth noting that despite the possibility to take on legal work not everyone decided on it. On the one hand the employer's pressure, on the other a growing competition of migrants form other countries of Eastern Europe. Also the chosen model of migration had an influence on the legality of employment. Those preferring the cyclical model do not want to be bound by contracts which would limit their mobility. Moreover, even legal employment did not always protect against exploitation on the part of the employer. Finally, the last issue is being unaware of one's rights and the inability to look for help. Also cultural differences concerning different behaviours and the meaning of gestures influenced the process of adaptation. They influenced the course of adaptation to the local traditions and customs. The differences usually became evident in everyday situations, in different patterns of behaviour. The newcomer had to get used to the different standards of behaviour, often very different from those previously known [Kawczyńska –

Butrym, 2009].

The language barrier caused problems, even if the migrant knew the language. Apart form the accent, the greatest problems were caused by vocabulary, especially professional, work-related. Another issue was a psychological barrier. Many people found it difficult to express emotions and feelings in a foreign language. Over time the barrier weakened [Dzięglewski, 2011].

The processes of adaptation of the newcomers are also influenced by the attitude of the host societies toward them. In the past few years, antiimmigration feelings appeared in a number of the fifteen countries of the EU. In the case of the new EU countries, the economic sphere was the main sphere of integration. The level of integration of particular groups of migrants depends on their education, vocational training, their position in the new society [Plewko, 2010]. It is clear that legal residence and employment are conducive to adaptation. Migrants have the chance to benefit from the right to work, from social and health security, social help, education, banking services, participation in the socio-political and cultural life, etc. [Czop, 2013].

Those not fully prepared to leave had a difficulty in adapting to the new country. Imprecise goals, which the myth of the rich West as an ideal place to live and work was often associated with, negatively affected the process of adaptation. Sometimes the migrants-to-be seemed it was enough to leave to be able to participate in the universal prosperity. However, it turned out on the spot that the working and living conditions do not fit with imagination. This gave rise to frustration which was combated with stimulants, and alcohol – as the leading one. Escalation of problems with alcohol and drug abuse resulted in the establishment of specialized care and addiction therapy centres, the 'Blue Line' in the UK, and AA groups in other countries in Polish parishes. Others, irrespective of the fact that they were in relationships in their home country, established new partnerships in the countries of residence [Czop, 2013; Orzechowska, 2011; Romaniszyn, 2000].

In a majority of EU countries Poles were seen as a well adapting, non-problematic group. Post-accession migrants, compared to earlier streams of migration, found it easier to adapt into the new society, which was often the effect of a better preparation to the life abroad. Young people felt the cultural difference to a smaller degree thanks to the internet and living in the sphere of British and American culture. Besides, most Poles – migrants wanted to get accustomed to the new conditions, the new environment as quickly as possible, to throw off the odium of a 'stranger', a migrant. They wanted to improve their financial and social situation [cf. Dyczewski, 2001; Sakson, 2000; Danek, 2007]

Highly-skilled professionals for whom going to work abroad was related to social and professional advancement should be considered separately. These people were well-educated, knew the language well, worked in accordance with their qualifications and so they willingly opened up to the new community. The process of adaptation and integration was facilitated by the prestige they had in their environment, and problems that a large part of Polish migrants had were alien to them. They were not confronted with intolerance, they did not have any problems with buying/renting a flat, finding suitable schools for children, etc. [Czop, 2013].

At the same time in each group of migrants there were persons who failed to settle in the new environment. They remained in the state of 'uprooting'. In their case, a language barrier or a very strong sense of cultural identity had an influence on the difficulty with adaptation. The lack of acceptance for the host society can be considered an extremity. The result of such an attitude was closing up in a group of people who perceive the new environment as a threat. A lot of migrants struggled with social isolation, a sense of alienation, loneliness, the feeling of being unappreciated. Not everyone could adapt to the new conditions, adjust to the new 'realities'. Hence so important was the initiative of Polish and host institutions to issue compendia with the most important information concerning settling in the new country.

References:

Czop, Edyta, Migranci polscy w krajach unijnej piętnastki (1992 – 2011). Wybrane zagadnienia, Rzeszów: Uniwersytet Rzeszowski, 2013

Czop, Edyta, Mroczna strona polskiej migracji poakcesyjnej do krajów unijnej piętnastki [w:] Od kwestii robotniczej do nowoczesnej kwestii socjalnej. Studia z polskiej polityki społecznej XX i XXI wieku. Tom II red. Grata Paweł, Rzeszów: Uniwersytet Rzeszowski, 2014

Danek, Andrzej, Polska mniejszość czy polskojęzyczni Niemcy, "Przegląd", 23.09.2007

Dyczewski, Leon, Tożsamość i integracja Polaków w Republice Federalnej Niemiec. Doświadczenia i perspektywy [w:] Polonia w Niemczech. Historia i współczesność, red. Masłowska, Maria, Warszawa: 2001

Dzięglewski, Mariusz, Bariery na drodze integracji polskich emigrantów poakcesyjnych w Irlandii, "Studia Migracyjne – Przegląd Polonijny", Kraków: NOMOS 2011, z.2

Garapich, Michał, Of alkhol and men - survival, masculinities and antinstitutionalism of Polish homeless men in a global city, "Studia Migracyjne – Przegląd Polonijny", Kraków: NOMOS, 2011, z.1 GUS, Informacja o rozmiarach i kierunkach emigracji z Polski w latach

2004 – 2011, Warszawa, 2012

Grabowska – Lusińska, Izabela, Jażwińska – Motylska, Ewa, Znaczenie migracji w życiu zawodowym kobiet i mężczyzn, "Kultura i Społeczeństwo", Warszawa, 2013, nr 3Grabowska – Lusińska, Izabela, Okólski, Marek, Emigracja ostatnia?, Warszawa: Scholar, 2009

Informacja o rozmiarach i kierunkach czasowej emigracji z Polski w latach 2004 – 2013, Warszawa 2014

Kapiszewski, Andrzej, *Psychologiczne aspekty emigracji i asymilacji* [w:] *Założenia teorii asymilacji*, red. Kubiak Hieronim, Paluch Andrzej K., Wrocław – Warszawa – Kraków – Gdańsk: Ossolineum, 1980

Kawczyńska – Butrym, Zofia, *Migracje. Wybrane zagadnienia*, Lublin: Wyd. UMCS, 2009

Kolbon, Izabela, *Mobilność społeczna w kontekście mobilności* przestrzennej: awans, marginalizacja i degradacja społeczna polskich euromigrantów, www.euromigranci.pl [8.04.2014]

Kto jest emigrantem? Z Danutą Mostwin rozmawia Bolesław Klimaszewski, "Przegląd", 1994, nr 7

Okólski, Marek, Wewnętrzna spójność nowej emigracji i przejawy jej łączności z Polską [w:] Rola dawnej i nowej emigracji w warunkach Unii Europejskiej, red. Lohman Wanda, Kraków: PAU 2006

Orzechowska, Daria K., Migracje zarobkowe Polaków po przystąpieniu Polski do Unii Europejskiej – skutki ekonomiczne i społeczne. Próba bilansu [w:] Bilans pierwszych lat członkostwa Polski w Unii Europejskiej red. Fiszer Józef M., Warszawa:Instytut Studiów Politycznych PAN, 2011;

Polacy na emigracji. Nowe dane GUS o rodakach za granicą, <u>http://www.money.pl/gospodarka/wiadomosci/artykul/ilu-polakow-</u>

przebywa-na-emigracji,54,0,2149430.html[8.01.2017]

Polscy emigranci w Europie, PBI, ACR Rynek i Opinia, Starcom, 29.11.2007

Polscy emigranci w Europie. Prezentacja wyników internetowego badana polskiej emigracji 2008, PBI, Warszawa, 2008

Plewko, Jadwiga, *Warunki integracji imigrantów ze społeczeństwem przyjmującym w wybranych krajach Unii Europejskiej*, "Roczniki Nauk Społecznych", Lublin, 2010, tom 2 (38)

Romaniszyn, Krystyna, *Wpływ migracji zagranicznych na formę organizacji rodziny*, "Studia Polonijne", Lublin 2000, t.21

Sakson, Andrzej, Uczestnictwo w życiu społecznym [w:] Być Polakiem w Niemczech, red. Wolf – Powęska, Anna, Schulz, Eberhard, Poznań:Instytut Zachodni, 2000

Wierzyński, Maciej, Prosto z emigracji, "Polityka", 5 stycznia 2008

Wolf – Powęska, Anna, Schulz, Eberhard, *Założenia i cele badawcze* [w:] *Być Polakiem w Niemczech*, red. Wolf – Powęska, Anna, Schulz, Eberhard, Poznań:Instytut Zachodni, 2000

Conceptualizing Export Growth in the Context of Triple Helix in Shrinking Regions A Case Study of South East Drenthe (The Netherlands)

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Abstract

This paper is a theoretical exercise to conceptualize the application of triple helix concept in one of the shrinking provinces of the Netherland. The triple helix concept is embodied in the form of the so called export promotion measure to provide low threshold alternative to the marginalized companies in the province. With help of revenue matrix, there are four sketches are depicted graphically to show the result of export promotion measure. The results show that the content wise high expertise of the professional education, the strategical assignments from the willing companies and the support of funding from the government turn out to be necessary conditions for the success for moving to the potential sector for the export, that in turn is able to create the necessary demand essential to the existence of the corporate sector in the shrinking provinces.

Keywords: Shrinking region, export measures, triple helix

Introduction

Are the shrinking regions just a victim of urbanization trends or there is something more structural problems related to the national policy? Irrespective of the reasons for the shrinking tendencies in a given region the ever depleting population has to deal up with the effects of such shrinking. The effects are not only economic, but also social and psychological and in the worst case politically visible in the neglect of the area.

The effects are not only economic, but also social and psychological and in the worst case politically visible in the neglect of the area. An educational institution is a part of dynamic social structure and in the shrinking region is more apparent. While, an educational institution may be a reflection of the region, the mass of the educated population may not find it's earning potential in the shrinking region and may find it necessary to migrate to economic thriving regions to find the higher earning and better living conditions.

The part of the firm sector that is targeted at local population have to deal to the decreasing demand. This article conceptualizes the attempt to revert the effects of the shrinking region on the firm sector by contributing to the creating opportunities or expanding the potential of export revenue in the international markets. The export promotion measures facilitated by the government and guided by the lecturers to bring out the potential of the companies with help of the market research carried out by the student form the essence of the program. The next section introduces the theory in short and explain the framework.

Research Methods

The nature of the paper is conceptual and the methods used are desk research and observational research. This observational research of approximately eighty companies over the years is substantiated with demand articulation of these companies. On the basis of the circumstances in which they entered our research we developed a few primary criteria to typify the companies which are common in the industrial economics:

- Export revenues as a percentage of total revenue
- Sales development on the local market

Based on this we categorized four types of companies and possible growth paths.

Theory

Theory Since the industrial revolution the infrastructural support by the government to the industries and entrepreneurs became evident (Leitão, 2009). On the other hand, the governmental support of educational development became apparent after the universalization of it. However, it took two centuries to synthesize these three elements into what is called a Triple Helix, developed by Henry Etzkowitz, originally quoted as follows: "The Triple Helix thesis is that the potential for innovation and economic development in a knowledge society lies in a more prominent role for the university and in the hybridization of elements from university, industry and government to generate new institutional and social forms for the production, transfer and application of knowledge. This vision encompasses not only the creative destruction that appears as a natural innovation dynamic, but also the creative renewal that arises within each of the three institutional spheres of university, industry and government, as well as at their intersections. The Triple Helix model thus introduces a three-dimensional perspective of innovation dynamics at the levels of industry, scientific institutions and governments, and emphasizes the interplay

between differentiation and integration in the evolution of the complex system of industry-academia-government." (Henry Etzkowitz, 2013). This kind of cycle is a natural process which does not have a destructive character, but is a structural phenomenon in the developed economic world. The role played by education in Triple Helix is to interfere in order to limit the period of the trough phase. The typical problem of a in order to limit the period of the trough phase. The typical problem of a shrink region is that the depression phase is continuous. The normal market forces do not work effectively to lead the economy to recovery. The typical Keynesian investment injection is needed to stimulate entrepreneurs. By applying the Triple Helix, all parties involved win. Government wins because it recovers its income source by reducing the depletion of population. Entrepreneurs win because they are shown the way how to increase their market value. Educational institutions win because they are able to provide the students with extraordinary professional capacities due to experience in a real case. experience in a real case.

experience in a real case. The Triple Helix efforts can be placed in the framework of minimum critical effort model of growth (Leibenstein, 1957). This theory states that in order to create growth stimuli critical minimum efforts are required in terms of investment. The investment in the Triple Helix has three directional flows, namely knowledge, funds and entrepreneurial innovation. The regional market is shrinking and the market expansion is possible only through international trade, because the national market is saturated. The entrepreneurial innovation is implanted in an international market through the strategic knowledge imparted by the educational institutions. The funding of which is by the third Helix partner, the government.

of which is by the third Helix partner, the government. The effect of the international Triple Helix has been evident in developed countries like Japan. The Japanese model of industrial strategy can find similarities with the Triple Helix model. This model, success of which was evident from as early as the 1970's, was constructed by the Ministry of International Trade and Industry (MITI). The characteristic success is achieved through the redeployment of higher value added resources, which is not possible without a knowledge base, that in turn is part of the educational institutions (Counling 2011)

of the educational institutions (Cowling, 2011). Applied successfully in the leading universities such as Stanford (Triple Helix Research Group, sd), the urge to apply the concept to Universities of Applied Sciences became evident due to the heavy focus of these institutions on professional competencies related to ever globalizing business. The cooperation between Universities of Applied Sciences and industries is inherent to the nature of higher vocational education. The Dublin Descriptors (European Commission, 2008) guide the higher education in Europe. However, the first cycle of the Dublin Descriptors is silent on this issue. Only in the third cycle (PhD) it refers to

internationalization. With reference to afore mentioned globalization, these descriptors do not fulfill the requirements for the students in an ever globalizing world. The national competencies derived from the Dublin Descriptors however include competencies related to internationalization, explicitly or implicitly (Vereniging hogescholen en VSNU, 2014).

The study program specific competencies of Domain of Commerce, the framework in which the authors work, are operationalized taking into account the international dimension of the business specific competencies, as laid down by the national authorities (Vereniging Hogescholen, 2016).

The international dimension is operationalized for all formulated competencies, in order to meet the requirements of the three stakeholders of the Triple Helix.

Current practice

As mentioned in the former section, within the Domain of Commerce, the international dimension is operationalized for all formulated competencies, in order to meet the requirements of the three stakeholders of the Triple Helix.

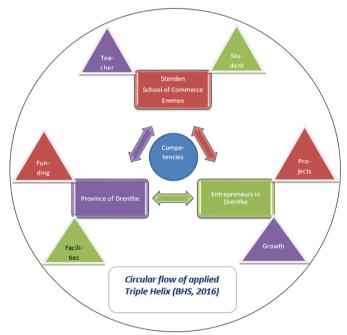


Figure 1 Circular flow of applied Triple Helix (BHS, 2016)

Figure 1 above shows the working of Triple Helix in practice. The starting point is the cooperation of Stenden University of Applied Sciences (School of Commerce – hereafter SoC) in Emmen, located in the province of Drenthe, which is on the verge of shrinking (Provincie Drenthe, 2016). This

has implications in terms of population, livability, employment and economic growth. The short term effects of the decline in population are already visible in the closing of elementary schools (Provincie Drenthe, 2016) and retail shops (PBL, 2016). Recently attempts have been undertaken to improve the livability for example in Emmen, the biggest city of Drenthe, by renovating the center and the zoo, and introducing an integrative concept of entertainment by offering the new zoo and the new theatre in one area. In order to boost the economic environment the province of Drenthe has taken measures to stimulate entrepreneurship. The province plays a facilitative and supportive role towards entrepreneurial innovation. An example of this is the opening of entrepreneurial factories in Assen, Emmen and Hoogeveen, in which also students of SoC participate (Ondernemersfabriekdrenthe, sd). Another example is the funding of the coaching on expertise and the organization of the events of the Export Carrousel.

Entrepreneurs are the backbone of the economy, they are the engine of economic growth as Schumpeter correctly said as early as in 1942. The entrepreneurs need to innovate in order to stay competitive. The innovations have different dimensions and fills from the economics to technology. The economic innovation has a range of factors from export marketing to distribution channels.

The economic innovation is at micro level to provide a competitive advantage to the entrepreneurs. The students of SoC of Stenden Emmen play a role in this field. Operating in the complex situation of meeting the theoretical demands of the teachers and operational implementation for the entrepreneurs, the students face the challenge of pointing out realistic competitive advantages for Small and Medium Enterprises (SME's) in the province of Drenthe.

The internationalization is a consequence of the globalization trend in general and trade in particular. The practical implications for Stenden are the incorporation of this concept in the staff, curriculum, students and facilities nationally and abroad.

Current practice one

The first current practice is the trilateral cooperation between the province of Drenthe, regional businesses (selected by the chamber of commerce) and the SoC of Stenden. This takes place in a specialization semester, called the Export Carrousel. The starting point is the competencies which participating students are expected to require at the end of the 7th semester. The students work on projects for companies which aspire to break into a (new) international market. The students of different nationalities or origins are expected to work on the project independently in a project

organization, guided closely by teachers not only process wise but also content wise.

The teachers teach relevant subjects updated with the latest trends, issues and general framework, so that the students are equipped to apply to the specific critical problems of SME. Every project of an SME is unique. By solving the problem in international context, using the PBL steps, they carry out research which makes them competent to operate in an international commercial environment. The competencies have three aspects: knowledge, skills and attitude. It is the responsibility of the teachers to assess the attainment of these competencies.

Afore mentioned projects are company specific, real, commercial, complicated and challenging. The fact that the representatives of the companies spend time to coach and provide information is an indication of the real nature of the problem. It is commercial because they are non-charity and have objectives related to profit, sales and international growth. The complicatedness of the project arises due to the interdisciplinary elements that students have to take into account: international marketing strategies, patents, international law, customs, product adaptation, distribution strategies, pricing and international promotion and communication. The projects are challenging because the students have to reach the highest level of the relevant competencies as described in the next section. However, the international context of the learning environment provides them with experiences and skills in operationalized competencies or the learning outcomes.

The international marketing and entry strategies which are the outcome of the Export Carrousel are provided with implementation plans. The implementation plans give operational tools for the companies to apply the strategies and thereby make a move ahead towards the realization of the goal of the company and guarantee sustainability of the company's existence. The entrepreneur generates revenues by meeting the potential demand abroad, and hereby continues to provide or even increase the employment opportunities in the economically shrinking region of Drenthe. However minimal this may be for one entrepreneur, summation wise this adds to visible economic growth over the years. This is precisely the reason why the province of Drenthe participates with funding and other facilities in the Triple Helix program, expressed in the Export Carrousel.

Framing the concepts

On the basis of this we constructed a matrix showing the ground framework to reflect the revenue structure of companies in the shrinking region of Drenthe.

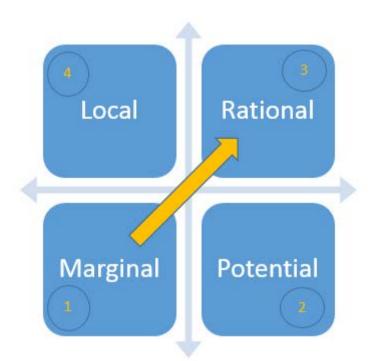


Figure 2 Matrix of trapped small firms in shrinking region (BHS, 2016)

Figure 2 reflects per block the revenues and share of export in it for the companies in a shrinking region. The left bottom block 1 reflects the marginal companies, which have low revenue mainly derived from the local market. The right bottom block 2 reflects the potential companies, which have low revenue mainly derived from foreign markets. The right upper block 3 reflects the rational companies, which have high revenue mainly derived from foreign markets. The left upper block 4 reflects the lucky companies, which have high revenue mainly derived from the local market.

The above mentioned Export Carrousel major attends mostly to the needs of marginalized companies and guides to develop a strategic vision to reach block 3, the rational companies. However, this does not mean that the companies in block 2 are not attended to.

Based on this matrix, we have developed four conceptualized diagrams (figure 3) which takes into account the economic theory and the reality of shrinking regions. The assumptions are as follows: the population is declining and thereby the companies face declining average revenue, the companies have no resources and the government doesn't provide export subsidy.

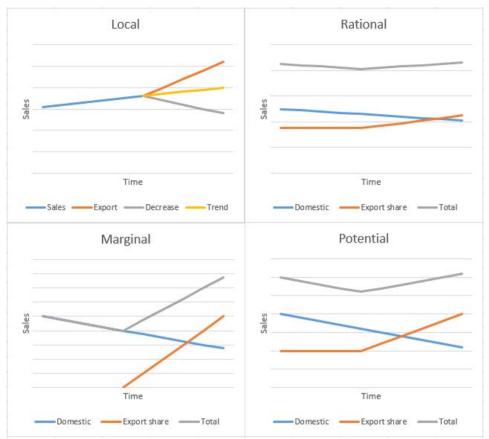


Figure 3 Sales curves for small companies in shrinking region (BHS, 2016)

The marginal firm faces decreasing sales revenues, and responds to it by participating in the export activities. This could lead to increasing revenues. The orange line represents the export revenues. The potential firm is already active in export but realizes that there is still growth potential. The rational firm gets its revenues mainly from export and needs to increase that share due to decreasing regional sales. The local firm has an increasing revenue from the regional market and expects continuous increase in the future. However, his expectations may not be in term with the reality. On one hand the orange line shows what the situation could be with export, on the other hand the grey line indicates a decrease in regional revenue. The transformation from marginal to rational is the essence of the Export Carrousel: from no export at all to a substantial, stable or growing, export share in revenues.

Conclusion

As can be seen above the paper shows the conceptualization of the Export Carrousel in the context of the Triple Helix in a shrinking region. The

most feasible strategy to improve the revenue of a company in a shrinking region is to export. We have not taken into account the strategy of product development or product differentiation. This remains an area for future work, just as the exercise to prove the graphs mathematically and the result statistically.

Our research will continue by determining, based on a set of relevant measurable criteria, the position in the matrix of the companies at the baseline of our project, and their position in 2017, leading to a statistical analysis of the growth paths of the companies resulting from the Export Carrousel.

The concept of Export Carrousel is replicable in shrinking regions all over the world, provided the critical success factors are present, which also open another avenue for the research.

References:

BHS, B. H. (2016, November 11). Own figure. Emmen. business-cycles-of-the-capitalist-system-meaning-characteristics-phases-and-other-information. (sd). Opgeroepen op March 23, 2016, van http://www.yourarticlelibrary.com/business/business-cycles-of-the-capitalistsystem-meaning-characteristics-phases-and-other-information/29235/:

system-meaning-characteristics-phases-and-other-information/29235/: http://www.yourarticlelibrary.com/business/business-cycles-of-the-capitalist-system-meaning-characteristics-phases-and-other-information/29235/ Cowling, K. &. (2011, November). The Japanese model in retrospective: industrial strategies, corporate Japan and the 'hollowing out' of Japanese industry. *Policy Studies*, 569-583.

Cross, T. &. (1989). Towards a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally Disturbed. Rockville, MD, USA: National Institute of

Justice/NCJRS paper reproduction. Davis, P. &. (1997). Multicultural counseling competencies: Assessment, evaluation, education and training, and supervision. Thousand Oaks, CA, USA: Sage Publications.

Etzkowitz H., L. L. (2000). The Triple Helix Model of University–Industry– Government. *Research Policy*, 109-123. European Commission. (2008). *The European qualifications framework for lifelong learning (EQF)*. Luxembourg: Office for Official Publications of the European Communities.

Health, W. g. (2016). http://ctb.ku.edu/en. Retrieved from University of Kansas.

Henry Etzkowitz, M. R. (2013). *Study on University-Business*. London: LSE. Leibenstein, H. (1957). *Economic Backwardness and Economic Growth*. Wiley.

Leitão, J. &. (2009). *Public Policies for Fostering Entrepreneurship*. New York: Springer.

Maastricht University - Problem Based Learning. (sd). Opgeroepen op March 18, 2016, van www.maastrichtuniversity.nl: http://www.maastrichtuniversity.nl/web/Main/Education/ProblemBasedLear ning.htm

NRC. (2016, February 2). Retrieved from www.nrc.nl: https://www.nrc.nl/nieuws/2016/02/02/hoe-goed-is-jouw-provincie-ininternationale-handel-a1493833

Ondernemersfabriekdrenthe. (sd). Opgeroepen op March 18, 2016, van Ondernemersfabriekdrenthe: http://ondernemersfabriekdrenthe.nl/

PBL. (2016, September 15). Retrieved from www.pbl.nl: http://www.pbl.nl/infographic/leegstand-van-winkels-2005-

2016#gemnr=0&year=2016&type=winkels

Provincie Drenthe. (2016, November 22). Retrieved from www.provincie.drenthe.nl:

http://www.provincie.drenthe.nl/feitenencijfers/cijfers/onderwijs-

jeugd/scholen/

Provincie Drenthe. (2016, November 22). Retrieved from http://www.provincie.drenthe.nl/:

http://www.provincie.drenthe.nl/feitenencijfers/cijfers/bevolkingwonen/bevolkingsomvang/

Triple Helix Research Group. (sd). *Triple Helix Research Group*. Opgeroepen op March 11, 2016, van Stanford University Triple Helix Research Group: http://triplehelix.stanford.edu/triplehelix

Vereniging Hogescholen. (2016, November 22). Retrieved from http://www.vereniginghogescholen.nl/:

http://www.vereniginghogescholen.nl/system/profiles/documents/000/000/11 0/original/aanvulling_domeincompetenties_bachelor_of_commerce.pdf?143 7563950

Vereniging hogescholen en VSNU. (2014, Mei). *www.vereniginghogescholen.nl/themas/internationalisering*. Retrieved from www.vereniginghogescholen.nl:

http://www.vereniginghogescholen.nl/system/knowledge_base/attachments/f iles/000/000/364/original/Gezamenlijke_Visie_Internationalisering_-

_Vereniging_Hogescholen_VSNU.pdf?1443097300

Workgroup on community and health. (2016, October). *Community Tool Box* - *The University of Kansas*. Retrieved from University of Kansas: http://ctb.ku.edu/env

Higher Education and Scientific Research Sector in Algeria: What Kind of Challenges and Changes That Are Required for A Better System?

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Abstract

This paper highlighted the main reforms of the Higher Education and Scientific Research sector in Algeria from the independence (1962) until now (2016), as well as the reality of its scientific production (graduated students' quality, publication, universities ranking, patents, and research) in the knowledge based economy. This sector needs some serious changes to function better that is what the paper has suggested.

Keywords: Higher Education, Scientific Research, Algeria

Introduction

The human capital¹ accumulation in any country or company is based on the investment in: education, health and training. The education is one of the most powerful investments which effects the human capital development. That is why in many nations government policy and scholarly work have identified the growing role of Higher Education (HE) and scientific research (SR) in the world-wide knowledge economy. The role of HE is not limited to fostering the economic development of nations and providing opportunities for individuals, it extends also to promotion of cultural diversity, political democracy and trade (Marginson, 2007).

Nowadays, the competitiveness in the knowledge based economy is based on the human capital capabilities. HE sector in Algeria has an estimable human capital that can achieve competitiveness, innovation and it can offer new research (products, programs, and patents ...etc) based on the good management of their knowledge and competencies, thus it will enable the HE and (SR) sector to adapt to the needs of Algerian economic enterprises.

¹ The human capital can be defined as "the stock of knowledge, skills, competencies, and abilities embodied in individuals that determine their level of productivity. In principle, it includes innate abilities and skills acquired through education, training and experience" (Djomo and Sikod, 2012).

HE and SR sector in Algeria has achieved many improvements in the last years but it still suffer from many problems, thus, this study has focused on analyzing the reality of HE and SR sector in Algeria. Based on the experience of the author in teaching at university and doing PhD on the management of researchers in Algeria, the study gives some remarks on: *The main challenges facing the HE and SR sector in Algeria? The main reasons why the HE and SR sector are not fulfilling its potential? And what are the changes that are required to make the HE and SR system work better?*

Higher Education sector in Algeria

The French established the first Algerian university –Universite d'Alger– in 1909 and it was the only university in the country till 1962, with 500 students. After the Algerian independence in 1962, significant changes were introduced in order to facilitate access to HE for a greater number of Algerians (Esau and Khelfaoui, [Accessed 15th May 2014]). In 2016, there are 112 HE Institutions comprising of 50 universities, 11 centres universitaires, 20 écoles nationales supérieures, 11 écoles normales supérieures, 12 écoles préparatoires and 4 classes préparatoires intégrées (02 ans premiers de la formation dans l'école nationales)².

Education is completely free for all the cycles and supported by the state and the HE institutions cover the whole Algerian territory. The number of enrolled students is nearly one million three hundred thousand in 2014, and probably it will reach two and a half million in 2025 (Bouhali, 2014). The next table shows the evolution of students enrolled in the period 1962-2011.

 $^{^{2}}$ In Algeria, *centre universitaire* : is a kind of small university, contains 2 or 3 departments, where they have few specialities and they give license diploma only most of time, they are created in far and isolated places.

École nationale supérieure : is a higher institution specialized in something like trade, management; they are divided into 2 catégories: human science and technical science like polytechnical school, public affairs... where they accept only very highly skilled students.

École normale supérieure: is an institution where they prepare and train students to be teachers at primary, secondary and high schools.

École préparatoire: is a preparatory higher institution where they prepare students for two years with an intensive program to make them able to take the test and study in the Ecole National Supérieur.

Classe préparatoire intégrée: is an annexe for the Ecole preparatoire where they are created to do the same mission as "École préparatoire" where students will take class for 2 years and then the best students will be choosen after doing a test to study in Ecole preparatoire which transformed recently to École nationale supérieure.

Year	1962/63	1969/70	1979/80	1989/90	1999/00	2009/10	2010/11
Student enrollment in graduation	2725	12243	57445	181350	407995	1034313	1077945
Student enrollment in post graduation	156	317	3965	13967	20846	58975	60617
Total	2881	12560	61410	195317	428841	1093288	1138562

Table 02: The evolution of students enrolled in the period 1962-2011

Source : MESRS (2012), p. 36.

Also, the number of teachers responsible for supervising has grown during these five decades. It went from 298 permanent teachers in 1962 to over 40 000 teachers in 2011. This quantitative development is not sufficiently as soon as the top university of Algeria came in 1725 position in the world ranking universities and this shows the gap (Souleh, 2015). Table 3 shows the evolution of the number of teachers and supervision rate.

Table05. Nulliber 01	permanen	t university	icaciicis a	teachers and supervision rate during (1902-2011)					
Year	1962/63	1969/70	1979/80	1989/90	1999/00	2009/10	2010/11		
Number of permanent	298	842	7497	14536	17460	37688	40140		
teachers									
Total students enrolled	2725	12243	57445	181350	407995	1034313	1077945		
in graduation									
Supervision rate	9	15	8	12	23	27	27		

Table03: Number of permanent university teachers and supervision rate during (1962-2011)

Source : MESRS (2012), p. 56

With the increased number of graduated students has decreased the quality of education because the lack of credibility and loss of confidence in the public and economic role of the university to effect meaningful transformations (Andersson and Djeflat, 2013, p177).

Scientific Research institutions in Algeria

Algeria has undertaken a strengthening of its research facilities and taken steps both to promote financial and institutional knowledge production, and especially to increase its links with the economic and social development (Khelfaoui, 2007). Unable to return to the entire device, institutions and legal texts that support research in Algeria, we will be limited in presenting the Law 08-05 (Loi n 08-05 qui modifie et de complète la Loi n° 98-11) Which aims to complete the institutional procedure outlined in the previous law and revitalize the various agencies and research communities. The law is interested in human resources development, in providing and facilitating all the physical, social, materials and scientific investments. Table 4 provides some indicators on the evolution of research workforce.

Year	2005	2008	2009	2010	2011	2012			
Teacher-researcher	13720	14720	18863	25079	26579	28079			
Permanent- researcher	1500	2100	2700	3300	3900	4500			
Total	15220	16820	21563	28379	30479	32579			
Number of new research projects	2000	2000	3200	3650	1732	3732			

Table 04: Number of researchers and research projects during (2008-2012)

Source: Loi n° 08-05.

Currently ongoing reforms for (2014-2018) or what they called the *third law of research* aimed at building linkages between university and industry, motivating researchers to develop their results in research units within enterprises, to motivate the innovation thinking and to innovate products. Recently, Algeria has 27000 researchers and nearly 45,000 academic staff. The thousands of research laboratories contain only 2083 permanent researchers. These researchers have published only 11,000 research papers between 2010 and 2012 (Souleh, 2015). Nowadays, Algeria has a research network of 30 institutions supervised by MESRS which combine:³ (12) centres de recherche, (12) unités de recherche and (6) agences de recherche⁴. These research centres contain more than 930 researchers (table 05).

Ν	Initials	N of	Denomination+ place
14	muais	researchers	Denomination+ place
	~~~~		
01	CDER	234	Centre de Développement des Énergies renouvelables (Alger)
02	CERIST	63	Centre de Recherche sur l'Information Scientifique et Technique
			(Alger)
03	CDTA	250	Centre de Développement des Technologies Avancées (Alger)
04	(CRTI) ex	74	Centre de Recherche en Technologie Industriel (Alger) before it
	(CSC)		called : Centre de Recherche Scientifique et Technique en Soudage
			et Contrôle
05	CRAPC	61	Centre de Recherche Scientifique et Technique en Analyses Physico
			– Chimiques (Tipaza)
06	CRSTDLA	29	Centre de Recherche Scientifique et Technique sur le
			Développement de la Langue Arabe (Alger)
07	CREAD	52	Centre de Recherche en Economie Appliquée pour le développement
			(Alger)
08	CRASC	55	Centre de Recherche en Anthropologie Sociale et Culturelle (Oran)
09	CRSTRA	60	Centre de Recherche Scientifique et Technologique sur les Régions
			Arides (Biskra)
10	CRBT	46	Centre de Recherche en Biotechnologie (constantine)
11	CRTSE	(NF)	Centre de Recherche en Technologie des Semi-conducteurs pour
			<u>l'Energétique</u> (Alger)
12	(NF)	(NF)	Centre National de Recherche dans les Sciences Islamiques et de
			Civilisation (Laghouat)
-	Total	930	-

Table 05: Research Centres presentation

Source: Data established based on the web site of MESRS and Research Centres, (2016).

³ Cited on: http://www.dgrsdt.dz/index.php/fr/centres-de-recherche, visited on 25/11/2016.

⁴ (12) research centres, (12) research unity, (06) research agency.

# Scientific production of HE and research sector Publication and citation ranking

Based on the SJR ranking (Table n06), Algeria comes in the 55th position from a 239 ranking country where Morocco comes directly after Algeria and Tunisia didn't appear in the ranking. France also comes in the 6th position and as we all know that France is full of researchers from (Algeria, Tunisia and Morocco). The first 5 positions of the Ranking go to (USA, China, UK, Germany and Japan).

		Docume	Citable		Self-	Citations per	Н
Rank	Country	nts	documents	Citations	Citations	Document	index
01	United			17743493			
	States	8626193	7876234	5	83777658	23,36	1648
03	United						
	Kingdom	2397817	2103145	44011201	10321539	21,03	1015
05	Japan	2074872	2008410	27040067	7619559	13,79	745
06	France	1555629	1468286	24700140	5516943	17,95	811
55	Algeria	36490	35871	174096	34065	7,66	97
56	Morocco	35962	34027	235287	43346	8,52	117

Table n 06: Country ranking based on SJR (2014)

Source: available on : <u>http://www.scimagojr.com/countryrank.php</u>, [Accessed 05th April 2016].

### **Patents indicator**

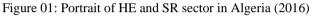
The role of Algerian Universities is still limited in terms of carrying out R&D and patents for industry. Contractual and partnership research do not exist in Algeria because the industry shows little interest in such projects. Consultancy opportunities are also scarce as university teachers and researchers cannot enter legally into such contracts. According to DGRSDT⁵, we can illustrate patents number of national Algerian researchers and Algerian researchers living abroad in the period (2011 to 2013) as follows:

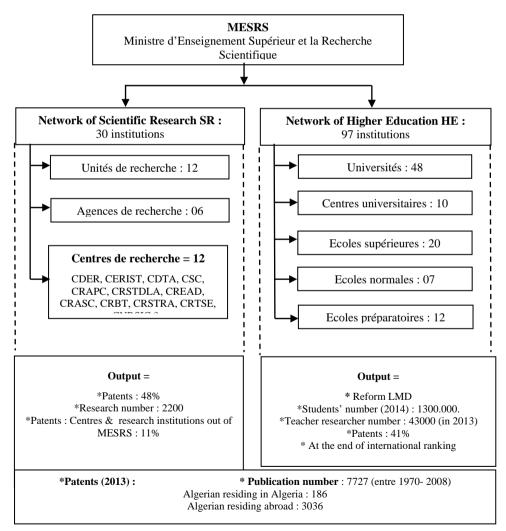
Table08: Comparison between national Algerian researchers and Algerian researchers residing abroad in terms of patents in (2010 - 2013)

	Testung abroad in terms of patents in (2010 – 2013)									
	Institutions &	Paten	ts numb	er of na	Patents Number of					
Ν	Research		r	esearch	ers		Algerian researchers			
	Entities						residing abroad			
		2010	2011	2012	2011	2012	2013			
01	Universities	-	-	66	69	41	-	-	-	
02	Publics Centres	-	-	52	81	48	-	-	-	
03	Other Centres	16 18 11		-	-	-				
]	Total of patents	96	116	134	168	100%	2744	2833	3036	

**Source:** Established by the author based on the data of: recueils des brevets d'invention, 2^{ème}et 3^{ème} édition, Alger, 2012-2013

⁵ **DGRSDT**= Direction Générale de la Recherche Scientifique et du Développement Technologique= General Direction of Scientific Research and Technologic Developpement The patents production has increased in recent years. Algeria has more than 500 Algerian inventors established abroad (residing in 23 countries) which they represent less than 1% of total Algerian researchers. But these researchers produce almost twenty times more than all the national researchers. This reality is the result of two different phenomena, the most inventive researchers are attracted by top international research centres (with the higher salaries and the best work environment) and national researchers are not always well tutored, supported and encouraged to produce patents. Foreign companies, professional organizations, and independent innovators are also more than 84% of patent holders (Souleh, 2015). We can establish the portrait below for the HE and SR sector:





Source: established by the author based on the investigation data (2016). The main challenges facing the HE and SR sector

**Knowledge based economy challenges**: The research university is an important knowledge sources and innovation partners for industry ( R&D an important knowledge sources and innovation partners for industry ( R&D collaborations, innovation partnerships, use of facilities, informal knowledge exchange); However, the key importance of universities has still to be seen in the traditional roles of providing highly qualified graduates, doing excellent scientific work, providing basic science and R&D (Tödtling, 2006). **Private education sector**: Bigger shares must be given to the private sector: complementary schemes for teaching exist at pre-school, primary and even secondary levels, over 200 institutions: since 2008 for universities (Miliani 14 pre-scient 12th Mar 2014)

(Miliani, [Accessed 12th May 2014]).

**Competitiveness and innovation**: Nowadays, the competitiveness in the knowledge based economy is based on the intellectual capital management (Carmen Cabello-Medina et al, 2011). HE sector in Algeria has an estimable human capital that can achieve competitiveness, innovation and it can offer new research (products, programs inventions, patents, methods and procedures ...etc) based on the good management of their knowledge and competencies, thus it will enable the HE sector (universities and research institutions) to adapt to the needs of Algerian economic enterprises.

SMEs and clusters: universities and research institutions play an important role in the emerging and development of regional clusters and their contribution to the collective learning within regions (e.g. science parks, business incubators, spin-offs, informal personal contacts, consulting, research consortia, etc.) (Stankeviciute, Jolanta; Jucevicius, Robertas, 2003). Understanding the nature of relationships between universities and SMEs is important because the current theories on regional development suggest that concentrations of SMEs in certain regions, clustered around one or more university centres, can be effective locations for accelerating this process (Hendry, Brown and Defillippi, cited online). Based on that, the Algerian HE system is facing the challenge of being strong and effective to help in the emerging and formation of SMEs and clusters.

Create an endogenous research field: Based on the third law of research "the research has to take in charge different fields related to agriculture, fishing, water resources, education, health and employment promotion, fundamental research, basic research, social and human sciences, renewable energy, environmental protection..." (Journal Elmoudjahid, 2013). HE sector needs to create an endogenous research field by orienting researchers to search in the fields that benefit the Algerian economy. After the hydrocarbon economy!: One of the biggest challenges in front of universities and research institutions is developing research

(products, programs inventions, patents, methods and procedures ...etc) in

the renewable energy and agriculture field to help the Algerian economy now and after the hydrocarbon area.

### The main reasons why the HE and SR sector in Algeria is not fulfilling its potential:

**Centralized education system**: the state is the dominate manager of HE sector which make the management process more complicated as it takes too much time, lose control and money, and the lack of credibility which can affect the quality of HE productivity. The centralization of decisions coming from the top of the structure "Trusteeship" encourages the emergence of some imbalances with regard to the reality which often differs from the vision of the decision maker.

Informal management: the centralized education system has its ups and downs, because the behaviors of the sector's managers which are sometimes justify and sometimes are not. Also, the existing of the pushing and pulling in the management process, specifically, a lot of bureaucracy and corruption, where we found that many managers and professors even students use the power of their positions to enhance what they want, by using also the empty circles in the laws and devices which mange the HE sector.

Matter of reforms: since the Algerian independence in 1962, the state has struggled a lot to set up an education system. For example we can notice a lot of reforms and rules in terms of some aspects in one hand, and the lack of applying this rules and reforms in the other hand, besides the lack of new effective rules and applications in the sector's management. **Instability of researcher**: The weaknesses, related to the status of

Instability of researcher: The weaknesses, related to the status of researchers in terms of compensation and social performance, encourages the emergence of some behaviours of opportunist type which threaten innovation and creativity processes. Also, the researcher's management strategy is not homogeneous with the individual initiatives evaluation. Some researchers witnessed a drop in their motivation because they work for others. Quality of teaching, learning and thinking of teachers and students: because the HE is a free system, students (many of them) will not show commitment. Because the HE is a centralized, well paid and less control system, teachers will never leave their jobs for any reason so if they teach well or not it does not matter because they get paid any way! It is only up to their conscience to do the right thing! Financing research projects by industry: if we want to develop the

**Financing research projects by industry**: if we want to develop the research we must have a strong industry which collaborate with researchers. It is a serious mistake that researchers are doing their research and publishing it just to get their PhD theses done. The Algerian researcher should get his thesis done at least by participating in the improvement and solving industrial or technological problem which does not exist in Algeria because

our industrial prefer foreigners to solve their problems instead of funding PhD theses to do it. It is also, a political, social and trust problem as well.

# The changes that are required to make the HE and research sector system work better

Make the HE sector a paid system, so student should pay for their studies at least they will show more commitment.

Uncentralized the HE system and open the door for *private sector* to manage universities in Parallel with the public sector. *Continuous evaluation for teachers and managers* is a good approach to set up a culture of competitiveness and credibility for universities. Settle for good, the principle of *Quality education* for universities and the *Productivity of research institutions*.

The HE management needs *new governance and new methods* especially the honesty in management or *the management by Ethics*. Increase budget for internships, training, international cooperation, scientific research and technological development with keeping eye on the effective management of this budget and make sure that this kind of investments enhance its goals.

Improve individual assessment methods and encourage collective work between managers, teams, researchers, universities to support the links with industry.

The modeling of the compensation system, the promotion and the patents pricing in regarding the area of each research institution / university. Improve legal and organizational texts that manage researchers, universities, research institutions in Algeria.

The centralization of decisions from the top structure does not help the progress of research projects, that's why universities and research institutions need to be independent in their management. The researchers are called to focus on research by ethics because the

scientific rigor is the real victim.

### Conclusion

We have to notice that both the HE and SR sector in any country are ones of the most important standards of sustainable development. In the case of Algeria, HE and SR sector still facing problems in their ways to be more effective and innovative, and even the government is helping them in so many ways, there does exist a lot of problems and obstacles that must be faced and resolved by the sector itself, which mean that the managers, taachars/managers, and students are all appeared. teachers/researchers, and students are all concerned.

We have highlighted as well the main reasons behind the weak performance of the HE and research sector. We have suggested also some

changes that are required to make the system work better mainly that the system should work on good linkages with the governmental, non-governmental organizations and specially firms.

# **References:**

Andersson, T., & Djeflat, A. (2013). *The real issues of the Middle East and the Arab spring: addressing research, innovation and entrepreneurship,* Springer edition.

Bouhali, R. (2014). l'enseignement supérieur en Algérie entre le nombre et la qualité, *colloque G3 : la qualité dans tous ses états*, du 16 au 18 octobre.

Cabello-M, C., Lopez-C, A. & Valle-C, R. (2011). "Leveraging the innovaive performance of human capital through HRM and social capital in Spanish firms", *The International Journal of Human Resource Management*, February, Vol. 22, No. 4., pp 807-828.

Djomo, J. M. N., & Sikod, F. (2012). The effects of human capital on agricultural productivity and farmer's income in Cameroon. *International Business Research*, 5(4), 149–159.

Esau, S., & Khelfaoui, H., (2006), "Algeria", cited on: http://portal.unesco.org/education/fr/files/55529/11998887155Algeria.pdf/Algeria.pdf, [Accessed 15th May 2015].

Hendry, C., Brown, & J., Defillippi, R. (2000). Understanding relationships between Universities and SMEs in emerging high technology industries: The Case of Opto-electronics, *International Journal of Innovation Management*, Vol. 4, No. 1, pp. 51-75.

*Journal Elmoudjahid* (2013). Avant-projet de la 3e loi sur la recherche scientifique 2014-2018: L'innovation au service des entreprises, Published at: 25th of March 2013 on: http://www.elmoudjahid.com/fr/actualites/39602, [Accessed 05th April 2013].

Khelfaoui, H. (2007). «La recherche scientifique en Algérie: Entre exigences locales et tendancesInternationales», available on:<http://portal.unesco.org/education/en/files/53297/11797117335Khelfaou i.doc/Khelfaoui.doc>, [Accessed 11th May 2015]).

LA DIRECTION GENERALE DE LA RECHERCHE SCIENTIFIQUE ET DU DEVELOPPEMENT TECHNOLOGIQUE, (2013-2014), *recueil des brevets d'invention*, 3^{ème} édition, Alger.

LA DIRECTION GENERALE DE LA RECHERCHE SCIENTIFIQUE ET DU DEVELOPPEMENT TECHNOLOGIQUE, (2012), *recueil des brevets d'invention*, 2^{ème} édition, Alger.

LA DIRECTION GENERALE DE LA RECHERCHE SCIENTIFIQUE ET DU DEVELOPPEMENT TECHNOLOGIQUE (2016),: http://www.dgrsdt.dz/index.php/fr/centres-de-recherche, [Accessed 25th november 2016]). Loi n 08-05 du 16 Safar 1429 correspondant au 23 février 2008 modifiant et complétant la loi n98-11 du 29 Rabie Ethani 1419 correspondant au 22 août 1998 portant loi d'orientation et de programme à projection quinquennale sur la recherche scientifique et le développement technologique 1998-2002.

Loi n° 98-11 du 29 Rabie Ethani 1419 correspondant au 22 août 1998 portnt Loi d'Orientation et de Programme à Projection Quinquennale sur la Recherche Scientifique et le développement technologique 1998-2002.

Marginson, S. (2007). Higher education in the global knowledge economy, *Beijing Forum*, 2-4 November 2007.

Milaini,M., Towards a University Ranking System in Algeria: rank ordering the notorious, the old and ... the others, cited on: http://www.mqa.gov.my/aqaaiw/slides/Prof%20Miliani/CAIRO%20PAPER. pdf, [Accessed 12th May 2015]

MINISTRE D'ENSEIGNEMENT SUPERIEUR ET LA RECHERCHE SCIENTIFIQUE (2015), Alger, Algérie, <www.mesrs.dz>. Souleh, S., (2015). L'évaluation de la recherche scientifique en Algérie:

Souleh, S., (2015). L'évaluation de la recherche scientifique en Algérie: réalités et défis dans les organisations publiques, *conference l'Acfast*, Rimouski, Canada, 28-29 Mai 2015.

Stankeviciute, J., & Jucevicius, R. (2003). The role of universities in the development of regional knowledge-based clusters: The collective learning perspective, *the European Conference on Educational Research*, University of Hamburg, 17-20 September 2003.

Tödtling, F. (2006). The role of universities in innovation systems and regional economies, *Expert meeting on The future of academic research*, Vienna, 19-20 October 2006. Available on: http://www.oecd.org/innovation/research/37592074.pdf. [Accessed 25th November 2016]).

# Business Clusters and Innovativeness of the EU Economies

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### Abstract

Business clusters are considered as key drivers shaping competitiveness of local, regional as well as national economies. Supporters of this view argue that business clusters are vehicles to increase productivity, hence development of such economic structures is crucial to assure economic prosperity. One of the more specific reasons pointed out quite recently in the literature is that business clusters stimulate creation and diffusion of innovations. In this paper we test validity of this statement looking at cluster strength and state of cluster development in the EU-28 economies and their innovativeness. The research question we focus on is whether a measurable relationship exists between these two different phenomena. In order to answer this question data on occurrence of business clusters in the EU provided by European Cluster Observatory (ECO) and results of the three types of innovativeness rankings, i.e. Global Innovation Index (GII), Summary Innovation Index (SII), and 12th pillar in the Global Competitiveness Index (GCI), were analyzed. It was found that the level of innovativeness of the EU economies is clearly related to the state of cluster development. This means that innovation and cluster policies should be treated as complementary ones and implemented in a well harmonized manner.

Keywords: Business clusters, innovativeness, competitiveness, EU

# Introduction

Business clusters, meant as geographic concentrations of companies, specialized suppliers, service providers, companies in related industries as well as associated institutions (Porter, 1998), are widely considered as drivers of competitiveness. Competition and cooperation occurring simultaneously within those structures cause positive economic effects, such

as higher productivity, increased efficiency, and better product and service quality. Based on such reasoning development of business clusters has also for some time now become a part of policy agendas of the EU at local, regional, and national levels. This is because policy makers started to believe that business clusters are drivers of economic prosperity. This view is accompanied by another mainstream topic, which is innovations and their role in building modern economies. The issue of innovativeness has also been introduced into policy agendas around the world. It is particularly recognized in leading economies as well as those aspiring to boost their global standing. Calls for innovation have been present in the EU's development strategies. Innovation is part of the Europe 2020 strategy that aims at creating smart, sustainable, and inclusive growth. It is widely claimed that "Europe's future is connected to its power to innovate" (European Commission, 2013). The importance of innovation manifests itself in many dimensions in the EU. The creation of the Innovation Union initiative is one of them. In this context, a research question arises whether occurrence of such economic structures as business clusters has an impact on occurrence of such economic structures as business clusters has an impact on number of innovations that emerge and translate into greater innovativeness of national economies?

The main goal of this paper is to look for an empirical evidence that occurrence of strong clusters is positively related to the measures of innovativeness of national economies. The geographic scope of the research was limited to the EU-28 member states, mainly due to availability of data on clusters occurrence. The sources of the data utilized in the analysis include most recent country rankings according to the Global Innovation Index, the European Innovation Scoreboard, and the Global Competitiveness Report by the World Economic Forum as well as information from the European Cluster Observatory.

**Strength and development of clusters in the EU economies** Clusters are composed of a set of relationships established among different entities. Its identification in space must consist of finding and separating key interactions that are taking place and are vital for the cluster. The network of relations is the necessary condition for clusters to exist. When looking into the emergence of the cluster concept three main phases of its development can be distinguished. The first one was started by Marshall. He postulated that geographical proximity of companies in an industry followed by proximity of companies from related industries forming industrial districts is a source of positive effects and externalities (Marshall, 1920). Becattini picked up those findings several years later when addressing the topic of the reasons of growth in Terza Italia. His work can be considered as a trigger for the second wave of research followed by the third one when

Porter addressed the topic of spatial agglomeration which takes form of business clusters.

Location of businesses does not occur in a single pattern. Each decision in this regard is to some extent unique and its effects are different. Given that, different locations are characterized by an exclusive in its form set of companies. These companies become allies and rivals, form industries, or if the circumstances are right, they form clusters. Research on business clusters has been carried out relatively extensively throughout the last two decades. Since the beginning the concept was on the one hand an interesting new approach within economics of agglomeration, but on the other hand many questions arose concerning its nature and potential applications. The "academic skepticism" towards clusters stems from "the eclecticism involved in the way ideas have been used" (Benneworth, Danson, Raines & Whittam, 2003). Although the concept resembles certain theoretical ideas from the past there is some novelty to its characteristics. In many cases it is emphasized that through clusters one can achieve an in-depth analysis of the real-life phenomena taking place between companies and other entities that engage in competitive and cooperative behavior.

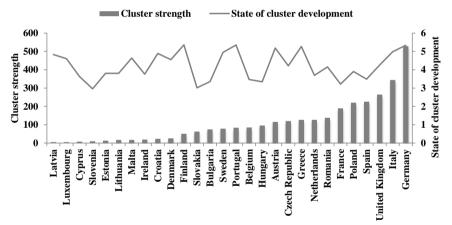
Considering the research studies on business clusters that have been conducted until now, the task of cluster mapping seems to be particularly difficult. There are many reasons for obstacles associated with the development of a consistent and widely applicable cluster mapping methodology. As different economies represent different levels of development it seems crucial to identify key factors determining such diversity. Economic systems are known for their heterogeneity and complexity, and whether at national, regional or local level, they consist of different sets of enterprises. Each location with its unique features is a home for a different set of entities that form industries. Cluster mapping is helpful for understanding and explaining the processes that influence the occurrence of spatial diversity in economic activities as well as its consequences. Such knowledge is valuable not only for scientists, but also for policy makers interested in development of strong business clusters related to various sectors (Figiel, Kuberska & Kufel, 2014).

The most complex method of cluster mapping was originally proposed by Porter and later applied in the European context by researchers from the Stockholm School of Economics. Apart from translating Porter's industry definitions for the European perspective, they have also established a unique methodology for measuring cluster strength. Each country is awarded a number of "stars" to its cluster structures (European Cluster Observatory).

As presented in figure 1 the star numbers vary very significantly between the EU-28 countries, which is mainly due to different sizes of the compared economies. Consequently, Germany is the country with the strongest clusters awarded 529 stars altogether, which is over 100 times more than in Latvia or Luxembourg awarded the least number of stars (only 5 each). This evaluation, although very useful to depict the cross-country distribution of business clusters according to their strength in the EU-28, is sort of strongly biased towards employment numbers highly correlated with the population and total GDP of a country. In other words overall size of an economy clearly matters, so the larger the economy is, the more stars it can likely receive.

Number of stars cannot not be treated as a measure of the level of a country economic development. It reflects specializations of compared national economies, which may be structurally different in terms of clusters' industry profiles potentially influencing the level of economic development. For instance, strong clusters in Latvia include maritime as well as education and knowledge creation, whereas in Luxembourg these are business services and financial services.

Figure 1. The cluster strength and the state of cluster development in the EU-28 economies



Source: own elaboration based on data of the European Cluster Observatory and World Economic Forum, 2016

Another measure, called state of cluster development, employed in the analysis to evaluate development of business clusters comes from the Global Competitiveness Report (the 11th pillar of competitiveness – business sophistication). As a measure based on business community assessment of how deep and well-developed clusters are it allows for global comparisons between countries. Values of this measure for 2016 are ranging from 2.96 (Croatia) to 5.36 (Germany) with the mean amounting to 4.22 and coefficient of variation equal to 18.36%. It should be mentioned that distribution of the values reflecting the state of cluster development in the countries included in the WEF ranking is not dependent on the scale of the economies. Innovativeness of the EU-28 economies and its connectedness with the state of cluster development

There are many indicators of innovativeness, which can be evaluated from a company, regional, national, or global perspective. In the paper results of three international rankings are considered, which refer to national economies. The World Economic Forum calculating Global Competitiveness Index and its 12th pillar (innovation) distinguishes three types of economies with regard to their stage of development. Among the EU-28 member states Bulgaria and Romania are considered efficiency-driven economies, whereas Croatia, Hungary, Latvia, Lithuania, Poland, and the Slovak Republic are economies in transition. The other countries are innovation-driven economies.

According to the results of the European Innovation Scoreboard ranking (Summary Innovation Index, SII) 12 out of the EU countries are strong innovators or innovation leaders and the other are moderate innovators (14) or modest innovators (2). The level of the innovativeness of the EU-28 economies can also be assessed using Global Innovation Index (GII) developed by INSEAD. In general, no matter of what kind of measure or index is used we can find that the current level of innovativeness of the EU-28 economies varies significantly (figure 2).

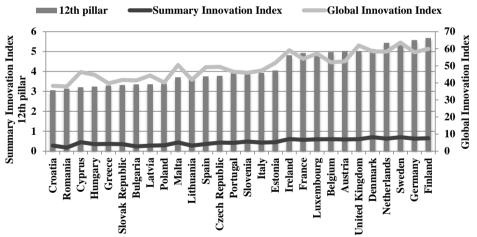


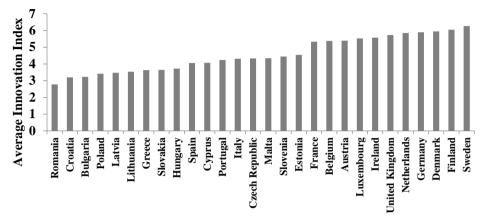
Figure 2. Innovativeness of the EU-28 economies in 2016

Source: own elaboration based on data of INSEAD, 2016, European Commission, 2016, World Economic Forum, 2016

Moreover, these indices are highly correlated with each other (all three correlation coefficients appeared to be above 0.9), therefore to avoid deciding which one of them is better suited to evaluate innovativeness Average Innovation Index (AII) was computed as a geometric mean of their values for particular countries, namely:  $AII_i = \sqrt[3]{GII_i \times SII_i \times GCI12_i}$ ,

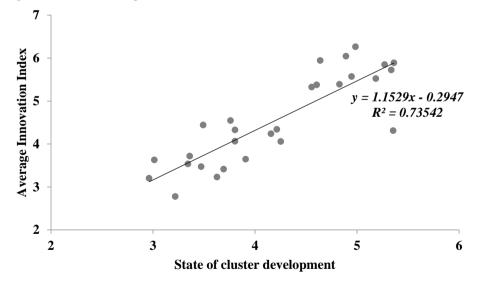
where  $GH_i$ ,  $SH_i$ , and  $GCH2_i$  are values of Global Innovation Index, Summary Innovation Index, and the 12th pillar in the Global Competitiveness Index, respectively, for country *i*. Results of these calculations are presented in figure 3.

Figure 3. Values of the Average Innovation Index for the EU-28 economies in 2016



Source: own elaboration based on data of INSEAD, 2016, European Commission, 2016, and the World Economic Forum, 2016.

Figure 4. Cluster development and the level of innovativeness of the EU-28 economies



Source: own elaboration based on data of INSEAD, 2016, European Commission, 2016, and the World Economic Forum, 2016.

Such countries as Sweden, Finland, Denmark, Germany, and the Netherlands are among the five most innovative EU-28 economies. The five least innovative economies are that of Romania, Croatia, Bulgaria, Poland, and Latvia. This shows that most of the countries, which have only recently joined the EU are below its average level of innovativeness. Of course, the causes of this situation are rather complex but one of them might be related to differences in development of business clusters. In order to shed some light on this problem, a statistically significant relationship between values for the state of cluster development measure, which is better suited for cross-country comparisons, and values of the Average Innovation Index (AII) is presented in figure 4.

There appears to be a very clear, positive connectedness between the state of cluster development in the EU-28 economies and the level of their innovativeness, as over 73% of variability of the AII values is explained by variability of the state of cluster development. So, it is very likely that existence of well developed business clusters may play an important role in shaping innovativeness of the EU-28 national economies.

### Conclusion

Potential impact of business clusters on economic development is discussed in a vast body of literature. Many authors argue that clusters are vehicles to increase competitiveness and improve economic prosperity due to various positive effects arising as results of their occurrence. One of these effects is supposed to be higher innovativeness of the economies characterized by well-developed clusters. Looking at the cluster strength and state of cluster development in the EU-28 economies and their innovativeness this assumption can be confirmed. A fairly high variation of the innovativeness levels of the EU-28 economies, measured by Average Innovation Index (AII), appeared to be related to the state of cluster development. This empirical evidence suggests that innovation and cluster policies should be treated as complementary ones and implemented in a well harmonized manner.

# **References:**

Benneworth, P., Danson, M., Raines, P., & Whittam, G. (2003). Confusing clusters? Making sense of the cluster approach in theory and practice. *European Planning Studies*, 11, 5, 511-520.

European Cluster Observatory. Retrieved from http://www.clusterobservatory.eu/

European Commission. (2013). *Innovation Union. A pocket guide on a Europe* 2020 *initiative*. Luxembourg. Retrieved from https://ec.europa.eu/eip/agriculture/en/content/innovation-union-pocket-guide-europe-2020-initiative

European Commission. (2016). *The European Innovation Scoreboard*. Retrieved from http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_pl

Figiel, S., Kuberska, D., & Kufel, J. (2014). *Agri-food clusters in Poland*. Institute of Agricultural and Food Economics – National Research Institute, Warsaw.

INSEAD. (2016). *The Global Innovation Index*. Retrieved from https://www.globalinnovationindex.org

Marshall, A. (1920). *Principles of Economics*. Macmillan and Co., Ltd., London.

World Economic Forum. (2016). Global Competitiveness Report 2016-2017.Retrievedfromhttps://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1

# The Role of Teaching Materials / Textbooks on Visual Perception and Visual Interpretation

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### Abstract

Perception depends on the mental interpretation. Our mind contains categories through which it interprets and gives sense to what was perceived. Categories are acquired through learning, and textbooks play an important role in the process of learning. Images of cubes in textbooks, particularly mathematics textbooks, are in contradiction with the central perspective, i.e. with the way in which we visually perceive them. Such images of cubes do not match mathematical axonometric projections either. Images of cubes in textbooks present the front side as a square with parallel sides, one lateral side, and the top side. Such a presentation is optically incorrect and stereotypical, creating a category that blights the visual perception and drawing interpretation of a cube in a space. In our empirical research, participants were presented with a cube above their horizon making it impossible to see its top side. While drawing the cube, a large number of participants had a blighted perception and interpretation. They drew the cube in a stereotypical manner, as a square with the top facet, which could actually not be seen. What is more, because of the perspective, the front side is not seen as a square anymore. The drawings were evaluated according to their success in presentation that was afterwards compared with the achievement in the written test of perception. The research was carried out in two countries, Croatia and Slovenia. The sample consisted of 217 participants in the fourth, sixth and eighth grades of primary school and third and fifth year of university.

Keywords: Didactic of visual art, visual perception and interpretation, drawing stereotypes

### Introduction

Perception is initiated by a stimulated sensory organ, and it finishes off with a mental interpretation. Interpretation is based on the categories our mind comprises. By means of those categories our mind interprets and makes sense of what it perceives. If we do not have a category for something, then we do not see it. Categories are acquired through learning, and teaching material, especially textbooks play a significant role in the process of learning. What will happen if textbooks create a category which perceives and interprets visual stimulation in the wrong way? Will the textbook users acquire a wrong category? Will that category have a negative effect and create a wrong perception and interpretation of what is seen? In other words, will the person, who is looking at something, perceive it in the wrong way, because he acquired the wrong interpretation in his childhood? Finally, does a wrong category for one phenomenon have an impact on other phenomena as well? Can one wrong category distort that person's perception in general?

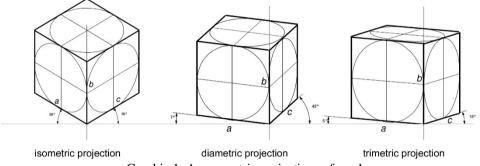
as well? Can one wrong category distort that person's perception in general? **Perception and reception** What do we see when we are watching? It is necessary to distinguish watching from seeing: *watching* is the process when we give our eyes a focus with the aim to accumulate variations of light. Eyes *watch*, but they cannot *see*. *Seeing* is the process which includes expectations, interpretations, understanding, and it is performed by our brain. We watch with our eyes, but we see with our mind. A psychologist Jerom S. Brunner presented the concept of *accessible categories* (Brunner, 1957). According to him, our mind contains concepts which it acquired through the process of learning and gaining experience, and those concepts (that is, accessible categories) are necessary for the brain to be able to interpret any information sent by the eyes. In other words, it is not possible to see the thing which our mind does not have a category for. Our mind is partially blind for all the things it does not have a categories, which is us seeing some of his moves in the wrong way, or not seeing them at all. The other examples of wrong perception are so-called *optical illusions*. Those are the patterns which are made to blur the usual categories, which is why our brain interprets them in fasualties. According to a certain research (Wann & Co., 2011), those children by the age of 15 are among the most frequent pedestrian for accessible categories, and therefore they perceive fewer things. In this case, the difference between watching and seeing can be the difference between life and death (Berman, 2015). One of the pioneers of the study of children's drawings, Georges-Henri Luquet, introduces the concept of *internal model*. Similar to the concept of accessible categories, the internal model is the mental representation of the entire model (Luquet, 2001).

Luquet claims: "When a drawing is produced from memory, or as they say in the studios, *de chic* ("without a model"), then it is necessarily based upon the internal model. But it is also the internal model that children copy even when they explicitly declare that they are reproducing something in front of them, that is, drawing from nature or copying from other drawings. In both these cases, the external object merely serves as a suggestion but what is really being drawn is the internal model." (Luquet, 2001, p. 47) In other words, Luquet established that children do not draw what they *see*, but rather what they *know*. Due to different accessible categories, different people see different things even when they look at the same phenomenon. "As Spinoza once said, if a peasant, a painter, and a general were to look at the same scene, they would not receive the same impressions. Similarly, a child in front of an object or drawing does not see the same details as an adult, or, more precisely, although his eyes see them, the mind perceives them only to the extent that they are of interest or given some significance by the child." (ibid, p. 55) Nevertheless, the research that was carried out on the sample of 215 preschool and elementary-school children (Huzjak, 2013) demonstrates that Luquet's internal model is much more flexible than he assumed, and that children are, therefore, capable of successfully and expressively drawing presented motives even before the stage of intellectual realism (around the age of 11).

In addition to the previously mentioned, available categories also include values and needs. It has been established that we perceive in accordance with them, which means that our previous experience and our believes create subjective world inside of us, regardless of what precisely is in front of our eyes (Brunner and Goodman, 1947). This refers to one of the aspects of perception, a reception. Visual reception is the ability to comprehend the meaning of visual symbols. It's a personal connection of observed with our own ideas and our own interpretation. Finally, the pressure of conformism changes the perception as well. It makes an individual perceive the same thing which is perceived by a majority of people, even when it is obviously wrong. (Zimbardo, 2017).

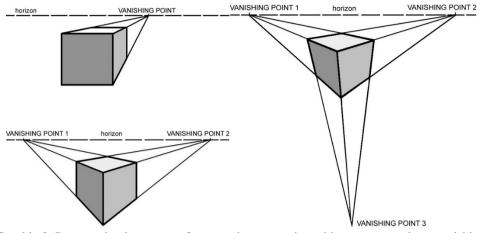
**Visual interpretations: axonometric projection and the perspective** When a Belgian painter René Magritte painted a pipe realistically, and then wrote underneath "*Ceci n'est pas une pipe*" ("This is not a pipe"), he indicated that the painting is only a visual interpretation of the perceived object. We cannot smoke a painted pipe, smell, taste nor touch it. During the process of painting, a painter decides what from motives he will accentuate, what he will change and what he will discard. Objects that are found in space, we present in a plane by using different conventions. The loss of the third dimension is compensated with a certain interpretation model which retains some features of the original object.

One method of making visual interpretation of an object on a plane is by using axonometric projections. In axonometric projections, edges, which are parallel on the object in the space, remain parallel in a plane as well (Maynard, 2005). Spatial dimensions are presented at a certain angle. There are three axonometric projections: isometric projection, dimetric projection and trimetric projection. In isometric projection, angles between all three coordinate axes are equal, 120 degrees, and all lengths have equal measures, none of them are foreshortened. In diametric projection, two axes are at angles of 7 and 90 degrees without being foreshortened, and one axis is at the angle of 42 degrees and is foreshortened 1:2. In trimetric projection, all three spatial axes are at different angles, and two lengths are foreshortened with different measures. In all three projections, axes are at the same angle, which means that a frontal plate cannot be seen as a square in neither of these projections.



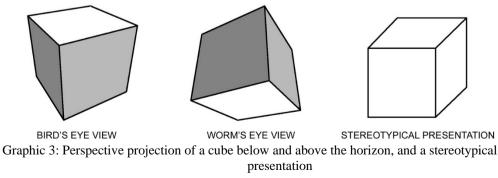
Graphic 1: Axonometric projections of a cube

Perspective (originating from a latin verb *prospicere* – look through, discern) is the other way of presenting space in the picture. By means of a perspective, three-dimensional objects are visually interpreted on a two-dimensional plane. Perspective usually refers to *linear perspective* (we also call it *geometric perspective* or *central perspective*). This is a case of a projection in which distant objects appear to be smaller, and the lines that recede into the distance, away from the observer, converge towards a point beyond sight, called vanishing point. The vanishing point is always at the eye level of the observer, on a horizon line or an eye level line. This interpretation method was invented by Filippo Brunelleschi in 1413 (Ivancevic, 1996). It is common to use one, two or three vanishing points in the projection of the object. However, only a construction with three vanishing points corresponds the way we see, and which is, per say, comparable to a photograph.



Graphic 2: Presentation by means of geometric perspective with one, two or three vanishing points

If the object that we observe (for example a cube) is below the level of the observer's horizon (that is, below eye level), then the observer sees upper face of the object, and he does not see the lower one. This is called "a bird's eye view". If the object is above the observer's horizon, then the lower face of the object can be seen, while the upper face cannot be seen. This is called "a frog's perspective or a worm's-eye view". If an angular shape (for example, a cube) is observed precisely from the frontal side at the eye level, then only the frontal face can be seen, while the upper, lower and lateral sides cannot be seen. If we want to see a lateral side of a cube, we must turn it round, and then the edges of the front face (square) converge towards the vanishing point. Therefore, by observing the cube whose upper and lateral sides are visible (cube turned aside), it is prospective to visually interpret it precisely, in other words - to draw it, without parallel lines and without a front square. If the cube is placed above the horizon, the upper face can't be seen. You can see the lower one, and is, therefore, correct to present it in a frog's perspective. By observing the cube from beneath, it is not possible to answer the question "How does the upper face look like?"



Although it does not correspond to neither axonometric projections nor perspective, it is the projection with a front square face that is the most frequent projection in the process of typical drawing. People usually resort to this method of drawing even when they observe a cube. Therefore, we regard this projection as a stereotypical presentation, because people resort to it without personal experience, just because other people do the same.

### Textbooks and a visual communication

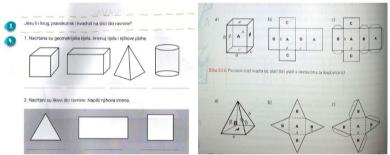
Textbooks and a visual communication The process of learning is one of the ways of acquiring accessible categories. In the process, textbooks have an important pedagogical role, because, with new verbal categories (descriptions and explanations) and their illustrations and projections, they also develop visual categories. By comparing textbooks on school science subjects and daily newspapers from the field of science and technology, it has been concluded that textbooks contain ten times more images, and, in that way, they tend to create a sense of higher empowerment for their readers by using the visual mode (Dimopoulos, Koulaidis & Sklaveniti, 2003). The reason for this is that an image conveys stronger impression then the text: it has a larger impact on the (Dinopoulos, Roulaidis & Sklaveniti, 2005). The reason for this is that an image conveys stronger impression then the text; it has a larger impact on the process of learning and memorizing. This can be exemplified by a well-known poster by Alfred Leetea "Your Country Needs YOU" (more precisely "Lord Kitchener Wants You") from 1914, which invites the observer to join the army. Besides verbal, the poster establishes much stronger visual communication (Van Leeuwen, 2014). The picture includes a finger which is pointing at the observer, a serious (frowning) face, military uniform with the British Field Marshal's cap, and the military, authoritative moustache. Apart from that, the text is written in the way that the size and the thickness of the letters in the word "YOU" are overemphasized in comparison to the other letters. This kind of typography creates semiotic mode which, when combined with non-verbal communication of the image, provides additional discourse: a textual invitation transformed into a visual command.

Therefore, by choosing the cadre, the plan, the camera angle, colours and accents, images are additional interpretations of the subject matter they present. By analyzing the advertisement for the pasta "Panzani", Roland Barthes (Barthes, 1977), besides denotation (description), he described connotation (context) which is created by the elements in the picture. That kind of context is, for example *Italianicity* which is, through the advertisement, associated with pasta.

school textbooks images and typography create visual In communication as well. In the textbooks of mathematics and technical education, appears a projection of a cube. Those projections are pictured as illustrations of educational content (geometrical shapes in space), but the way they are drawn includes some additional contents. A drawing is an interpretation, and the projections of a cube in textbooks do not match neither optical, perspective projection, nor mathematical, axonometric projection. This is a case of a usual stereotypical projection of a cube which is drawn automatically, because nobody asked the illustrator to do it differently. That kind of automatized, injudicious projection creates Brunner's accessible category at the observers, and similar to Luquet's "internal model" that projection is stronger than the one in front of our eyes. Therefore this kind of projection, presented in a textbook, damages the observer's perception, who is - due to his belief that he knows how to draw a cube - no longer able to actually see the cube.



Graphic 4: The mathematics textbooks for the 1st and the 2nd grade of primary school



Graphic 5: The mathematics textbook for the 3rd and the textbook in technical education for the 5th grade of primary school

### Clichés (stereotypes) and conformism as moral issues

Let us summarize the main points: it is possible to influence the perception by learning concepts of interpretation, accessible categories. As it has been seen in the example of a stereotypical projection of a cube in textbooks, a person who possesses faulty accessible categories has *an internal model*, a concept of visual interpretation, which is sometimes stronger than the thing that is observed. When the perception is distorted, an individual resorts to a stereotypical visual interpretation. The question is: is that bad? Does the distorted perception and stereotypical interpretation affect the behavior of an individual?

To begin with, the activities a certain person performs are mainly reactions to the information this person receives. The wrong perception provides us with wrong information, which consequently makes the judgement and reactions wrong. In this regard objectivity does not exist; the World exists exclusively through personal interpretation. Secondly, cliché is the shortest way to conformism. Cliché is a

Secondly, cliché is the shortest way to conformism. Cliché is a stereotypical expression which repeats something general, someone else's expression, without originality and forethought. Clichés in drawing are very common with children and they develop when adults show children how to draw something. While doing so, the adults are showing them clichés, and then they praise them exaggeratedly, which leads children to adopt such a pattern "because everybody does it", and because such a drawing certainly becomes money for buying praises. The most common examples of such drawing clichés which teach children conformism ("*be like everybody else, because, otherwise, you will not be given a praise*") are on the graphic 6. Conformism is the impact of the society on the belief and the behavior of an individual. This is the case of giving in to the pressure of the group (Crutchfield, 1955), and adapting of an individual to the majority because of his need to be accepted and the fear of being rejected. This leads to the change in the behavior and even to the adoption of other people's believes.



Graphic 6: the most common examples of drawing clichés imposed on children

It has been established that conformism affects the perception. In the experiment which was conducted by Solomon Asch (Asch, 1955), some persons had to compare the length of the referential line with three lines of different lengths, but in the presence of other persons who were giving wrong answers. Other people's opinions affected the respondents: seven persons who gave opposite opinions affected the respondents in 37.1% of cases. On the whole, 75% of people changed their statement, saying that they really felt that it was the right truth. Muzafer Sherif (Sherif, 1935) conducted an experiment by using autokinetic effect: a small patch of light, projected onto the screen in a dark room, seems to be moving (while it actually remains still, which is a visual illusion). When the respondents individually estimated the distance (of a non-existent) movement, the results were various: but when they estimated the movement in the presence of the other people, then all the perceptive estimations were brought into accordance.

The problem is that conformism and clichés affect the moral. The question of good and evil becomes the question of a context. Social

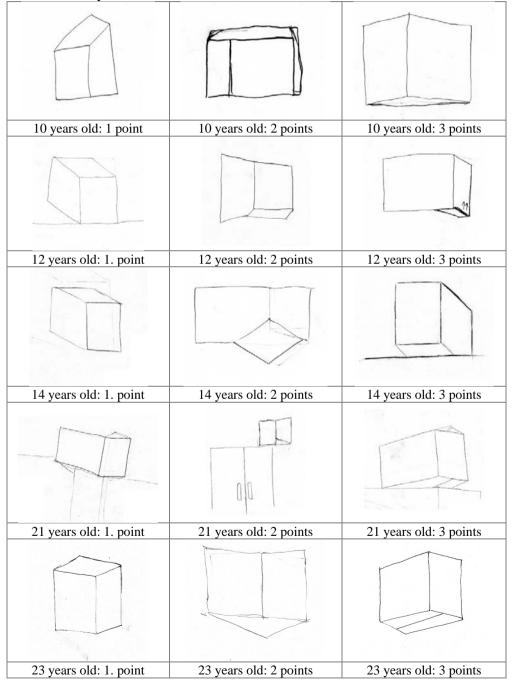
psychologist Philip Zimbardo named this The Lucifer effect: good people become evil due to the external conditions and the system they find themselves in (Zimbardo, 2007). Moral is the question of a context, and conformism enables that. There is a whole range of experiments that show us the things we do not want to hear: people are neither good nor evil; people simply do what other people do, even if those things are evil. Zimbardo is the author of a so-called Stanford Prison Experiment, where the students who were volunteers became "prisoners" and "prison guards", while "the prison guards" started subjecting "the prisoners" to the psychological torture which led to nervous breakdowns and the interruption of the experiment. Stanley Milgram is the author of the experiment in which the respondents whose role was "a teacher", gave the respondents who had the role of "students" electric shocks, increasing them because they were following the instructions of the leader of the experiment up to a lethal level of 450 volts. Electric shocks were not real, but the experiment demonstrated that the social dynamics can turn from 63% to 90% of people into murderers (Zimbardo, 2007). Similar results were obtained in the experiment with nurses, who obey an unfamiliar voice which orders them by phone to give the patient double bigger dose that exceeded the allowed maximum dose. In this experiment, 21 out of 22 nurses administered a deadly dose to their patients (Zimbardo, 2007). A high-school teacher Ron Jones used the classroom experiment to create a totalitarian system of believes (called "The Third Wave") with high-school students in just five days, wishing to make them understand the development of Nazism through the process of experimental learning. The teacher Jane Elliot, for the sake of the experiment, divided her students of the third grade into blue-eyed and brown-eyed, declaring one group superior to the other, and doing the opposite the following day. The result was that, once lovely and thoughtful children, became hostile, evil and discriminating (Zimbardo, 2007).

In 1941, at the honorary lecture on the King's College, a professor and a writer C. S. Lewis described the problem of tyranny of a groupthink (or group norms) described as a need for belonging to "The Inner Ring". He described different types of rings, explaining that those rings represent what we actually call "society". The Ring is neither good nor evil. However, the desire to be inside of it, as well as the fear not to be left outside The Ring can make an individual become evil. He said: "Of all the passions, the passion for the Inner Ring is most skillful in making a man who is not yet a very bad man do very bad things." (Lewis, 1941., p. 154)

In short: stereotypy leads to intolerance to dissimilarity. Clichés in drawing (for example a cube) is anything but dangerous in and of itself; however, it impregnates a person to accept stereotypical, injudicious behavior pattern, which can lead that person to the dark side of moral.

### The analysis of drawing interpretations according to the age and success

The drawings which directly use interpretation cliché earned one point. Two points were awarded to those who made an effort to explore the object, and three points were awarded to those who managed to draw the cube correctly.



# **Empirical research**

# The aim of the research

The aim of the conducted research is to examine the correlation between perception, reception and drawing interpretation and the level of those abilities with regard to age, gender and the country of origin of students.

### **Hypotheses**

H1: We expect higher level of perception at older age.

- H2: We expect higher level of reception at older age.
- H3: We expect higher level of drawing interpretation at older age.
- H4: We expect higher level of perception with girls.
- H5: We expect higher level of reception with girls.H6: We expect higher level of drawing interpretation with boys.
- H7: We expect that there will be no differences in the level of perception regard of country
- H8: We expect that there will be no difference in the level of reception regard of country
- H9: We expect that there will be no difference in the level of drawing interpretation regard of country
- H10: We expect that there is correlation between the drawing interpretation, perception and reception.

# Methodology

### **Research methods**

Empirical research is based on descriptive and causal nonexperimental method of empirical research.

### The sample of respondents

The research was conducted on an convenience sample of 218 pupils of primary school and college students of which, 116 (53,2%) are from Croatia and 102 (46.8%) are from Slovenia. The respondents are different in age, there were 44 (20,2%), at the age of 10; 46 (21,1%) at the age of 12; 44 (20,2%) at the age of 14; 47 (21,6%) at the age of 21 and 37 (17,0%) at the age of 23. Among them, there were 67 (30,7%) male and 151 (69,3%) female respondents.

### The procedure of collecting data and research instruments

We used a part of  $\overrightarrow{AP}$  test, which proved to be the test with adequate measure characteristics (validity, reliability, objectivity, sensitivity). In this research, Cronbach coefficient of reliability alpha is 0.651. The test consists of eight examination questions, the seven of which are closed-ended questions (multiple choice), and one is the open-ended question. All the questions refer to the work of art by Paula Cézanne "A Blue vase", 1887. The first set of questions (from 1 to 4) examines the abilities of perception, and the other set of questions (from 5 to 7) examines the abilities of reception. Besides the test, a practical assignment was carried out where the respondents were supposed to draw a cube above the horizon according to their observation.

### The procedures of data processing

Collected data were processed at the level of descriptive and inferential statistics. The following methods were used:

- t-test for independent samples intended to examine the differences in the achievements in examination questions (perception, reception and drawing interpretation) with regard to age, gender and country of origin of the students;
- regression analysis of the impact of predictors (gender, age, country);
- Pearson's correlation coefficient

# The analysis of the achievement in a modified AP test, in regard to age, gender and respondents' country of origin

### a. The role of age

 TABLE 1: The results of t-test differences in a merge result of perception, reception and drawing interpretation, with respect to the age of respondents

Abilities	Age	n	Arithme. mean	Standard deviation (sd)	Test of Homogeneity of Variances		Compare of arithmetic means	
			$\frac{1}{x}$	S	F	Р	t	Р
	10	44	9,6136	2,47044		0,450	6,389	0,000
	12	46	8,6957	2,85867	0,925			
Perception	14	44	9,9091	2,75190				
	21	47	10,9362	2,23027				
	23	37	11,0811	2,52078				
	10	44	6,0227	2,23595	2,159	0,075	0,359	0,837
	12	46	6,1087	2,69343				
Reception	14	44	5,9773	2,49174				
	21	47	6,1277	2,67531				
	23	37	6,5676	1,92268				
Interpretation (drawing)	10	44	1,7045	0,76492	8,230	0,000	1,706	0,150
	12	46	1,5435	0,78050				
	14	44	1,9773	0,99974				
(urawing)	21	47	1,8298	0,91649				
	23	37	1,9189	0,95389				

Hypothesis of homogeneity which the t-test is based on is not justified in case of drawing interpretation, which is why we refer to the result of the approximate method of the t-test. In other two cases, we have all the conditions for a common t-test. The results show that the difference in perception between students is statistically significant, (p = 0,000), and the best results are obtained by twenty-three-year-old students. In reception and drawing interpretation we did not discover any significant differences. This helped us accept the hypothesis H1 according to which we expected that the older respondents will achieve better results on the factor of perception the factor of perception. We must reject the hypothesis H2, according to which we expected that the older respondents will achieve better results in reception, and the hypothesis H3, according to which we expected that older respondents will achieve better results in drawing interpretation.

perception and reception with regard to gender								
Abilities	Gender	n	Arithme. mean	Standard deviation (sd)	Test of Homogeneity of Variances		Compare of arithmetic means	
			$\frac{-}{x}$	S	F	Р	t	Р
Drawing	М	67	1,8209	0,86909	1,373	0,243	0,351	0,726
	F	151	1,7748	0,90312				
Perception	М	67	8,8507	2,89856	1 1 6 9	0.201	4 412	0.000
	F	151	10,5298	2,44624	1,168	0,281	-4,412	0,000
Reception	М	67	5,7463	2,48842	0.010	0.000	1 (20)	0.105
	F	151	6,3245	2,38761	0,019	0,890	-1,629	0,105

### b. The role of gender

During the process of drawing, perception and reception, the condition for homogeneity of variances is satisfied, and that is why we rely on the common t-test. Between male and female respondents there is a statistically significant difference in perception (P = 0,000) where female respondents have a lead over male respondents. This result is confirmed by the hypothesis H4, according to which we expected that the girls will be better in the factor of perception. Hypotheses H5 and H6 must be rejected.

TABEL 2: The results of the t-test differences in the overall result of interpretation, perception and reception with regard to gender

and reception with regard to a country								
Abilities	Country	n	Arithme. mean	Standard	Test of Homogeneity		Compare of arithmetic	
				deviation				
				(sd)	of Variances		means	
			$\frac{-}{x}$	S	F	Р	t	Р
Drawing	CRO	116	1,9483	0,89292	0,270	0,640	2,861	0,005
	SLO	102	1,6078	0,85778				
Perception	CRO	116	9,2241	2,77594	1,796	0,182	-4,835	0,000
	SLO	102	10,9118	2,31698				
Reception	CRO	116	6,0517	2,75316	14,695	0,000	-0,628	0.521
	SLO	102	6,2549	2,00339				0,531

### c. The role of a country

TABEL 3: The results of t-test differences in the overall result of interpretation, perception and reception with regard to a country

The assumption about the homogeneity of variances is justified in the analysis of a drawing interpretation and perception. With the factor of reception, we resorted to approximation.

Statistically significant differences between two countries in the factor of drawing interpretation (P = 0,005) were noticed. Better results were achieved by the respondents from Croatia. In the case of perception (P = 0,000), the respondents from Slovenia achieved significantly better results. We have to reject the hypotheses H7 and H9 according to which we expected that there will be no differences between these factors at country level. We can accept the hypothesis H8, and that there is no significant difference in reception.

perception and reception							
Correlations							
Drawing Perception Recepti							
	Pearson Correlation	1	,032	,087			
Drawing	Р		,640	,202			
	Ν	218	218	218			
	Pearson Correlation	,032	1	,062			
Perception	Р	,640		,366			
	Ν	218	218	218			
	Pearson Correlation	,087	,062	1			
Reception	Р	,202	,366				
	Ν	218	218	218			

TABEL 4: The results of Person's coefficient of the impact of a drawing interpretation on perception and reception

The result of the Pearson's coefficient demonstrates that there is a weak correlation between the drawing interpretation and the perception. (r = 0,032). However, the correlation is strong between the drawing interpretation and the reception (r = 0,087). Also, there is a moderate (r=0,057) correlation between bad drawing and bad perception. Therefore, H10 must be rejected.

### Conclusion

In the overall, over the half of respondents (53%) used drawing cliché by drawing a cube, that is, they interpreted what they did not see at all. It is possible that textbooks had an impact on that behavior, and there is a certain connection between interpretation, perception and reception. Theoretically speaking, there is a correlation between interpretation and moral issues (clichés corrupt the moral when "I" became "we"), which means that the problem of visual education is anything but harmless.

### **References:**

Asch, S. E. Opinions and Social Pressure. In: Scientific American 193 (5), 1955. 31-35

Berman, A. The Difference Between Looking and Seeing. Linkedin, 2015. URL: https://www.linkedin.com/pulse/difference-between-looking-seeing-alli-berman. 21. 12. 2015.

Barthes, R. Rhetoric of the Image. In: Image-Music-Text. New York: Hill and Wang, 1977. Pp. 32-51

Brunner, J. S.; Goodman, C. C. Value and Need as Organizing Factors in Perception. In: Journal of Abnormal and Social Psychology, 42. 1947, pp. 33-44.

Bruner, J. S. On perceptual readiness. Psychological Review, Vol 64(2), Mar 1957, 123-152.

Crutchfield, R. S. Conformity and character. American Psychologist, Vol 10(5), May 1955, 191-198.

Dimopoulos, K., Koulaidis, V. & Sklaveniti, S. Towards an Analysis of Visual Images in School Science Textbooks and Press Articles about Science and Technology. In: Research in Science Education, 2003, 33. 189-216.

Huzjak, M. Analytical Observation Method in the Development of Children's Drawings. In: Croatian Journal of Education, Vol:15; Sp.Ed. No. 1/2013, 81-98.

Ivancevic, R. Perspektive. Zagreb: Skolska knjiga, 1996.

Luquet, G. H. Children's Drawings. London/New York: Free Association Books, 2001.

Lewis, C. L. The Inner Ring. In: Weight of Glory. New York: HarperOne; 2001. Pp. 141-157

Maynard, P. Drawing distinctions: the varieties of graphic expression. London: Cornell University Press, 2005.

Sherif, M. A study of some social factors in perception. Archives of Psychology, 27 (187), 1935

Van Leeuwen, T. Ten reasons why linguists should pay attention to visual communication. In: Discourse & Technology. Multimodal discourse analysis. Washington, D.C.: Georgetown University Press, 2014. Pp. 7–19.

Wann, J. P.; Poulter, D. R.; Purcell, C. Reduced Sensitivity to Visual Looming Inflates the Risk Posed by Speeding Vehicles When Children Try to Cross the Road. In: Psychological Science, Vol. 22, No. 4, 04.2011, 429-434.

Zimbardo, P. The Lucifer Effect: Understanding How Good People Turn Evil. New York: Random House Trade Paperbacks, 2007.

## Et 2020 – European Education System on the Border Between Globalization, Technology and Revivement of the Identitary Creativity

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### Abstract

Education is perceived, by the developed societies, as the key element of progress and welfare, being able to empower new generations with knowledge and skills aimed to contribute to the evolution of the world we live in. Designed as a political, economic, but, above all, social project, the European Union supports its member states in their attempts to increase both the quality and the accessibility of education, by setting common goals and designing common instruments to achieve them. However, the process of modernizing the European system of education is not an easy one, nor can it be concluded in a short period of time. This is the reason why, for several decades, the European institutions have released a number of official documents meant to create the framework for an education system that would match the challenges and opportunities of the globalized world we live in. The aim of this paper is to analyze and discuss the ways in which the national management of the education system provided by the governments of the Member States is complemented by the tools provided by the common European institutions. In order to achieve this, we will highlight the main issues tackled by previous documents, along with the results of such policies, focusing on Education and training 2020 (ET 2020).

Keywords: European Union, institutions, policy, education, member states

### Introduction

For centuries, Europe has been regarded as the cradle of culture, education and creativity, housing the world's oldest education institutions. Along with the creation and development of the European Union, policies have been issued aiming to create a more unitary and highly performing education system. "Education and training are key elements in the economic and social cohesion" (Ilie Goga, 2014: 215). The main part of the European institutions in this task is to design the necessary instruments which can be used to set these policies in practice (Şerban, Ilie, 2014), as well as to

supervise the ways in which the member states can respond to the requests of cooperation in the field of education.

By observing the key documents issued by the European Union in this matter, we can examine the ways in which the diversity of the member states' systems brings opportunities and value, as well as the attempts made to design a cooperation framework in the fields of education and training, in order to provide benefits and support for the Member States. Such documents have been issued for specific time frames, the current one, Education and training 2020 (ET 2020), being the one we aim to focus our analysis on.

It took 30 years of cooperation, from the formal adoption of the first Community action program on education in February 1976, for such recognition of the importance of education and training to be expressed as clearly as this at the highest level of the Union (European Commission, 2006: 21). During these years, several results have been achieved, thus coming to a phase of current cooperation that was not obvious at the beginning of the common framework. For example, programs such as the Erasmus, which is now one of the flagships of the Community's work, did not come to exist in the form we know it until recently, or the fact that in the initial European Coal and Steel Treaty of 1951 education was not even regarded as a specific topic, prove that the initial interest in tackling these fields was minimum. However, 30 years later, the Treaty of Maastricht in 1992, brought along a new approach, considering education as one of the major elements in creating social and economic development. In the "Council conclusions of 12 May 2009 on a strategic

In the "Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020')" (Official Journal of the European Union, 28.05.2009), it is emphasized that education and training have a "crucial role to play in meeting the many socio-economic, demographic, environmental and technological challenges facing Europe and its citizens today and in the years ahead". Also, the conclusions state that "efficient investment in human capital through education and training systems is an essential component of Europe's strategy to deliver the high levels of sustainable, knowledge-based growth and jobs that lie at the heart of the Lisbon strategy, at the same time as promoting personal fulfillment, social cohesion and active citizenship".

### What has been done so far?

In order to promote the development and increase the quality of the education and training systems, the European Union has designed two different types of instruments: first of all, there have been issued a series of policies encouraging the EU countries to exchange examples of good practice in order to develop their national education systems; secondly, a

substantial program funding and facilitating exchanges, networks and mutual learning between schools, universities or training centers, as well as between the political authorities responsible for these areas in the different Member States, has been created(European Commission, 2006: 107). A historical overlook reveals the ways in which European education and training policies evolved during the decades since the initial start of

A historical overlook reveals the ways in which European education and training policies evolved during the decades since the initial start of cooperation within the institutional frame of the European Communities. Thus, from 1971 until the end of the 1980s, European educational policy was characterized by an approach based primarily on economic growth (Munoz, 2015: 27). This first period was characterized by the fact that educational policies were, first of all, meant to promote vocational training among European countries, in order for them to achieve higher rates of economic growth through professional qualifications. Also, one of the main characteristics of this era is that education was used, on European level, as a tool to support economic growth more than in its cultural and social dimensions (Sauron, 2010). Since, after the opposition of the European countries during the Second World War, economic integration was preferred to social and political integration, all the policies issued by European institutions had to be aimed in this direction, of creating a common area of welfare. The national and historical differences were set aside, aiming to ensure a more unitary industrial and economic union of states, among which conflicts would become, if not impossible, at least undesired.

The first program of the European Union aiming to improve the education system was adopted in July 1987 - the COMETT program, designed to stimulate contacts and exchanges between universities and industry. After the successful implementation of this program, the Erasmus inter-university contacts and cooperation scheme was implemented, also providing European students with the opportunity to benefit from an international mobility (as, in 1989, did the "Youth for Europe" program, the EU's first youth exchange support scheme). Although all these programs were adopted by the Member States, they would not have been implemented without the considerable support from the European Parliament, offering including budgets before the legal instruments had been adopted.

were adopted by the Member States, they would not have been implemented without the considerable support from the European Parliament, offering including budgets before the legal instruments had been adopted. The main responsibility in the field of education within the European Union belongs to the Member States, while the common institutions merely have a supporting role. Art. 165 of the <u>Treaty on the Functioning of the</u> <u>European Union</u> states that the Community "shall contribute to the development of quality education by encouraging cooperation between Member States, through actions such as promoting the mobility of citizens, designing joint study programs, establishing networks, exchanging information or teaching <u>languages of the European Union</u>. The Treaty also contains a commitment to promote life-long learning for all citizens of the Union".

Furthermore, the EU has developed several programs funding educational, vocational and citizenship-building initiatives, meant to support European citizens and mostly those involved in the educational activities, to take advantage of the opportunities which the EU offers its citizens to live, study and work in other countries. Such an example is the Erasmus program, which provides students with the logistic and financial aid to take part in inter-university exchanges and mobility.

inter-university exchanges and mobility. Another example of important policies undertaken by the European Union is the European Higher Education Area (EHEA). On June 19, 1999, the ministers of education from 29 European countries met in Bologna, Italy, to debate and endorse an important strategy related to higher education, which later on became effective (Munoz, 2015: 30-31). The document issued was named the Bologna Declaration, creating "an important and irreversible process of harmonizing the various European systems of higher education" (The Bologna Declaration, 1999). The original Bologna Declaration agreed to biennial ministerial follow-up meetings to discuss strategies to solve convergence problems. The European Higher Education Area came into force in 2010, setting six main directions of action: Adoption of a system of easily readable and comparable degrees (grade/post grade)

(grade/post grade)

Adoption of a system essentially based on two main cycles: undergraduate and graduate

Establishment of a system of credits (European Credit Transfer System—ECTS)

Promotion of mobility with particular attention to students, teachers, researchers, and administrative staff

Promotion of European cooperation in quality assurance Promotion of the necessary European dimension in higher education. We argue that it is important to underline the fact that the Bologna We argue that it is important to underline the fact that the Bologna Declaration was not issued, nor did it create an instrument designed or used exclusively by the European Union Member States, among the 29 initial signatories being representatives of European non-EU countries. However, this document has a major impact and is interconnected with several European educational programs and policies (Şerban, Ilie, 2014). Following intense debates among the representatives of the Member States, at the Stockholm Summit in 2001, the Lisbon Strategy was ratified. Its provisions in the field of educational and training included the adoption of a set of benchmarks to measure and compare educational development

a set of benchmarks to measure and compare educational development among European countries (Valle, 2006). The procedure created to ensure the proper application of these decisions includes annually reports to the

European authorities and publishing in the *Lisbon Objectives in Education and Training* series. The information gathered was used in order to reshape some of the existing programs, such as the Socrates, Leonardo da Vinci, and Youth programs, which eventually ended in 2006. The Integrated Programs then gave way to the former Integrated Plan (2007-2013), or The Lifelong Learning Program, which included, among its main objectives, the Learning Program, which included, among its main objectives, the development, mutual exchange, cooperation and mobility among education systems so that they become a world-quality reference in accordance with the Lisbon Strategy (Valle, 2006). This new platform was considerably larger than the initial design, and included several programs covering different age and skill groups: the Comenius (primary and secondary education), Erasmus (higher education), Leonardo Da Vinci (vocational training), Grundtvig (adult education), and Jean Monnet (European integration in the conduction of the conduction).

training), Grundtvig (adult education), and Jean Monnet (European integration in the academic world) programs (Valle, 2006). As stated above, starting with 2000, the EU Member States have begun to take common actions aiming to design and achieve specific goals in the field of education and training, due to the awareness of the importance of these sectors in attaining several social and economic objectives. The common actions include, among others, sharing examples of good policy practice, taking part in Peer Learning activities, setting benchmarks, or tracking programs against key indicators but they beyouver not avaluate the tracking progress against key indicators, but they, however, not exclude the national sovereignty issuing specific Education policies. This strategy is referred to as the Education and Training 2020 program (ET2020), which is an update of the Education and Training 2010 program. The European Union is also a partner in various inter-governmental projects, including the <u>Bologna Process</u>, whose purpose is to create a <u>European higher education</u> <u>area</u> by harmonizing <u>academic degree</u> structures and standards as well as academic <u>quality assurance</u> standards throughout EU Member States and in other European countries (Standards and Guidelines for Quality Assurance in the European Higher Education Area ESG, 2015).

**ET 2020 - European policies in the Field of Education and Training** As stated above, the Lisbon Strategy had a major impact on European educational policy, acknowledging the fact that Europe's education and training systems need to adapt both to the demands of the knowledge society and to the need for an improved level and quality of employment. Their task, in the globalized world, is, as the Council states, to "offer learning and training opportunities tailored to target groups at different stages of their lives: young people, unemployed adults and those in employment who are at risk of seeing their skills overtaken by rapid change". In order to achieve these goals, this approach was targeted on three main directions: the development of local learning centers, the promotion of new basic skills, in

particular in the information technologies, and increased transparency of qualifications (Council of the European Union, 2000). In the Communication issued after the <u>Lisbon Spring Summit</u> in March 2000 (Presidency Conclusions, 2000), the <u>Heads of State and Government</u> of the <u>European Union</u> defined a series of areas where improvements in education and training were needed, and the Ministers of Education of the Member States were required to analyze the future of education systems and how they served citizens: "The European <u>Council</u> asks the <u>Council</u> (Education) to undertake a general reflection on the concrete future objectives of education systems, focusing on common concerns and priorities while respecting national diversity, with a view to ... presenting a broader report to the European Council in the Spring of 2001." (paragraph 27).

(paragraph 27). Several European institutions, among which the European Council, acknowledge the development and improvements acquired during the previous years, with several programs such as "Education and Training 2010", and express their intention to extend such cooperation for the future. Also, traditional European values, such as diversity, national identity and individual culture are cherished in an integrative system that allows and encourages partners to work together in order to achieve better results. In the Council conclusions on a strategic framework for European cooperation in education and training ('ET 2020'), it is clearly stated, even in the preliminary section, that, "while valuing European diversity and the unique opportunities which this affords, and while fully respecting the Member States' responsibility for their education and training — building on the progress made under the 'Education and Training 2010' work program — could further enhance the efficiency of such cooperation and provide continuing benefits and support for Member States' education and training systems up to the year 2020". training systems up to the year 2020".

training systems up to the year 2020". Also, the Europe 2020 Strategy includes three models of growth: (a) smart growth based on knowledge and technological innovation, (b) sustainable growth through the efficient use of alternative energy resources, and (c) inclusive growth with high employment and social cohesion (Council of the European Union, 2010: 3). So far, according to the Europe 2020 Strategy, the current European Union policy regards education rather as a means to produce graduates capable of producing business benefits in an increasingly competitive market, than promoting democratic social values that are critical and participatory (Munoz, 2015: 36). The educational frame designed by the Europe 2020 Strategy focuses mainly on training workers and encouraging entrepreneurship, setting as one of the main directions "to promote knowledge partnerships and strengthen

links between education, business, research and innovation, including through the EIT, and to promote entrepreneurship by supporting young innovative Companies" (Council of the European Union, 2010: 11). The provisions of the Europe 2020 Strategy in the field of education are completed by specific documents and policies, such as ET 2020. Therefore, according to the 'ET 2020', "In the period up to 2020, the

Therefore, according to the 'ET 2020', "In the period up to 2020, the primary goal of European cooperation should be to support the further development of education and training systems in the Member States which are aimed at ensuring: (a) the personal, social and professional fulfillment of all citizens; (b) sustainable economic prosperity and employability, whilst promoting democratic values, social cohesion, active citizenship, and intercultural dialogue" (Official Journal of the European Union, 28.05.2009).

Also, the Education and Training 2020 Strategy designs four strategic objectives, aimed to ensure that all the education and training systems in the European member states have a significant increase in the levels of training provided. These objectives are accompanied by a set of indicators of the reference levels of the European average performance:

Strategic objective 1: Making lifelong learning and mobility a reality

Strategic objective 2: Improving the quality and efficiency of education and training

Strategic objective 3: Promoting equity, social cohesion and active citizenship

Strategic objective 4: Enhancing creativity and innovation, including entrepreneurship, at all levels of education and training.

The conclusions of the Interim Evaluation of the strategic framework for European cooperation in education and training (ET 2020) issued in January 2015 state that regarding the operational dimension, "mechanisms have not been systematically put in place to enable ET 2020 to deliver the 'clear and visible outcomes' specified in the 2009 Council Conclusions". Furthermore, the findings of the research reveal that the "use of benchmarks and indicators is not systematically applied, and those that have been devised do not effectively serve as a tool to monitor direct progress in the achievement of the strategic objectives". Basically, according to this report, the ET 2020 requires the specification of more detailed intended outcomes that are linked to each objective, and that are feasible to both monitor and measure. In addition to these, most of the actions need to be undertaken by the Member States, thus reinforcing their capabilities in developing modern and efficient education systems.

### Conclusion

One of the main findings of our research resides in the fact that, at least in the first decades of the European construction, education was

perceived as an instrument to ensure economic growth of the Member States. Cooperation, exchange of expertise, participation in joint training sessions, proved to be efficient practices in improving the current activities in this sector, and the European institutions, through the representatives of the countries, enhanced the cooperation in education, splitting activities into age or education dimensions.

However, such a perspective ignored, at least in part, the fact that one of the key-advantages of education is that it can excellently contribute to building the supra-cultural dimension that European policymakers seek (Munoz, 20015: 23). The latest reports of the European Commission on education acknowledge that this field is of strategic importance for our societies and economic development; starting from the idea that Europe's prosperity and way of life are based upon its greatest asset: its people, education is described as the foundation for social cohesion and creating an open society. Some authors argue that in the knowledge society, quality, excellence, and competitiveness are indispensable factors to economic progress; however, it is equally important to define European educational policy in terms of multiculturalism, pluralism, and interdependence (Munoz, 2015).

Another important conclusion we draw from the analysis of the education and training evolutions is that the real stake-holders in this matter are the national governments. As history proves, modernizing and improving the quality of education systems require reforms, which cannot be concluded in brief periods of time, nor can be decided by external institutions, being rather a continuous effort that need to be undertaken by each of the Member States. Nevertheless, all the 28 European countries share the interest that these reforms make progress and yield results, from which Europe as a whole would benefit, for example in the form of social cohesion and fairness, higher growth, employment, innovation and competitiveness (European Commission, 2016: 9). In the same manner that things evolved so far, the EU can assist the efforts of the Member States, by placing the improvement and modernization of education as a key priority on the EU agenda. Furthermore, targeted action at EU-level can support Member States in their reform efforts and help building a shared agenda to make high-quality education a reality for all.

Education is a means to transfer to citizens important and meaningful cultural elements such as language, values, and traditions (Lafuente et al., 2007: 88). The exclusive economic perspective should be abandoned, building future European education policies around the idea of creating a "melting pot" of European culture.

### **References:**

Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), Official Journal of the European Union, 28.5.2009 Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528 (01)&from=EN

Joint Report of the Council and the Commission on the implementation of the strategic framework for European cooperation in education and training (ET 2020), Official Journal of the European Union, 15.12.2015 Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=

CELEX:52015XG1215(02)&from=EN.

Presidency Conclusions, Lisbon European Council, 23 and 24 March 2000 Available at

http://www.consilium.europa.eu/ro/uedocs/cms_data/docs/pressdata/en/ec/00 100-r1.en0.htm

Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), Brussels, Belgium, 2015 Available at: http://www.eua.be/Libraries/quality-

assurance/esg_2015857166ca84b96a879ce5ff00009465c7.pdf?sfvrsn=0

Council of the European Union. *Presidency* conclusions Lisbon European Council, Brussels: COM, 2000.

The Bologna Declaration of 19 June 1999: Joint declaration of the EuropeanMinistersofEducation,Availableathttps://www.eurashe.eu/library/bologna_1999_bologna-declaration-pdf/.

European Commission. The history of European cooperation in education and training, Luxembourg: Office for Official Publications of the European Communities, 2006.

European Commission. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions improving and modernising education Available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0941&from=en.

Gornitzka, A. The Open Method of Coordination as practice - A watershed in European education policy? University of Oslo: Center for European Studies, 2006.

Ilie Goga, C. The status quo of regional social policy in the European Union, *Revista de Științe Politice. Revue des Sciences Politiques, 43, 2014*, pp. 207-221.

Lafuente, J. et al. El diseño curricular por competencias en educación médica: Impacto en la formación profesional, *Educación médica*, 10(2), 2007, pp. 86-92.

Maassen, P., Stensaker, B. The knowledge triangle, European higher education policy logics and policy implications, *Higher Education*, 2011, Vol. 61, Issue 6, 2010, pp. 757–769.

Muñoz, R. A. European Education Policy: A Historical and Critical Approach to Understanding the Impact of Neoliberalism in Europe, *Journal for Critical Education Policy Studies Volume 13, Number 1, 2015*, pp. 19-42.

Sauron, J. L. Curs de institutii europene, Iasi: Polirom, 2010.

Şerban, I., Ilie, C., The use of field research in the educational process. Original/primary sources vs. Internet, *Procedia - Social and Behavioral Sciences, no. 116/2014, Elsevier*, pp. 3231-3235

Valle, J. La Unión Europea y su política educativa, Madrid: CIDE-MEC, 2006.

West, J. The evolution of European Union policies on vocational education and training, London: Centre for Learning and Life Chances in Knowledge Economies, 2012.

### **Detention: Effect or Cause of Deviance? An Analysis of the Arguments Provided by Romanian Inmates**

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#### Abstract

The sociology of deviance places great importance on the causes of delinquency. A question always arises: why, in the same context, some people commit crimes and others do not? The first part of the article is based on the analysis of the causal theories of deviance, showing the views of some famous authors such as Cesare Lombroso, Edwin Sutherland, Michel Foucault or Erving Goffman. The second part of the paper presents the results of a sociological survey conducted in a Romanian penitentiary and analyses the prisoners' perspective on the causes that led them to commit those delinquent acts and also their perception of the influence that the detention system has on their personal development and on the risks that incarceration incurs.

Keywords: Detention, deviance, causal theories of deviance, sociological survey, Romania

#### Introduction

This paper is built around the following question: Can detention be seen as the effect or as the cause of deviance?

Ever since the beginning of the 19th century, the French system of liberty deprivation has been analyzed by a series of researchers who worked for the government or for other institutions. They wanted to find an answer to the question of whether incarceration can or cannot be perceived as a cause of repeated offenses, given the fact that it leads to an "inmate's moral decay" (Beck, 1992: 15).

We will begin our work with a brief theoretical analysis of the causes of deviance, whereas in the second part we will consider them in relation to detention and delinquency, from an empirical point of view, by presenting the results of a sociological survey conducted among the inmates in the Maximum Security Penitentiary in Craiova.

### **Causal theories of deviance**

The sociology of deviance greatly emphasizes deviance causes. Ever since the 1950s there have been determined five main characteristics of delinquency: "constant, male, juvenile, urban and committed by disadvantaged people". Other variables have also been added since then, such as: age, place of residence, occupation, ethnicity, family, social status, etc. (Ogien, 2002: 40).

However, one question still remains: Why is it that, within the same context, some people commit deviant acts and others do not?

Walter Rackless divided the causal theories of deviance into three categories: "biological and constitutional, which identify causes such as biological heredity and mental disorders", "psychogenic, which mention faulty family relationships in early childhood as the main deviant factor" and "sociological theories, which see society and social pressure as the main elements which lead to deviance" (Reckless, 1961: 42).

In his book called "The sociology of deviance", Albert Ogien identifies the following factors as being determinant to deviance: "an individual's lack of adaptation, peer group emulation, reduced authority of control institutions, social inequity " and "reproduction of dominance, resulting from the defense of a certain form of social hierarchy" (Ogien, 2002: 44). The author divides causal deviance theories according to four elements: the individual, the environment, society and the social structure.

Adolphe Quételet (astronomer, mathematician, statistician and sociologist) believes that deviance is only perceived in relation to an average of general behaviour, enabling us to assess how serious deviance is. By using the statistical criteria, the author mentions the fact that it resides in *probability*. Quételet is the author of the concept of "average man". Starting from the statistical data of deviance, the author defined the average man as someone who leads a moderate life, with no excess. Quételet also identified three constant elements which lead to crime, namely: "accidental causation, variable causation and constant causation", the latter being the most influential in deviant acts (Beck, 1992: 16). Causes can however concur. Also, starting from the statistical data in France regarding criminality, the author concluded that the unequally distributed welfare determines the highest levels of criminality, even though his initial thesis was that poverty is a major cause of deviance. (Beck, 1992: 16).

We will now analyze the *causes of deviance in relation to the individual*, the so-called *biological and constitutional theories*.

Cesare Lombroso pointed to biological or organic causes for deviance. The Italian author claims that it is easy to identify a criminal by merely looking at their hereditary physical attributes, which make them an organically abnormal person, "partly pathological, partly atavistic"

(Ellwood, 1912: 717). Following ample anthropological research in Italian penitentiaries, Lombroso was able to identify "primitive", hereditary features, which are characteristic to most of those who broke the law (for instance: narrow foreheads, excessive body hair, prominent jaws, etc.). A born criminal is an "atavistic abnormality, who sums the physical and psychological characteristics of their long gone ancestors" (Ellwood, 1912: 720) and "even those of wild animals" (Lombroso, 2006: 15). They are "savage people born in the modern world", "programmed to hurt" (Lombroso, 2006: 15). The well-known Italian criminologist and physician used the results of his research to conclude that most criminals have a propensity towards this type of actions ("criminaloids") and divided criminals into three distinctive categories: "criminaloids", occasional criminals and passionate criminals. During the last stage of his life, Lombroso also added social and psychological factors to his own categories, acknowledging the fact that they are causes of crime, although he mostly thought of them as stimulus (Ellwood, 1912: 717) for a born criminal and for a "criminaloid".

There followed "the theory of the born criminal" (1897), a series of biological explanations of deviance, of other authors, who emphasized elements such as "degeneration", "epilepsy", "intellectual defects", "mental disorders", each of these factors being identified as "unilateral causes" of the phenomenon (Glueck, 1956: 92). William Herbert Sheldon is the author of another biology-based theory, "the constitutional theory", and he created the somatotype (the constitutional type of a person), by quantifying their rate of endomorphy, mesomorphy and ectomorphy (The medical dictionary, 2016), while mentioning the fact that, as a result of his research, people who have a mesomorph structure are more inclined to commit aggressive, violent acts, unlike those who have an endomorph or ectomorph body type (Maddan, Walker and Miller, 2008).

Although nowadays biological theories are rejected by most researchers, modern deviance theories are often based on genetic, hormonal or even metabolic causes (Thompson and Gibbs, 2017: 47). For instance there are certain theories such as the one of the extra Y chromosome, also known as the "Super Male theory". It offered a pattern of male deviance consisting of an XYY combination, which was said to produce excessive aggressiveness (Rosenberg, Stebbin and Turowetz, 1982 apud. Thompson and Gibbs, 2017). Nutritional causes are also held responsible in sociobiology for deviant behaviour such as the attention deficit disorder and hyperactivity (ADD şi ADHD), antisocial behaviour, aggressiveness etc. (Schoenthaler, 1983 apud. Thompson and Gibbs, 2017: 47).

The psychogenic theory, also known as the "character flaw theory" sees an individual's character as a cause of deviance. Characters develop in

the early years of life, as a result of learning and of family relationships (Reckless, 1961: 42). A sociopathic behaviour, inability or lack of selfcontrol and propensity towards addictions (Terry and Pellens, 1928) can easily lead to deviant acts. There is a series of studies which use this theory in relation to drug users, who often commit other crimes in order to obtain their drugs (Dole and Nyswander, 1980 : 258 in Lettieri, Sayers, and Wallenstein Pearson, 1980).

The Gluecks believed that criminal tendencies are most often determined by the individual's mental characteristics (psychological features), which led them to identify a certain "delinquency potential" that is more prominent in some individuals and which is a sign of social inadaptation, originating in the early childhood. Eleonor and Sheldon Glueck discovered that this propensity originates in parents incapable of educating their own children properly. The two researchers manage to draw predictive social tables, consisting of seven types of factors: build, intelligence, personality, background and family relationships, leisure activities, school performance and habits (Ogien, 2002: 45-47).

When analysing the causality of deviance as reported to the environment, it can be noticed that the followers of the idea of "human ecology", claim that the environment has a strong influence on human actions. In this perspective there can also be mentioned the theory of cultural transmission as applied to criminal subculture. Thus, the representatives of the Chicago school of thought linked criminal behaviour to the lifestyles of outskirts communities (suburbs, slums). As a result of a research conducted in the residential areas, ghettos and outskirts of Chicago, Robert Park identified a high incidence of criminality, divorces, suicides, in areas with needy communities, such as migrants, facing a state of normative disorientation, anomia and marginalisation (Rădulescu, 1998: 109). Therefore, large groups of immigrants are often regarded as a threat (Porumbescu, 2014: 232). Clifford Shaw and Henry Mac Kay believe that delinquency is acquired, as a result of the living conditions in the place of residence. The first factor is the acquisition of the habits of the place where the respective person was born and raised. The results of the research conducted in 21 American cities on various categories of criminals and in various time spans (between 1900 and 1933) led the researchers to conclude that residence is an accurate indicator of the probability to commit criminal acts, as the authors noticed that the delinquents originated from "ill-reputed" neighbourhoods. C. Shaw and H. Mac Kay also identified the three factors neighbourhoods: common to those poverty, which are mobility, heterogeneity. To be more specific, the authors believe that a person who is born and raised in an environment where deviance is all-present, is more at risk of choosing such a lifestyle than one who lives in a more peaceful

environment. Therefore you are not born a criminal, rather you become one (Shaw and Mac Kay, 1942 apud. Ogien, 2002: 50-55).

When examining *the causality of deviance as reported to the society*, Ogien explains that, when accounting for deviance, society is often mentioned, in the sense of lack of authority, materialized in the fact that some essential mechanisms of social insertion are considered to be useless. Authority is attributed to family, school, the church, the police, and, most importantly, to justice. Within this context, several factors must be taken into account when assessing the function of authority: education, the practical circumstances of the crime or the legal procedures applicable to the respective delinquent actions (Ogien, 2002: 56-57).

When reporting deviance *to education and social insertion*, there are theories, such as "the theory of socialization in the deviance" or "the theory of cultural transmission", which claim that deviance is an acquired conduct or a mere conformation to the values and rules of certain subcultures (Rădulescu, 1998). Among these socialization theories, there is also the "differential association theory" initiated by Edwin Sutherland, who "started from the idea that any criminal conduct is acquired to the same extent as conventional conduct, and it results from the differential association with criminal norms, values and techniques" (Sutherland, 1939 apud. Rădulescu, 1998: 105). According to Sutherland and Cressey, criminal conduct is acquired by a person by means of their interaction and communication with other individuals among their acquaintances, and association with criminal patterns as opposed to noncriminal ones, is differential, depending on the duration, intensity, frequency and priority of exposure to those criminal patterns (Sutherland and Cressey, 1984 apud. Rădulescu, 1998).

"The theory of cultural transmission" is based on the idea that "any deviant behaviour is a conformation to the rules, traditions and values of various subcultures, which are transmitted from one generation to the next" (Rădulescu, 1998: 107). Subcultures have got their own interests, meanings and perceptions. Such is the case of the Romani population, homosexuals, drug users, inmates etc. The sense of belonging to the respective subculture makes the individual comply with the norms and values of the subculture and therefore commit a series of deviant acts, by adopting a certain lifestyle and attitude (Rădulescu, 1998: 108-109). When applied to the criminal subculture, the theory of cultural transmission leads to the idea of criminal conduct as a form of conformation to the set of values that is specific to marginalized groups, whose members have got a low social status and cultural models who encourage breaking the laws. This leads us to the causality of deviance as reported to the environment, which has already been approached. While the acquisition of the norms which go against the applicable social standards could account for deviance, there are authors who disagree with this aspect. Irving Piliavin and his fellow researchers conducted a study in 1985, starting from the rationality theory. They applied the principle of calculating utility and used the hypothesis that the acknowledgment of the risk of being punished would be a strong enough reason to prevent the individual from ever committing criminal acts again (Piliavin, Gartner, Thornton and Matsueda, 1985). The results of the research proved the contrary, explaining the fact that the acknowledgment of the legitimacy of the punishment was of very little importance in the decision to commit a crime. Thus, the conclusion is that "instead of considering the acquisition of childhood norms as a permanent proof of conformity, we should rather admit the fact that, while this acquisition does take place, compliance to the norms is an attitude which is highly circumstantial" (Ogien, 2002: 57-60).

From the perspective of the *multiplying temptations*, the research conducted by Piliavin led to the idea that, apart from the individual causes, there are also a set of favoring circumstances, also known as "crime opportunity": "empty houses, neighborhoods with no police surveillance, misplaced objects, stopped cars, lack of or limited number of financial controls" (Ogien, 2002: 61). According to Cohen and Felson, crime is perceived as an event which occurs when certain conditions which favor it are met at a given time, in a given place. The authors believe that the most important three elements which favor a crime are: the person who decides to commit the crime, the object of the crime which is located in plain sight, and the lack of surveillance. The variables which the authors use in elaborating the "routine activity theory" are: exposure, proximity, attraction and surveillance (Cohen and Felson, 1979 apud. Ogien, 2002: 62).

In order to study *the feeling of impunity* as a cause of deviance, Ogien analyses Cusson's perspective defined in 1990, namely that in nowadays society, criminals are more likely to receive no punishment, to escape arrest, to have their case closed, or to avoid paying the fine or serving time even in the presence of a definitive sentence (Cusson, 1990: 109 apud. Ogien, 2002: 65). Thus, the feeling of receiving no punishment, determined by a lax justice (an apparently relaxed way of sanctioning crimes, less rigorous laws, a slow replacement of repression with persuasion), can be seen as a factor which encourages an individual to commit a criminal act.

*The social structure* has also been identified as a cause of deviance, according to the analysis involving the structure of social classes and some economical aspects, conducted by the very founders of sociology: Karl Marx and Émile Durkheim. Similar studies have also been conducted by William Chambliss (1973), Richard Quinney (1980), Fritzgerald and Zucker (1995), Heckert and Heckert (2004), Tillan (2009) (Spencer, 2015: 225-230). Albert

Ogien explains that the layered structure of society, which includes one ruling class which favors the perpetuation of power, is seen as a source of deviance. However, the social structure is perceived differently, and the author includes other secondary factors within the context: social and economic inequity, dominance and reproduction.

In order to enforce the idea of the *social and economic inequity* as a cause of deviance, Ogien uses a research conducted in 1982 by Juridih and Peter Blau, who tried to measure the importance of social inequity in the occurrence of crime. Thus, the authors notice the importance of both social and economic inequity, while drawing a line between inequity, economic inequity and poverty and claiming that "but for the social and economic inequity the population experiences, and especially the inequity generated by the definitive status conferred by poverty and ethnicity, the prescriptions of social order could be applied" (Ogien, 2002:71-72).

Albert Ogien includes elements such as *dominance and reproduction* as sources of deviance. His analysis is based upon the concept of "social control". In Durkheim's perspective, adopted by the Anglo-American school of thought, social control is defined as "the action of a set of regulating mechanisms which are specific to any social community, which predictably regulate the relationships among its members" (Ogien, 2002: 74). According to the French school, social control is seen as : "a set of practices used by those in power, which either guarantee hierarchy and social stratification, or perpetuate the conditions of exploitation and alienation by the dominant classes" (Ogien, 2002: 74). In order to present a detailed overview of the causes of deviance in terms of social control, an analysis must be conducted, regarding either the functioning of power directly, or the types of people envisaged by the institutions in charge of social control.

In the analysis of the *social production of deviance*, it is used Marx's theory according to which deviance most frequently occurs in the lower classes of a society, as it originates in the division of the society into antagonistic classes, in inequity, and the state guarantees the hegemony of the ruling class by means of its repressive instruments (the police, justice, medicine, family, the church, etc.) (Ogien, 2002: 83). However, in 1994, Jean de Maillard insisted upon the fact that in contemporary society "budget constraints have led to a limitation of the public intervention in the private sector, to a prioritization of human rights, to a decriminalization of minor crimes and to the development of alternative punitive instruments" (Maillard, 1994 apud. Ogien, 2002: 87). Criminality has now changed to "serious delinquency", of a financial and economic nature, which is characteristic to the dominant class itself. It can therefore be noticed the fact that, while discussing the social production of deviance, the cause of this phenomenon is no longer of the same nature, with changes ranging from the economic order

of dominance, to the perception of politics and to the administration of public affairs (Ogien, 2002: 87-88). A similar approach is used in "the theory of power" designed by Alex Thio (2000), who notices the fact that, in today's society, the law favors the powerful and wealthy. Their already existing power leads to greater influence and to less strict social control, they are more highly motivated and they have more frequent opportunities to commit high-level crimes, as opposed to the poor and powerless, who commit unprofitable deviant acts. This could be an explanation for the ever-more-present high-level corruption (Palispis, 2007: 222-223).

In his presentation of the *power of norms* within this context, Ogien chooses to favor the perspective of authors such as: Michel Foucault, Robert Castel or Jacques Denzelot, who advocate for the following theory: "deviance does not exist outside of the practices of social control which define it and repress it" therefore, "the abnormality of a conduct is the result of the institutions appointed to treat it, not a blamable attitude which is the effect of accountable and measurable social causes". In other words, people become deviant when judged according to the criteria imposed by various institutions, which are different for people who break the norms (Ogien, 2002: 82).

In his book "Discipline and Punish. The birth of the prison", Foucault studied the process of legal rationalization and of the invention of prison, with a strong critical attitude against the penitentiary system.

Michel Foucault defines the phenomenon which generates the change of power technology: the replacement of law by the norm, thus the prison man, who is the "basic instrument of power, imposed a new type of law: a mixture of legality and nature, prescriptions and constitution, the norm" (Foucault, 1975: 310 apud. Ogien, 2002: 76-77). Foucault sees the entire society undergo a slight process of turning from the law to the norm, thus imposing a new power regime "based upon the use of rational criteria which account for the progress of objective knowledge in relation to the human being and to their behaviour". Within this context there appears a new type of institutional surveillance, which "proves its worth of setting lives straight when they tend to deviate from the institutional order" (Ogien, 2002: 77). M. Foucault uses terms such as a judge-teacher, a judge-doctor, a judge-social worker, "who impose the rule of the norm, to which they comply in their behaviour and skills" (Foucault, 1975: 311 apud. Ogien, 2002: 76-77). Repression is therefore more present in the norm than in the law. From the author's perspective, deviance results from the application of a strict norm at the level of the society.

In Foucault's opinion, criminal law and penitentiaries are both instruments of power and factors which can be used to enforce social order." A criminal is a result of the institution, if we can say that imprisonment

makes the passage from illegalities to delinquency". In other words, Foucault reverses the way in which these terms were used in traditional doctrine, which used to claim that crime was prior to the institution in charge of the repression thereof.

There have been frequent analyses of the freedom depriving punishment as a cause of delinquency. Erving Goffman conducted a research on the "delimitation nature" of total institutions, which lead to an almost complete elimination of the "civilian ego", to a "humiliation of the ego" (Goffman, 2005: 24-33) and to the assimilation of the rules and behavioral patterns which are characteristic to penitentiaries (Dobrică, 2010: 375). Goffman refers to the effect of detention, that of "deculturation", in other words "forgetfulness which makes the individual temporary unable to deal with certain characteristics of everyday life outside the institution, if and when they are liberated" (Goffman, 2005: 24). Inside a penitentiary there is "a high degree of conformity, an adaptation to the rules of the penitentiary and an increased difficulty of adapting to the outside society" (Dobrică, 2010 :386). The failure of the penitentiary institution is based on the very paradox on which it is founded : "it aims at providing the society with people who are ready to live a free life, while depriving them of their liberty" (Dobrică, 2010:386). Furthermore, after noticing the increase of criminality and second-time crimes at the global level over the past two centuries, we can conclude that the idea of idea reeducating a detained person is an illusion, with frequently contrary effects.

### An empirical analysis of the causes of deviance

This chapter includes the analysis of the results of a sociological research conducted during the first half of the year 2015 within the Maximum Security Penitentiary in Craiova. "The field research it is important because allows the author to introduce in the scientific circuit" new data, validating the theoretical part" (Şerban and Ilie, 2014: 3232). The sample consisted of 104 people deprived of their liberty, 96 men

The sample consisted of 104 people deprived of their liberty, 96 men and 8 women, representing 20% of the total number of inmates. The men-towomen ratio was equivalent to real-life ratio (483 men and 37 women). Starting from the variable of the defavouring social environment (the

Starting from the variable of the defavouring social environment (the place where the respective person was born and raised, poverty, constant moves, relationship with different groups of people, etc), along with the theory of human ecology (Shaw and Mac Kay), we identified the effect variable: a high probability of committing a criminal act.

Our hypothesis is the fact that the social environment is the most important cause of deviance.

Thus, the objective of the research was to identify the inmates' perception of the influence of their social environment upon the committal of the delinquent act.

Options	Percentage	
Social integration in a group whose members committed deviant	37.5%	
acts		
The living environment	9.6%	
Social and economic inequity	8.7%	
Inborn personality traits	3.8%	
Easy earnings at low risk	2.9%	
State's abuses and unjust procedures	1.9%	
Supernatural causes (bad luck, the devil, God, etc.)	1.9%	
I cannot tell	33.7%	
Total	100 %	

By applying this question, we wanted to test the causal theories of deviance, as presented in the theoretical chapter. Not all options were chosen by the respondents. A percent of 37.5% of the inmates stated that "the social integration in a group whose members committed deviant acts" was the main cause for the committal of their crime. For 9.6% of the respondents, their "environment" was the favoring cause of delinquency, whereas 8.7% chose "economic inequity" as the main reason which led them to commit the deviant acts. A percent of 3.8% of the respondents mentioned the fact that their "inborn personality traits" is the dominant cause for the committal of their crimes, 2.9% mentioned "easy earnings at low risk", 1.9% "state's abuses and unjust procedures" and another 1.9% mentioned a "supernatural cause (bad luck, the devil, God etc.)".

concagues, inside the pennentiary?					
Percentage					
16.3%					
1.9%					
19.3%					
1.9%					
60.6%					
100 %					

 Table no. 2: Answer to the question: What kind of things do you think you learnt from your colleagues inside the penitentiary?

When talking about the things they learnt while they were inside the penitentiary, most respondents, 60.6% stated that they "did not learn anything" from their colleagues, 19.3% of them said that they learnt good things, 16.3% of the inmates mentioned that they learned some "bad things" from their colleagues, whereas 1.9% said that they learnt either some very good or some very bad things.

Many of the people who answered the questions said that, while inside, an inmate could learn both good and bad things. The important thing is to be willing to listen and learn.

### Conclusion

In relation to the causal theories of deviance, most respondents estimated that the theory of cultural transmission was the most applicable one. The second most applicable one was the theory of "human ecology", which is a merely different presentation of the theory of cultural transmission as applied to the criminal subculture.

In relation to the statement according to which detention is a cause of deviance, it is my opinion that it was confirmed, given the fact that 21.2% of the respondents said that they learnt some either "good" or "very good" things from their colleagues. The idea of learning good things from an inmate is a relative one and it can be easily interpreted in a reversed meaning. This demonstrates that a large number of inmates adhere to the values of the penitentiary subculture and that coexisting with people convicted for criminal acts can have a negative influence.

There is a cause-effect relation between deviance and delinquency with detention, given the fact that, according to criminal law and to criminal procedure law, most crimes are punishable by detention. However, on the other hand, along with the retributive purpose, or serving as an example for other people, liberty deprivation is also aiming at educating the offenders in order to correct their attitude. The purpose of detention thus become one of providing society with "sane, healthy, peace and truth-loving individuals" (Gorescu, 1930: 37-40). Social (re)insertion programs conducted in penitentiaries aim at providing the inmates with the necessary skills and abilities, in order to prevent them from repeating their offenses (Levan, 2004: 290). However, based on the statistical data, it becomes obvious that, after their liberation, most criminals commit offenses again and return behind bars. We can therefore conclude that the educational and social insertion purpose of the punishment is seldom fulfilled. Penitentiaries are more often seen as "a place of contamination, a school of crime" (Vrăbiescu, 1928: 34). And thus, a potential answer to the initial question could be that detention is an effect, as well as a cause of deviance.

### **References:**

Beck, U. *Risk Society: Towards a New Modernity*. London: Sage. 1992. Cohen, L. and Felson, M. Social change and crime rate trands: a routine activity approach. *American Sociological Review*. 44(4). 1972. Cusson. M. *Croissance et décroissance du crime*. Paris: PUF. 1990. Dicționar medical. *Somatotip*. 2016. Retrived from: http://www.dictio.ro/medical/somatotip.

Dobrică, P. Normalitate, conformitate și devianță socială. În Vlăsceanu, L. Sociologie. Iași: Polirom: 337- 390. 2010

Dole. V. P. and Nyswander, M. E., *Methadone maintenance. A theoretical perspective.* In Lettieri, D. J., Sayers, M. and Wallenstein Pearson, H. (Eds.) Theories on drug abuse. Selected contemporary perspectives. Washington: Metrotec Research Associates: 256-261. 1980.

Ellwood, C. A. Lombroso's theory of crime, *Journal of Criminal law and Criminology*, 2(5): 716-723. 1912.

Foucault, M. Surveiller et punir. Naissance de la prison (A supraveghea și a pedepsi. Nașterea închisorii). Paris: Gallimard.1975.

Glueck, S. Theory and fact in criminology. *The British Journal of Delinquency*. 7 (2): 92-109. 1956.

Goffman, E. Aziluri: Eseuri despre situația socială a pacienților psihiatrici și a altor categorii de persoane instituționalizate. (translated by Anacaona Mîndrilă). Iași: Editura Paralela 45. 2005.

Gorescu, O. "Văcăreștii" Mânăstire. "Văcăreștii" Penitenciar. Precedatde un scurt istoric asupra regimului penitenciar în România. București: Editura necunoscută. 1930.

Levan, Kristine. Adult *Offender recidivism. Reduction programs*. In Mackey David and Levan Kristine (Eds.) Crime prevention. Burlington: Jones & Bartlett Learning: 289- 295. 2004.

Lombroso, C. *Criminal man* (translated by Gibson, M and Rafter, N. H.). London: Duke University Press. 2006.

Maddan, S., Walker, J. T. and Miller, J. M. Does size really matter?: A reexamination of Sheldon's somatotypes and criminal behavior. *The Social Science Journal*. 45(2): 330-344. 2008.

Maillard de, J. Crimes et lois. Paris: Flammarion. 1994.

Ogien, A. *Sociologia devianței (Sociology of deviance)*. (transalted by Dana Lungu and George Neamțu). Iași: Polirom. 2002.

Palispis, E. S. Introduction to Sociology and Anthropolgy. Manila: Rex Book Store. 2007.

Pilivian, I., Gartner, R., Thornton, C. and Matsueda, R. Crime, deterrence ansd rational choice. *American Sociological Review*, 56 (1), 1985.

Porumbescu, A. The cultural impact of the emigration of German ethnics from Romania, Iulian Boldea (ed.). *Globalization and intercultural dialogue: multidisciplinary perspectives*, Târgu-Mureş : Arhipelag XXI, 227-236, 2014.

Rădulescu, S. Sociologia devianței. Bucharest: Victor. 1998.

Reckless, W. A new theory of delinquency and crime. *Federal Probation*. 25: 42-46. 1961.

Rosenberg, M. M., Stebbin, R. A. and Turowetz, A. *The sociology of deviance*. New York: St. Martin's Press. 1982.

Schoenthaler, S. J. Diet and crime, an empirical examination on the value of nutrition in the control and treatment of incarcerated juvenile offenders. *International Journal of Biosocial Research.* (4): 25-39. 1983.

Shaw, C. and Mac Kay, H. *Juvenile delinquency and urban area*. Chicago: The University of Chicago Press. 1942.

Spencer, J. W. *Contexts of Deviance: Statuses, Institutions, and Interactions.* Oxford: Oxford University press. 2015.

Sutherland, E. Principles of criminology. Philadelphia: Lippincott. 1939.

Şerban, I. and Ilie, C. The Use of Field Research in the Educational Process. *Procedia - Social and Behavioral Sciences*. 116: 3231-3235. 2014.

Terry, C. E. and Pellens, M. *The opium problem*. Montclair: Patterson Smith. 1928

Thompson W. E. and Gibbs J. C. Deviance and deviants: A sociological approach. Hoboken: Wiley-Blackwell. 2017

Vrăbiescu, Nicolae. Privire asupra dispozițiunilor penitenciare din vechiul Regat și provinciile alipite, precum și asupra noilor tendințe în această materie. *Revista de drept penal și știință penitenciară*. (7-8): 32-42. 1928.

### Neets Phenomenon of Young Romanians Caught Between Never Endless Educational Reform and the Impenetrable Labor Market

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### Abstract

In a society genetically endowed with great cognitive potential, the paradigmatic failure of the post-communist education system divide young people into three categories: young elitists who join foreign universities and companies, well-prepared young people eager to study in their country and young NEETs. The increasing percentage of the latter ones is confirmed by the national results obtained in the PISA tests and high school dropout rates. No community in this world can be strong when the investment in education lacks. Non-aligned job policies to educational ones will give birth to worrying imbalances, highlighting the phenomenon of migration. Demographic decline and the lack of strategies to stimulate birth rate will increase the impossibility to ensure generational change within the active population and all these will lead to a block of the pension system. Romania, in the next 20 years will follow the model of the European countries, which face labor importation and the migration of non-European capital. Are there any solutions to counterbalance these trends? This is the question which, the whole rethink of theoretical-methodological analysis of some policies meant to give value to the huge Romanian qualitative human force, deprecated within the large globalization, is based on.

Keywords: Young NEETs, education policies, labor market

### Introduction

The transition from a private society of free speech and one realizing the opportunities aiming at individual development, in which there were no social classes and the smooth running was fueled by the standardization of individuals, to a democratic system based on a consumer society depending on promoting "the new" has led to significant changes in the cultural, political, educational and above all economic system.

The failure to reform structureshas embrittled, for a long period of time, this system. Clearly, what will perpetuate the status quo in Romania is

the very educational pillar, which after the decline of the past 20 years, has fractionated the young into three categories: young migratory elitists, young people who continue their studies internally and the young NEET's. Romania has a cognitive potential acknowledged by the member states of the European Union and not only. But amid the increasing migration of young elitists, either for studies or as a result of massive migration of young elitists, either for studies or as a result of massive recruitment by foreign companies, Romania risks losing consistently specialists for productive fields. Remuneration or the conditions in which they practice and operate in areas such as medicine or IT are just a few illustrative examples of the elitist migration. Diminishing the migratory flux of people who can bring added value to the state, by boosting them, can on long term lead to economic and living standard growth in Romania. In absolute figures, the rate of migration of highly qualified people, known as the phrase "brain drain", created for the first time the British Royal Society to describe the emigration of scientists and technologists in the years 1950-1960, from UK to USA and Canada (Gibson & McKenzie, 2011), has increased. This may be due, on the one hand, to the increase in the level of

increased. This may be due, on the one hand, to the increase in the level of education of the population of migrant-exporting countries, and on the other hand, to the improvement of infrastructure, means of transport and the development of international organizations and inter-state links.

The brain drain under unidirectional flow from less developed countries towards countries in the process of economic evolution acquires a negative moral connotation in relation to other forms of brain drain. In this negative moral connotation in relation to other forms of brain drain. In this sense, the specialized literature analyzesthe various aspects of the phenomenon from different perspectives, revealing at least two discursive-explanatory versions. The first variant concerns the surplus of brains: some brains are prone not to be absorbed by the workforce due to the slow rate of use of improved human capital, which is difussed and absorbed by a foreign market (Gaillard & Gaillard, 1998). The second version refers to "brain exchange", ie the exchange of specialists, researchers and students between LDCs and developed countries.

LDCs and developed countries. For the countries of destination of specialized laborforce the phenomenon was called "brain gain" and thus, these states use the classification of immigrants to develop certain sectors without investing in training and development. The winnings of the departure states is related to the remittances sent by migrants in the country, the possible transfer of knowledge and networking, and the losses can be estimated by the spendings made by the state for the training of the human resources and the loss of highly qualified people in the system (Schellinger, 2015, p.5-6). This phenomenon of Brain Drain has grown in our country after 2007, when Romania joined the European Union, thus gaining the freedom of movement of circulatory human capital on the European labor market.

This phenomenon can not be analyzed by the phrase "good-bad"because from the migrating person's point of view this decision is beneficial to him, at least on short term, but it is not favorable for our country. The main reason for which Romanian society suffers from this phenomenon is that in the country there is no elite, which is why the society will face a shortage of scientists in different fields such as medicine or IT industry.

According to the report "Social Affairs and Inclusion, Employment and Social Developments in Europe. 2011" Romania has the highest mobility rate, over 11%, even taking into account the period of 7 years (2004-2011), when the mobility rate was 6%.(European Commission, 2011). Western countries are aware of the advantages they have when hiring

Western countries are aware of the advantages they have when hiring young people from less developed countries. People chosen for recruitment excel in the areas they are studying. The advantages of Western countries are that immigrants are often paid at a lower level, do not spend money on training of specialists and the third important aspect is they attract inside the community highly skilled people, contributing to the development of the host state. Another issue is strictly related to the brain drain of young people who leave to attend university abroad. According to a survey conducted in 2014 by the League of Romanian Students Abroad, nearly 40% of these people do not want to return home to practise a job not want to return home to practise a job.

not want to return home to practise a job. Brain drain, analyzed with theAddiction theory or World system theory of Immanuel Wallerstein, can represent the direct effect of differentiated development between states and the dependecy relationship between them. According to it, the capitalist development has given rise to a global order that is reflected in the "core" countries, namely the strong industrialized states which developedependecy relationships for the "peripheral" less developed ones.(Mesure, 2009). Wishing to perform professionally and have a standard of living higher than back home, young elitists always opt to migrate from the peripheral countries to the semi-peripheral or even core ones. Reverse migration is rare, only if the reason for migration is to experience or support a less developed community

a less developed community.

Brain drain affects Romania on long term, because the lack of elites, of those able to develop the country's economy produces negative effects in each action sector, more so when we are talking about diversity and inclusion on the labor market.

Duality or labor market segmentation confirms the classification of the first two categories of youth. According to the representative of this trend, Piore, it is divided into two segments: the first sengment, called also the primary one, is characterized by high salaries, promoting the individual and his integration into large organizations that focus on the professional development of employees, and the second segment has the opposite

characteristics: low wages, where the emphasis is not on promoting the employee, and labor migration is very high. This structure has created a third segment of the labor market, ie unemployment. (Doeringer & Piore, 1971). Thus, many virtuous young people, opting to continue their studies in the country join the workforce, most commonly in the first segment, and the young NEETs is the third segment, but are also the result of the fluctuation of human capital from the second segment.

After all, at the core of human development an important role is held by social interaction, every behavior is internalized and becomes observable behavior (Stănciulescu, 1996). Thus, the interactional theory explains young people's options through a microsocial analysis, to interact with dynamic systems that may support their professional development: education system, labor market, etc.

The classification of young people and inequalities of social positions in society may be associated to conflict theories that "no longer considers education (especially school) as a factor of social order, emancipation and progress, but as an instance of social control through which inequality and domination are reproduced" (Stănciulescu, 1997, p.241).

### Young NEETs in the European context

Analyzing statistically, young people who continue their studies internally in Romania are declining, on the one hand due to negative demographic dynamics, and on the other hand, due to increasing interest towards education and work, causing strengthening the category of NEET's young. The results of admission to high school and baccalaureate in recent years, coupled with statistic data from the National Agency for Employment confirm the expansion of young people who are not in education nor are employed on the labor market.

In a country where the education system manifestsexacerbated negative symptoms, in which the state continues to direct its attention in terms of budgetary allocation to other areas and with a labor market that offers limited employment, young NEETs phenomena becomes huge.

At EU level, the demographic data show a steady trend of population aging and worrying diminishing of the proportion represented by children and youth. The information provided by Eurostat, for the year 2014, showed the existence of 504 million inhabitants in the 28 EU Member States. Of these, the population of children aged 0-14 years is 15.6% and youth population aged 15-29 years, 17.7%. In this context the European Union was actively involved in the development and implementation of policies for young people, with the objective of reducing early school abadonment rate, the increase in the integration rate on the labor market or in a training program.

According to the latest statistics published by the European Commission in the article *Statistics on young people neither employment nor in education or in training*, young NEET rate increased in the EU, between 2008 and 2015 with a rate of 2.4%. By 2015, there were over 17 million young people, aged 20-34, who were not employed in the labor market and were not studying at all. The increase or decrease of this number is a direct effect of the phenomenon of progress or economic crisis. Analysing the situation of this group of young people for all Member States, there is a high variation in the recorded percentages. Thus, in 2015, the lowest figures were recored in Sweden and Luxembourg, where less than 10% of young people (20-34), was represented by young NEET. In contrast, we fiind Greece and Italy, where about 1/3 of all young people (20-34 years) are NEET youth, 32.4% and 31.6%, respectively.

Regarding the concerning data registered by Italy, they highlight the effects of a high percentage of young discouraged people, a reduced rate of college graduates, a high rate of unemployment and limited employment. All these indicators ultimately affect young people's ability to create an independent future. The latest information provided by the Italian National Statistics Institute showed, for 2013, the existence of 2,400,000 NEETs young, aged 15-29. Youth unemployment rate increased from 20% in 2007 to a historic peak of 44.2% reached in 2014 (Pastore, 2015, p. 4). For the age segment 20-24 years, Italy occupied in 2015 the first place in Europe in terms of unemployment and 32%, respectively.

segment 20-24 years, Italy occupied in 2015 the first place in Europe in terms of unemployment and 32%, respectively. Spain is among the countries with the highest percentage of the total unemployment rate held by young people who do not have a job. According to the Spanish National Statistics Institute at the end of 2015, 22.7% of people aged between 15 and 29 years were young NEETs. Compared with Italy, inclusion and absorption policies of young people into the labor market have contributed significantly to lowering the unemployment rate, 2016 being the first year after 2009 in which this rate has gone into remission, from the 20% to 18.91%.

France is one of the EU member states where recorded percentages of young NEETs have not yet reached a dangerous level. According to the European Commission, in 2013, 13.8% of people aged between 15 and 29 years were part of the youth category NEET's, ie 1.58 million French citizens. However, France is experiencing a steady growth, over the past 15 years, of people aged 15-29 who give up school early.

The situation of young NETTs produces serious adverse consequences both for individuals who get in this situation, as well as society and economy. Looking at the statistical data published by Eurostat we can observe significant differences between genders in terms of the proportion of young people who are unemployed and do not attend any form of education or training. In 2015, nearly a quarter of the total female population (23%), aged 20-34, were NEETs, while of the total male population (20-34 years), only 14, 9 % were NEETs. Of the total male population registered in the Member States as NEETs young people (20-34 years), 60.4% have not found a job, and 39.6% are inactive, because they are not looking for a job. Inthis situation also occurs the disproportion in gender analysis, only 32.6% of women were in a position of not finding a job, while 67.4% of them were inactive.

Inactive. The high percentage of people who belong to the young NEETs at EU level, can be explained by analyzing several factors (lack of appetite of the youth to study and work, the superannuation of values by globalization, technological development and growing demands for specialist trening, requirements for vacancies, projecting high financial expectations and generating dissonance between the potential and qualification of young people and the employers' offer, etc). Regardless of the possible explanations, the fact is that the vast majority of Member States of the EU is facing increasing challenges in trying to absorb and integrate young people in education and the labor market in education and the labor market.

# Young NEETs betweenthe never endless educational reform andthe

Young NEETs betweenthe never endless educational reform andthe impenetrablelabor market in Romania Integrating people between 16-29 years the labor market remains a challenge for Romania. According to the European Commission's Country Report published in February 2016, the youth unemployment dropped significantly, to 22%. However, although major efforts have been made and incentive programs have been implemented, we are still slightly above the EU average. Regarding young NEETs, namely those who do not attend any form of education or training nor operate on the labor market, Romania is above the EU average with 5%, averaging 12%. In the official documents of the Human Capital Development Operational Programme, the number of young NEETs in Romania is over 400,000. Initially, there were provided key measures such as internships and apprenticeships mobility packages etc. measures such as internships and apprenticeships, mobility packages, etc., but which have not been implemented in a capacity to contribute to reducing the percentage of young NEETs.

The network of partnerships between public employment services, the education system represented by schools and universities and the private sector is not sufficiently developed and not used as a supporting pillar of a sustainable progress. Exceptions are some counties where pilot measures eased, however limitedly, to reach this category of young people who mostly is not registered in public employment. In the present financial allocation, 2014-2020, of the Human Capital Operational Programme, the Ministry of European Funds manages a Priority Axis aimed at improving the situation of

young NEETs category by implementing integrated measures. The measures eligible under this approach aim mainly the employment growth of unemployed young NEETs aged 16 to 24 years.

The implementation of strategies aiming at strengthening labor market and the education system through integrated plans and specific programs is limited by the capacity of public administration to access and manage national and European fodurile locally or regionally.

The problems in Romania, even more of young NEETs, are emphasized by the demographic situation of the population aged between 15 and 29 years. As shown by the National Statistics Institute data (see Table 1), young population is decreasing since 2013 to the present, and from one year to another this phenomenon starts spreading. Compared to 2013, the population aged between 15 and 29 years, dropped in 2016 with nearly 190,000 people, being reduced gradually: in 2014 with approximately 36,700 young people compared to 2013, in 2015 with 57,300 young people compared to 2014, and in 2016 the decrease is considerable, ie the difference being of almost 95,500 young people.

This data aim also for an analysis of birth rate in Romania, during 1987-2001, demographic decline explained by changes in the political structures of that period. The policies' consequences of the new democratic regime installed in the 90s, after a period of 41 years of communism, is configured in the social phenomena of contemporary Romania. Approval of abortion, widespread use of contraception and the transition from housewife, the woman devoted to her family to the independt woman, eager to build a career are just some of the facts that contributed to the demographic decline of population in the period 1987-2001. This explanation is also confirmed by and dynamics of young people aged between 25-29, which is increasing in 2013-2015, a period relates to the birth rate in the years 1987-1989.

Population	Population	Population	Population				
for2013	for2014	for2015	for2016				
1091355	1087420	1081303	1083079				
1273671	1193052	1128713	1079644				
1344539	1392394	1405491	1357286				
3709565	3672866	3615507	3520009				
	for2013 1091355 1273671 1344539	for2013         for2014           1091355         1087420           1273671         1193052           1344539         1392394	for2013         for2014         for2015           1091355         1087420         1081303           1273671         1193052         1128713           1344539         1392394         1405491				

Table 1 (Analysis of demographic data, National Statistics Institute)

According to the European Commission country report issued in February 2016, Romania is facingthe phenomenon of aging population, under the the current conditions being estimated thatwe will rank second in Europe by 2060, the demographic dependency index increasing to 64.8%. To prevent a second position in European rankings, Romania should adopt

social policies to stimulate birth rates growth and counteract the migration of young people towards developed Western countries. On the other hand, the phenomenon of young NEETs is a direct

effect of multiple failures in the education system. The school has a determinant role in social and professional development of individuals and is considered to be an important factor in their adaptation process to the effervescent reality and prepares them for an easy integration on the labor market. The education system is the barometer of a country's development. No state without investments in health, education and culture could aspire to the status of "central state", dominating the world economy and controlling most of the technology and capital, according to I. Wallerstein's theory. Education must be approached with a major importance because it configures fundamentally the human life, but also social progress, and in

current conditions it must reprioritize systemic issues to revitalizate and ensure intergenerational quality transfer.

The increasing percentage of young NEETs is confirmed by the national results obtained in the PISA tests, where Romania participates since 2001. According to the results in 2015, when 4876 students attended, 15 year olds, from 182 surveyed schools, published in the OECD (Organisation for Economic Co-operation and Development) report, education is in decline,

the overall score obtained on the scale by Reading/Lection can match the performances of Uruguay and Bulgaria. On the overall scale of Sciences is signalized an average performance, ranking us 48th out of 70 participating countries, and regarding Mathematics, Romania is compared to Greece, Bulgaria, Cyprus or Argentina.

Identifying key internal and external factors that can stimulate and maintain the quality of education and analyzing the main approaches, dimensions, criteria and organizational, financial, managerial, pedagogical, sociological indicators reflected in the standards and assessment strategies of educational institutions may represent alternatives to improve the educational act.

The educational system is one of the pillars of a sociaety interested in investing in sustainable development and that tends to access a higher stage in the evolutionary process. However, in Romania the state of education indicates that this is not a priority, especially for political leaders who allocate insufficient funds for the development of the educational process in optimal conditions. The financial resources provided regularly in the budget do not cover the entire range of identified needs, so that the chance of achieving progress standards found in other European Union member countries is minimized.

Romania's efforts in education in terms of governance and public spendings are recognized in the European Commission's report. According to it, public spendings increased in 2013 from 2.8% to 3.2% in 2015, and this level is wanted to continue in 2016. Increasing the budget allocations percentage in education do not balance the large range of needs and problems that perpetuate in the education system.

Roma citizens and students from families with a high degree of poverty, part of vulnerable groups, still face significant difficulties in the access to education, mainly the completion of studies, mostly in rural areas. Regarding education, vulnerable groups (among which we mention children in rural communities, children in institutions, Roma and disabled people) are classified on a significantly lower position compared to the general population, a situation revealed in graduation rates as well as registered performances.

Due to the major disinterest for a socio-educational reform, focused on identifying the causes generating school dropout and prevention of poverty, but also due to the manifestation of low availability for effective corrective programs, the percentage of early school dropouts remains at one of the highest, alarming levels in Europe. Thus, the results recorded in Romania, in school dropouts increased with almost 7% above the EU average and our target made under the Europe 2020 Strategy, namely from 18.1% in 2014 2014.

2014. The results showed that the percentage of school dropouts is much higher among rural residents, children with special needs and Roma people. It was thus found that the support given to teachers and parents working with children and young people from vulnerable groups is insufficient, highlighting the need for more support from those entitled thereto. Therefore, there must be a speed up implementation of the strategy aiming to reduce early school dropout, approved and adopted since 2015, strategy which still has unprecedented delays, at the expense of those who need real solutions in this sense. "Second chance" programs are still not sufficiently calibrated to the extent and variety of needs. Education technology, generating network database for all stakeholders interested in the phenomenon bases that would database for all stakeholders interested in the phenomenon, bases that would include specific indicators for dropout detection and its correction, it not yet implemented.

In 2013, only 6% of children under three years of age benefited from formal care for a period of time greater than 30 hours/week. Compared with the Barcelona target, of 33%, Romania is significantly below average. Also in the case of preschool children, in the age group three to six years, there have been major differences in access to care and education services. Adopting Law no. 248/2015 on stimulating the participation in

preschool education of children from disadvantaged families, aimed to offer

them the chance to benefit monthly from social coupons to purchase the materials needed in the educational process, where their children aged between three and six years are registered and attend kindergarten or grammar school. This measure to fight child poverty is part of a beneficial initiative whose application would result in solving the numerous system discrepancies.

Young NEETs analysis can also be achieved by a study on the figures showing the rate of young people registered in secondary education system. The difference between the number of candidates registered for the admission examination and the number of distributed candidates represents young NEETs candidates, except those that fall in employment at the age of 15 with the parents or legal guardian's approval. Thus, according to the results published by the Ministry of National Education and Scientific Research in 2013, 500 students were not distributed to a high school, this number being on the rise, reaching 1880 students in 2015 (see Table 2). At the same time, there is decrease in the number of students registered in high school admission examination in the 2013-2016 period, in 2013 being 145,896 students registered compared to the number of young people enrolled in 2016, of 119,578 students.

Total number of candidatesin	Registered	Distributed
the year:		
2013	145896	145396
2014	128707	127746
2015	126685	124805
2016	119578	118661

Table 2 (Source: Ministryof National Education)

The analysis of young NEETs should not ignore the cases of school dropout, another phenomenon that has grown in Romania, occupying top positions, regarding this indicator, at European level. Continuing with the difficulties in the education system, the

Continuing with the difficulties in the education system, the disastrous failure of high school graduates at the baccalaureate examinations in the last four calendar years is a problem whose cause must be identified and stopped. Equally relevant is the graduation rate at the Baccalaureate Examination and its analysis in the last four years. We can observe a constant increase, so since 2013 when the graduation rate was 52.4%, it reached 64.1% in 2016. This ascending trend manifests itself after the graduation rate in 2007 was 80.3%, and in 2011 it declined dramatically to 43.9%. The number of students who have not passed the Baccalaureate examination in the period 2013-2016 is over 269,000 students, young people who definitely were not included in the university education system. This number is a minimized one since it adds the young people who, although they obtained a passing grade, have opted not to continue their studies. As

with the analysis of high school admission, the 269,000 young people who failed to fit into the impenetrable labor market were absorbed by the young NEETs category.

	Graduation rate for th	e Baccalaureate exam	
2013	2014	2015	2016
52,4%	56,7%	64,1%	64,2%

Table3 (Source: Ministry of National Education)

The failure of the baccalaureate examination or the high school admission is due to several factors: small GDP given to education with direct effects on the educational process (poor remuneration of teachers and decreased quality of their training, precarious material base of Romanian schools, underfunding of activities meant to identify vocational interests and establish educational and professional paths appropriate to young people, etc), social status uncorrelated with education (youth people take easy social success models, generated by the context of interminable transition to market economy and favorable to law circumvention), frequent changes in the Education Law, better surveillance of the examinations to reduce fraud during the evaluation process, etc.

Although many of the labor market needs are not met, whatever efforts are made to eliminate the dissonances between what the education system provides and what employers request, the number of those who complete tertiary education has increased. Over the last decade, there have been mixed results, the graduation rates of tertiary education increasing constantly, thus reaching 25% in 2014, approaching Romania's target of 26.7%, assumed by the 2020 Europe Strategy.

According to the European Commission country report, despite the results achieved since 2008, the number of candidates registered to university studies has declined dramatically, while that of tertiary education graduates in rural areas is steadily decreasing, the divide between geographical areas, in this segment, retaining a ratio eight times lower in rural than in urban areas. Corroborating these data also with the employability of graduates in the last three years, alsotrending negatively by more than 7 percentage points, we demonstrate that universities have not yet rallied with developments on the labor market, being a significant gap between supply and demand on the labor market. Thus, it is highlighted the need tomake permanent annual evaluations of the binomial supply and demand, of labor market forecasts, to adapt curricula, to cooperate with economic and social partners and rational and practical reform of the education system in Romania.

### Conclusion

Early participation in the labor market is an advantage for graduates and helps them find a job in the profession for which they have trained after graduation if they have gained experience during their studies. The globalisation process has led to significant changes in the occupational structure of Romania, the socio-economic reforms leading to the elimination of some occupations and the emergence of others. The transformations have included the effect phenomenon of market economy dynamics, unknown in the communist era and specific to the capitalist stage: unemployment.

The phenomenon of unemployment can be fought by promoting good practices that encourage the implementation in short periods of time of solutions to the problems that Public Employment Service is facing, by using mechanisms or methods already tested by other institutions and thus be able to respond efficiently the more increasing requirements of citizens and which will be a source of inspiration and learning for their own activity.

which will be a source of inspiration and learning for their own activity. Amid these findings, boosted by demographic decline and constant maintenance of a migration flow, sociological analyzes come to confirm fears and outline alarming predictions on the educational future of children and young Romanians, especially young NEETs. Although there are viable solutions to help perform the education system, there was still not created the reflection on the possibilities of change and was not exhaustively used the application of social policies in the area of family, education and employment.

Although the negative effects of migration, in general and the brain drain, in particular, are obvious, the Romanian Government does not seem aware of this, so it still did not follow a public policy to reduce the migration phenomenon.

In order to diminish the effects produced by the constant increase in the percentages of young population who get to be part of NEETs groups, the European Union and all Member States have developed and implemented policies of social inclusion.

In 2014 it was launched in Romania by the Romanian Students Abroad League, the Diaspora SMART project which aims to stop the migration effect of graduate students in other states. The project proposes viable solutions consisting in offering financial incentives in the form of financial deductions for those who have completed undergraduate studies at one of the best 500 universities in the world, online recruitment for jobs in the public system, creation and development of research and innovationcenters for the best scientists and engineers in the country and abroad, simplifying the bureaucratic process of recognition of diplomas, etc.

abroad, simplifying the bureaucratic process of recognition of diplomas, etc. On the other hand, by a recommendation published by the Council of Europe in 2015, it warned Italy on the lack of existence of a national social service for the unemployed. That same year, Italy began implementing the program *Youth Guarantee*, supported by all Member States, which had as immediate results the creation of new forms of cooperation between the public and private system and established new ways to facilitate the relationship between employers and young people.
Another example is Spain, where the Ministry of Health, Social Services and Equality published the National Action Plan for Social Inclusion of the Kingdom of Spain for the period 2013-2016. In this document there are three strategic objectives:

Promoting labor market inclusion of vulnerable groups, especially families with minors and children with high risk of exclusion.

 Implementing a system of benefits that grants financial support to those belonging to vulnerable groups reducing poverty among children.
 Ensuring the provision of basic services to the entire population, focusing especially on disadvantaged groups: social services, education, health. housing. etc.

In France, the Committee to Combat Exclusion adopted in January 2013 the *Social subsistence/ protection and health cover for young people living in poverty* plan. Its objectives aimed: reducing inequality and exclusion prevention; consolidation of inclusion actions of disadvantaged groups; coordination of social action and development of some stakeholders in this area.

in this area. Within the European Council held on May 12th 2009, there was materialized the strategic framework for European cooperation in education and training ("ET 2020"). According ot its conclusions, among the specific objectives to be achieved by 2020 there are included: minimum 95% of children between 4 years and 16 years should attend preschool education, the proportion of graduate employees should be at least 80%, at least 15% of adults should participate in learning activities throughout life, etc. The main imposed measures refer to actions aiming at strengthening preventive approaches, promoting innovation and creativity through the use of teaching and learning specific methods and last but not least the development of partnerships between the education system (schools/high schools/universities), training providers, private companies and research institutions.

institutions.

Regarding young NEETs, Romania has developed numerous strategies that support them, including the National Strategy for Employment, the Initiative Jobs for Youth, the Guarantee Implementation Plan for Youth 2014-2015, the National Strategy for lifelong Learning. There into consideration the country specific taken should be also recommendations of the European Union in fighting youth unemployment. The financial allocation for Initiative Jobs for Youth, program in which the

target group is limited to young NEETs, was set for 105.9 million EUR for Romania. Therefore, the implementation of these projects would lead to stopping the phenomenon of young Romanian NEETs by registering them in the impenetrable labor market or the education system.

# **References:**

Alexe, Iris, Adina Cazacu, Louis Ulrich, Ștefan Stanciugelu, Viorel Mihăilă and Marian Bojincă. Al patrulea Val. Migrația creierelor pe ruta România-Occident. București: Editura Fundația Soros România, 2011. Cazacu, Aculin, Sociologia educației. București: Editura Hyperion XXI,

1992.

Gaillard, Anne Marie and Jacques Gaillard.International Migration of the Highly Qualified: A Bibliographic and Conceptual Itinerary. New York: Center for Migration Studies, 1998.

Doeringer, P. and Piore, M. Internal Labor Markets and Manpower Analysis. Lexington: Editura 1971.

Hatos, Adrian, Saveanu, Sorana, Educație și excluziunea socială a adolescenților din România. Oradea: Editura Universitatii, 2009.

Mesure, S., Istoria Gândirii Sociologice. Marii Clasici, Iași: Institutul European, 2009.

Pastore, Francesco. The European Youth Guarantee: Labor Market Context, Conditions and Opportunities in Italy. Bonn: Institute for the Study of Labor. 2015.

Ridde, Alexis, Mebarki, Farid, Labadie, Francine and Fourcoux, Solange. Information Template on Inclusion of young people in France. France: Social Inclusion of Youth, 2013.

Schellinger, Alexander. Brain drain- Brain gain: European labour markets in times of crisis. Bonn: International Policy Analysis, 2015.

Social Inclusion Monitor.Labour Market and Social Policy in Italy:

Challenges and Changes. Germany: Bertelsmann Stiftung, 2016. Stanciu, Stoian, Metodologia comparativă în educație și învățământ: Pedagogia comparată. București: Editura Didactică și Pedagogică, 1970. Stanciulescu, Elisabeta.Sociologia educației familiale - Volumul I Strategii educative ale familiilor contemporane. Iași: Polirom, 1997.

# Articles

Cervantes, Mario and Dominique Guellec. The brain drain: Old myths, new realities.OECD Observer, nr.230, 2002.

Gibson, Apud John and David McKenzie, Eight Questions about Brain

Drain.Policy research working paper, no.5730, 2011. European Commission.Directorate-General for Employment, Social Affairs and Inclusion, Employment and Social Developments in Europe. The Youth Guarantee country by country – Italy. Bruxelles: 2016.

European Foundation for the Improvement of Living and Working Conditions. NEETs Young people not in employment, education or training: Characteristics, costs and policy responses in Europe. Luxemburg: Publications Office of the European Union, 2012.

Eurostat Statistical Books.Being young in Europe today. Luxemburg: Publications Office of the European Union, 2015.

Liga Studenților Români în Străinătate.Studiile în străinătate și întoarcerea acasă - Prezentarea și analiza rezultatelor. București: 2014.

Organisation for Economic Co-operation and Development.PISA 2015 Results (Volume I) – Excellence and equity în education. Paris: 2015.

## **Online Sources:**

EUR-LEX, Access to European Union Law. Bruxelles: 2016. Retrieved from:http://eurlex.europa.eu/legalcontent/RO/TXT/?uri=URISERV%3Aef00 16

European Commission, Directorate-General for Employment, Social Affairs and Inclusion, Employment and SocialDevelopments in Europe.Bruxelles: 2011. Retrieved

fromhttp://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=6176 European Commission, Raportul de țară al României pentru 2016. Bruxelles: 2016. Retrieved from

http://ec.europa.eu/europe2020/pdf/csr2016/cr2016_romania_ro.pdf.

Liga Studenților Români din Străinătate (LSRS), SMART Diaspora. Retrieved from http://www.lsrs.ro/smart-diaspora/

Ministerul Educației Naționale și Cercetării Științifice, Admitere în licee 2007-2016.Retrieved fromhttp://admitere.edu.ro/Pages/RespInTara.aspx

Eurostat Statistical, Statistics on young people neither in employment not in education or training. Bruxelles: 2016. Retrieved from http://ec.europa.eu/eurostat/statisticsexplained/index.php/Statistics_on_youn g_people_neither_in_employment_nor_in_education_or_training

# Estonian Health Care System: Accomplishments and Challenges

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#### Abstract

In Estonia, everyone has a constitutional right to health. After regaining independence, the country has executed thorough and successful healthcare reforms. The changes are especially noticeable at the primary level of healthcare. Using the most common models it is investigated how Estonia's healthcare system fits into international classifications and what models best describe the healthcare system before and after reforms. It is shown that the Bismarck model, which is chosen as a prototype for the health care system in Estonia suits well in the case of the Estonian society, better than the other models would. It corresponds well to ethical and economic reality of Estonia.

Keywords: Estonia, health care system, reform, sustainability

#### Introduction

Convening to review first half year report, Estonia's Health Insurance Fund (HIF) is facing a budget deficit of 33m. The hole will be filled from the approximately 14m reserves of HIF but if the system continues, the future is bleak as the fund is predicted to run out of the money in 2020. At the same time the budget strategy approved at end of April predicts that in 2016 HIF ought to show surplus of 0.8m and in the red by 1.3m in 2017 (Värk 2016). There is no doubt that this situation needs to be improved. Due to this severe situation essential proposals appear to change the funding scheme of the health care system in Estonia. Different proposals have made with the aim of improving the financial coverage of the healthcare activities, but the <u>relevance of the applied overall model</u> has not been under discussion at all. It seems to be the most right time to make clear whether the organizational model needs to be changed or the amount of funding increased, or both at the same time. Politicians need to have a framework that they are able to understand and to explain to others in simple terms if they are to make decisions concerning healthcare (Värk 2016). Any change in health care policy is difficult. Special interests pose a continued obstacle

to change. Pragmatism is very important in both legislation and implementation (Obama 2016).

Health care system reforms in Estonia The breakup of the Soviet Union led to radical reforms in the Estonian health care system similarly to other transition countries in Eastern and Central Europe. New financing schemes were introduced and new models of primary health care were developed. Modern methods of organization and care delivery were implemented to improve the quality of care and health system efficiency. Systematic interventions combined legal, structural, organizational and financial reforms. Although health care reforms in most post-Soviet countries remain uneven and fragmented, Estonia is the first country to implement a comprehensive change in its health care system as a whole and have fully scaled-up reforms in the primary care sector by institutionalizing family practice. A small number of studies have been conducted to analyse the gate-keeping role of family physicians and define continuing education needs as

keeping role of family physicians and define continuing education needs as well as prospects of family practitioners in Estonia (Kalda et al. 2003, Põlluste et al.2004, Tõemets 2008). There is no academic research available romuste et al.2004, Toemets 2008). There is no academic research available employing holistic approach of the Estonian health system reform experience based on a theoretical framework. Health care system classifications help to define the transition of the Estonian health system from one model to another and to explain the consequences of this move. The absence of such study makes it difficult to evaluate the rationality of the main features of the existing health care system, tackle arising problems and make competent suggestions for further developments.

suggestions for further developments. The significance of the present work is in the thorough analysis of the health care system model used in Estonia, which reveals and helps to address its weaknesses and plan on appropriate development for system improvement. Spending on health care takes up a big part of the public budget and requires large investments in sophisticated infrastructure as well as well-trained human resources. Analysis of the health care services organization provides a useful tool to optimize health financing. It is always an appropriate time for this, but especially after the major makeover of the health care system or before embarking on further system changes. Theoretical framework is applied to analyse health care system changes in Estonia and how the health sector was affected by political decisions. The aim of this study is to find out what impact the

decisions. The aim of this study is to find out what impact the implementation of a new health care system model has had on health care system organization and development in Estonia. Most significantly and widely used health care system classifications or taxonomies are taken as a basis for the model. Well-known classifications

starting with those proposed in the 70s and finishing with the most recently developed classifications are introduced. These include Soviet medicine, classification by economic formation, OECD or liberal-democratic nations classification and the further development of it being ideal-types or models taxonomy (Docteur and Oxley 2004). Based on the review of a variety of important taxonomies, the most appropriate one for the Estonian case – the OECD ideal-types classification from 1987 – is chosen. This classifies healthcare systems by financing source, healthcare services and infrastructure ownership (OECD 1987). It is characterized by the researchers as simple and yet taking into account the most critical dimensions of any health system, well-known and so widely used that it already became a standard classification of the health care systems (Wendt et al. 2009, 74). The defining characteristics of each health care system model and the most important key players are presented.

The OECD classification can differentiate three models: national health care service *aka* the Beveridge model, social insurance *aka* the Bismarck model and private insurance *aka* the modified market model (OECD 1987). Citizens' access to health care is arranged according to these models. In countries with the Bismarck model it is achieved using the participation of employers and employees. In the Beveridge model, all citizens have the right to healthcare and it is funded using general taxation. In the market model, healthcare services are determined by agreements with private insurance companies. Most countries use a mix of these models (Moran 2000, 141).

How a country or society picks a system depends on many factors. Countries in Europe and America approach the question with different understandings of social ethics, which depend on their respective cultures, histories and basis of distributing national income.

First of all, most European countries organized their health care systems from an ethical standpoint of redistributing wealth, which determined the systems' structure. In those countries wealth is purely thought of as social capital and as such the health care system is developed to give everyone more or less the same services. In systems based on an ethics of social solidarity, nearly all citizens can receive health care services on the same basis. However, in the USA, health is seen as everyone's private capital, the risk of damage to which each person generally must reduce by themselves.

Second, the world's healthcare systems can be differentiated by ownership and financing source. Most of Europe's systems use social health insurance. From a social ethics perspective, the main principles of the USA's and Europe's health care systems are opposites (WHO 2008). Soviet Estonia, like the rest of the Soviet Union, had the Semashko healthcare system, which was funded directly by the national budget and lead by the government's central planning. 3-4% of the national budget was spent on healthcare. The healthcare system was highly centralized, bureaucratic and standardized (Barr and Field 1996, 307-308). The Soviet Union declared that everyone had a right to health and healthcare. This meant free healthcare services for the whole population.

Healthcare workers had the status of civil servant and the government paid their incomes, which were determined centrally (Koppel et al. 2008). Healthcare services were free for the patients, but their actual cost wasn't taken into account, because there was no systemic overview of the services' cost (Lember 2002, 44). Primary healthcare level was not carrying out the coordinating function (Atun et al. 2006, 80).

The roles and relations of key players had to change in the new system. The first stage of health care reform included the introduction of a solidarity-based insurance system predominantly financed by the employees' mandatory contributions, which are mediated by the independent public entity – a sickness fund. The next step consists of institutionalizing a strong family medicine-centred primary care system.

Estonia was one of the first Eastern European countries to begin healthcare reforms (Lember 2002, 48). When the Soviet Union dissolved, Estonia was at a crossroad and had to pick a direction for its healthcare reforms. There was a great desire for change and to move away from a centralized government and toward a capitalist market. Due to the advice of outside experts, the decision was made in favour of social health insurance. The WHO's and World Bank's consultants recommended design of the new healthcare system to Estonia that essentially matched the Bismarck model (Atun et al. 2006, 89, Koppel et al. 2008, 181).

Comparing theoretical models and actual systems helps discover where ideal systems diverge from reality. This approach is called empirical analysis (Wendt et al. 2009, 72). By comparing the features of different models from the OECD classification of health care systems to the specifics of an Estonian health care system, it can be then analysed which model the Estonian health system corresponded to before and after the reforms. The health care system in Estonia corresponds to the defining features of the Bismarck model of the OECD classification. The health care system arrangements in Estonia are typical for this model.

It can be concluded that the Bismarck model, which is chosen as a prototype for the health care system in Estonia suits well in the case of the Estonian society, better than the other models would. It corresponds well to ethical and economic reality of Estonia. One of the reasons for creating health insurance was the need to provide a reliable source of income for the healthcare system. The distrust of the government that had formed in Soviet Estonia resulted in a desire to fund health care outside of the government's budget. Creating health insurance made it possible to actually leave the old system (Rechel and McKee 2009). There was a strong need to connect health insurance to the labour

There was a strong need to connect health insurance to the labour market, so people would be interested in working officially and paying taxes. The tax rate of health insurance was set to 13% of each employee's income and was to be paid by their employer. The new health insurance was compulsory with no exceptions. The insurance covered almost every resident of Estonia (Koppel et al. 2008, 181, Lai et al 2013).

There are both strengths and weaknesses of the Bismarck model as they apply to the Estonian case, as well as problems caused by socialist medicine inheritance and issues specific to the transitional society. An important aspect of the reform is the separation of a healthcare service's planner, buyer and provider. Before, the government had all three roles, but after the reform, the sickness fund was the buyer and medical institutions and their personnel were the providers. Strategical planning was left to the Social ministry (Atun et al. 2006, 83). Separating the roles made the negotiation process more transparent, which ensured more efficient use of resources. The main values and goals which directed the healthcare system's development were efficiency, transparency, professional responsibility for the quality of healthcare and choices (although limited) for users of healthcare services. The main values of health insurance were solidarity, limited cost and equal services for all insured individuals regardless of where they live. The sickness fund's goals were set based on these values (Jesse 2008, 8).

services for all insured individuals regardless of where they live. The sickness fund's goals were set based on these values (Jesse 2008, 8). Several studies point out that Estonian health care reforms are the success stories by themselves and in the regional context of Central and Eastern Europe (Rurik ja Kalabay 2009, Liseckiene 2007). Factors that led to their success were the following: perfect timing, strong political will, public dissatisfaction with the Soviet health care system and support to the changes, passionate leadership of doctors and the academic community (medical educators), attempt to not merely change labels but to implement real reforms, advisory and financial support from foreign countries, collaboration between governmental and public institutions and other stakeholders and also the development of realistic policies (Lember 2002). It was shown in this work that the health care system in Estonia corresponds to the Bismarck model from the OECD health care classification. Based on this fact, it was established that the health care system reforms were sensible. Considering what is known this far, they gave the best possible results to the present health care system in Estonia. In recent years, the sustainability of the healthcare system financing is an issue of growing concern. As the life expectancy claims up but birth rate decreases and natural increase of population in Estonia stays negative, the taxpayers' pool is shrinking (Statistics Estonia 2016). On contrary, aging population and advances in healthcare technology drive up the costs. Not sufficient financing leads to poor healthcare access due to longer waiting times to see providers. In quest for solutions, some propose to turn to different healthcare models. Private insurance as in modified market model seems attractive to more affluent part of society, as it provides greater satisfaction for those who can afford it. It is crucial not to forget the core values Estonian healthcare system is based on, solidarity being the strength and cornerstone. Instead, the appropriate level of financing needs to be established for this well designed system to function properly. Other European countries spend around 7-9% of the national GDP on their healthcare. Estonia historically lags behind at around 6% of GDP, positioning itself next to Mexico (Health at a Glance 2015). So even while being recognized as (one of) the most efficient healthcare system in Europe for high quality of care at low expenditure (Björnberg 2016), it faces serious challenges of financial sustainability (Thomson 2010).

#### Conclusion

The health care system in Estonia functions according to the lines of the Bismarck model from the OECD health care classification. Based on this fact, it was established that the recent health care system reforms have been sensible. Considering what is known this far, they gave the best possible results to the present health care system in Estonia but in spite of this the sustainability of the healthcare system financing is an issue of growing concern.

### **References:**

Atun, R., Menabde, N., Saluvere, C., Jesse, M. and Habicht, J. (2006). Introducing a complex health innovation-primary health care reforms in Estonia (multimethods evaluation). *Health Policy*, 79: 91–96.

Barr, D.A. and Field, M.G. (1996). The current state of health care in the former Soviet Union: Implications for health care policy and reform. *American Journal of Public Health*, 86(3): 307-312. Björnberg, A. (2016). Euro Health Consumer Index 2015. Report Health Consumer Powerhouse. Retrieved from http://www.healthpowerhouse.com/files/EHCI_2015/EHCI_2015_report.pdf Health at a glance. (2015). DOI:10.1787/health_glance-2015-en

Docteur, E. and H. Oxley (2004). Health-care Systems: Lessons from the Reform Experience. OECD Health Working Paper, No. 9, OECD, Paris. www.oecd.org/els/health/workingpapers

Jesse, M. (2008). Governance of the health system, health insurance fund and hospitals in Estonia – opportunities to improve performance. WHO Regional Office for Europe. Retrieved from http://ee.euro.who.int/publikatsioonid/index.htm

Kalda, R., Põlluste, K. and Lember, M. (2003). Patient satisfaction with care is associated with personal choice of physician. *Health Policy*, 64, 55–62. Koppel, A., Kahur, K., Habicht, T., Saar, P., Habicht, J., and van Ginneken, E. (2008). Estonia: Health system review. *Health Systems in Transition*, 10(1): 1-230.

Lai, T., Habicht, T., Kahur, K., Reinap, M., Kiivet, R., van Ginneken, E. (2013). Eesti: Tervisesüsteemi ülevaade. *Tervisesüsteemid muutustes*, 15(6):1-196.

Lember, M. (2002). A policy of introducing a new contract and funding system of general practice in Estonia. *International Journal of Health Planning and Management*, 17, 41–53.

Liseckiene, I., Boerma, W.G. and Milasauskiene, Z. (2007). Primary care in a postcommunist country 10 years later Comparison of service profiles of Lithuanian primary care physicians in 1994 and GPs in 2004. *Health Policy*, 83, 105–113.

Moran, M. (2000). Understanding the welfare state: the case of health care. *British Journal of Politics and International Relations*, 2: 135–160. Obama B. (2016). United States health care reform progress to date and next steps. *JAMA: The Journal of the American Medical Association*, 316(5), 525-532. doi:10.1001/jama.2016.9797

OECD (1987). Financing and delivering health care. A comparative analysis of OECD countries. Organisation of Economic Cooperation and Development, Paris.

Põlluste K., Kalda R. and Lember M. (2004). Evaluation of Primary Health Care Reform in Estonia from patient's perspective: acceptability and satisfaction. *Croatian Medical Journal* 45(5): 582–587. Statistics Estonia (2016). Births, deaths and natural increase, years. Retrieved from https://www.stat.ee/34280

Rechel, B. and McKee, M. (2009). Health reform in central and eastern Europe and the former Soviet Union. *The Lancet*, *374*(9696): 1186-1195.

Rurik, I., and Kalabay, L. (2009). Primary healthcare in the developing part of Europe: Changes and development in the former Eastern Bloc countries that joined the European Union following 2004. *Medical Science Monitoring*, 15(7): 78-84.

Thomson, S., Võrk, A., Habicht, T., Rooväli, L., Evetovits, T., Habicht, J. (2010). Responding to the challenge of financial sustainability in Estonia's health system. WHO Regional Office for Europe. Retrieved from http://www.euro.who.int/en/countries/estonia/publications/responding-to-the-challenge-of-financial-sustainability-in-estonias-health-system-executive-summary

Tõemets, T. (2008). Pereõe töö ja tööalane koolitus: pereõe, perearsti ja koolitaja arvamused [magistritoo]. Tartu: Tartu Ülikool, 82 lk.

Värk, Joosep. (2016, August 19). Health Insurance Fund in the red by  $\notin 33m$ . Postimees: Estonian News. Retrieved from http://news.postimees.ee/3806171/health-insurance-fund-in-the-red-by-33m Wendt, C., Frisina, L. and Rothgang, H. (2009). Healthcare system types: A conceptual framework for comparison. *Social Policy & Administration*, 43(1): 70–90.

WHO (2008). World Health Organisation European Ministerial Conference on Health Systems "Health Systems, Health and Wealth". Tallinn, Estonia.

# **Sewage Sludge Composting and Pharmaceuticals**

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#### Abstract

Drug residues end up in the environment when sewage sludge or its compost is used as a fertilizer and they cause adverse effects there. Both, the producers and consumers seem to believe that drug residues decompose during sewage sludge treatment or in soil and do not affect the environment or humans. The acceptable level of drugs in different compartments of the environment is still disputable.

Keywords: Pharmaceuticals, Sewage sludge, Compost

#### Pharmaceuticals in the environment

Intensive use of pharmaceuticals in modern medicine and agriculture is the main reason for global environment pollution by these contaminants (Radović et al., 2016). Widespread occurrence of pharmaceuticals in the environment is well established (Daughton & Ruhoy, 2009). It has now been almost two decades since the defining papers by Halling-Sørensen (1998) and Daughton & Ternes (1999) identified pharmaceuticals in the environment as an important phenomenon. Medical substances have been measured in the effluent of medical care units, sewage and the effluent of sewage treatment plants, in surface water, ground water, and in drinking water (Heberer, 2002). Uncontrolled discharging of these organic compounds into the environmental media has led to their accumulation into soil and sediments (Radović et al., 2016).

Some pharmaceuticals are extremely persistent and introduced to the environment in very high quantities and perhaps have already gained ubiquity worldwide, others could act as if they were persistent, simply because their continual infusion into the aquatic environment serves to sustain perpetual life-cycle exposures for aquatic organisms (Daughton & Ternes, 1999). When drugs are detected in the environment, their concentrations are generally in the ng/L- $\mu$ g/L (ppt-ppb) range (Moldovan et al., 2009). Even though individual concentrations of any drug might be low, the combined concentrations from drugs sharing a common mechanism of

action could be substantial (Daughton & Ternes, 1999). In 2013 Hughes et al. have published a global-scale analysis of the presence of 203 pharmaceuticals across 41 countries and showed that contamination is extensive due to widespread consumption and subsequent disposal to rivers. According to this overview, painkillers were globally the most frequently detected compounds accounting for 31% of records with a median concentration of 230 ng/L followed by antibiotics (21%, 8128 ng/L).

There are increasing concerns about the undesired impacts that may result from continuous contamination of the environment with pharmaceutically-active substances (Barbosa et al., 2016 and Verlicchi & Zambello, 2016). One of the possible fates of pharmaceuticals is to accumulate in organisms. Bioaccumulation may have different effects from increased internal loads in a given organism potentially reaching toxic concentrations to biomagnification through up-concentration along a food chain (Straub, 2015).

chain (Straub, 2015). Antibiotics present in soil contaminated with pharmaceutical residues may be taken up by plants from arable land or pasture, and thus involuntarily end up in human or animal food, destroy soil microorganisms or develop drug resistance. Genes determining drug resistance can be transferred from harmless soil microbes to pathogenic microbes (Davies, 1994). It is assumed that using sewage sludge or manure containing drug residues for fertilizing is one of the main reasons of increasing drug resistance (Knapp et al., 2010). Since 1940 the production and use of antibacterial drugs has multiplied while the antibiotic resistance of bacteria has also increased noticeably. It has been shown that the occurrence of tetracycline resistant

noticeably. It has been shown that the occurrence of tetracycline resistant gene among soil bacteria increased 15 times between 1970–2008 in the Netherlands, which was caused by using sewage sludge or compost as a fertilizer (Knapp et al., 2010). Probably, the long-term influence of antibiotics on soil microbes has brought about the same effect also in other countries.

# Pharmaceuticals in sewage sludge

The environmental presence of pharmaceuticals is attributed primarily to raw or treated sewage (for human drugs) and to manure and lagoons (for veterinary drugs); additional, less obvious sources also exist, which sometimes can play important localized roles (Daughton, 2007). The major route by which pharmaceuticals enter sewage is commonly accepted to be via urine and feces, with each contributing different relative amounts depending on the pharmacokinetics and structure of the individual compound (Winkler et al. 2008). Urban wastawater seems to be the dominant emission (Winkler et al., 2008). Urban wastewater seems to be the dominant emission pathway for pharmaceuticals globally, although emissions from industrial production, hospitals, agriculture, and aquaculture are important locally

(Beek et al., 2016). Sewage sludge is an inevitable by-product of wastewater treatment. In Estonia about 360,000 - 500,000 tons of it is created annually. Sewage sludge, which is difficult to market, piles up at wastewater treatment plants. Many pollutants are not efficiently removed during sewage and sewage sludge treatment (Martín et al., 2015).

sewage sludge treatment (Martín et al., 2015). In Lillenberg et al. (2010) the reported highest concentrations (μg/kg) of the antimicrobials norfloxacin (NOR), ciprofloxacin (CIP), ofloxacin (OFL), sulfamethoxazole (SMX) and sulfadimethoxine (SDM) were in sewage sludge as follows: NOR – 162; CIP – 426; OFL – 39; SMX – 6; SDM – 20. In the study carried out by Motoyama et al. (2011), the highest concentrations of the studied pharmaceuticals in sewage sludge were: CIP – 130; SMX – 8; SDM – 3; carbamazepine CBZ – 46. In Martín et al. (2015) the relevant values were: NOR – 258; SMX – 20; OFL – 432; CBZ – 106; and in our recent study (unpublished results): CBZ – 66; diclofenac – 92; triclosan – 1800 (all in ug/kg) triclosan – 1800 (all in  $\mu g/kg$ ).

For the prevention of the development of microbial resistance of humans and animals the concentration of antimicrobials in agricultural soil must be clearly under  $0.1\mu g/kg$  (Lillenberg, 2011). The limited selection of results given above clearly shows that raw sewage sludge in not suitable for improving the quality of agricultural soils.

**Fate of pharmaceuticals during sewage sludge composting** Sewage sludge may be regarded as hazardous waste but it can also be used as a fertilizer. Its safety with respect to pharmaceutical residues must be assessed before use (Kipper et al., 2011). Antibiotics are present in Estonian sewage sludge (as elsewhere) and their content may exceed the relevant trigger values for manure (Lillenberg et al., 2011). According to Nayak & Kalamdhad (2015) composting is one of the sustainable practices to convert sewage sludge into useful agricultural product because it is rich in organic matter, micro- and macronutrients, which are essential for plants growth and soil fauna to live. Alternatively, it has been stated that sewage compost cannot be used for agricultural purposes: it may contain an excess amount of cannot be used for agricultural purposes: it may contain an excess amount of chemical contaminants that can be assimilated by food crops (Lillenberg et al., 2010). However, sewage compost is rich in minerals, enabling long-lasting supply for the fast growth of plants (Järvis et al., 2016). Since the 1960s, Estonia has been the major oil shale producer

and consumer in the world (Kalda et al., 2015). Estonia has the world's largest exploited oil-shale basin covering about 4% of its territory. In 2001–2013 the number of active landfills in Estonia decreased from 159 to 13. Recultivation of the landscapes covered by semi-coke, oil-shale ash-mountains, abandoned opencast mines and closed landfills appears to be one of the major environmental tasks in Estonia (Haiba et al., 2016). Since mid– 1990s the national average soil P balance has been negative in Estonia due to a sharp decrease in fertilizer use and availability of manure. The national average soil P balance varied in 2004–2009 from -10 to -5 kg P/ha. Currently crop production in Estonia largely takes place at the expense of soil P resources (Astover & Rossner, 2013). One of the most efficient ways to eliminate these problems is an intelligent preparation of solid waste composts (Haiba et al., 2016).

Sawdust has been proven to be a good bulking agent for sludge composting (Banegas et al., 2007). In the study carried out by Qiu et al. (2012) the degradation of 4 sulfonamides using manure + sawdust or manure + rice straw was more effective than in the case of using manure alone (presumably due to the higher microorganism activities in the former). It has been shown by Kim et al., 2012, that sawdust could be a potential organic source able to initiate efficient composting, as exhibited by elevated composting temperatures, and consequently resulted in the reduction of residual concentrations of tetracyclines, sulfonamides and macrolides to reasonable levels in a relatively short composting period. Thus manure-based composts manufactured through the proper composting process can be acceptable for application to agricultural areas. However, application of livestock manure as raw manure and/or as liquid fertilizer after only a short storage period to stabilize the manure should be avoided as this may result in the potential release of veterinary antibiotics to the environment (Kim et al., 2012).

The degradation rate of pharmaceuticals in sewage sludge compost depends on the applied composting technology. The degradation of salinomycin was observed by Ramaswamyunder et al. (2015) under open and composting conditions. Composting with hay significantly reduced the concentration of salinomycin in the manure, making application of the postcompost manure safer for field application.

It has been shown, that the degradation of fluroquinolones (ciprofloxacin CIP, norfloxacin NOR and ofloxacin OFL) and sulfonamides (sulfadimethoxine SMX and sulfamethoxazole SDM) takes place during sewage sludge co-composting with sawdust, peat and straw (Haiba et al., 2013). Additions of sawdust clearly speeded up the decomposition of the studied pharmaceuticals, whereas the mixtures with peat and straw showed lower abilities to decompose pharmaceutical residues.

In compost mixtures with sawdust the concentrations of the studied pharmaceuticals decreased as much as 95% to 100% during 4-months composting period. The mixtures with straw and peat where less efficient in decomposing these pollutants: in the mixture with peat the degradation level for SMX was 83% and for SDM 76%; in the mixture with straw the degradation level for NOR was 79% and for OFL 74%. At the same time, the concentrations of the other studied pharmaceuticals decreased more than 90% during the 4-month period.

The temperature profiles of the sewage sludge–sawdust mixture samples during composting are demonstrated in figure 1. Initially the temperature of the composting samples ranged from 20 to 38  $^{\circ}$ C (mesophilic stage), then rose to 42  $^{\circ}$ C in 8 days (start of thermophilic stage).

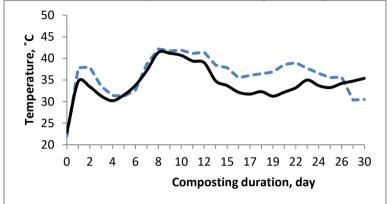


Figure 1. Temperature profiles during sewage sludge composting: sewage sludge mixedwith sawdust --- E1 1:2 (v:v) andE2 1:3 (v:v)

In small volumes of sawdust-sludge samples, where the sample temperature remained unchanged, the degradation of pharmaceuticals was very slow. During 1-month period only 37% of the initial amount of SMX degraded (the lowest value); the highest level of degradation was apparent in the case of OFL - 82%. This clearly shows that composting may sufficiently speed up the degradation of pharmaceuticals originating from sewage sludge.

Although the results obtained in the case of composting sewage sludge with sawdust seem to be very promising, the experiments show very slow rate of carbamazepine degradation, not exceeding 20% during the 1month period. According to this fact, the problems associated with the usage of sewage sludge compost as an agricultural fertilizer are far from reaching a final solution.

### **References:**

Astover, A. & Rossner, H. 2013. Knowledge report: Phosphorus status of agricultural soils in Estonia. Baltic Forum for Innovative Technologies for Sustainable Manure Management, p 8.

Banegas, V., Moreno, J.L., Moreno, J.I., García, C., León, G. & Hernández, T. 2007. Composting anaerobic and aerobic sewage sludges using two proportions of sawdust. Waste Management 27, no. 10: 1317–1327.

Barbosa, M.O., Moreira, N.F.F., Riberio, A.R., Pereira, M.F.R. & Silva, A.M.T. 2016. Occurrence and removal of organic micropollutants: an

overview of the watch list of EU Decision 2015/495. Water Research 94: 257–279.

Beek, T. aus der, Weber, F.A., Bergmann, A., Hickmann, S., Ebert, I., Hein, A. & Küster, A. 2016. Pharmaceuticals in the environment—Global occurrences and perspectives. Environmental Toxicology and Chemistry 35, no. 4: 823–835.

Daughton, C.G. 2007. Pharmaceuticals in the environment: Sources and their management. In Petrovic, M. & Barcelo, D., eds. Analysis, Fate and Removal of Pharmaceuticals in the Water Cycle, Vol 50. Wilson & Wilson's Comprehensive Analytical Chemistry Series. Elsevier Science, Amsterdam, The Netherlands: 1-58.

Daughton, C.G. & Ruhoy, I.S. 2009. Environmental footprint of pharmaceuticals: The significance of factors beyond direct excretion to sewers. Environmental Toxicology and Chemistry. 28, no. 12: 2495–2521.

Daughton, C.G. & Ternes, T.A. 1999. Pharmaceuticals and personal care products in the environment: agents of subtle change? Environal Health Perspectives 107, suppl. 6: 907–938.

Davies, J. 1994. Inactivation of antibiotics and the dissemination of resistance genes. Science 264, no. 5157: 375–382.

Ferrari, B., Mons, R., Vollat, B., Fraysse, B., Paxēaus, N., Giudice, R.Lo, Rollio, A. & Garric, J. 2004. Environmental risk assessment of six human pharmaceuticals: are the current risk assessment procedures sufficient for the protection of the aquatic environment. Environmental Toxicology and Chemistry 23, no. 5: 1344–1345.

Haiba, E., Nei, L., Ivask, M., Peda, J., Järvis, J., Lillenberg, M., Kipper, K. & Herodes, K. 2016. Sewage sludge composting and fate of pharmaceutical residues – recent studies in Estonia. Agronomy Research 14, no. 5: 1583-1600.

Haiba, E., Nei, L., Lillenberg, M., Kipper, K. & Herodes, K. 2013. Degradation of some pharmaceuticals during composting. AWERProcedia Advances in Applied Sciences 1: 857-862.

Halling-Sorensen, B., Nielsen, S.N., Lanzky, P.F., Ingerslev, F., Lutzhoft, H.C.H. & Jorgensen S.E. 1998. Occurrence, fate and effects of pharmaceutical substances in the environment – a review. Chemosphere 36, no. 2: 357–394.

Heberer, T. 2002. Occurrence, fate, and removal of pharmaceutical residus in the aquatic environment: a review of recent research data. Toxicology Letters 131, no. 1-2: 5–17.

Hughes, S.R., Kay, P., Brown, L.E. 2013. Global synthesis and critical evaluation of pharmaceutical data sets collected from river systems. Environmental Science & Technology 47, no. 2: 661–677.

Järvis, J., Ivask, M., Nei, L., Kuu, A. & Luud, A. 2016. Effect of green waste compost application on afforestation success. Baltic Forestry 22, no. 1: 90-97.

Kalda, K., Ivask, M., Kutti, S., Kuu, A., Meriste, M., Nei, L., Peda, J. & Raukas, A. 2015. Soil invertebrates in semi-coke heaps of Estonian oil shale industry. Oil Shale 32, no. 1: 82–97.

Kim, K.-R., Owens, G., Ok, Y.S.; Park, W.-K., Lee, D.B. & Kwon, S.-I. 2012. Decline in extractable antibiotics in manure-based composts during composting. Waste Management 32, no.1: 110–116.

Kipper, K., Herodes, K., Leito, I. & Nei, L. 2011. Two fluoroalcohols as components of basic buffers for liquid chromatography electrospray ionization mass spectrometric determination of antibiotic residues. Analyst 136, no. 21: 4587-4594.

Knapp, C.W., Dolfing, J., Ehlert, P.A.I. & Graham, D.W. 2010. Evidence of increasing antibiotic resistance gene abundances in archived soils since 1940. – Environmental Science & Technology 44, no. 2: 580–587.

Lillenberg, M. 2011. Residues of some pharmaceuticals in sewage sludge in Estonia, their stability in the environment and accumulation into food plants via fertilizing: PhD thesis in environmental protection. Estonian University of Life Sciences.

Lillenberg, M., Yurchenko, S., Kipper, K., Herodes, K., Pihl, V., Sepp, K., Lõhmus, R. & Nei, L. 2009. Simultaneous determination of fluoroquinolones, sulfonamides and tetracyclines in sewage sludge by pressurized liquid extraction and liquid chromatography electrospray ionization-mass spectrometry. Journal of Chromatography A 1216, no. 32: 5949-5954.

Lillenberg, M., Yurchenko, S., Kipper, K., Herodes, K., Pihl, V., Lõhmus, R., Ivask, M., Kuu, A., Kutti, S., Litvin, S.V. & Nei, L. 2010. Presence of fluoroquinolones and sulfonamides in urban sewage sludge and their degradation as a result of composting. International Journal of Environmental Science and Technology 7, no. 2: 307-312.

Martín, J., Santos, J.L., Aparicio, I. & Alonso, E. 2015. Pharmaceutically active compounds in sludge stabilization treatments: anaerobic and aerobic digestion, wastewater stabilization ponds and composting. Science of the Total Environment 503, special issue: 97–104.

Moldovan, Z., Chira, R. & Alder, A.C. 2009. Environmental exposure of pharmaceuticals and musk fragrances in the Somes River before and after upgrading the municipal wastewater treatment plant Cluj-Napoca, Romania. Environmental Science and Pollution Research 16, suppl. 1: 46-54.

Nayak, A.K. & Kalamdhad, A.S. 2015. Sewage sludge composting in a rotary drum reactor: stability and kinetic analysis. International Journal of Recycling of Organic Waste in Agriculture 4, no. 4: 249-259.

Motoyama, M., Nakagawa, S., Tanoue, R., Sato, Y., Nomiyamac, K. & Shinoharaa, R. 2011. Residues of pharmaceutical products in recycled organic manure produced from sewage sludge and solid waste from livestock and relationship to their fermentation level. Chemosphere 84, no. 4: 432-438. Qiu, J.R., He, J.H., Liu, Q.Y., Guo, Z.Y., He, D.C., Wu, G.Y. & Xu, Z.C. 2012. Effects of conditioners on sulfonamides degradation during the aerobic composting of animal manures. Procedia Environmental Sciences 16: 17-24.

Radović, T.T., Grujić, S.D., Kovačević, S.R., Laušević, M.D. & Dmkić M.A. 2016. Sorption of selected pharmaceuticals and pesticides on different river sediments. Environmental Science and Pollution Research 23, no. 24: 25232–25244.

Ramaswamy, J., Prasher, S.O., Patel, R.M., Hussain, S.A. & Barrington ,S.F. 2010. The effect of composting on the degradation of a veterinary pharmaceutical. Bioresource Technology 101, no. 7: 2294–2299.

Straub, J. O. 2016. Aquatic environmental risk assessment for human use of the old antibiotic sulfamethoxazole in Europe. Environmental Toxicology and Chemistry 35, no. 4: 767–779.

Verlicchi, P. & Zambello, E. 2016. Predicted and measured concentrations of pharmaceuticals in hospital effluents. Examination of the strengths and weaknesses of the two approaches through the analysis of a case study. Science of the Total Environment 565: 82–94.

Winkler, M., Faika, D., Gulyas, H. & Otterpohl, R. 2008. A comparison of human pharmaceutical concentrations in raw municipal wastewater and yellowwater. Science of the Total Environment 399, no.1-3: 96-104.

# "Please, Sir, I Want Some More.": (A Case Study of Child Mortality of Palghar District, State of Maharashtra, India, from August 2014 – October 2016)

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#### Abstract

This study examines the relationship between climate change and undernourishment and its negative impact on child health. The focus of this study is Palghar District (which was formed on August 1, 2014, in State of Maharashtra, India). This paper examines the efficacy of the role of healthy government initiatives and their awareness among people in overcoming the adverse effects of climate-change.

The study is based on interviews with the District Collector, various government officials and anthropologists working in the area, as well as secondary data collected from the Palghar District Collectorate. As the data made available by the government were limited, the study is unable to supply extensive information about such aspects as the beneficiaries of various welfare schemes, project costs and cost analysis.

Palghar district has reported 64 per 1000 child deaths and 44 per 1000 infant deaths between April and October, 2016. The researcher tried to find links between various potential variables and child mortality in this administrative region. The researcher hopes that by giving voice to a localised issue and discussing possible solutions for curbing the problem of child mortality due to undernourishment, it may be possible to find a long-term and comprehensive model for a solution for the same problem around the world.

## Keywords: Climate changes, child health, India

"Please, sir, I want some more.": (A Case Study of Child Mortality of Palghar District, State of Maharashtra, India, from August 2014 – October 2016)

The title of this paper makes reference to a very famous scene in English Literature. In Charles Dickens' *Oliver Twist*, the undourished and hungry little Oliver asks for more food and is severely beaten. The children

discussed in this study are in a similar situation. They may not be able to ask for more always, but their condition is just as appalling as was that of Oliver.

### Introduction

There has been growing concern in both climatological and medical communities that global climate change is likely to have wide-ranging impact on health. The potential health effects from these changes are many. Overall, negative health impacts may outweigh the positive ones (IPCC, 2001b). The major potential health impacts have been classified as direct and indirect impacts, according to whether they occur predominantly via the direct effects of exacerbated values of one or more climate variables (e.g. temperature, precipitation, solar radiation) on humans, or are mediated by climate-induced changes in complex biogeochemical processes or climatic influences on other environmental hazards (IPCC, 1996b). Climate variables such as extended rain leading to moist and low temperature, or heat, cause various diseases. Low and moist temperature severely affects patients suffering from pneumonia, hypothermia and skin diseases.

In tribal areas, most children are delivered at home. The warm inutero environment is replaced by one that is cold and moist, because the parents are generally unable to regulate the temperature to provide a conducive environment. Infants thus suffer from hypothermia in extreme cases. They are also exposed to the risk of vector-borne diseases such as malaria, dengue and diarrhoea.

In addition, extreme undernourishment is rampant among these tribal populations due to unbalanced diets. They do not get enough calories, protein or micronutrients. Consequently, the children display the classic symptoms of undernourishment — stunted growth, thin body, very poor energy level, swollen legs and abdomen. Low immunity makes children susceptible to infections. These impacts can be multiple, simultaneous and significant.

One of the many challenges to policy makers and resource managers, then, is how to cope with all of these potential, and simultaneous, impacts.

# Background

This study echoes the same concerns at the micro level. It is a case study of Palghar District from the State of Maharashtra, India. The District was legally formed on August 1, 2014. Therefore, the study period here is 2014 onwards.

Palghar is located nearly 107 kilometres off Mumbai (Greater Mumbai), the financial and commercial capital of India. Palghar District attracted media attention due to the high percentage of deaths due to

undernourishment, and has, in fact, acquired the dubious distinction of being the second in this respect (after Nandurbar District) in Maharashtra.

Of the total population of Palghar, 37 percent are tribals. There are eight tehsils in Palghar and 90 percent of the tribal population of Palghar in concentrated in four of these tehsils.(Table 1.1)

These tribal communities are deeply connected to local ecosystems and are economically and culturally dependent on fish, wildlife, plants, and other resources from the land. Thus, these communities are adversely affected by changing climate or outright loss of habitats suitable for native species and resources.

According to Primitive Tribes of Central India (1934), undernutrition was not a problem about half a century ago. Similarly, "Kings of the Jungle" (*Jangalche Raje*) published in 1954, focused on the areas under consideration but made no reference to undernutrition⁶. Sadly, the previously healthy relationship of these communities with the forest has deteriorated now. The geographical boundaries of reservations and resource availability restrict the options for relocation, thus limiting opportunities to move to areas where climate change impacts are not so severe. Tribal rights to access resources on usual and accustomed areas outside of reservation boundaries are based on location, regardless of climate-induced shifts in resource availability. This leaves tribes in a position where they may no longer have access to important subsistence, medicinal, and cultural resources. Adverse effects of climate change have manifested themselves as the continuing disappearance of roots, berries, and other traditional food sources. All this may, in turn, lead to the unravelling of the traditional practices and ceremonies that have bound tribal people and societies together for generations. The traditional ecological knowledge and governance structures of the tribes may be used to alleviate the significant climate-related challenges they face. To accomplish this, tribes should be allowed to participate meaningfully in sustained scientific programmes to understand how climate change impacts them, how they can and should be involved, and should be allowed to propose their traditional ecological knowledge as a valuable tool in developing solutions for many such problems. In the long run, these measures will help the tribal community counter not only the problems associated with climate change but also other related issues like infant mortality, child mortality and undernourishment.

# **Research Methodology**

This study is largely based on focussed interviews with the District Collector, doctors working in the area, health officers and anthropologists

⁶ This was told to the researcher by one of the respondents during an interview.

working in this region, and the secondary data collected from the Palghar District Collectorate. Based on the interviews and data collected, this researcher attempted to explain and describe the facts uncovered.

India-specific adjustments have been made wherever required. For instance, the international understanding of the age of 'children' is from 0 to 5 years; but in India this is 0 to 6 years, the age of enrolment in schools.

### **Demographics of Palghar**

The demographic composition of Palghar is a mix of tribal and urban-rural population. But the cause of concern is tribal areas where the quality of life is appalling.

Interestingly, the tribal population scores well on the various indicators of sex and gender. The women outnumber the men (Table 1.1) as the tribals believe that girl children bring them prosperity and fortune. Women are seen as the source of life and sustenance. A girl manages household duties until she marries, and at her marriage her parents earn a bride price. After marriage, it is she who is the 'man of the house', earning the family's livelihood. Thus, girls are preferred and sex ratio imbalance or child discrimination is never a problem in these communities. Among primitive tribals, in the absence of financial capital, human and social capital assumes tremendous importance.

Unfortunately, while the women are the human and social capital for these tribes, they are valued only as much as their perceived utility value to their families in particular, and to the community at large. Women's reproductive abilities are prized far more than the children. In other words, raising children is not a priority, and the infant mortality passes disregarded. Of the eight tehsils in Palghar, the highest concentration of tribal

Of the eight tehsils in Palghar, the highest concentration of tribal population is in Mokhada, which is situated in a lush green landscape on the slopes of the Sahyadris. This is an area where the food with the highest nutrient content — Ragi (red finger millet) — is plentifully grown; yet, paradoxically, it is also the area with the highest number of child deaths due to undernourishment. Local inquiries point to the simple conclusion that poverty is the main cause of undernourishment and related problems.

Sr. No	Tahsil	Tot	al Populati	on	S	T Populati	on Percentage of ST	
		Male	Female	Total	Male	Female	Total	population
1	Vasai	709771	633631	1343402	48921	49377	98298	7.32
2	Palghar	288514	261652	550166	83424	84728	168152	30.56
3	Dahanu	199574	202521	402095	135842	142062	277904	69.11
4	Talasari	76417	78401	154818	68699	71574	140273	90.61

Table No.1.1: Palghar District Scheduled Tribes (STs) population

5	Jawhar	69333	70854	140187	63280	65182	128462	91.64
6	Vikramgad	68489	69136	137625	62646	63722	126368	91.82
7	Mokhada	41691	41762	83453	38246	38596	76842	92.08
	Total	1545779	1444337	2990116	552218	565790	1118008	37.39

Table 1.2 shows the child deaths in Palghar tehsil in 2012-13 (when Palghar was an administrative division of Thane District) and in Palghar District from 2014-15 (when Palghar became an administrative unit) until October 2016-17. With the formation of the administrative unit of Palghar, the District administration accepted the challenge to solve the menacing problem of undernourishment and child deaths. Within just three years, that is, by 2015-16, the death rate fell by 64 percent. However, by October 2016, these figures changed yet again as the mortality rate increased dramatically by 15 percent. The situation in Mokhada tehsil, particularly, was very critical.

Out of every four child deaths, two are from the Kathkari tribe from Mokhada, which is considered as a primitive tribe. This tribe is a particularly vulnerable group. They are landless and have customarily been utilised in extracting kaat from khair trees, which is used as kaat (catechu) in paan (betel leaves). The tribes are adept at making traditional kaat using indigenous practices. Deforestation has depleted the quantity of khair trees, and this has had spiralling effects on the livelihoods of this tribe.

The increased child deaths in 2016-17 have been attributed to pneumonia and the low birth weight of the infants. It has been also reported that 50 percent of women were anaemic at the time of childbirth, which is another severe cause of concern.

Sr. No.	Tahsil	Year 2012- 13 [*]	Year 2014-15	Year 2015-16	Year 2016-17 (Up to October 2016)
1	Mokhada	60	57	43	64
2	Jawhar	95	50	42	45
3	Vikramgad	68	40	31	32
4	Wada	50	20	30	33
5	Palghar	100	14	8	7
6	Talasari	46	21	17	11
7	Dahanu	106	19	20	23

Table 1.2 Year-wise Child Death Rate

8	Vasai	64	11	17	26
Palg	har District	589	232	208	241

Source: District Health Information System, Government of Maharashtra Note 1: * 2012-13 figures are for Palghar Tehsil

Infant mortality (Table 1.3) fell by 66 percent in the year 2015-16, i.e., within two years of formation of Palghar District. But once again Mokhada tehsil is facing serious issues. In the same year, the infant mortality of Mokhada stood at 44 (per 1000 live childbirths) due to undernourishment, higher than any of the other tehsils. The mortality rate this year in 2016-17 (until October 2016) shot up by 83 percent in Mokhada tehsil alone. Overall, infant death rates in Palghar district rose by 19 percent until October 2016, as compared to the previous year of 2015-16.

Why are infants remaining so severely undernourished? It is not surprising that the cause is acute poverty. What is shocking is that parents prefer children to remain undernourished so that they can avail financial assistance (*Khavati* loan) in the form of 'consumption loan' during the lean period of monsoon. These loans are intended to benefit families having undernourished children, but they become the source of food for the entire family. These loans are meant to improve the condition of infants and eradicate usury, thus preventing the exploitation of tribals. Ironically, they have resulted in the exploitation of the infants themselves.

Sr. No.	Tahsil	Year 2012-13*	Year 2014-15	Year 2015-16	Year 2016-17 (Up to October 2016)
1	Mokhada	51	33	24	44
2	Jawhar	64	41	31	35
3	Vikramgad	48	29	23	22
4	Wada	33	14	23	16
5	Palghar	71	11	6	5
6	Talasari	32	13	12	7
7	Dahanu	75	13	14	18
8	Vasai	52	9	11	24
Palgl	nar District	426	163	144	171

Table 1.3 Infant Death Rates
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Source: District Health Information System, Government of Maharashtra Note 1: * 2012-13 figures are for Palghar Tehsil

### The Main Reason

The main reason of these deaths is undernourishment. Both mother and child are severely undernourished due to the dietary deficiency of micronutrients — such as Iron, Vitamin A and Iodine — essential for the mother's health and development of the child. Although, the remedies are low-cost and highly-effective — the consumption of iodized salt, proper cooking oil, and vitamins through low-cost nutritious food — they are not being implemented. Acute poverty deprives women of the nutritious food required during pregnancy and after childbirth and which is necessary for their own survival. Thus, the vicious cycle of undernourishment from one generation to the next continues.

Palghar's undernourishment problem is a chronic one and cannot be fixed with nutritious food alone. The lack of income leads to lack of spending and procurement of basic necessities, leading to nutrient deficiency affecting everybody's health. The situation worsens with decreasing traditional sources of food for these tribes.

There are multiple reasons for the low income of these tribes. The primary one is that they are dependent on forest products. Deforestation is causing a loss of livelihood for them. Most tribal people do not have land entitlements or ownership rights. The land allotted to tribals as per the Forest Rights Act 2006 is most often uncultivable. Topographically, more than 90 percent of this land is barren. In the less than 10 percent that is cultivable, they cultivate only during one agricultural season, that is, *Kharif* season (monsoon season in India). The land remains untouched for the rest of year; there is no crop-rotation; and there are inadequate irrigation facilities. Economic self-interest causes the tribals to focus on agriculture as their main source of income during the monsoon, and to ignore their children's health. The women are the wage earners while the men are the dependent population, involved in various unsocial activities such as excessive alcohol consumption and drug addiction. This needless spending just adds to the problems of the family.

Rampant illiteracy and unskilled labour are two other important reasons for the low incomes. The government machinery is working extensively to provide a livelihood to many people. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is the prime employment generation agency and guarantees livelihood security. But policy-paralysis and hindrances in implementation in the form of delayed payments, discriminative remuneration and the creation of fake identities, misappropriation of funds, etc., make it difficult to protect the interests of these people. The limited scope of work, inadequate infrastructure and limited employment opportunities for an ever-increasing labour force, lead to seasonal migrations. This displacement deprives them of the benefits to which they are entitled as part of being beneficiaries to various governmentrelated programmes and schemes.

With their migration, the hardships of mother and child start. When these tribal mothers and children migrate, they are in comparatively good health because of government interventions. They lose this local government support once they migrate. When they return during the next monsoon to cultivate their barren land, mother and child are very weak and vulnerable due to starvation and stinting on food to save money for investing in their agricultural activities. This negligence towards one's health naturally has severe consequences.

The long working hours with all the shifting and movement leave the mothers hardly any time to actually take care of their offspring. Juggling the roles of breadwinner and mother, the former takes the precedence. Mothers resort to home-remedies to cure their babies' severe condition, but too often it is too late to help the children. It may also be too difficult for the mothers to stay back in hospital and take care of the children because it would mean the loss of income. Monsoon being the only prime season to undertake work, they try to harness every possible opportunity, and the opportunity cost⁷ is the endangering of the child's health. It is difficult to judge, either morally or ethically, whether a mother should stay back in hospital and look after her child or look after the work of farmland or livestock. This dilemma leads to ineffective health care, as well as inefficient work and insufficient income. Thus, this tendency to resort to any available opportunity without judging its worth leads them to choose those options that are neither greatly profitable nor health-wise preferable.

This alternating of responsibility between different levels of health administration and the tribals continues until the mothers (and the family) agree to look after the needs of their ailing children. Climate change causes the monsoon to either retreat or advance, leading the period to either lengthen or shorten without warning. Similar changes are observed in other seasons as well due to climate change. Media attention is focussed on the issue of child mortality, but this is incomplete coverage because only the situation during the monsoon is covered, not the wider picture involving the related hardships and problems.

Climate change and its effects necessitate infants to adjust and adapt for survival. This is not always easy. For example, in 2016-17, Palghar reported excess rainfall, with 2,500 millimetres of rainfall in a single night.

⁷ 'Opportunity cost' is a concept in Economics which refers to the 'cost' paid by an individual for not utilising an opportunity. In one astounding example of this, the researcher came across a case where a mother was unwilling to accompany her seriously ill child to the hospital because she claimed that doing so would mean neglecting her bullock. As the bullock was required for agricultural work, it was perceived as more valuable.

Such extreme weather conditions lead to abnormalities of various sort like viral infections, hypothermia, etc. The response mechanism for this problem includes Central and State governments' intervention in general, and District Collectorate intervention in particular for Palghar District.

### **General Government Intervention**

Among the multiple available Central and State government schemes, the following are of especial interest with reference to the area under consideration:

Setting up various mechanisms to fulfil the goal of sufficient nutrientintake for children (age group 0-6).

Providing employment opportunities through various employment-generation programmes such as MGNREGA and skill development programmes.

Providing irrigation facilities to undertake agricultural practices throughout the year through Jalyukta Shivar Abhiyaan (a State of Maharashtra initiative to undertake water conservation programmes to make the State drought-free).

Creating awareness and providing counselling to pregnant women and lactating mothers, as well as arranging population awareness programmes on Family Planning and Child-rearing.

### **District Collectorate Intervention**

The District Collectorate intervention lays emphasis upon the need to take innovative approaches to tackle problems, even going beyond Constitutional or legal provisions. The following were the proactive measures taken by the Collectorate:

Facilitating the direct intervention of medical practitioners Anganwadi workers (Courtyard Shelter) and Accredited Social Health Activists (ASHA) who reach out to larger masses, either to provide medical facilities or to publicise nutritious local home-made food. This local food

includes the highly nutrient-rich Ragi, which is abundant in this region. Strengthening the health care initiatives with a comprehensive structure by including paediatricians from urban areas (doctors from reputable hospitals in Mumbai volunteered to take care of critical cases while government-appointed doctors worked locally), regular medical camps in rural areas, providing intensive and focussed need-based service to different cases of undernourishment, and mobile dispensaries.

Conducting regular and timely surveys of the situation of

undernourishment in children and planning subsequent action accordingly. Central-tracking of undernourished children by ASHA volunteers using software installed on cellular phones to save the time required for

manually updating records. This technology largely aided in providing timely treatment and care to children and decreasing the time-lag involved in identification and selection of undernourished children.

Involving business communities to finance or support skilldevelopment and employment-generation programmes. Nearly 295 youths were being given training in October 2016, and by the end of February 2017, 800 more youths will be included in this programme, thus helping to control mass migration.

Diverting corporate funds to run inactive government schemes and going beyond the Corporate Social Responsibility (CSR) initiatives. For instance, there are plans for setting up an Apparel Park in Palghar. The sewing machines, fabric and materials for tailoring the clothes to be sold at the Apparel Park will be provided, thus promoting self-employment for women. The District administration will also play an active role in marketing the goods, with five-years of buy-back policy.

the goods, with five-years of buy-back policy. Providing support for maintaining livestock to promote the District administration health care initiatives. In fact, the District administration went ahead to make arrangements to look after the livestock as this remained an important reason for many families to avoid health care needs.

### Recommendations

Wise policies and improvement of public health facilities given to tribals can reduce child deaths and can improve public health substantially. Continuous appraisal and promotion of schemes with timely support is essential. The following are some general recommendations in this regard:

Continuing Central and State government intervention in terms of health, infrastructure, employment, agriculture and allied activities like poultry-farming and pisciculture, food security and education to ensure sustainable development.

Improving literacy and providing education facilities up to higher secondary and graduation levels, in addition to vocational and agricultural training to ensure livelihoods.

Addressing issues of land ownership, public infrastructure, human resource development and good governance.

Reducing deforestation to provide climate-based development assistance.

Focussing on implementing land replenishing methodologies, as well as other related measures to ensure the preservation of ethnic cultures and traditions.

Promoting eco-tourism in this area to provide an alternative source of income, thus reducing the need for seasonal migrations.

Providing vocational training to women as they are the wage-earners for their families.

## Conclusion

It is obvious that the comprehensive efforts of the State are important to tackle the issue of undernutrition. The Collector of Palghar hailed the positive changes as a "small victory" in the battle against undernutrition and child mortality. The consistent efforts of the government can be seen to have borne fruit where a few villages of Mokhada tehsil saw a 100 percent survival rate of children.

On the other hand, the programmes implemented have been criticised for being partial as they do not accommodate the tribal lifestyle and means. It is feared that the uneducated tribal population at large will find it difficult to cope with the industrial or corporate set-up.

There is some resistance from the tribals themselves to the help offered, as well. For instance, the government provides good quality of food supplements; they are sweetened to tempt the children to consume them regularly. However, the preferred taste for the tribals is savoury, and so they do not consume the supplements as regularly as they should.

Post-monsoon, the change in season brings a reduction in infections and vector-borne diseases. This is a good opportunity to restart treatment and reduce child mortality. However, the seasonal migrations begin around this time, and the returning population shows symptoms of severe undernourishment and related problems.

Palghar District was formed in August 2014. As such it has entered a new administrative set-up only within the last two years. As a District, more funds are available for ameliorating the distress of this section of the population. To do this effectively, there is a need to undertake an in-depth analysis of the problems of the tribals in this area. The current study is the first of its kind, but more such researches need to be encouraged to ensure a wholistic solution to the problem.

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# **References:**

A Human Health Perspective on Climate Change: A report outlining the research needs on the Human Health Effects on Climate Change (April, 2010) "Mitigation, Human Health, Adaptation."

2010) "Mitigation, Human Health, Adaptation." Callaway D, Eamer J, Edwardsen E, Jack C, Marcy S, Olrun A, Patkotak M, Rexford D, Whiting A (1999), "Effects of climate change on subsistence communities in Alaska." In: Weller G, Anderson P (eds) Assessing the consequences of climate change for Alaska and the Bering Sea Region. Center for Global Change and Arctic System Research, University of Alaska Fairbanks

Climate Change and The Health Of Indigenous Populations (May, 2016) De Wet C (ed) (2006), "Development-induced displacement: problems, policies and people." Berghahn Books, New York

District Census Handbook Thane (2013), "District Health Information System of Govt. of Maharashtra" (October 2016). Farbotko C, Lazrus H (2012), "The first climate refugees? Contesting global

narratives of climate change in Tuvalu. Glob Environ Chang pp:22:382–390

Gareth Jones, Werner Schultink and Marzio Babille, "Child Survival in India" Indian Journal of Peddiatrics, Volume 73, (June 2006), pp: 479-487

Harley CDG (2011), "Climate change, keystone predation, and biodiversity loss." Science 334, pp:1124–1127.

Indian Census Report (2011)

IPCC:, Intergovernmental Panel on Climate Change, 2001b, "Climate Change 2001: Impacts, Adaptation & Vulnerability", Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change, McCarthy, J. J., Canziani, O. F., Leary, N. A.,

Dokken D. J., and White, K. S., (eds.), Cambridge University Press, U.K IIPC, Intergovernmental Panel on Climate Change, (1996 b), "The Science of Climate Change", Houghton, J.T, MeiroFilho, L.G., Callendar, B.A. Harris, N., Kattenberg, N., Maskell, K. (Eds.), Cambridge University Press, UK.

Palghar District Collectorate (2016)

United Nations Development Program (UNDP), (2007/2008), "Human Development Report 2007/2008", Fighting climate change: human solidarity in a divided world.

United Nations Children's Fund (UNICEF) (2006), "The State of Asia-Pacific's Children 2008 Report"

United States (U.S.) (2013), "Global Change Research Program", Climate Change Impacts in the United States:

The Third National Climate Assessment (2014)

World Health Organisation (WHO) (2001), "Climate change and human health: risk and responses." World Health Organization, Geneva, Whyte, KP (2013), "Justice forward: tribes, climate adaptation and

responsibility in Indian country."

# Children Are the Future of the Nation (With Reference to National Family Health Survey [NFHS] Round 3 and 4 I.E. 2005-06 and 2015-16)

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## Abstract

The interstate variation in IMR and CMR is the focus of the study and researchers plan to investigate reasons behind the same in India.

The selection of three Indian states for the study is based on the planning commission data showing regional disparities in IMR and CMR. The NFHS round 3 and 4 supported in understand various linkages and relationships between various variables.

Extensive breast feeding is not directly linked with the rise or fall in Infant Mortality Rate (IMR) and Child Mortality Rate (CMR). Other important factors like women literacy and development of the state play an important role.

During the process of finding correlation between IMR, CMR and various factors affecting them, showed rising tendencies of IMR, CMR in those are areas which are economically backward, having illiteracy among women, lack of adequate diet for mother and child etc.

The limitation of the study is the source of data as the NFHS round 4 phase 2 is yet to be published while there hasn't been any research in the same field.

The findings of the study are important for various stakeholders of the society so as to contribute towards the human capital development of the nation.

**Keywords**: Breast feeding, women's education, infant mortality rate, child mortality rate

# Introduction

Human capital is an important consideration for a stronger nation as the productivity of the nation is determined by the same. Thus to focus on the human capital development, materal and child health is important and the crucial step in the same direction which forms the crux of the paper.

#### I.

Infant mortality rate (IMR) is probability of dying between birth and exactly one year of age expressed per 1,000 live births. IMR and Child Mortality Rate (CMR) are interlinked and cannot be overlooked upon. The Child mortality is the probability of dying between birth and exactly five years of age expressed per 1,000 live births. These two rates define the overall child deaths and it's important to focus on these indicators. Both the indicators reveal the health status, socio-economic development and quality of life in a state/ country.

#### Background

The National Family Health Survey (NFHS) is a large-scale, multiround survey conducted in a representative sample of households throughout India. Three rounds of the survey have been conducted since the first survey in 1992-93. The survey provides state and national information for India on fertility, infant and child mortality, the practice of family planning, maternal and child health, reproductive health, nutrition, anemia, utilization and quality of health and family planning services. Each successive round of the NFHS has had two specific goals: a) to provide essential data on health and family welfare needed by the Ministry of Health and Family Welfare and other agencies for policy and programme purposes, and b) to provide information on important emerging health and family welfare issues. The Ministry of Health and Family Welfare (MOHFW), Government of India, designated the International Institute for Population Sciences (IIPS), a nodal agency. The researchers have considered the data from the two recent NFHS rounds on basis their work.

The focuses on various studies have been specifically on the benefits arising from breast feeding which reveal the following details.

# **Review of Literature**

Many studies of breast feeding and its effects on child health and child survival provide convincing evidence of the health benefits of breast feeding (Victora et al. 1987; World Health Organization 1989; Coppa et al. 1990, Lucas et al. 1990, 1992; Cunningham et al. 1991). Apart from being highly nutritious, breast milk also contains high levels of antibody-rich proteins, especially secretory immunoglobulin A, and lactoferrin, which offer anti- infective protection to the newborn (Prentice 1987; Hanson et al. 1988; Bernshaw 1991). The maternal antibodies found in human breast milk protect the baby against respiratory infections (Feachem and Koblinski 1984; Jason et al. 1984; Victora et al. 1987)

Longer duration of lactation was found to be associated with a statistically significant trend towards reduced risk of breast cancer (Davis et al. 1988; Yoo et al. 1992; Newcomb et al. 1994; Freudenheim et al. 1994). Davis et al. (1988) demonstrated that children who were artificially fed or breast- fed less than six months were at increased risk of developing cancer before the age of 15

Lucas et al. (1992) found that preterm babies who had consumed breast milk had a substantial advantage in subsequent intelligence quotient (IQ) at 7.5-8 years over those who did not receive breast milk. Breast feeding also plays a preventive role against paralytic poliomyelitis during the first six months of life (Pisacane et al. 1992). Coppa et al. (1990) suggested that breast feeding has a preventive effect on urinary tract infection in both the mother and the infant. According to Grant (1984), Habicht et al. (1986), and Cunningham (1988), breast feeding provides protection against morbidity and mortality, especially during the first two years of life; even partial breast feeding has been found to be beneficial (Habicht et al. 1988). A high proportion and prolonged duration of breast feeding helps to reduce the detrimental effects of a poor hygienic environment in economically less developed countries and contributes to improved health even in the most highly industrialized countries relative to formula-fed infants (Victora et al. 1987; Lucas et al. 1990).

Apart from its nutritional and immunological effects, breast feeding also plays an important role in controlling fertility (Vitzthum 1994). Smith (1985) found that each additional month of breast feeding increases the average birth interval by 0.25-0.50 month, thereby leading to reduced fertility. Demo- graphic analyses have demonstrated that in populations without access to modern forms of contraception birth intervals are determined principally by the duration of breast feeding (Bongaarts and Potter 1983; Smith 1985; Nath et al. 1993b, 1994).

Anthropologists have consistently maintained that traditional societies have always had a mechanism to control their own population growth (Reining 1981; Oppong 1985). According to Oppong (1985), fertility constraint revolves around the biological and social mechanisms and the degree to which individuals or subgroups of people make conscious attempts to control their fertility. Fertility regulation methods include delayed marriage, residential separation of spouses, postpartum sexual abstinence, and breast feeding.

Based on the available literature, Khan (1990) revealed that the practice of breast feeding is almost universal in India. However, in some segments of the population, such as among the well-educated and urban

elites, the duration of breast feeding appears to be declining. Breast-feeding patterns and practices vary remarkably across populations and individuals because several factors may contribute to differences in breast-feeding behavior.

The researchers tried to find out the relationship between exclusive breast feeding and IMR and CMR, but it is revealed that there is no relationship between the two variables. Thus, the other factors play an important role in contributing towards a lower IMR and CMR.

#### **Research Methodology**

Using NHFS survey data (2015-16) & (2005-06), we have attempted to investigate the current breast-feeding patterns. There is a considerable variation among the states of India. The selection of 3 Indian states is based on the planning commission data showing regional disparities in IMR and CMR.

In this complete process of understanding the child and infant mortality rates, breast feeding plays an important role. The other important variables considered are as follows.

- a) IMR (infant deaths per 1000 live births)b) CMR (child deaths per 1000 live births)

- c) Children under age 6 months exclusively breastfed (per cent)
  d) Children age 6-8 months receiving solid or semi-solid foods and breast milk (per cent)
- e) Total children receiving adequate diet between 6 to 23 months (per cent)
- f) Non-breastfeeding children age 6-23 months receiving an adequate diet (per cent)
- g) Children under age 3 years breastfed within one hour of birth (per cent)
- h) Stunted children under the age of 5 (per cent)i) Underweight children under the age of 5 (per cent)
- j) Sex ratio at birth for children born in the last five years (females per 1.000 males)
- k) Sex ratio of the total population (females per 1,000 males)l) Mothers who consumed iron folic acid for 100 days or more when n) Households with an improved drinking-water sourcen) Households using improved sanitation facility

- o) Women who are literate (per cent)
- p) Women with 10 or more years of schooling (per cent)

We are taking selective variables for individual study, whereas for the comparative analysis we are considering all the variables which have been mentioned earlier in the paper.

#### State-wise details

a) <u>Madhya Pradesh:</u> At the time of NHFS 3, breastfeeding was nearly universal in Madhya Pradesh, only 22 percent of children less than six months are exclusively breastfed, as the World Health Organization (WHO) recommends. In addition, only 53 percent were put to the breast within the first day of life, including 16 percent within one hour of birth, which means that many infants were deprived of the highly nutritious first milk (colostrum) and the antibodies it contains. Mothers in Madhya Pradesh breastfeed their children for an average of 23 months, which was slightly less than the minimum of 24 months recommended by WHO for most children. It is recommended that nothing be given to children other than breast milk in the first three days when the milk has not begun to flow regularly. However, most children (58per cent) are given something other than breast milk during that period.

Madhya Pradesh	Urban	Rural	Total	NHFS3	
Infant Mortality Rate (IMR)	44	54	51	69	
Child Mortality Rate (CMR)	52	59	65	93	
Children under age 6 months exclusively breastfed (per cent)	54.2	59.6	58.2	21.6	
Non-breastfeeding children age 6-23 months receiving an adequate diet, (per cent)	4.4	5.1	4.8	na	
Children under age 3 years breastfed within one hour of birth (per cent)	31.6	35.5	34.5	14.9	
Sex ratio at birth for children born in the last five years (females per 1,000 males)	899	937	927	961	
Sex ratio of the total population (females per 1,000 males)	933	955	948	961	
Women who are literate (per cent)	77.5	51.4	59.4	44.4	
Men who are literate (per cent)	88.7	78.5	81.8	73.5	
Women with 10 or more years of schooling (per cent)	43.6	14.1	23.2	14.0	

Table 1.1. The state of Madhya Pradesh in basic indicators

Source: The state wise fact sheet from NFHS 4

In Madhya Pradesh literacy rate of women increased substantially from 44 percent to 59 percent. On other hand women with 10 or more years of schooling percentage is not increased in rural area even if overall percentage has increased from 14 percent to 23 percent. Infant mortality rate has decreased remarkably from 69 to 51. The number of children under age 3 years breastfed within one hour of birth NHFS 3 was 14.9 percent which increased by two folds and reached to 34.5 percent in NHFS4. Children under age 6 months exclusively breastfed percentage increased by 37 percent in this period.

Sex ratio for children and female show declining trends when compared NFHS 3 and 4, is a cause of concern. Women with 10 or more years of education percentage is only 23 per cent. The trend shows that women education over the decade has been neglected. Thus, IMR and CMR over the decade has declined from 69 to 51 and 93 to 65 respectivelyBut still the figures are higher than the national avegrage.

b) **Harvana:** During NHFS 3 in Harvana, it was found that only 17 percent of children under 6 months were exclusively breastfed, as the World Health Organization (WHO) recommends. In addition, only 63 percent were put to the breast within the first day of life, including 22 percent who started breastfeeding in the first hour of life, which means that many infants are deprived of the highly nutritious first milk (colostrums) and the antibodies it contains. However, mothers in Harvana breastfeed for an average of 26 months, which is slightly longer than the minimum of 24 months recommended by WHO for most children. In first three days more than half of children (54 per cent) are given something other than breast milk during that period.

Hamman		NUESS		
Haryana	Urban	Rural	Total	NHFS3
Infant mortality rate (IMR)	31	33	33	41
Under-five mortality rate (U5MR)	36	44	41	52
Children under age 6months exclusively breastfed (per cent)	46.6	52.4	50.3	16.9
Non-breastfeeding children age 6-23 months receiving an adequate diet (per cent)	10.7	9.5	10	na
Children under age 3 years breastfed within one hour of birth (per cent)	38.3	44.6	42.4	22.3
Sex ratio at birth for children born in the last five years (females per 1,000 males)	785	867	836	762
Sex ratio of the total population (females per 1,000 males)	846	895	876	897
Women who are literate (per cent)	80.3	72.1	75.4	60.4
Men who are literate (per cent)	93	88.9	90.6	83.4
Women with 10 or more years of schooling (per cent)	55.1	39.7	45.8	29.6

Table 1.2. The state of Haryana in basic indicators

Source: The state wise fact sheet from NFHS 4

c) **Tamil Nadu:** As per NHFS 3 data only 34 percent of children under 6 months were exclusively breastfed, as the World Health Organization (WHO) recommends. Almost 1 in 10 children are not put to the breast within the first day of life, which means they were deprived of the highly nutritious first milk (colostrum) and the antibodies it contains. Mothers in Tamil Nadu breastfeed for an average of 16 months, which was the shortest duration of any state and was considerably shorter than the minimum duration of 24 months recommended by WHO for most children. In the first three days, more than one-fifth of children (21per cent) in Tamil Nadu were given something other than breast milk during that period.

Tamil Nadu		NHFS3		
Tanin Nadu	Urban	Rural	Total	ицгээ
Infant mortality rate (IMR)	18	23	21	30
Under-five mortality rate (U5MR)	24	21	27	35
Children under age 6 months exclusively breastfed (per cent)	47.8	48.7	48.3	34.1
Non-breastfeeding children age 6-23 months receiving an adequate diet,(per cent)	42.6	51.5	47.1	na
Children under age 3 years breastfed within one hour of birth (per cent)	55.4	54.2	54.7	55.2
Sex ratio at birth for children born in the last five years (females per 1,000 males)	972	939	954	896
Sex ratio of the total population (females per 1,000 males)	1020	1047	1033	1078
Women who are literate (per cent)	85.6	72.9	79.4	69.4
Men who are literate (per cent)	91.7	86.2	89.1	84.1
Women with 10 or more years of schooling (per cent)	58.6	42.9	50.9	31.8

Table 1.3 the state of Tamil Nadu in basic indicators

Source: The state wise fact sheet from NFHS 4

NHFS 4 survey shows that the literacy rate in rural part of Tamil Nadu is still lower than average. Women schooling 10 or more year's percentage increased from 32 percent to 51 percent. During this period infant mortality rate decreased marginally which is 21 as per NHFS 4 survey. Children under age 3 years breastfed within one hour of birth percentage is reduced surprisingly in Tamil Nadu, which comes down to 54.7 percent from 55.2 percent. Whereas Children under age 6 months exclusively breastfed percentage increased from 34 percent to 48 percent. It is clear that in urban areas breastfeeding percentage is lower than

It is clear that in urban areas breastfeeding percentage is lower than rural part even though the overall percentage is increasing. With growing awareness overall percentage of breastfeeding is increasing. We need to be very cautious as non-breastfeeding children age 6-23 months receiving an adequate diet percentage in developed state like Tamil Nadu is very high. And this percentage can be linked to urbanization. All efforts to preserve, promote and encourage breast-feeding should be taken and every measure necessary to reduce the regrettable trend towards bottle-feeding in our country should be seriously considered.

#### Findings

As per the selection criteria considering the Planning Commission data, the indicators and result should have shown a proportional and cohesive result. But the results are not proportional and cohesive.

Women's education is crucial in deciding the infant and child survival. More crucial is healthier children and educated women. The researchers attempted to understand the inverse relationship between women literacy and women with 10 or more years of schooling and IMR and CMR. The data from NFHS 4 and the comparison between 3 above mentioned states shows that progressive states having more literate women have inverse relationship with IMR and CMR. With educated women it is clear that children (6-8 months) receive solid or semi-solids foods and breast milk. In Tamil Nadu, the percentage of children receiving solid or semi-solid foods and breast milk is almost 70 percent. But in the remaining states, it's less than 40 percent.

Parameters/ States	Tamil Nadu	Haryana	Madhya Pradesh			
IMR (deaths per 1000 live births)	21	33	51			
Child mortality (deaths per 1000 live births)	27	41	65			
Children under age 6 months exclusively breastfed (per cent)	48.3	50.3	58.2			
per cent of children age 6-8 months receiving solid or semi-solid foods and breast milk	67.5	35.9	38.1			
per cent of total children receiving adequate diet between 6 to 23 months	30.7	7.5	6.9			
Non-breastfeeding children age 6-23 months receiving an adequate diet,(per cent)	47.1	10	4.8			
Children under age 3 years breastfed within one hour of birth (per cent)	54.7	42.4	34.5			
per cent of Stunted children under the age of 5	27.1	34	42			
per cent of underweight children under the age of 5	23.8	29.4	42.8			
Sex ratio at birth for children born in the last five years (females per 1,000 males)	954	836	927			
Sex ratio of the total population (females per 1,000 males)	1033	876	948			
Mothers who consumed iron folic acid for 100 days or more when they were pregnant (per cent)	64	32.5	23.6			
Households with an improved drinking-water source	90.6	91.7	84.7			
Households using improved sanitation facility	52.2	79.2	33.7			
Women who are literate (per cent)	79.4	75.4	59.4			
Women with 10 or more years of schooling (per cent)	50.9	45.8	23.2			
Source: The state wise fact sheat from NEUS 4						

Table 1.4 The comparative analysis of the 3 states

Source: The state wise fact sheet from NFHS 4

With education, the percentage of underweight children reduces as adequate diet percentage rises. Those mothers who are educated are aware of their dietary supplements

Other variables like drinking water, sanitation are generally in improved state in comparatively developed states. Same is the trend seen in sex ratio i.e. female per 1000 males and sex ratio at birth for children born in the last five years.

The children who are either stunted or underweight are directly linked to the development of the particular state. As it's evidently clear in our analysis, the rising trend in developed to underdeveloped state is directly linked to the stunted and underweight children.

Exclusive Breast feeding given to the infant for the first six months are important as it allows the mothers and child to physically and mentally strengthen themselves and also them to develop a physical bond. Though it has various advantages as mentioned above, the exclusive breast feeding and the fall of IMR and CMR are contradictory in nature on Madhya Pradesh. The researchers with their limited resources have failed to acknowledge and legitimize the cause and effect relationship.

#### Conclusion

The researchers have not come across NFHS comparisons in terms of IMR and CMR and the factors affecting them. As NFHS 4 data for only 1 phase is available, the available data 3 and 4 round make up for the comparison on the grounds, where IMR and CMR are highest to lowest. The holistic view considering other complementary variables is

essential for healthy children. Bold and holistic steps to develop and maintain child health will ensure a healthier population. Thus, the investment in human capital lies in maternal and early life health of children, nutrition and women's education. Even if it might look quiet multi-variant, such issues require multipronged approach to tackle them successfully.

#### Recommendations

a) Women literacy should be promoted to reduce IMR and CMR with general awarenss among the masses.

b)

Government surveys and policies should be more comprehensive. The development indicators are linked to social indicators thus all c) these shouldn't be overlooked.

d) Emphasis on breast feeding in every policy is a welcome move but it needs to reconsider with other factors affecting this issue.

e) Development of human capital is possible with the state machinery finding better avenues and means for investing it in and for the betterment of population at large.

# **Practical proposition**

The findings are important for all stakeholders like the families, governments, Ministry of Health and Family Welfare and other agencies for policy and programme purposes etc. who are involved in taking proper initiatives and actions in terms of child health and reduction in IMR and CMR. Women education and healthier children are important in achieving the sustainable development of our country. For the reduction of IMR and CMR, the stake holders should invest in child health's with the aim of maximizing long run economic growth.

# **References:**

# Websites:

http://planningcommission.nic.in/data/datatable/data_2312/DatabookDec201 4per cent20223.pdf

http://rchiips.org/nfhs/

https://www.unicef.org/infobycountry/stats_popup1.html

http://rchiips.org/nfhs/factsheet_NFHS-4.shtml

http://data.worldbank.org

# **Reports and Publications:**

A.Aggarwal, S. Verma, and M. M. A. Faridi, "Complementary feeding reasons for inappropriateness in timing, quantity and consistency," Indian Journal of Pediatrics, vol. 75, no. 1, pp. 49–53, 2008.

A.S.Nimbalkar, V. V. Shukla, A. G. Phatak, and S. M. Nimbalkar, "Newborn care practices and health seeking behavior in urban slums and villages of Anand, Gujarat," Indian Pediatrics, vol. 50, no. 4, pp. 408–410, 2013

Bernshaw, N.B. 1991. Does breast feeding protect against sudden infant eath syndrome? J. Hum. Lactation 7(2): 7 3

Bongaarts, J., and R.G. Potter. 1983. Fertility, Biology, and Behavior. New York: Academic Press.

Choudhury, R.H. 1982. Son preference and fertility.In Social Aspects of Fertility. New Delhi, India: Vikas Publishing, 3

Coppa, G. V., O. Gabrielli, P. Giorgi et al. 1990. Preliminary study of breast feeding and bacterial adhesion to uro-epithelial cells. Lancet 335:

Cox, D.R. 1972.Regression models and life tables. J. R. Stat. Soc., ser. B,Soc., ser. B, 34

Cunningham, A.S. 1988. Breast-feeding, bottle-feeding, and illness: An annotated bibliography. In Programmes to Promote Breast-F eeding, D.B. Jelliffe and E.F.P. Jelliffe, eds. New York: Oxford University Press, 448-480 Cunningham, A.S., D.B. Jelliffe, and E.F.P. Jelliffe. 1991. Breast feeding and health in the 1980s: A global epidemiologic review. J. Pediatr. 118-659-666

Davis, M.K., D.A. Savitz, and B.I. Graubard. 1988. Infant feeding and childhood cancer. Lancet 2:365-368

D. Kumar, N. K. Goel, P. C. Mittal, and P. Misra, "Influence of infant-feeding practices on nutritional status of under-five children," Indian Journal of Pediatrics, vol. 73, no. 5, pp. 417–421, 2006. Feachem, R.G., and M.A. Koblinski. 1984. Interventions for the control of

Feachem, R.G., and M.A. Koblinski. 1984. Interventions for the control of diarrheal diseases among young children: Promotion of breast-feeding. Bull. WHO 62(2):271-291.

Freudenheim, J.L., J.R. Marshall, S. Graham et al. 1994. Exposure to breast milk in infancy and the risk of breast cancer. Epidemiology 5(3):324-331

G. Jones, R. W. Steketee, R. E. Black, Z. A. Bhutta, and S. S. Morris, "Howmany child deaths can we prevent this year?" The Lancet, vol. 362, no. 9377, pp. 65–71, 2003

Grant, J.P. 1984. In The State of the World's Children 1984, UNICEF. London: Oxford Uni- versity Press

Habicht, J.P., J. Da Vanzo, and W.P. Butz. 1986. Does breast-feeding really save lives, or are apparent benefits due to biases? Am. J. Epidemiol. 123 (2): 279-290

Habicht, J.P., J. Da Vanzo, and W.P. Butz. 1988. Mother's milk and sewage: Their interactive effects on infant mortality. Pediatrics 18(3):456-461

Hanson, L.A., B. Carlsson, and F. Jalil. 1988. Antiviral and antibacterial factors in human milk. In Biology of Human Milk, L.A. Hanson, ed. New York: Raven Press, 141-157

Jason, J.M., P. Nieburg, and J.S. Marks. 1984. Mortality and infectious diseases associated with infant feeding practices in developing countries. Pediatrics 74(4):702-727

Khan, M.E. 1990. Breast-feeding and weaning practices in India. Asia Pac. Popul. J. 5(1):71-88

Lucas, A., O.G. Brooke, R. Morley et al. 1990. Early diet of preterm infants and development of allergic or atopic disease: Randomized prospective study. Br. Med. J. 300:837-840

Lucas, A., R. Morley, T.J. Cole et al. 1992. Breast milk and subsequent intelligence quotient in children born preterm. Lancet 339:261-264

McKee, L. 1984. Sex differentials in survivorship and the customary treatment of infants and children. Med. Anthropol. 8(2):91-103

Ministry of Women and Child Development FaNB and Government of India, National Guidelines on Infant and Young Child Feeding, Ministry of Women and Child Development FaNB, Government of India, New Delhi, India, 2nd edition, 2006

Ministry of Health and Family Welfare, DLHS 3, District level household and facility survey, Factsheet Kerala,International Institute of Population Sciences Namboodiri, K., and C.M. Suchindran. 1987. Life Table Techniques and Teir Applications. Orlando, FL: Academic Press

National Family Health Survey (NFHS) 4

National Family Health Survey (NFHS) 3

Nath, D.C., K.C. Land, and K.K. Singh. 1994. The role of breast-feeding beyond postpartum amenorrhea on the return of fertility in India: A life table and hazards model analysis. J. Biosoc. Sci. 26:191-206

Nath, D.C., K.K. Singh, K.C. Land et al. 1993a. Age at marriage and length of the first birth interval in a traditional Indian society: Life table and hazards model analysis. Hum. Biol. 65(5):783-7

Nath, D.C., K.K. Singh, K.C. Land et al. 1993b. Breast-feeding and postpartum amenorrhea in a traditional society: A hazard model analysis. Soc. Biol. 40(1/2):74-86

Newcomb, P.A., B.E. Storer, M.P. Longnecker et al. 1994. Lactation and reduced risk of pre- menopausal breast cancer. New Engl. J. Med. 330:81-87

Oppong, C. 1985. Some aspects of anthropological contributions. In Fertility in Developing Countries: An Economic Perspective on Research and Policy Issues, G.M. Farooq and G.B. Simmons, eds. London, England: Macmillan Press, 240-273

Pisacane, A., G. Grillo, M. Cafiero et al. 1992. Role of breast feeding in paralytic poliomyelitis. Br. Med. J. 305:1367

Pisacane, A., N. Impagliazzo, M. Russo et al. 1994.Breast feeding and multiple sclerosis. Brit. Med. J. 308:1411-1412

Prentice, A. 1987. Breast feeding increases concentrations of IgA in infants' urine. Arch. Dis. Childhood 62:792-795

Reining, P. 1981.Anthropology of fertility. Paper presented to the Panel on Fertility Determinants, Committee on Population and Demography, US National Academy of Sciences. Mimeograph

Sakyi, Y.O., and B.K. Takyi. 1991. Sociodemographic correlates of breast feeding in Ghana. Hum. Biol. 63(3):389-402.

Singh, U.P., V.K. Singh, and O.P. Singh. 1988. A parity-dependent model for the most recent birth interval. Can. Stud. Popul. 15(1):25-36

Smith, D.P. 1985. Breast-feeding, contraception, and birth intervals in developing countries. Stud. F am. Plann. 16(3): 154-163

Thapa, S., and N.E. Williamson. 1990. Breast-feeding in Asia: An overview. Asia Pac. Popul. J. 5(1):7-24

Tu Ping. 1990. Breast-feeding patters and correlates in Shaanxi, China. Asia Pac. Popul. J. 5(1):57-70

Unicef India, Nutrition—Latest Stories, Unicef India, 2014, http://www.unicef.org/india/nutrition.html.

V. Sethi, S. Kashyap, and V. Seth, "Effect of nutrition education of mothers on infant feeding practices," The Indian Journal of Pediatrics, vol. 70, no. 6, pp. 463–466, 2003.

Victora, C.G., P.G. Smith, J.P. Vaugham et al. 1987. Evidence for protection by breast feeding against infant death from infectious diseases in Brazil. Lancet 2:319-322.

Vitzthum, V.J. 1994. Comparative study of breast-feeding structure and its relation to human reproductive ecology. Yrbk. Phys. Anthropol. 37:307-349.

World Bank, Urgent Action Needed to Overcome Persistent Malnutrition in India, World Bank, New Delhi, India, 2006

World Health Organization. 1989. Research on improving infant feeding practices to prevent diarrhea or reduce its severity: Memorandum for a John Hopkins University/WHO Meet- ing. Bull. WHO 67(1):27-33

World Health Organization, Complementary Feeding: Report of the Global Consultation. Summary of Guiding Principles for Complementary Feeding of the Breastfed Child, World Health Organization, Geneva, Switzerland, 2003.

WHO, Global Strategy on Infant and Young Child Feeding, World Health Organzation, Geneva, Switzerland, 2003.

Yamaguchi, K. 1991. Introduction.In Event History Analysis, by K. Yamaguchi. Newbury Park, CA: SAGE Publication, 1-14.

Yoo, K.Y., K. Tajima, T. Kufotshi et al. 1992. Independent protective effect of lactation against breast cancer: A case-control study in Japan. Am. J. Epidemiol. 135:726-733

# Social Media Portals as a Modern Form of Social Communication: An Exemplification of Polish Mediasphere

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#### Abstract

Today, internet plays an indisputable role as a means of communication, information flow, and as a point of meeting the needs of a growing number of people. The authors noted more and more important role that mass communication plays in social media. This article presents various definitions of the phenomenon and the proposed typology, and threats which entails using either incompetent social media today. This article is intended to facilitate the communication process for researchers, sociologists, media experts, and people interested in the study of the phenomenon of online communication.

**Keywords:** Social media, social communication, e-communication, social media portals

#### Introduction

Today, internet plays an indisputable role as a means of communication, information flow, and as a point of meeting the needs of a growing number of people. Consequently, the proportion of internet users is constantly growing around the world (Stachura, 2008). K. Krzysztofek suggests to assume the Internet as a social institution is non-linear in nature. This results in the need to go beyond the current discourse and reflection on mediów. Sieć facilitates the development processes interaktywizacji and personalization. As a result, this leads to the breakdown of traditional hierarchies (Krzysztofek, 2006).

Virtual communities have many features that exist in reality. They are characterized by interaction, sense of identity, and belonging. In addition, they have their proper rites, rituals, forms of expression, the existence of a common purpose, standards, and rules (MacQuail, 2007).

I.

Social networking comes from the English term "social network." The social network is a variety of online communities which are grouped in a specific website, and its users satisfy their need for communication with other people through the rotation of information, interests, and experiences. A characteristic feature of social networking sites is a complex interaction between users (Frankowski & Juneja, 2009). Therefore, the features common to most of these sites are the following functions:

(1) Create your profile (user adds pictures and basic information);

(2) About yourself;

(3) Search for friends on the specific qualities;

(4) Create a list of friends;

(5) Private messaging;

(6) Formation of linking groups of people according to different interests;

(7) Adding a new group of users;

(8) A place to discuss such as discussion forums, chats, blogs etc.;

(9) Possibility of posting links, photos, videos, and music (Stachura, 2008).

The number of interactions between the members of social networking gives the portals dynamic character. Many social networking sites offers the option of geolocation; an information which determines the place of residence or domicile of the user (Kinal, 2015). Thus, social networking sites are used for maintaining and strengthening the existing relationships that are most often associated with offline (Stachura, 2008).

relationships that are most often associated with offline (Stachura, 2008). Social networking sites began at the end of the twentieth century when the first social networking sites was created in the United States. In 1979, UseNet- system newsgroups was found. This system, however, initiated the exchange of information between users on a mass scale. Another important system is the history portal that was created in 1995. This was Classmates.com, and their aim is to maintain contacts with former colleagues and classmates (Frankowski & Juneja, 2009). However, the official beginning of the new forms of communication in the network is considered to rise. SixDegrees.com service, which operated in 1997-2000, makes contact with family and friends possible. These portals provide an opportunity to build your profile, locate members who share similar interests with you, and send messages to people who are on your friends list (Gruber et al., 2012). The popularity of social networking sites began to grow in 2002, thanks to the appearance of the portal Friendster.com. This portal was oriented primarily for maintaining social contacts, as well as Tribe.net and LinkedIn, which is regarded as the largest business social network (Stachura, 2008).

Relationship between users of different services was developed. Member's portals initiated the formation of new groups which combines common interests and friends. These relationships have evolved in a more virtual manner. Gradually, social networks have been increasingly controlled by the users themselves. The members began to create content and service issues, as well as making comments on other publication. Contacts between users have developed into a multi-dimensional relation. Also, the exchange of information has replaced conversations conducted live via instant messaging. Everyday life is involving the exchange of files, editing them, as well as their participation in many groups (Malecki Malecka, 2011). As a breakthrough, researchers recognized the social networking site MySpace.com which was launched in 2003. However, within a short time, it became a huge success and has gained recognition among million of users. It offers its users the opportunity to show the personal "I," as well as present their own artistic creation. In 2004, the *Facebook.com* site was found. Originally, facebook was focused on students of secondary schools and universities in the United States. Thus, within a short time, it has become so popular as *MySpace.com*. Currently, the only competitor of *Facebook* may be Google, which brings together social services available on *Google Profiles* and *Google Buzz*, and provides new features such as video meetings or circles of friends (Stachura, 2008).

Social networking sites in Poland began to appear later in the United States. However, the most important sites of social character include Grono.net and *Epuls*. These portals are aimed at maintaining professional relationships which include *GoldenLine*. In 2001, *Fotka.pl* service was created and modeled on *HotOrNot.com*. Over time, it gained its functionality because it gave opportunity to the publication of user's photos, their evaluation, as well as commenting. At the same time, it brings together the largest number of users of social network in Poland *Grono.net* which was established in 2004. The best known service is our - Class, which gives you the opportunity to find friends from childhood and youth. However, the group of friend's portal users invites friends not only with same classes and schools, but also all the people known to him. In 2007, the portal began to gain popularity and as a result became the most popular Polish service. Another service is *Blox.pl*, which allows free blogging. Here, members can publish their memories, photos, reviews, and make references to interesting articles and pages (Gruber et al., 2012).

Social networking sites have gained worldwide recognition because of the evolution of the Internet and the transformation of communication. Part of the services has gained attention in some countries or regions. Portal *Hi5* won recognition in Latin America and South America, as well as in Thailand. In turn, *Orkut*, created a month earlier than *Facebook*, is common in Brazil and India. The fact about creating new portals that offers their users a new hitherto unknown possibilities and functions should be noted, while contributing to a distortion of the existing hierarchy of popularity of social networking sites (Stachura, 2008; Frankowski & Juneja, 2009).

Basically, social networking can be divided due to its availability:

(1) External, that is public and accessible to all Internet users;

(2) Internal, or closed community, which consists of a group of one company, associations, and those which can be reached via an invitation from a friend.

Social networking can be divided by the type of main body:

(1) Oriented user;

(2) Oriented to the group.

Portals share due to availability:

- (1) A fully free;
- (2) Providing part of the function after paying a subscription.

Social networking sites can also be classified due to their nature:

- (1) Professional;
- (2) Personals.

Subsequently, services are divided because of the interactions in which the user enters the system:

(1) A high degree of interaction with the user;

- (2) A medium degree of interaction with the user;
- (3) A small degree of interaction with the user.

Portals can be divided because of the way in which they obtain income. These ways include:

(1) Deriving income from advertising;

(2) With a subscription;

(3) Non-profit services that do not contain ads (Frankowski & Juneja, 2009).

In Poland, social networks that have been successful can be divided into three groups:

- (1) World giants such as MySpace, YouTube, LinkedIn, Facebook;
- (2) Native counterparts foreign services e.g. Nasza-klasa.pl, Fotka.pl;
- (3) New ideas such as copyright format. 28dni.pl (Stachura, 2008).

order					
Name	Year of	Description			
	founding				
Myspace	2003	This service gave the opportunity to establish			
		contact with other users without having to enter a			
		real name. Portal gathers mostly people who are			
		interested in musical works. Young performers			
		thanks to service could show up in the industry by			
		publishing works on the Internet.			
Linkedin	2003	Portal supports career development, user profiles			
		include a curriculum vitae. Internet users using this			
		service can search for a job, ask for advice or			
		recommendations			
Facebook	2004	It is one of the most popular sites of this type. It is			
		global. The service can be used for retrieval of old			
		friends, family members, and people who share the			
		same passions. It also allows self-presentation, to			
		share information about themselves, the publication			
		of their achievements, as well as the acquisition of			
		interesting proposals			
YouTube	2005	The key role played by movies. Users can post,			
		watch, and comment on videos.			
Twitter	2006	The biggest advantage of this service is a			
		microblog. Here, users can post short texts			
		containing a maximum of 140 characters, which are			
		available to all persons tracking the profile. Portal			
		is valued because Internet users can use it to			
		comment on everything that is going on around her.			
		The service is also used by politicians, sports stars,			
	2005	and television.			
Vkontakte	2006	This is a russian and ukrainian language			
		community portal. It is commonly known as a			
		russian facebook. The main aim of the site is in			
		gathering and connecting diasporas from east			
		europe.			

Figure 1. Main abroad social media portals in Poland in chronological order

Source: http://freeisoft.pl/2015/11/ranking-polskich-portali-spolecznosciowych-na-rok-2015/, http://interaktywnie.com/biznes/artykuly/ biznes/grono-net-juz-nie-jest-serwisem-spolecznosciowym-teraz-jest-23771

Figure 2.	Main	native-	polish	social	media	sites
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Name	Year of founding	Description		
Fotka.pl	2001	Portal allows you to post photos and		
		comment on them. It also has a forum,		
		chat, "forum event", which allows the		
		organization of meetings and "clans"		
		among a group of people with similar		
		views and interests. It is possible to		
		purchase additional features, such as the		
		award nickname opportunity to create		
		clans, the ability to add an unlimited		
		number of comments.		
Grono.net	2004	The basic principle of the website is to		
		create your own profile with a photo and		
		information about yourself. Service users		

		accumulate on the thematic clusters			
		converse on topics of interest. In 2012,			
		the portal has ceased to function. As at			
		that time, everyone could become a			
		member of this site.			
Nasza-klasa.pl (nk.pl)	2006	Primary role was to enable the searching			
		of friends from school days; but soon, its			
		role changed. Portal gives you the			
		opportunity to return to the old			
		knowledge, as well as establish new			
		knowledge, add photos and videos, send			
		and receive messages, chat and			
		discussion forums.			

Source: http://freeisoft.pl/2015/11/ranking-polskich-portali-spolecznosciowych-na-rok-2015/, http://interaktywnie.com/biznes/artykuly/ biznes/grono-net-juz-nie-jest-serwisem-spolecznosciowym-teraz-jest-23771

Internet as a source of information and means of communication has a wide interest. Its users are primarily young people who live in the "electronic caves." In the virtual space, they can meet a lot of pitfalls and dangers which they are often not aware of. These threats are dimensional. Abuse of a computer and the Internet may be the reason for a severe change in personality and a psychosocial functioning of users. It can also be the cause of many social pathologies (Andrzejewska, 2014).

Furthermore, the most popular distractions in online communications are as follows:

1. Addiction to the internet: This involves being forced online. In literature, we could find several types of this dysfunction:

- Information overload, involving the forced extraction of information.

- Internet network, which consists of addiction from online social contacts; addicts establish contact only via the network.

- Internet pornography involves viewing pornographic materials or participation in chats of a sexual nature (Andrzejewska, 2014).

2. Cyber Friends: In the literature, this term referred to those studied in discussion forums, chatrooms, instant messaging, and social networks. Such persons know to the extent that they allow themselves to get to know. Threats making friends on the Internet spends more and more time on their computer. They think that the knowledge of the network were better than those in the real world. Thus, they are isolating themselves from the world, living in a virtual world (Andrzejewska, 2014).

3. Cyberbullying also called cyberbullying or cyberagresją: This term refers to the use of violence with the use of information and communication technologies. The basic forms of this phenomenon include "harassment; threats; blackmails using the network; publish or distribute libelous, compromising information, photos, videos and impersonating a network at someone against his will." Cyberbullying has a significant effect more on the

psyche of young people than in the real world. The most common forms of cyberbullying include: publishing incorrect data, intimidation, impersonating another person, placing the network insults, threats formulation, recording the wrong photos or videos, send ridiculing materials using phone, and hacking into e-mail accounts (Wojtasik, 2007).

4. Grooming, or cybersex and pedophilia on the network: The main purpose of pornography is sexual arousal of network user. Human dignity is compromised, thereby causing violence. Its consumption stimulates sexual desire and leads to a search for thrills, which leads to sexual promiscuity. A derivative of Internet pornography is sexting which consists of sending multimedia messages with an erotic example (nude photos). Exposing children to pornography beyond their adaptive capacity may lead to assimilation and spotted sprymityzowanej vision of sexuality. Content removal that are available on the Internet shows the deceitful image of femininity and masculinity. They depict sexuality in the category instinctive processes. Primarily, the so-called hard pornography can lead young people to the unconscious conditioning and combining pleasure of brutality and aggression. This shows the objectification of women, which is presented as provocative sexual activity, worse than the venurability of the man. This is illustrated as a "macho" sexual record. This can lead to increased acceptance of violence in interpersonal relations, frigidity and hostile attitudes towards women, unconscious acquiescence to violence, and rape against a female. Nowadays, the main center of ads prostytucyjnych has become the internet. The Internet provides many opportunities for the development of juvenile prostitution. Young people increasingly involve themselves in these acts as a source of income. With the current state, the legal advertising of prostituted persons is completely allowed (Krawulska-Ptaszyńska, 2003)

5. Stalking is defined as abusing victims on the Internet.

6. Internet gambling is a kind of gambling conducted via the Internet. Players are playing here for the money, both virtual and real. An important element of e-gambling is its anonymity. Anonymity is combined with the lack of control over who enters the game. It means that online gambling can be used by anyone without restriction, even children and youth (Andrzejewska, 2014).

# Conclusion

Today, the mass media play an important role in society - shaping public opinion. For this reason, they are called the fourth power, and are also regarded as the first priority by some. The role the media should play is to inform consumers about what happened in the culture and politics both in the country and the world. Specific functions of the media have been identified according to the study of Boguslawa Dobek - Ostrowska and Robert Wiszniewski (2007): 1) The Information Function - Inform users about current events at

home and abroad.

2) The Educational Function - Interpretation of the meaning and importance of events and explaining and analyzing them.3) The Function of a Platform for Public Debate - To facilitate the

formation of public opinion, and to stimulate the expression of different views.

Nowadays, the role of typical media (such as television, radio, and newspapers) is being taken over by social media. Social media, like twitter and facebook, are beginning to serve as a serious information hub.

#### **References:**

Andrzejewska (2014). Anna. Dzieci i młodzież w sieci zagrożeń realnych i wirtualnych. Aspekty teoretyczne i empiryczne. Warszawa: Difin. Dobek Ostrowska Barbara and Wiszniewski Robert (2007). Teoria

Komunikowania Publicznego i Politycznego. Wrocław: Astrum.

and Przemysławc Juneja (2009). Frankowski Arwind Serwisy społecznościowe. Budowa, administracja i moderacja, Gliwice: Helion.

Gruber Jacek, Jóźwiak Ireneusz., & Merks Kamil (2012). Zagrożenia dla informacji udostępnianych na portalach społecznościowych, [in:] Zeszyty Naukowe Politechniki Śląskiej. Gliwice, pp. 354. Kinal Mariola (2015). Nowe media w pracy nauczyciela edukacji przedszkolnej i wczesnoszkolnej. Rzeszów: Stowarzyszenie Naukowe

Przestrzeń Społeczna i Środowisko.

Krawulska-Ptaszyńska Anna (2003). Psychospołeczne uwarunkowania korzystania z pornografii przez mężczyzn, Poznań: Bogucki Wydawnictwo Naukowe.

Krzysztofek Kazimierz (2006). Status mediów cyfrowych; stare i nowe paradygmaty, Global Media Journal – Polish Edition, no 1, pp. 14-15. Małecki Bartosz, Małecka Magdalena, Analiza rozwoju (2008). portali społecznościowych w Internecie, Warszawa. Stachura, Krzysztof (2008). Serwisy społecznościowe w perspektywie światów społecznych, [in:] Media i społeczeństwo. Nowe strategie komunikacyjne, (ed.) Sokołowski M., Toruń: Adam Marszałek.

# Women in the Social Policy of the Second Polish Republic

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#### Abstract

The system of support for women within the framework of the social policy of the Second Polish Republic included: the adequate regulations of work legislation, the rules of social insurance, the activities towards the maternity protection of the insured and, finally, social services directly or indirectly provided to women by the central as well as local governments.

These activities were extensive and, in many cases, very modern. What is more, they were directed towards solving the most important social problems of women. However, rather than common, the scope of those activities was very limited and selective. Moreover, the implementation of those activities was not always in accordance with the plans and expectations of their authors.

From the point of view of the existing social needs, the most advanced solutions were those which resulted from a privileged position of women in the work legislation and the system of health insurance. The problem of the insignificant influence always had its roots in the socio-professional structure of the country. Only women in employment or covered by the insurance could receive the benefits. For the rest the offer was no longer that beneficial.

**Keywords:** Social policy, social insurance, maternity protection, social care, Second Polish Republic

#### Introduction

Women were an important element of the state social policy as early as in the 19th century. The situation did not change after the 1st World War. The position of women in the context of the social policy of the Second Polish Republic was undisputed. Working terms and conditions that were created for women (such as maternity rights, social security benefits as well as the actions taken by the social services and public healthcare in favour of mothers with children and the support offered to single mothers) were the fundamental elements of the state social policy in the interwar period. What is worth analysing is the formation, the organization and the implementation of those actions. The analysis is based on the problem type and each section of the article treats about a particular form of activities which fall into the category of the social policy.

#### State social policy towards working women

In the Second Polish Republic the problem of the legal rights of working women was not solved for a relatively long time. Although the first project of Ignacy Paderewski's government was approved on 16th October 1919, the act on juvenile and women's employment was passed by the parliament of the first term of office as late as in July 1924. The reason for the delay were numerous obligations and limitations imposed on employers which were included in the act (Grata, 2014, p. 126). The act of 2nd July 1924 included fundamental decisions on the

The act of 2nd July 1924 included fundamental decisions on the working conditions for women and their maternity rights. The act protected women from working in dangerous or harmful conditions. The regulations introduced in the act were additionally complemented by the ordinance of the minister of labour and social services which was announced in the article 4 of the act and then published on 29th July 1925. The ordinance included the list of work restrictions for the juvenile and women. The 2nd attachment to the document (related to the restrictions on women's employment) included a list of twenty jobs which women could not do. The extended list was introduced 10 years later in the ordinance of 3rd October 1935 (Jończyk, 1961, p. 217-227).

The standards regulating the way women were employed (introduced in the mid-20s) were important from the point of view of the protection of women's employment rights. However, their significance was depreciated by the way women's legal rights were enforced. The following standards were often violated: a night-shift ban, adequate working conditions and also work restrictions for women. Sexual abuse of women by their supervisors – men was also present in many factories where young women were hired. Although the problem with applying the binding legal standards existed till the end of the interwar period, the number of incidents was gradually declining (Inspekcja, 1930, p. 36, 86-87; Inspekcja, 1938, p. 17-18; Przedborska, 1936, p. 47-51).

The position of working women in the context of social insurance was even worse than in the case of work legislation. Apart from the solutions offered to pregnant women, women in labour or breast-feeding women (discussed below), working women (similarly to women in other European countries) did not exercise any privileges of the state social insurance system. According to the resolutions of the act of 28th March 1933, the age

entitling workers to receive disability pension was 65 and was equal for both men and women. Only women undertaking intellectual work were entitled to receive old-age pension earlier than men - after 35 years of work and after turning 55 years old (D. U. 1927, no. 106, pos. 911; 1933, no. 51, pos. 396).

#### Benefits for widows of insured husbands

The Polish social insurance system was closely related to the entitlements of wives and children of insured husbands/fathers or breadwinners entitled to receive benefits. In such case, widows had to be regarded as a separate entity of the Polish social policy, especially because they constituted a numerous category of insurance benefits recipients. They were legally entitled to receive benefits of their insured husbands. The situation of widows of civil servants and professional soldiers was the most beneficial. In this case, men were entitled to receive pension after 10 years of work (from 1932 after 15 years) which meant that also their wives could receive their entitlements after the same period of time. In the case of the insurance of intellectual and physical workers the age caesura was binding meaning that they could receive pensions after obtaining the pension entitlements (65 years old for physical workers and 60 years old for intellectual workers) (Piątkowski, 1983, p. 134-142).

The level of benefits was also diversified. The highest benefits (in relation to the income of the insured) could receive a widow of an intellectual worker. It amounted to three fifth of the pension of an insured husband. For a physical worker it amounted to half of the pension, similar as in the case of a widow of a civil servant. The entitlements of a widow entitled to receive the benefits in respect of work accident insurance was fixed on the level of less than a half of the benefits in respect of complete incapacity for work (Piątkowski, 1983, p. 39-45).

The number of women claiming the benefits differed depending on the binding rules. The highest number of pensions was paid to widows of civil servants and professional soldiers. In 1938 it was paid to 58 000 women. The old-age pension insurance was paid to 47 000 widows of physical workers, 7 000 widows of intellectual workers and 13 500 widows received accident insurance. In total, in the late 30s, there were nearly 125 000 benefits paid to widows, plus slightly more than 60 000 pensions paid to war-disabled people (MRS 1936, p. 215; 1939, p. 294, 307; Ubezpieczenia, 1940, p. 60).

# Maternity protection for working women

The challenges related to the maternity of working women were present in the Polish social policy from the very beginning of the nation. The decree of 11th January 1919 on the health insurance granted working mothers

the right to medical help and to the eight week allowance in the amount of the regular income. Although the regulations of the decree were slightly restricted by the act of 19th May 1920, they remained beneficial for the insured, especially because the government was obliged to make supplementary payments to childbirth allowance. A significant change in the rules and regulations was introduced in the act of 28th March 1933 on social insurance which resulted in the government withdrawing supplementary payments which were on the level of 50% of the income of the insured (D. U. 1919, no. 9, pos. 122; 1920, no. 44, pos. 272; 1933, no. 51, pos. 396; Turowicz, 1929, p. 2-4).

The second element of the maternity support and protection were the rights granted in the act of  $2^{nd}$  July 1924 on juvenile and women's employment. According to the regulations of the act, pregnant women had the right to stop working six weeks prior to childbirth. They also had the right to have breaks at work and they couldn't be employed within six weeks after childbirth. During that time, an employer could not terminate or denounce their contact. The act, however, did not guarantee the continuation of employment of pregnant women earlier than six weeks prior to childbirth (D. U. 1924, no. 65, pos. 636; Jończyk, 1961, p. 247-259).

The obligation of running nurseries imposed on the entrepreneurs who hired over 100 women was an important, yet difficult, task to fulfil. The idea was introduced in the act of  $2^{nd}$  July 1924 and it met with such a sharp reaction of industrialists that its implementation was postponed for a few years. The regulation entered into force only in the middle of 1928 and the process of establishing nurseries started in the late 20s. However, it still met with the protests of entrepreneurs. The breakthrough happened in the mid-30s when day care centres, established and run by the specialized social organizations, became more common. They were funded by the entrepreneurs who did not have to establish their own nurseries. The result was a rapid increase in the number of enterprises which were able to fulfil this obligation. In 1937 about 60% of enterprises met the obligation and in 1939 – 90% (MRS, 1939, p. 292; Zawadowska, 1937, p. 296-298).

#### Support and protection of non-working mothers

The legal and insurance protection of working women was claimed only by a small number of women in Poland. This meant that the majority of them were not covered by the social insurance and could not receive any benefits resulting from the work legislation. Although the legal regulations on maternity protection were announced in the article 103 of the 1921 Constitution, the wide scope of obligations which would have to be imposed on local government meant that they couldn't be passed. The thesis to the project of the act on maternity, children and youth support were presented in 1936 and made it to the forum of the Social Care Council. However, still no solution was found within the Polish social policy (D.U. 1921, no. 44, pos. 267; Protokół, 1937, p. 11).

As a result of the lack of the system solutions, the support for mothers who were not covered by the social insurance was based on a set of activities undertaken by the social services and public healthcare. Their main task was to provide medical care to mothers and their children. In this respect, the amount of resources was unsatisfactory till the end of the 30s. Although the number of midwives increased from about 6 000 in 1923 to 10 200 in 1938, the shortage remained on the level of 8 000. The number of hospital beds for women in labour was not satisfactory either. What is more, in the majority of cases, medical services were provided to insured patients (MRS, 1939, p. 295, 297; Danielski, 1938, p. 436-437).

With time, mother and child care centres became the institutions whose main aim was to improve the level of support provided to pregnant women, women in labour and breast-feeding mothers. Although, in the 20s, the number of the centres was rather small (about 100 centres in the country), it was gradually increasing. In the mid-30s, there were over 400 centres and in 1938 – 700 centres. They provided care and support to over 225 000 children and 23 000 women. Although the number of the centres was steadily growing, they could only provide help to only a small percentage of women in need. Still, the results of their activities were clearly visible as women gave birth in the centres more willingly than at home. The provided support resulted in a lower infant mortality rate (MOS, sign. 12, p. 16-17; Sprawozdanie, 1936, p. 418).

Institutionalized help provided to single mothers also fell into the category of the support activities related to maternity protection. It was based on secured institutions which, in the 30s, were called Mother and Child Shelters. In 1938, there were seven of them in Poland and women usually stayed there for the last months of pregnancy and the first 6-12 months after childbirth. They received shelter and food and they were also provided with medical care. Although, this form of support was modern and specialized, the number of Shelters was low so the problem of single mothers deprived of family support could not be entirely solved (every year, in Poland, there were about 60 000 unwed children born and the number of places in this type of institutions was only a few hundred) (Rasiówna, 1938, p. 320; Robakiewiczowa, 1938, p. 33-38).

#### Social services vs. women

The aim of the social services was to complement the activities of the social insurance system. The act of  $16^{th}$  August 1923 set out support activities in the area of maternity protection. Many women also resorted to

the classic support activities. The support was mainly addressed to women unable to work or with no financial means. The statistics of 1927 show that there were 13 100 women living in 24-hour adult care centres and they constituted nearly 70% of all patients (the clear predominance of women was also visible in the next years) (D. U. 1923, no. 92, pos.726; MRS, 1937, p. 276; Rocznik, 1930, p. 355).

A separate category of social services recipients were women and girls in danger of or already involved in prostitution. There were two fundamental aims of the activities undertaken in this area. The first one was the registration of all active prostitutes, their obligatory medical examinations and treatment if needed. The second aim was the attempt of social institutions to give support to prostitutes as well as the prevention and protection against prostitution. The success of the registration of prostitutes was very limited, similarly to the success of obligatory medical examinations (only half of the registered prostitutes underwent regular examinations) (D. U. 1922, no. 78, pos. 715; Grata, 2013, p. 267-272).

The activities towards providing support to women in danger of or involved in prostitution were more successful. The extensive system of support and care provision was introduced by the Polish Committee for the Fight against Woman and Child Trafficking. It provided support to travelling women through the network of, so called, missions which were located close to the train/bus stations. They offered shelter, food, information and even small financial support. With time, the hostels for morally unstable women were set up and run by them. In the 30s, there were over 20 missions and the number of women who used their services was about 120 000-130 000 a year. Educational and care centres, whose main task was the rehabilitation and resocialization of prostitutes and the support of morally unstable girls, were also an important element of activities aimed at fighting against prostitution. In the late 30s, there were 25 educational and care centres with about 2 000 women living there (MOS, sign. 456, p.1-7; Działalność, 1937, p. 79-82).

#### Conclusion

The system of support for women within the framework of the social policy of the Second Polish Republic included: the adequate regulations of work legislation, the rules of social insurance, the activities towards the maternity protection of the insured and, finally, social services directly or indirectly provided to women by the central as well as local governments. It needs to be noticed that, without any doubt, these activities were extensive and, in many cases, very modern. What is more, they were directed towards solving the most important social problems of women. However, rather than common, the scope of those activities was very limited and selective. Moreover, the implementation of those activities was not always in accordance with the plans and expectations of their authors. From the point of view of the existing social needs, the most

From the point of view of the existing social needs, the most advanced solutions were those which resulted from a privileged position of women in the work legislation and the system of health insurance. The problem of the insignificant influence always had its roots in the socioprofessional structure of the country. Only women in employment or covered by the insurance could receive the benefits. This meant that only a few hundred thousand women (out of about 9 million living in Poland) could receive the support. For the rest the offer was no longer that beneficial. Despite visible progress, the activities towards the support of maternity of non-insured women were inadequate in relation to their needs. The activities of the social services, especially in the area of the institutionalized support for single mothers, were not sufficient, either.

# **References:**

Archiwum Akt Nowych, Ministerstwo Opieki Społecznej (cit. MOS), sign. 12, 456

Danielski J. (1938), *Pomoc lecznicza na wsi*, "Praca i Opieka Społeczna" no. 4

Działalność Polskiego Komitetu Walki z Handlem Kobietami i Dziećmi w okresie od 1 IV 1935 do 30 VI 1936 (1937), "Praca i Opieka Społeczna" no. 1

Dziennik Ustaw Rzeczypospolitej Polskiej (cit. D. U.) 1919, 1920, 1921, 1922, 1923, 1924, 1927, 1933

Grata P. (2014), Rola parlamentu w kreowaniu polityki społecznej Drugiej Rzeczypospolitej, "Przegląd Sejmowy", no. 4

Grata P. (2013), Walka z nierządem w polityce państwa polskiego w latach 1918-1939 [w:] Margines społeczny Drugiej Rzeczypospolitej, ed. Rodak M., Warszawa

Inspekcja Pracy w 1928 roku z uwzględnieniem okresu 1918-1928 (1930), Warszawa

Inspekcja Pracy w 1937 roku. Sprawozdanie Głównego Inspektora Pracy (1938), Warszawa

Jończyk J. (1961), Ochrona pracy kobiet i młodocianych w polskim przemyśle w latach 1918-1939, Warszawa

Leśniewska M. (1929), Wykonywanie przepisów o ochronie kobiet i młodocianych, "Praca i Opieka Społeczna" no. 1

Mały Rocznik Statystyczny (cit. MRS) 1936, 1937, 1939

Piątkowski M. (1983), Świadczenia emerytalno-rentowe ubezpieczeń społecznych w okresie międzywojennym, "Studia i Materiały z Historii Ubezpieczeń Społecznych w Polsce" no. 1, Warszawa

Piątkowski M. (1991), Ubezpieczenia emerytalne [w:] Rozwój ubezpieczeń społecznych w Polsce, Warszawa

Protokół z XVII-ej Sesji Rady Opieki Społecznej (1937), Warszawa

Przedborska (1936), Samowola majstrów wobec robotnic [w:] H. Krahelska, M. Kirstowa, S. Wolski, Ze wspomnień Inspektora Pracy, vol. 1, Warszawa

Rasiówna J. (1938), Opieka nad zdrowiem dziecka w Polsce w chwili

obecnej, "Praca i Opieka Społeczna" no. 3

Robakiewiczowa M. (1938), *Pomoc matce nieślubnej i opuszczonej*, "Opiekun Społeczny" no. 6

Rocznik Statystyki Rzeczypospolitej Polskiej 1930

Turowicz F. (1929), Geneza i podstawy zasadnicze dekretu z dnia 11 stycznia 1919 r., "Przegląd Ubezpieczeń Społecznych" no. 1

Ubezpieczenia społeczne w Polsce w latach 1934-1938 (1940), Warszawa

Zawadowska I. (1937), Ochrona macierzyństwa robotnicy w Polsce, "Statystyka Pracy" no. 4

# To Save Our Species But *How* Do We Make Collective Decisions?

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#### Abstract

Throughout human history, havoc has been wrought by just a handful of very powerful leaders. The ultimate catastrophe could also be caused by just a few individuals, by unleashing a nuclear war or by ignoring international agreements on climate change. Donald Trump, for example, may renege on the Paris Agreement and commit other ecological blunders, which could spell the end for everyone. In a nutshell, the current democratic process gives him far too much power.

The rights of any one citizen or country must be tempered by the rights of all. Alas, current forms of decision-making often fail to involve everyone in the final decision, the most obvious instances relating to decisions taken by a (simple or weighted) majority vote. If instead decision-making were based on the local, national or international consensus, such exclusive decisions could not be taken so easily. It should also be pointed out that majoritarianism – majority rule based on majority voting – has been and still is problematic in numerous inter-communal conflicts.

This paper therefore outlines the flaws involved in binary voting; next, as a better methodology, it proposes a more inclusive voting mechanism; and finally, it advocates a structure to ensure that agreements are implemented, with possible penalties for those individuals, organisations or countries that flaunt the international consensus.

Keywords: Consensus voting Modified Borda Count, MBC Matrix Vote

"In a plural society the approach to politics as a zero-sum game is immoral and impracticable. Words like 'winning' and 'losing' have to be banished from the political vocabulary of a plural society." (Lewis 1965: 66-7.)

#### Introduction

An old African proverb notes that when elephants fight, ants get killed. In like manner, the most powerful human beings often inflict fatal

blows on the poor and powerless. Furthermore, as the years go by, manmade disasters cause ever larger numbers of fatalities. In a finite world, nothing can continue on an exponential curve for ever; unless truncated by a catastrophe, many developments follow either a hysteresis-style trajectory or a sort of normal distribution curve unto their own demise. With advances in science, the world is now rapidly approaching two *denouements*: with fission and now fusion nuclear bombs, human beings could easily start a war which would lead to the end of all life on the planet; albeit rather more slowly, increases in  $CO_2$  emissions caused by human activity might have the same consequence.

As our species has evolved, many primitive tools have been replaced by gadgets of fantastic sophistication. There is, however, one glaring exception: people continue to make decisions by means of a 2,500-year-old methodology, the most primitive, divisive and inaccurate measure of collective opinion ever invented: the (simple or weighted) majority vote. This binary voting has been part of the problem (a) in many dysfunctional administrations, as in the US if and when a Democrat president, say, is confronted by a Republican Congress; (b) in many international gatherings, if and when even a tiny minority vetoes potential decisions; (c) in an increasing number of binary referendums, like brexit and the Italian poll of Matteo Renzi, where the power of 'no' could oppose everything; and (d) in countless conflicts not only in Europe, in the Basque region, Northern Ireland, the Balkans and now Ukraine; but also in Africa, in Rwanda and Kenya for example; and throughout the Middle East where so many conflicts are based on Sunni/Shia minorities fighting Shia/Sunni majorities. Despite these horrors, majority voting and its consequence, majority rule, continue to be upheld and practiced as if beyond criticism. Granted, there are exceptions; many gatherings operate in what is described as consensus – and in using this term, those concerned usually mean a verbal consensus – not least because of the impracticalities of majority voting in any international forum. Alas, all too few persons are aware of 'consensus voting' (section 5).⁸

Alternatives to binary voting are many. Some of these procedures are more accurate and, *ergo*, more democratic. Furthermore, a few are nonmajoritarian. If one of the latter were to be adopted as the democratic norm, there would be no further justification for majority rule. Instead, as advocated for nearly every conflict zone, power could be shared. Thus no one individual – Trump, Mugabe, al-Assad or whosoever – would be able to

⁸ The term applies to three voting methodologies, all of which are non-majoritarian and all of which are discussed later in this article.

impose his will, (it is usually a 'he'), just because he has been elected by a (supposed) majority.

Accordingly, with a little historical background, this paper first reviews some of the mistakes, both political and mathematical, which have resulted from the almost ubiquitous belief in majoritarianism. Next, it analyses some other decision-making methodologies. Then it outlines the potential of a non-majoritarian procedure at the level of national governance and in international forums. And finally, it suggests a proviso to help ensure international agreements on nuclear disarmament and global warming could be made binding.

#### I.

#### The political flaws of majoritarianism

The political flaws of majoritarianism Majority voting was first used in Ancient Greece, albeit just by the rich males, and in the Imperial Court of the Former Han Dynasty in China, but only by the appointed Ministers (Wang 1968: 176). But there was "nothing resembling a 'party system' in sixth/fifth-century Athens" (Ste Croix 2005: 198), so the polity could best be described, not as 'the right of *the* majority to rule' but as the right 'of *a* majority'. In this democratic structure, someone could vote with a colleague on one day, and against on another, without necessarily falling into blocs of permanent antipathy. Voting was also used in Rome, where Pliny the Younger realised that in any debate on three or more options binary voting was inadequate, so he

in any debate on three or more options, binary voting was inadequate, so he advocated plurality voting. Other decision-making structures were devised elsewhere in the world but most of these – the *baraza, gacaca* or *palabré*⁹ of sub-Saharan African, for example – relied on a verbal consensus. Only in Europe did voting become the norm.

In 1299, the Catalan Ramon Llull suggested what is now called the Condorcet rule, and maybe too the Borda count, BC (McLean and Urken, 1995: 16), though the history is a bit vague on this point. One Cardinal Nicholas Cusanus definitely suggested the BC in 1435, but that too didn't get very far (Sigmund 1963: 212); after all, the powerful don't like decision-making procedures which they can't control. As a consequence, majority voting and its consequence majority rule have predominated and, as shall now be related, this majoritarianism has wreaked havoc amongst millions.

#### England

The House of Commons is designed for gladiatorial debate. Initially, as in Greece of old, there were no political parties. But one side faced the other, and decisions were taken by majority vote. It did not take long,

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Quoting the Kiswahili, Kinyawanda and French words respectively.

therefore, before abuse was being hurled across the floor. "You tories," shouted one side, "you Irish Papist bandits!" – a serious insult in those days. The response was equally rude: "You whigs!" – "money-grabbing Scots Presbyterians." (Churchill 1956: Book II, 294.) Hence the current UK two-party political system. And hence, *inter alia*, Brexit.

#### France

In 18th Century France, members of *l'Académie des Sciences* wondered how best to replace *l'ancient régime*. They looked at Westminster but concluded, *Mon Dieu, c'est incroyable*. After all, you cannot get *la volonté général* in a vote which is binary, for the outcome of such a ballot will invariably be to on one side or the other in the normal distribution curve, the left-wing or the right, whereas any consensus would be at its peak.

will invariably be to on one side or the other in the normal distribution curve, the left-wing or the right, whereas any consensus would be at its peak.
So maybe multi-option voting would be better. Le Marquis de Condorcet advocated a pairings system, while Jean-Charles de Borda opted for points. The problem of finding the most popular of many policies can be compared to a sports competition. Consider a tournament (debate) in which there are seven teams (policies). In a knock-out competition (binary voting), as in tennis but without any seeding, the resulting social choice might be accurate but the social ranking would be highly questionable. Better, then, either a league system (Condorcet pairings) or one based on goals scored (BC points). Every team plays every other team, (the voters cast their preferences), and then, in Condorcet, team (option) *A* plays (is compared with) *B*, then with *C*, etc., to see which team (option) wins the most matches (pairings). In contrast, in a BC (preferences are translated into points), the goals (points) scored are counted, and the team (option) with the most goals (points) is the winner. Both of the latter systems are pretty good – after all, the winner of the league often has the best goal difference – but in 1784 they chose the BC, mainly as an electoral system, and it worked pretty well.

(pairings). In contrast, in a BC (preferences are translated into points), the goals (points) scored are counted, and the team (option) with the most goals (points) is the winner. Both of the latter systems are pretty good – after all, the winner of the league often has the best goal difference – but in 1784 they chose the BC, mainly as an electoral system, and it worked pretty well. A few years later, *l'Académie*, now renamed *l'Institut Français*, had a new president. He didn't like this preference voting so he, not best known for his democratic idealism, reverted to majority voting. "The new member was Napoleon Bonaparte" (Black 1987: 180), later elected as the emperor by a majority vote in 1804; he won by 99.7 per cent (Emerson 2012: 144). And this is just the first of umpteen majoritarian tragedies.

# The United States

Many of the founding fathers were bitterly opposed to the two-party political structure of Old Europe. To quote George Washington in his farewell address of 1796, it was "a frightful despotism". Sadly, while they devised some pretty good electoral rules – Thomas Jefferson, for instance, invented a formula for PR (McLean and Urken, 1998: 44) – they did not

examine decision-making. Decisions were taken by majority vote, so it did not take long before the two party system and party political patronage entered into US politics; hence today's "frightful despotism," possibly the worst two-party system in the world, has now produced the frightful Trump.

# The Soviet Union

Like many other monarchs, the Russian tzars were not too fond of democracy, and certainly not of the left-wing politicians in the All-Russia Congress of Social Democrats. Like many other political parties, the Congress in London in 1903 used majority voting. And like many another, it split into two wings, 'soft' and 'hard' (just like today's brexiteers – section 2.11), the former led by Julius Martov, the latter by Vladimir Ilyich Lenin. The first vote went to the 'soft' wing, 28 to 23. Oh don't worry comrades, said Lenin, "I don't think our differences are so important." In the next vote, after some had walked out, Lenin won, just: 19 to 17 with 3 abstentions, so he now had not a majority, just the largest minority. (Deutscher 1966: 71.) Ah but this was important, he decided. The Congress split. Lenin pretended he had the majority. *bolshinstvo*, and called his side the

Ah but this was important, he decided. The Congress split. Lenin pretended he had the majority, *bolshinstvo*, and called his side the Bolsheviks. While those of the minority, *menshinstvo*, became the Mensheviks. In the post-revolution elections of 1917, the Bolsheviks won only 175 seats to the Social Revolutionaries who gained an absolute majority in the 707-seat Constituent Assembly of 370 seats. At its first sitting, the 'hard' man sent in the troops (Shub 1966: 315), so Lenin enjoyed his second *coup d'état*. And the bolshevism of majoritarianism became the bolshevism of the gulags.

When Gorbachev came to power in 1985 and announced a policy of *perestroika*, many western experts rushed over to Moscow to tell him of the advantages of a free democracy. Hold 'free and fair' elections, they advised him; establish a parliament (Duma); propose legislation; and implement any policy adopted in that parliament by a majority vote. The word, in English, is majoritarianism. But he doesn't speak English, so of course they had to translate everything into Russian. Mikhail Sergeyevich, they began, *Vam nuzhen*, you need... plus the Russian word for majoritarianism, *Vam nuzhen bolshevism*. (A new word has now been coined, *majoritarnost*.) Hence today's 'democratic bolshevik', Vladimir Putin.

# China

Initially, the Communist Party of China "debated and voted" issues quite frequently, but Máo Zédōng "loathed the convention of voting... and abolished the practice." (Chang and Halliday, 2006: 81 and 90.) Nevertheless, a majoritarian thought process dominated his actions and his arguments. "In 1959-60, some 3.6 million party members were labeled or purged as rightists" (Dikötter 2011:102), and four years later, Máo addressed the Standing Committee of the Politburo of the Central Committee: "we must win over the majority, oppose and smash the minority" (Schram 1969: 325). Thus it was on the ground; at a meeting in the County of Daoxian in Hunan Province, "participants voted to decide who would be killed; one by one, potential victims' names were read and votes were tallied. The process lasted for hours." (Yang 2011: 65.)

#### The Balkans

In 1991, the EU's "insistence on referendums... provided the impetus... to create ethnically pure areas through population transfers and expulsions as a prelude to a vote." (Woodward 1995: 271.) And "all the wars in the former Yugoslavia started with a [majority vote] referendum." (*Oslobodjenje*, Sarajevo's now legendary newspaper, 7.2.1999.)

#### Rwanda

The *Interahamwe* launched their 1994 genocide with the slogan, "*Rubanda Nyamwinshi*", we are "the majority people". (Prunier 1995: 183.)

# Ukraine

Ukraine received its independence in 1991, at which time the EU argued for majority rule. In 2014, however, when violence broke out on the barricades in Kiev, the EU changed its mind and advocated power-sharing. On  $20^{\text{th}}$  February, the President, Viktor Yanukovich agreed that a "new government of 'national unity' should be formed within 10 days" (The *Guardian*, 21.2.2014), but later that day, he went into exile. The referendum in Crimea followed in March, with two more in Donetsk and Luhansk; majority votes, of course; and then, as in Bosnia, war, again of course. (Emerson 2016: 58.)

# The Middle East

For as long as people believe in majority rule, (a) there will not be a 'one-state' solution to the Israel/Palestine problem; (b), Israel's Arab Party, Joint List, will probably not be accepted into a coalition government; (c) in numerous countries from Bahrain to Yemen, arguments will rage between the Sunni/Shia majority and its supposed opposite minority – as in Northern Ireland, so too in all of these conflicts, majority rule is part of the problem; and (d) if the policy of 'self-determination by majority vote referendum' is implemented in Kirkuk and Mosul, etc., Iraq may well collapse with yet more violence, just like the Balkans.

# Kashmir and so on

According to UN Resolution 47 of 1948, Kashmir should hold a referendum; if it did, in all probability, there would be bloodshed. One consequence of South Sudan's referendum in 2011 is that it has since imploded; a second is that other countries on the continent may also split on religious and/or tribal lines, like the Central African Republic, the Ivory Coast and the Democratic Republic of Congo, with more horrific consequences. Thirdly, there is talk of referendums in Hong Kong and Taiwan, with little recognition of the fact that the repercussions in Xīnjiāng and Tibet could be terrible.

Despite all of the above tragedies, majoritarianism continues to dominate both the domestic and the international agenda, even when it does not work.

# Brexit

The late Jo Cox, MP, would probably still be alive if the Brexit ballot had been multi-optional. The debate concerned whether the UK would remain in the EU, or be like Norway in the EEA, or have a looser arrangement as does Switzerland, or be in the Customs Union like Turkey, or whatever. The debate, however, was binary: "yes or no?" "remain or leave?" The will of the people? No no, everyone now knows what a 52 per cent majority does *not* want. So everything has moved on to another binary debate, is Brexit to be 'soft' or 'hard', (see section 2.4).

# Italy

The 2016 referendum related to a choice of (i) the old constitutional arrangements or (ii) some new ones. But the question asked was "(ii), yes or no?" So those who favoured (i) voted 'no'. But those who did not support the EU, or Matteo Renzi, or the Democratic Party or *je ne sais quoi* also voted 'no'. So 'no' won. This 'yes-or-no' voting might yet spread to other countries in the EU, saying 'no' to everything, until, according to the logic of populism, there is nothing.

# Trump

The US Presidential election was another (almost) binary contest, a double FPTP election in which there were just two favourites. As in any FPTP ballot, therefore, some voters, not only supporters of Cruz and Sanders, for example, but those who might have wanted to vote for, say, Johnson or Stein, had to vote tactically. Few, then, can have confidence in the outcome, 48.08 per cent to Clinton to 46.00 to Trump, let alone the even more screwed results in the Electoral College, 232 to 306.¹⁰ So Trump has 'won'; a

¹⁰ Figures as of 12.12.2016.

climate-change denier with less than 50 per cent of the vote now has 100 per cent of the power.

In a nutshell, he has inherited a political structure similar to or even worse than the UK's "elected dictatorship" (Hailsham 1978: the phrase is used frequently). The winner wins everything, the loser, even if on 49 per cent (or more!) gets nothing. That's what happens with majority rule. In countless inter-communal conflicts around the world, and now, with the rise of populism in the States and in Europe, majoritarianism is a cause of conflict; in the latter setting, it is a threat to the very survival of our species. This form of decision-making is also hopelessly inappropriate in international gatherings, as in the 2015 UN Climate Change Conference, COP 21, in Paris, or even in much smaller gatherings like the UN Security Council (section 4).

#### The mathematical flaws of majoritarianism

There are, of course, other decision-making voting procedures, which are multi-optional. No complex question, especially any related to global warming, should be reduced and thereby distorted (e.g., as in sections 2.11 and 2.12) to a dichotomy, or even a series of dichotomies. Instead, debates should cater for every relevant proposal to be 'on the table' (a computer screen, and maybe too a dedicated web-page); final ballot papers should be drawn up by a team of independent facilitators; and decisions or ratifications should be taken in multi-option ballots.

Consider, then, a scenario in which 28 voters have the preferences shown in Table I. These may be analysed by a number of different voting procedures. Now an initial glance would suggest that option A is very divisive; it is, after all, the 1st preference of 7 voters but the 7th of 11, while 10 voters give it no preference at all! Option G is not much better, the 1st of 6, but the 6th of 7 and the 5th of 5. Of the others, option B gets a mixed reception, but something from everybody; support for options C is also ambivalent; so maybe D, E or F best represents the collective will.

Tuble 1 /1 voters Trome								
		Number of voters						
Preferences	7	5	3	1	2	2	2	6
$1^{st}$	A	B	С	D	E	F	F	G
$2^{nd}$	B	D	D	С	С	D	E	E
$3^{\rm rd}$	F	E	F	B	B	E	D	F
$4^{\text{th}}$	D	С	E	-	-	С	С	D
5 th	E	G	B	-	-	B	В	С
6 th	G	F	-	-	-	-	-	B
7 th	-	A	-	-	-	-	-	A

Table I A Voters' Profile

Consider, now, seven different analyses under plurality voting; the two-round system, TRS; the alternative vote, AV;¹¹ approval voting; a Borda count, BC; the modified Borda count, MBC; and the Condorcet rule.

## **Plurality voting**

In plurality voting, only the voters' 1st preferences are taken into account. So the score is A-7, G-6, B-5, F-4, C-3, E-2, D-1, and the winner is A.

#### trs

If no one option gains a majority, a second round majority vote can be held between the two leading options from the first plurality vote. So that's a contest between A-7 and G-6, which (if everyone's preferences stay the same) gives A-7, G-11, so G is now the most popular.

#### av

AV is a series of plurality votes, the least popular option being eliminated at each stage and its votes transferred in accordance with its supporters'  $2^{nd}$  and subsequent preferences, until one option gains a majority (or wins by default). Stage (i), then, is A-7, G-6, B-5, F-4, C-3, E-2, D-1. So D is out, and its vote goes to C: A-7, G-6, B-5, F-4, C-4, E-2. That's the end of E so, stage (iii), E's votes also go to C: A-7, G-6, B-5, F-4, C-6. Next, F's votes go (not to D or E, both of which are out of contention), but to C, so it's now A-7, G-6, B-5, C-10. Finally, in stage (v), B's 5 votes go to C as well for scores of A-7, G-6, C-15, so that's an absolute majority for C.

## **Approval voting**

In approval voting, every preference cast is regarded as an 'approval', so the scores are B28-E27-D26-F25-C21-A/G18, suggesting B is the most popular.

#### bc

In a ballot of *n* options, a voter may cast *m* preferences where  $n \ge m \ge l$ .

Points are awarded to  $(1^{st}, 2^{nd} \dots$  penultimate, last) preferences cast as per the rule:

(n, n-1 ... 2, 1).

¹¹ Also known as the single transferable vote, STV; as instant run-off voting, IRV, in the States; and as preference voting, PV, in Australasia.

This give scores of E130-D129-B125-F118-C93-G71-A60, so E is the outcome.

#### mbc

For various reasons (Emerson 2013: 353-8), the above BC is not what Jean-Charles de Borda had actually proposed (Saari 2008: 197). In effect, he advocated what is now called an MBC in which, in contrast to the BC, points are awarded as per the rule:

 $(m, m-1 \dots 2, 1)$ .

This gives scores of D104-E101-F97-B92-C67-G64-A53, so D best represents the consensus.

# The Condorcet rule

A comparison of the pairings according to the Condorcet rule gives a ranking of *F*5-*D*4.5-*E*4-*B*3.5-*C*3-*G*1-*A*0, so the Condorcet winner is *F*. All of these results are shown in Table II.

Table II The Social Choices and Social Rankings of Table 1's voters Profile								
Voting	Social	Social ranking	Social ranking scores					
Procedure	choice							
Plurality voting	A	A>G>B>F>C>E>D	A7, G6, B5, F4, C3, E2, D1					
TRS	G	G>A	<b>G</b> 11, <b>A</b> 7					
Approval voting	В	B > E > D > F > C > A = G	<b>B</b> 28, <b>E</b> 27, <b>D</b> 26, <b>F</b> 25, <b>C</b> 21,					
			<i>A/G</i> 18					
AV	С	<i>C</i> > <i>A</i> > <i>G</i>	<b>C</b> 15, <b>A</b> 7, <b>G</b> 6					
BC	E	E>D>B>F>C>G>A	<i>E</i> 130, <i>D</i> 129, <i>B</i> 125, <i>F</i> 118, <i>C</i> 93,					
			<b>G</b> 71, <b>A</b> 64					
MBC	D	D>E>F>B>C>G>A	<b>D</b> 104, <b>E</b> 101, <b>F</b> 97, <b>B</b> 92, <b>C</b> 67,					
			<b>G</b> 64, <b>A</b> 53					
Condorcet	F	F>D>E>B>C>G>A	F5, D4.5, E4, B3.5, C3, G1, A0					

Table II The Social Choices and Social Rankings of Table I's Voters' Profile

With this voters' profile, then, the democratic decision can be either A or B or C or D or E or F or G. It is an extraordinary fact but, because voting procedures are so little understood, countless decisions are regarded as democratic and true representations of the collective will inappropriately, often with horrific consequences, (sections 2.4 - 2.10).

# **Inclusive decision-making**

In 2002, the UN Security Council debated Iraq. The topic could hardly have been more serious. Yet everything was reduced to a dichotomy: Resolution 1441, yes or no? France and Germany, the former a veto power, did not like the phrase "serious consequences".¹² Yet they voted in favour.

¹² The Security Council "Recalls... that the Council has repeatedly warned Iraq that it will face serious consequences as a result of its continued violations of its obligations." Article 13.

In fact, the vote was unanimous, 15 to nil. But obviously, from a Franco-German and maybe other viewpoints, support for that Resolution was not unanimous. That majority vote was a cause of war.

If Resolution 1441 as drafted had been option A; if France and Germany had proposed alternative wording, even if only for that particular clause, that could have been option B; Syria was a temporary member of the Council, and might have wanted another variation, option C; and the status quo ante, of course, would have been option D. If such had been the scenario, the Council could have held a preference vote on the four options and, if nothing else, gained a much more accurate assessment of the Council's consensus. It might also have prevented that war and many of the horrible events which have followed the 2003 invasion.

A consensus cannot best be identified by majority voting, for the latter measures the very opposite – so many 'for' and so many 'against – the degree of *dissent*. In inclusive decision-making, the procedure allows all concerned, not only to cast their preferences on the options listed after the debate, but also to participate during the debate in choosing those options. Accordingly, an independent authority – in a parliament, the Speaker; in a public enquiry, the commissioners – should allow all relevant options to be 'on the table' and computer screen, subject only to one proviso, namely, that the given proposal complies with an international norm like the UN Charter on Human Rights.

The outcome should be that option which gains the highest level of overall support as measured by its consensus coefficient (Emerson 2007: 161), the option's MBC score divided by the maximum possible score.

# The inclusive nature of an mbc

In, say, a seven-option MBC ballot, he who casts just one preference exercises just 1 point; she who casts two preferences gives her favourite 2 points (and her  $2^{nd}$  choice 1 point); he who casts three preferences gives his favourite 3 points (his  $2^{nd}$  choice 2 and his  $3^{rd}$  1 point); and so on; so she who casts all seven preferences gives her favourite 7 points (her  $2^{nd}$  choice 6, etc.). The outcome is the option with the most points.

etc.). The outcome is the option with the most points. The difference is always 1 point. A voter's  $x^{th}$  preference, therefore, will always get 1 point more than his  $(x+1)^{th}$  preference, regardless of whether or not he has cast that  $(x+1)^{th}$  preference.

In this way, the mathematics of the count encourages the voter to cast a full ballot; in so doing, he recognises the validity of the other options and the aspirations of their proponents. The MBC is inclusive. Meanwhile, the protagonist will want her option to succeed. Therefore, she will want all her supporters to cast full (or at least nearly full) ballots. Furthermore, she will want her erstwhile (majoritarian) opponents to give her option not a 7th but a higher preference, so it will be worth her while to campaign with all members of the electorate. The MBC is indeed inclusive.

## **Governance and Power-sharing**

The MBC is also non-majoritarian. As shown above, it is more accurate – and therefore more democratic – than any binary ballot. Therefore, whenever the debate concerns a topic which is complex and/or contentious, there can be no further justification for this primitive and divisive methodology; and no further justification for majority rule. Instead, power-sharing should be the norm. Accordingly, in any inclusive democracy:

The people shall elect any representatives, ideally by a proportional Borda methodology, the quota Borda system, QBS.

The parliament shall then elect a government, and the appropriate

methodology is a matrix vote (see below). Parliament shall take all non-urgent decisions on the basis of consensus, either verbally or by using an MBC vote. Forming the final list of options shall be the responsibility of the Speaker.

If as a result of a Citizens' Initiative or an Act of Parliament, a referendum is to be held, an independent commission shall first determine the number and nature of all the options to be listed.

## The Matrix Vote

In a matrix vote, every member of parliament may vote, in order of preference, not only for which MPs they want to be in cabinet, but also for the particular portfolio in which they want to be in cabinet, but also for the particular portfolio in which they want each of these nominees to serve. It shall first be decided (in an MBC ballot) how many shall be in cabinet, what shall be the various functions, and who shall be eligible for election.

Consider then the simple example of a seven-member cabinet, in which case the appropriate ballot paper could be as shown in Table III.

		The Cabinet						
f Ca	erences for binet	Secretary of	Secretary of the Treasury	Secretary of	Attorney	Secretary of Commerce	Secretary of	Secretary of Housing
1 st	Ms M				$\checkmark$			
2 nd	Ms U					$\checkmark$		
3 rd	Mr P							$\checkmark$
4 th	Mr T		$\checkmark$					
5 th	Mr R	$\checkmark$						
6 th	Ms H			$\checkmark$				
7 th	Ms B						$\checkmark$	

Table IIIA Matrix Vote Ballot Paper

Each member first chooses, in order of preference, those whom he/she wishes to be in cabinet, and these he/she then lists in the shaded column, as shown, Ms M, Ms U, and so on. Next, in the unshaded matrix, the member gives a tick to identify the portfolio in which he/she wants each of these nominess to serve. The completed ballot, then, has a full list of seven different names, plus seven separate ticks, one in each column and one in each row.

The count consists of two analyses. The first is a Quota Borda System, QBS,¹³ count of the preferences cast in the shaded column, so to identify the seven most popular candidates. Then comes an MBC analysis of the ticks (or rather points) cast, with appointments based in descending order on the candidate/portfolio with the largest matrix MBC scores.

In electing a seven-member cabinet, a party with, say, 25 per cent of the seats in parliament can expect to get two candidates elected. Accordingly, MPs of this party would be well advised to vote for two or at most three of their own, but then to vote for other members of other parties. Such cross-party voting is a vital element, so this author would argue, of a power-sharing polity. In like manner, such co-operation should be a vital part of any international gathering.

¹³ In a QBS count, in stage (i), any single candidate with one quota of  $1^{st}$  preferences is deemed elected; in stage (ii) any pair of candidates with two quotas of  $1^{st}/2^{nd}$  preferences are both elected; then, in stage (iii), if another pair has a single quota, the one with the higher MBC score is elected; and if seats are still to be filled, stage (iv) is based on the candidates' MBC scores.

## Facilitating and implementing international agreements

Consensus voting – the MBC in decision-making, QBS in elections, and the matrix vote in delegations – could be an essential feature in all multilateral forums. The matrix vote could be used for the election of chairpersons, spokespersons, representatives or whomsoever, and the MBC could be used to resolve and/or ratify all matters of policy.

The 2009 United Nations Climate Change Conference ended in disarray. This was partly because the final agreement, the Copenhagen Accord, was supposed to be adopted 'in consensus' – a term which is usually taken to mean unanimously. The very methodology is part of the problem, giving as it does each and every country the power of veto.

The Accord was drafted by only five countries – admittedly, all very big ones – and in the final stages, it failed to be adopted; instead, it was only 'noted'. Granted, considerable energy had been expended in trying to ensure that the conference would come to a successful conclusion. 183 countries had been represented in Bonn, for example, six months earlier, but there was and still is a tendency which suggests the final draft should be approved unanimously. This of course implies that any country can exercise a veto or, at the very least, fail to ratify such an agreement.

The difficulties were, of course, numerous. There again, coming to an agreement on the exact figure for the proposed reduction in  $CO_2$ emissions, for example – proposals varied from -40 to +5 °C – could have been more efficiently expedited by MBC. The Paris conference, COP21,¹⁴ was rather more successful, not least

The Paris conference, COP21,¹⁴ was rather more successful, not least because of the tactic by which, rather than asking all countries to agree to one given set of criteria for action for everyone, each was asked to devise its own plans for how it would comply, admittedly with the general agreement of keeping any global temperature rise to a maximum of 2°C.

The agreement was not as good as it might have been, however, and the most glaring exceptions related to aviation and shipping. Another feature absent from Paris concerned actions to be undertaken in the event that any one country fails to comply with its provisions. It would of course be quite difficult to persuade certain countries to agree to a treaty under the terms of which they could later be sanctioned. Nevertheless, if the world continues to give individual nation states total sovereignty over all of their activities, future generations may be confronted by the most horrible of problems.

Collective governance must cater for the situation in which those members of the human family who do not comply with everyone's collective decisions must accept their individual responsibilities. Sadly, society is

¹⁴ The author participated in the Paris demonstration on the Champ-de-Mars on 12.12.2015.

confronted by a conundrum, for just as the veto powers in the UN Security Council have a veto on any proposals to reform that veto, so too, as it stands at the moment, individual countries may veto collective decisions with impunity.

The first step, therefore, is to dismiss the notion that a majority vote can accurately identify the "will of the people." It cannot. Logically, as noted above, it is impossible. In its place, the UN and others should practice a more inclusive methodology, but first they should endeavor to define more precisely what they mean by the term "democratic rights"; alas, at the moment, their efforts have been all too glib.¹⁵ A more comprehensive charter would include sections on decision-making and on governance.

Now no voting system is perfect. As shown (section 4), however, some decision-making systems are at best capricious, others are so-so, and a few are robust, accurate and fair. Not least because they are the only voting procedures that take all preferences cast by all voters into account, both the MBC and Condorcet are more exact. Indeed, with many voters' profiles, the MBC social choice is the same as the Condorcet social choice, and maybe the two social rankings coincide as well. Such was the case in Table II, where the MBC and Condorcet social rankings were almost the same, and both in total contrast to that of plurality voting.

Accordingly, on really serious topics as in conferences on global warming, ballots should indeed be multi-optional and counts should be conducted by both an MBC and a Condorcet count; then, if the social choice from both is the same, and if this outcome gains a sufficiently high consensus coefficient, that outcome can be regarded as the will of all concerned – the "will of the people" – with a very high degree of confidence

# Conclusion

The decision-making methodology is key. In UN conferences, in the UN Security Council, in parliaments and councils everywhere, and definitely in referendums, questions on complex problems should not be reduced to simple dichotomies, 'yes-or-no?' This is partly because some people may be tempted to vote 'no' for reasons unrelated to the motion on the ballot paper, (section 2.12).

¹⁵ Article 21 of the 1948 United Nations Declaration of Human Rights:

⁽i) Everyone has the right to take part in the government of his country, directly or through freely elected representatives.

⁽ii) The will of the people shall be the basis of the authority of government; this shall be expressed in periodic and genuine elections which shall be held by secret vote or by equivalent free voting procedures.

Logically, the will of any given electorate can only be identified if each of the voters first states his or her own individual wills. In both the UK's Brexit vote and in Italy's referendum, many voters stated what they did not want, so both of those ballots had inaccurate outcomes.

In the US and in Europe, populism is getting stronger. Granted, there are many people who are disgruntled with the present order. If, however, majority voting remains the norm, there is the danger that there will be a proliferation of referendums in the EU and elsewhere and that, almost regardless of the question, the outcome in many will be 'no'. So the EU may collapse. So countries might do the same. So the prospects of any combined effort to solve the problems of global warming will be reduced.

Meanwhile, abroad, if majority voting remains unchallenged, there is the danger that the Kurds will never be invited to join in the governance of Turkey; that the problems of Israel and Palestine will forever fester, (section 2.9); that conflicts will continue to emerge on sectarian lines, not least in the Middle East; that in countries like China, many may wish certain parts of that jurisdiction to opt out but, in so doing, they might risk appalling violence in other parts, (section 2.10); and that some countries in Africa may also fall apart, on religious and/or tribal lines.

Meanwhile, internationally, in the inevitable event of even more serious problems caused by climate change, it will be increasingly difficult to come to worthwhile and effective agreements to effectively tackle these problems, for as long as people believe in the rights of a majority to rule and/or those of a minority to veto. Problems could be solved more readily if resort were made to multi-option, preferential voting. Decision-making is, The problem is so complex, what with rising sea-levels, de-, over-population, increasing species loss and nuclear yes, key. forestation, proliferation, but an understanding of decision-making will be yet another part of the holistic solution.

## **References:**

Black, D., 1987, The Theory of Committees and Elections. Kluwer Academic Publications, Boston.

Chang J, and Halliday J, 2006, Mao, The Unknown Story. Vintage Books, London.

Churchill, W.S., 1956, The History of the English-speaking Peoples. Cassell, London.

Deutscher, I. 1966, Stalin. Pelican Books, Middlesex.

Dikötter, F., 2011, Mao's Great Famine. Bloomsbury, London.

Emerson, P., 2007, *Designing an All-Inclusive Democracy*. Sp Heidelberg.2012, *Defining Democracy*. Springer, Heidelberg. 2013, The Original Borda Count and Partial Voting. In *Social Choice* Springer,

and Welfare, Vol. 40, № 2.

2016, From Majority Rule to Inclusive Politics. Springer, Heidelberg.

Hailsham, Lord, 1978, The Dilemma of Democracy. Collins, London.

Lewis, Sir A., 1965, *Politics in West Africa*. George Allen and Unwin, London.

McLean I, and Urken A.B., 1998, *Classics of Social Choice*. The University of Michigan Press, Ann Arbor.

Prunier, G., 1995, The Rwanda Crisis. C. Hurst and Co., London.

Saari, D.G., 2008, Disposing Dictators, Demystifying Voting Paradoxes.

Cambridge University Press, Cambridge.

Schram, S.R., 1969, *The Political Thought of Mao Tse-tung*. Frederick A. Praeger, New York.

Shub, D., 1966, Lenin. Penguin Books, Middlesex.

Sigmund, P.E., 1963, *Nicholas of Cusa and Medieval Political Thought*. Harvard University Press, Cambridge, Massachusetts.

Wang, Y.C., 1968, An Outline of the Central Government of the Former Han Dynasty. In Bishop, L.J., (Ed), *Studies of Government Institutions in Chinese History*. Harvard-Yenching Institute Studies XXIII.

Woodward, S.L.,1995, *Balkan Tragedy*. The Brookings Institute, Washington.

Yang, S 2011, *Collective Killings in Rural China during the Cultural Revolution*. Cambridge University Press, Cambridge.

# The Benefits Of Being Shy

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#### Abstract

"Shy people notice everything but they do not get noticed" (Author unknown)

Practicing shyness and modesty should be an integral part of the managerial education yet it often gets associated with weakness. Anyone who has ever experienced a shy, modest and kind line manager feels a sense of ease and approachability so alien to nowadays business world and backstabbing mentality. Shy and modest managers see the person behind the employee rather than the employee as a number. Today's business world is lacking a portal for shyness and modesty among line managers who have grown in numbers but not very often human quality in recent years. For this reason, it is important that researchers, educators, managers and businesses become aware of the nature of shyness and modesty and its benefits. Researchers are in a unique position to help businesses and institutions reflect upon and understand that aggressive behavior can potentially harm the progress and image of a company rather than insuring to build a successful team, honest service and lasting product.

#### Keywords: Shyness, Business, Manager, education, benefits

Shyness which is often described as simply practicing 'low selfesteem' and its impact on nowadays society is not simply another influence that can be overlooked. The interaction between people of all character traits defines society; shyness dismissed by most people (particularly managers and business educators) as a low self-esteem push-over philosophy the education of shyness defines the nature of our society and the need for a space where one can observe before talking, digest before talking and finally act upon reflection rather than hot-tempered impulse. Observation and reflection are key.

In this paper I will argue that an analysis of shyness, understood and practiced as a powerful, rather than the dismissing and judging tradition, shyness can be the starting point of many managerial innovations and can bring us closer to a well-balanced team and society at large. Shyness established itself as a character trait, which, from the outset, took itself back rather than paying attention to itself. The environment of a shy character often perceives his or her 'body' but not mind. Shy people should be encouraged to interact and be asked for their opinions. Only then can we strive for a better world, where shyness is part of us and gets the potential to contribute to an innovative future. Often shy people have a distorted image of themselves. Businesses and society should guide them and bring out the best in them and their observational talents. Not only shy people are put under this ever-rising pressure of performance via verbal and non-verbal communication but also businesses. This impact can be perceived when businesses get measured only via sales (no matter what was promised and what actually delivered), neglect of environmental factors to put competitors out of business and employees paid for their individual performance rather than team spirit. It is a vicious narcissistic cycle with little concern about generations to come, environmental sustainability or the extension of knowledge to contribute to a better and fairer world. A very unhealthy society driven by greed, money and success measured by income. The financial crisis is the result of such greed and lack of empathy. This cannot be good for society. For nobody. Not even any individual. If one watched successful entrepreneurs a virtual illusion of aggressive perfection and success, is provided and perceived by the audience. Therefore the paradox of shyness as a benefit to businesses, which offers success through the use of your good judgment via observation rather than your self-celebration becomes obvious. Business practices are often designed to cone, to 'screw somebody over', to betray and contribute to this illusion of dog-eat-dog behavior climaxing into great economical success. Only when the crowds are exploited is the maximum outcome guaranteed. Only when you have successfully pushed the competitors aside (including the

challenged in the name of self-interest.

It is important to remember that nowadays managerial education has often personal as well as economic consequences since the students have to equip themselves with certain character traits, ethics or non-ethics, voice coaches, image centered environment, often chauvinism, student loans, study and celebrating of ruthless managers or entrepreneurs 'who made it no matter what price they had to pay' and competitiveness against each other (Abdolmohammadi & Reeves, 1997), (Borkowski & Urgas, 1998), (Carpano, Giacalone & Arpan, 2000). This results in the celebration of egocentric behavior rather than practicing team spirit nor the 'giving room' to the ones who are quite but have a lot to say. Nevertheless, young employees are most likely expected to learn via copy paste...a character trait that shy people have championed. A company is only as good as its diversity of employees...as a whole rather than as individuals. A good CEO without a good observant team will fail. It is our duty as educators and institutions to set our students up for success rather than failure and celebrate the observant shyness, the modesty, the calm and strategic action to progress. It is us who have to show the benefits of shyness and its exciting potential innovations. Only if we as educators can show off the benefits of a modest character, one that observes before talking and thinks before acting do we cater for a better and more human tomorrow and fair trade. Pressure of quick economic and more human tomorrow and fair trade. Pressure of quick economic results, unrealistic economic business plan expectations and one-sided benefits are disastrous not only for businesses but the society at large. Attentive observation is the soil of progress. Only if we as educators and managers are demonstrating shyness as an asset rather than downfall can we encourage our students or employees to celebrate it. There is nothing more endearing than if something still means something to somebody. If one can feel shy about something. Nowadays nothing means anything anymore. True progress does not mean to push others aside and be oblivious to other people's ideas. True progress means to observe to innovate. To be shy enough to see potential. To innovate via the extension of the given and not via market aggression. Success should not only be evaluated by shire numbers but how one has achieved these numbers. Opening and maintaining numbers but how one has achieved these numbers. Opening and maintaining your own ethics and sensitivity should be part of success just as much as successful numbers (Ahmed & Jarkko, 1998), (Dubinskey, Jolson, Kotabe & Lim, 1991). It is the shy things that count; the ability to feel big to make it big based on your sensitivity. We all can make profits via aggression such as market monopoly and lower costs but for what price? Dominant behavior might work at first to intimidate but this intimidation will never inspire employees to speak out and come up with new advancements. I have noticed that managers who listen more than they talk practice more ethical businesses and seem to overachieve and outperform via goodness and Shy people rarely seem to gain innovation rather than destruction. promotions or executive positions (no matter how great their ideas and mentality). It seems as if they are disregarded due to their shyness rather than their qualities. They seem to hope that their qualities will be (one day) appreciated, waiting for a sort of savior out of their shyness and line managers who provide them with the well-needed respect while they innovate from within. This attempt might sound naïve but it is the collaborative patchwork of talents and attitudes, perspectives and advancements that make our life as colorful as it is.

Academic critics, business managers and investors reinforce the sense of competitiveness in business as being the survival of the strongest, meaning nowadays the most strategic and most cash flow healthy but in reality the relationship between business and people has a dynamic of its own. One-dimensional dog-eat-dog business strategies are the breeding ground for bullying, depression resulting in an increase of sick days and health insurance expenses (to see it from a cost and human perspective). Diversity is an integral part of success as it inspires and at the same time caters to the needs of ALL kinds of consumers. Most people don't see themselves as leaders but followers. If we leaders as the answer to all themselves as leaders but followers. If we label leaders as the answer to all of our problems and fears society will follow without thinking, creating opportunities for people who should 'shut up' rather than be celebrated. We have arrived in a new era of interaction and democratization rather than tyranny or the careless overuse of our resources. What will we do when mother earth does not provide for us anymore? What do we do when there are no more fish in the sea? What do we do when industrial smock has not only destroyed our surroundings but health? Humans seem to have a talent only destroyed our surroundings but health? Humans seem to have a talent for self-destruction. Now it is time to stop, to reflect, to promote the good (yes we know what it is) and act upon it. This is a time of change, of perspectives and of becoming one. Humans are not born human...they become human (if they are lucky). We have failed so many times, we have miscalculated success so many times, we have gotten facts wrong even though we used the brightest minds and we have successfully destroyed parts of our society by the click of a button. Shyness is an integral part of our existence; a disbelief in ones own abilities, a tender and self-conscious critical reflection of ourselves and a childlike blushing of ones own mind and shyness is the starting point of any talent. Shyness is the starting point of any first real love. Shyness is the one thing that we should celebrate but that we have neglected over decades due to its fragile state and quite nature. To live is to be shy (that means to live a fulfilled life means to celebrate ones own shyness and build upon it).

During my academic career I had arranged for many self-esteem campaigns. I could observe how academically weak and academically brilliant students could show signs of shyness. It was hard to watch these students present in front of the class. Their shy nature made them feel awkward, out of place, exploited, insecure and we could all watch how their paper trembled in their hands like a hot potato. They felt as if they had nothing to say or to contribute. Their distorted image of themselves was hard to overcome, hard to change. They believed that just because they were shy, they were less capable of becoming leaders, business owners and entrepreneurs.... (something that many managers and businesses believe to be true). Sit up straight, have an authoritative voice that can make dogs and horses shiver, the survival of the fittest and strongest, the dominance of arrogance and the image of a sort of God. This attitude flows into the personal aspect of who marries the prettiest partner (for men) and the richest partner (for women). As you can see their lives are already predicted, their shyness labeled as a weakness and the following of this trend huge and without doubt. Nevertheless some of the most innovative people of our time were outcasts, extremely shy but helped our world towards greatness and progress; people such as politician Abraham Lincoln, entrepreneur Richard Brandson and actress Andrey Hepburn to name a few. Yet even when I mentioned this fact to my students they were stuck in their own bad perception of themselves and their lack of perceived accomplishments (no matter what grade or voiced support).

matter what grade or voiced support). Shyness is a very powerful tool. Not everything one is shy about can maintain its shyness, its innocence. It can prevent oneself from taking a risk but it can also be a perfect calculator of risk and what one is willing to invest (and potentially lose). Traditionally, women are more risk conscious than men. Car insurance is more expensive for males than females. The shy and more conscious attitude of female drivers stands in opposition to the more impulsive, riskier and hormone driven (sorry) driving attitude of men. Now these are generalizations but case studies and research have shown that this is a mere fact rather than speculation. Men are more willing to take large risks whereas females are more risk conscious and conservative. Also in meetings men seem to talk fare more than women (which seems extraordinary in light of the normal situation). They seem to observe more and make up their mind. One should ask cleaning staff, concierges and secretaries for their opinion of a person and one might be surprised by their insight and common sense. Shyness means to take oneself back, to observe, to feel not allowed to speak out and share ones point of view. Noble Peace price winner Muhammad Yunus pioneered the idea of third world micro-credit exclusively given to women. When it comes to business women will make sure that they cater to the needs of their families, they calculate their risk, step back, prepare for the worst case scenario (very different to the finical crisis speculations of banks and their arrogance in recent years). Most things are common sense. A five year old could have understood the finical crisis downfalls if calculated with candies and gingerbread houses mortgages.

Inspired by the above, I undertook an experiment via a simple exercise. I asked my students to play a sort of business game. They were divided into two categories. One represented the general public and the other banks. Both sides were asked to make the most of their power and to achieve greatest profits. Anything was allowed. Surprisingly rather than coming up with business models or ideas the first thing most male students admitted to buy was to buy a new and faster car on credit, the ladies admitted to buy some more fancy luxury goods such as bags and jewelry...(no matter if divided into public or bank representative). They mentioned the power of image and how this image would guarantee them success in the future. I asked them what if they could not afford these luxury items? They answered that they would take a loan. It was completely natural for them – like buying candies. What if they knew that they could never pay back that money? My students had no doubt that no matter how much money they would borrow they would be able to pay it back (one day). In contrast to my generation, I could observe an inflated financial self-esteem so alien to me. Once gain this is just an attitude and reality of our every-day life...and not an attack on my students. They were honest enough to admit to the essence of the financial crisis. "Well we have to live" was the answer of some of my students. On the other side the students representing the banks came up with ideas how to get back the money that was loaned to their heavy spenders. They did not shy away from legal battles to auctioning off homes of families. To summarize the experiment...everybody wanted more than they could realistically have and often overlooked the human aspect of the situation...and it seemed an every day life reality. A battle between humans and money. A dangerous liaison that climaxed in the financial crisis and left many families without homes and a bright future. Once again this exercise reconfirmed that rather than trying to establish a healthy cash flow it was all about short-lived pleasures such as luxury goods, travel and too big mortgages. A healthy relationship with money and expenses is crucial for a good economy. After discussing the above with my students we got to undertake the actual experiment. Many female students were more conservative with their money spending. The male students often took higher risks and often made more quickly money...yet also debts... women seemed to spend less, take smaller risks and all in all often (at least in the long-run) make a more gradual success of their business. Shy people no matter if female or male were also more conservative and reflective of their choice of investment. Reflectiveness and steady consistency of investments is a big part of success. Yet most businesses want to give the impression that only high risks can result in high rewards. Fact is high risks can also very quickly end up in bankruptcy.

Shyness can be channeled – made more part of the game, offered a platform for interaction rather than pushing it aside. Especially in a world in which arrogance is rising we as educators need to set up our students for not only a real but even better world, to provide them with professional and emotional skills and guide them towards their own as well as others success. In a way educators could be regarded as ambassadors and promoters of shyness. Nevertheless, nowadays generation often strives for quick economical and emotional fixes – pushing others aside is much easier than nurturing slow growing talent of shyness. Youngsters are in need of economical freedom, payback of student loans and credit card bills, mortgages, marriages, children, divorces, pensions...the list is endless. Nobody wants to come short of their own comfort, their own expectations of life, the media celebrated VIP status, the gangster lifestyle which was in the past condemned is now the goal of any youngster. It does not matter HOW you make money – but that you have it...plenty of it. Education needs to be aware of these changes and developments. Consuming rather than nurturing, celebrating oneself rather than working hard, pushing aside rather than collaborating. It is our job to support our students academically as well as emotionally to live a fulfilled life with their families, friends and colleagues. We need to motivate our students to see potential in shyness, in the first unsure steps of any innovation, in the patient nurturing of great ideas rather than great presenters. This approach is not always easy but our role in society is to observe and act....otherwise we do not deserve the title of an educator.

Nowadays, if you ask students what they want to become in the future...they simply say: "Rich!" When you ask them via what profession they want to become rich they look at you as if you asked them to speak Chinese. The means are non-important and seem to justify any action. Shy people are considered perfect victims and pushovers, dominant people are considered as enemies that one needs to defeat and followers collected like shells on a beach. Ethics are replaced by money, patience replaced by quick profits and fast deals and relationships updated like new models of cars (Ahmed, 1998), (Friedman, 1978). Nevertheless, this extreme capitalism of matters has not created healthy individuals with healthy expectations (Fanfani, 1935). Instead it has created a neurotic bunch of people who try to overthrow each other over and over again like in a video game. 'Game over' only happens when one dies and leaves ones money behind.

It is also important to reflect on the assumption that shyness will produce weak people with little self-esteem and little authority. Real authority does not get measured by the volume of ones voice, latest fashion sense and image, height, gender or aggression. Real authority (as I understand it) is a nurturing of ones potential and the of others. A believe in the world. A silent observation and a fair way of acting. Over ninety percent of all communication is non-verbal. Therefore gender, image and aggression is part of our business and personal world (Gould, 1995). We, who consider ourselves and our evolution above all animals, act and react just as primitive to non-verbal communication as animals do. Soft spoken and fair leaders have become increasingly popular in recent years...from the election of the soft-spoken President Obama back to the glorification of Lincoln. We can see the benefits of fair leaders nevertheless we often get seduced by our instinctive choice of the strongest. Some of the most innovative inventors, computer engineers, entrepreneurs have shown great social awareness and charity not only for tax purposes but out of self-fulfillment. Nowadays to give back is the greatest luxury. Employees and worker unions have gained dramatic power over the years in order to be part of the election of their leaders. Employees are naturally more drawn to leaders who are fair, straight talking and do not want to create a gap between themselves and others. The dangers of capitalism will only be overcome if we, collectively, separate ourselves from primitive habits and liberate ourselves towards a more sensitive environment. In the old days mentors took on prodigies. These prodigies were not slaves but helpers...most of the time they would be entrusted with the secrets of the trait after the mentor would retire. We need to see our colleagues and bosses more as mentors rather than competition. Then we'll inhabit a more human world full of great opportunities rather than being stuck in the cycle of arrogance, distrust of others and self-promotion over great inventions. Maybe one should see ones own intellect and creativity as a currency rather than spare time activity (rather than waste of time) and this would enable us to live a happier tomorrow. Being able to entertain oneself, being one with the world and follow your own creativity via curiosity rather than greed is what it is all about.

This article explores the complexity of shyness through the analysis of the increasing number of bullying and discrimination in the work environment as well as in personal relationships via many conversations with employees, HR managers, business owners, investors, students. Shyness's and modesty's unique expressive potential may be observed by the greatest achievements of humankind such as the end of slavery, democracy ect (Williams, 1993). I use the terminology of 'shyness' since I believe it to be important to reflect on the child like sincerity. If we think about our own childhood, we were all once shy. Getting introduced to this world, learning things, taking our first steps...shyness seems to originate from an unknown environment, from a trust and belief in others to nature and support us when we are at our most vulnerable. Critics are familiar with the basic principles of shyness but very little analysis has been given to the psychological and factual reality of shyness as a powerful tool rather than one that sets oneself back. Obviously our aggressive and dominance filled behavior raises valid questions about our business ethics, diversity in the workplace and tolerance and excitement towards others and the unknown and unexplored (Barnett, Brown & Hebert, 1998), (Becker & Fritzche, 1987), (Hunt & Vitell, 1986), (Hunt, Wood & Chonko, 1989).

Shyness does not draw attention to itself. It creates a sense of peace (best case scenario) or anxiousness (worst case scenario). The different perspectives and approaches towards shyness is crucial to understand its complexity. True shyness is an uncertainty into ones own environment and self, something that is very crucial; as Socrates said: "I know that I know nothing". Most businesses seek innovation and thinking outside the box within the limits of its hierarchy and grid. The shy element, the insecurity of ones knowledge, the questioning of ones progress and the innovation by the extension of knowledge is what makes businesses profitable. Nevertheless, this is only possible if society and the law support such an approach rather than unethical behavior or the support of the party with the best lawyers. The amount of time in which people with good reason to believe that they would win a case but eventually lost ... is a tragedy of modern day capitalism.

The intimacy between law and lived tolerant ethics is essential and needs to be built on trust in the system (Baumhart, 1961), (Iyer, 2001), (Jones, 1991). This creates an intimate peaceful environment that builds up self-esteem and creates a bright tomorrow. This might sound naïve and utopian...but we all started with a dream (Martin Luther King). Now we should live the dream of unity, creativity, tolerance and innovation. Whereas a lot of economies strive on corruption it robs the country of its greatest assets...the people and their creativity. I would argue that with the utilization of peoples questioning shyness and innovation any country would be more profitable and strive. This is represented by the convention of politics and its set up, which has dominated history over decades. Some attempts have been made to cultivate more open-minded including rather than excluding political systems yet most faded with time; whereas any working or living environment should use tolerance rather than arrogance. The global Americanization and adoption of dog-eat-dog capitalism is a step backwards rather than forward. Sensitivity is not a weakness but life's greatest rather than forward. Sensitivity is not a weakness but life's greatest strengths. We have no real way to proof that sensitivity works in all sectors of life. But we have an instinct that knows when something feels good and when something feels bad. Educators need to remember that true education can only work in a collaborative environment. The focus should not be to create narcissistic, self-observed individuals but teams of great people with foresight and respect for themselves and their environment. Being shy together, is being sensitive with each other, is being sensitive with our environment and creating new and supportive innovations fare away of exploitation. Students who 'stick up for each other' rather than feel 'Schadenfreude' (translated from the German language meaning happy when others fail). Syllabi should allow to be applied to different characters, different types of learning and celebrating shyness and sensitivity. Classrooms should be rooms of exploration and excitement. Shyness is the key towards any progress. It is important to be an ambassador of shyness of questioning oneself, others, to advance existing techniques, to progress without exploiting or destroying. Good leaders don't need to raise their voice

to lead, don't need to scare their team, don't need to manipulate, don't need to betray their team or their competitors. In my opinion if the corporate world was a tool of innovation rather than exploitation shyness would be its greatest asset. Furthermore this passion for improving rather than destroying others would not only influence workers and students but would shape the future.

When discussing the benefits of being shy with some of my colleagues, students as well as executives and empathizing its potential I was laughed at, even made fun out of (in an academic intellectual manner of course). Being shy was showing weakness and weakness needs to be exploited. The pressure and pain that goes with such a life philosophy seems obvious; one never shows weakness, one always pretends to be in control, one always pretends to know it all and be on top of things (Koehn, 1999). Reality of course is very different. Fact is, most of what we know needs to be updated, many facts in science and other disciplines are simply wrong or unexplored (like for example the brain). We need to practice a more modest way of life and attitude towards knowledge. Many of my students see their shyness as a weakness. Many of my colleagues agree with this attitude. Many businesses strive on arrogance. Most of my students fiercely dislike their vulnerable shyness. All of us are shy when we do something for the first time. All of us know what it means to feel shy. Few of us enjoy our shyness. The idea of a shy society is as non-appealing as a society full of murderers (whereas I would argue that most people would prefer the arrogance of murderers to the vulnerability of the shy). My students even argued that often in movies a thief is considered smarter than a push-over. When do we make these assumptions? When have these assumptions When do we make these assumptions? When have these assumptions become part of popular culture? Shyness is unpredictable, not tangible and when appreciated endearing. The technological advancements of our time have lead us to a dehumanization of all aspects of our lives. Yet it is our shyness, which will make us sustain and extend our lives on earth. This shyness will make us take care of our world, treasure what we have and innovate. Even during academic presentations I could witness a certain arrogance of academics towards business owners who then started their own presentation by the sentence: "Those who can't do each!" which responded presentation by the sentence: "Those who can't do each!" which responded in further verbal abuses. Always against each other rather than with each other, always arrogance rather than stepping back, always knowing better than the other. Team spirit skill will be an integral part of my students future jobs and could lead to potential promotions. Naturally all my students wanted to become managers...so here was an opportunity to champion teamwork, to evenly distribute the work and to follow up on the progress (a manager's main duty). To a lot of my students taking responsibly for others seemed to sound good on paper but was a dreaded activity in reality. I was

surprised when my students asked me if I could give individual grades to different team members according to their work...'just to be fair' and to follow 'what others are doing'. My response was that if the project would fail...all students would fail. Obviously such a response was not appreciated but I told my students that our society is built on teamwork and progress only possible if we work together rather than give up on each other. Therefore the students had to support the weakest and strongest link of the team. It is an integral part of the education and society at large to support the weakest link to gain success. While undertaking the exercise some of my students were surprised that who they had considered at first as the 'weakest link' in the team had often come up with the best ideas. These innovative students were often not good at following up on ideas but that could be achieved collaboratively in the group. This method did not only increase the self-esteem of the 'weakest link' but all members of the team felt heard and cared for. Their unique talents were integrated in the project, which resulted in the best results. Every project was better due to its teamwork and collaborations than it would have been when done individually. I observed a sense of pride and collaborative spirit among my students. Something that was totally new to them. Working together felt good and not as if 'dragged down by others'. Opinions were voiced and everybody had a say. Shy students often have great things to say (as they are great observers) but are often not heard due to another dominant team member. The more dominant the team, the more silent they get. This results in frustration and little interest in the task. The 'spiral of silence' (Noelle-Neumann, 1974) is a vicious cycle and rather than speaking out to make things better...shy students often crawl back into their shell and keep on observing rather than participating. Some special needs students were part of the teams and could show off their unique talents such as (in this case) excellent budgeting skills and graphic design skills. It is important for us as a society to work together, to respect each other's talents and to collaborate.

Another important and crucial aspect of the integration of the shy exercise was to give students enough time to complete the task. Rushed jobs, as we all know, are never really successful.

Dominance and arrogance represents one of the most popular and practiced business attitudes of our time and has a proven track record of success stories. Nevertheless its unethical business practice rate is shocking (Tsalikis & Latour, 1995). Excessive arrogance and dominance will poison the working environment. Sensitivity and shyness should be considered as a breath of fresh air rather than the character trait of the weak. The competitive spirit of our world should not overshadow the potential of shyness. In fact shyness can result in great innovative approaches and further business within its competitive world, through innovation rather than dominance. It is important to reflect on the realistic practices of shyness – most businesses do not want to innovate, they are happy to stick to the same practices (and not to forget machines). People like routine it gives them a sense of security. Nevertheless this approach can be very dangerous as nowadays our rapid business world rises and falls with innovation. Please note that there are many businesses which are extraordinary and who do their best to innovate but this takes time and patience. In my opinion a healthy combination of business with innovation would be ideal for any business no matter if big or small.

matter if big or small. The appreciation and embedding of shyness in business is still in its infancy and it is important that we explore it as much as we can and identify its benefits. Nevertheless shyness does not necessarily have to be practiced by only shy people but can be practiced by all. In fact, practicing shyness is like practicing reflective thoughts, modesty and self-evaluation. Shyness can only do so much...it is the environment at large that will make the difference. Support and the right attitude and guidance at the right time can change lives. A good shy person is somebody who listens, reflects, questions, concludes and acts upon ones beliefs. Who does more internally than externally. Who believes more in reflection than aggression. Shyness raises crucial questions about society and what we expect

than externally. Who believes more in reflection than aggression. Shyness raises crucial questions about society and what we expect from it. We must ask ourselves weather nowadays life is the platform for new ideas or a stressful competition. Whereas many attempts have been made to analyze psychology, surprisingly few psychologists, or researchers have paid much attention to the rise of anxiety, bullying and depression among employees. Researchers such as Rayner and Lewis recognized bullying and its toxic domino effect in the world place...but somehow anxiety and depression caused due to this bullying remains less explored. When talking to my colleagues at conferences they mentioned that students had become either withdrawn from the lectures or cocky. They seemed to pay less attention. Point is: should we as educators not be able to explore the different character traits of our students and celebrate them? Isn't that what we get paid for and what ours students' parents have trusted us with? Isn't what happens in the classroom somehow the future attitude of tomorrow? At my institution I can feel the increasing celebration of diversity in spirit of the Canadian attitude. Nevertheless, true diversity rather than forced diversity has still a long way to go.

I believe that this liberation of shyness and its practices can bring us closer to a state of reflection, sincere honesty and true innovation. The introduction of shyness as a respected and proven attitude for a healthy business environment and happy employees who feel heard and appreciated is crucial. The fact that shyness was temporary motivated by low self esteem should not overshadow its great character and potential usefulness. As long as we reflect and re-reflect (something shy people are extraordinary at) and come to conclusions we have reason to believe in shyness. I undertook another exercise with some of my students. I asked my

students to imagine that they were a CEO of a company. They were asked to assign their classmates to different roles (including managers, workers, clerks, secretaries ect.). The result was astounding and at the same time terrifying. The more dominant the higher the position, the more shy the lower the position. Furthermore female students were granted secretarial roles whereas male students were assigned the higher executive roles. Then I asked the students to defend their decision via facts such as intellectual and academic ranking, experience ect (Vitell & Barnes, 1993). It turned out that most decisions were solely based on image rather than facts. The higher positions were assigned to students who had a huge network and social skills positions were assigned to students who had a huge network and social skins whereas shy students were asked to be happy with what they were given as 'they don't care anyway and simply have no leadership potential'. Women were considered by some students as supporting staff and would get pregnant anyway. It would be up to the men to be the breadwinner. Now I was very happy that my students trusted me with their honest opinions. It is not them who should be condemned, it should be our society who teaches our youngsters these approaches. Yes we have come a long way...but we still have to fine-tune our world. My research seeks to explore the relationship between businesses and shyness (Walton, 1990). I will argue that we must acknowledge that shyness and the attention we pay to it has its unique expressive form and that effective use of shyness will lead us to a state of innovation rather than 'managing from above'. Surprisingly, after the exercise and its discussion all students became more aware of their own assumptions and even became more active in the collection of facts rather than image. The success and reflection of the students depend on their questioning abilities and their ability to see potential where nobody else sees it. This can make a dramatic difference. I also observed that many educators and business owners only greet and smile at their top management. It is crucial to greet, smile, interact and even ask for all of the opinions of the team. Most of the time common sense and an in depths knowledge will provide all the answers. As Voltaire said: "Common sense is not so provide all the answers. As voltaire said: "Common sense is not so common". Top management often try to hide certain facts from their line manager while trying to keep the employees they are supervising down. Only if we are open can we get to the core of anything and sustain within a competitive world. Errors will happen...the question is how the team will resolve them together. For that to work challenges should be considered as the glue of a team, one that holds one together rather than the destruction of a business or position. Only then can we truly be shy together, can we innovate and can we survive the future. Together and not apart. A lot of my students are suffering low self-esteem. Low self-esteem is often a reaction towards the media that tells us that perfection is everything. Only if you look a certain way and act a certain way are you somebody and loveable. This image and illusion of perfection often leads to a crucifixion of ones own defaults and nature. Illusions and misrepresentation of beauty so perfectly portrait by the Dove self-esteem ad that films the journey of an average looking woman to gain model looks via make-up, hair and retouching is poison for the healthy development of young and vulnerable teenagers and even adults. Too often one sees an enemy in the mirror rather than a friend.

Other students suffer from an inflated arrogance and become more and more certain that they deserve only the best...no matter what. Through their 'ueber-confidence' (over-confidence) they feel little remorse, little empathy and little emotions towards anybody but themselves. This self-centered attitude nurtured by the media as well as the environment often results into a mid life crisis and divorce. A mix of a healthy self-esteem combined with true empathy would be ideal but is rarely found. This results combined with true empathy would be ideal but is rarely found. This results in two extreme opposites of teenage attitudes that want little to do with each other. Our job is it to bring these two extremes together rather than widening the gab. Fact is that a combination of self-assured students with students suffering under self-esteem issues might be the perfect team for a presentation project. Whereas the student suffering under self-esteem often is very good in creating and following up and the overconfident student is a natural presenter. Opposites should attract and it is up to us to highlight this fact of successful teamwork. Teams of overconfident students often fail as well as teams of students consumed by low self-esteem... it is about celebrating differences rather than neglecting them. The adult world is just similar but businesses need to establish why a project is success and see the different employees as a combined bundle of strengths. Who did what is not the point, who presents should not be considered the leader but the commentary, who gets promoted should be a team effort and not a individual stunt. Only if teams get promoted rather than individuals can we ensure a more human way of working and living. Our nowadays managerial spirit of hierarchy is in my opinion outdated (Weber, 1967). The individual only counts in the togetherness and successful collaboration with others. Often the shy people are the ones who are getting overlooked, their potential leadership skills doubted and their achievements taken credit for by their more dominant teammates. They often fall through the grid of promotion and end up neglected and frustrated. One is only as good as ones image should not rule our business world...but unfortunately it often does. Considered 'champions' are often those who cheat, take credit for other people's work and who have only one objective: to rule over others rather than work with

others. Their only potential is the of the ruthless dictator. But what is a dictator without his or her people? Nothing! It comes as no surprise that the practice of shyness within an extremely competitive world results in fierce critical confrontation. Nevertheless it is up to us to see it as a serious answer to the ever-rising serious issue of frustration, depression and unethical business practices. Here I would like to say that I'm talking about a true sincere kind shyness, not a non-participation out of the belief that one is better than everybody else. Shyness that knows empathy, that is based on fair play and fair idea sharing. It seems impossible to write about shyness without mentioning its

great power on social media sites. I do not condemn media as the sole reason great power on social media sites. I do not condemn media as the sole reason for the either 'ueber-confidence' of people or low self esteem on the other hand. The media has shown to highlight and celebrate some shy youngsters who would have never been heard otherwise. There is a great power in social media coverage and exchange which can lead to exciting new discoveries -but there is even more great power in the media and especially advertising when stepping back from the dehumanization of illusive imagery as role models. It seems as if nowadays generation becomes slowly more and more aware of these challenges and it is us as communication specialties who can help them with this journey. The practice and celebration of diversity has become essential to our world and to ensure world peace based on values and empathy. empathy.

The challenge is to see shyness as what it is. In fact we do not exactly know what it is...but we can feel its uncomfortable presence within ourselves and others. We have a sort of shy radar and we ourselves can decide if it is endearing or to be dismissed. Most of our most important decisions depend on ourselves and our attitude towards the matter (Ferrell, decisions depend on ourselves and our attitude towards the matter (Ferrell, Gresham & Fraedrich, 1989), (Ferrell & Gresham, 1985), (Forsyth, 1980). If I as a person feel appreciated I will perform better, I will feel comfortable to exchange and I will be open to collaborations. In all matters of life, understanding and respect towards the other persons' strengths and weaknesses should be regarded as the core and peak of our existence. Whereas animals dominate or even kill the weaker competitor we should embrace the potential of each person. Yes it takes time to discover each person's potential, yes it will be a journey but the rewards are spectacular. For us to explore shyness and its reasons for being shy would be a waste of time, we should unfold it and celebrate its potential. How about we recognize it as a sensitive approach towards matters, a 'in-tune' perspective and God knows we need more of that. Shyness results will astonish anybody, it will convince any CEO and it will inspire the team. The saying that 'actions speak louder than words' has often been neglected for 'talkers speak louder than their actions but win at the end'. We can shape business and education, we can channel shyness, we can practice team spirit and we can glow with innovation. Only if we truly care about people and their unique talents should we be allowed to call ourselves humans.

#### Conclusion

Shyness has often been dismissed as nothing more than 'weak and unsure character traits' and this attitude somehow gained popularity in the 90s dog-eat-dog mentality. It is accused by business people, investors and often even educators as being a sign of weakness. Very little supporting evidence has been condemned without a fair trial to the footnotes of any business or academic study of the impact and benefits of shyness in the workplace. It is true that when shyness is linked to indecisiveness it is guilty of delaying deals and innovation. Nevertheless, shyness has been gradually liberating itself from this indecisiveness towards an observing and reflecting force. Divorced from semi-researched assumptions the celebration of shyness celebrates the psychological effect, support and true interest in the individual person that one can have and has outgrown its bad reputation. It must be remembered that shyness is a reflective force, yet determined. If we all sat back and reflected more than we talk and push aside I m sure this world would be a better place. Shyness is still a new perspective on business. It is only in its early years of recognition and implementation into the business world. The industrialization of our every-day lives, work and even personal lives highlights many of the arguments and concerns expressed at business conferences and this new development will provide new insights previously held absolutes concerning what business is, how it is practiced, perceived and how it is distributed and its effects it might have on nowadays generation and the generation to come.

generation and the generation to come. The industrial era was characterized by an overwhelming wealth and luxury goods supply and pressure of basic character traits such as charisma, dominance and an aggressive business sense (no matter if ethical or not). Aggression and the strive for a monopoly in ones sector justified all actions. Reflective shyness were to some extend part of it but not main concerns. It was about taking and not giving. Consumerism was holding up shyness as a sort of disability of modern day life, an anti-capitalism approach, a character trait that would bring you only misery rather than success. With shyness being pushed into the background in most Western societies, we as educators observed how diversity, empathy and kindness were rarely practiced. Personally, I always know when a business student is standing in a kiosk queue. It is extraordinary how they try to wiggle their way to the front...as if they have the right to push others aside. This is a very concerning fact of our time. Shyness continues to impress on higher-level executives, so does modesty. Fact is shyness needs an appreciative audience to blossom. Shyness will continue to challenge the business world from within and reveal its great and unique within nowadays often inhuman capitalism. It is shyness that will be the seed of creativity and sustainability; because shyness cares. Shyness cares because it knows how it feels to not be cared for and therefore is the perfect reflection of our abused environment, resources and business world; careful observation, reflection and action that will build a new and safe tomorrow with flourishing businesses and fulfilled lives. Businesses and a society that one can rely on, trust in, work for and which cultivate a healthy life-work balance embracing rather than excluding diversity (Koehn, 2001).

tomorrow with nourishing businesses and fulfilled lives. Businesses and a society that one can rely on, trust in, work for and which cultivate a healthy life-work balance embracing rather than excluding diversity (Koehn, 2001). Aggression and often even betrayal remain the most dominant practices of business. Is this because the businesses replicate what they have been taught by their mentors and educators? Is this because the business world strives on aggression? Is this because gradual success has become boring a quick buck is all that counts?

Whereas many critics argue that business is a one sided aggressive activity, I argue that it is an exchange of ideas and ideals, a play- ground of new innovations and a hub for potential new businesses including diversity. If we as educators and businesses saw ourselves more as innovators rather than collectors of money we would see shyness and its innovations as great potentials (La Forge, 1997), (Lam, 2002), (McCleland, 1961). I have had discussions with many entrepreneurs regarding this subject. Most of them got very successful by 'copycat' implementation of businesses into different markets. Now there is nothing wrong with that but to build a legacy I believe one has to come up with something new rather than do the same old again. For me an entrepreneur is an innovator and not a copycat benefiter. If we as a society could recognize and patent more new ideas under the umbrella of innovation we would experience a much fuller and more colorful business world. Many investors shy away from new adventures, a proven track record of success and quick profitability is all that counts. Universities have adopted this approach and are educating a new generation of aggressors. Some great new businesses such as Toms (www.toms.com) offer products of consume while being charitable. For example buy one pair of Toms shoes and you will donate another pair of shoes to a child in need. Luxury can give back. It is not impossible.

The narrowing down of profitable but at the same time ethical methods in contrast to a repetition of business models is crucial to the success and innovation of our world. Feeling overwhelmed by businesses and aggression does not make sense anymore. It is demotivating and it is as if one cannot 'add anything else anymore as everything has already been done'.

Uninspiring businesses and consume of their products is a one-sided experience whereas ethical innovative businesses and consume of their products is a good feel factor experience. Business's original motivation is to make life better, enjoy and bring happiness rather than grief. Undoubtedly shyness's representation is uniquely portrait in businesses and politics, and in my belief has never enjoyed the portrait benefits of unorthodox but effective reflection. Only if you understand why

people are shy (taking oneself not too seriously, reflecting more than talking, questioning oneself and others) will you be open to it and celebrate it (Rayner & Lewis, 2011). My research has shown that shy students can be an extraordinary force in terms of reflection and self-assessment. I have noticed extraordinary force in terms of reflection and self-assessment. I have noticed that most shy students just need some given room to interact, include their opinions and be part of a team. Only if we as the team allow shy people to become one with us can we benefit from them. There is an old saying that quiet waters are deep. We need to pay special attention to shyness and its potential benefits. The aggressor is nothing without his or her competitors, the talker nothing without his or her audience, the shy person nothing without his or her team. The attention paid to shy people might just be the attention nowadays business world and personal life needs. Surprisingly, this shy and reflective approach was new to my students shy and reflective approach was new to my students.

shy and reflective approach was new to my students. Furthermore, it was extraordinary to talk to students and businesses to find a solution how to incorporate shy people and their ideas into the decision making process. In my research on campus the students took pride in their embracing of diverse characters and interests, became more and more conscious of their presumptions and made sure to overcome them. There is no 'I' in 'TEAM' but there are many 'I's in 'TEAM SPIRIT'. Diversity is an integral part of our society (Rossauw, 1994), (Singhapakdi, Kraft, Vitell & Rallapalli, 1995 & 1996). In fact, most of the most successful people have achieved their success by their team diversity rather than individually. Nevertheless, some of the shy students are hard to integrate because they are not used to being integrated. It is as if you try to force an elephant into ballerina shoes. It takes time to integrate and most projects have tight deadlines. I argue that one needs to gradually build up the confidence of shy students to achieve the biggest and more rewarding results. There is no such thing as a weak link...just weak teams. Shy people need time to find themselves and have confidence in their own ideas: but this will only happen if support comes from the outside and inside. Otherwise all talent is lost.

if support comes from the outside and inside. Otherwise all talent is lost.

Students and businesses should learn how to integrate, support and innovate – it is making space for all thoughts no matter how unorthodox and allowing oneself and others to be part of the journey of innovation. Teams with a healthy respect among each other will practice ethical business relationships and innovations. They will try to support each other and others. It will become part of their character rather than superficial arrogance. In reality most businesses experience a vast amount of ups and downs. It is important that the team supports each other, picks each other up and come up with solutions rather than creating more problems from within when all is needed is a strong base. The most well known businesses and leaders have strong teams behind them...no matter how eccentric they were. It is our job to make our students believe not only in themselves and only their ideas but in their teams and the execution of ideas. Filmmaker Woody Allen once said in an interview that: "Ideas are cheap. It is the execution that is the problem" (Allen, 2016). A successful execution is only possible within a successful team. From the outside aggressors may seem to control a team but the question is who controls ideas? My bet is on the kind and perceptive leader rather than the aggressor. Aggression kills all ideas of fear of failing or being ridiculed. We need to take care of ourselves and others without destroying ourselves or others. There have been wonderful attempts to predict a kinder business world...my advice is to look at employees and students as hidden treasures full of ideas that one needs to tease out. We are only as significant as our executed ideas.

I wonder what the future will bring to shyness. I wonder if the Americanization will get rid of shyness. A world in which everybody always says that they are fine even though they are not, drive big cars even if one cannot afford them and maxed out credit cards and an education system that concentrates and awards the physical strong rather than the sensitive shy.

cannot allord them and maxed out credit cards and an education system that concentrates and awards the physical strong rather than the sensitive shy. Educators and businesses seem to ignore that reflection and a kind nature is more than a charismatic appearance paired with unquestionable self-esteem. Never before in history were we as exposed to financial crises and natural catastrophes caused by this arrogance. After World War II women had to take over jobs that had been executed for years by men. This new found self-esteem of women then caused further feminist movements (some of them successful others not so much). The same applies to shyness. Shyness deserves a chance. It deserves to be given a platform. Shyness is often an internal dialogue between the person and the world. It is high time that we questioned our methods and ourselves if we want to survive and offer generations to come a brighter future. If shyness is a unique language then I would argue that every individual has his or her own inner language and thoughts and we need to find a way to allow ourselves to communicate with oneself and others. Shyness reaches its greatest sophistication in the communication between inner voice, conscious and alert observation of the world at large. Maybe key is to be shy about everything, to question everything, to wake up each morning and question why one is alive and what one can do with that life, to support without questioning ones rewards, to be kind cause one wants to be kind rather than one only wants to be treated kindly too, to be part of a team without losing sight of what really matters, to be happily humbled by others, to be humbled by oneself. Most kids learn how to estrange, to become shy and to withdraw from strangers. It is a sort of protection often reinforced by parents who tell their kids to be aware of strangers. Fact is shyness can embrace new ideas because it has questioned them over and over again.

Mainstream media tells us that being shy is not very fashionable. One needs to represent oneself on all social media channels, one needs to show off, one needs to be tough. In my belief shyness is an integral part of our society and our attitude. All of us are shy at some point in our lives. Nobody is always confident ...that is an illusion. And even though all we have is illusions to survive on this earth (Nietzsche) ones ideas have to remain indefinable, unpredictable and shy so that we can experience true life. We can only kid ourselves so much. Fact is, if we practice and celebrate shyness we practice our souls rather than our image.

can only kid ourselves so much. Fact is, if we practice and celebrate signess we practice our souls rather than our image. In contrast to many theorists I would strongly argue that shyness is valid to be considered as a historical, psychological and sociological backbone of society. If we lose everything (from worldly goods to relationships) we won't remain confident. We will be shy and down. Shyness is the end of the spectrum, the last step before death and the first step is the end of the spectrum, the last step before death and the first step towards life. I believe that we have to embrace shyness and allow it to gestate within an evolving, sophisticated and innovative environment. It is this sensitive innovative approach that allows it the means to continue to develop and move towards a notion of inspiration. Shyness is not a character trait, shyness is a pure and sincere reality. It is a subtle reality independent of gender, character or social status. Yet it does not limit itself. It is unpredictable, at least during the beginning and middle of your life as for the end of your life all will be shy of the approaching death and little confidence about transcending into another form of existence or nonexistence (dependent on your beliefs). Shyness is around us, in us and beyond us about transcending into another form of existence or nonexistence (dependent on your beliefs). Shyness is around us, in us and beyond us. Perceived image charisma has gained mainstream popularity yet I see beauty in shyness, I see sincerity in shyness, I see the future in shyness. Without shyness something is missing, something important is missing. Many students report anxiety, depression, sleeping and eating disorders. Maybe the illusions are catching up with us. Maybe in our heart we know that what we are doing is not what we wish to do. Maybe image is not everything. Maybe to find ones own way is crucial to free oneself of anxiety and depression. The interaction with others is still the most important aspect of human life. No man is an island. We are all dependent on our community and its approach towards us. This being said, the attitude of 'one size fits all' in teasing out and celebrating shyness is not really efficient. We need to remember that everyone is different and that when a platform and stage is given...we can only hope, watch and wonder.

Shyness's very nature is in a constant state of questioning in response to its environment. The facets of shyness is just as vast as the of art itself. In fact, shyness is an art as like art it questions oneself and ones environment. It is in a constant tumult of emotions, being torn between different approaches but results in a beautiful or abstract, telling and inspiring art piece. No art is perfect or imperfect, no shyness perfect or imperfect. It is that elusive existence that makes it so exciting, so endearing and so special to nowadays society which is so certain of its own existence and dominance over all matters; to then be put in its place by nature and makes oneself feel small and insignificant. Fact is: We are never in charge...even though we might pretend very convincingly to others that we are. I believe in shyness as an extension and reflection of our own insignificance, I believe in shyness as the essence of life itself, I believe in the celebration of an emotion that can still make us blush and laugh hysterically at the same time, I believe that only if we celebrate our vulnerability can we be good human beings with a chance of survival (both physically and spiritually).

## **References:**

Abdolmohammadi, M., D. R. L. Gabhart and M. F. Reeves: 1997, 'Ethical Cognition of Business Students Individually and in Groups', *Journal of Business Ethics* **16**(12–13) (December), 1717–1725.

Ahmed, Mohamed M. and Jarkko Maattanen: 1998, *Ethics and Moral Judgment in Management Development: A Comparative Study of the Attitudes of Russian and Finnish Students* (State University of St. Petersburg).

Ahmed, Mohamed: 1998, 'Cultural and Contextual Factors in Business Ethics: Three Controversies and A Dilemma', *Journal of Transnational Management Development* **4**(1).

Arouet, F. pen name Voltaire: 1764, Dictionnaire Philosophique.

Barnett, T., K. Bass, G. Brown and F. J. Hebert: 1998, 'Ethical Ideology and the Ethical Judgments of Marketing Professionals', *Journal of Business Ethics* **17**(7), 715–723.

Baumhart, R.: 1961, 'How Ethical is Business', *Harvard Business Review* **39** (July-August).

Becker, H. and D. J. Fritzche: 1987, 'A Comparison between American, French and German Managers', *Columbia Journal of World Business* **22** (winter), 87–95.

Borkowski, S. C. and Y. J. Urgas: 1998, 'Business Students and Ethics: A Meta-Analysis', *Journal of Business Ethics* 17, 1117–1127.

Carpano, Claudio, R. A. Giacalone and Jeffrey S. Arpan: 2000, 'Introduction', *Journal of Business Ethics: Special Issue on International Business Ethics* **31**(1).

Dubinsky, A. J., A. Jolson, M. Kotabe and C. U. Lim: 1991, 'A Cross National Investigation of Industrial Salespeople's Ethical Perceptions', *Journal of International Business Studies* **22**, 651–670.

Fanfani, A.: 1935, *Catholicism, Protestantism, and Capitalism* (Sheed and Ward, New York).

Ferrell, Gresham and Fraedrich: 1989, 'A Synthesis of Ethical Decision Model for Marketing', *Journal of Macromarketing* (Fall), 55–64. Ferrell, O. C. and L. Gresham: 1985, 'A Contingency Framework for

Ferrell, O. C. and L. Gresham: 1985, 'A Contingency Framework for Understanding Ethical Decision Making in Marketing', *Journal of Marketing* (Summer), 87–96.

Marketing (Summer), 87–96. Forsyth, Donelson R.: 1980, 'A Taxonomy of Ethical Ideologies', Journal of Personality and Social Psychology **39**(1), 174–184.

of Personality and Social Psychology **39**(1), 174–184. Friedman, M.: 1978, 'A Friedman Doctrine: The Social Responsibility of Business Is To Increase Its Profits', *New York Times Magazine* (September 13), 122–126.

Gould, S. J.: 1995, 'The Buddhist Perspective on Business Ethics: Experiential Exercises for Exploration and Practice', *Journal of Business Ethics* **14**, 63–70.

Hunt, S. D. and S. J. Vitell: 1986, 'A General Theory of Marketing Ethics', *Journal of Macromarkeing* (Spring), 5–16. Hunt, Shelby, Van R. Wood and L. B. Chonko: 1989, 'Corporate Ethical

Hunt, Shelby, Van R. Wood and L. B. Chonko: 1989, 'Corporate Ethical Values and Organizational Commitment in Marketing', *Journal of Marketing* **53** (July), 79–90.

Iyer, Gopalkrishnan R.: 2001, 'International Exchanges as the Basis for Conceptualizing Ethics in International Business', *Journal of Business Ethics* **31**, 3–24.

Jones, Thomas M.: 1991, 'Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model', *Academy of Management Review* **16** (April), 366–395.

Koehn, Daryl: 1999, 'What Can Eastern Philosophy teach Us about Business Ethics?', *Journal of Business Ethics* **19**, 71–79.

Koehn, Daryl: 2001, 'Confucian Trustworthiness and the Practice of Business in China?', *Business Ethics Quarterly* **2**, 415–429.

La Forge, Paul G.: 1997, 'Teaching Business Ethics Through Meditation', *Journal of Business Ethics* 16(12–13) (September), 1283–1295.

Lam, Kit-Chun Joanna: 2002, 'Confucian Business Ethics And The Economy', paper presented at the International Conference on Business Ethics in the Knowledge Economy, Hong Kong, April 2002.

McCleland, D.: 1961, *The Achieving Society* (Van Nostrand, New York).

Rayner, C. & Lewis, D.: 2011, 'Managing Workplace Bullying: the Role of Policies'. European Journal of Work and Organizational Psychology 5, 165-184.

Rossauw, G. J.: 1994, 'Business Ethics: Where Has All the Christians Gone?', *Journal of Business Ethics* **13**, 557–570.

Singhapakdi, Anusorn, Kenneth L. Kraft, Scott J. Vitell and Kumar C. Rallapalli: 1995, 'The Perceived Importance of Ethics and Social Responsibility on Organizational Effectiveness: A survey of Marketers', *Journal of the Academy of Marketing Science* **23** (Winter), 49–56.

Singhapakdi, Anusorn, Scott J. Vitell and Kenneth L. Kraft: 1996, 'Moral Intensity and Ethical Decision-Making of Marketing Professionals', *Journal of Business Research*.

Tsalikis, John and Michael S. Latour: 1995, 'Bribery and Extortion in International Business: Ethical Perceptions of Greeks Compared to Americans', *Journal of Business Ethics* **14**(4), 249–264.

Vitell, S. J., S. L. Nwachukwu and J. H. Barnes: 1993, 'The Effect of Culture on Ethical Decision Making: An Application of Hofstede's Typology', *Journal of Business Ethics* **12**, 1–18.

Walton, C. (ed.): 1990, *Enhancing Business Ethics* (Penium Press, New York).

Weber, M.: 1967, *The Protestant Ethic and the Spirit of Capitalism* (Unwin University). Originally published in German 1905. First English translation 1930.

Williams, O. F.: 1993, 'Catholic Social Thinking: A Communitarian Democratic Capitalism for the New World Order', *Journal of Business Ethics* **12**, 919–932.

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# **Infrastructural Aspects of Intensification of Entrepreneurial Activity as A Vector of Modern Global Economy Development**

## Tatiana Litvinova, PhD, Associate Professor Volgograd State Agrarian University, Volgograd, Russia

#### Abstract

Abstract The problem of the research consists in the fact that despite the importance and significance of the infrastructure, it does not fully satisfy the needs of modern international business by quantitative (growing deficit) and qualitative (quick aging) characteristics. The working hypothesis of the research is the proprietary hypothesis that the cause of the existing situation and emergence of the problem is presence of contradictions in development of infrastructure of entrepreneurship in the global markets. The purpose of the article is to verify the offered hypothesis, to determine contradictions in entrepreneurship's infrastructure in the global markets, and to determine their influence on development of international business. Methodology of the research is based on the use of the method of systemic and problem analysis research is based on the use of the method of systemic and problem analysis, analysis of causal connections, synthesis, induction, deduction, formalization, and method of modeling of socio-economic systems for developing the model of development of entrepreneurship's infrastructure in the global markets. Modern entrepreneurship's infrastructure in the global the global markets. Modern entrepreneurship's infrastructure in the global markets is peculiar for systemic contradictions related to deepening of the gap between level of development of entrepreneurship's infrastructure in developed and developing countries with increase of globalization and integration processes in the world economy, preservation of state regulation's domination in the processes of creation and functioning of the main objects of entrepreneurship's infrastructure, in spite of common market conditions, and simultaneous belonging of entrepreneurship's infrastructure to public and private goods. The determined contradictions influence negatively the development of international business, causing and stimulating strengthening of underrun of the current level and possibilities of the global business infrastructure from actual needs of international entrepreneurship. This problem could be solved with the author's model of entrepreneurship. This problem could be solved with the author's model of development of entrepreneurship's infrastructure in the global markets, which is based on the mechanism of public-private partnership and the corresponding recommendations.

Keywords: Entrepreneurship's infrastructure, entrepreneurial activity, global economy

## Introduction

In the age of globalization, national economies become more integrated into the global economic system. Geographical boundaries are erased, production becomes global, and entrepreneurial structures stop concentrating on a certain territoru, entering the world markets. With development of international trade, powerful economic bases are created and developed on the territory of foreign countries. Thus, the need for global entrepreneurship's infrastructure grows, which is a basis of functioning and development of transnational business.

Under the influence of globalization, national economies become Under the influence of globalization, national economies become more open and interdependent with other countries. On the one hand, this opens wider possibilities for them, on the other hand, it increases the necessity to struggle for resources, investments, and capital. One of the most important factors of global competitiveness and means of attraction of international business for modern economic systems is the development of business infrastructure. Thus, the topicality of development of global entrepreneurship's infrastructure and its popularity among all participants of international economic relations grows.

However, despite importance and significance of such infrastructure, it does noy fully correspond to needs of modern internaitonal business as to quantitative (growing deficit) and qualitative (quick aging) characteristics. This constitutes serious scientific and practical problem, as without the cocorresponding infrastructure, the level of development of transnational entrepreneurship and the rate of growth of global economy are restrained. The working hypothesis of this research is the author's idea that the

The working hypothesis of this research is the author's idea that the reason of the existing situation and emergence of this problem is contradictions in development of entrepreneurship's infrastructure in the global markets. The purpose of the article is to verify the offered hypothesis and study infrastructural aspects of intensification of entrepreneurial activity as a vector of development of modern global economy. In this research, the term "entrepreneurship" is treated as business on the whole, including small, medium, and large business. "Business infrastructure" is a totality of conditions for conduct of business relations that unite these relations into a single whole. "Human capital" is a totality of knowledge, capabilities, and skills used for satisfaction of multiple needs of human and society on the whole.

human and society on the whole.

Study of contradictions of business infrastructure in the world markets is an important scientific and practical issue, as it allows sheding light on weak spots of this infrastructure and developing tools for their elimination. This will create conditions for more intense transnational business, increasing effectiveness of modern world economy, and accelerating its development in the long-term. Study of contradictions of business infrastructure in the world markets expands the existing scientific knowledge by determining the specifics and barriers on the path of development of international business.

I.

The subjects of international business development are very popular in modern scientific environment. The notion, sense, and specifics of functioning of entrepreneurship in the global markets are studied in a lot of works of modern researchers and experts: (Bhanumurthy & Singh, 2013), (Škare & Sinković, 2013), (Bozkurt et al., 2015), (Teekasap, 2014), (Caporale & Spagnolo, 2012), (Gehringer, 2014), (Jahfer & Inoue, 2014), (Md. Al & Sohag, 2015), (Popkova et al., 2013b, (Popkova et al., 2013a), and (Popkova & Tinyakova, 2013a).

The issues of creation and management of global business infrastructure are also actively discussed by the scientific society. Theoretical & methodological and practical peculiarities of infrastructural provision of transnational entrepreneurship are viewed in multiple works by (Popkova & Tinyakova, 2013b), and (Popkova & Tinyakova, 2013c). Maximization of rates of eocnomic growth is studied in the following works: (Popkova et al., 2015), (Gallié et al., 2013), (Mantaeva & Kurkudinova, 2012), (Mihajlović, 2014), (Nica, 2010), (Reveiu & Dârdală, 2015), (Vanka et al., 2012), (Xavier Molina-Morales et al., 2015), (Aragón et al., 2014), (Emmoth et al., 2015) (Revoltella et al. 2016), (Menshchikova & Tribunskaya, 2015), (Roig-Tierno et al. 2015), (Valeryevna et al., 2014), (Ulesov et al., 2013).

et al. 2015), (Valeryevna et al., 2014), (Ulesov et al., 2013). The performed analysis of publications on the topic of the research showed that they study only certain aspects of the viewed problem, while contradictions of entrepreneurship's infrastructure in the global markets are not well-studied, and their solutions are not found. This does not allow solving the set problem and predetermines the necessity for further research in this sphere.

Methodology of this research is based on the use of the method of systemic and problem analysis, analysis of causal connections, method of synthesis, induction, deduction, formalization, and method of modeling of socio-economic systems for building the model of development of entrepreneurship's infrastructure in the global markets.

It is possible to distinguish three most important contradictions of entrepreneurship's infrastructure in the global markets. The first contradiction is related to deepening of the gap in the level of development of entrepreneurship's infrastructure in developed and developing countries with strengthening of globalization and integration processes in the global economy.

This is proved by annual increase of the value the KOF Index of Globalization, according to the ETH Zurich (Swiss Federal Institute of Technology), KOF Swiss Economic Institute, and growth of underrun of a group of developing countries from a group of developed countries by the value of index of business infrastructure according to the Global Competitiveness Report 2015–2016. World Economic Forum (Table 1).

milastructure in 2000-2015						
Indicators	Values of indicators for the periods					
Indicators	2000	2005	2010	2015		
Index of economic globalization on the average in the world, %	55.06	58.38	60.06	61.1		
Index of business infrastructure on the average in developed countries, points	4.35	4.4	4.42	4.46		
Index of business infrastructure omn the average in developing countries, points	2.89	2.92	2.93	2.95		
Underrun of developing countries from developed countries as to the index of business infrastructure, %	33.56	33.64	33.71	33.86		

 Table 1. Dynamics of values of index of economic globalization and index of business infrastructure in 2000-2015

Source: Compiled by the author on the basis of materials (Dreher & Sturm, 2016), (Barghini et al., 2015), (Schwab, 2016).

As is seen from Table 1, index of economic globalization on the average in the world grew by 10.96% in 2015 as compared to 2000, constituting 61.1%. At the same time, underrun of developing countries from developed countries as to index of business infrastructure grew annually over the studied period, constituting 33.86% in 2015. This contradiction is a reason for limited possibilities of optimization of the system of production location in the global economy and low effectiveness of distribution networks' work.

The second contradiction is caused by preservation of domination of state regulation of the processes of crearion and functioning of the main objects of entrepreneurship's infrastructure – despite common market conditions. In other words, in most countries of the world ownership of the objects of business infrastructure belongs to the state, and it conducts management of these objects.

This is proved by significant increasse of the 50% share of state business infrastructure in its general structure – according to the Global Competitiveness Report 2015–2016.

 Table 2. Dynamics of the share of state business infrastructure and index of economic freedom in 2005-2015

 Values of indicators for the periods

 Indicators
 2000
 2010
 2015

Indicators	Values of indicators for the periods										
Indicators	2000	2005	2010	2015							
Share of state business infrastructure in its general structure, %	87.6	84.1	82.3	79.5							
Index of economic freedom on the average in the world, points	58.6	61.2	63.4	65.7							

Source: Compiled by the author on the basis of materials (Barghini et al., 2015), (Schwab, 2016).

As is seen from Table 2, despite the fact that the share of state business infrastructure in its general structure reduced by 9.24% in 2015, as compared to 2000, when it constituted more than a half - 79.5%. Over this period, index of economic freedom increases by 12.11% on the average in the world, constituting 65.7 points in 2015. Inflexibility of the state is often a reason of the low quality of business infrastructure objects. Limitation of budget assets reduces possibilities for its development, which leads to increase of its deficit.

Its main cause lies in the third contradiction, predetermined by simultaneous belonging of entrepreneurship's infrastructure to public and private goods. Thus, one the one hand, infrastructure, as a rule, consists of mass use objects; it is impossible to limit the access to them and charge the fee. In this case, business-infrastructure is a public good. Here we speak of transport & logistic and institutional infrastructure.

On the other hand, in certain cases business-infrastructure includes objects the access to which is provided on the individual basis, which allows their suppliers to receive commercial benefit from that. In this case, business-infrastructure is a private benefit. This usually is true for financial and human infrastructure.

The found contradictions are a reason for emergence and deepening of the problems of development of entrepreneurship's infrastructure in the global markets, the most important of which consists in non-correspondence of the current level and possibilities of global business infrastructure to actual needs of international entrepreneurship, in spite of its active and dynamic development.

Bases on the performed analysis, it is possible to conclude that delay in development of business infrastructure in the global markets is caused by the found contradictions. More thorough consideration allows seeing that the main cause lise in strictly limited and insufficient participation of private business inc reation of entrepreneurship's infrastructure in the global markets. As a result, lack of state financial resources and impossibility of attraction of private investments causes quantitative lack of business infrastructure, and lack of commercial interest – its low quality and weak innovational development. This leads to impossibility of realization of existing potential for internationalization of entrepreneurship, which is proved by Table 1.

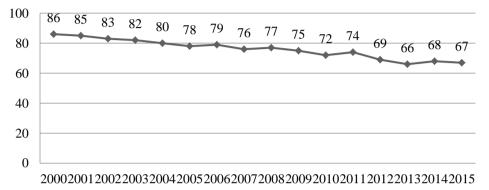


Figure 1. Dynamics of change of the level of satisfaction of internaitonal entrepreneurship's needs in global business infrastructure in 2000-2015, % Source: Compiled by the authors on the basis of (Schwab, 2016).

As is seen from Figure 1, level of satisfaction of international entrepreneurship's needs in global business infrastructure reduced by 22.09% in 2015, as compared to 2000, constituting 67%. This proves significant underrun of current possiblities of development of entrepreneurship's infrastructure from growting needs and its deepening with time.

In order to solve this problem and to eliminate the above contradictions, this work offers the following recommendations for development of entrepreneurship's infrastructure in the global markets. Firstly, it is necessary to create conditions for transition of business infrastructure objects from public to private economic benefits.

This supposes institutionalization of ownership right of private investors for created objects of business infrastructure, i.e., creation of the corresponding normative & legal base, as well as starting the effective system of distribution of permits for creation of such objects on a competitive basis.

Secondly, it is necessary to ensure high investment attractiveness of projects for creation and development of business infrastructure. While previously the focus was on the possibility for getting profit from such projects, now emphasis is made on maximization of such profit – in order to ensure return of investments and growth of income.

This requires establishment of favorable business climate in the sphere of creation of business infrastructure. In particular, it is related to tax stimulation of private investors to financing the infrastructural projects, development of insurance system, provision of state guarantees of investments return, etc.

Realization of the developed recommendations should be based on the corresponding model that reflects the sense and logic of the offered approach to development of entrepreneurship's infrastructure in the global markets and is shown in Fig. 2.

As is seen from Fig. 2, the offered model seeks the goal of development of entrepreneurship's infrastructure in the global markets, which is achieved with the help of eliminating the contradictions of development of entrepreneurship's infrastructure in the global markets. This supposes solving the following tasks: reduction of the gap in the level of development of entrepreneurship's infrastructure in developed and developing countries, elimination of domination of state regulation of creationa and functioning of the main objects of entrepreneurship's infrastructure objects from public to private benefits.

The core of the offered model is the mechanism of public-private partnership. The developed recommendations are tools of achievement of the set goal. As a result of realization of this model, massive inflow of private investments into development of business infrastructure in the global markets is expected that leads to elimination of deficit of objects of business infrastructure in the global markets (increase of quantity).

It is also possible to expect the creation of commercial interest in the sphere of business infrastructure development in the global markets and, accordingly, improvement and innovational development of business infrastructure objects in the global markets (growth of quality). As a result, larger satisfaction of the needs of international business is achieved in the global infrastructure, as well as development of transnational entrepreneurship and growth of rate of global economic growth.

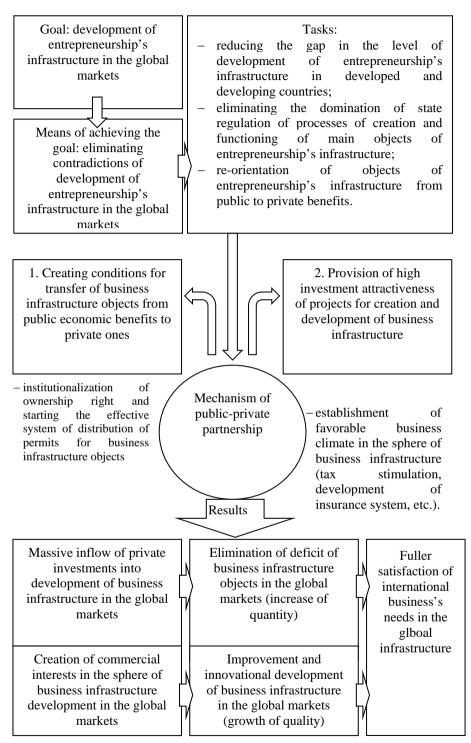


Figure 2. Model of development of entrepreneurship's infrastructure in the global markets Source: compiled by the authors

Concluding, it is necessary to note that under the conditions of market re-orientation of modern economic systems there are reconsideration and transformation of the sense of a lot of economic benefits, including business infrastructure. This creates preconditions and additional stimuli for activation fo the process of commercialization of infrastructural provision of entrepreneurial activities in the global markets.

This also emphasizes correspondnce of the offered recommendations to the spontaneous processes that take place in modern global economy system and their harmonic combination with global tendencies in the economic sphere. Based on that, it is possible to expect positive reaction and quick realization of the offered model of entrepreneurship's infrastructure development in the global markets.

## Conclusion

Thus, the working hypothesis was proved, and it was confirmed that modern entrepreneurship's infrastructure in the global markets is peculiar for systemic contradictions, related to deepening of the gap in the level of development of entrepreneurship's infrastructure in developed and developing countries with strengthening of globalization and integration processes in the global economy, preservation of domintion of state regulation of the processes of creation and functioning of the main subjects of entrepreneurship's infrastructure (despite general market relations), and simultaneous belonging of entrepreneurship's infrastructure to public and private benefits.

They influence negatively the development of international business, being a reason and stimulating underrun of the current level and possibilities of the global business infrastructure from actual needs of international entrepreneurship. This problem could be solved by the proprietary model of entrepreneurship's infrastructure development in the global markets, which is based on the mechanism of public-private partnership, and the corresponding recommendations.

It should be emphasized that despite the applied character of the offered recommendations, they are of a generalized character. This allows using them for development of entrepreneurship's infrastructure in different countries of the world – primarily, in the developing economic systems; a thte same time, this requires their detailed elaboration and adaptation to specific economic conditions, which is a perspective direction of further scientific and practical research in this sphere.

# **References:**

Aragón, C., Aranguren, M.J., Iturrioz, C., Wilson, J.R. (2014). A social capital approach for network policy learning: The case of an established cluster initiative. European Urban and Regional Studies, 21 (2), pp. 128-145. Barghini T., Pasquali V. "Economic Freedom by Country 2015" (2015). Retrieved from: https://www.gfmag.com/global-data/economic-data/economic-freedom-by-country?page=2.

Bhanumurthy, N.R., Singh, P. (2013). Financial sector development and economic growth in Indian states. International Journal of Economic Policy in Emerging Economies, 6 (1), pp. 47-63.

in Emerging Economies, 6 (1), pp. 47-63. Bozkurt, Ö.G., Erdem, C., Ero‡lu, I. (2015). Identifying the factors affecting the economic growth of oil-producing countries. International Journal of Trade and Global Markets, 8 (2), pp. 97-111.

Caporale, G.M., Spagnolo, N. (2012). Stock market, economic growth and EU accession: Evidence from three CEECs. International Journal of Monetary Economics and Finance, 5 (2), pp. 183-191.

Dreher A., Sturm J.-E. "KOF Index of Globalization" (2016). Retrieved from: http://globalization.kof.ethz.ch/query/#economic-globalization.

Emmoth, A., Gebert Persson, S., Lundberg, H. (2015). Interpartner Legitimacy Effects on Cluster Initiative Formation and Development Processes. European Planning Studies, 23 (5), pp. 892-908. Gallié, E.-P., Glaser, A., Mérindol, V., Weil, T. (2013). How Do Pre-existing

Gallié, E.-P., Glaser, A., Mérindol, V., Weil, T. (2013). How Do Pre-existing R&D Activities in a Region Influence the Performance of Cluster Initiatives? The Case of French Competitiveness Clusters. European Planning Studies, 21 (10), pp. 1653-1675ю

Gehringer, A. (2014). Financial liberalisation, financial development and productivity growth: An overview. International Journal of Monetary Economics and Finance, 7 (1), pp. 40-65.

Jahfer, A., Inoue, T. (2014). Financial development, foreign direct investment and economic growth in Sri Lanka. International Journal of Economic Policy in Emerging Economies, 7 (1), pp. 77-93.

Mantaeva, E.I., Kurkudinova, E.V. (2012). Global experience of cluster model of development. Regional economics, 2(38), pp. 28-31.

Md. Al, M., Sohag, K. (2015). Revisiting the dynamic effect of foreign direct investment on economic growth in LDCs. International Journal of Economic Policy in Emerging Economies, 8 (2), pp. 97-118.

Menshchikova, V.I., Tribunskaya, U.G. (2015). Improvement of the infrastructure support system for business activities in different types of regions. Actual Problems of Economics, 163 (1), pp. 270-275.

Mihajlović, I. (2014). Possibilities for development of business cluster network between SMEs from Visegrad countries and Serbia. Serbian Journal of Management, 9 (2), pp. 145-148.

Nica, M. (2010). Small business clusters in Oklahoma: Mar or Jacobs effects? Regional and Sectoral Economic Studies, 10 (2), pp. 5-19

Popkova, E.G, Zubakova, N.N., Bogdanov, D.V., Yakovleva, E.A, Nebesnay, A.Y. (2013b). Measurement of economic growth as a factor of development of strategies of economic transformation. World Applied Sciences Journal, 25 (2), pp. 264-269.

Popkova, E.G., Akopova, E.S., Budanova, I.M., Natsubidze, A.S. (2013a). The directions of transition of economic systems to new quality of economic growth. World Applied Sciences Journal, 26 (9), pp. 1180-1184.

growth. World Applied Sciences Journal, 26 (9), pp. 1180-1184. Popkova, E.G., Tinyakova, V.I. (2013a). New quality of economic growth at the present stage of development of the world economy. World Applied Sciences Journal, 24 (5), pp. 617-622.

Popkova, E.G., Tinyakova, V.I. (2013b). Dialectical methodology of analysis of economic growth. World Applied Sciences Journal, 24 (4), pp. 467-475.

Popkova, E.G., Tinyakova, V.I. (2013c). Drivers and contradictions of formation of new quality of economic growth. Middle East Journal of Scientific Research, 15 (11), pp. 1635-1640.

Popkova, E.G., Yurev, V., Stepicheva, O., Denisov, N. (2015). Transformation and concentration of intellectual capital as a factor of economic growth in the modern economy. Regional and Sectoral Economic Studies, 15 (1), pp. 53-60.

Reveiu, A., Dârdală, M. (2015). Influence of cluster type business agglomerations for development of entrepreneurial activities study about Romania. Amfiteatru Economic, 17 (38), pp. 107-119. Revoltella, D., Brutscher, P.-B., Tsiotras, A., Weiss, C.T. (2016). Linking

Revoltella, D., Brutscher, P.-B., Tsiotras, A., Weiss, C.T. (2016). Linking local business with global growth opportunities: The role of infrastructure. Oxford Review of Economic Policy, 32 (3), pp. 410-430.

Roig-Tierno, N., Alcázar, J., Ribeiro-Navarrete, S. (2015). Use of infrastructures to support innovative entrepreneurship and business growth. Journal of Business Research, 68 (11), pp. 2290-2294. Schwab K. "The Global Competitiveness Report 2015–2016. World

Schwab K. "The Global Competitiveness Report 2015–2016. World Economic Forum" (2016). Retrieved from: http://www3.weforum.org/docs/gcr/2015-

2016/Global_Competitiveness_Report_2015-2016.pdf.

Sören, E. (2015). Clusters and Economic Growth in Asia. Retrieved from: https://www.e-elgar.com/shop/clusters-and-economic-growth-in-

asia?___website=uk_warehouse.

Škare, M., Sinković, D. (2013). The role of equipment investments in economic growth: A cointegration analysis. International Journal of Economic Policy in Emerging Economies, 6 (1), pp. 29-46.

Economic Policy in Emerging Economies, 6 (1), pp. 29-46. Teekasap, P. (2014). Intellectual property rights and productivity growth from technology spillover in Thailand: A system dynamics approach. International Journal of Economic Policy in Emerging Economies, 7 (4), pp. 366-382.

Ulesov, D.V., Shigabieva, A.M., Maratkanova, I.M., Shaidullin, R.N. (2013). Information infrastructure of small business development. World Applied Sciences Journal, 27 (13), pp. 193-196.

Valeryevna, K.N., Borisovych, P.R., Aleksandrovna, T.N. (2014). Strategic management of regional business infrastructure system. Mediterranean Journal of Social Sciences, 5 (18 SPEC. ISSUE), pp. 311-316.

Vanka, G.M., Heijman, W.J.M., Vasiljevic, Z. (2012). Present state analysis of cluster initiatives in Serbian transition economy. Agricultural Economics (Czech Republic), 58 (12), pp. 566-579.

Xavier Molina-Morales, F., Belso-Martínez, J.A., Más-Verdú, F., Martínez-Cháfer, L. (2015). Formation and dissolution of inter-firm linkages in lengthy and stable networks in clusters. Journal of Business Research, 68 (7), pp. 1557-1562

# An Overview of Work Contentment: A Social Analysis of Lebanese and US Workers

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### Abstract

This paper studies and investigates workers in USA and Lebanon, their observed mood of work satisfaction as well as their occupation in both service and manufacturing businesses. The outcomes demonstrate unanticipated divergences and resemblances in the workers' replies. Hypotheses, founded on Hofstede's Individualism (IDV), foresees that national variances in Lebanon and USA would lead to a greater insight into work contentment of workers in USA vs. their counterparts in Lebanon.

Keywords: Work contentment, Culture, Lebanese, American, Workers

# Introduction

In this study, 'Work' means the total relationship between the individual employee and his employer (organization) and with the actual task for which he gets compensated. The term 'Contentment' refers to the simple sentiment/status that accompanies one's attainment based on a stimulus of their goals.

The term 'Work Contentment', therefore, refers to the favorableness with which workers perceive their work; while the term 'Work Dissatisfaction', on the other hand, refers to the un-favorableness with which they take their work.

However, there are some assumptions in business concerning certain key personality traits of managers. Researchers claim such personal characteristics play an important role in enhancing the organization's performance and increasing its profitability levels. Hence, profitability can be explained using measures that are related to concepts, such as the organization's culture, leadership, work place communication, job satisfaction, and other factors as well.

Job satisfaction appears to be important in many fields. Indeed, according to Cranny et al. (1992), work contentment has an influence on the

bodily and psychological condition of employees. This is because it affects job-related behaviors, and influences productivity and profitability in organizations.

Moreover, according to Smith, et al. (1969) and Jewel1 and Siegall (1990), increasing satisfaction is of humanitarian importance and should, therefore, be a goal in itself.

Work contentment (which will be used interchangeably with job satisfaction) and organizational commitment were considered to be inversely connected to some withdrawal behaviors such as lateness, nonattendance, and turnover (Youssef, 2000). Furthermore, they were in addition associated to greater efficiency and organizational usefulness (Buitendach & de Witte, 2005).

Workplace satisfaction concerns have been a significant subject to American executives for numerous years. Thus, it has currently transformed into a global work anxiety, as the economies of diverse nations became intertwined in the international economy.

Officially defined, work contentment is the amount or level at which employees sense their job circumstances, whether constructively or undesirably.

Supervisors are required to be wise at identifying work satisfaction amidst their subordinates. This they do by observing how they perform at work as well as what they mention about their organization. Frustrated employees are susceptible to leave their work more than fulfilled employees (Staw, 1980).

(Staw, 1980). An individual's choice to stay with the association is affected by work satisfaction, likewise impelling absenteeism or ultimately quitting completely is affected by the same (work satisfaction). The study of work satisfaction with its relationship to performance has been a continuous arguable subject. Thus, satisfaction leads to performance, performance leads to contentment, and gratifications will in turn be triggered by contentment and performance (Green, 1985). After revising numerous issued papers, a slight relationship seems to exist between satisfaction and performance (Iaffaldano, 1985). Studies and facts propose that gratifications probably lead to satisfaction and not performance (Caudron 2001). The notion suggested that maintaining workers' happiness (Caudron, 2001). The notion suggested that maintaining workers' happiness may be "the path of least resistance" (Caudron, 2001). The propensity for supervisors to consider satisfying workers' needs is the best way to have efficiency at the workplace (Fisher, 2003).

### **Management concept**

Furthermore, Rozonwski and Hulin (1987) stated that the best significant data to have concerning a worker is a validated measure of their

level of work contentment. Work contentment has been considered as an element of organizational commitment (Kovach, 1977). It is assumed that work contentment "is a feeling of happiness gained from implementing one's values to a job" (Locke, 1969).

Spector (1997, p.2) considers that work contentment "can be considered as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job."

Subsequently, scholars have discovered that work contentment is correlated with turnover, but not to the level of a predictive model establishment (Kraut, 1975; Mobley, 1982; Mobley Griffeth, Hand, & Meglino, 1979).

The concept of the worker in their environment has transformed significantly. In the past 20 years, with the industrial renaissance in USA, the majority of management concepts were focusing on productivity with minimum or no attention to the worker. In 1911, Frederick Taylor established the "Scientific Management Theory" which have the singular goal of enhancing productivity. Taylor's concept was founded on precise dimensions and detailed control of the actions of the employee. However, translating Henry Fayol's "General and Industrial Management" from French to English in 1916 redefined management as being a definite clerical stages.

The fundamental variance among Taylor's and Fayol's perceptions of management was that Taylor viewed the company down up, while Fayol viewed it up down (George, 1968).

Max Weber elaborated the concepts of Frederick Taylor with his notion of bureaucracy and the dissimination of management into hierarchy classes maintaining upon dominant shapes of power and authority. Upon establishing powerful unions in the 1930s and the backing of officials, various concepts began to diverge into the Human Relations trend. "Theory X and Theory Y" by McGregor in the 1960s and Elton Mayo's Hawthorn experiment transformed the notion of which the employee was not taken for granted anymore, but rather a very essential ingredient of the outcome (George, 1968).

# Work contentment

Job satisfaction is one of the most researched fields of organizational behavior.

It is recognized as "an attitudinal variable measuring the level to which employees like their jobs and the diverse features of their jobs" (Spector, 1996; Stamps, 1997). Work contentment has been targeted by research for almost one hundred years. The source of these studies goes back to at least 1911, when Taylor started to inspect workers and their job responsibilities to establish improved ways to train employees (Taylor, 1911). After seven years, the concern on work contentment was evidently attained when Edward Thorndike observed the relationship between job and contentment in the Journal of Applied Psychology in 1918. Satisfaction theorists emphasize on the form of objectives and motivations that persons attempt to attain in order to be satisfied and

successful in their work.

Scientific management considered in the beginning that financial gratification was the sole motivator. Afterwards, other incentives also became widespread such as organizational setting, safety, and an increasing democratic style of management.

Some specialists in the field propose that the study of work contentment can be found almost 200 years ago, when the industrial revolution had begun to flourish in the US. Nevertheless, those original studies were dedicated to exploiting employee productivity. Also, the information was frequently scrambled with ambiguous concepts such as "morale" which conveyed slight abstract precision and outcomes that were slightly valuable. Frederick Taylor presented the notion and denoted the employee as an economic person. He elaborated the concept of minimum salary and commission.

The indication that the single stimulus or satisfier for the employee is financial gratification was apprehended back then (Taylor, 1911). Henry L. Gantt maintained Frederick Taylor's notion that financial

gratification was a stimulus and suggested a minimum salary. He was a visionary man, and he promoted the significance of the human factor in the organizational aspect. In addition, he did not mention work contentment, but he did support the human relations trend (Gantt, 1913).

Therefore, the notion concerning the significance of the human factor in the organizational setting was maintained with the "Human Relations Movement". For a long time now, most of the studies were about financial stimulus. The more financially rewarded the employees are, the better fulfilled the employee will become. Subsequently, the common extrinsic

remuneration serves as compensation (Beatty, 2004). Work expenditures affiliated to labor take around two thirds of the overall working expenditure (Cooper, 2001). Various tools were put forward to quantify work satisfaction: focus groups, surveys, and systematic computer databases (Winner, 1992).

The concept suggested by the historical scholars discussed that financial gratification was a substantial stimulus and motivator of the employed person. A misconception of linking salary to contentment at work might be discussed in comparing individual salaries in Lebanon with those of the American employee. The usual individual hourly rate of the US employee is \$21.97, while the Lebanese employee gets approximately \$5 per hour. Thus, there is a necessity to have a traditional viewpoint or norm in comparing wages for the American employee in contrast with the Lebanese employee.

A paper in the 1998 on American workers shows that manager's support was an influential element affecting job satisfaction (Hickins, 1998). Education, ethnicity, disability, age, and gender have been recognized

Education, ethnicity, disability, age, and gender have been recognized as obstacles to improvement of employment in Lebanon and USA. Such situations in the work setting cause rejection of entrance to the job. Also, poor salary, random layoff, and absence of chances for progress are all elements of work frustration. The age of employees also has an effect on work satisfaction. The usual employment age in Lebanon is lower than that of the United States. Midlife crisis or breakdown is the status of fatigue caused by duties from the job and stressors leading to tiresome job circumstances.

In USA, the midlife crisis that influences work contentment should be related to people in their fifties, and has been stated to be even arising at the age of 44 (ABC, 2008). Subsequently, majority of papers on office frustration emphasize on inequalities in precise illustration of demographics. These offer substantial measures for current circumstances.

Modifications in a worker's performance probably are not related solely to alterations in a worker's performance probably are not related solely to alterations in work contentment, but also on the employee himself/herself. Job performance is dependent by almost fifty percent on who you employ (fifty percent related to personal dissimilarities) and fifty percent not related to personal dissimilarities. Thus, recruitment and selection are crucial factors in this matter. This paper, however, studies workers in USA and in Lebanon whether they distinguish between organizational work contentment and to what extent. Hofstede's concepts of cultural dimensions maintain an anticipation of bigger consciousness of cultural dimensions maintain an anticipation of bigger consciousness of organizational contentment by workers in USA than in Lebanon.

# Job satisfaction and performance

A great amount of research has been carried out in an attempt to

connect worker's attitudes with job consequences. Previous study used to emphasize on work contentment as the significant attitude related to worker's behaviors such as work performance and turnover (Locke, 1976).

Brayfield and Crockett (1955) issued a descriptive review of the satisfaction-performance relationship where they determined that the relationship was minimal or nonexistent. Nonetheless, this issue was partial due to the minor amount of primary studies that existed in the era where the satisfaction-performance relationship was studied. Also, these reviews have varied in their observations of the satisfaction-performance relationship. The

most insightful of these reviews is that of Herzberg et al. (1957). Thus, they have conveyed assurance in a relationship between work contentment and work performance, but propose that preceding correlations have been little. This is because scholars were not adequately assessing satisfaction and performance. Engagement or an engaged workforce emphasizes motivation, satisfaction, commitment, finding significance at work, pride and support of the organization in terms of job promotion and career growth within the firm. (Zaraket and Halawi, 2015)

However, a mutual subject between these reviews is a requirement for conceptual effort on satisfaction, performance, and their relationship (Locke, 1970; Schwab & Cummings, 1970).

## **Cultural variances**

All the Arab countries are influenced either by the French culture (Tunisia, Algeria, and Morocco) or by the Anglo-Saxon culture (Emirates, Kuwait, Iraq, etc.). In this context, Lebanon has an exceptional feature within the Arab world. This is because it is affected by the two cultures. The French language is the first spoken language after Arabic. As such, more than half of the Lebanese population is French

educated. Therefore, this dual Lebanese culture is based on two points:

Lebanon remained under the French mandate from 1918 until 1943 (year of the independence); This French mandate left cultural traces in Lebanon. Thus, the Lebanese constitution is based mainly on the French constitution; the official Lebanese schooling system is French. The Lebanese people who live in the US, Canada, and Australia are

numerous and constitute a second source of influence. When they return to their native country, they bring with them the culture of these countries. All these diversities (political, cultural, geographical, and religious), contribute to the originality of Lebanon.

Furthermore, Lebanese diversity will make it very hard to reach a perception of a uniformed Lebanese culture. The dialects and the accents, the perception of a uniformed Lebanese culture. The dialects and the accents, the nutritional habits and the traditions, and the gathering places are all a testimony of this diversity. Hofstede's concepts of cultural dissimilarities led this study. Precisely, Hofstede's ratings of the Individualism (IDV) for nations sustain estimates of variances in workers' opinions of their work contentment and the chances phenomena. As mentioned on Hofstede's website (n.d.), Individualism (IDV) emphasizes on the level of collectivism or the level that individuals are interconnected in their culture or group; hence, on the contrasting side, the individualist cares only for themselves (Hofstede, 2004). In harmony with Hofstede's IDV's, Lebanese workers would not have as great hopes for equivalent opportunities as American workers (81% IDV). This variance elaborates the subsequent hypotheses:

### Hypothesis #1

Workers in US service establishments will account for a greater awareness of job contentment than Lebanese workers in service establishments.

# Hypothesis # 2

Workers in US production industries establishments will account for a greater awareness of job contentment than Lebanese workers in production industries.

To tackle these issues, workers in USA and in Lebanon, working in a range of magnitudes and categories of production and service businesses, were asked about their insights of work contentment.

## Methodology

In USA, 213 questionnaires were collected; 151 were collected in Los Angeles and 62 in Las Vegas; and questionnaires were collected in Lebanon. The overall number of respondents was 364. The gender dispersal between the two sets was equal with 110 male and 103 female American respondents. Also, 76 male and 75 female of Lebanese respondents were also involved.

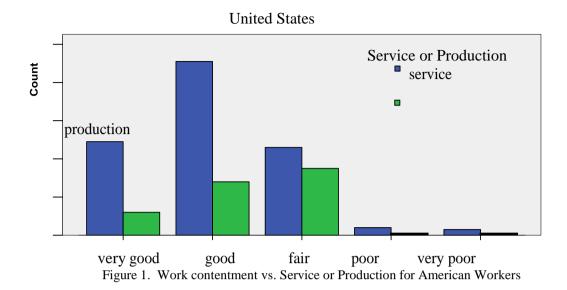
A questionnaire with Yes or No reply selections was established and transformed into Arabic to inquire workers' insights of numerous work related topics. Authorization was granted from top administration before conducting the onsite questionnaires.

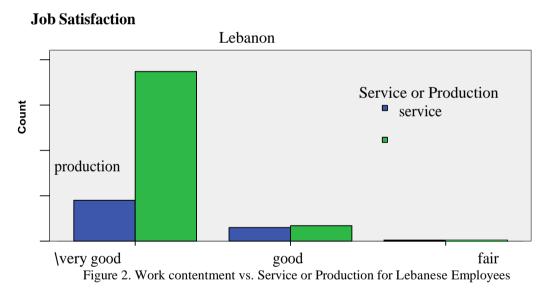
Respondents were inquired for demographic data and numerous Yes or No reply questionnaire queries. One inquiry pursued workers' insights of contentment at work by using a Likert scale, which requests ranks of satisfaction at 5 levels: very good, good, fair, poor, and very poor. Other inquiries provided an additional component related to the type of industry: service or production.

### Results

A two-way contingency table analysis was directed on both American and Lebanese workers' information to assess whether a statistically significant association occurs among work contentment and business type.

The two (2) variables were work contentment with 5 group ranks (very good, good, fair, poor, and very poor) and business type with 2 group ranks (service and production). Thus, this is mentioned in the following figures.





#### **Job Satisfaction**

For Lebanese workers, work contentment vs. service or production was considered to be considerably linked.

Unlike USA, in Lebanon, it seems that production workers present greater stages of work contentment than workers from service establishments.

# Argument Hypothesis # 1

US service companies' workers will state a greater awareness of work contentment than Lebanese workers in service establishments.

The first hypothesis was not sustained by the data. In service groups, the US workers only accounted for 0.35% vs. Lebanese workers, who made 0.64% of their corresponding groups to be "very satisfied" with their work.

# Hypothesis # 2

Workers in US production companies will state a greater awareness of work contentment than Lebanese workers in production companies.

This hypothesis was not sustained by the data. In production categories, the US workers only accounted for 0.26% in contrast with Lebanese workers who made 0.81% of their corresponding groups to be "very satisfied" with their work. In order to respond to these inquiries, American and Lebanese workers working in a diverse range and forms of production and service industries inquired about the insights of work contentment. The Lebanese workers in the two groups (service and production) stated greater or "very satisfied" with their work.

# **Constraints**

Consequently, the examination of further demographic pointers comprising age and religion may add value to comprehending the resemblances of insights. Future inspections may discover variances in categories of workplace, i.e. major or minor, service or production, and public or private segments.

Work contentment and personal insight of advancement prospects could similarly affect the observations of office behavior.

# Conclusion

The subject of family and acquaintances, colleagues, and friends bond the Lebanese nation collectively. The individualistic sentiment held by US groups them separately and pushes them to take care of themselves. This could be a 100 year old notion initiated by Horace Greely, as he mentioned in the New York Times, "Go west young men and strike out for

vourselves."

This paper introduced an inspection of office discernment from the worker's viewpoint instead of the typical dimensions of depiction and wage achievement. Thus, these outcomes indicate that the administration must tackle views of discrimination in addition to salary inequalities.

The cultural variances foreseen by Hofstede's cultural dimensions model were not supported by the data collected in this paper. Almost half of the Lebanese and American workers considered that there is office discrimination related to gender, age, or religion.

Nevertheless, the 47% of American and Lebanese workers who do recognize office discrimination are considered as a considerable figure and they deserves inspection. Problems of gender, age, and religious discrimination in the office permit additional inspection from the worker viewpoint. Hofstede's concepts of cultural variances steered this inspection of Lebanese and American workers. Explicitly, Hofstede's assessments of the Individualism (IDV) for each nation sustain likelihoods of variances in workers' perceptions of their work contentment and the opportunities phenomena.

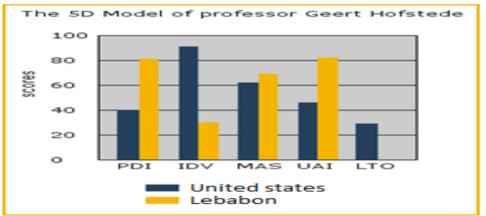


Figure 3. U.S. vs. Lebanon on all Cultural Dimensions. (Geert, n.d.).

Therefore, some studies suggest a substantial correlation between the Lebanese and business establishments' cultures, and how this correlation affects the development of groups within them.

### **References:**

Beatty, J. E. (2004). Grades as Money and the Role of the Market Metaphor in Management Education.

Brayfield, A., & Rothe, H. (1951). An index of job satisfaction. Journal of Applied Psychology, 35. 307-311.

Caudron, S. The Myth of Job Happiness, Workforce, retrieved September 6, 2001 from website www.workforce.com.

Cooper, J. C. & Madigan, K. (2001). The Second Half Should be Healthier. Business Week, (9) 26

Fisher, C. D. (2003). Why Delay People from believing that satisfaction and performance are correlated?

Gantt H. L. (1913). Work, Wages, and Profits. New York Engineering Magazine Company 2nd Ed.

George, C. (1968), The History of Management Thought retrieved from http://en.wikipedia.org/wiki/Henry_Fayol

Green, C. N. (1985), The Satisfaction Performance Controversy, Horizons 15: 31.

Herzberg, F. (1966). Work and the nature of man. Cleveland: World.

Hickins, M. (1998), Give A Little, Get a Lot, Management Review, p. 6;

Hofstede, G. (n.d.). Cultural dimensions. Retrieved August 28, 2004 from http://www.geert-hofstede.com/.

Hoppock, Robert. Job Satisfaction. New York: Harper, 1935.

Jewell, L. N., and Marc Siegall. Contemporary Industrial/Organizational Psychology. St. Paul, MN: West Publishing Company, 1990.

Kovach, K. A. (1977). Organization size, job satisfaction, absenteeism and turnover. Washington, D.C.: University Press of America.

Locke, E. A. (1969). What is job satisfaction?

Locke, E. A. "The Nature and Causes of Job Satisfaction." In Handbook of Industrial and Organizational Psychology, ed. M. D. Dunnette. Chicago: Rand McNally, 1976.

Kraut, A. J. (1975). Predicting turnover of employees from measured job attitudes. Organizational Behavior and Human Performance, 13(2), 233-243. Psychological Bulletin 97(9): 251-273.

Rozonwski, M., & Hulin C. (1987). The scientific merit of valid measures of general constructs with special reference to job satisfaction and job withdrawal.

Spector, P.E. (1997). Job satisfaction: Application, assessment, cause, and consequences. Thousand Oaks, CA: Sage Publications, Inc.

Staw, B. M. (1980), The Consequences of Turnover. Journal of Occupational Behavior 1:253-273)

Taylor, F. W. (1911), Shop Management. New York: Harper and Brothers. 22.

Winner, W. E. & Carsten, J. M. (1992), Alternative Ways to Gather Opinions. HR Magazine 37(4):71-78.

(Zaraket, W. & Halawi, A. (1995), The interdependence between Lebanese higher academic institutions' goals and its faculty members' commitment, J. Global Business Advancement, Vol. 8, No. 1, 2015)

# Development of Modern World Economy Through The Prism of "Underdevelopment Whirlpools"

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#### Abstract

The article analyzes the development of modern world economy through the prism of "underdevelopment whirlpools". The author distinguishes the problem of disproportions of world economy development, provides the proprietary methodology of "underdevelopment whirlpools", and studies the world economy through the prism of "underdevelopment whirlpools". Based on the official statistical information of the International Monetary Fund, the author performs calculation of "underdevelopment whirlpools" in regional associations as a part of modern global economy: Advanced economies, of which the Euro area µ Major advanced economies (G7) are distinguished and the Emerging market and developing economies, of which the Commonwealth of Independent States, Emerging and developing Asia, Emerging and developing Europe, Latin America and the Caribbean, Middle East, North Africa, Afghanistan, and Pakistan and Sub-Saharan Africa are distinguished. The article proves the thesis that modern global economy is peculiar for presence of deepening "underdevelopment whirlpools" that are largely determined by sectorial structure of economic systems.

**Keywords:** World economy, "underdevelopment whirlpools", developing countries, developed countries

### Introduction

The higher level of development is achieved in the scale of the world economy on the whole, the stronger are the differences in growth of various economic systems that are part of it. A key reason for this phenomenon is the impossibility to ensure fully independent development of these systems that is especially peculiar for modern economic conditions characterized by high level and speed of globalization and integration.

As a result, stable regularity of development of some economic systems (recipient countries) by means of other (donor countries) is

established, which supposes the use of other's resources for realization of one's potential. Thus, underrun of recipient countries from donor countries grows, which leads to deepening of differentiation of countries in the modern world economy.

This differentiation is a cause of unbalanced development of the world economic system and, as a consequence, of periodic geo-economic crises that hinder the global economic growth - so it is a serious global problem of modern time, which is viewed is this paper. The author seeks the goal of studying the tendencies and perspectives of development of modern world economy through the prism of "underdevelopment whirlpools".

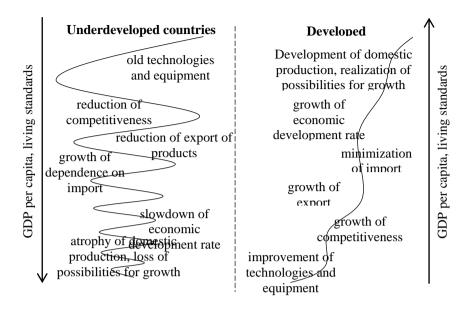
#### I.

L. Despite the excess of modern studies and publications in the sphere of theory and practice of development of modern world economy, its disproportions are well-studied only in the short-term. Among the works of conceptual nature it is possible to distinguish (Pogosov, 2015), (Odhiambo, 2015), (Zeira & Zoabi, 2015), (Leonida et al., 2015), (Sarracino & Bartolini, 2015), (González-Pernía & Peña-Legazkue, 2015), (Choi & Shin, 2015), (Lee & Oh, 2015), (Castiglione et al., 2015), (Kolomiets, 2015), (Bere, (2015), (Smékalová et al., 2014), (Dymskill, 2013), (Ravuri, 2012), (Christofakis & Papadaskalopoulos, 2011), (Fuseini & Kemp, 2015), etc. The mist interesting applied studies in this sphere include (Ilie & Iaradat 2015), (Docquier & Machado 2015), (Yakoyleva et al. 2015)

& Jaradat, 2015), (Docquier & Machado, 2015), (Yakovleva et al., 2015), (Wirtz et al., 2015), (Čaušević, 2015), (Klinov, 2015), (Kornev et al., 2015), (Pulselli et al., 2015), Dudin & Frolova, (2015), (Zhao et al., 2015), (Rodriguez et al., 2015), (McMaster, 2015), (Aytaç et al., 2015), (Heinrich et al., 2015), (Guttmann, 2015), (Galbraith, 2015), (Capello et al., 2015), and (Hieronymi, 2015).

A perspective tool of studying the dynamics of change of the studied disproportions in this paper is the proprietary methodology of "underdevelopment whirlpools" created by E.G. Popkova. It is described in her works, among which are (Popkova et al., 2013b), (Popkova et al., 2013a), (Popkova & Tinyakova, 2013a), (Popkova & Tinyakova, 2013b), (Popkova & Tinyakova, 2013c), (Popkova et al., 2015), etc.

The author offers a hypothesis that modern world economy is peculiar for deepening "underdevelopment whirlpools" that are largely determined by sectorial structure of economic systems. "Underdevelopment whirlpool" is a sustainable reduction of economic growth and development rate and reduction of global competitiveness of economic system, as well as its establishing as underdeveloped countries. The process of its formation is graphically presented in Figure 1 graphically presented in Figure 1.



Source: compiled by the authors

As is seen from Figure 1, the initial cause of formation of "underdevelopment whirlpool" is aging of technologies and equipment that leads to reduction of global competitiveness of a country and its enterprises, reduction of export, strengthening of dependency on import, slowdown of economic development rate, and, as a result, atrophy of domestic production and loss of possibilities for growth.

All of this is accompanied by reduction of GDP per capita. "Underdevelopment whirlpools" establish certain countries' underrun from other countries. That's why the author of this research thinks that it is necessary to distinguish not developing and developed countries but leading and underdeveloped countries. As a result, underdeveloped countries become sources of final products sales for leading countries and sources of cheap raw material and human resources.

Meanwhile, developed countries improve their technologies and equipment, increase competitiveness and export, reduce import, accelerate economic development, actively develop domestic production, and realize their potential and possibilities for economic growth.

"Underdevelopment whirlpool" has stable feature – depth of whirlpool, and dynamic feature – speed of sucking into the whirlpool. Calculation of "underdevelopment whirlpools" is performed in the following way. The model is provided – an object to be compared to all other values. Then statistical data are provided that reflect change of GDP per capita in the "model" and studied economic systems by the years.

After that, values of GDP per capita for the years are compared to the values of these indicators with the "model" and specific years are given. Then the underrun of the economic system from the model is determined by the indicator of GDP per capita through calculating the difference between the current year and the corresponding year. Then the depth of the whirlpool is calculated as difference between the underrun in the current period and previous period, as well as speed of sucking into the whirlpool, determined as ratio of whirlpool's depth to difference in the studied periods. In this research, the "model" is the world economy on the whole,

dynamics of GDP of which in 1995-2015 is given in Table 1.

Year	GDP per capita
1995	6,043.882
1996	6,257.975
1997	6,166.816
1998	6,082.534
1999	6,240.907
2000	6,417.968
2001	6,409.691
2002	6,741.650
2003	7,794.258
2004	9,273.837
2005	10,142.400
2006	10,993.590
2007	12,542.460
2008	13,771.480
2009	12,218.770
2010	12,983.010
2011	14,489.560
2012	14,372.150
2013	14,742.820
2014	14,808.550
2015	13,094.710

Table 1. Dynamics of GDP per capita of the world economy on the whole, USD.

Source: based on materials of the IMF, www.imf.org

In order to fully cover the world economy and stay within the acceptable limit of the research, the objects of the research in this paper are not separate countries but regional associations of countries in the modern world economy: Advanced economies that include the Euro area and Major advanced economies (G7) and the Emerging market and developing economies that include the Commonwealth of Independent States, Emerging and developing Asia, Emerging and developing Europe, Latin America and the Caribbean, Middle East, North Africa, Afghanistan, and Pakistan, and Sub-Saharan Africa.

The results of calculation of "underdevelopment whirlpools" in these regional associations are given in Table 2. Based on the performed research, the author compiled the map of "underdevelopment whirlpools" on the economy, given territory of modern world in Table 2.

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Reg	GRP per	Year of the	U nd	GRP per	Year of the	U nd	D e	S p	GRP per	Year of the	U nd	D e	S p	GRP per	Year of the	U nd	D e	S p	GRP per	Year of the	U nd	D e	S p
ion	capit a,	average global	er ru	capit a,	average global	er ru	p t	e e	capit a,	average global	er ru	p t	e e	capit a,	average global	er ru	p t	e e	capit a,	average global	er ru	p t	e e
	1995	level	n	2000	level	n	h	d	2005	level	n	h	d	2010	level	n	h	d	2015	level	n	h	d
Ad van ced eco no mie s	21,26 5.04	>2015	0	21,00 9.83	>2015	0	0	0	32,87 1.7	>2015	0	0	0	40,25 0.16	>2015	0	0	0	19,83 5.76	>2015	0	0	0
Eur o area	18,41 9.28	>2015	0	17,35 7.10	>2015	0	0	0	29,10 9.63	>2015	0	0	0	35,35 6.47	>2015	0	0	0	33,33 2.94	>2015	0	0	0
Maj or adv anc ed eco no mie s (G7 )	27,84 5.21	>2015	0	27,57 0.36	>2015	0	0	0	37,27 6.73	>2015	0	0	0	42,53 5.68	>2015	0	0	0	40,60 2.55	>2015	0	0	0
Em ergi ng ma rke t and dev elo pin g eco	2,575 .99	1981	14	3,034 .40	1986	14	0	0	43,73 .01	1990	15	1 5	3	60,75 .91	1995	15	1 2	2 , 4	6,298 .54	1996	19	1 6. 6	3. 3 2

Table 2. Calculation of "underdevelopment whirlpools" in regional associations in modern world economy

Reg ion	GRP per capit a, 1995	Year of the average global level	U nd er ru n	GRP per capit a, 2000	Year of the average global level	U nd er ru n	D e p t h	S p e d	GRP per capit a, 2005	Year of the average global level	U nd er ru n	D e p t h	S p e d	GRP per capit a, 2010	Year of the average global level	U nd er ru n	D e p t h	S p e d	GRP per capit a, 2015	Year of the average global level	U nd er ru n	D e p t h	S p e d
no mie s																							
Co mm onw ealt h of Ind epe nde nt Stat es	677.7 0	1962	33	792.1 8	1962	38	5	1	20,81 .62	1977	28	2 7	5 , 4	41,82 .13	1990	20	1 4 , 6	2 ,9 2	4,432 .09	1991	24	2 1. 0 8	4. 2 1 6
Em ergi ng and dev elop ing Asi a	2,026 .46	1977	18	2,060 .25	1977	23	5	1	2,872 .21	1978	27	2 6	5 2	4,250 .66	1989	21	1 5 8	3 1 6	4,764 .45	1992	23	1 9. 8 4	3. 9 6 8
Em ergi ng and dev elop ing Eur ope	2,932 .49	1983	12	3,058 .72	1986	14	2	0 , 4	6,329 .01	2000	5	4 6	0 9 2	9,077 .29	2004	6	5 0 8	1 0 1 6	8,763 .35	2004	11	9. 9 8 4	1. 9 9 6 8
Lati n Am	3,869 .74	1988	7	4,693 .17	1991	9	2	0 , 4	5,647 .58	1994	11	1 0	2 1	7,822 .47	2003	7	4 8	0 9	8,853 .34	2004	11	1 0. 0	2. 0 0

Reg ion eric a and the Cari bbe an	GRP per capit a, 1995	Year of the average global level	U nd er ru n	GRP per capit a, 2000	Year of the average global level	U nd er ru n	D e p t h	S p e d	GRP per capit a, 2005	Year of the average global level	U nd er ru n	D e p t h 6	S p e d 2	GRP per capit a, 2010	Year of the average global level	U nd er ru n	D e p t h 8	S p e d 7 6	GRP per capit a, 2015	Year of the average global level	U nd er ru n	D e p t h 2 4	S p e d 4 8
Mid dle East , Nor th Afri ca, Afg hani stan , and Pak ista n	5,762 .91	1992	3	7,525 .36	2003	-3	- 6	- 1 ,2	10,62 4.50	2006	-1	0 2	0 0 4	13,44 0.55	2008	2	1 9 6	0 3 9 2	12.98 7.62	2007	8	7. 6 8	1. 5 2 1 6
Sub - Sah aran Afri ca	995.9 5	1950	45	1,000 .47	1951	49	4	0 8	1,807 .07	1951	54	5 3 2	1 0 6 4	2,544 .43	1953	57	4 6 3 6	9 2 7 2	2,471	1952	63	5 3. 7 2 8	1 0. 7 4 5 6

Source: compiled by the author based on materials of the IMF, www.imf.org

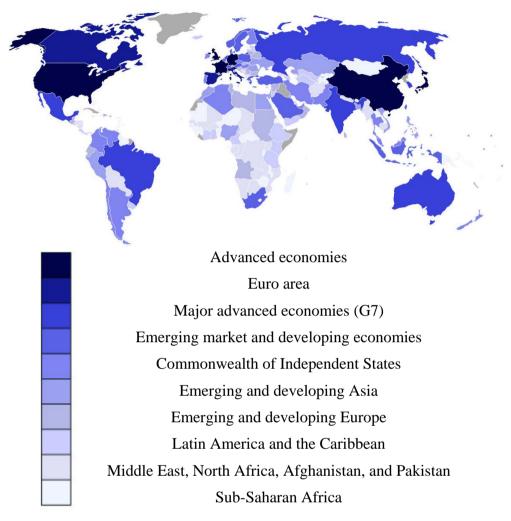


Fig. 2. Map of "underdevelopment whirlpools" on the territory of modern world economy

As is seen from Table 2 and Fig. 2, the Emerging market and developing economies are peculiar for existence of "underdevelopment whirlpools" that have been deepening over the last 20 years, while the Advanced economies develop quickly and are characterized by higher values of GDP per capita than in the world economy on the average.

In order to determine the causes of formation of "underdevelopment whirlpools" in the modern world economy, let us view sectorial structure of gross regional product (GRP) of the studied regional associations. For that, let us use Table 3.

Region	Service sphere	Processing industry	Extractin g industry	Agriculture
Advanced economies	69	17	6	8
Euro area	64	22	4	10
Major advanced economies (G7)	75	12	8	5
Emerging market and developing economies	23	24	21	32
Commonwealth of Independent States	20	29	37	14
Emerging and developing Asia	34	22	37	7
Emerging and developing Europe	56	12	21	11
Latin America and the Caribbean	15	48	25	12
Middle East, North Africa, Afghanistan, and Pakistan	7	18	3	72
Sub-Saharan Africa	4	13	2	81

Table 3. Sectorial structure of GDP for the types of economic activities for 2015 (in %)

Source: compiled by the author based on materials of the IMF, www.imf.org

Based on the data of Table 3, the author performed regression and correlation analysis, with the help of which the following model of paired linear regression was obtained: y=1.14+5x. According to this model, growth of the share of processing industry in the structure of GRP (x) by 1% leads to deepening of "underdevelopment whirlpool" of a regional union (y) by 5 years. Correlation coefficient for the obtained model exceeds 99%, which proves is statistical significance and high interdependence of the studied indicators.

### Conclusion

Thus, it is possible to conclude that the offered hypothesis is proved – Emerging market and developing economies, which constitute more than 60% in its structure, are in the process of formation of "underdevelopment whirlpools". As the cause of the start of this process is domination (or high share) of extracting industry in the structure of their GRP, and the whirlpools are caused by aging of technologies and equipment, the author suggests that the overcoming of "underdevelopment whirlpools" should be done by development of R&D and service sphere, as well as processing industry in the interests of provision of sustainable development of regional economic systems.

### **References:**

Aytaç, I.A., Rankin, B.H., İbikoğlu, A. (2015). The Social Impact of the 2008 Global Economic Crisis on Neighborhoods, Households, and Individuals in Turkey. Social Indicators Research, 124 (1).

Bere, R.C. (2015). Institutional structures in the growth pole policy from Romania. Administratie si Management Public, 2015 (24), 64-86. Capello, R., Caragliu, A., Fratesi, U. (2015). Global trends and the economic

crisis: Future alternative European growth strategies. Technological Forecasting and Social Change, 98, 120-136. Castiglione, C., Infante, D., Smirnova, J. (2015). Environment and economic

growth: is the rule of law the go-between? The case of high-income

countries. Energy, Sustainability and Society, 5 (1), 26. Čaušević, F. (2015). Globalization, Southeastern Europe, and the world economy. Globalization, Southeastern Europe, and the World Economy, 1-190.

Choi, K.-H., Shin, S. (2015). Population aging, economic growth, and the social transmission of human capital: An analysis with an overlapping generations model. Economic Modelling, 50, 138-147.

Christofakis, M., Papadaskalopoulos, A. (2011). The growth poles strategy in regional planning: The recent experience of Greece. Theoretical and Empirical Researches in Urban Management, 6 (2), 5-20. Docquier, F., Machado, J. (2015). Global Competition for Attracting Talents

and the World Economy. World Economy, 2(1), 124-131. Dudin, M.N., Frolova, E.E. (2015). The balanced scorecard as a basis for

strategic company management in the context of the world economy transformation. Asian Social Science, 11 (3), 282-288.

Dymskill, G. (2013). The problem of power in finance in India and Brazil: From targets of opportunity to poles of self-reinforcing growth? Non-Mainstream Dimensions of Global Political Economy: Essays in Honour of Sunanda Sen, 45-67.

Fuseini, I., Kemp, J. (2015). A review of spatial planning in Ghana's socio-economic development trajectory: A sustainable development perspective. Land Use Policy, 47, 309-320.

Galbraith, J.K. (2015). Inequality and instability: A study of the world economy just before the great crisis. Inequality and Instability: A Study of the World Economy Just Before the Great Crisis, 1-336.

J.L., Peña-Legazkue, (2015). González-Pernía, I. Export-oriented entrepreneurship and regional economic growth. Small Business Economics, 45 (3), 505-522.

Guttmann, R. (2015). Chronic macro-economic and financial imbalances in the world economy: A meta-economic view. Revista de Economia Politica, 35 (2), 203-226.

Heinrich, Kobayashi, Y.,Bryant, K.A. (2015). Public Opinion and Foreign Aid Cuts in Economic Crises. World Development, 77, 66-79. Hieronymi, O. (2015). The crisis of international finance, the Eurozone and

economic growth. Contributions to Economics, 214, 3-18.

Ilie, C., Jaradat, M. (2015). Co-operation in the world economy. Quality - Access to Success, 16, 168-173.

International Monetary Fund (2016). Access: imf.org.

Klinov, V.G. (2015). The evolution of long waves in the world economy. Studies on Russian Economic Development, 26 (3), 285-294. Kolomiets, G.M. (2015). Risk management as a factor of sustainable

Kolomiets, G.M. (2015). Risk management as a factor of sustainable development of the world economy. Actual Problems of Economics, 165 (3), 43-49.

Kornev, A.K., Maksimtsova, S.I., Treshchina, S.V. (2015). Experience in world industrial development and the reindustrialization of the domestic economy. Studies on Russian Economic Development, 26 (5), 460-469. Lee, S., Oh, D.-W. (2015). Economic growth and the environment in China:

Lee, S., Oh, D.-W. (2015). Economic growth and the environment in China: Empirical evidence using prefecture level data. China Economic Review, 36, 870, 73-85.

Leonida, L., Maimone Ansaldo Patti, D., Marini, A., Navarra, P. (2015). Political competition and economic growth: A test of two tales. Economics Letters, 135, 6854, 96-99.

McMaster, R. (2015). The "illusion" or "paradigm blindness" of economics: Ethical challenges to economic thought from the financial crisis. Marx, Veblen, and the Foundations of Heterodox Economics: Essays in Honor of John F. Henry, 155-175.

Odhiambo, N.M. (2015). Government Expenditure and Economic Growth in South Africa: an Empirical Investigation. Atlantic Economic Journal, 43 (3), 393-406.

Pogosov, I.A. (2015). Factors of long-term economic growth: Scientific and technical progress and capital intensity of production. Studies on Russian Economic Development, 26 (5), 423-433.

Popkova, E.G, Zubakova, N.N., Bogdanov, D.V., Yakovleva, E.A, Nebesnay, A.Y. (2013b). Measurement of economic growth as a factor of development of strategies of economic transformation. World Applied Sciences Journal, 25 (2), 264-269.

Popkova, E.G., Akopova, E.S., Budanova, I.M., Natsubidze, A.S. (2013a). The directions of transition of economic systems to new quality of economic growth. World Applied Sciences Journal, 26 (9), 1180-1184.

Popkova, E.G., Tinyakova, V.I. (2013a). New quality of economic growth at the present stage of development of the world economy. World Applied Sciences Journal, 24 (5), 617-622.

Popkova, E.G., Tinyakova, V.I. (2013b). Dialectical methodology of analysis of economic growth. World Applied Sciences Journal, 24 (4), 467-475.

Popkova, E.G., Tinyakova, V.I. (2013c). Drivers and contradictions of formation of new quality of economic growth. Middle East Journal of Scientific Research, 15 (11), 1635-1640.

Popkova, E.G., Yurev, V., Stepicheva, O., Denisov, N. (2015). Transformation and concentration of intellectual capital as a factor of economic growth in the modern economy. Regional and Sectoral Economic Studies, 15 (1), 53-60.

Pulselli, F.M., Coscieme, L., Neri, L., (...), Lemmi, A., Bastianoni, S. (2015). The world economy in a cube: A more rational structural representation of sustainability. Global Environmental Change, 35, 41-51.

Ravuri, E.D. (2012). Assessing the growth pole phenomenon in Venezuela: The case of Ciudad Guayana. Urban Development: Strategies, Management and Impact, 77-89.

Rodriguez, A., Turmo, J., Vara, O. (2015). Financial crisis and the failure of economic theory. Financial Crisis and the Failure of Economic Theory, 1-198.

Sarracino, F., Bartolini, S. (2015). The Dark Side of Chinese Growth: Declining Social Capital and Well-Being in Times of Economic Boom. World Development, 74, 333-351.

Smékalová, L., Hrabinová, S., Habuda, M. (2014). Spatial distribution of competitiveness support in the Slovakia in relation to growth poles and small and medium enterprises. Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration, 21 (30), 95-106.

Wirtz, J., Tuzovic, S.,Ehret, M. (2015). Global business services: Increasing specialization and integration of the world economy as drivers of economic growth. Journal of Service Management, 26 (4), 565-587.

Yakovleva, E.A., Azarova, N.A., Titova, E.V. (2015). Innovation as a vector of regional economic development and a necessary condition for the progress of the world economy. Asian Social Science, 11 (20), 90-96.

Zeira, J., Zoabi, H. (2015). Economic growth and sector dynamics. European Economic Review, 79, 1-15.

Zhao, X., Jiang, X., Li, Z. (2015). The impact of the economic crisis on the financial performance of multinational corporations. International Review of Economics and Finance, 37, 55-68.

# The Role of "Slow Territories" in the Development of Sustainable Tourism

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### Abstract

The paper intends to propose an analysis of the so called "slow territories", sometimes little known contexts that present a significant set of both tangible and intangible resources often characterized by levels of excellence, by investigating in particular their role in the development of sustainable tourism. In recent years, the international tourism market highlights important chances, both as regard the demand and supply sides, and an increasing attention and sensitivity to sustainability understood in its social, environmental and economic dimension The emergence of a substantial segment of demand more aware and attentive to the sustainable dimension of the holiday is connected to the growth of the cultural level of tourists: in this framework the increasing awareness of environmental issues, the respect and desire to learn about the traditions of local cultures are becoming key criteria in the choice of tourist destinations. These trends have led to the emergence of a new type of tourist, who aims to live a territory and to interact with the local community, in a relationship of mutual exchange, which translate into a new experiential dimension of the holiday. In this perspective the "slow territories" represent not only a model of local development, but also a growth trajectory that combines economic growth, social cohesion, entrepreneurial innovation and environmental protection, with a view to sustainability.

**Keywords:** Sustainable tourism; slow territories; experiential tourism; local development models

### Introduction

The tourism sector is in the middle of important changes that affect both demand and tourist offer. Several studies highlights the changes in the consumption patterns (Andereck, 2009; Bramwell, Henry, Jackson, Prat, Richards & van der Straaten, 1996; Caruana, Glozer, Crane & McCabe 2014; Chafe, 2005; Weaver & Lawton 2007).

If until the 1980s the tourist was mostly similar to a mass consumer, in recent decades has emerged a growing demand of customization of the holiday. Increasingly, the tourist is configured as a traveller who seeks a travel experiences based on the so-called "three elle": leisure, landscape and learning (Plog, 1974; Donohoe & Needham, 2006). In particular tourist shows a growing sensitivity to the experiential aspects of leisure time, focusing on both the discovery of the intrinsic characteristics of an area and the development of relationships with the indigenous reality. Tourists seeking not a tourist experience of generic type, but more complex and profound experiences, enabling them to appreciate both the elements of the identity and the specificities of a given territory (Chafe, 2005; Franch, Sambri, Martini, Pegan & Rizzi, 2008).

Several factors explain the changes in tourism demand. First, psychological and emotional aspects, together with social and cultural factors are nowadays able to affect the tourist orientation. In addition, the progressive disintermediation of the traditional distribution channels determines the spread of multi-channel supply and co-production driven by the demand. In this framework, the tourist's choices are often influenced by community based mechanisms, which implies the ability for the tourist operators to exploit new social components of the tourist experience (Wearing, Cynn, Ponting & McDonald, 2002). The rise of alternatives for the tourist open new markets and new destinations, inaccessible until a few years ago both from a commercial and geographical point of view (Franch, Sambri, Martini, Pegan & Rizzi, 2008; Goossens, 2001; Han, Hsu & Lee, 2009).

The evolution that affect the tourism sector highlights the need for the tourist industry to increase the quality of the tourist product, playing particular attention to the customization of the travel experience (Pencarelli, Splendiani, 2008).

The tourist expresses a wide and complex vision of the tourism product, against whom has different level of expectations (functional, social, cultural, psychological ones) (Tamma, 2002; Franch, 2002;Pechlaner, Weiermair, 2000; Cherubini, 2008). The quality of the tourist offer perceived by the tourist is not based on objective characteristics of the product and on the judgment resulting from experience, which appears to be the result of the interaction between tourists and the bidding system. The satisfaction of this set of expectations is the result of an experiential process: the perception of quality depends on the greater or lesser propensity to take advantage of the tourism product and the gap between expectations and experience. The quality of tourism services provided influences the overall satisfaction of tourists and consequently the experience lived within a given territory (Chafe, 2005; Frey & George, 2010). In other words, the tourist, within the chosen destination, lives an overall experience that led him to make a judgment on the set of both all the material and intangible factors with which it comes into contact; this create a continuous interaction relationship with the territory and tour operators. Hence the need for the tourist industry to have a correct identification of the drivers affecting the customer satisfaction and to monitor the evolution of the customer preferences.

In this framework, a tourist destination is competitive only if it can generate a unique experience, higher than that offered by other territories. Its competitiveness is defined by the degree of imitability and reproducibility of the attractions available. This explains the relevance of certain categories of resources (natural, artistic, architectural, anthropological and cultural ones), which can be not be available elsewhere. The development of tourist destinations is closely linked to their environment, the cultural and social interactions, together with the wellbeing of local populations. These characteristics make tourism the driving force for the protection and development of the tourist destinations.

This differentiation capacity of a territory comes to depend on a plurality of factors, widely investigated in the literature (Buhalis, 2000; Valdani & Ancarani, 2000; Dwyer & Kim, 2003). The territory, in fact, is not statically expressed only in terms of infrastructure resources, but it represents a place where geographical and physical elements are linked to all other factors (social, economic, institutional, etc.). In addition, the complex network of relationships and interactions between the different entities that compose the territory determine the evolution of the territory itself.

compose the territory determine the evolution of the territory itself. In this perspective the territory could be seen as a viable system (Golinelli, 2002), in a tangle of dynamics involving different stakeholders with a variety of interests, sometimes difficult to reconcile. It follows that the development potentials of a territory are strongly linked to the way in which the interaction between actors, resources and activities concretely manifests (Barile, Saviano, Polese, & Di Nauta, 2013).

The set of tangible and intangible resources configures the quality of the assets in which an area is proposed, and hence its competitiveness tends to depend. The attractiveness and potential for development of a territory are derived primarily from the way in which these resources are linked and integrated into a unified and coherent vision. From this interaction it arises what is called the "vocation" of a territory, a concept complex to define, which is the result of the evolution of both tangible and intangible assets: cultural heritage, natural resources, institutional structures, socio-economics development of the territory. The development strategy of a territory is based on the ability of all actors involved to confer value to available resources, that are the pivot on which to rotate its vocation. In the medium-long term, the vocation can become the basis for the productive specialization of the territory, resulting in a strong rooting and territorial identity. In other words, the specificity of a place that make up the territorial vocation has its basis in the strong sense of identity of the local community.

In this sense, the vocation is the starting point for the definition of a territorial development strategy based on the peculiarities which may be more attractive. Consequently, the government body in charge to guide the long-term strategy of a territory has the primary task to enhance the wealth of resources. This is to increase the attractiveness of a territory and, consequently, its competitiveness which tend to be dependent on several consequently, its competitiveness which tend to be dependent on several factors: environmental and structural factors, intangible resources such as social capital, trust and innovativeness, the policies adopted by the institutions and by individual operators, the same behaviors of the actors involved (Buhalis, 2000; Poon, 1993). The competitiveness of a territory also derives from its ability from one hand to outline a development strategy able to enhance and enrich the heritage of both tangible and intangible resources; on the other hand to promote the competitiveness of all actors who are part of it. In the light of these considerations, it is evident that the exploitation of a territory steps through the implementation of a coherent project bidding with its vocation and with the opportunities that exist within it.

**Peculiarities and Prospects for Development of "Slow Territories"** The sedimentation of resources and specific expertise in a particular territorial reality characterize the so-called "slow territories" or, in some cases, minor territories (Mutti, 1998; Lancerini, 2005; Folorunso & Ojo, 2013). The meaning "slow" or "minor" should not be referred to a situation 2013). The meaning "slow" or "minor" should not be referred to a situation of delay or backward of the territory, or to merely rural provincial areas; the concept refers to a specific development approach away from the traditional model of Fordist growth, oriented primarily to the quality of the territory and its lifestyle. Slow territories are low geographic density areas, whith a significant rural setting, where important heritage of tangible and intangible resources are presents (art, food and wine, landscape, etc.). These contexts are often not well known, but contain a significant heritage of excellences, also in the production side. Their common feature is the high landscape quality that, combined with the local history and traditions, configure these areas as cultural districts (Dickinson, Lumsdon & Slow, 2011; Caffyn, 2012) 2012).

The distinctive features of the landscape, which is one of the elements qualifying "slow" areas, are linked to a non-quantitative growth

development strategy, but looking for hospitable spaces away from the spectacular architectural design (Lanzani, 2005). In the model of development of "slow territories", the landscape becomes the glue for the actions of the different players of the territory (both public and private) and for sectoral policies.

The "slow territories" are not therefore just a model of local development, but a growth trajectory that combines economic growth, social cohesion and environmental protection (CST, 2009, Pink, 2008). Some authors refer, in this regard, to the idea of soft economy in which the development strategy of the territory is based on knowledge, identity, history, creativity, able to combine social cohesion and economic competitiveness.

In this perspective, the territory is the central competitive factor, since it is the area that develop and consolidate identity and collective interests. In this virtuous growth circuit, the main actors are the industrial manufacturing base of territorially-based quality, linked to the land agriculture, the third sector, tourism (Parra, 2010). The "slow" areas are as capable of mixing rural and urban aspects traits, developing original growth trajectories in multi-sector perspective that makes these territories with more development engines (Michael, 2000; Miele, 2008; Lumsdon & McGrath 2011).

In this perspective, the territory become the key competitive factor, since it consolidates the local identity and promotes collective interest. The "slow" areas are as capable of mixing rural and urban aspects traits, developing original growth trajectories in a multi-sector perspective (Rizzo, 2016).

The polyvalent nature of this development implicates new approaches to the measurement of its various aspects. In particular, it assumes importance the search of a method of multidimensional evaluation of the development, that allows to gather the different factors that competes to the formation of the comfort and the quality of the life (Sen, 1999; Stiglitz, Sen & Fitoussi, 2009).

Innovative relationships between agricultural and industrial realities, new processes of exploitation of local products, cultural heritage and landscape are the distinctive features of these territories, which are grafted on a strong traditional identity, based on reciprocity, trust, attachment to the roots (Fukuyama, 1995). It is precisely because of these characteristics that the territory can become a promoter of quality districts, based on the exploitation of local roots, the landscape, the communities.

Some strands of studies recognize in these traits typical feature of the industrial districts (Visconti, 1996): the presence of a population of small and medium-sized enterprises among which are established cooperative relations,

the geographical boundaries, the existence of homogeneous values and a strong territorial identities.

In recent years, the "slow territories" have initiated an intense process of construction or reconstruction of a local identity, which gives renewed value to the share capital, fiduciary relationships, traditions, lifestyle, sustainability. These contexts have become witnesses of an active land policy, understood as the construction of local areas with a high quality of life, relying on the recovery and enhancement of the individual features, attention to the environment, the ability of cultural resources, crafts, landscaping to narrate the history and local tradition.

Slow Territories and Sustainability At the centre of the development policies of the "slow territories", especially in recent years, there is not only competitiveness, but increasingly the habitability and sustainable development (Giaoutzi & Nijkap, 1993; Evans, Joas, Sundback & Theobald,2006; Roberts & Simpson, 1999). The idea of physiological evolution of the territory, consistent with the concept of sustainability, refers to the definition of sustainable development offer in the 1987 Brundtland Report: the direction of investments the orientation of technological development and institutional

investments, the orientation of technological development and institutional changes are harmonized so as to take into account both the present necessities and that of future generations.

Sustainability is therefore a concept that encompasses three components: economic growth, dynamic balance of the environment, social cohesion and inclusion. Each of these components is divided into a number of specific conditions that take on a different significance in relation to the particular model of sustainable development that a given territory intends to follow (the United Nations Environment Programme).

With regard to the environmental component, the management of a territory and the use of the resources available go in the direction to simultaneously optimize current results and enrichment or at least the maintenance over time of the wealth of resources available. In terms of environmental sustainability, several instruments are nowadays consolidated: environmental sustainability, several instruments are nowadays consolidated: the local Agenda 21, reporting and environmental accounting, environmental appraisal systems, urban planning at different levels. In this sense, and with particular reference to the "slow" territories, the concept of sustainable development is to be superposed on the sustainable landscape: it refers to the ability to preserve the quality of natural and environmental resources, as a pillar of a new concept of well-being and lifestyle. In essence, the management of a territory increasingly aims to enrich (or at least maintain over time) the wealth of available resources. This means that their use must be done in ways that favor the replicability over time or at least limit the depletion of the resources.

In a wider perspective, the land management aims to achieve a number of conditions (Caroli, 2006): a proper balance in the satisfaction of the interests of different stakeholders; the participation of all stakeholders to the benefits arising from the social-economic development of the territory, the extension of opportunities for access to factors of economic growth, social and cultural development for all people living in the territory; the gradual reduction of both economic and social differences between the subareas that comprise the territory. In this framework, the economic and

areas that comprise the territory. In this framework, the economic and industrial policy choices made by the governing bodies play a fundamental influence on the degree of environmental and social sustainability, as a driver of the economic growth of a territory (Lancerini, 2005). The conditions for the sustainable development of a territory pass through the synergistic integration of three dimensions: economic, social and environmental development. The synergistic balance between the different components of sustainability is achieved operationally by several means: organization of territorial spaces, development of community welfare systems, promotion of lifestyles and ways of organizing both economic and social activities. In this framework, there is also the search for different rhythms and lifestyles which can become a political and social trajectory of rhythms and lifestyles, which can become a political and social trajectory of growth. The promotion of lifestyles oriented to waste reduction and reuse of

growth. The promotion of lifestyles oriented to waste reduction and reuse of resources, as well as models of organization of production activities that go in the direction of an efficient use of resources, are just some examples of local policies aimed at sustainability (Pavione & Pezzetti, 2016a). Sustainable development of a territory is therefore the result of different territorial government choices, made by defining a balance between economic development, ecological, cultural and social strategies. This integration requires a complex process of involvement of all stakeholders operating in a territory, both public and private, in a systemic long-term vision. Such passage, as will be noted later in this work, it is crucial to ensure a territory a sustainable development trajectory over time (Pavione & a territory a sustainable development trajectory over time (Pavione & Pezzetti, 2016b)

#### Conclusion

The management strategies of a territory is nowadays increasingly focus on the concept of sustainable development. Tourism represents an activity which, more than others, is based on an intrinsic and composite relationship with the both natural and social environment of territories. The "slow territories", which are characterized by the ability to enable original development paths quality-oriented, consistent with their vocation, are nowadays increasingly attractive to tourists who are looking for

high quality experiences, pleasant places, local traditions and exclusivity, far away from the highly urbanized contexts and from standardised tourism destinations. The development of these territories in the direction of strong recovery of identity and sustainability is consistent with the changing characteristics of the tourism market, which shows the growth of a substantial segment of demand seeking an experiential holiday away from the traditional routes, in the choice of which is gaining greater weight both ethical and environmental variables. In this context, the ability to integrate the three dimensions of sustainability (environmental, economic and social) may represents a response of the smaller destinations to competitive challenges they are facing (Giaoutzi & Nijkamp, 1993; Turnock, 2002). In this perspective, the "slow territories" may qualify as new tourist

In this perspective, the "slow territories" may qualify as new tourist districts, whose peculiarity is based on several interrelated factors: the specialization of enterprises not for the production phase, but by product excellence; the cultural and historical heritage; the valorisation of natural and cultural resources, the exclusivity of local product (such as food, wine, craftsmanship) often based on the valorisation of the Made in factor. In doing so, the district takes on the character of a territorial organisational entity characterized by both high quality companies that run tourist activities, either by a set of often unique environmental, cultural and social resources that make the area a tourism destination for a new segment of demand more aware and attentive to responsible and sustainable dimension of the holiday. (Lazzaretti & Petrillo, 2006; Pavione & Pezzetti, 2016).

#### **References:**

Andereck, K.L. (2009). Tourists' perceptions of environmentally responsible innovations at tourism businesses. Journal of Sustainable Tourism, 17, 489-499, 2009.

Bramwell, B., Henry, I., Jackson, G., Prat, A.G., Richards, G. & van der Straaten, J. Sustainable Tourism Management: Principles and Practice. Tilburg: Tilburg University Press, 1996.

Buhalis, D. Marketing the competitive destination of the future. Tourism Management, 21(1), 97-116, 2000.

Barile, S., Saviano, M., Polese, F., and Di Nauta P. Il rapporto impresaterritorio tra efficienza locale, efficacia di contesto e sostenibilità ambientale. Sinergie, 90, 25-49, 2013.

Buhalis, B. Marketing the Competitive Destination of the Future. Tourism Management, 21, 97-116, 2000.

Caffyn, A. Advocating and Implementing Slow Tourism. Tourism Recreation Research, 37(1), 77-80, 2012.

Chafe, Z. Consumer Demand and Operator Support for Socially and Environmentally Responsible Tourism Key Findings. Wikieducatororg CESD/TIES, 104, 1-15, 2005.

Caroli, M.G. Il marketing territoriale. Strategie per la competitività sostenibile del territorio. Milano: Franco Angeli, 2006. Caruana, R., Glozer, S., Crane, A., & McCabe, S. Tourists' Accounts of

Responsible Tourism. Annals of Tourism Research, 46, 115-129, 2014.

Cherubini, S. Cooperazione e competizione nel settore dell'entertainment. Economia e Diritto del Terziario, 20(2), 233-259, 2008.

CST. Sviluppo turistico e territori lenti. Milano: Franco Angeli, 2006.

Dickinson, J.E., Lumsdon, L., and Slow, R.D. Slow travel: issues for tourism and climate change. Journal of Sustainable Tourism, 19, 281-300, 2011.

R.D. Ecotourism: Donohoe. H.M., and Needham, The evolving

contemporary definition. Journal of Ecotourism, 5(3), 192-210, 2006. Evans, B., Joas, M., Sundback, S., and Theobald K. Governing local sustainability. Journal of Environmental Planning and Management, 49(6), 849-867, 2006.

Folorunso, S., and Ojo, A. Slow tourism: experiences and mobilities. Anatolia, 24(2), 278-280, 2013.

Franch, M. (Ed.) Destination management. Governare il turismo fra locale e globale. Torino: Giappichelli, 2002.

Franch, M., Sambri, C., Martini, U. Pegan, G. and Rizzi, G.. La domanda di turismo responabile e di eco-turismo in Italia. Un'indagine esplorativa sui turisti. CTS. Proceeding of the Conference: Marketing Trends, Università Ca' Foscari. Venice, 2008. Frey, N. and George, R. Responsible tourism management: the missing link between business owners' attitudes and behaviour in the Cape Town tourism industry. Tourism Management, 31(5), 621-628, 2010.

Fukuyama, F. Trust. The Social Virtues and the Creation of Prosperity. New York: FreePress, 1995.

Giaoutzi, M., and Nijkamp, P. Decision Support Model for Sustainable Development. Avebury: Aldershot, 1993.

Golinelli, G.M. L'approccio sistemico al governo dell'impresa. La dinamica evolutiva del sistema impresa tra economia e finanza. Padova: Cedam, 2002.

Goossens, C. Tourism Information and Pleasure Motivation. Annals of Tourism Research, 27(2), 301-321, 2001.

Han, H., Hsu, L.T., and Lee, J.S. Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. International Journal of Hospitality Management, 28, 519-528, 2009. Lancerini, E. Territori lenti: contributi per una nuova geografia dei paesaggi

abitati italiani. Territorio, 34, 9-15, 2005.

Lanzani, A. Geografie, paesaggi, pratiche dell'abitare e progetti di sviluppo. Territorio, 34, 19-37, 2005.

Lazzaretti, L., and Petrillo C., Tourism Local Systems and Networking, London: Elsevier, 2006.

Lumsdon, L., and McGrath, P. Developing a conceptual framework for slow travel: a grounded theory approach. Journal of Sustainable Tourism, 19(3), 265-279, 2011.

Meng, B., Kyuhwan C. Extending the theory of planned behaviour: testing the effects of authentic perception and environmental concerns on the slow-tourist decision-making process. Current Issues in Tourism, 19(6), 528-544, 2016.

Michael C.H. Degrowing Tourism: Décroissance, Sustainable Consumption and Steady-State Tourism. Anatolia, 20(1), 46-61, 2009.

Miele, M. CittàSlow: Producing slowness against the Fast Life. Space and Polity ,12(1) 135-156, 2008.

Mutti, A. Capitale sociale e sviluppo. La fiducia come risorsa. Bologna: Il Mulino, 1998.

Parra, C. Sustainability and multi-level governance of territories classified as protected areas in France: the Morvan regional park case. Journal of Environmental Planning and Management, 53(4), 491-509, 2010. Pavione E., Pezzetti R., *"Evolution of tourism demand and development of* 

Pavione E., Pezzetti R., "Evolution of tourism demand and development of sustainable tourism: what impact on tourist destinations?", Strategica International Academic Conference, Fourth Edition, Opportunities & Risks in the Contemporary Business Environment, College of Management, National University of Political Studies and Public Administration, Bucharest, Romania, October 20-21, ISBN: 978-606-749-181-4, ISSN: 2392-702X (2016a).

Pavione E., Pezzetti R., "The valorisation of "slow territories" through the development of sustainable and experiential tourism", Strategica International Academic Conference, Fourth Edition, Opportunities & Risks in the Contemporary Business Environment, College of Management, National University of Political Studies and Public Administration in Romania Bucharest, Romania, October 20-21, ISBN: 978-606-749-181-4, ISSN: 2392-702X (2016b)

Pencarelli, T., and Splendiani, S. Il governo delle destinazioni e dei prodotti turistici: analisi di alcune esperienze. Mercati e Competitività, 2, 91-121, 2008.

Pink, S. Sense and sustainability: The case of the Slow City movement. Local Environment , 13(2), 95-106, 2008.

Plog, S.C. Why Destinations Areas Rise and Fall in Popularity. Cornell Hotel and Restaurant Administration Quarterly, November, 13-16, 1974.

Poon, A. Tourism, Technology and Competitive Strategies, 3. Wallingford: Cab International, 1993.

Rizzo, A. Declining, transition and slow rural territories in southern Italy Characterizing the intra-rural divides. European Planning Studies, 24(2), 231-253, 2016.

Roberts, L., and Simpson, F. Developing Partnership Approaches to Tourism in Central and Eastern Europe. Journal of Sustainable Tourism 7(3-4), 314-330, 1999.

Rullani, E. Reti globali e reti metropolitane per l'economia del Nordest: In Banco Ambrosiano Veneto (Ed.), Nord-Est: fattori di competitività. Bologna: Il Mulino, 1996.

Sen, A. Development as Freedom. Oxford: Oxford University Press, 1999.

Staber, U. The Structure of Networks in Industrial Districts. International

Journal of Urban and Regional Research, 25(3), 537-552, 2001. Stanford, D. Exceptional Visitors': Dimensions of Tourist Responsibility in the Context of New Zealand. Journal of Sustainable Tourism, 16(3), 258-275, 2008.

Stiglitz, J., Sen, A., and Fitoussi J. Report by the Commission on the Measurement of Economic Performance and Social Progress, CMEPSP, 2009, www.stiglitz-sen-fitoussi.fr

Tamma, M. Destination management: gestire prodotti e sistemi locali di offerta, in M. Manente, and F. Cerato M. From Destination to Destination Marketing and Management. Designing and Repositioning Tourism Products. Venice: Cafoscarina, 2002.

Turnock, D. Prospects for sustainable rural cultural tourism in Maramure. Romania Tourism Geographies, 4(1), 62-94, 2002. Visconti, F. Le condizioni di sviluppo delle imprese operanti nei distretti

industriali. Milano: Egea, 1996.

Wearing, S., Cynn, S., Ponting, J. and McDonald, M.. Converting environmental concern into ecotourism purchases: a qualitative evaluation of international backpackers in Australia. Journal of Ecotourism, 1, 133-148, 2002.

Weaver, D.B., Lawton, L.J. Twenty years on: the state of contemporary ecotourism research. Tourism Management, 28(5) 1168-1179, 2007.

# **Re-Industrialization of Europe: Industry4.0 and the Future of Work**

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#### Abstract

The term "Industry 4.0" was first introduced in Germany in 2011. It refers to digitising industrial production. The concept outlines the vision of a smart factory, which is characterised by the complete networking of all production processes: real time control via ITC and the increased use of robots, which control themselves, are developments that should contribute to greater productivity and efficiency. The concept of Industry 4.0 is a base of re-industrialization of Europe. Industry 4.0 is shaping the digital discourse in the Czech Republic as well. The first step was the release of the National Initiative: Industry 4.0 by the Czech Ministry of Trade and Industry in 2015. We are now at the beginning of a fundamental debate that is still presenting more questions than offering answers. The aim of this paper is to discuss the issue: re-industrialization and its consequences for the world of work. If widespread predictions are correct, the digitisation of production can mean the extinction for millions of jobs. Innovations may seem grandiose, but they can also be destructive, rendering entire professions obsolete.

**Keywords:** Industry 4.0, re-industrialization of Europe, future of work, employment

#### Introduction

The term "Industry 4.0" was first introduced by the German Industry-Science Research Alliance in 2011 (Bullinger, 2013). The concept describes how the Internet of Things, Data and Services¹⁶ will change production, logistics and work processes in the future (Kagermann, 2014). The changes brought about by networking based on the Internet of Things, Data and Services have a greater impact than for industrial production alone because they affect not only our economies, but also the world of work and social life as a whole. Industry 4.0 is more a vision than a reality, but it is already

¹⁶ The concept Industry 4.0 involves many elements of the industrial value chain and it is based on the Internet of Thinks, Data and Services, sometimes called the Internet of Everything.

prepared to change not only industry, but also word of work. The paper is focused on two key questions, which guide this paper: What is Industry 4.02

What is Industry 4.0?

What does this mean for the world of work?

#### What is Industry 4.0?

Industry 4.0 or the Fourth Industrial Revolution, is the current trend of automation, cybernation and data exchange in manufacturing technologies¹⁷. It is based on the <u>Internet of Things</u>, Data and Services and creates what is called a "smart factory": Within the modular structured smart factories, cyber-physical systems (hereafter "CPS") monitor physical processes, create a virtual copy of the physical world and make decentralized decisions (Herman, 2014). Cyber-physical systems communicate and cooperate with each other and with humans in real time via the Internet of Things. Services are offered and used by participants of the value chain via the Internet of Services (Platform Industrie 4.0, 2015).

In the context of the Fourth Industrial Revolution researchers and industry representatives also discus about a new organisation and steering of the entire value chain, which is increasingly becoming aligned with individual customer demands. The value chain covers the entire lifecycle of a product, from the initial idea through the task of developing and manufacturing it to successive customer delivery as well as the product's recycling. Growing digitisation brings us to the "second machine age" (Brynjolfsson, 2014). This is due to the fact that data forms the material of this Fourth Industrial Revolution.

Fourth Industrial Revolution is based on CPS. Comparison with the previous levels of industry, see table 1.

Level of complexity		Time period
The First Industrial	mechanical production facilities	end of 19th century
Revolution	using water and steam power	
The Second Industrial	diversified mass production using	beginning of 20th
Revolution	electric energy	century
The Third Industrial	further automation of production	beginning of 1970s
Revolution	through use of electronics and IT	
The Fourth Industrial	cyber-physical systems	nowadays
Revolution		

Table 1: Industrial revolutions one to four: the level of complexity

Source: Spath, 2013

¹⁷ Although Industry 4.0 is currently a top priority for many companies, research institutions and universities, a generally accepted understanding of the term does not exist. As a result, discussing the topic on an academic level is difficult.

The concept Industry 4.0 is based on networking. Large amounts of data (big data) is generated as a virtual copy of the physical world. Whoever can access this limitless data treasure, will benefit, above all from flexibility and efficiency. Industry 4.0 could become a result of this ongoing digitisation in which everything along the value creation chain is networked and all of the relevant information can be independently and directly exchanged between the individual chain links. Linking people, objects and systems will lead to dynamic, real-time-optimised and self-organising, cross-company value added networks that can be optimised according to different criteria, for example cost, availability and resource consumption (Plattform Industrie 4.0, 2015).

In the future, the objects could communicate with each other directly and independently. They consult one another about what should happen to them next. This means that objects will become machine-readable. Thus, products will be able to express many things. Sensors and actuators will ensure that the data from scanners and computers can be distributed and processed directly. The Internet of Things and Services is the result and it promises to merge the physical and the virtual world into CPS (<u>Wan</u>, 2015). The guiding theme of the future developments outlined above seems

The guiding theme of the future developments outlined above seems to be: "anything that can be digitised will be digitised" and accordingly, the scenario of the future developments is ambitious. Researchers and industry representatives emphasize the opportunities of the concept Industry 4.0: Real-time networking of industrial processes makes production cheaper, sustainable and efficient and digital networking allows the direct involvement of customer demands. The IT and TC sectors will be the first to see the benefits. Creators and providers of software solutions for big data analysis, networking and digitisation can most likely look forward to increases in orders. Many more industries, however, will probably be deeply impacted by Industry 4.0 developments: machine and facility engineering, electrical equipment manufacturers, the chemical industry, car makers and their suppliers, but also the logistics industry as well as agriculture.

#### Changes in the area of world of work

What is meant by the concept Industry 4.0 for the world of work? There is no definitive answer to this question at the moment. The estimates are uncertain and differ. Rather, most of the scenarios revolve around a more complex relationship between humans and machines (Kurz, 2014):

The **automation scenario**: systems direct humans. Monitoring and control tasks are taken over by technology. It prepares and distributes information in real time. Employees respond to the needs of cyber-physical systems and take on primarily executive tasks. The abilities of lesser skilled workers are thereby devalued.

The **hybrid scenario**: monitoring and control tasks are performed via cooperative and interactive technologies, networked objects and people. The demands on employees increase because they have to be considerably more flexible.

The **specialisation scenario**: people use systems. CPS is a tool to support decision-making. The dominant role of the qualified workers is maintained.

Digitisation and Industry 4.0 will change work in the future. Automation will enable ever smaller series production, labour will nevertheless continue to be an important part of production. The concept Industry 4.0 means, however, much more than networking of all things. The future includes intelligent data acquisition, storage and distribution by objects and people. Traditional production-line workers' and knowledge workers' tasks will amalgamate to an ever greater degree (Spath, 2013). As a result, many labour processes will be carried out more efficiently and effectively in the future. The processes will also provide a variety of new assistance systems. This means that administration processes will be further automated as well. A variety of options will open up to certain labour groups (especially the highly qualified) to design their own working life, both in terms of where and when they do their jobs as well as the nature of the activity and access to the task at hand. A polarisation of employment thus assumed to be on the horizon in which certain jobs with mid-level skill requirements and wages will be the first to be made redundant as the consequence of Industry 4.0.

Frey and Osborne forecast that half of all the jobs in the US labour market could feel the effects (Frey, 2013). Accordingly, vocations at the lower and upper ends of the qualification spectrum that are less automatable and more experience- and interaction-based professions would gain in relevance. This is also where we can expect to see completely new fields arise (Picot, 2014). Furthermore, due to increased outsourcing, the droves of "click workers" and "cloud labourers" *who are poorly paid and less socially secure as freelancers will most likely grow.* The world of work is undergoing a major process of change. The main force of transforming it is onward march of technology. The robots are coming and if the forecasts are correct, it can mean the extinction for millions of jobs. Innovations may seem grandiose, but they can also be destructive, rendering entire professions obsolete even as they boost productivity and convenience.

If widespread predictions are correct, automation in the workplace is set to increase at an unprecedented rate. There's going to be a huge change, comparable to the industrial revolution (Acemoglu, 2014).

comparable to the industrial revolution (Acemoglu, 2014). One issue that will loom ever larger as the incidence of automation increases, is income and social inequality. Automation is fundamentally the substitution of capital for labour. The problem is that the people who already have the capital are the ones who will benefit most, because they are the ones who will invest in the new automation. In other words, the rich will get richer and the rest will suffer. The Internationale Labour Organization (hereafter: "ILO") needs to respond to the future of the work ongoing changes in order to be able to advance its mandate for social justice. Therefore, the ILO has launched a four - year initiative at fostering discussion on the future of work named The Future of Work Centenary Initiative (ILO, 2016):

In 2016 all ILO members States were invited to undertake national "future of work" dialogues structured around four "centenary conversations":

Work and society Decent jobs for all The organization of work and production The governance of work

The governance of work In 2017 a High Level Global Commission on the Future of Work will be established. Its purpose will be to examine the output from the national dialogues and other input it may consider necessary. The Commission will publish a report and recommendations in the course of 2018. In the first half of 2019, all member States will be invited to organize events to mark the ILO's centenary and to discuss the Commission's report. The culmination of the "Future of Work" initiative will be the 2019

International Labour Conference, with the possible adoption of a Centenary Declaration.

**The Czech National Initiative of the Industry 4.0** The Ministry of Industry and Trade of the Czech Republic, released the National Initiative 4.0 Industry (MPO, 2015) in September 2015, which follows the concept of German Industry 4.0. Czech initiative is a challenge to launch a debate on the possible impacts of the introduction of the 4.0 Industry in Czech economic environment. The aim of this initiative is to encourage the creation of a suitable economic environment in which the Czech industry will respond to the challenges of new industry trends. It is expected that many jobs will disappear and new ones will emerge in the future on the Czech labor market. An important element will therefore be the creation of lifelong learning.

Technological progress is driven by research and development (hereafter R & D). Paul Romer's model for endogenous growth provides theoretical explanation: the greater the proportion of an economy's labour force involved in research sectors, the stronger that economy's growth. Since its inception, many innovation analyses and innovation-policy approaches have been following this principle all over the world. The formula is then:

more is better. That means one can invest as much as possible in research and development and supposedly sit back and watch the positive effects on production and the blossoming market (Romer, 1994). Importance and position of R & D is in the Czech Republic slightly below the EU average: the share of expenditure on R & D was 2% of GDP over the period 2012-2014 in the Czech Republic, the average expenditure on R & D in the EU was 2.5% of GDP. But in the developed European countries (Sweden, Great Britain, Denmark), these expenses amounted to 3% of GDP. The share of employees in R & D per 1,000 employees was 13 employees in the Czech Republic, in developed European countries amounted to 20 employees per 1,000 in the years 2012-2014 (CSU, 2015).

#### Conclusion

In the future, companies will network their equipment, storage systems, resources, employees, supplier and partner companies and their customers via cyber-physical systems. There is enormous potential behind Industry 4.0: individual customer demands can be taken into account and even one-off, tailored production may become profitable; production will become faster and more flexible; this reduces the resource usage and become faster and more flexible; this reduces the resource usage and improves productivity. Employee productivity may also greatly improve. Flexible work options could allow for better work-life balance in terms of both time and location. A variety of options will open up to certain labour groups (especially the highly qualified) to design their own working life, in terms of where and when they do their jobs. The result of Industry 4.0 will be in the future, that many labour processes will be carried out more efficiently and effectively by cyber-physical systems. The processes will also provide a variety of new assistance systems. This means that administration processes will be further automated as well. A polarisation of employment thus assumed that certain employees will be made redundant as the consequence of Industry 4.0. One issue that will loom ever larger as the incidence of automation increases, is income and social inequality. Automation is

automation increases, is income and social inequality. Automation is fundamentally the substitution of capital for labour. The problem is that the people who already have the capital are the ones who will benefit most, because they are the ones who will invest in the new automation. In other words, the rich will get richer.

The Ministry of Industry and Trade of the Czech Republic, released the National Initiative 4.0 Industry (MPO, 2015) in September 2015, which follows the concept of German Industry 4.0. Czech initiative is a challenge to launch a debate on the possible impacts of the introduction of the 4.0 Industry in Czech economic environment. The aim of this initiative is to encourage the creation of a suitable economic environment in which the

Czech industry will respond to the challenges of new industry trends. It is expected that many jobs will disappear and new ones will emerge in the future on the Czech labor market. But Industry 4.0 still has to prove its benefit to society. Only when the developments within and around Industry 4.0 result in social added value, when new technologies, regulations, services and organisations establish themselves in the society and when these social practices prove to be "better for people", will we have recognised and put the potential for Industry 4.0 to work Industry 4.0 to work.

#### Acknowledgement

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#### **References:**

Acemoglu, Daron, and David Autor. Skills, Tasks and Technologies: Implications for Employment and Earnings. Working Paper 16082. Cambridge: National Bureau of Economic Research (NBER), 2011. Brynjolfsson, Erik, and Andrew McAfee. The Second Machine Age: Progress, and Prosperity in a Time of Brilliant Technologies. New York: W.W.Norton @ Company, 2014. Bullinger, Hans Jorg, Henig Kagermann, and Thomas Weber.

Bullinger, Hans Jorg, Henig Kagermann, and Thomas Weber. Perspektivenpapier der Forschungsunion Wohlstand durch Forschung – Vor welchen Aufgaben steht Deutschland? [Online] 2013. Available: http://www.forschungsunion.de/pdf/forschungsunion_perspektivenpapier_20 13.pdf.

CSU (Czech Statistical Office). Research and Development Indicators - 2014: Summary of basic data on research and development in 2014. Czech Statistical Office. [Online] 2014. Available:

http://www.czso.cz/csu/czso/ukazatele-vyzkumu-a-vyvoje-za-rok-2014. Frey, Carl Benedict, and Michael Osborne. The Future of Employment: How Susceptible are Jobs to Computerisation? Oxford: Oxford Martin School, 2013.

Ganz, Walter. Welche Rolle spielen die Dienstleistungen in der Industrie 4.0? Berlin: Fraunhofer IAO, 2014.

Herman, Mario, Tobias Pentek, and Boris Otto. Design Principles for Industrie 4.0 Scenarios IEEE Xplore Digital Liberary. [Online] 2013... Available:

http://ieeexplore.ieee.org/xpl/abstractAuthors.jsp?arnumber=7427673&news earch=true&queryText=industrie%204.0%20design%20principles. ILO (International Labor Office). The future of work centenary initiative-

2016. [Online] 2016. Available:

http://www.ilo.org/global/topics/future-of-work/WCMS_448448/lang-en/index.htm.

Kagermann, Henig. Smart Service Welt - Internetbasierte Dienste für die Zwischenbericht des Arbeitskreises. Progress Report of the Wirtschaft. working group. [Online] 2014. Available: http://www.acatech.de/smart-service-welt.

Kurz, Constanze. Mensch, Maschine und die Zukunft der Industriearbeit, Vortrag auf der Fachkonferenz Münchner Kreis "Maschinen entscheiden: vom Cognitive Computing zu autonomen Systemen". Munich: Fraunhofer IAO. 2014.

MPO CR (Ministry of Industry and Trade of the Czech Republic). National Initiative: Industry 4.0. Prague: Ministry of Industry and Trade of the Czech Republic, 2015.

Picot, Arnold, and Rahild Neuburger. Arbeit in der digitalen Welt: Zusammenfassung der Ergebnisse der AG 1-Projektgruppe anlässlich der IT-Gipfelprozesse 2013 und 2014. Hamburg: Fraunhofer IAO, 2014. Plattform Industrie 4.0. Whitepaper FuE Version 2015. [Online] 2015.

http://www.zvei.org/Downloads/Automation/Whitepaper-I40-Available: FuE-Themen-2015-04.pdf.

Romer, Paul. M., The original of Endogenous Growth. Journal of Economic Perspectives, Volume 78, Number 1, pp 3-32. [Online] 1994. Available: http://www.development.wne.uw.edu.pl/uploads/Courses/de_jt_romer1.pdf. Spath David, Produktionsarbeit der Zukunft: Industrie 4.0. Fraunhofer

Institut für Arbeitswirtschaft und Organisation (IAO). [Online] 2013. Available:

http:// www.iao.fraunhofer.de/lang-de/images/iao-news/produktionsarbeitder-zukunft.pdf.

Wan, Jiafu, Li Di, and Chunhua Zhang. Industrie 4.0: Enabling Technologies. Proceedings of 2015 International Conference on Intelligent Computing and Internet of Things. pp.: 135-140. [Online]. (January, 2015).Available:

http://www.ieee.org/conferences_events/conferences/conferencedetails/index .html?Conf ID=35436.

# Mind Set of Indian Accounting Professionals and Environmental Accounting

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#### Abstract

Those who do not plan, cannot control and it is difficult for them to control if they do not have an accurate measurement. Those who do not measure cannot report. If not reported, the regulating authorities and governments will not have an effective control on pollution to fulfill the global requirements. The mindset of financial accounting professionals who prepare financial accounts and reporting to shareholders and management is positive which would help the Government of India for the implementation of environmental accounting and reporting to the stake holders. Structured questionnaire were used and collected as primary data. The accounting professionals were in the opinion that reporting on environment related issues of the company would give positive impact on the Indian companies.

Keywords: Financial Statement, Environment Accounting, Reporting, Professionals

#### Introduction

A research conducted by Augsburg a German researcher indicates that in 7.9 microgram per cubic meter increase in soot and other PM, there is 15% higher rate of insulin resistance, a market of Type 2 diabetes. For prediabetics, the risk increased by almost 46% for each unit increase in air pollution also has insulin resistance. According to the World Health Organisation, 22 of the 50 urban areas with worst ambient air pollution are from India. A huge leap to production of 100 gigawatts of solar power by 2022 is part of the plan which is increased from 20GW. Recently, in May 2016, India produced 7568 MW from solar. It has to achieve 100GW which is equivalent to 1,00,000 Mega Watt. In order to achieve this target of 100GW, it requires \$1 trillion worth of investment by 2030. The budget of

2015-2016 had allocated around \$500 million for energy generation through solar energy. 55 countries which account for 55% of global emissions ratify the Paris agreement on  $2^{nd}$  October 2016 where US and China contribute 38% of global pollution. With the ratification, India will have to start working on its energy plans which have become part of the Paris process in reduction of usage of fossil fuel especially coal related power production. According to KPMG report, the solar prices have come down by 15%. According to KPMG report, the solar prices have come down by 15%. Environmental accounting, reporting has to be made compulsory for all registered companies in India and also for those companies having trade operations in India. If we cannot measure, we cannot control it. If we have to control, we have to plan. If those pollutions are not reported by polluters, Government may loose control over pollutants. It becomes difficult to achieve global requirements to control pollution.

#### **Methods and Material**

A study based on 350 Accounting Professions who are involved in the preparation of financial accounting and reporting from South India. The frequency distribution was prepared based on questionnaire and

statistically analysed by using F-ratio and factor analysis

**Objectives of the study** The following are the objectives of the study: 1. To study the updated knowledge and awareness of professional accountant who prepares and reports on financial accounting on environmental accounting after SEBI's guidelines on Responsibility reporting.

To study the present knowledge and awareness of professional accountant who prepares and reports on financial accounting on Sustainability reporting by GRI by Indian companies.
 To analyse whether the "Environmental Reporting Firm" will have a

better market price or not.

#### **Review of literature**

UN CSD 2001 and Deegan (2003), Horngren and Foster (1987) -Under environmental accounting, both monetary units (MU) and Physical units(PU) are considered to be important. This is not new under traditional accounting. 1/5 of large companies in high carbon sectors do not report

on carbon. Example: Mining and Chemicals. **Akerlof(1970),** The firms which earn more profit are more likely to disclose more information on pollution comparing to less profitability firm who screen themselves from less profitable firm.

**Auperle, K.E, Carroll, A.B & Hatfield, J.** (1985), "An Empirical examination of the relationship between Corporate Social Responsibility and Profitability" Academy of Management Review, 28(2), pp446-463.

Bassevl, Sunday E.Eton(2013) **O.Effiok**, Evo Bassev organizational performances were enhanced due to environmental cost management which had influence on profitability. Lack of environmental reporting and disclosure standards significantly affected the reporting and uniformity in disclosure of environmental related information. Belkaoui and Kirkpin(1989) There was a significant pair of

correlation but an insignificant regression co-efficient for the return on assets and corporate socio-economic environmental accounting disclosure. It was also identified that different terms are used under social responsibility accounting such as: Social Performance Information, Social Audit, Social Accounting, Social Responsibility Accounting and Social and Environmental Reporting.

Charles J. Coate & Karen J. Frey (2011) Accountant's eye shades may soon be turning away from money green to environmental green. Why? Because environmental accounting and reporting are of increasing importance for businesses.

Coven et.al.(1987) found no association between environmental

accounting and profitability. **Disu and Gray(1998)** founded that less than quarter of companies disclosed environmental, equal opportunities and consumer areas. The study was conducted for the years 1994 and 1995.

European companies have made a lot of reports on targets for carbon reduction. Asia Pacific are the least likely to publish targets for carbon reduction.

European companies score the highest in carbon reporting, whereas, the US, Asia Pacific countries including China are the least likely to report on carbon.

Half of the companies which reported on carbon earned the benefit of carbon reduction.

Kisenyi and Gray (1998) observed that out of the four companies selected, none of them made any environmental disclosure. They concluded that social and environmental disclosure in Uganda was given little importance, low grade and scarce.

**KPMG's Survey Of Carbon Reporting Of 250 Largest Companies (2015)** in KPMG professionals analysed reporting from 4500 companies across 45 countries. It is one of the most comprehensive and authoritative reports on non-financial reporting. This study reports on Carbon Reporting based on top 100 companies in each of the 45

countries. It also assessed the quality of CR reporting from the world's 250 largest companies. The findings were as follows: Only 1/3rd of the companies target reduction of carbon explained

why they had chosen those target years.

Rees (1995) As there was no proper standard on environmental accounting, each author proposed different frameworks.

S.C. Bansal and Shuchi Pahuja(2010) In their paper, they identified that environmental management had received increasing attention of the investors, creditors, employees, government, and other stakeholders in the corporate sector. Although many studies had examined corporate environmental disclosure practices all over the world, only a few had addressed the issues relating to environmental accounting.

Shil & Iqbal (2005), The most widely used technique for analysis of narratives in annual financial reports was Content Analysis. In order to deviate from this, Multiple Regression Models were used. It was observed that most of the studies were conducted in developed world and very few studies focused on developing countries such as India.

There was a lack of consistency in the carbon information. Therefore almost it was impossible to compare accurately one company's carbon performance with another.

Transport and leisure sector scored highest in Carbon reporting, whereas oil and gas companies scored the lowest. Less than 1/10th of the companies reporting carbon, reported on emission of such companies.

# **Analysis and Interpretation**

### Organizational policies and management support

Factor analysis technique is used to identify the underlying factors that organizational policies and management support in the companies. The seven factors were identified namely S1, S2 ......S7 is given below table

	Table 1.01 Kenability Analysis on Factor Stinulating			
No. of cases No. of Items		No. of Items	Reliability Coefficient Alpha	
	350	7	.689	

Table 1.01 Baliability Analysis on Faster Stimulating

shows that the reliability analysis on the factor Table 1.01 stimulating, reliability analysis scale ranges between 0.00 and 1.0 (were 0.0 = no reliability & 1.0= perfect analysis). From the table given above, it is observed that the reliability of coefficient alpha ( $\alpha$ ) for the 350 cases of 7 items is .689 (scale range between 0.0 to 1.0) which shows the reliability of the given factors.

Table 1.02			
	Measure of Sampling Adequacy	.762	
Kaiser-Meyer-Olkin	Approx. Chi-Square	493.783	
Bartlett's Test of Sphericity	Sig	.000	

The above Table 1.02 reveals Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of Sphercity have been applied, to the resultant correlation matrix to test whether the relationship among the variables has been significant or not as shown in table. The result of the test shows that with the significant value of 0.000 there is significant relationship among the variable chosen. KMO test yields a result of 0.762 which states that factor analysis can be carried out appropriately for these seven variables that are taken for the study.

Reporting practices on environmental	Ŭ	actor	Communalities
protection	1	2	
Increasing trend of shareholders' concern - S1	.187	729	38.978
Demand for environmental management – S2	.764	.197	54.667
Sustainable development – S3	.707	.264	67.818
Current development in corporate - S4	.737	027	78.363
Reporting practices on environment accounting – S5	.759	.003	87.609
Incomplete and inadequate industries practice –S6	.601	191	94.920
Awareness of the measurement –S7	.292	.683	100.000
Eigen value	2.728	1.098	3.826
Per cent of variance	38.330	16.336	54.667
Cumulative per cent	38.330	54.667	

Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization Rotation converged in 3 iterations

Table 1.02 illustrates that the principal component analysis and rotated factor loading method is used for stimulating factors. From the above table, it is observed that out of 7 factors, 2 factors are identified by the rotation method. The total per cent of variation in the factors show 54.667 per cent and total Eigen value of the factors is 3.826.

Clustering	of as store	into footoma
Clustering	of sectors	into factors

Factors	Sectors	Rotated factor Loadings
	Demand for environmental	
	management -S2	.764
	Reporting practices on	
I (2.967 per cent)	environmental accounting-S5	.759
	Current development in corporate	
	-S4	.737
	Suitable development- S3	.707
	Increasing trend of shareholders'	
	concern – S1	729
$\mathbf{H}(1,602 \text{ man cont})$	Awareness of the measurement –	
II (1. 603 per cent)	S7	.683
	Incomplete and inadequate	
	industries practice –S6	191

#### **Reporting practices and guidelines**

Table 1. 03: Individual environmental accounting policies

Company	Respondents	Per cent
Yes	58	17
No	203	58
Not sure	89	25
Total	350	100

Source: compute results based on primary data

The above table 1.03 is based on the question related to whether company where the individual works follows any environmental accounting policies or not, 17% of the respondents said 'yes'; 58% expressed 'No' and 25% of the respondents expressed 'Not sure'.

Table 1.04 : Acceptable guidelines and measurements

Company	Respondents	Per cent
Yes	125	36
No	186	53
Not sure	39	11
Total	350	100

Source: compute results based on primary data

Table 1.04 Responses to a question on whether company follows acceptable guidelines and measurements: 36% of the respondents expressed 'Yes'; 53% expressed "No'; and 11% expressed "Not sure'.

Required	Respondents	Per cent	
Yes	275	79	
No	47	13	
Not sure	28	8	
Total	350	100	

Motives of business organizations and knowledge Table 1.05 : Environmental reporting

Source: compute results based on primary data

From Table:1.05 relates to a question whether Environmental Accounting is practiced in the respondents' companies or not: 79% of the respondents expressed 'Yes'; 13% expressed 'No' and 8% of the respondents expressed 'Not sure'.

Table 1.06 : Environment Accounting and Quantitative reporting

Implementation	Respondents	Per cent
Yes	43	12
No	173	50
Can't say	134	38
Total	350	100

Source: compute results based on primary data

From Table:1.06 relates to a question whether environmental accounting and reporting quantitatively or not: - 12% of the respondents expressed 'Yes'; 50% of the respondents expressed 'No' and 38% of the respondents expressed 'Can't say'. It means majority of the companies were not expressed quantitatively.

Measure	Respondents	Per cent
Separate Legislation	241	69
SEBI Guidelines	82	23
Voluntary	27	8
Total	350	100

Table 1.07 : Measure of Environment Accounting

Source: compute results based on primary data

From Table:1.07 relates to a question whether whether separate legislation or SEBI's guidelines or voluntary environmental accounting to be imposed:- 69% of the respondents expressed for 'State Legislation'; 23% of the respondents expressed for 'SEBI's guidelines' and 8% expressed for 'voluntary'.

	Table 1.08 : Environmental Accounting			
	Awareness	Respondents	Per cent	
	Voluntary	209	60	
	Compulsory	40	40	
	Total	350	100	

# Awareness of report preparer / Educationist

Source: compute results based on primary data

From Table: 1.08 relates to a question whether environmental accounting should be made voluntary or compulsory:- 60% of the respondents expressed to 'Voluntary"; 40% of the respondents expressed to "Compulsory".

	Table 1.09. Reports	
particulars	Respondents	Per cent
Quantitatively	89	25
Qualitatively	39	11
Both	222	64
Total	350	100

Table 1 09 · Reports

Source: compute results based on primary data

From Table: 1.09 whether reporting on environmental Accounting should be made qualitatively, quantitatively and both, 25% of the respondents expressed that it should be quantitatively; 11% of the respondents expressed that it should be qualitatively and 64% of the respondents expressed both quantitatively and qualitatively.

particulars	Respondents	Per cent
Yes	115	33
Not sure	215	61
No	20	6
Total	350	100

Table 1.10 : Methods

Source: compute results based on primary data

From Table:1.10 related to a question whether selected South based companies follow any methods to measure environmental accounting; 33% expressed to "Yes'; 61% of the respondents expressed to 'Not Sure' and 6% expressed to "not sure".

Professional Institute	Respondents	Per cent
Big Four CA firms	142	40
Universities	80	23
GRI	87	25
Others	41	12
Total	350	100

Table 1.11: Course on environmental accounting

Source: compute results based on primary data

From Table:1.11 related to a question whether the respondents have a knowledge on courses on Environmental Accounting offered by universities/ professional institutions:- 40% of the respondents expressed to 'Big Four CA firms'; 23% of the respondents expressed to 'Universities' and 25% of the respondents expressed 'GRI' conducts courses on Environment; and 12% expressed that the courses run by others without mentioning specific name of the institution.

Various Stake holders	Respondents	Per cent
Yes	305	87
No	15	4
Can't say	30	9
Total	350	100

Source: compute results based on primary data

**The Table: 1.12** whether environmental information are useful to stakeholders or not:- 87% of the respondents said it is 'Useful', 4% of the respondents said 'No' and 9% of the respondents expressed to 'Can't say'. Table 1.13 : Reports of environmental accounting

Company	Respondents	Per cent
Yes	305	87
No	45	13
Total	350	100

Source: compute results based on primary data

The table 1.13 related to a question whether Environmental accounting are reported by Indian companies or not:- 87% of the respondents expressed that 'Yes' and 13% of the respondents said 'No'. Therefore it is concluded majority of the respondents are aware that South Indian companies are reporting on environmental issues.

Respondents Relationship Per cent Yes 261 75 No 8 2 57 Not sure 16 Have an idea 8 2 16 5 Exploring it Total 350 100

**Relationship between Environmental cost and profitability** Table 1.14 : Environmental cost disclosure and profitability

Source: compute results based on primary data

Environmental cost and profitability:- 75% of the respondents expressed that there is a relationship between environmental cost disclosure and profitability, 2% of the respondents expressed 'No relationship', 16% of the respondents expressed 'Not Sure', 2% of the respondents expressed 'Have no idea' and 5% of the respondents expressed ' Exploring it'. Therefore it is concluded that majority of the respondents felt that there was a strong relationship between environmental cost and profitability. Table 1.15 : Disclosure of Environmental costs

Public confidence	Respondents	Per cent
Yes	332	95
No	5	1
Not sure	13	4
Total	350	100

Source: compute results based on primary data

The above table:1.25 related to a question regarding public confidence if environmental costs are disclosed in the financial statements:-95% of the respondents expressed 'Yes', 1% of the respondents expressed 'No' and 4% of the respondents expressed 'Not Sure'. Therefore it is concluded that public confidence can be developed by disclosing environmental costs in the financial statements.

Table 1.16 : Responsibility Reporting

Securing loan	Respondents	Per cent
Yes	311	89
No	39	11
Total	350	100

Source: compute results based on primary data

The above table :1.16 The Responsibility reporting is helpful for companies to secure loan or not; 89% of the respondents expressed 'Yes' and 11% of the respondents expressed 'No'. Therefore it is concluded it is helpful to secure loan by the Responsibility Reporting.

Global Reporting Initiative	Respondents	Per cent
Yes	303	87
No	47	13
Total	350	100

 Table 1.17 :
 Multinational company

Source: compute results based on primary data

The above table: 1.17 related to a question on Indian company as per Responsibility Reporting that will have an equal reporting respect/value with a multinational company which reports as per Global Reporting Initiative:- 87% of the respondents expressed 'Yes', 13% of the respondents expressed 'No'. Therefore **it is concluded that there would be** equal respect to Indian companies that report by 'Responsibility Reporting' and Multinational companies that report by 'GRI'. Table 1.18 : Prepares responsibility report and disclosures

Better Market Price	Respondents	Per cent
Yes	299	85
No	14	4
Not sure	37	11
Total	350	100

Source: compute results based on primary data

The above Table: 1.18 related to a question whether a company which prepares responsibility report and discloses to public will have a better market price compared to similar company not reporting environmental responsibility reporting in India:- 85% of the respondents expressed their opinion 'Yes' and 4% expressed 'No' and 11% expressed ' Not sure. Therefore it is concluded that companies reports by 'Responsibility Reporting' would have a better market price than companies who are not reporting by Responsibility Reporting.

#### Conclusion

A positive mind set prevailed among professionals related to environmental accounting and reporting on environment. Accounting professionals strongly believe that environmental reporting will have better market price than firm not reporting environmental issues. There would be equal respect to Indian companies that report by 'Responsibility Reporting' and Multinational companies that report by 'GRI'. Therefore it is concluded that public confidence can be developed by disclosing environmental costs in the financial statements. Government of India can fulfil the international agreements on pollution reduction. The new trend would help the Government to implement environmental accounting and reporting.

#### **References:**

Azeez, P. A. (2001), "Environmental Implications of Untreated Effluents from Bleaching and Dyeing", in Eco-friendly Technology for Waste Minimisation in in Textile Industry, Centre for Environment Education, Tiruppur and Public Works Department Water Resources Organisation, Coimbatore.

Azeez, P. A. (2001), "Environmental Implications of Untreated Effluents from Bleaching and Dyeing", in Eco-friendly Technology for Waste Minimisation in in Textile Industry, Centre for Environment Education, Tiruppur and Public Works Department Water Resources Organisation, Coimbatore.

Charles J. Coate & Karen J. Frey (2011). Environmental Accounting and reporting 101. New Accountant. REN Publishing Company.

Disu and Gray (1998). An Exploration of social Reporting and MNC's in Nigeria. Social and Environmental Accounting 18(2): 13-15

Eric R. Shamp, Aia LEED AP (2003), "Basic, No-Cost Green Building

Strategies", The American Institute Of Architects Bp 18.11.03 June 2003. Eric R. Shamp, Aia LEED AP (2003), "Basic, No-Cost Green Building Strategies", The American Institute Of Architects Bp 18.11.03 June 2003. GeofSyphers, Mara Baum, Darren, Wesley Sullens (2003), "Managing The Costs Of Green Building", Report By State And Consumer Service Agency Partnered With California State.

GeofSyphers, Mara Baum, Darren, Wesley Sullens (2003), "Managing The Costs Of Green Building", Report By State And Consumer Service Agency Partnered With California State.

Kisenyi and Gray (1998). Social Disclosure in Uganda. Social and Environmental Accounting 18(2): 16-18.

KPMG's Survey Of Carbon Reporting Of 250 Largest Companies(2015) Survey report

Lodhia, "Environment accounting in Fiji, An extended case study of the FIJI Sugar Corporation"

M.R.Mathew, "The Development and Social and Environmental Accounting Research" 1995-2000.

Noor Mohammad (2012), "Need to implement the Environmental Accounting Education for sustainable Development: An overview", World Academy of science, Engineering Technology 63

Noor Mohammad (2012), "Need to implement the Environmental Accounting Education for sustainable Development: An overview", World

Academy of science, Engineering Technology 63 Timo Kaphengst, Samuela Bassi, Mckenna Davis, Sarah Gardner (2011), "Taking into account opportunity costs when assessing costs of biodiversity

and ecosystem action", Final report, Institute for European Environmental Policy.

Timo Kaphengst, Samuela Bassi, Mckenna Davis, Sarah Gardner (2011), "Taking into account opportunity costs when assessing costs of biodiversity and ecosystem action", Final report, Institute for European Environmental Policy.

Tsang(1998). A longtitudinal study of corporate social reporting in Singapore- the case of the banking, food and beverages and hotel industries. Accounting Auditing and Accountability Journal 11(3), pp.624-635. University of Alberta School of Business Department of Accounting,

University of Alberta School of Business Department of Accounting, Operations and Information systems Accounting(2012): Accounting for Natural Resources, energy and the environment syllabus Winter.

# The Role of Local Government in Supporting Ownership Transformation at Enterprises in Poland After 1990

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#### Abstract

In the history of local government in Poland after the WWII two periods are generally indicated. The first one refers to the years 1950-1989. During that long time interval in Poland local government was dissolved and replaced with national councils, modeled on the Soviet Union solutions. The second period started in 1989 and has lasted up to present day. It is related to restoration of democracy in Poland and also of the local government.

Dissolution of the local government in Poland took place on 20th March 1950. On that day the Polish Seym adopted a resolution on territorial units of uniform public authority. Basing on the resolution the system of national councils was constructed, following the Soviet model. National councils did not have attributes allowing to recognize them as local government units. They were deprived of legal personality, own property or budget. Therefore, the role of institution providing for social needs at local level was taken over by enterprises. Such situation deformed life of local community. The concept of local homeland was excluded from use. Transformation of political and economic systems that began in Poland in 1989, and related to it reconstruction of local government, (on the basis of Act of 8th March 1990), enabled restoration of the local government after nearly fifty years of nonexistence. From the moment of reconstruction, the local government took over the responsibility for fulfilling social needs. At the same time enterprises, undergoing the process of restructuring and ownership transformations, as part of the reduction of so-called nonproductive assets, gave to the local governments, often for free, parts of assets that were connected with social activities of plants, for instance: apartments belonging to the enterprise and technical and municipal buildings (water and waste water facilities, water treatment plants and local roads).

This paper, basing on selected cases, shows what tasks were carried out by enterprises that replaced local government (first part of the paper), and describes the scale of problem, referred to as enterprises "abandoning" the role meant for the local government after 1990.

Keywords: Keywords: local government, enterprise, social needs, little homeland

#### Introduction

The role of local government in the process of ownership transformation at enterprises in Poland after 1990.

In the history of local government in Poland after the WWII two periods are generally indicated. The first one refers to the years 1950-1989. During that long time interval in Poland local government was dissolved and replaced with national councils, modeled on the Soviet Union solutions. The second period started in 1989 and has lasted up to present day. It is related to restoration of democracy in Poland and also of the local government. Dissolution of the local government in Poland took place on 20th March 1950. On that day the Polish Seym adopted a resolution on territorial units of uniform public authority. Basing on the resolution the system of national councils was constructed, following the Soviet model. National councils did not have attributes allowing to recognize them as local government units. They were deprived of legal personality, own property or

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This paper, basing on selected cases, shows what tasks were carried out by enterprises that replaced local government (first part of the paper), and describes the scale of problem, referred to as enterprises "abandoning" the role meant for the local government after 1990.

State enterprise as the institution providing for social needs During the times of the People's Republic of Poland, within 1950-1989, people of Poland were deprived of the right to manage local matters on their own behalf and responsibility. The governing elites, totally dependent on the Soviet Union, by virtue of the Resolution on territorial units of uniform public authority of 20th Mach 1950, dissolved the local government.

uniform public authority of 20th Mach 1950, dissolved the local government. In the place of the units of local government, known in Poland from the interwar period, the said Resolution introduced the strange solution of uniform administration, being the combination of the executive and legislative powers in one national organization (Witkowski, 2007, p. 427). National councils operating in districts, on the basis of the Constitution of the People's Republic of Poland of 22nd July 1952 were the territorial units of public authority and basic local authorities for the working people of towns and villages. Hierarchically constructed system of the national councils turned out to be a creation totally unable to act independently. Regulations concerning the national councils contained contradiction, as they were to represent the interests of local community and the national interest at were to represent the interests of local community and the national interest at the same time (Witkowski, 2007, p. 432). Their role in the life of local communities was downgraded by the fact that the national councils could not carry out own policy of local development, did not have legal personality, did not manage their own property, but could only manage national property. Besides, they did not have own budget and their expenses were incurred

from the state budget (Regulski, 2000, p.22). System of territorial units of uniform public authority did not at all promote the active citizenship. Jacek Kuroń noticed: "Public authority in our promote the active citizenship. Jacek Kuroń noticed: "Public authority in our country is handled through depriving the society from initiative, information and decision. Each self-governing social initiative violates state monopoly and the basis of public authority" (Kuroń, 1980, p.17). Such foundations, prepared by the governing elites of the People's Republic of Poland, resulted in breaking the bonds connecting local community with the local homeland. Local homeland was no longer attractive to the average inhabitant. At that time there was no preservation of local values, no information on local history or local civilization heritage. Authorities of the People's Republic of Poland were aptly convinced that it was easier to control community within an enterprise. That was the community of particularly set goals. The local an enterprise. That was the community of particularly set goals. The local community involved in the actions to the benefit of the place of residence, gathered in social organizations difficult to control, was considered dangerous and so its development was prevented. Due to such conditions, the place of local governments and social communities was taken over by the state enterprise. The process of making workers dependent on enterprises was facilitated by migrations of people to cities resulting in breakdown of so-far existing social structures. The migrating workers felt lost in new

environments. The enterprise, though, offered help and provided for their needs. Such was the method of building the awareness of group interests of working people from the enterprise. (Kozioł, 2004, p.154). The state enterprise worker had the task placed ahead of him- to achieve certain objectives, mainly by industrial, manufacture work. In return for a good job, the factory took over, replacing the nonexistent local government, the duty to provide for social needs (often basic) of the workers. Such was the method of constructing the experimental social community in the People's Republic of Poland, against the old tradition of local government in Europe. In the center of this community there was a state enterprise which, apart from industrial goals, realized tasks of social character, providing for workers' needs.

Authorities of the People's Republic of Poland were fully convinced that any social problems could be solved throughout permanent that any social problems could be solved throughout permanent industrialization. On such basis the government and related ministries competed each other with ideas on constructing new factories. The policy of implementation of central investments in separate places in the state, without coordinating it with local needs and development plans created a strange situation, considering spatial planning in cities. (Secomski, 1974, p.10). Due to aforementioned investment preferences in the space of cities some unneeded objects arouse, disturbing the architecture and being useless for current operation of the city (Kozioł, 2004, p. 151). None of the policy makers took into consideration the voice of local architects, urban planners or monument conservators. Problems related to the implementation of central or monument conservators. Problems related to the implementation of central industrial investment policy without consideration for the voices of local communities were observed for instance in Włocławek. Development of the Rope and Wire Factory Drumet in Włocławek was hampered due to the lack of factory water intake for industrial purposes. Construction of such water intake was impossible as it would have resulted in drying of town water supplies. Solution was however found- within the 24-hour time frame water was periodically limited for the inhabitants of the town. Different situation took place in Grudziądz. Production rhythm in Agricultural Machine Factory Agromet-Unia was regulated by the principles of the Road Traffic Code (Stępowski, 1979). The enterprise was located in the town center, and a busy road divided it into two parts. There was always a heavy traffic on the road, as from one part of the plant to another one production-related goods were transported.

Then, it was not accidental that one of the first professional groups to raise the problem of reconstruction of the local government at the district level of the People's Republic of Poland were the urban planners and city architects. Professor Jerzy Regulski explained the problem in the following way: "Spatial planning is purposeful only when there is entity that may

benefit from these plans" (Regulski, 2006, p.7). As the national councils were deprived of the possibility to create the local space, the phenomenon of "deindustrialization of suburbs" occurred. According to economists, central planning of investments" resulted in depopulation and freezing of economic functions in smaller towns, which, in turn, was followed by damage and dying out of the infrastructure therein" (Bittnerowa, 1967, p.22). We must agree with professor Regulski who pointed out that the reason for such state of the matter was lack of authentic host, such as local government that would have effectively managed the resources. In the situation of stagnation and decline of development in small towns, authorities dealing with central planning obligated the enterprises managed by them to set up branches in the problematic areas. Undoubtedly, these branches had only social functions. Using that tool the state-owned enterprise performed social task of stimulating professional activity of inhabitants in the provinces. Such investments were to replace the individual entrepreneurship, existing in Western Europe .

The first need of a worker to be provided for by the enterprise was accommodation. The enterprises usually built so-called complexes of factory flats that sometimes formed the whole districts nearby the workplace. For instance, within 1961-1965 the Cement Mill Kujawy in Barcin allocated 13.5 million zlotys for so-called "accompanying investments" that is for construction of flats. Additional 3.7 million was spent on construction of service and commercial buildings for inhabitants of the districts, and 16 million on the development of infrastructure, (such as sewage and water system and roads). Rope and Wire Factory Drumet II in Włocławek built 100 flats in 1972, then in 1973- 200 flats and 100 more in 1974. The new districts were equipped with the necessary technical infrastructure. In the second half of the 1950s the United Cycling Plant Romet in Bydgoszcz declared that each year they had spent approximately 14% of investment expenses on housing and development of supporting technical infrastructure. Sodium Plant established in the 1950s in Janikowo was an example of the fact that a factory was able to construct even the whole town. Most of the housing resources built there were owned by the Sodium Plant, similarly to the roads and water and sewage system. Moreover, the plants constructed the culture club, cinema, and commercial and service facilities (Kamosiński, 2007).

The enterprise, taking decision to provide for the social needs often became the body to set up and manage the enterprise-affiliated schools. In 1967 in the People's Republic of Poland about 800 enterprise-affiliated schools operated. They educated over 180 thousand of workers. In the 1970s the increase in number of such schools was observed. If a factory did not own its enterprise-affiliated school it had to take "patronage" over the one existing in the neighborhood. Thus the education system depended on the enterprises that decided on the education process. In their schools the enterprises prepared qualified workers who were to bind their whole professional life with one plant. (Kamosiński, 2009, p. 26).

Many enterprises, however, found it difficult to solve the problem of everyday commuting. Public transport in towns and suburbs, owned by the state, did not manage to provide proper communication services for workers travelling to plants. Buses, trains and other means of transport were unpunctual. Because of that, the enterprises created their own communication networks or provided transport for their workers. The national transport monopolist was not ready to coordinate proper and effective transport services at local level.

In order to fully provide for social needs of workers, the state enterprise offered access to free health care. In the 1970s medical care was available to practically all workers of so-called key enterprises. At the 7th Meeting of the Polish United Workers' Party it was declared that within 1970-1975 there were built 239 enterprise-affiliated clinics that provided medical services for factory workers (7th meeting, 1976, p. 20). Looking from statistical perspective we should point out that in the second half of the 1970 around the city of Łódź 33% of cinemas, 78% of nurseries, 33% of kindergartens, 60% of enterprise-affiliated clinics and 69% of culture clubs were owned by the industrial plants. The enterprise care for workers included also organization of free time. The plants possessed their own holiday centers in most attractive tourist destinations, for instance: the Rail Rolling Stock Repair Workshops in Bydgoszcz had their own leisure center in Szklarska Poręba, the Chemical Plant Zachem in Bydgoszcz- a holiday center in Sopot, the State Agricultural Farm in Strzelin near Wrocław possessed a holiday house in Nowęcin near Łeba by the sea.

As it was noted by Jan Regulski, there was lack of local government that, as a certain area host, would have been responsible for monitoring the condition of natural environment. As a result, the central policy of designing and performing industrial investments pushed the matter of environmental protection aside. The territorial units of uniform public authority were passive in that matter. So, the results of random studies of the natural environment were alarming. For instance in Bydgoszcz in 1971 it was discovered that industrial plants had dumped industrial wastewater into the Brda and Vistula rivers. Solid waste were piled. Polluted grounds were not recultivated. Inhabitants of industrial districts had to bear the toxic fumes coming out of plants' chimneys and deal with excessive noise (Kamosiński, 2007, p. 335).

In the project of reforms program prepared by professor Regulski and professor Kulesza in the 1980s it was stated: "one must decidedly say that in the territorial system the basic managing unit should be the town/commune and not the enterprise": and further: "local governments should have farreaching impact on the operation of national enterprises as without them there would be no possibility to control the development of towns and communes understood as the socio-economic systems" (Regulski, 2009, p. 89).

# Enterprises "abandoning" the role meant for the institution carrying out social tasks after 1989

After fifty years of nonexistence the local government underwent the reconstruction owing to adoption of the Act on local governments on 8th March 1990 and the democratic elections of local governments authorities on 27th May 1990. Thus, new institutions of public life were created. The commune or district local government, acting on its own behalf and responsibility, was to carry out public tasks. In order to effectively perform its duties, the commune/district obtained the right to possess and manage own property, so-called municipal property. That was ruled by the provisions of 10th May 1990 introducing the Act on local government and its authorities. The main role of the Act was including the district into the process of ownership transformations. Firstly, so-called municipalization of property was introduced. It meant that the state enterprises that had provided municipal services before 1990, became the property owned by the commune. Such decision was justified by the fact that they were the nationwide (state) property, managed before 1990 by the national councils and the territorial units of uniform public authority. The communes obtained the right to apply to the government for ownership of areas belonging to the enterprises that possessed wide undeveloped areas, not used for industrial purpose. According to the data from the Provincial Office in Bydgoszcz, at the end of 1992 the advance stage of ownership transformation and reconstruction of municipal property in communes/districts reached 70%. It was assumed that the process would end in 1993.

was assumed that the process would end in 1993. As the legal environment changed, and new institutions of public life emerged, the state-owned enterprises lost their dominant role within economic, culture and social matters they had played in districts/communes until 1989. After that year they became just one of many varied elements of local governments' operation. The moment the local government in Poland was reinstated, a complicated process began of withdrawing the state enterprises from the role of national provider of public services. The main complication arose due to expenses on such operation. State-owned enterprises that had gathered certain real property resources, referred to as nonproductive or useless, after 1989 tried to get rid of that property. Ironically, as the state enterprises were eager to do that as soon as possible, they lowered value of property remaining at their disposal by way of giving parts of own property for free. So, certain dependency arouse that was not understood by some observers of economic life of those times- lowering the value of enterprise's property its market value increased its competitiveness. The useless property covered enterprise-owned flats, technical infrastructure, including water and sewage system, local roads, water intakes, nurseries, kindergartens, sports facilities, culture clubs or clinics. That problem was solved by virtue of the Act of 12th October on principles for transfer of company housing property by state companies. The districts took over the said useless objects for free. Thus the local governments' resources grew and could be used for providing for the needs of local communities. However, there was a large group of state enterprises that had given the unproductive property to the communes for free before the aforementioned Act was effective on 12th October 1994. Because of that,

aforementioned Act was effective on 12th October 1994. Because of that, validity of transactions was confirmed by provisions of the Act of 8th March 1990 on local government. As examples here can serve the management of the Printed Circuit Boards Plant Toral in Toruń or the management of the Cement Mill Kujawy. Value of property given for free was estimated there at 21,551,636,100 PLN. The nonproductive property given to Włocławek commune by the Nitric Compounds Factory in Włocławek in 1994 amounted to 97,655,327,253 PLN. The donation included blocks of flats and the adjoining infrastructure (water and sewage system, boiler plants, local roads and pressure boosters). The Pulp and Paper Mill in Swiecie gave the commune Swiecie six housing units containing 236 flats and water treatment plant for free. A large nonproductive property was owned by the Sodium Plant in Janikowo. On 29th November 1993 the management of that plant decided to give the Janikowo commune two important public buildings for free: Sports and Recreation Center and Culture Club. The Cellular Concrete Plant Prefabet from Solec Kujawski, by virtue of agreement concluded with the mayor of Solec on 1st August 1991, gave residential buildings and technical infrastructure to the benefit of the town. Value of the donation was estimated at 2,686,598,000 PLN. A practical solution included into the said agreement was a provision saying that "the Cellular Concrete Plant Prefabet in Solec Kujawski shall give the amount of 180 mln PLN to the benefit of town and commune Solec Kujawski for maintenance of the buildings until 31st December 1991" (Kamosiński, 2015, p. 249). Importance of asset restructuring carried out by enterprises in order to improve their performance in the conditions of free market is well reflected in the mende of annidant of the new enterprises the Carin and Mill Plant in

Importance of asset restructuring carried out by enterprises in order to improve their performance in the conditions of free market is well reflected in the words of president of the new enterprise- the Grain and Mill Plant in Kruszwica, established on 1st March 1996, basing on the assets of former state enterprise: "Within 1991–1996, considering the principles of carrying out system transformations and implemented economic programs, assets restructuring was conducted basing on 'slimming down' the amount of unwanted property by way of passing Workers' Hotel and Przedbojewice warehouse for free to the benefit of Town and District Office in Kruszwica, and passing A and B warehouses in Sukowy to the benefit of District Office in Inowrocław" (Kamosiński, 2015).

Local government, restored in 1990, for many enterprises of those times was an institution that helped to go through the times of worsened market situation, related to markets reorganization and changes in ownership structure. Supporting the process of enterprises financial restructuring local authorities took up their shares. Thus, the debt of factories towards communes, following from unpaid local tax on use of property, was reduced. For instance, on 31st December 1995 2.95% of shares of the Nitric Compounds Factory in Włocławek was owned by the town Włocławek. The plant owed to the town 40 billion PLN due to unpaid tax on the use of property within 1992-1993, (with accrued interest- 56 billion PLN). The town officers used to state that "that amount was significant for the revenue side of the town budget" (Kamosiński, 2015, p. 256). This example illustrates a problem that many communes had to face. It was related to the difficulties with obtaining tax liabilities and local fees from the enterprises plunged into restructuring crisis. Lack of assumed budgetary revenue limited the commune capacity to undertake investments and fulfill the task of providing for social needs of the local community. In 2002 the local government of the city of Toruń took a decision to allow their debtor- the Marine Machines and Devices Plant Towimor in Toruń, to repay the due amount in installments.

Provision for needs of local communities covered also the tasks related to protection of environment and nature. Fulfilling those tasks by the commune was very difficult in the 1990s. Very often a conflict of interest arouse- the commune wanted to maintain as many workplaces as possible to minimize the negative effects of unemployment, but, of course, it was also important that the inhabitants would live in a clean natural environment. Decisions taken within that matter in Toruń prove the determination of city authorities to achieve objectives by long-lasting local development perspective and not by achieving temporary benefits. On that basis, the Inorganic Chemistry Plant Polchem in Toruń, main manufacturer of Sulfuric acid in the state, was considered unwanted. Degradation of natural environment that was a result of production-related pollution was hazardous to the city dwellers and to priceless city monuments. Because of that, in 2000 the city authorities approved of the decision of the Provincial Inspector for Environmental Protection on shutting down the plant. Local authorities argued that the best decision for Toruń would have been to immediately shut down the plant. So, a new value appeared- city authorities protected the right of inhabitants to life in clean environment and on their behalf they asked for its protection: "Acting on behalf of the city inhabitants, we cannot remain indifferent to hazard that Polchem poses. We have no reliable information letting us believe that the management of Polchem will take efficient steps to eliminate harmful emission of Sulfur dioxide" (Rakowicz, 2001). And the plant was shut down.

#### **Summary**

Summary Summing up what was said above on the role of enterprises in 1950-1989 with reference to providing for social needs, and on difficult process of withdrawing from this role, we must pay attention to the observation made by a certain group of scientists. J. Regulski, P. Bury, A. Jewtuchowicz and T. Markowski stated in 1980 that "finding a solution to the political, social and economic crisis is impossible without general reform of territorial authorities, without reinstatement of real self-government necessary to stimulate activity of society and to launch the great reserves of social initiative" (Regulski, 2000, p. 33). After 1989, when the local government in Poland was restored, certain directions of local development were determined. They will be fulfilled provided that all internal factors of local determined. They will be fulfilled, provided that all internal factors of local development have been used, including local entrepreneurship and inhabitants' industriousness. Local government should strive to provide local communities with proper conditions of personal development.

#### **References:**

Bittnerowa E (1967), Majątek trwały jako czynnik rozwoju regionu (na przykładzie województwa poznańskiego), Warszawa.

Kamosiński S., (2007), Mikroekonomiczny obraz przemysłu Polski Ludowej w latach 1950-1980 na przykładzie regionu kujawsko-pomorskiego, Poznań. Kamosiński S., (2009), Wszystko inaczej. Przedsiębiorstwo w roli samorządu terytorialnego w latach Polski Ludowej, Samorząd Terytorialny, nr 12.

Kamosiński S. (2015), Przedsiębiorstwa w przebudowie. Prywatyzacja i restrukturyzacja przedsiębiorstw kujawsko-pomorskich w latach 1990-2004, Bydgoszcz.

Kozioł R., (2004), Debata samorządowa w czasach pierwszej Solidarności, Kraków.

Kuroń J., (1980), Notatki o samorządzie, Głos Niezależny Miesięcznik Społeczno-Polityczny, Paryż, nr 1.

Rakowicz G., (2001), Ziemia za długi Polchemu, dodatek: Regiony Polski – Kujawsko-Pomorskie, Rzeczpospolita.

Regulski J. (2000), Samorząd III Rzeczypospolitej koncepcje i realizacja, Warszawa.

Regulski J., (2006), 25 lat temu, Samorząd Terytorialny, nr 12.

Regulski J., Kulesza M., (2009) Droga do samorządu. Od pierwszych koncepcji do inicjatywy senatu (1981-1989), Warszawa.

Seconski K., (1974), Najbliższe zadania planowania przestrzennego w Polsce, Rada Narodowa – Gospodarka – Administracja.

Stępowski J., (1979), Jak UFO, Przegląd Techniczny. VII Zjazd PZPR (1976), Stenogram, Warszawa 8-12 grudnia 1975, Warszawa.

Witkowski W., (2007), Historia administracji w Polsce 1764 - 1989, Warszawa.

## Gandhi and the Muslims of India: A Study on the Collected Works of Mahatma Gandhi

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#### Abstract

This research paper is essentially selections from the Collected Works of Mahatma Gandhi regarding the approach of Gandhi towards the Muslims of India and his constant efforts for the maintenance of the Hindu-Muslim unity. This present paper also throws ample light on the relationship which existed between the Indian National Congress and the All India Muslim League and the events leading to the partition of India. This paper covers the period since the involvement of Gandhiji with the Khilafat Conference until that of the martyrdom of Gandhiji at the altar of the Hindu-Muslim unity. It has been argued in this research paper that the speeches, writings, correspondences, and statements of Gandhiji clearly reveal his deep understanding of the Islam, his love towards the Muslims of India, his heartily desire for the maintenance of the Hindu-Muslim unity and, above all, his love towards humanity. This is without considering the distinction of class, caste, religion, and even nationality.

#### Keywords: Humanity, Tolerance, Hindu-Muslim Unity, Khilafat

#### Introduction

Mohandas Karamchand Gandhi, Mahatma Gandhi, was a religious genius, who had genuine tolerance and respect for all of mankind's faiths. His commitment to religion did not mean a commitment to Hinduism alone i.e. his own religion. However, he also shows respect and tolerance towards all other faiths with an attitude of full freedom and complete equality to the followers of all the religions on this earth. His prayer meetings were not just about his beloved *Gita*, but there was space for *Holy Quran, the Bible*, and the *Guru Grantha Saheb* as well. In his introduction to the sayings of Prophet Mohammed by Abdullah Suhrawardy, Gandhiji emphatically declared that there will be no lasting place on earth unless one learns not to merely tolerate, but also to respect the other faiths as one's own. Time and again, Gandhiji had declared that Allah of Islam is the same as the God of Christians and Ishwar of the Hindus. Mahatma Gandhi used to say that,

although there were numerous names of God in Hinduism, there were also many names of God in Islam and as well as in Christianity. Gandhiji declared that the names of God do not indicate individuality but attributes. However, little man has tried in his humble way to describe the Almighty God by giving him attributes, even though He is above all attributes. Living faith in this God means equal respect for all religions. Mahatma Gandhi, thus, declared that he was as much a Muslim, a Christian, a Sikh, a Jain and a Zoroastrian, as much he was a Hindu (Amarjit Singh, 2014).

Subsequently, it appears that Mahatma Gandhi possessed a sound knowledge of Islam and of the life and teachings of Prophet Mohammed. Gandhiji himself had declared that he had read the holy Quran and the life of Prophet Mohammed many times. Muslim friends and clients of Mahatma Gandhi in South Africa as well as his Muslims friends in India provided him some literatures on Islam and on the life of Prophet Mohammed. Mahatma Gandhi had claimed to read all those literatures very carefully. In addition, he also claimed to have understood those literatures to a great extent. Mahatma Gandhi had read the translation of the Holy Quran and other Islamic literatures produced by Thomas Carlyle, Maulana Shibli Numani, Maulana Syed Amir Ali, Abdullah Suhrawardy, Dr. Mohammed, and Sir Ross Massod. Also, Mahatma Gandhi regularly carried on sympathetic debates with eminent Islamic scholars like Maulana Mohammed Ali, Maulana Shaukat Ali, Hakim Ajmal Khan, Dr. M.A. Ansari, Maulana Muhammad Ali Jauhar, Maulana Abul Kalam Azad, Mohammed Mujeeb, Syed Abid Hussain, Dr. Zakir Hussain and others. Gandhiji believed that Prophet Mohammed was a seeker of truth. He was God fearing and he suffered endless persecution. Time and again, Mahatma Gandhi had asserted that Islam has not been kept alive by the sword, but by the many sufi saints and scholars with high sense of honour whom it has produced. Therefore, he firmly believed that the Holy Quran stresses mercy and patience as the essential human virtues. Keeping in view his understanding of Islam and the Holy Quran, it appears that Mahatma Gandhi, more or less, lived an Islamic life.²

I wish to suggest, on the bases of the present selections from the Collected Works of Mahatma Gandhi, that Gandhiji was immensely in love with the Muslims of India. Mahatma Gandhi spent his childhood and his school life amongst a large number of Muslim friends and Muslim neighbours, who were frequent visitors to his house. Gandhiji went to South Africa as a Lawyer for a Muslim firm that had family connections with some of his old Muslim friends. During his stay in South Africa, his feelings of common brotherhood with Muslims were further strengthened. Mahatma Gandhi himself stated that while he was in South Africa, he came in close touch with the Muslim brothers there. Also, he was able to learn their habits, thoughts and aspirations. He had lived in the midst of Muslim friends for twenty years, and his Muslims friends in South Africa treated him as a member of their family. In addition, they had told their wives, daughters, and sisters that they needed not to observe purdah with him.³ Once he returned to India, his long association with Maulana Mohammed Ali, Maulana Shaukat Ali, Hakim Ajmal Khan, and Dr. M.A. Ansari provided him another opportunity to move among the Muslims of India at large. However, Mahatma Gandhi's unconditional support to the Khilafat Conference provided him the ample opportunities to move and to mix with each and every class, section, and clan of the Muslims of India. It was during the course of the Khilafat Movement that Mahatma Gandhi was provided an opportunity to address an exclusive Muslim women gathering at Bombay. It was a gathering where the Muslim women were invited to interact with Gandhiji without observing any purdah. This was indeed a rare honour bestowed upon Gandhiji alone. Therefore, such a honour was not enjoyed even by any of the male Muslim leader of the Khilafat Conference.⁴ Later on, his long association with Maulana Abul Kalam Azad, Khan Abdul Ghaffar Khan, and Dr. Zakir Husain further widened the bases and influence of Mahatma Gandhi among the Muslims of India. The ample writings and, as such, the activities of Gandhiji, throughout his life period has very vividly expressed his love, affection, care, and respect for the Muslims of India. I wish to put it emphatically on the basis of the study of his enormous

I wish to put it emphatically on the basis of the study of his enormous correspondences, writings, and speeches that the attainment of complete communal harmony between the Hindus and the Muslims was more important for Mahatma Gandhi than the attainment of Swaraj and the Independence of India. Gandhiji never visualized and imagined the achievement of freedom from the British yoke at the cost of the loss of Hindu-Muslim unity. Once, while making a speech at a public meeting at Abbottabad in July 1939, Gandhiji stated that if one could dissect his heart, one would find that the prayer and spiritual striving for the attainment of Hindu-Muslim unity goes on there unceasingly all the twenty-four hours without even a moment's interruption, whether he was awake or asleep.⁵ Unfortunately, during the last years of his life, Mahatma Gandhi was made to witness a great amount of communal violence between the Hindus and the Muslims. Gandhiji indeed lived his final years in the midst of a sort of hell on earth. However, there can scarcely be any worse kind of hell than that of the outbursts of malicious violence among the very persons one has given one's life serving.

Gandhiji has never cherished the achievement of the Independence of India along with the emergence of communal passions and communal holocaust between the Hindus and the Muslims. The frail old man went from place of place, seeking to establish peace and goodwill while there were enmity and strife. He went to Noakhali to soothe the Hindus who had suffered from Muslim atrocities. He went to Patna to heal the sufferings of the Muslims who had suffered from the hands of Hindus. He went to Delhi and he proposed to visit Pakistan. Everywhere and each day, he preached love and communal amity.⁶ Lastly, Mahatma Gandhi had to sacrifice his life at the altar of the achievement of Hindu-Muslim unity when he was shot dead by a Hindu fanatic, Nathuram Godse, in the evening of January 30, 1948. This seventy-eight year old man took three bullets in his chest while standing. This he did in order to shun hostility and establish love, peace, and harmony between the Hindus and the Muslims.

In this research paper, I have made a humble attempt to study the efforts made by Mahatma Gandhi for the achievement of Hindu-Muslim unity right from the days of the Khilafat Conference up to the last day of his life. Based on my understanding, this entire period may be divided into five phases. During the first phase i.e. from 1919 to 1924, Mahatma Gandhi was successful enough to achieve the Hindu-Muslim unity to a larger extent. It was the phase when thousands of Hindus and Muslims marched together for the courses of Khilafat Movement and Non-Cooperation Movement. From 1925 to 1936, which may be called the second phase, the efforts of Mahatma Gandhi for the course of the Hindu-Muslim unity were hampered. Thus, this is because of the new founded agenda of the Provincial Muslim Political Organizations and of the All India Muslim League. During the third phase, i.e. from 1937 to 1942, while Mahatma Gandhi was more concerned with the war issues and the Quit India Movement, the All India Muslim League and M.A. Jinnah had further weakened his mission regarding the maintenance of the communal harmony between the Hindus and the Muslims. From 1943 to the middle of 1946, which may be called the fourth phase, Mahatma Gandhi reached out in every possible measure and every possible negotiations with M.A. Jinnah. Thus, this was done with the All India Muslims League and with the British in order to achieve his life long mission of Hindu-Muslim unity. However, he could not succeed. During the last phase, Mahatma Gandhi was the most sadden and unfortunate person on the earth. Hence, he had to witness a serious communal holocaust between the Hindus and the Muslims.⁷

During the first phase, Mahatma Gandhi was well able to achieve the Hindu-Muslim unity. His keen interest in Islam and love for the Muslims of India took a political turn during this phase when he himself lent full support to the Khilafat movement and exhorted the Hindus and Muslims to take active parts in it. Later on, he tackled the non-cooperation movement and enlisted the full support of the Muslims of India for this course. The message of the Khilafat movement and non-cooperation movement reached out to every nook and cranny of India. Consequently, Indian Muslims joined the non-cooperation movement in large numbers as Gandhiji had linked it to the demand to restore the Caliph to his pristine spiritual glory. For the first time in the political history of modern India, thirty thousand Hindus and Muslims went to jail in thirty days. For the first time in the political history of India, twenty-lakhs of Hindus and Muslims left their houses at the bidding of Mahatma Gandhi. While speaking at a public meeting in the middle of 1922, Mahatma Gandhi said that it would not be an exaggeration to say that the unity which prevailed between the Hindus and the Muslims at that time was unparalleled in that age. During this phase, Gandhiji not only successfully achieved the mission of Hindu-Muslim unity, but he was also well able to lay down the path of non-violence and Satyagraha among the Hindus and Muslims alike.⁸

During the second phase, communal riots between the Hindus and the Muslims were reported from the different parts of India. While speaking at a public meeting at Mymensingh in May 1925, Gandhiji said that the Hindus and the Muslims were fighting not even for leaves and fishes, but for stones and not for vital interests. As a result, he advised both communities not to endanger their unity on the ground of selfishness. Furthermore, Gandhiji said that until they had cleansed their heart and purified their soul, they would not be able to live as brothers. Optimistic as Mahatma was, he believed that God would show mercy on this blessed land and enable them to live as brothers.⁹ During this phase, Gandhiji did his best possible efforts at the platforms of All Parties Conference, Calcutta and Round Table Conference, London, for the attainment of the Hindu-Muslim unity. However, he produced no major success. In an article in *Young India* of December, 1927, Gandhiji wrote that his method and approach on the issue of Hindu-Muslim unity has changed. Formerly, he tried to achieve it by addressing meetings and joining them in promoting and passing resolutions. Nevertheless, he now had no faith in these devices or methods. In an atmosphere, which was surcharged with distrust, fear and hopelessness, he would rely upon prayer to God and such individual acts of friendship as were possible. Gandhiji further wrote that his interest and faith in Hindu-Muslim unity remained, however, as strong as it ever was.¹⁰

However, even in these circumstances, Mahatma Gandhiji was able enough to muster the support of some sections of the Muslims of India. Also, there are majority of the Muslims of the North-West Frontier Province for the course of the Civil-Disobedience Movement. In this concern, Gandhiji vehemently condemned the policies of the British Raj and, while speaking at the Plenary Session of Round Table Conference in December 1931, he said that the quarrel between the Hindus and Muslims was not an old one. Also, the Hindus and the Muslims were not at war when there had been no British Rule. He was of the view that the Hindus and the Muslims will live together in peace again after the departure of the British. In the year 1935, Gandhiji even encouraged Babu Rajendra Prasad, the then President of the Indian National Congress, to negotiate with M.A. Jinnah, President of the All India Muslim League at that time. Thus, this negotiation is based on an agreed political settlement between the Hindus and the Muslims. Nevertheless, the negotiations brought no tangible results.¹¹

During the third phase i.e. from 1937 to 1942, the happenings moved very fast at the political level such as the elections of the Provincial Legislative Assemblies, formation of the Congress Government at the eight British India Provinces, beginning of World War II and the new found relationship between the British Raj and the All India Muslim League, resignations of the Provincial Ministries of the Congress, adoption of the Lahore Resolution by Muslim League in March 1942, Cripps Mission, and the Quit India Movement. Although, during this phase, Mahatma Gandhi, as usual, kept on his business of public meetings, speeches at the evening prayers, articles in the *Young India*, and numerous correspondences with the individuals on the issue of the maintenance of Hindu-Muslim unity. In fact, the political space among the Muslims of India was occupied by the All India Muslim League to a larger extent. No doubt that the Indian National Congress under the leadership of Mahatma Gandhi during this phase successfully challenged the very existence of the British Rule through the Quit India Movement. At the same time, the complete aloofness of the Muslims of India against the Quit India Movement, notwithstanding the exception of the North-West Frontier Province, posed a serious challenge to the issue of the Hindu-Muslim unity. Mahatma Gandhi called to the Muslims of India to join the Congress. The Congress, which was representing the whole of India in its uphill fight for independence, was making no major political influence on the Muslims of India.¹²

Reacting to the Lahore Resolution of the All India Muslim League, Mahatma Gandhi retorted that the two-nation theory was untruth. He said that the vast majority of the Muslims of India were converts of Islam or where descendants of converts and that they did not become a separate nation as soon as they became converts. He further argued that he had found it difficult to distinguish by outward sign between a Bengali Hindu and a Bengali Muslim, and between a Punjabi Hindu and a Punjabi Muslim. Iqbal and Kitchelew were the names common to Hindus and Muslims. He concluded that the Hindus and Muslims of India were not two nation, but those whom God had made one. As such, man will never be able to divide them. While speaking at a public meeting in early 1942, Mahatma Gandhi said that the political and communal pacts between the Hindus and the Muslims, whilst they were good if they could be achieved, were valueless unless they were backed by the unity of hearts. Without it, there could be no peace in India. Gandhiji further argued that even Pakistan would bring no peace, if there was no unity of hearts. Therefore, this unity of hearts would come only by mutual service and co-operation.¹³

During the fourth phase, Mahatma Gandhi now realized that, from then hence, the Hindu-Muslim unity would be achieved only through conducting some negotiations and pacts with M.A. Jinnah, All-India Muslim League, and the British Raj. The nature of the Quit India Movement had already convinced Mahatma that the political space among the Muslims of India, to a great extent, was enjoyed by the All India Muslim League under the leadership of M.A. Jinnah, who was now hailed as Quaid-e-Azam. Thus, it was as early as in may 1943, while Mahatma Gandhi was under detention at Aga Khan Palace, that he wrote to M.A. Jinnah on the reason they should not both approach the great question of communal unity as men determined on finding a common solution. Thus, it was during this phase that the Gandhi-Jinnah negotiations, Bhaulabhai Desai-Liaquat Ali Khan Pact, Simla Conference, and Cabinet Mission proceeding were conducted. This is in order to achieve the Hindu-Muslim unity and also to achieve a political pact between the All-India Muslim League and the Indian National Congress.

The Gandhi-Jinnah negotiations were held at the residence of M.A. Jinnah in Bombay in September 1944 on the basis of the C. Rajagopalchari Formula. While talking to the Press during the course of this negotiation, Gandhiji said that their goal was the attainment of independence for the whole of India. It was for that they prayed and were pledged to lay down their lives. Subsequently, it was only during the course of these negotiations that Mahatma Gandhi in principle accepted the demand of Pakistan. Gandhiji had suggested that the Muslim majority provinces or areas under the British India will be demarcated. However, the Muslim League and the Congress would put up a joint struggle against the British Raj. Gandhiji further elaborated that once after the withdrawal of the British, a general plebiscite would be held in the Muslim majority areas on the basis of the adult franchise. Thus, if the general plebiscite would favour the demand of separate Muslim State, then Pakistan would be established. M.A. Jinnah, on the other hand, remained adamant on the basis of the Lahore Resolution of March 1940 and his Two-Nation theory. However, he simply declined to accept this offer of a maimed and mutilated Pakistan. Thus, the Gandhi-Jinnah negotiations collapsed. However, a detailed study of this valuable negotiation once again revealed the immense love of Mahatma Gandhi towards M.A. Jinnah and towards Muslims of India. It also shows his lifelong desire regarding the achievement of Hindu-Muslim unity.¹⁴

Subsequently, it appears to me that the Desai-Liquat Pact, Simla Conference and Cabinet Mission Proceedings all were significant tests for Mahatma Gandhi in terms of his long standing desire to achieve the HinduMuslim Unity. In addition, this was now to be established only at the political platform. Based on the issue of the formation of an interim ministry and parity between the Congress and the League, Gandhiji had asserted that the more he thought, the more he became convinced that if the Congress tried to select as many Hindus that were Muslims, then the communal poison would spread throughout the country. He further argued about the harm if Congress was reduced from a majority to a minority and would not the Congress become a communal organization by selecting as many Hindus as there were Muslims? After meeting Cabinet Mission for several times and while speaking at a prayer meeting in New Delhi in June 1946, Gandhiji had stated that a true Hindu-Muslim unity would not be achieved while the third party was there. Mahatma Gandhi further argued that although the Cabinet Mission was trying to bring together the Congress, the League, and the British were all laboring under unnatural conditions.¹⁵

On the issue of the Hindu-Muslim unity, the last phase of his life was quite a miserable and saddening one. Every day, Mahatma Gandhi would have to hear the news of the communal holocaust between the Hindus and the Muslims and others from the other parts of India. While speaking at a prayer meeting in New Delhi in October 1946, Gandhiji said that ever since he had heard the news of Ioakhali, he had been wondering where his duty lay. God would have showed him the way. However, what he wanted to tell them and through them to the wider public was that it was the duty of every Hindu not to harbour any thoughts of revenge on Muslims in spite of what they had done in Noakhali. Similarly, while addressing a Muslim gathering at Calcutta in November 1946, Gandhiji said that whether they believed him or not, he wanted to assure them that he was a servant of both Hindus and Muslims. He had not come there to fight Pakistan. Thus, if India was destined to be partitioned, then he could not prevent it. He further said that he only wished to tell them that Pakistan could not be established by force.

Lastly and unfortunately, after making all efforts toward the achievement of Hindu-Muslim unity throughout his life, Mahatma Gandhi had to accept the partition of India on the basis of the religion. He conceded the *Mountbatten Plan* of 3rd June 1947 which envisaged the establishment of two nations i.e. India and Pakistan. However, Lord Mountbatten, in an interview with Mahatma Gandhi, had asserted that Plan should be really christened as the *Gandhi Plan*, since all the salient ingredients were suggested to him by Mahatma Gandhi and since there was no other option left out.¹⁶ With reference to the severe communal violence and speaking at a prayer meeting at New Delhi in July 1947, Gandhiji said that in 1944, he trudged his way under the sun in eighteen successive days to the Quaid-e-Azam house in Bombay. After then, he was performing his duty. Had Jinnah

accepted what he went to offer him at that time, all that blood that had been shed would never have been shed. Also, all that poison would not have been spread.¹⁷ It is indeed wonderful that Mahatma Gandhi, till the last day of his life, happened to meet and address the Muslim delegations and unceasingly spoke for the course of the Hindu-Muslim unity. However, one fails to understand why Mahatma Gandhi did not provide an elaborate programme to the Indian National Congress under his leadership, which may have broadened its political and social bases among the Muslims of India. In addition, there is a space to debate on this issue.¹⁸

#### **References:**

Amarjit Singh (ed.), Gandhi And The Muslims Of India: Selections From The Collected Works Of Mahatma Gandhi, New Delhi, 2014, pp. i-ii *Ibid.* p. iii *Ibid.* p. iv Government of India, The Collected Works Of Mahatma Gandhi, Vol. XX, Ahmedabad, Reprint 1993, pp. 396-98 Ibid., Vol. LXX, pp. 22-24 Ibid., Vol. XC, pp. 532-33 Amarjit Singh(ed.), op.cit, pp. 5-6 *Ibid.* pp.50-51 The Collected Works Of Mahatma Gandhi, Vol. XXVII, pp. 126-27 Ibid., Vol. XXXV, pp. 352-54 Bimal Prasad, Pathway To India's Partition: A Nation Within A Nation, Vol.II, New Delhi,2005,pp. 360-67 Amarjit Singh (ed.), op.cit., pp. viii-ix The Collected Works Of Mahatma Gandhi, Vol. LXXV, pp. 377-78 Ibid., Vol. LXXVIII, pp. 87-143 Ibid., Vol. LXXXIV, pp. 465-90 Ibid., Vol. LXXXVIII, pp. 481-82 *Ibid.*, pp. 313-14 Amarjit Singh (ed.), op.cit., p. xiii

289

# Modelling Religion and Nationalism on a Godly-Civil Continuum

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#### Abstract

There is no precise distinction between traditional godly religion and civil secular religion; both phenomena are in fact quite similar. This is an odd statement to present almost fifty years after Robert Bellah's momentous "Civil Religion in America" and a century and a half after Rousseau coined the term civil religion. In order to explain this assertion, we will begin our discussion of civil religion by placing it in its broader context, that of religion itself. Recognizing its capacity to mobilize human resources like no other social mechanism, religion is first of all defined, and its essential characteristics are outlined.

When examining the attributes of religion, we shall find that many of these same characteristics are typical of nationalism and patriotism as well. In order to distinguish between religion and these ostensibly secular phenomena we propose a godly-civil continuum, which maps and compares traditional and civil religions and the nexus between them. We suggest that these seemingly different phenomena share a common prototype and differ only in the degree to which godly authorities or civil authorities gain dominance one over the other in a particular political system.

Keywords: Religion, civil religion, nationalism, patriotism

#### **Introduction The Characteristics of Religion**

Scholars have been trying to understand the social expression of religion at least since the nineteenth century (Spilka et al., 2003: 3-23). The scholarly discussion about religion reflects a divide between those who maintain substantive definitions of religion and those who hold functional views. Substantive definitions relate to the content of the religious phenomenon, referring mainly to the sacred (belief, doctrine, devotion, rituals, agents), whereas functional definitions point to the utility or the effect that religion has (community, immortality). (Fursech, Repstad, 2006: 16-20; Droogers, 2009: 263-269).

Several definitions from scholarly literature have been considered for the purpose of operationalizing the term of religion in this study. One definition was Max Muller's proposal that religion is:

[...] a mental faculty which [...] in spite of sense and reason, enables man to apprehend the infinite under different names and under varying disguises (Muller, [1880] 1930: 21).

Keith Yandell proposed that religion is:

[...] a conceptual system that provides an interpretation of the world and the place of human beings in it, bases an account of how life should be lived [... and sets] rituals, institutions, and practices (Yandell, 1999: 16). Talcott Parsons and Anthony Wallace described the prototype of

Talcott Parsons and Anthony Wallace described the prototype of religion as having certain qualities, seven that are essential: (1) A belief in the existence of a divine entity, supernatural and metaphysical, that rules the world; (2) A solid doctrine that constructs the framing of reality and forms the moral codes according to which everything in life can be explained; (3) Total devotion, expressed often by personal willingness for self-sacrifice; (4) Public rituals and ceremonies; (5) A cohesive community; (6) Immortality; (7) Social agents and institutions that continually maintain religion and ensure that all the other attributes do not erode (Parsons, 1979: 62-65; Wallace, 1966: 52-101).

#### **A Divine Entity**

All religions are characterized first and foremost by a complex system of beliefs in a divine or superhuman power, and a sense of dependence on a power that is beyond human command (Radcliff-Browne, 1956: 157). Religion is a universal feature of human culture in the sense that every society recognizes the existence of unsolved and awe-inspiring extraordinary manifestations of reality (Lowie, 1936: xvi). Thus, the practices and rituals that are typical for religion derive from a belief that a divine superpower, a supernatural being, controls the universe. The basic common denominator of all religions is the belief that there are spirits that inhabit an invisible world and people have a relationship with them (Argyle and Beit-Hallahmi, 1975; Beit-Hallahmi, 1989; Beit-Hallahmi and Argyle, 1997). William James portrayed the essence of faith in a divine entity as an acceptance of the existence of some parallel cosmos:

acceptance of the existence of some parallel cosmos: [...] there stretches beyond this visible world an unseen world of which we now know nothing positive, but in its relation to which the true significance of our present mundane life consists (James, [1897] 1956: 51).

The deep faith in mystic forces enables religion to act as a mediator between the invisible supernatural, godly world and the visible, natural, human one. This postulate as a definer of religion provides the researcher with an initial cross-cultural clear distinction between religious and non-religious ideologies and behavior (Beit-Hallahmi, 2006: 15).

#### **A Solid Doctrine**

A Solid Doctrine The leading feature of religion is its entirety. It is a decisive set of values that bears no compromise. This array of ideas is a doctrine, typical for every religion and at the same time differing according to the specific religion. It is the religious doctrine that organizes the group affections of identity and solidarity, which form the foundations for its ability to mobilize social resources (Dow, 2007; Southwold, 1978). The power of religious doctrine explains not only the relationship of religiousness with collective action, but also the believers' readiness to make costly personal sacrifices and even to participate in acts of violence (Beit-Hallahmi and Argyle, 1997). Religious doctrine is made solid and coherent through the use of religious texts. Within these texts, three traits of doctrinal cohesiveness are prominent: (i) integration: most elements hang together and cross-reference each other; (ii) deduction: by considering the general principles, one can infer the religious position on a whole variety of situations; (iii) stability: believers get the same messages from different sources on which the religious tradition is founded (Boyer, 2001: 278).

#### **Total Devotion**

Total Devotion The vitality of religion, as scholars have realized, stems from its capacity to be absolute. It serves as a complete and infinite value system (Kishimoto, 1961: 236-240). One's religion is, therefore, one's dedication to a certain purpose that might often even determine his course of life (Ferre, 1970). Understanding the totality within which religion operates is illustrated in the logic of some common idiomatic expressions. When someone is personally obsessive about sport, for example, we might say something like "soccer is his religion". The word "fanatic", describing someone who is filled with an extreme and uncritical enthusiasm or zeal, is derived from the Latin word "fannum" that translates into "temple" and stands for a religious source word "fannum" that translates into "temple" and stands for a religious source for devotion (Rapoport, 1991). Religion has the capacity to induce commitment and dedication exceeding any other social mechanism (Argyle, 1970: 116-117).

#### **Rituals and Ceremonies**

Religious rituals are a set of practices, that adherents of a religion are expected to perform, through which the participants relate to the sacred (Lessa ans Vogt, 1979: 220). Rituals are repeated formal patterns of social behavior, which are expressive and symbolic. Religious rituals tend to attach value to objects and to events which, too, are important objects, or

symbolically representative of such objects, that link together the people in a community (Radcliffe-Browne, 1979; Argyle, 2000: 116-117). Ritual is manipulative in the sense that it combines certain kinds of action with mental process. It is communicative, customary, prescribed, playful, stereotypic, and secretive. The specific actions that are taken throughout ritual include reading (silently, out loud, or both), singing, group processions, dance, and sacrifice. Rituals also include some form of union and communication with the supernatural sphere that characterizes the particular religion (Collins, 2009: 672).

Ritual constructs religion by acting as social glue; it is a vehicle for securing social unity. By making the critical acts and the social contracts of human life public and subject to supernatural sanctions, religious belief and ritual strengthens the bonds of social cohesion (Malinowski, 1979: 46; Radcliff-Browne, [1922] 1964; Glickman, 1963).

#### Community

From its etymological roots, the word "religion", *religio* in its Latin origins, has two distinctive sources. The first one, *relegere*, from *legere*, means to bring together, to gather. This meaning recognizes that any society that chooses to group together does so on the basis of a common religion. The second etymological source is *religare*, from *ligare*, that means to tie and to bind together. This meaning indicates the moral force that is essential for control bind together.

and to bind together. This meaning indicates the moral force that is essential for controlling and regulating human beings, and points to the social regulatory practices of religion (Derrida, 1998). The meanings and linguistic origins of religion stress its social foundations. Durkheim and others, who viewed religion as eminently social, argue that religious representations are collective ones and express collective realities. Ceremonies and rituals are actions that take place in the midst of assembled groups and are destined to excite, maintain, or recreate mental assembled groups and are destined to excite, maintain, or recreate mental states among group members. According to the social functionalist attitude, religion attaches the individual with the solemn obligations of social life; it makes the vital ties of society's common life sacred by turning every important human bond into a union with the divine as well. Through religion, following this reasoning, one belongs to a spiritual community, where his personal obligations to the common – be it family, tribe, or any social institution and his dependence is total (Deciding 1015). institution – are divine, and his devotion is total (Boodin, 1915).

#### **Immortality**

All religions share visions of death and recognize that we are all eventually doomed to die. The common denominator of all religions, however, is the perception that death is merely a passage to another life, and this after-life takes its various forms in different religions accordingly

(Huizinga [1919] 2013: 124-125). Hence, within the religious sphere, people overcome death by a variety of techniques: their spirits do not die; they come back in another form; they wait eternally for the Last Judgment (Boyer, 2001: 203-204). Religion did not only create sacred space, where important lifecycles are determined, but it also put death in the midst of this sacred space and established it as an integral part of these lifecycles. Since prehistoric times, religions have stressed personal immortality either through the rise of one's soul to heaven or by some form of reincarnation. Additionally, promises of resurrection monopolize religions as a framework for the existence of some form of afterlife once life on earth ends (Beit-Hallahmi 2006: 16). Hallahmi, 2006: 16).

#### **Social Agents and Institutions**

Social Agents and Institutions Social life tends to be ambiguous and full of conflicts; naturally, people have their doubts and differences over a variety of issues. In order to reaffirm the divine anchor of their basic beliefs, believers turn to specific persons whom they consider to have religious authority. Consequently, those who hold religious authority decisively determine courses of action and interpret the words and wishes of the Divine. By virtue of this special status, religious specialists or clergy gain the social power and he legitimacy to impose moral and normative decisions on communities of believers (Borg, 2000) 2009).

#### The Term of Civil Religion

There is no doubt about the role that Christianity played, for example, in the eleventh century, when hundreds of thousands of Catholics were willing to take the deadly path to the Holy Land once Pope Urban II urged them to do so (Duncalf, 1909). The Crusaders were called to their death for a holy cause just like other believers throughout history. Moslems heeded a call to jihad, and were willing to sacrifice their lives for a divine purpose. Jews went to war to "sanctify His Name" rather than accept pagan beliefs. However, the puzzle of human collective behavior and the

willingness to sacrifice seems far from being solved by an inquiry that is limited to religion. There are also many examples of collective behavior that were inspired by secular motives and ideas. Take, for instance, the strange case of Italian Fascism. On October 2, 1936, an enormous wave of rallies took place throughout Italy, with 50 percent of all Italians storming the streets and gathering in town squares to express their support of Benito Mussolini's announcement of the invasion of Ethiopia, avowing their willingness to fight. In the Piazza Venezia in Rome, crowds of ordinary Italians pushed and elbowed to get nearer the balcony where the Duce gave his speech. They should and screamed ecstatic replies to their leader's rhetoric appeals. Spontaneous popular enthusiasm for Fascism and for the Duce seemed to create a unitary bond between Mussolini and his followers. The Duce expressed this vividly:

Blackshirts of the Revolution, men and women of Italy, Italians scattered throughout the world, across the mountains and across the oceans, listen! A solemn hour is about to strike in the history of the fatherland. Twenty million men are at this moment gathered in the piazzas through the whole of' Italy. Never in the history of mankind has there been seen a more gigantic demonstration. Twenty million men: a single heart, a single will, a single decision. [...] Forty four million Italians are marching in unison with this army. [...] Never more than in this historic epoch has the Italian people revealed the force of its spirit and the power of its character (Connor, 1992: 52).

Patriotic convulsion in Fascist Italy was expressed by the people not only in crowded rallies. Women queued up to hand over their wedding rings in order to assist the government in financing the war, demonstrating an active desire to participate in the national effort at personal costs. When the government officially invited the public to donate all gold objects to the national cause, about 35 thousand kilos of gold were collected (Corner, 2010).

During the following decade nearly four million Italians served in the Italian Army of World War II, and about half a million of them lost their lives (Overy, 1995). Even though historians have found criticism of the war effort amongst the high ranks of the Italian Army as well as some signs of popular disapproval, the fact remains that millions of Italians went willingly and enthusiastically to fight for the Duce and Italy. Is there a connection between the long and bloody march from Rome to Stalingrad and the Christian march to Jerusalem in the eleventh century? Which God was it that led hundreds of thousands of Italians to march to their heroic death? The answer, according to this study, lies within the continuum of forms that religion can take. In the case of Mussolini and his followers, as in the case of Nazism and Soviet Communism (Zeldin, 1969: 100-111) that flourished during the same decades, we are witnessing an extreme form of a different kind of religion that plays according to similar rules: the civil religion.

Civil religion is a term that was coined by Jean-Jacques Rousseau. Rousseau, a thinker of the Enlightenment and of the French Revolution, envisioned a new form of religion that was the product of secular legislation and which united society with a spiritual foundation consisting not of God but rather of the state, its institutions and laws (Rousseau, [1762] 1960). Pride in the state, veneration for its institutions and reverence for its laws and customs should be inculcated in citizens. It was the responsibility of the state to teach moral values and a civic creed that would foster loyalty, obligation and brotherhood among its citizens. Civil religion was to be a top- down phenomenon; it was in effect a political religion, bearing a politico-religious dogma which would be inculcated into the citizens of the state by its leaders and institutions. Rousseau had an instrumental view of civil religion, as a means by which state authorities could ensure unity, loyalty and obedience (Cristi, 2001).

Durkheim perceived civil religion somewhat differently. While its purpose was in fact the same, Durkheim saw the development of a civil religion as a bottom-up process, in which civil religion was created by the people. In his last major work, *The Elementary Forms of Religious Life* (1912), Durkheim postulated that religion was not divinely or supernaturally inspired; it was rather a product of society (Durkheim, [1917] 2001: 43). Deriving his conclusion from a study of an Australian aborigine tribe, he noted that a religion could replace belief in a supernatural being with an earthly substitute: the public. In Durkheim's words: "The god of the clan [...] can therefore be nothing else than the clan itself" (Durkheim, [1917] 2001: 28). The deity is at its base an expression of the self-worship of the collective. Unlike Rousseau, Durkheim did not see civil religion as an instrumental political process to secure loyalty to a particular social order nor was he interested in its political utility. For Durkheim, civil religion emanates from the people themselves as an expression of self-love and serves as an agent of social cohesion; as such, it establishes the norms and values that define the social order.

During the 1930s, Talcott Parsons building upon Durkheim's notion of an allegedly godless form of religion, described American culture as being shaped by a secular style of Christianity (Parsons, 1935). Decades later, in the late 1960s and early 1970s, Parsons and others brought back into use the specific term of civil religion (Coleman, 1970; Hammond, 1976; Thomas and Flippen (1972); Wimberly, 1976). Best-known and one of the first in this new wave was Parsons' student, Robert Bellah. In 1967, Bellah published his seminal article titled *Civil Religion in America* (Bellah, 1967), and evoked a new concept of social order. Bellah's article electrified the scholarly community and resulted in scores of articles responding to his thesis; it stirred up a debate over civil religion in the United States. He asserted that there was in the United States an elaborate well-institutionalized civil religion, residing alongside and differentiated from churches and synagogues. According to Bellah, most Americans share a common Judeo-Christian religious base which provides a common foundation of sanctity to their secular political institutions and to their domestic and foreign policies as well. This common base gave religious legitimacy to political authority and inspired the political process. This he found most clearly in the frequent mention of God in presidential speeches. Civil religion in the United States ascribed to ostensibly secular institutions a measure of godly reverence and sanctity that could unite and also inspire its citizens. "Defense of liberty", the Constitution Following Bellah, most contemporary academic discourse refers to the American case as the prototype of civil religion, which can then be applied to our understanding of other modern societies (Bellah, 1967; 1975). The godly connection which provides inspiration and reverence to

American secular institutions need not be present in civil religion as such. American secular institutions need not be present in civil religion as such. Veneration for institutions, leaders, and public symbols can be fostered by means of a secular ideology such as nationalism, or secular totalitarian ideologies such as fascism and communism. Within the framework of civil religion, not only is the almost fanatic support for Fascism understood but also the motivation of patriots throughout history to declare, each in their own language, Horace's *Dulce et decorum est pro patria mori*, "Sweet and fitting it is to die for the fatherland" (Grafton and Settis, 2010: 287).

Nationalism and Patriotism: Components of Civil Religion Civil religion necessarily includes an aspect of nationalism, since it unites the nation through its role in politics (Santiago, 2009). In the name of nationalism, people have accomplished the greatest human achievements but have also executed humanity's worst atrocities and genocide. Some scholars distinguish between patriotism and nationalism, mainly because correctly or incorrectly the latter is associated with centuries of bloodshed in Europe. Maurizio Viroli, for example, differentiates between the two concepts, claiming that nationalism is exclusive whereas patriotism is generally inclusive (Viroli, 1995). Patriotism, following this distinction, puts forward affective connections with the nation, its institutions and principles, whereas nationalism spotlights chauvinism and superiority, thus giving rise to the notion that nationalism is simply a corrupt version of patriotism (de Figueiredo and Elkins, 2003). Whereas patriotism is considered a virtue, nationalism can be seen a fault. Perhaps the best illustration for this position is the assertion that nationalism is no more than patriotism's bloody sister (Schaar, 1981). Charles De Gaulle, for this matter, is quoted as having said that "patriotism means that the love towards one's countrymen comes first; nationalism means that the hatred toward others comes first" (Poper, 2004: 195).

However, this study adopts the view that patriotism, like nationalism, is an expression of a strong and uncompromising bond to the country and to the people, and a resolute unconditional support for its values its critics. Patriotism, just like nationalism, is connected to a deep emotional identification with the country's culture and symbols. Patriotic national pride is based on an ideal portrayal of state and nation, shaped by the political

establishment in schools, media, and other social organizations (Dekker et al., 2003).

Some scholars regard nationalism not only as different in its essence from religion but also as its contradiction. British nationalism developed in the eighteenth century on the foundation of rationalism and humanism that became popular among an emerging anti-aristocratic Franco-phobic bourgeoisie that strove to establish a more egalitarian socio-political order (Newman, 1987; Greenfeld, 1992). In France, inspired by the writings of Montesquieu, Voltaire and Rousseau, the revolutionaries, made Man the yardstick of everything and God lost his primacy. Society became now, in the eyes of these political philosophers, a collection of free citizens, and the nation-state became the framework for these citizens to govern themselves. The early flowering of democracy went hand in hand with the establishment of modern nationalism. Napoleon Bonaparte used French nationalism to justify his military campaigns across Europe to distribute the enlightened ideals of the French Revolution. Indeed, Napoleon's invasions spread the concept of nationalism all over the continent (Motyl, 2001; Greenfeld, 1992).

Decades later, towards the end of the nineteenth century, anticlericalism became practically a part of the official ideology of nations. Schoolmasters, for example, who were part of the large civil service system, were dispatched across the country to eradicate the influence of ecclesiastical teaching and teach the values of the nation. The nation-state that took shape in France, as well as in other small states in Western Europe, was a political entity with a nationalist, patriotic political ideology, devoid of religion and a secularized public sphere (Weber, 1976).

Thus, the Western European nationalism that emerged presented a secular rationalist social order. Marcel Mauss' definition reflects this approach towards nationalism:

[A nation is] a society materially and morally integrated, with a stable and permanent central authority, with determinate borders whose inhabitants possess a relative moral, mental, and cultural unity and consciously adhere to the state and its laws (Mauss, 1969: 108).

Typically, in this definition, as well as other definitions of nationalism, we do not find reference to any belief or religious doctrine. However from a functionalist perspective, not only are the two phenomena, religion and nationalism, similar in their behavioral manifestations but they are also similar in the way they affect society and influence the loyalties and commitments of their adherents. To further clarify this point we will utilize the essential qualities of religion derived from the works of Talcott Parsons and Anthony Wallace to analyze nationalism and national patriotism (Parsons, 1979; Wallace, 1966).

#### **A Divine Entity**

National patriotism relates to loyalties to one's country and to its inhabitants. There is a wide consensus among scholars that the essence of patriotism is the supremacy of the group over its individual members. It is something that society forms in order to justify the devotion of major private resources to collective goals (Ben-Amos and Bar-Tal, 2004; Schaar, 1981; Viroli, 1995; Lewin, 2010). Hence, the core of national patriotism is devotion to a social sphere; dedication to the attitudes, actions and organizations that belong to the collective group. This almost blind devotion is similar to the unquestioned belief in the supernatural in the context of religion. It allows one to relinquish the need for a reestablishment of decisions in every junction; it is stronger than any idea of justice or ethics, and forms, therefore, the grounds for people's readiness to sacrifice for the object of their patriotic loyalty (Grodzins, 1956; Oldenquist, 1982). Religion may provide the identity that turns the community into a cohesive social entity and connects it with a particular geographical space. The combination of ethnic nationalism with national religion as in the case of Catholic Ireland, Catholic Croatia or Muslim Bosnia can make devotion to the national cause all the more powerful.

#### A Solid Doctrine

Patriotism involves an understanding that the object of patriotic loyalty, that is – the political entity, deserves dedication because of the values that it stands for. National identity includes accepting the values and ideals of one's country; national patriotism; in practice is loyalty not just to the specific political order but rather loyalty to the ideas that it stands for (Keller, 2005). Ideas such as democracy, freedom, and equality have inspired patriots throughout history to support their governments and to make sacrifices in their name.

It is important to note that there is an inherent tendency of national patriotism to go often beyond the morals of any constructed ideology and to even reject logic if need be. The well-known declaration of Stephen Decatur, the American naval officer, is perhaps one of the best examples illustrating this: "Our Country! In her intercourse with foreign nations may she always be in the right; but right or wrong, our country!" (Somerville, 1981: 571).

#### **Total Devotion**

National patriotic loyalties often lead to what some scholars refer to as obsessive dedication, an unconditional love, and a compulsive commitment to the object of admiration (Tamir, 1997). Willingness to sacrifice is an elementary attribute of national patriotism, the core of its beliefs and affections. This is why military service and participation in combat, where the personal risks are great, are often regarded as the ultimate expressions of patriotism (Somerville, 1981). American children are commonly taught the words of Nathan Hale, hero of the Revolutionary War, before he was executed by the British: "I only regret that I have but one life to lose for my country" (Seymour, 2006: 122).

#### **Rituals and Ceremonies**

Rituals and Ceremonies Religions are clearly marked by public and private rituals and ceremonies that conjoin believers together into a community and celebrate past events. In patriotic nationalism too rituals commemorate moments of common history that mark milestones in shaping and crystallizing the nation. They are constructed to establish a crucial link between the private and the public. Hence, although patriotic rites were originally militaristic by nature, they later included public parades, singing the national anthem, flags, speeches of political leaders, festivals, and even pilgrimage to specific cites of importance to the collective identity (Barber, 1949; Lukes, 2004; Alexander, 2004). National rituals may also take the form of visits to Alexander, 2004). National rituals may also take the form of visits to national history museums and memorials of national leaders, which become in effect national shrines (Glass, 2009: 12-13). Perhaps the most outstanding shrines are the mausoleums of national leaders such as Russian Vladimir Ilyich Lenin, Chinese Mao Zedong, Vietnamese Ho Chi Minh, and the memorials of American Presidents George Washington and Abraham Lincoln.

The educational system is one of the most important spheres where patriotic celebrations are practiced. During the late nineteenth century, patriotic rituals were fused together with school practices and composed a sort of national liturgy. Rites are iterated at school annually. Before studying their country's history, school-children already internalize emotions, recount myths, and identify with the nation and its political entity (Carretero, 2011, 110, 122, 186, 100) 2011: 119-122; 186-190).

#### Community

Religion, as mentioned earlier, unites believers into a community and creates a relationship between God and His People. Similarly, national creates a relationship between God and His People. Similarly, national patriots share a love for their countrymen. It is not a humanitarian love that emanates from deep compassion toward all members of the human race; instead, it is directed specifically toward those who belong to one's particular group, even in cases when no prior personal acquaintance exists. Moreover, the patriot's commitment to his compatriots has nothing to do with friendship or even familiarity; most of the people for whom he acts will remain unknown to him forever. Such patriotic loyalty, then, refers to the large national community, which extends far beyond one's personal ties and networks (Primoratz, 2002).

#### Immortality

The national patriot who sacrifices his life, or hers, for the country becomes an immortal hero. The hero's life is renewed in the nation's collective memory—and the endurance of the nation becomes a necessary condition for the promise of a lasting commemoration of the patriotic deed (Tamir, 1997). Thus, past and future are joined in patriotism; the belief that the national group is an entity rooted in history is essential for the individual to believe in its eternal future, and the belief in an eternal future of the group, promising commemoration of the patriot's sacrifice, is a reflection of its historic past (Ben-Amos, 1997).

#### **Social Agents and Institutions**

Empirical studies have shown the importance of trust in political leadership. In fact, there is evidence that vertical trust, reflecting people's confidence in officials who lead the military and other state institutions, is crucial in maintaining patriotic action; its absence is likely to lead to a decline in national patriotism (Lewin, 2010). National leaders often inspire high esteem and even veneration in the eyes of citizens not because of their own attributes but rather because of the revered office that they fill. "Hail to the Chief", the official anthem of the US. President played on the arrival of the President at public gatherings, creates the mystic of the office. While trust in political leadership may be declining (Hetherington, 2004), in times of crisis the public still look to their leaders to offer guidance, solace and hope for the future, a role which in the religious context is filled by the clergy. Without the presence of God, then, national patriotism seems to demonstrate the very same traits that religion does, thus forming the profound exampleof a a secular civil religion, that is – a religion where the nation replaces God.

nation replaces God. Social groups may perform rituals and live within a clear system of beliefs and common collective principles even with the absence of a godly entity (Robertson, 1970). As early as the 1930s, Gaetano Mosca noted that both religious institutions and political parties use the very same techniques of myths, symbols and rituals in order to manage the masses. He called it *crowd manipulation*, implying that it was all about manipulating the public and tricking people into action (Mosca, 1939). This approach towards both religion and politics sees tradition as no more than a manipulative tool to motivate and control the masses. It corresponds to Eric Hobsbawm's assertion that social practices are in fact demagogic means, consciously invented by political actors in order to gain legitimacy for their power; rituals and other religious expressions are, hence, essentially utilitarian and instrumental (Hobsbawm, 1983).

Consequently, the border between religion and nationalism is not always a clear one, particularly since nationalism often fulfills some of the functions that are considered religious ones, like the sense of belonging to a certain group or the willingness to sacrifice for the nation. Carlton Hayes, for example, left no doubt with the title of his book *Nationalism: A Religion* and asserted clearly that nationalism was no more than a modern substitute replacing the historic form of supernatural religion (Hayes, 1960). Boyd Shafer, who wrote about nationalism in the West during the second half of the twentieth century, suggested that in modern France nation and nationalism supplied new gods, new hopes, and a means to achieve a good life, at a time of instability and insecurity (Shafer, 1955). However, even proponents of the "nationalism was a secular force that pushed religion aside, religion often proved to be so resilient that it co-opted nationalism under its control (Canetti-Nisim, 2003). Since religion is capable of arousing deep social allegiance, nonreligious leaders who strive for secular goals often use it manipulatively (Rapoport, 1991). The state may have the bureaucratically efficient apparatus to manage society, but it is actually religion that creates a legitimacy that is necessary to maintain the secular state (Rothi et al., 2005).

The inherent bond between traditional religion and nationalism explains why in European countries, and not necessarily only there, there is a deliberate formal connection between religions and state institutions. In fact, many states have fostered religion as the very foundation of their nationality, as in Greece, Ireland, Italy, Great Britain and the Scandinavian countries.

The Catholic Church has also proved to be powerful in post-Communist Poland. When the country's democratic constitution was formulated in 1997, the secular forces were strong enough to prevent any official status from being conferred on the Church. Nevertheless, the preamble to the Constitution reflects the notion of an accepted connection between Catholic Christianity and Polish national identity (Durham et al., 2003; Flere, 2011).

The American case of the relationship between religion and national patriotism is noteworthy. The First Amendment of the American constitution guarantees the free exercise of religion and prevents the federal government from making any law respecting an establishment of religion. However, the American creed, this large foundation of common identity, is based both on the Declaration of Independence and on the Anglo-Protestant culture of its forefathers. The religious dimension of this culture was a commitment to Christianity and its values, among them the Protestant idea of individualism (Huntington, 2004).

In many democratic countries, religion has been fostered as a synergetic vehicle for national unity. However, it is important to note that at the same time, citizens of these states, as individuals, are free not to practice religion. They regard themselves as secular because they do not practice rituals in their daily lives; however, at the same time, they identify with the Christian ethos of public institutions in the country and participate in religious rituals at key points in their lives (for example, rites of passage such as baptism, marriage and burial) provided by their church (Bruce, 1996; 2000).

Conclusively, one can see that when observing national patriotism's basic traits and when comparing patriotism to religion according to the latter's seven qualities – we are in fact witnessing diverse types of the same phenomenon, that are intertwined with each other.

There is broad understanding that civil religion contains a civil component and a religious one, but the question remains which of them is the nucleus of this phenomenon. Are we dealing with occurrences where politics takes the form of religion or are we concerned with religion that asserts itself in politics? Is civil religion a set of godly beliefs that is trimmed and supplemented to support the political order, in which case the political order is the center, or is the reverse true and civil religion is the framework within which godly religion, takes over politics in order to establish itself in the minds and hearts of the citizens? No doubt, in both cases we encounter a fusion of political life with religious imagery and practices. However, whereas the first option implies that we should examine temporal political authority the second sends us to inquire about godly authority and its political expression.

#### The Godly-Civil Continuum

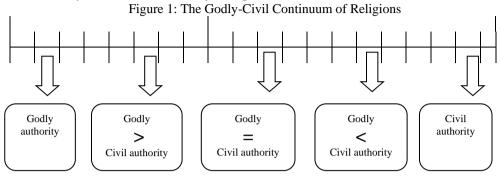
This study has set itself the task of framing the concept of civil religion in a comparative perspective. In order to do so, the point of departure of our analysis is that civil religion falls, as the simple linguistic structure of the words implies, within and without the boundaries of religion; civil religion is, put simply, a religion that is civil in its nature.

structure of the words implies, within and without the boundaries of rengion; civil religion is, put simply, a religion that is civil in its nature. As we have explained earlier, civil religion is a way in which particular political and social arrangements acquire some kind of sacred meaning and as a result gain elevated stature and legitimacy. The civil religion borrows some of its symbols and rituals from the dominant traditional religion; consequently, it provides the social glue that unites societies around a common base (Mcclay, 2010). Our conceptualization of a general model that puts onto one continuum civil religion and traditional (godly) religions follows the approach outlined by Emilio Gentile in his book *Politics as Religion*. Gentile concluded that religion is a phenomenon that is liable to be a godly one, but it is also likely to be a non-godly one; both the godly and the non-godly religions belong to the same continuum of social occurrences. He generalizes the phenomenon as follows:

A developed system of beliefs, myths, rituals, and symbols that create an aura of sacredness around an entity belonging to this world and turn it into a cult and an object of worship and devotion. [...] Any human activity from science to history or from entertainment to sport can be invested with [... sacredness] and become the object of a [...] cult, thus constituting a [...] religion (Gentile, 2006: 76).

The analytical model of the relations between civil and traditional religion regard them both as springing from a common prototype. The paradigm suggested here is that relations between traditional religion and civil religion are the continuance of the centuries-long struggle between godly authorities and civil authorities. Hence, the two phenomena are not dichotomous; rather, there is a continuum stretching from one pole to another, with states and nations falling along a range, some of them being closer to traditional religion and others located near the opposite extremity of a secular civil religion. If we were to map out the relations between different manifestations of civil religion and the authority, and where religious leadership and political leadership are one and otherswould be located on the opposite edge where legitimacy is based entirely on a secular model of civil religion. In order to be as exact as possible within the limitations of social sciences, we suggest to split the continuum into five different categories. These categories reflect the relative distribution of power that the two sources of authority have over society: (I) at one pole of the continuum – political entities where godly authority reigns; (II) political entities where a godly authority is dominant but weaker civil authorities share power; (IV)political entities where a civil authority; (V) at the other pole of the continuum – political entities where a civil authority; (V) at the other pole of the continuum – political entities where a civil authority; reigns and religion is illegitimate and powerless.

The five different categories form two groups of religions: the godly one, where a godly authority either totally controls or dominates the political realm, and the civil one, where a secular, civil authority either shares, dominates or replaces its godly rival. The paradigm is illustrated in *Figure 1: The Godly-Civil Continuum of Religions*.



Godly Religion

**Civil Religion** 

The strength of this model is that it is an inclusive one. Combined with the definitions of religion, as outlined above, it has the capacity to form a framework for understanding a variety of social phenomena and comparing them. It is within this framework that we can refer to nationalism, patriotism and a variety of social movements, to view them as religious forms of social experience, to place them accordingly along the godly-civil continuum, and consequently to deepen our understanding of these social phenomena.

In conclusion, when we inquire why individuals and societies are ready to kill or to die for a cause, to suffer hardships or to celebrate ecstatically collective victories and achievements, a broad comparative perspective should be adopted. Consequently, by reducing our discussion to only one dimension, one that refers solely to religion, godly or civil, the linear model provides us with a conceptual framework that allows us to understand political behavior in a large comparative context. We can now take diverse social and political experiences, place them along the model's continuum and evaluate them not only in their specific historical setting but also in relation to each other.

#### **References:**

Alexander, J. C. (2004), Cultural Pragmatics: Social Performance Between Ritual and Strategy, *Sociological Theory* 22, 4: 527-573.

Appadurai, A. (1986), *The Social Life of Things: Commodities in Cultural Perspective*. New York, NY: Cambridge University Press.

Argyle, M. (2000), *Psychology and Religion: An Introduction*. New York, NY: Routledge.

Argyle, M. and B. Beit-Hallahmi (1975), *The Social Psychology of Religion*. London, UK: Routledge and Kegan Paul.

Aronoff, M. J. (1981), Civil Religion in Israel, RAIN, 44: 2-19.

Barber, B. (1949), Place, Symbol and the Utilitarian Function in War Memorials, *Social Forces*, 28, 1: 62-87.

Beit-Hallahmi, B. (1989), *Prolegomena to the Psychological Study of Religion*. Lewisburg, PA: Bucknell University Press.

Beit-Hallahmi, B. (2006), The Return of Martyrdom: Honor, Death and Immortality, in L. Weinberg and A. Pedahzur eds., *Religious Fundementalism and Political Extremism – Totalitarian Movements and Political Religions*. New York, NY: Routledge: 12-38.

Beit-Hallahmi, B. and M. Argyle (1997), *The Psychology of Religious Behavior, Belief and Experience* London, UK: Routledge.

Bellah, R. N. (1967), Civil Religion in America, *Daedalus – Journal of the American Academy of Arts and Sciences*, 1: 1-21.

Bellah, R. N. (1975), *The Broken Covenant: American Civil Religion in Time of Trial*. New York, NY: Seabury, 1975.

Ben-Amos, A. (1997), The Uses of the Past: Patriotism Between History and Memory, in D. Bar-Tal and E. Staub eds., *Patriotism in the Lives of Individuals and Nations*. Chicago, IL: Nelson-Hall: 67-82.

Ben-Amos, A. and D. Bar-Tal (2004), Patriotism as a Psychological Social Phenomenon – Introduction to an Analysis of the Israeli Case, in A. Ben-Amos and D. Bar-Tal eds., *Patriotism – Homeland Love*. Tel Aviv, Israel: University of Tel Aviv: 13-28.

Benveniste, E. (1973), *Indo-European Language and Society*. London, UK: Faber & Faber.

Boodin, J. E. (1915), The Function of Religion, *The Biblical World*, 46, 1: 67-76.

Borg, M. T. (2009), Religion and Power, in P. B. Clarke ed., *The Oxford Handbook of the Sociology of Religion*. New York, NY: Oxford University Press: 194-209.

Boyer, P. (2001), *Religion Explained: The Evolutionary Origins of Religious Thought*. New York, NY: Basic Books.

Bruce, S. (1996), *Religion in the Modern World: From Cathedrals to Cults*. Oxford, UK: Oxford University Press.

Bruce, S. (2000), God Is Dead: Secularization in the West. Oxford, UK: Blackwell.

Canetti-Nisim, D. (2003), Two Religious Meaning Systems, One Political Belief System: Religiosity, Alternative Religiosity, and Political Extremism, *Totalitarian Movements and Political Religions*, 43, 3: 35-54.

Carretero, M. (2011), *Constructing Patriotism: Teaching History and Memories in Global Worlds*. Charlotte, NC: Information Age Publishing: 114-195.

Coleman, J. A. (1970), Civil Religion, Sociological Analysis, 31: 67-77;

Collins, P. (2009), Religion and Ritual: A Multi-Perspectival Approach, in P. B. Clarke ed., *The Oxford Handbook of the Sociology of Religion*. New York, NY: Oxford University Press: 671-698.

Connor, W. (1992), The Nation and its Myth, in A. D. Smith ed., *Ethnicity* and Nationalism. Leiden, Netherlands: Brill: 48-57.

Corner, P. (2010), Italian Fascism: Organization, Enthusiasm, Opinion, *Journal of Modern Italian Studies*, 15, 3: 378-389.

Corner, P. (2012), *The Fascist Party and Popular Opinion in Mussolini's Italy*. Oxford, UK: Oxford University Press.

Cristi, M. (2001), From Civil to Political Religion: The Intersection of Culture, Religion and Politics. Ontario, Canada: Wilfrid Laurier University Press: 15-40.

de Figueiredo R. J. and Z. Elkins (2003), Are Patriots Bigots? An Inquiry into the Vices of In-Group Pride, *American Journal of Political Science*, 47, 1: 171-188.

Dekker, H., D. Malova, and S. Hoogendoom (2003), Nationalism and Its Explanations, *Political Psychology*, 24, 2: 345-376.

Derrida, J. (1998), Faith and Knowledge: The Two Sources of "Religion" at the Limits of Reason Alone, in J. Derrida and G. Vattimo eds., *Religion*. Cambridge: Polity Press: 1-78.

Dow, J. W. (2007), A Scientific Definition of Religion, *Anpere – e-Journal* for the study of Anthropology of Religion: 1-15. Retrieved: www.anpere.net/2007/2.pdf

Droogers, A. (2009), Defining Religion: A Social Science Approach, in P. B. Clarke ed., *The Oxford Handbook of the Sociology of Religion*. New York, NY: Oxford University Press: 263-269.

Duncalf, F. (1909), *The Peasant's Crusade*, a thesis submitted in partial fulfillment of the requirement for the degree of Doctor of Philosophy (Wisconsin: University of Wisconsin.

Durham Jr. C. W., N. J. Peterson and E. A. Sewell (2003), Introduction: A Comparative Analysis of Religious Association Laws in Post-Communist Europe, in S. W. Ferrari, C. W. Durham Jr. and E. A. Sewell eds., *Law and Religion in Post-Communist Europe* (Leuven, Belgium: Peeters: vii-xliii.

Durkheim, E. ([1917] 2001), *The Elementary Forms of Religious Life*. New York, NY: Oxford University Press.

Eisenstadt, S. N. (1967), *Israeli Society*. London, UK: Weidenfeld & Nicolson.

Ferre, F. (1970), The Definition of Religion, *Journal of the American Academy of Religion*, 38, 1: 3-16.

Flere, S. (2011), Article 9 of the European Convention on Human Rights: Discerning an Orthodox Pattern of Problems? in M. Blagojevic and D. Todorovic eds., *Orthodoxy from an Empirical Perspective*. Belgrad, Serbia: Yugoslav Society for the Scientific Study of Religion: 37-48.

Fursech, I. and P. Repstad (2006), An Introduction to the Sociology of Religion: Classical and Contemporary Perspectives. Burlington, VT: Ashgate.

Gentile, E. (2006), *Politics as Religion*. Princeton, NJ: Princeton University Press.

Glass, B. D. (2009), The Star-Spangled Banner Flies High, Shining New Light on American History, *Phi Kapa Phi Forum*: 12-33.

Glock, C. Y. (1962), On the Study of Religious Commitment, *Religious Education*, Vol. 54, 4: S98-S110.

Gluckman, M. (1963), *Order and Rebellion in Tribal Africa*. New York, NY: Free Press.

Grafton, A., G. W. Most and S. Settis (2010), Horace, *Odes* (3.2.13) in *The Classical Tradition*. Harvard, CT: The President and Fellows of Harvard College: 287.

Greenfeld, L. (1992), *Nationalism: Five Roads to Modernity*. Cambridge, MA: Harvard University Press.

Grodzins, M. (1956), *The Loyal and the Disloyal – Social Boundaries of Patriotism and Treason*. Chicago, IL: University of Chicago Press.

Hammond, P. E. (1976), The Sociology of American Civil Religion, *Sociological Analysis*, 37: 169-182.

Hayes, C. J. (1960), Nationalism: A Religion. New York, NY: MacMillan.

Hetherington, M. J. (2004), Why Trust Matters: Declining Political Trust and the Demise of American Liberalism. Princeton: University Press.

Hobsbawm, E. (1983), Introduction: Inventing Traditions, in E. Hobsbawm and T. Ranger eds., *The Invention of Tradition*. Cambridge, UK: Cambridge University Press: 1-308.

Huizinga, J. ([1919] 2013), *The Waning of the Middle Ages*. Mineola, NY: Dover Press.

Huntington, S. P. (2004), *Who Are We? The Challenges to America's National Identity*. New York, NY: Simon & Schuster.

James, W. ([1897] 1956), *The Will to Believe*. New York: Dover Publications.

Kedar, N. (2003), Ben Gurion's Mamlakhtiut: Etymological and Theoretical Roots, *Israel Studies*, 7, 3: 117-133.

Keller, S. (2005), Patriotism as Bad Faith, *Ethics*, 115: 563-592.

Kishimoto, H. (1961), An Operational Definition of Religion, *Numen*, 8, 3: 236-240.

Lessa, W. A. and E. Z. Vogt (1979), Introduction, in W. A. Lessa and E. Z. Vogt eds., *Reader in Comparative Religion: An Anthropological Approach, Fourth Edition*. New York, NY: HarperCollins: 220-237.

Lewin, E. (2010), Patriotism: Insights from Israel. Amherst, NY: Cambria.

Liebman, C. L. and E. Don-Yehiya (1983), The Dilemma of Reconciling Traditional Culture and Political Needs: Civil Religion in Israel, *Comparative Politics*, 16, 1: 53-66.

Lowie, R. H. (1936), Introduction, *Primitive Religion*. London, UK: Routledge: xvi.

Lukes, S. (2004), Political Ritual and Social Integration, *Sociology*, 9, 2: 289-308.

Malinowski, B. (1979), The Role of Magic and Religion, in W. A. Lessa and E. Z. Vogt eds., *Reader in Comparative Religion: An Anthropological Approach, Fourth Edition*. New York, NY: HarperCollins: 46-63.

Mauss, M. (1969), *La Nation*, Paris: Editions de Minuit: 574. The translation is quoted from Brubaker R. (2004), Marcel Mauss on Nationhood: Objectivism and its Limits, in M. M. Kovacs and P. Lomeds, *Studies on Nationalism*. Budapest, Hungary: Central European University, 2004: 105-113.

Mcclay, W. M. (2010), Foreword, in R. Weed and J. von Heyking eds., *Civil Religion in Political Thought: Its Perennial Relevance in North America*. Washington, DC: The Catholic University of America Press: vii-viii.

Medding, P. (1990), *The Founding of the Israeli Democracy*, 1949-1967. New York, NY: Oxford University Press.

Mosca, G. (1939), *The Ruling Class*. New York, NY and London, UK: McGraw-Hill.

Motyl, A. J. (2001), *Encyclopedia of Nationalism Vol. 2*. San Diego, CA: Academic Press: 170-172.

Muller, M. ([1880] 1930), Lectures on the Origin and Growth of Religion, in N. Schmidt, *The Coming Religion*. New York, NY: Macmillan: 21-47.

Newman, G. (1987), *The Rise of English Nationalism: A Cultural History*, 1740-1830. New York, NY: St. Martin's Press.

O'Hara, V. (2009), *Struggle for the Middle Sea*. London, UK: Conway, 2009. Oldenquist, A. (1982), Loyalties, *Journal of Philosophy*, 79, 4: 173-193.

Overy, R. (1995), Why the Allies Won. New York, NY: Norton & company.

Talcott Parsons, T. (1935), The place of Ultimate Values in Sociological Theory, *International Journal of Ethics*, 45: 282-316.

Parsons, T. (1979), Religious Perspectives in Sociology and Social Psychology, in W. A. Lessa and E. Z. Vogt eds., *Reader in Comparative Religion: An Anthropological Approach, Fourth Edition*. New York, NY: HarperCollins: 62-85.

Poper, M. (2004), IDF as Educator of Patriotism, in A. Ben-Amos and D. Bar-Tal eds., *Patriotism – Homeland Love*. Tel Aviv, Israel: University of Tel Aviv Press: 195-211.

Porges, W. (1945), The Clergy, the Poor, and the Non-Combatants on the First Crusade, *Speculum*, 21, 1 : 1-23.

Primoratz, I. (2002), Introduction, in I. Primoratz ed., *Patriotism*. Amherst, New York: Humanity Books: 9-24.

Radcliff-Browne, A. R. (1956), *Structure and Fiction in Primitive Society*. London, UK: Cohen & West.

Radcliff-Brown, A. ([1922] 1964), *The Andaman Islanders: A Study in Social Anthropology*. New York, NY: Free Press.

Radcliffe-Brown, A. R. (1979), Taboo, in W. A. Lessa and E. Z. Vogt eds., *Reader in Comparative Religion: An Anthropological Approach, Fourth Edition*. New York, NY: HarperCollins: 47-56.

Rapoport, D. C. (1991), Some General Observations on Religion and Violence, *Terrorism and Political Violence*, 3, 3: 118-140.

Riley-Smith, J. (2003), *The First Crusade and the Idea of Crusading*. New York, NY: Continuum.

Robertson, R. (1970), Sociologists and Secularization, Sociology, 5: 1-16.

Rothi, D. M., E. Lyons and X. Chryssochoou (2005), National Attachment and Patriotism in a European Nation: A British Study, *Political Psychology*, 26, 1: 135-155.

Rousseau, J-J. ([1762] 1960), *The Social Contract or Principles of Political Right*. London, UK: Oxford University Press.

Runciman, S. (1980), *The First Crusade*. New York, NY: Cambridge University Press.

Sadkovich, J. (1994), *The Italian Navy in World War II*. Westpoint, CT: Greenwood Press.

Santiago, J. (2009), From Civil Religion to Nationalism as the Religion of Modern Times: Rethinking a Complex Relationship, *Journal for the Study of Religion*, 48, 2: 394-401.

Schaar, J. H. (1981), *The Case for Covenanted Patriotism: Legitimacy in the Modern State*. New Brunswick, NJ and London, UK: Transaction Books.

Seymour, G. D. (2006), *Documentary Life of Nathan Hale: Comprising All Available Official and Private Documents Bearing on the Life of the Patriot.* Whitefish, MT: Kessinger Publishing.

Shafer, B. C. (1955), *Nationalism: Myth and Reality*. New York, NY: Harcourt, Brace and Co.: 156-167.

Smart, N. (1989), *The World's Religions: Old Traditions and Modern Transformation*. Cambridge: Cambridge University Press.

Somerville, J. (1981), Patriotism and War, Ethics, 91, 4: 568-578.

Southwold, M. (1978), Buddhism and the Definition of Religion, *Man*, 13, 3: 362-379.

Spilka, B., R. W. Hood, B. Hunsberger, and R. Gorsuch (2003), *The Psychology of Religion: An Empirical Approach*. New York, NY: Guilford Press.

Tamir, Y. (1997), Reflections on Patriotism, in D. Bar-Tal and E. Staub eds., *Patriotism in the Lives of Individuals and Nations*. Chicago, IL: Nelson-Hall: 23-42.

Thomas, M. C. and C. C. Flippen, American Civil Religion: An Empirical Study, *Social Forces*, 51 (1972): 218-225.

Turner, B. S. (2005), Talcott Parsons' Sociology of Religion and the Expressive Revolution: The Problem of Western Individualism, *Journal of Classic Sociology*, 5, 3: 303-318.

Viroli, M. (1995), For Love of Country. Oxford, UK: Clarendon Press.

Walker, I. (2003), Iron Hulls Iron Hearts: Mussolini's Elite Armored Divisions in North Africa (Marlborough, UK: Greenwood Press.

Wallace, A. F. C. (1966), *Religion: An Anthropological View*. New York, NY: Random House.

Weber, E. (1976), *Peasants into Frenchmen: The Modernization of Rural France*, 1870-1914. Stanford, CA: Stanford University Press.

Weed, R. and J. von Heyking (2010), Introduction, in R. Weed and J. von Heyking eds., *Civil Religion in Political Thought: Its Perennial Relevance in North America*. Washington, DC: The Catholic University of America Press.

Wimberly, R. C. (1976), Testing the Civil Religion Hypothesis, *Sociological Analysis*, 37: 341-352.

Yandell, K. E. (1999), *Philosophy of Religion: A Contemporary Introduction*. London, UK and New York, NY: Routledge.

Zeldin, M. B. (1969), The Religious Nature of Russian Marxism, *Journal for the Scientific Study of Religion*, 8 : 100-111.

# Drawing Lessons from Dissolution of Czechoslovakia in Addressing Possible Brexit Implications

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#### Abstract

It may appear there are hardly two other states that could be more different from each other than it is in the case of Czechoslovakia and the United Kingdom of Great Britain and Northern Ireland, however in hindsight of the latest development after the Brexit referendum and before triggering the notorious Article 50 of the Lisbon Treaty there could be some lessons drawn from the former development after the collapse of the Communist bloc setting into motion huge political changes in Europe from the perspective of dissolution of Czechoslovakia.

Keywords: Czechoslovakia, United Kingdom, state, dissolution

#### Introduction

In my academic career, there are two states I look up to most: thanks to a huge political change, the first one does not exist anymore and the second one's existence is currently being challenged as a result of another huge political change. The two states I am going to talk about are Czechoslovakia and the United Kingdom.

Born in the early 80's in Czechoslovakia and after the Velvet Revolution in 1989 removing the communist regime from power in the country I was able to watch the further development of political and cultural relations between two nations who shared a common state for almost 70 years (69; 75 respectively). I had the opportunity to see and experience immense political changes after the collapse of the Communist bloc resulting in dissolution of not only the Soviet Union itself, but another states of the bloc such as Yugoslavia and of course, Czechoslovakia.

As an eager student of international relations interested in British politics and having visited Britain several times, I noticed some resemblance between Slovak and Scottish (English and Czech, respectively) attitudes and their very understanding of statehood which inspired my thoughts on the likelihood of dissolution of United Kingdom after Brexit presenting a big political shift affecting Europe and further international relations. At first, it may seem there are hardly two other states that could be more different from each other in any possible aspect one might consider, however there are intriguing similarities to be tracked down from the perspective of a possible political implication of Brexit such as the looming idea of splitting the UK.

# Spotting similarities and discrepancies between Czechoslovakia and the United Kingdom

The size of Great Britain is almost twice as big as the territory of former Czechoslovakia, with rather flat-land areas of England and Wales in the south and mountainous Scotland in the north of the island. The geographical parallel with former Czechoslovakia may be seen in the fact that while the Czech territory is rather flat, Slovakia is more-less a mountainous country. Another analogy can be recognised in the size proportions of the territories. The size of England (along with Wales) with 151.174 km² is almost twice as large as Scottish territory of 80.077 km². The Czech Republic's territory with 78.866 km² is also almost twice as sizeable as the territory of the Slovak Republic of 49.035 km².

From the perspective of the religion, the English traditionally incline to Protestantism (such as the case of the Czechs) while in Scotland the religious tendencies are rather more rigorous (such as in the case of Slovakia). Although the size of English population is almost four times bigger than Czech population of ca. 10 million people, there are more than five million Slovaks, which is similar to the size of Scottish population of ca. 4.5 million people.

^{4.5} Inition people. Nevertheless, the main ambition of this essay is not to find as many similarities as possible, but to outline the complications and obstacles a unitary state joining diverse constituent nations may face after a significant political shift. By this shift I mean the results of Brexit referendum held in the UK on 23rd June 2016. Opting for leaving the EU the British set in motion several issues which had been only partially silenced after the 2014 Scottish independence referendum where Scotland chose to remain a part of the United Kingdom (so far).

Although a monarchy, United Kingdom is a more than 200 year old unitary state with deep roots of democratic principles of its governance. It is said to be a country which disdains revolution as a means of change (perhaps with the exception of the last revolution that took place on its territory – the Industrial Revolution). Britain never experienced a totalitarian regime, neither some 20 years of foreign military occupation. There are four statecreating nations: the English, the Scottish, the Irish and the Welsh. In this essay, I will focus on the relationship between the English and the Scottish as the two biggest nations that are most determining the political development

in their common state, although the English are being accused of too big a dominance in addressing important state matters. Czechoslovakia was a Central European republic founded on democratic principles in 1918, after the World War II being ruled for four decades by a communist regime which was overthrown by a non-violent (!) revolution that set in motion tremendous social and political changes resulting in the very cessation of the state. It was a union of two state-creating nations: Czechs and Slovaks. Of course, one shall not forget Moravians (who are politically / practically included in the Czech nation) and other ethnic groups living on its territory such as Germans, Hungarians, Ruthenians and Jews.

#### The Czechoslovak idea

The ancestors of the Czechs and Slovaks were first united in the seventh century in the so-called "<u>Samo</u> Empire" for some thirty years and later in the <u>Great Moravia</u> between the years 833 and 907. In the tenth century, the Czechs controlled western Slovakia for around thirty years, but by the eleventh century the Hungarians had conquered and annexed the whole territory of Slovakia, while the Czechs maintained their own whole territory of Slovakia, while the Czechs maintained their own principality of Bohemia (a kingdom since 1198). Although a part of Austro-Hungarian Empire, the Bohemian Kingdom officially ceased to exist in 1918 by transformation into the <u>Czechoslovak Republic as a democratic state</u>. In the past, both Czechs and Slovaks had to struggle against powerful neighbours (<u>Germans</u> in the case of the Czechs, <u>Hungarians</u> in the case of the Slovaks) and cultural contacts between Czechs and Slovaks arose again in

the fifteenth century, with the campaigns of the Czech <u>Hussite</u> armies to Slovakia and in the seventeenth century, when Czech <u>Protestants</u> fled to Slovakia and in the seventeenth century, when Czech Protestants fied to Slovakia. Needless to say, since the late fourteenth century many representatives of Slovak intelligence studied at the Prague University. The Czechs and Slovaks were formally united from the fifteenth century until 1918, when Hungary (which then included Slovakia), <u>Bohemia</u> and other Central European states were ruled by the same (Habsburg) kings in Austro-Hungarian Empire. In practise, the two nations were treated differently by the ruling authorities in Vienna and Budapest. While the Czechs, belonging to the Austrian part of the Empire, were granted considerable cultural autonomy, the Slovaks were subject to rather harsh oppression from the Hungarian governance. Between the fifteenth and eighteenth centuries, Slovak intellectuals used written Czech as well as Slovak (and Latin, of course). Similarities of both languages resulted in both nations being able to understand each other without having to study one another's language. Here lie the roots of the Czech-Slovak intercommunity.

Radicalisation of the Czechs in Austria and the Slovaks in Hungary did not take place only along the Slavic line; there was also the question of national self-determination of the Czechs and Slovaks which had two separate dimensions: on one hand it was their differentiation from the Germans and the Hungarians, on the other hand it was their differentiation from one another. As the language difference is the easiest to spot when considering national specifications, it was the linguists who played immensely substantial role on the onset of Czech and Slovak revival. (Krejčí, 2000)

Both the First Czecho-Slovak Republic founded in 1918 and its successor after the end of WWII the Czechoslovak Republic had the form of a unitary state until 1969 when it was formally declared a federation of the Czech Socialist Republic and the Slovak Socialist Republic. However, there had always been an asymmetric relationship between the Czechs and Slovaks where the Slovaks often felt they were getting the short end of the stick and the Czechs felt being somewhat superior to and therefore inhibited by the Slovaks. Despite numerous political frictions, all in all, nevertheless, their co-existence in common state was never disrupted by any violent acts.

Slovaks. Despite numerous political frictions, all in all, nevertheless, their co-existence in common state was never disrupted by any violent acts. From the very names such as Union of Soviet Socialist Republics, Socialist Federal Republic of Yugoslavia and Czechoslovak Socialist Republic it is apparent that these were officially federal states, however in encounter with the very principle of a socialist rule there lies a paradox. This principle assumes the rule of the communist party above all other state authorities bringing about central decision-making authority and thus destroying the very idea of a federalist state where two or more equal states' governances with specifically defined competences do not succumb to any higher authority – here being the Communist Party. In Czechoslovak Constitution it was the infamous Article 4 which stipulated that the leading force in the society and the state is the vanguard of the working class, the <u>Communist Party of Czechoslovakia</u>, thus standing above all other state authorities.

# **Dissolution of Czechoslovakia**

While the dissolutions of socialist federal states such as Soviet Union and Yugoslavia were accompanied with bloodshed, it was only Czechoslovakia that accomplished its split without any violence – hence the expression "Velvet Divorce". Here is where I would like to draw attention to an exemplary settling of an international dispute between two nations on the highest level of a civilised conduct.

During the very events of the Velvet Revolution in November 1989 (in Slovak language the term "Gentle Revolution" is used) resulting in the collapse of the communist rule in Czechoslovakia first disparities between the Czechs and Slovaks emerged concerning the understanding of proportion of the political power in the country and the competencies of its particular constituents. Not only were there two different movements against the communist regime with two different names which were established practically independent from one another (hence the two different names – Civic Forum (OF) in the Czech part and Public against Violence (VPN) in the Slovak part of the country), these two platforms launched the difference in further development of political efforts on both sides where the authority of the federal government was slowly undermined by the two national governments resulting in splitting of the common state.

At first this option did not seem to be on the table at all. In June 1990, the first democratic elections were held in both parts of the state and in July 1990 the prime ministers of both republics met to discuss the future of Czechoslovakia. The Slovak prime minister expressed the view that Slovak citizens are in favour of a common state. In October 1990 the Prime ministers Vladimír Mečiar (Slovakia), Petr Pithart (Czech Republic) and Marián Čalfa (Czechoslovakia) agreed that after the redistribution of positions between the republics a viable federation must remain in existence. In December 1990 after long negotiations the Federal Assembly

In December 1990 after long negotiations the Federal Assembly adopts amendments to the Constitutional Law on Federation no. 143/1968 Coll. – so-called Competence Act. It was a compromise on proposals of both the Czech National Council and the Slovak National Council, while strengthening the competencies of both countries.

Officially, neither the Czechs nor the Slovaks wanted the country to be dissolved and desired the continued existence of a federal Czechoslovakia. A slight majority of Slovaks, however, advocated a looser form of co-existence or complete independence and sovereignty. At first, the idea of sovereignty was only advocated by the Slovak National Party (SNS). In April 1991 Methodical-Research Cabinet of the Slovak Radio along with the Centre for Social Analysis at the Comenius University in Bratislava, published results of a survey pursuant to which 77% of the Slovak population is in favour of the common state of Czechs and Slovaks. The opinion polls in 1992 suggested that 63% of Slovaks and 64% of Czechs were still favouring the idea of one common republic.

were still favouring the idea of one common republic. In the years 1990–1992, different political parties re-emerged, but Czech parties had little or no presence in Slovakia, and vice versa. In order to have a functional state, the government demanded continued control from Prague, while Slovaks continued to ask for decentralization. This was a period of constant disputes and strife between Czech and the Slovak political representatives, public protests demanding either independence or unity in both parts of the country as well as several transport and education strikes.

Lengthy political negotiations saw numerous proposals of an agreement on the state organisation being turned down by one or another respective party. The most awkward dispute, infamously named "Hyphen War", began as early as in December 1989 when the newly elected President Václav Havel announced dropping the word "Socialist" from the state's official name and simply changing it to Czechoslovak republic (official name from 1920 to 1938 and from 1945 to 1960). <u>Slovak</u> politicians however suggested that it diminished Slovakia's equal status, and demanded that the country's name be spelled with a hyphen as it was spelled in 1918 when the (First) name be spelled with a <u>hyphen</u>, as it was spelled in 1918 when the (First) Czecho-Slovak Republic was founded. The Hyphen War implied a certain division in understanding of the statehood and distribution of competences between the Czech and Slovak nations.

In July 1991 as these divisions were becoming more and more obvious, the Federal Assembly agreed on a constitutional law on the referendum providing that any withdrawal of a republic from the federation may not take place other than by plebiscite. This referendum never took place, however. No law on referendum was passed as a result of complex and problematic political debates where neither Czech nor Slovak politicians seemed to find common ground with one another.

Parliamentary elections in June 1992 saw the victory of the coalition of Civic Democratic Party (ODS) and Christian Democratic Party in the Czech Republic and quite a grand victory of the Movement for Democratic Slovakia (HZDS) with 37% of all votes cast. It took no longer than two days for the leaders of ODS (Václav Klaus) and HZDS (Vladimír Mečiar) to meet in Brno to begin a series of negotiations, where representatives of various delegations of the winning subjects agreed upon various conventions. So far, no one knows exactly what the two leaders discussed. Some representatives of HZDS submitted a draft of the constitutional arrangement for both countries at the level of the Union, or confederation with international subjectivity. A meeting between ODS and HZDS was held in which several participants took the view that from long-term perspective the federation is unsustainable. For these reasons Václav Klaus refused to accept the position of the prime minister, who was in charge of creating the federal government. Instead, an agreement between Klaus and Mečiar was made to form a federal

Instead, an agreement between Klaus and Mečiar was made to form a federal government of Czechoslovakia with a temporary mandate. On 17th July 1992 Slovak National Council adopted the Declaration of Sovereignty of the Slovak Republic. Václav Havel resigned as president of Czechoslovakia. Following days another round of negotiations between ODS and HZDS took place. The result was an agreement on dissolution of the federation. In August Mečiar announced in the Slovak National Council that a referendum on the continued existence of the common state would be politically irresponsible.

During October and November 1992 dozens of various agreements were signed on future cooperation of the Czech Republic and Slovakia, including the Customs Union agreement, Treaty of good neighbourliness, friendly relations and co-operation, six contracts in the economic field and an agreement on organising relations arising from the dissociation of the Czechoslovak army forces as well as the constitutional law on property division of the federation and its transfer to the republic(s). Federal assets were divided according to the 2:1 formula (considering the approximate ratio between the Czech and Slovak population within Czechoslovakia). On 25th November 1992 the Federal Assembly adopted a constitutional Act on the dissolution of Czechoslovakia, which came into force at midnight on 31st December 1992 to 1st January 1993. It implied the division of Czechoslovakia without a referendum.

The question why the Czech and Slovak public were excluded from The question why the Czech and Slovak public were excluded from the decision-making process on dissolving their common state is being answered (differently) by both camps – unionists and separatists. The advocates of separation claim that this did not happen for two main reasons. Firstly, if one country decided differently than the other one the leaving country (without mutual accord) risks losing its property. Secondly, both nations might have wanted to remain in a common state, but the question was how to arrange it? Czechoslovak unionists argue that dissolving of the republic was treason of politicians who were eager to govern their own part of the country. They argue that with the exception of SNS there were no other political parties aspiring to get seats in the parliament with the idea of splitting Czechoslovakia anchored in their electoral programme. This is why they question the very legitimacy of this act since at the time there was an splitting Czechoslovakia anchored in their electoral programme. This is why they question the very legitimacy of this act since at the time there was an immense risk to legitimise a state through politicians only. This was luckily warded off by both victorious political subjects in Czech and Slovak republics being elected once again in the following parliamentary elections in two separate states. Regarding the overall situation in Central Europe at that time there was also a looming risk of (especially) the southern territories of Slovakia being claimed by Hungary. Fortunately, these worries never came true and nowadays the relationships between the Czechs and Slovaks (and their neighbours, including the Germans and Hungarians) are at their historical peak. It is argued that the reason for such favourable friendly atmosphere between the two nations with thriving personal contacts and cultural and intellectual intercourse is the very fact that both countries are independent, since the reasons for frictions caused by centralised political independent, since the reasons for frictions caused by centralised political no longer exist. What remained is the Czech-Slovak decisions intercommunity where the absence of political dictate strengthens and stimulates personal and cultural relationships.

Even some of those essentially favouring a common state are currently inclined to the idea that the dissolution of Czechoslovakia was not such a bad decision at the end of the day. Nevertheless, they point out that following the split there were five long years of ice-cold political relations between the two countries when the two foreign affairs ministers never met. They also suggest that splitting of a small country indicates farther vulnerability of its units.

Those in favour of the dissolution argue that from the historic point of view Central European lands have always been parts of different state units, so the dissolution of Czechoslovakia was a process quite natural for this part of Europe.

On 31st December 1992 at 12.00 p.m. Czech and Slovak Federative Republic ceased to exist. As of 1st January 1993 two independent states arose – the Czech Republic and the Slovak Republic. Their gentle and civilised split predicted an excellent start for both countries in the international community.

Both the Czech and Slovak republics had explicit conceptions of their further foreign policy and after the split the countries expressed their wish to join European structures as well as NATO and started to work towards these goals – each in their own pace and way. Although being widely recognised by the world community as two successor states of Czechoslovakia and granted their sovereignty, in Slovakia the situation became more problematic due to a divisive figure of the then Prime minister, Mečiar. Slovak efforts were hindered as illustrates the European Commission Regular Report on Slovakia's progress towards accession in 1997: "During the period July 1997 to end September 1998 there has been is a lack of stability in the institutions guaranteeing democracy, the rule of law and protection of human rights, as reflected by the inability to elect a President, the controversial use of the transferred presidential powers, the unsatisfactory functioning of the parliamentary committees and the disregard for the Constitutional Court rulings. There have been problems in the treatment of minorities and a lack of progress concerning the adoption of legislation on minority languages." (Regular Report, 1997)

In 1998 a new Slovak government led by Mikuláš Dzurinda relaunched admission negotiations with the EU and in 2004, eleven years after the dissolution of Czechoslovakia, Slovak Republic was eventually admitted in the EU along with its brother state, Czech Republic (and eight other Central and Eastern European states).

Since joining the EU Slovakia has become a more integral part of the Union thanks to its adoption of the single currency (euro), and strong tendency to take part in the banking and fiscal unions. The Czechs, on the

other hand tend to retain a bigger part of their sovereignty manifested mainly by preserving their own currency (Czech koruna). The similarity to be spotted here is in the Scottish willingness to stay within the EU while the English (and Welsh) part of the country is rather in favour of leaving it, clearly demonstrated by the results of the UK EU Membership Referendum in July 2016. The United Kingdom as a (future former) member state of the EU has indisputably clung to the British pound just like the Czech Republic to their koruna.

Ahead of the 2016 referendum the First Minister of Scotland Nicola Sturgeon said the Scottish National Party (SNP) will discuss an independent Sturgeon said the Scottish National Party (SNP) will discuss an independent Scotland using the euro if a vote to leave the European Union leads to the break-up of the United Kingdom: "The First Minister said it was not party policy to seek entry to the single currency if Scotland becomes independent, but the pound may not be "as attractive a currency" if it weakens after Brexit... she said her party would enter "decisions and discussions" over the euro <u>if Britain pulls out of the EU against the will of a majority of Scots</u>." (Daily Telegraph, 21 June 2016)

# Conclusions

Splitting up is never an easy thing to do. Inevitably, it brings about insecurity and instability making both/all sides more vulnerable. However, when the differences become irreconcilable, it is better to do so. Where strife appears on ethnic lines and national groups demand autonomy or selfgovernance, one possible solution is to allow the formation of smaller units which can then cooperate with others within the larger trans-national entity.

The peaceful and amicable dissolution of Czechoslovakia can serve as a model for other similar contexts where communities that became part of a larger nation-state having unfulfilled national aspirations can achieve their goals. This is the case of Scotland as a part of the UK. This development seems not to be finished yet, though. British politics is renowned for embracing major political transformations through subtle changes rather than revolutionary shifts.

Countries' splitting up essentially involves a certain degree of violence with the worst scenario of a civil war. In Czechoslovakia this was not the case. In hindsight, the relationships between the two nations (and states) have become even more cordial than ever after the split. The very fact that the common state was dissolved peacefully in the frame of two years bears resemblance to the scope of time given by the Article 50 of the Lisbon Treaty on ending a country's membership in the EU.

Once this Article is activated a period of long negotiations will commence. It is still unclear what and how big the disputes between the Scottish and the English (and Welsh) part of the country will be.

Undoubtedly, there will be some. Only time will tell what positive or negative lessons the British people will take from the dissolution of other countries in the past.

Being an unionist myself, I certainly would not wish to see the United Kingdom split into more states, however in case the Brexit implications result in irreconcilable differences between the two parts of Great Britain, I wish the British people a Czechoslovakia-like split.

Still, the question of the long-term geopolitical consequences for rather a small country being split into even smaller parts is a topic for another extensive discussion.

# **References:**

Krejčí, Oskar. The Geopolitics of Central Europe (Geopolitika středoevropského prostoru. Horizonty zahraniční politiky České republiky a Slovenské republiky.) Prague: Ekopress, 2000. Rychlík, Jan. The Split of Czechoslovakia. Czech-Slovak relations 1989-1992. (Rozpad Československa. Česko-slovenské vztahy 1989-1992.)

Prague: Vyšehrad, 2012.

Constitutional law no. 100/1960 Sb. Constitution of the Czechoslovak Socialist Republic, Article 4. http://www.upn.gov.sk/data/pdf/ustava100-60.pdf

Daily Telegraph, 21 June 2016. http://www.telegraph.co.uk/news/2016/06/21/nicola-sturgeon-snp-willdiscuss-using-euro-if-scotland-independ/

Regular Report from the Commission on Slovakia's Progress towards https://ec.europa.eu/neighbourhoodp.13 Accession. enlargement/sites/near/files/archives/pdf/key_documents/1998/slovakia_en.p df

# The Opportunity Cost in Health Care: Low Cost High Value

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#### Abstract

There is a need to innovate with new management tools to be disseminated both in the public health and in the private sector. The ways to contain health care expenditure, normally involve a decrease in the quality of services. Some of the measures are commonly adopted patient co-pay schemes, or practicing de-facto rationing, either by limiting the number of actual treatments provided in combination with long waiting lists, or carrying out consumer health campaigns focused on prevention, all with the aim of limiting the demand for public health services. Major industrialized countries have focused on reforming health care to cut costs rather than implementing policies to improve the health of their populations and thus stimulate national economic growth. Low cost-high value services are the answer firstly, to an individual's desire for personalized health care and secondly, to the inability of the western health care systems to respond to this change. Low Cost- High Value companies are new entries in those areas of the competitive system left vacant by the welfare state and they meet the patient's new needs to safeguard health with out of pocket payment. Often they are prime mover companies that launch innovations, invest in the development of new products and accept the risk of exploring unknown territory. The analysis of two case studies: Centro Medico Sant'Agostino and Odontosalute, highlights that the traditional health care business model and the low cost high value are significantly different in several points of their chain of values.)

Keywords: Health, low cost-high value, opportunity cost, case works, prime mover

#### Introduction

The purpose of this study is to analyze two companies that have chosen to operate in the field of low cost/high value health services, (Eisenhard, 1989). Companies operating in health services of the low cost/high value type are new entries in an area of the competitive system left vacant by the shift of the welfare state from universal health care to a more selective system. However, this new course is not accompanied by new choices, even though the consumer/patients would like to see their needs met with a new range of options for which, despite their shrinking incomes, they are willing to pay out of pocket to safeguard their health. The patients pay directly for dental services, the counter drugs, diagnostic services and a majority of specialist visits. People are often encouraged to opt for paid services privately in order to ensure faster access at the cares (Fattore & Ferré, 2012). Many times these companies are first movers that introduce an innovation to the field, carrying the expense of developing a new product and the risks of exploring unknown territory. A possible answer to the needs of population who need to care are companies low cost high value. It is the and the risks of exploring unknown territory. A possible answer to the needs of population who need to care are companies low cost high value. It is the long waiting time involved in public health services which leads people concerned with the cost of opportunity to turn to privately paid health services. These companies responding to the choices of the major industrialized countries have focused on health care reform to reduce costs, rather than implement policies to improve the health of their populations and stimulate national economic growth as well. The difficulties of the welfare state can not find an adequate response to the hoped-for recovery. In fact, the crisis of the creation of new jobs, inequality and the blocking of social mobility generate a terrible attack on two fronts at the Italian welfare. The first is in terms of funding, because fewer workers means less income to be taxed and less resources from which social services can be paid; the second on the demand side of performance, because it is the request of unemployed with no income, and the demand from those who work but still have insufficient income. It is the systemicity crisis enveloping the welfare which may explain the shocking numbers: Italians renounce at health services, especially those employed but in absolute poverty; so welfare is working contrarily to the original mission: instead of moderating, amplifying social inequalities (Censis, 2016). Furthermore there are many effects that derive from access to good health like increased productivity, since workers feel more physically and mentally more efficient and energetic or a decrease in the number of sick days and days off of work to care for family members who are ill, (Suhrcke & Martin McKee, 2005). Low Cost High Value companies are new entries in those areas of the competitive system left vacant by the welfare state and they meet the consumer/patient's new needs vacant by the welfare state and they meet the consumer/patient's new needs to safeguard health with out of pocket payment (Kachaner et al., 2010). Low cost health care providers, encouraged by the opening up of new market areas, particularly those in the lightweight care areas, are privileged correspondents of voluntary health care funds, while accredited private providers and the National Health Service itself often find it difficult to conform to the operating systems of company health funds which take into

consideration things like on-line appointments, short waiting lists and even pleasant environments, (Cinosi & Rizzo 2013)

## **Organization and Research Method**

We want to prove that there is a new sector that stands between the public and private health care: the health care low cost high quality. The specific objective and the ultimate goal of the research that we resolved, is to be put in benchmarking, through the study of cases (Hartley, 1994), which may act as a guide for those who want to go down this road or want to improve their corporate policies in view of low cost high value in order to meet the requirements of good health. This work may act as a guide for those who want to go down this road or want to improve their corporate policies in view of low cost high value in order to meet the requirements of good health. This work may act as a guide for those who want to go down this road or want to improve their corporate policies in view of low cost high value in order to meet the requirements of good health. According to Porter and Lee (2013), the value is defined as "health outcomes achieved that matter to patients relative to the cost of achieving those outcomes". In the research an analysis of changing economic and political choices in health care will be highlighted. Following Hibbard et al. (2012) we consider that achieving better health outcomes at lower cost is a major objective of many initiatives in health care.

The adoption of a descriptive research design, fieldwork and qualitative method is the default choice in the structuring of research and considered appropriate to achieving the objectives of the work. To define the business model for Low Cost High Value in health care providers, case studies are considered the most effective course to come up with answers to "how" and "why" questions when researchers have only limited control over events, but at the same time want to explore con-current trends with the aim of explaining certain phenomena and casual relationships. This is the reason why case studies and real stories are the research strategies that are most suitable to this kind of study. Yin (2003) suggested applying the logic of "literal e theoretical replication", which is based either on the identification of cases that will give similar results (literal replication ) or which will give different results, but for predictable reasons (theoretical replication). The importance of this logic is that it allows for the extension or replication" analyzing two kinds of companies active in the low cost/high value sector to find their similarities. They are Italian companies working in northern Italy: the Centro Medico Santagostino Milan in Lombardy, and OdontoSalute Gemona in Friuli - Venezia Giulia. They are companies that have adopted the low cost/high quality philosophy by focusing on improving their organization and creating economies of scale to cut costs, thus making health services available to a wider range of consumers. Both companies adhere to the ethical code (Gazzola & Mella 2015) drawn up by the AssoLowcost and

so, while adopting different business strategies, they must follow similar parameters, (Wirtz, Iacovone & Lovelock, 2013)

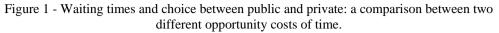
# The Opportunity Cost Choices in Health Care

Major industrialized countries have focused on reforming health care to cut costs rather than implementing policies to improve the health of their populations and thus stimulate national economic growth.

Containing health care expenditure can be done in many ways, however they all involve a decrease in the quality of services. Some of the measures commonly adopted are patient co-pay schemes, or practicing defacto rationing, either by limiting the number of actual treatments provided in combination with long waiting lists, or carrying out consumer health campaigns focused on prevention, all with the aim of limiting the demand for public health services. Resources are limited and the Italian National Health Service is struggling to deal with many problems like inadequate treatments due to insufficient staff and long waiting lists, mainly caused by lack of hospitals, inefficient bureaucracy, poor management and general disorganization which all contribute to cost increases, (Querci, 2014 b). It is important to define the difference in meaning between waiting

It is important to define the difference in meaning between waiting lists and the lapse of time that occurs before a service is provided; the first refers to the number of patients in line while the second refers to the time patients must wait from the moment they join the line to the moment when they actually receive treatment, (Sanmartin et al., 2003). Striving to reach a point of balance between waiting lists and waiting time is rather complex since there is no direct benefit to be gained by increasing productivity; while this might lead to shorter waiting time it does not automatically shorten waiting lists which, on the contrary, might lengthen. This is due to the phenomena known as supply-induced demand where an increase in supply can lead to an increase in demand, generated by the perception that reduced waiting time means better quality. Therefore, it is waiting time that is an indicator of an excess of demand in relation to supply.

The private opportunity cost increases for as long as the waiting time increases, since it is impossible to carry out normal daily activities like work, housework and free time activities. Equally important is the time involved in obtaining treatment like waiting time, travel time and last, but not least, the anxiety and uncertainty involved in not knowing when treatment will be provided. It is therefore the long waiting time involved in public health services which leads people concerned with the cost of opportunity to turn to privately paid health services, (Rebba, 2009).



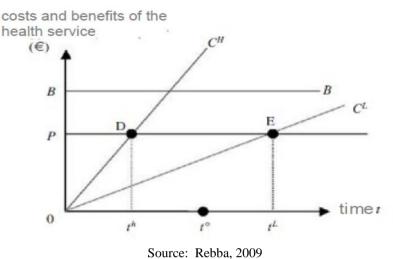


Figure 1 highlights the difference between two inclined straight lines, CH and CL, where the first one refers to a subject H, with high costopportunity , and the second to a subject L, with low cost-opportunity. For both subjects it is initially hypothesized that the expected benefits from treatment B remain constant in time and are always above the price P. In general, an individual will choose free public health care when the expected waiting time is such that the cost-opportunity of the service is less than the price P of the service provided by private providers. As waiting time increases, the performance of the line, with reference to time costopportunity, overtakes the price P and in this case an individual might decide to turn to a private provider to obtain treatment.

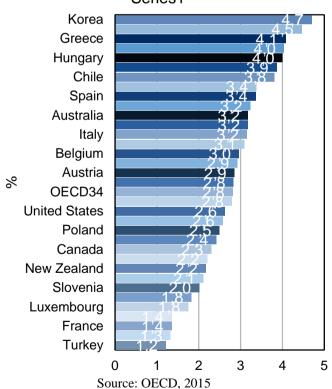
Subject H, with a high level of time cost-opportunity, will place a limit on the position assigned by the public health service, that is to say, if it is within the time limit th, however if waiting time shifts towards t°, his choice may immediately move towards private treatment at a price P. L, whose cost opportunity is lower, will turn to a private provider only if the waiting time of the public health provider is longer than tL. The choice in favour of paid health care does not necessarily imply that H has a higher income than L, but only that H might be self-employed with low income, so the impossibility of obtaining health care in a short time might lead to a loss of income, while L, with a higher income is drawn to the private sector because of the costs of anxiety. If H is not able to afford the payment of price P he will have to endure a reduction of efficiency caused by the loss of well-being as a consequence of having to stop working for the time t°.

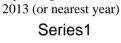
The free Public Health System might manage to ration a specific health treatment through the practice of long waiting lists when there is a private alternative with no waiting lists and competitive prices, (Querci, 2014a). Who pays out-of-pocket health care often does so for the long waiting lists. This is due to the phenomena known as supply-induced demand where an increase in supply can lead to an increase in demand, generated by the perception that reduced waiting time means better quality. Therefore, it is waiting time that is an indicator of an excess of demand in relation to supply, (Boutsioli, 2010).

# **Reducing Waiting Time in Health Care**

The OECD reports (2015) a general decline in health expenditure and the adoption of containment measures in Italy as a result of the economic crisis. Such containment measures exhort citizens to use the out of pocket private health care. The spending out of pocket in Italy (3.2%) is higher than the OECD average (2.8%), Figure 2 (Aceti & Squillace, 2016).

Figure 2 - Out of pocket medical spending as a share of final households consumption,





It is necessary to specify that the waiting time between public, private or the low cost high value healthcare is different. The comparison of the data CENSIS (2015) with the retail prices offered by the Low Cost High Value showed the cost of each day of waiting time for a medical examination. Every single day of waiting spared by purchasing private facilities rather than public ones will cost from  $\leq 4.2$  to  $\leq 28$ , depending on the service. Cost and waiting time have inverse trends in the transition from public to private. Infact the increase of the cost in the private services corresponds to a decrease in waiting time and vice versa. Table 2 shows that a gynaecological examination costs  $\leq 30.7$  in the public sector, while  $\leq 103.3$  in the private, but with different waiting times. The waiting time is 5.4 days in private and 38.3 days in public sectors, and, compared to a cost of  $\leq 60$ , the waiting time of high to low-cost value is 7 days. The waiting time is the hidden cost that affects the choice of citizens to use the private sector, profit or non profit, (Table 1) (Querci & Gazzola, 2106).

Cost in euro (2015)	Public ticket*	Intramoe nia*	Private*	Centro medico Santagostino low cost high value**	Odonto Salute low cost high value***
Specialist visits					
Before cardiological examination with Ecg	41.70	113.50	108.10	80.00	
gynecological examination	30.70	99.80	103.30	60.00	
orthopaedic examination,	31.70	101.90	103.60	60.00	
first eye examination	42.50	105.10	102.40	60.00	
Diagnostic examinations					
Full abdomen ultrasound	56.30	102.20	110.00	60.00	
Psa prostate specific antigen	13.80	19.30	18.80	13.80	
Laboratory analysis					
total cholesterol	4.90	7.60	7.30	1.70	
complete blood count	6.80	11.40	10.00	4.05	
Dental visits					
simple tooth extraction with anaesthesia	24.90	76.10	88.00		45.00
two-channel root canal	48.10	182.10	179.00		100.00

Table 1 - Comparing costs between public health, private and low cost high value

treatment				
tartar removal	16.40	55.10	88.00	40.00

source:*censis.it;**http://www.cmsantagostino.it;***http://www.odontosalute.it.

## Private health Care, Low Cost High Value

This is mainly due to the shift from the National Health Service to the private sector and to the trends towards privatization occurring on a global scale. This has led to an attempt to overcome the economic downturn due to the privatization of assets and services, which used to be protected from commercialization, through the creation of new areas of market and the expansion of existing ones by increasing their profitability.

Long-term profitability is mainly guaranteed in the local public sector and in the social health services, due to their largely unvarying demand. The variety of companies that are involved in the health services system are the accredited private provider, the so-called" private to private" health care provider, among which there are those that adhere to the low-cost philosophy, and the foreign health care provider that caters to the medical tourism industry. There are also providers of many additional kinds of health insurance that can be complementary to, supplementary to, or duplicative of that of the National Health System.

Therefore the opening up of the market to a third kind of "lightweight" private health care, positioned between the public and the private sectors, as well as the inclusion in some national trade union agreements of voluntary health care funds, is one of the paths chosen to provide an alternative to national health systems. These national systems are in constant financial distress due to the imbalance between income and expenditure which results in ever increasing cuts in spending. Low-cost health care providers, encouraged by the opening up of new market areas (Pessina et al., 2011), particularly those in the lightweight care areas, are privileged correspondents of voluntary health Care funds, while accredited private providers and the National Health Service itself often find it difficult to conform to the operating systems of company health funds which take into consideration things like on-line appointments, short waiting lists and even pleasant environments. Low cost high value companies have entered the market just at the moment when a new field is opening up and they offer advanced technology, good organization, pleasant accommodation and the ability to fulfil the demands of that new field. Their company mission is to provide low cost quality health care while at the same time meeting the commitment of company health funds to provide the required services to their members.

Health care companies in the low cost high value field share goals of long term economic viability, as well as that of total independence from the National Health Service. Prices of services are on average 30% lower than the price of private traditional health and sometimes inferior to the public ticket (Cinosi & Rizzo, 2013). Many times these companies are first movers that introduce an innovation to the field, carrying the expense of developing a new product and the risks of exploring unknown territory. The definition of first mover is ambiguous because, if a company moves into a consolidated market but takes advantage of certain technological gaps or sectors where there is a new demand, can it be considered a first mover? Can this be classified as the first move? There are no published answers to this question but from the data of the PIMS (Profit Impact of Market Strategy) it appears, for instance, that more than half of all the business units are "pioneers" among several competitors within the same market area (Querci, 2016)

The advantage of being first movers lies in the ability of the company to be in a pole-position to gain economically and this can be reached through several stages. In the first stage a particular advantage of the pioneer over its rivals can usually be attributed to some variable such as unique resources, or a particular foresight, or even just to a stroke of luck. Once this variable occurs, a series of mechanisms allow the company to take advantage of its position to increase the scope, or the length, of its profit as a first moverIt is important to bear in mind that in certain markets there is only room for a limited number of profitable enterprises so the first move is to select the most interesting niche sectors and then to put into effect those strategies that will limit the space available to further competitors (Lieberman & Montgomery, 1988). The next step is to pass from narrow and traditional skills to the wider and newer skills necessary, at the same time as the rules of the game are being re-written. R. Norman (2002) calls prime mover innovator/inventor those individuals that he considers "creators of sleeping assets markets". The prime mover transforms these assets into liquidity that can be advantageously employed in a different context. In this sense the prime mover makes all the players richer, leading others to identify untapped assets to be exploited, such as, in the realm of low cost high value health services, short waiting lists, comfortable accommodation and convenient geographical locations. They have a new approach as subjects capable of impacting on the outside environment. They are organizations that don't only understand the changing market but, in some ways, implement or direct the change itself (Norman, 2002) The prime mover has considerable advantages, among them technological leadership, learning curves, brand identification, as well as the opportunity to shift the switching expenses on to the client and the chance to exploit the positive effects generated by customer satisfaction. The leading company that is the first to invest in new technology, particularly when this involves skills, will enjoy a preeminent position among its competitors, at least until they are able to reach the same levels of skills.

# Case Study

The two cases studied, Centro Medico Sant'Agostino and OdontoSalute, though offering different types of goods and services, shared certain common elements like business strategies, the organization of their supply chains and customer satisfaction and orientation. The two companies are characterized by profit margins based on industrial production; dental prosthesis and specialties for the Centro Medico Sant'Agostino and dental care and prosthesis for OdontoSalute. The Table 2 compares their strong points.

	Centro Medico SantAgostino	OdontoSalute	
Born	2009	2008 (born like Progetto Dentale Apollonia (in June 2013 changed its name to OdontoSalute)	
Their mission:	"Health at the right price"	"With us a smile costs less"	
Market share:	Meets the growing consumer need for high quality specialized medicine that is economical and accessible.	Services at affordable prices to contrast medical tourism output by offering patients local care at fair prices and import patients from oth countries	
Price:	Prices are 30% to 40% below comparable market prices.	Prices are 30% to 40% below comparable market prices.	
Customer satisfaction and orientation:	Patients seeking good health care with waiting lists of one week or less, in pleasant surroundings to get quality care with minimum stress	The strategies to contain costs benefit patients who are offered quality services at lower prices than those of the competition, with minimum waiting lists and easy access to care.	
Location:	7 locations with 3 clinics that offer more than 30 specialties. In the center of Milan, the offices are easy to reach and cater to a vast and diverse socio-economic clientele.	21 locations, in north, center and south Italy, ample parking, near airports, and motorway exits, very diverse socio-economic clientele. seven clinics are owned by other franchise agreements	

Table 2 - Commercial strong points of the Centro Medico Santagostino, and the
OdontoSalute

Type of goods and services:Out-patient surgery furnishing careful and individual attention, aimed at supporting patients in every aspect of their care, especially the doctor/patient relationship, with plenty of time for dialogue, free consulting services and transportation, child care areas.Highly specialized dental clinic with state of the art equipment. Provides medical tourism services for foreigners seeking treatment in Italy.
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Source: author's elaboration

The cases analyzed (Eisenhard, 1989) are all in line with the parameters of the study, in fact they all adhere to the low cost/high value philosophy, all offer, either directly or indirectly, a variety of health services or medical prosthesis, they operate in different geographical areas and they are first movers. They are successful in the competitive market and are financially secure. They are providers for private care insurance policies, associations and company health care plans, or other organizations that could potentially become partners. In their performance, the two companies share a common organizational model, (Cinosi & Rizzo, 2013). For management and non-management personnel, paramedics and doctors, the two companies review performance, raise salaries and grant promotions on the basis of merit. Implementing organizational routines in the offices guarantees quality and efficiency and is useful when opening new branches or franchise ventures. Career and economic incentives are offered mainly to professional employees; at the OdontoSalute doctors are granted commissions on a percentage of the prosthetic work they perform, in the Centro Medico Santagostino, upward career mobility is the incentive. The IT systems are suitable and convenient for the type of business involved and, with cost control in mind, they use standard programs modified to suit specific demands. Branches are designed with functional features in mind, so as to provide efficient work environments and services.

If on one hand venues are designed with people in mind, taking into account hospitality and good use of space, on the other hand the layout is functional to containing costs. The OdontoSalute has come up with clinics that make the most of their investments by having 10 to 17 dentists' chairs that work for 6 days a week, in two shifts. In both centers it is possible to book on line. The Medical Center Santagostino website states that it maintains the waiting time within 3 days from the date of request for all visits.While Odontosalute informs the patients that at the entrance to the clinic, the customer is provided with a badge that 'counts' the waiting time.

## Conclusion

In health care low cost/high value enterprises offer a satisfactory choice of quality services at substantially lower prices. In a society where welfare is suffering, and political choices are shifting towards multiple providers in health care, the volume of services and turnover of low cost/high value care, indicates that people consider it the answer to their demand for treatment at fair prices. Where the structure of the health services has had a gradual transformation from a network of professionals to a network of more industrialized services. These case studies are all virtuous examples whose aim is to increase economic turnover while safeguarding vulnerable consumers. The appearance of new private enterprises in the health market has a positive effect on the nation's revenues through the increase in income from taxation, the growth of job opportunities and real estate investments. However, the spread of the phenomena of low cost health care has increased the tendency to transform the health services market into one like many others, with the risk of generating negative consequences. In the comparison of Censis data (2015) with the retail prices offered by lowcost high value the cost of each day of time waiting for a medical examination evidence that their cost is competitive. These companies minimize the increase in the cost of private services with a decrease in the waiting time. The health services structures in low-cost high-value offer the services substantially characterized by the industrial logic. In fact they adhere to the low cost/high value philosophy, offering either directly or indirectly, a variety of health services or medical prosthesis, operating in different geographical areas and they are first movers. They also are providers for private care insurance policies, associations and company health care plans, or other organizations that could potentially become partners. (Carbone et al., 2010). OdontoSalute has 10 to 17 dental units that work for 6 days a week, in two shifts. The Centro Medico Santagostino offers dental care up to 10 pm. Large volumes of sales and narrow margins are the philosophy of all two companies and suppliers have had to conform to this same policy. It is particularly evident in health care that low cost/high value enterprises offer a satisfactory choice of quality services at substantially lower prices. In a society where welfare is suffering, and political choices are shifting towards multiple providers in health care, the volume of services and turnover of low cost/high value care, indicates that people consider it the answer to their demand for treatment at fair prices (Del Vecchio & Rappini, 2010).

# **References:**

Aceti, T., Squillace, A. Rapporto 2015, Osservatorio civico sul federalismo in sanità. Franco Angeli: Milano, 2016.

Boutsioli, Z. Demand variability, demand uncertainty and hospital costs: a selective survey of the empirical literature. Global Journal of Health Science 2(1) 2010: 138-149. doi: 10.5539/gjhs.v2n1p138

Carbone, C, Ferré, F, Liotta, A. La struttura del SSN. In Anessi Pessina E, Cantù, E (eds) L'aziendalizzazione della sanità in Italia. Rapporto OASI 2010. Egea, Milano, 2010, p 13-48

CENSIS, Cinquantesimo Rapporto sulla situazione sociale del Paese 2016 Autori e curatori Collana Censis - Centro studi investimenti Sociali – Rapporti, 2016.

Centro Medico Santagostino: http://www.cmsantagostino.it

Cinosi, A, Rizzo, G. I segreti delle aziende Low Cost: Riflessioni per il mondo delle imprese. Franco Angeli: Milano, 2013.

Debba, Vincenzo. I ticket sanitari: strumenti di controllo della domanda o artefici di disuguaglianze nell'accesso alle cure?. In Politiche sanitarie, 2009, 10.4: 221-242. doi 10.1706/1008.10961

Del Vecchio M. and Rappini V. Low cost in sanità. In E. Cantù (Ed.) Rapporto OASI, 2010 L'Aziendalizzazione nella sanità italiana. Egea, Milano (2010) ISBN/EAN: 9788823851061 Eisenhard K.M. Building Theories from Case Study Research. Academy of Management Review, 1989, 14(4): 532-550

Fattore, G., Ferré, F. I tempi di attesa per le prestazioni del SSN: stato dell'arte e alcune riflessioni. In Cantu' E. (eds), L'aziendalizzazione della sanità in Italia. Rapporto OASI 2012. Egea, Milano, 2012, p. 245-267

Gazzola, P, Mella, P. Ethics builds reputation. International Journal of Markets and Business System, 2015, 1(1): 38-52. doi: 10.1504/IJMABS.2015.070262

Hartley, J. F. Case studies in organisational research. Cassel C. e G., Symon G. Qualitative methods in Organizational Research. A Practical Guide, 1994. Hibbard, J.H., Greene, J., Sofaer S., Firminger K., Hirsh, J. An experiment shows that a well-designed report on costs and quality can help consumers choose high-value health care. Health affairs, 2012, 31(3): 560-568. doi: 0.1377/hlthaff.2011.1168

Lieberman, M.B. & Montgomery, D.B. "First-Mover advantages", Strategic Management Journal, 1988, Vol, 9. 49-51

Norman, R. "Ridisegnare l'impresa: quando la mappa cambia il paesaggio" Etas Libri pp 78-123

OECD, Health at a Glance 2015: OECD Indicators. OECD Publishing, Paris 2002 Pessina, E.A., Cantù, E. Carbone C. and Ferrè F. L'aziendalizzazione della sanità in Italia: rapporto Oasi 2011, Egea, 2011 pp.173-197

Norman, R., & Ramirez, R. Designing interactive strategy: From value chain to value constellation. Chichester:Wiley, 1998. ISBN: 978-0-471-98607-2 Odontosalute: http://www.odontosalute.it

Porter, M.E., Lee, T.H. The strategy that will fix health care, Harvard Business Review, 2013, 91(12): 50-70

Querci, E, Gazzola, P. The dynamic capabilities in low-cost high-value companies: the Italian health care, Strategica International Academic Conference- Fourth Edition- Bucaharest, 2016, ISSN: 2392-702X ISBN (E-book): 978-606-749-181-4.

Querci, E. The business model for Low Cost High Value in the development of the domestic medical tourism industry Enterprise and the Competitive Enviroment, 6-7 March 2014 Facolty of Business and Economic, Mendel University in Brno, 2014a, ISBN 978-80-87106-74-7

Querci, E., Gazzola, P. A New Business Model in Health care Between Public and Private: Low Cost High Value Healthcare. The Wrocław Conference in Finance – WROFIN 2016. The second edition, Wroclaw, Polonia, il 27 e 28 settembre 2016

Querci, E. The out of pocket in healthcare: the lower social protections for workers. First International Meeting of Industrial Sociology, Sociology of Work and Organizations (EISIOT) 27-28 November 2014 IPL-Lisbon, Portugal, 2014b, ISBN 978-989-95465-5-4.

Sanmartin, C.A. Steering Committee of the Western Canada Waiting List Project, Toward standard definitions for waiting times. Healthcare Management Forum, 2003, 16(2): 49-53. doi: 10.1016/S0840-4704(10) 60222-0

Selltiz, C., Wrightsman, L.S., Cook S.W., Research methods in social relations. Rinehart and Winston: Holt, 1976.

Suhrcke, Marc, and McKee, Martin. The contribution of health to the economy in the European Union. Luxembourg: ISBN 92-894-9829-3 Office for Official Publications of the European Communities, 2005.

Wirtz, J., Iacovone L., Lovelock C., Marketing Dei Servizi. Editor Pearson, 2013.

Yin, R.K. Case Study Research: Design and Methods. Sage Publications 2003, US. ISBN 0-7619-2553-8

# **Environmental Survey and Photographic Documentation of a Forest Edge Hamlet Situated in** Buxa Tiger Reserve, India

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# Abstract

Buxa Tiger Reserve (BTR) is situated in *Alipurduar* district of West Bengal, India and is considered as one of the significant tiger reserves of India. The Reserve lies between Latitudes  $23^{\circ}30'$  N to  $23^{\circ}50'$  N and Longitudes 89°25' E to 89°55' E. It has 37 forest villages and 4 fixed demand holdings, 46 revenue villages and 34 tea gardens in and around it. The survey work was done in May, 2015 by visiting a forest edge village (*Bhutia Basti*) on the banks of *Jayanti* River in Buxa Tiger Reserve. It is the only village that has ever been relocated from the core area of Buxa Tiger Reserve. The position of the village is ecologically crucial as it is situated near the elephant corridors of Buxa. Primary data were gathered through field survey and direct contact with common people and authorized centres of the region. Structured and semi-structured questionnaire was administered in the village area. Surveys on the demography, agriculture, livestock management, water management, education, culture, health, waste management, disaster management, transport, biodiversity, joint forest management activities, Non-timber forest product usage and human animal conflict were done in this area. Human animal conflicts were studied in Bhutia Basti, as the village is periodically disturbed by the encroachment of elephant, rhinoceros and leopard. Biodiversity of the forest was documented by visiting the adjacent forest areas. Photographs were taken, analysed and interpreted in light of the survey data collected from the study area. There is an urgent need for implementing an integrated sustainable development system for the conservation of forest ecosystems and traditional human settlements in BTR.

Keywords: Forest, Biodiversity, Photography, Sustainability, Survey

# Introduction

The *Dooars* are the biodiversity-rich extensive floodplains and foothills of the eastern Himalayas in North-Eastern India. The *Dooars* region

politically constitutes the plains of Darjeeling District, the whole of *Jalpaiguri* district and *Alipurduar* district and the upper region of Cooch Behar district in West Bengal. The *Dooars* valley has several wildlife sanctuaries like *Gorumara* National Park, *Chapramari* wildlife sanctuary, *Buxa* Tiger Reserve and *Jaldapara* Sanctuary, which altogether represent the ecological wealth of the region (Dooars, 2015).

Buxa Tiger Reserve (BTR) is situated in *Alipurduar* district of West Bengal, India. Buxa Tiger Reserve is located in the north-eastern corner of *Jalpaiguri* district, West Bengal. The Reserve lies between Latitudes  $23^{\circ}30'$ N to  $23^{\circ}50'$  N and Longitudes  $89^{\circ}25'$  E to  $89^{\circ}55'$  E (Figure 1). It comprises of the entire forest area of the erstwhile Buxa Forest Division (Created in 1877 - 78) and some territory of the erstwhile neighbouring Cooch Behar Forest Division (Buxa Tiger Reserve, 2015). It covers an area of 760 km², with a core area of 385 km² and a buffer zone 375 km². The northern and eastern boundaries of the reserve border Bhutan and Assam respectively. The western and southern boundaries are bordered by tea gardens and agricultural fields. It has 37 forest villages and 4 fixed demand holdings, 46 revenue villages and 34 tea gardens in and around it. The habitat of BTR is primarily tropical moist deciduous forest dominated by *Sal* tree (*Shorea robusta*) (Bhattacharya et al., 2016).



Figure 1: Google map showing the position of Buxa Tiger Reserve.

In BTR, evergreen, semi-evergreen and riverine forest, scrub and grasslands are also found, along with plantations of sal, teak (*Tectona grandis*), jarul (*Lagerstroemia reginae*) and mixed plantations of native trees (Sivakuma et al., 2006). BTR is located at the confluence of three major bio-

geographic zones: The lower Gangetic plains, Central Himalayas and the Brahmaputra valley (Das, 2012).

BTR is biologically very rich and supports several elements of the biodiversity of north-east India and is one of the most biodiverse regions in the country [6]. About 60% of the total floral endemic species of north-east India are observed in BTR. It has a network of many perennial and seasonal rivers, which are the water sources of wild animals and plants. This is an international corridor of elephant migration (Das, 2009).

Jayanti village is one of the oldest towns in the BTR region (Figure 2). Before independence of India, the dolomite mines of nearby Bhutan hills were excavated and dolomites were brought to Jayanti from where trains were used to supply the materials in other parts of the country (Mukherjee, 2013). Gradually the forest area was reserved for the wildlife and the railway stopped its operations. Jayanti slowly became a large village inside the Buxa Tiger Reserve.

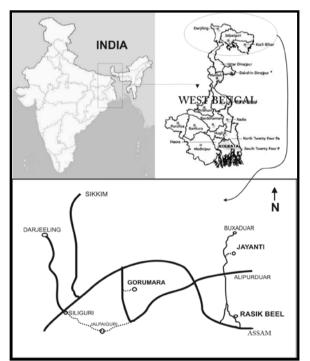


Figure 2: Position of Jayanti Area and Buxa Tiger Reserve in Alipurduar District.



Figure 3: Jayanti River bed in Buxa Tiger Reserve.

The river bank of *Jayanti* (Figure 3) is one of the most attractive tourist destinations of North Bengal in recent times. The river naturally forms a border between India and Bhutan. *Bhutia Basti* is a small village situated at the river bank of *Jayanti*. *Bhutia basti* forest village is under the jurisdiction of *Bhutia basti* beat of *Jayanti* Range, East division of BTR. Nepali community is the predominant ethnic group in *Bhutia basti*. These settlements were built by employees of a dolomite mining firm, whose operations were suspended in 1983 after Buxa was declared a tiger reserve. It is the only village that has ever been relocated from the core area of Buxa Tiger Reserve. The reason of the relocation was the floods of 1993 which swept away the jungle settlement (Mukherjee, 2013). The position of the village is ecologically crucial as it is situated near the elephant corridors of Buxa.

#### **Objectives of the survey work**

The developmental perspectives depend on socio-economic settings and environmental status of an area. The survey work was done in May, 2015 by visiting the *Bhutia Basti* village area on the river bank of Jayanti. The objectives of the study are:

1. To explore the socio-environmental structure of the village.

 To explore the economy and livelihood status of the village inhabitants.
 To explore the health and hygiene status of the villagers and the medical facilities of the area.

4. To explore the water and waste management facilities and to address the management problems.

5. To explore the cultural and educational status of the area.6. To explore the biodiversity status of the ecologically important zone and to explore the human-biodiversity interactions in social, environmental and economic perspectives.

7. To propose sustainable management policies for the betterment of socio-environmental condition of the area.

# Materials and methods

The survey work was done in May, 2015 by visiting *Bhutia Basti* village on the river bank of *Jayanti* in Buxa Tiger Reserve. During the survey work, primary data were gathered through field survey and direct contact with common people and authorized centres of the region. Structured and semi-structured questionnaire was administered in the village area. Surveys on the demography, agriculture, livestock management, water management, education, culture, health, waste management, disaster management, transport, biodiversity, joint forest management activities, Non-timber forest product usage and human animal conflict were done in this area. Demographic information was collected from the village area and from the local *panchayat*. Census report was collected from the local *Panchayat* Office. Health and education information was collected from the local schools and local sub health centers. Information regarding the transport system was collected from the local transport office and syndicate. Religious and social festival information was collected from the local people. Information on agricultural activities is collected from the local villagers and the agricultural activities were observed and documented at field. the agricultural activities were observed and documented at field. Information on environmental activities like using sustainable agricultural practices and waste management policies is collected through surveys in the villages. Human animal conflicts were studied in the village area, as the area is periodically disturbed by the encroachment of elephant and leopard. Biodiversity of the region was documented by visiting the adjacent forest areas, accessing the database of West Bengal Forest Department Office and visiting the nature interpretation centre situated at Buxa Fort. Photographs were taken, analysed and interpreted in light of the survey data collected from the study area from the study area.

#### **Results and discussion** Climate

The climate of the northern West Bengal region can be divided into four seasons: (a) cool dry; (b) warm pre-monsoon; (c) hot monsoon; and (d) warm late-monsoon. In Buxa, Temperature varies from 15°C to 39°C and rainfall varies from 3570 mm to 5600 mm. The lowest point is 125 meter above mean sea level and highest point is 1750 meter above mean sea level

(Roy and Sah, 2012). Most of the rainfall is received during June to September. Pre-monsoon showers occur during May season. The Tiger Reserve remains adequately humid throughout the vear. as Himalayas. is located in the foothills of the outer Maximum relative humidity varies between 80% - 95%, seldom below 75% with a maximum in June to September and minimum in December to February (Buxa Tiger Reserve, 2015).

# Soil

The Northern West Bengal region shows the typical sub-Himalayan geological formation (Wadia, 1919). The Sub-Himalayan foothills, at an elevation of about 1200 meter, are made up mostly from the erosion of geologic material from the rising Himalayas mountains formation. The Buxa landscape is mostly covered with alluvial soil, except for a narrow belt of hard rocks exposed along the northern border of the area contiguous with the Bhutan hills (Das, 2000). In hilly area of *Jalpaiguri* District, soil is divided into seven types. Among these, Coarse Loamy type of soil is predominant in Buxa, *Jayanti* and *Bhutia Basti* area.

The study area is almost entirely covered with alluvial soil, boulder and pebble beds, stones with clay, quartzite, dolomite, banded ferruginous rock, shale, gneiss etc. All the riverbeds in those areas are rising by the deposition of huge sediments that are carried down with rainwater due to massive deforestation in the upper catchments areas.

# Population

Since 1999, 2,919 families of diverse ethnic groups are residing in the forest villages of BTR (Das, 2009; Das, 2005). A substantial proportion of the population comprises tribes such as *Rava*, *Garo*, *Mechia*, *Oraon*, *Madesia* (*Santhal*), *Rajbanshi*, *Nepali*, and Bhutia. Among them, the *Nepali* and *Rabha* communities are the two most dominant ethnic groups. The human population of these villages is 95,049 (1991 Census) (Das, 2009). Migrant Hindus, Muslims and *Rajbanshis* are the predominant ethnic groups in revenue villages of the reserve. The people till their own land or work as labourers in other farms and tea gardens. The *Rava*, *Mechia*, *Oraon*, *Rajbanshi and Madesia* reside on the southern part of the forest, *Dukpas* live in extreme northern hilly areas bordering Bhutan, Nepalese are scattered all over.

At *Bhutia Basti*, there are 33 houses with population of 112 inhabitants with an average family size of 3.39. The male female sex ratio is 1: 0.89 (Figure 4, Table 1). Population of this area consists of 99% Nepali community and 1% local "*Adibasi*" community (Figure 5).

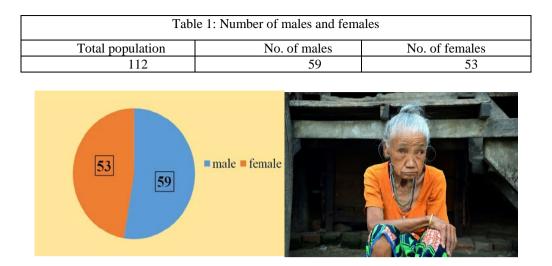


Figure 4: Male: Female in *Bhutia Basti*.

Figure 5: Nepali inhabitant in *Bhutia Basti* village.

#### **Occupational Status**

Agriculture and live stock farming are the main econamic sources in *Bhutia Basti*. Agriculture & live stock are the main occupation of the 80% of the total people. 15% of total people depend on loading and unloading of stones for economic purposes as daily labourers. However, this work stops during the monsoon season. 5% of the total people are migrated to other states or city for earning money (Figure 6).

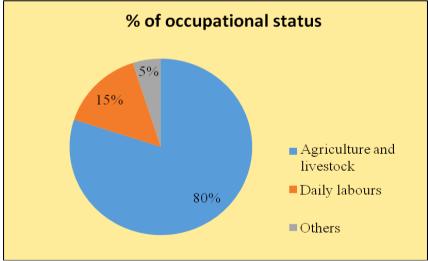


Figure 6: Occupational status of Bhutia Basti village.

# Economy

Employment opportunities for both forest villagers and fringe dwellers in BTR reduced substantially due to the ban in clear felling coupes and artificial regeneration (CFC) operation and boulder collection with the creation of the tiger reserve in 1983. Prior to 1983, villagers of both forest and fringe are as used to be employed in timber harvesting and plantation work for nearly 100-120 days a year. It is observed that the employment generation of 5.9 lakh person days during 1984 has dwindled to 2.775 lakh person days in 1991 (Das, 2009).

The entire Buxa region and its community depends on provisioning services such as: (1) Natural Products (2) Fuel wood (3) Fodder and (4) Water. The village is far from technologies & industry. The agriculture process is very old and the production rate is also low. People are mainly dependent on stone loading and unloading in the *Jayanti* River bed for earning money. The monthly average per capita income of the villagers is approximately 4000 -5000 INR. Agricultural production, NTFP collection and livestock products are main sources of income (Figure 7).

As in all protected areas in India there is a strong relation between the people and the forests because the people living in and around the forests are considerably dependent on the forest resources for subsistence, commercial and cultural purposes. NTFPs collection is another important source of income for the villagers of *Bhutia Basti*. They use small timber for house construction; thatch for roof; edible roots and tubers, mushrooms, leaf litter and leaves, flowers and fruits as substitute of staple foods especially during lean seasons; medicinal herbs for healing etc (Das, 2005). The minor forest produce including aquatic products such as roots and shoots of various plants used as food and medicine, fishes, etc, supplement their routine food requirements. About 90% of total population in *Bhutia Basti* collect NTFPs for sale. NTFP collection and selling is the primary occupation for 26% families of this village (Das, 2005).

Agriculture is one of the main economic sources of the inhabitants of *Bhutia Basti* village in Buxa. The people used to sell the agricultural and livestock products in the local markets of *Alipurduar*. Crop husbandry, animal husbandry, wild biodiversity and rural economy are subsystems of the integrated traditional resource management system.

Communities are dependent on local markets for other essentials like rice, pulses, fruits, eggs, fishes etc. The market link is also limited and located at the opposite side of the *Jayanti* River, *Santhalabari* and nearby *Alipurduar*.

Interestingly, the tourism potential of the region is found to be increasing. The sharp rivers, mountains, forest and biodiversity is attracting tourists from outside. Both Buxa and *Jayanti* are attracting large number of

tourists and the villagers have started developing rural housing where the tourists come and stay. The local flora and fauna offer great attraction to the tourists.

# **Agriculture and Livestock**

In *Bhutia Basti*, the inhabitants have 3.68 cattle per family in average. They have 2.34 *bighas* of cultivable land per family. The community is largely dependent on rainwater for irrigation. Canal irrigation and rain-fed irrigation are done in the agricultural fields. The common cultivable vegetables are Rice, Maize, Mustard, Potato, Radish, Garlic, Cabbage, Cauliflower, Tomato, Chilli pepper etc (Figure 8). The people of *Bhutia Basti* usually practice organic farming and use cowdung as fertilizer in the agricultural fields. Most of the cultivable crops are mainly used for personal consumption rather than earning money from the products. Most of the families have cultivable lands adjacent to the houses. The common livestock are local breeds of cows, buffalo, goat and chicken. Eggs and milk are the main livestock products which are among the important economic sources. People regard domesticated animals like cattle an asset, which is a useful source of income during events like diseases, marriages, festivals, disasters. Livestock encroachment in the forest areas are controlled by the villagers, mainly due to the risks of wildlife attacks. In Bhutia Basti, the inhabitants have 3.68 cattle per family in average. mainly due to the risks of wildlife attacks.

# Water Management

Jayanti River used to be a perennial river which has now become shallow because of mining in the upper region and breaking of stones by the strong currents (Figure 9). The villagers reported to have had big catch of fish in the past which has now shrunk because of drying up of the river during dry seasons. There are localized water bodies within the river where fishes are found and the villagers eater these using different traditional fishes are found and the villagers catch those using different traditional methods of nets, rods and embanking.

The village suffers from serious infrastructure and civic amenities

The village suffers from serious infrastructure and civic amenities deficiencies. The households do not have adequate toilet facilities within their houses and the drinking water is provided from the streams and rivers. The main water sources of *Bhutia Basti* in Buxa are natural streams ("*jhora*") situated at the hilltops. Network of pipeline distributes the water in the villages and water is stored in small reservoirs in the village area. The stream water is used for drinking purpose, which is collected in small reservoirs within the village and sometimes is used after purification. The water becomes using the provided for the stream water in the village and sometimes is used after purification. water becomes wispy in rain season. Rain water in mainly used for agricultural practices during rainy season. The main river in the village area is *Jayanti* River. For most of the season the river is dry; however in rainy season (June- September) the river is filled with rain water. Rainfall

measurement shows that the month of July receives heavy rainfall while December receives least amount of rainfall. Water crisis occurs during the period of March-April. No rainwater harvesting structure is found in the village for water conservation. However, our previous studies showed that numerous rainwater harvesting structures are generally found in different mountain and forest hamlets of North Bengal like *Lava*, *Rishop*, *Tinchuley* and Chatakpur (Bhattacharya et al., 2014; Bhattacharya & Ghosh, 2014; Bhattacharya et al., 2015



Figure 7: Occupational status in Bhutia Basti.

Figure 8: Agriculture in Bhutia Basti.



Figure 9: Jayanti river has now become shallow. Figure 10: Plastic Pollution problem in Jayanti Area.



# Waste Management

In Bhutia Basti village in Buxa, the common waste materials generated are solid wastes, including plastic packets, paper boxes, plastic bottles, glass bottles, vegetable wastes etc. Every house their own burning places where they used to burn all the solid wastes once in a week. The unburned materials are generally buried in the ground. However, burial of the waste materials can affect the biodiversity of the forest area, and can affect the wildlife as well (Bhattacharya et al., 2015b). Plastic and glass bottles are generally recycled by selling in the local markets after use. A dog was observed to be chocked by a plastic jar in the Jayanti River bed during the survey period (Figure 10). Some of the houses in Bhutia Basti village have separate sanitation system and toilets.

#### Education, culture and health

There is no school in *Bhutia Basti*; children have to go at *Jayanti* High School situated at the opposite side of the river bank. For higher education, they have to go to *Alipurduar* city.

There is no hospital or medical shops in *Bhutia Basti*. People used to go to *Kalchini* and *Santalbari* Sub Health Centers for basic treatments. 4 nurses and 2 doctors are available in *Kalchini* and 1 nurse in *Santalbari* health centers. For emergency cases people used to go Alipurduar hospital, where operation and emergency treatment facilities are available.

Most of the houses situated in *Bhutia Basti* are made of wood. The wood is generally collected from the forest areas; however, the collection is restricted. The other materials used for construction purpose are bricks, stones, mud etc. Most of the families use forest wood as domestic fuel, approximately 5% of the total families in *Bhutia Basti* use LPG or kerosene for cooking.

An interpretation center is an establishment for dissemination of local knowledge of natural or culture heritage of a place. A Nature Interpretation Center is present in Buxa Fort area (around 10 km. from *Jayanti* River). The interpretation center executes the history and tradition of the Buxa Fort; and the social, cultural and economic dimensions of the Buxa villages and about the traditional knowledge. Various objects of local importance are preserved in Buxa Nature Interpretation Center, such as-*Jajee* (Container for keeping Wine), *Chasum* (Utensil for making tea), *Churu* (Type of necklace used by Women), *Chebete* (Container to keep water during Puja), *Phup* (Used for writing purpose), *Chaka Timi* (For keep Supari), *Chempa* (Lamp / Diya), *Koma* (Part of dress of Women), *Doji* (Put on after wearing the dress), *Timi* (For keeping lime for paan/betel leaf ), *Chanso* (Put on Brewing Wine ), *Bakhu / Dobigulla* (Dukpa dress for males), *Kera / Dobigulla* (Dukpa dress for females) etc.

# Disasters

*Dooars* of North Bengal are under rapid habitat destruction due to several anthropogenic pressures and developmental activities including hydro-electrical projects, road development, establishment of tea gardens, mining activities, landslides, forest fire etc (Das, 2005). These factors gradually have increased the fragility of the Himalayan Mountains, leading to an increase in the incidence of landslides in the region.

The area in which Buxa lies is proclaimed to be at seismic risk, in Zone V of the earthquake hazard conation (Bandyopadhyay & Neogi, 2011). Seismicity of this area loosens the hill sides, causing rock slides and siltation in the river beds. As BTR is located in the foothills of eastern sub-Himalayan West Bengal bordering Bhutan in the northern side, several rivers and streams originate and flow southwards, intercepting the reserve. They rise and fall frequently and constantly change their courses, which consequently have huge negative impact on the reserve. BTR has a long history of devastating floods causing massive damage to the forest and agricultural lands of villagers. The present course of Buxa *jhora* shifted after the 1993 flood and is presently cutting into the base of the table-top mountain (Bandyopadhyay & Neogi, 2011). The major earthquake in 1897 at shilling has changed the course of many rivers.

River erosion is a serious problem in this area. Excess volume of water in the huge riverbed increased friction and erosion of banks, frequent flooding is one of the major disasters faced by the Buxa villagers. An estimate suggests that in few places silting occurs at an alarmingly high rate of 2 to 4 feet per year (Khalid & Patel, 1999). It was also revealed that about 1,596 hectares of forest area were damaged due to the changing course of streams (*jhoras*) and rivers of the reserve. Devastating floods have been reported in 1950, 1952, 1954, 1968 and 1993, causing massive damage to the habitat of the reserve (Das, 2012). The wildlife habitat has been destroyed several times due to recurrent floods in the flood-plains of these rivers. A massive landslide occurred in the sub-Himalayan slopes due to a destructive flood in 1954, when all river basins were affected by rapid rise of river bed bank erosion. Another destructive flood occurs in 1993 causing maximum damage to the Buxa area (about 200 deaths, loss of habitats) (Das, 2012). The flood of 1993 washed off many villages situated at the river bank of *Jayanti. Bhutia Basti* is the only village that has ever been relocated from the core area of Buxa Tiger Reserve. The reason of the relocation was the floods of 1993 which swept away the jungle settlements.

# **Transport and Connectivity**

Jayanti area is very remote area where communication facility is dependent on the Government transportation (NBSTC), the arrival time of the bus from Alipurduar Station at 7:00 AM and arrival time from Jayanti at 9:00 AM. Again the bus arrives from the same place at 2:00 PM. and return time from Jayanti at 4 PM. Jayanti.

In and around the village area, the most popular mode of public transport is bus. Almost every people in *Bhutia Basti* area uses cycle for their daily convenience. The opposite side of the river bank is well connected with *Coach Behar, Jaldapara, Rajabhatkhawa, Siliguri* etc. However, at the river bank where *Bhutia Basti* is situated, the connectivity problems are of major concern.

# **Biodiversity**

Buxa Tiger Reserve is biologically very rich. It represents several elements of biodiversity of northeast India, one of the most biodiverse Indian regions. Eleven landscape elements were identified in Buxa, which include, 1) Semi-evergreen vegetation forest, 2) dense evergreen forest, 3) deciduous forest, 4) dry thorn forest, 5) mixed vegetation and plantations, 6) degraded forests, 7) tea gardens, 8) teak plantations, 9) flood plains of the different rivers present in the reserve, 10) water bodies and 11) cultivation/settlements (Asian Nature Conservation Foundation, 2015).

More than 50% of the plant species of India are represented in northeast India; of these, 60% are endemic. Most of the floral endemic species of northeast India are encountered in Buxa Tiger Reserve. Presently there are 283 species of trees, 31 species of shrubs and herbs, 33 species of climbers, 150 species of orchids, 36 species of grasses and reeds, and 7 species each of cane and bamboo. The most common species found within the forest is Sal (Shorea robusta), which is one of the ecologically and economically significant trees of BTR. The lofty Sal trees occur with their usual associates, viz. Champ (Michelia champaca), Chilaune (Schima wallichii), Chikrashi (Chukrasia tabularis), Bahera (Terminalia beterica), Sidha (Lagerstroemia parviflora), Toon (Cedrella toona), Laii (Amoora wallichii), Lausuni (Amoora rohituka), Lampati (Duabanga sonneratioides), Simul (Bombax ceiba) etc (Das, 2000; Chaudhury, 2015). In areas adjoining the rivers Simul, Sirish (Albizzia sp.), Sissoo (Dalbergia sissoo) and Khair (Acacia catechu) are the most common species. The commonly found hill forest species are Katus (Castenopsis indica), Mandane (Acrocarpus fraxinifolius), Bhalukath (Talauma hodgsoni), Phalame (Walsura tubulata) associated with Kimbu (Morus laevigata), Panisaj (Terminalia myriocarpa), Gokul (Ailanthus grandis), etc. The savannah woodlands are also characterized by tropical trees of Kumbhi (Careya arborea), Tantari (Dillenia pentagyna), Jamun (Syzygium cumini), Palash (Butea monosperma) and Kul (Zizyphus sp.) (Indian Bird Conservation Network, 2015).

In case of Buxa Tiger Reserve, diversity of trees is least in comparison to herbs or shrubs, whereas species richness index of shrubs is higher than trees. It showed that species richness index of herbs is higher than shrubs. Here highest dominance was observed in case of *Ampelocissus latifolia* (Roxb.) Planch. (31.92), followed by *Trachelospermum lucidum* (D. Don.) Schum (12.22), whereas lowest dominance of shrubby species was observed in case of *Mikania micrantha Kunth*. (1.1) (Figure 11).

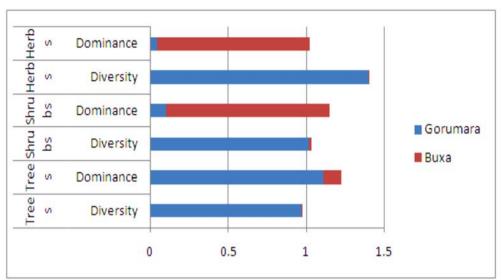


Figure 11: Comparative account of Diversity and Dominance Indices of species (Herbs, Shrubs and Trees), of Gorumara and Buxa.



Figure 12: Lizard in Jayanti area.

Fig. 13: Common Gull (*Cepora nerissa*) in BTR.

The faunal diversity of BTR includes 230 species of birds, 73 species of mammals, 37 species of reptiles, 32 species of fishes, 4 species of amphibians and 353 species of identified entomofauna.

Buxa Tiger reserve is also enriched with butterfly diversity. Common Crow, Chocolate Albatross, Common Gull (Figure 13), Grass Yellow, Lemon Emigrant, Paris Peacock, Common Bluebottle, Common Beak, Lesser Zebra are some of the examples of butterfly species found here.

Among reptiles, tortoise, lizards (Figure 12), various kinds of Snakes such as King Cobra, Russel's viper, Black Krait, Banded Krait, Indian Python (*Python molurus*) and Reticulated Python (*Python reticulatus*), Chinese pangolin are found in this region. Gharial (*Gavialis gangeticus*) and Mugger (*Crocodilus palustris*) are reported in 6th Working Plan of Buxa Division (1965-66 to 1974-75), but these are not seen now-a-days (Buxa Tiger Reserve, 2015; Chaudhury, 2015).

Among the wetlands of BTR, Narathali is a significant one where 3 big shallow lakes harbour a good number of migratory ducks including Schedule-I species like whistling Teal as well as common Teal, Pintail, white eyed pocherd, shoveller etc. The swift streams of *Jayanti & Raidak* harbour Mergansers. The migratory birds appear during the end of Monsoon and fly away before summer. The migratory birds include the beautiful Ibis Bill, Pretty Minivets, Yellow Crested Sultan Tits, Streaked Spider Hunter, Snipes, Wagtails, Leaf Warblers, Sandpipers. Endangered birds like Great pied Hornbill start nesting in *Pukhuri* area in *Phaskhawa* block of BTR during spring season (Sivakumar et al., 2006; Chaudhury, 2015). Five threatened and two near threatened species were recorded in BTR in a previous study: Lesser Adjutant [Leptoptilos javanicus] (Vulnerable), White-rumped Vulture [Gyps bengalensis] (Critically Endangered), Slender-billed Vulture [Gyps Chestnut-breasted Endangered), tenuirostris] (Critically Partridge [Arborophila mandellii] (Vulnerable), Rufous-necked Hornbill [Aceros nipalensis](Vulnerable), Ferruginous Pochard [Aythya nyroca] (Near Threatened) and Great Hornbill [Buceros bicornis] (Near Threatened).

The main carnivores of BTR are Indian Tiger (*Panthera tigris*), Leopard (*Panthera pardus*), Clouded Leopard (*Neofelis nebulosa*), Hog Badger (*Arctonyx collaris*), Jungle Cat (*Felis chaus*), Leopard Cat (*Felis benghalensis*), Sloth Bear (*Melursus ursinus*), Fishing Cat (*Felis viverrina*), Civet Cat (*Viverricula indica*), Hyaena (*Hyaena hyaena*), Jackal (*Canis aureus*), Wolf (*Canis lupus*), Mongoose (*Herpestes edwardsi*), Fox (*Vulpes benghalensis*), etc. The predominant herbivores of the reserve are Elephant (*Elephas maximus*), Gaur (*Bos gaurus*), Sambar (*Cervus unicolor*), Chital (*Axis axis*), Barking Deer (*Muntiacus muntjak*), Hog Deer (*Axis porcinus*), Wild Pig (*Sus scrofa cristatus*), Hispid Hare (*Caprolagus hispidus*), Giant Squirrels (*Ratufa indica, R. bicolor*), and Pangolins (*Manis crassicaudata, M. pentadactyla*). Endemic Indo-Malayan species such as Clouded Leopard, Chinese Pangolin, Reticulated Python (*Python reticulatus*), and Blacknecked Crane (*Grus nigriocollis*) have been reported in BTR (Buxa Tiger Reserve, 2015; Chaudhury, 2015).

Some of the endangered species found in the reserve are <u>Indian Tiger</u> (*Panthera tigris tigris*), <u>Asian Elephant</u> (*Elephas maximus*), <u>Regal Python</u> (*Python regius*), <u>Chinese Pangolin</u> (*Manis pentadactyla*), <u>Hispid Hare</u> (*Caprolagus hispidus*), <u>Hog Deer</u> (*Axis porcinus*), <u>Slender-billed</u> <u>Vulture</u> (*Gyps tenuirostris*) etc (Buxa Tiger Reserve, 2015; Chaudhury, 2015; Indian Bird Conservation Network, 2015).

#### Human wildlife conflicts

Human-wildlife conflict is in limelight in recent times as it causes a major threat to survival of many wild animal species in different ecological zones. Human-Wildlife Conflict (HWC) occurs when wildlife requirements overlap with those of human populations, creating costs both to residents and wild animals (WPC, 2003). Man-animal conflict has been in existence for as long as human existence, and wild animals and people have shared the same landscapes and resources (Lamarque, 2008). With increasing population and pressure on forest areas, human-wildlife interaction and resultant conflict is also increasing (Zubri & Switzer, 2001).

BTR forest with periphery of 330 km. is surrounded by numerous tea gardens and cultivated land of villages. Over the decades there have been large scale changes in the landscape outside the forests by way of intensive cultivation, growth of human habitations in villages and towns and in tea gardens (Buxa Tiger Reserve, 2015). Many of the tea gardens in these areas are important corridors of wildlife. The tea gardens and revenue villages situated on the periphery witness highest intensity of human wildlife conflict, especially of elephant depredation. Since, elephants have wide home ranges, typically between 100 and 1000 km², a fragmented habitat or obstruction to traditional migration path is bound to bring many human-elephant conflicts resulting in damage to agricultural crops, property, household and injury and mortality to both humans and elephants (Roy & Sah, 2012). Cultivated crops are easy source of forage for elephants which is nutritious and healthy too. Crop damage is positively correlated with migration patterns of elephants (Roy & Sah, 2012). In Buxa Tiger Reserve, elephants damaged 4.6% of the cultivated area during 2001 and 3.4% during 2002 (Asian Nature Conservation Foundation, 2015). The proportion of cultivated crops damaged by elephant in Buxa Tiger Reserve is more than double the proportion damaged by elephants in a southern Indian population (Asian Nature Conservation Foundation, 2015). The northern West Bengal landscape experiences one of the highest levels of elephant-human conflict across Asia (Lahiri Choudhury, 1975). The conflict has increased since 1980 and the number of human deaths rose from 34 in 1987 to 59 in 2004.

*Bhutia Basti* village in Buxa Tiger Reserve is a part of the Buxa forest and an important area of elephant corridor. In the village, the man animal conflict is mainly centred on the attacks of elephants in the agricultural fields. Besides, there are examples of the attacks of wild pigs and wild dogs on human population, agricultural fields and livestock. Leopard attacks on humans are very rare, but they used to kill the livestock in the villages. The village people of *Bhutia Basti* used to protect the crop fields from elephant attacks by burning woods in the night time, burning firecrackers, beating drums and metal cans etc. Several watch towers are

constructed in the *Bhutia Basti* village to monitor the encroachment of the elephants in the agricultural fields with communications (ex. whistles) to alert other farmers. Crop fields are protected by fences made up of thorny bushes, which are the initial resistant that can be used to hinder the entry of elephant in the agricultural fields. Search lights are used in the night time to resist the attacks of wild animals (Roy & Sah, 2012). Figure 14 shows the position of elephant watch tower in *Bhutia Basti* village in BTR. Most of the houses in *Bhutia Basti* are constructed using wooden pillars, maintaining a considerable height from the ground for avoiding elephant attacks (Figure 14).

The actual damage by elephants could not be accurately judged in some previous studies in the case of *Bhutia Basti* during the maize season, as cattle were allowed to consume most of the remaining crops. The villagers in these settlements usually claim that the raiding is so intense that it is better to allow cattle to eat the maize.



Figure 14: House with wooden pillars in Bhutia Basti. Figure 15: Buxa Tiger Reserve Forest.

#### Joint forest Management

Joint Forest Management (JFM) is the official and popular term in India for partnerships in forest management involving both the state forest departments and local communities. The policies and objectives of Joint Forest Management are detailed in the Indian comprehensive National Forest Policy of 1988 and the Joint Forest Management Guidelines of 1990 of the Government of India (Joint Forest Management, 2015). Villagers agree to assist in the safeguarding of forest resources through protection from fire, grazing, and illegal harvesting in exchange for which they receive nontimber forest products, eco development works and a share of the revenue from the sale of timber products.

The creation of the Buxa Tiger Reserve (Figure 15) in 1983 resulted in a ban on fodder collection and cattle grazing, threatening the very survival of the inhabitants residing in and around the BTR (Das, 2008). Restrictions on resource use, often leads to conflicts among park managers and villagers. To reduce pressures and conflicts, the IEDP was launched by the Forest Department, West Bengal, with assistance from the World Bank and the Global Environment Facility in 1996. The project addresses the issues regarding participatory management of PAs through a strategy of ecodevelopment. It deals with reducing negative interactions of local people with biodiversity and increasing their collaboration in conservation. It aims at involving local people by supporting sustainable alternative incomegenerating activities with mutual understanding on controlled grazing, stall feeding, fodder regeneration outside forest areas, reduction of cattle, replacement of scrub cattle by improved cattle and castration (World Bank, 1996). Forest Department provides employment opportunities to the people in various forestry works as Plantation Watchers, Fire Watchers, Eco Guides, AntiDepredation Helpers etc.Recently some initiatives were taken by the Eco-development committee of BTR for the socio-economic development of the local people like training in Jute toy making, jute and carpet making training and computer training programmes.

The various Eco-development activities and forest village development activities in Buxa Tiger Reserve Divisions are:-

1. Infrastructure development through construction and maintenance of road, culvert, and drinking water supply.

2. Imparting training on *Jari*, Weaving, Apiculture, Soft toy making, improved agriculture practices, improved cattle rearing, vermicompost, bag making, and training the Tourist Guides.

3. Rural electrification.

4. Distribution nursery for providing seeding to the local people and various institutions.

5. Construction of hut for forest villagers.

6. Distribution of furniture to schools.

In India, more than 41 million tribal and forest dwellers derive their earnings from these products after consuming about 60% of collected NTFPs for personal use (Prasad, 1985). NTFP is potentially obtainable from about 3000 species found in the forests of India. NTFP collection, an important source of income for forest dwellers and rural poor, varies from state to state ranging from 5.4 to 55 percent. Moreover, 60% of NTFP isconsumed as food or as a dietary supplement especially during lean season by forest dwellers (Das, 2005). In *Bhutia Basti*, the main NTFPs are Mushrooms, *Timboor, Teenphali, Lali fruits; Odal; Chilauni, Narkeli, Ritha, Malagiri, Amloki, Kainchipata*, Broom sticks etc. Approximately 83% of the family members in *Bhutia Basti* is 35-70 INR/Family/Day or 3500-9000 INR/Family/Year (Table 2).

Table 2: Relative contribution of NTFPs on annual income of sampled families of <i>Bhutia basti</i> (Das, 2005)								
Range of	Percentage	Mean	Relative contribution on annual income					
annual family income	of family	family income (INR)	Agriculture%	NTFP%	Milk%	Others%		
(INR)	22.72	7800	32.82	20.74	6 41	22.31		
Upto 9000 9000-11000	22.73 31.82	10207	33.73	39.74 37.23	6.41 9.24	19.80		
11001- 13000	13.64	11993	27.37	43.30	18.83	15.36		
13001- 15000	13.64	14800	38.29	31.98	10.36	19.37		
Above 15000	18.18	17775	32.91	38.11	14.06	14.91		

#### Sustainable management recommendation

Several forest villages of *Dooars* area in North Bengal have become the attractive tourist spots for pleasure trips, biological and geographical excursions and medical research works. In spite of getting so much attention in the recent times, the forest edge hamlets are not adequately managed. There is an urgent need for implementing sustainable management systems in the areas for the betterment of the socio-environmental and economic structures. Several environmental, social and economic problems were highlighted in the present survey work in *Bhutia Basti* village, which should be addressed for sustainable management of the village area. Some management strategies can be considered for *Bhutia Basti*, which are mentioned below:

1. For reducing the water crisis in *Bhutia Basti* in the dry seasons, traditional rainwater harvesting structures should be constructed in the houses. In our previous studies, we observed in some mountain hamlets of North Bengal, the roofs of the houses have aluminium gutters at the corner for collecting rainwater. The rainwater falling on the roof top can be collected through these gutter channels. Pipes are connected with the gutters through which water can be collected in the cisterns and containers. Similar kind of harvesting structures can be implemented in *Bhutia Basti* area for rainwater conservation. Filtering systems should be provided to the local inhabitants so that they can use the rainwater for drinking purpose after purification.

2. Adequate health services should be provided to the local inhabitants of *Bhutia Basti* village. Local Sub Health centres with doctors, nurses and basic medical facilities should be established in the village.

3. Local training centres should be established in *Bhutia Basti* for teaching the local people about the importance of biodiversity resources of

Buxa Tiger Reserve. The initiatives of the local people can effectively protect the natural assets of the areas. Implementation of joint forest management programme and integrating the concept with the local economy can improve the socio-biological conditions of the village. Proper study is necessary to enumerate different NTFPs and to estimate the average production.

4. The carrying capacity assessment and sustainability of tourism in the circuits identified is an important component of the ecotourism study as it will form the basis for resource allocation and future development (Karmakar, 2011). The balance between ecotourism development and carrying capacity could develop the social, cultural and economic status of the forest villages like *Bhutia Basti*.

5. There is lack of gross knowledge among villagers on the advantages of afforestation in the forest and hill areas. Specific training and awareness efforts from the Forest Department should be given to educate people on the effects of deforestation, with special focus on the long term effects of deforestation on climatic conditions. Focus should be given on areas critically important to floral and faunal habitat, water catchments and areas important with social and cultural values. A better understanding of corridor management can reduce the incidences of elephant encroachment and attacks.

The communities in Buxa do not seem to be adequately informed of the implications of the new Acts/rules of biodiversity. Their access to the biodiversity, according to them, is unrestricted. Similarly the government officials, concerned with the implementation of bio-diversity government officials, concerned with the implementation of bio-diversity Act and Rules are also not clear about the implications and follow this as a bureaucratic process. The policy framework and the stakeholders need to be compatible with each other in relating to the issues and potentials of biodiversity and in appreciating the long term implications of the policy framework viz-a-viz the community and their rights. 6. Organic farming is one of the several approaches found to meet the objectives of sustainable agriculture. Organic farming is a production system that sustains the health of soils, ecosystem and the people. Encouraging and supporting the farmers of *Bhutia Basti* towards organic farming can promote sustainable development

sustainable development.

7. The effects of climate change are more devastating in the Himalayas compared to the other regions (IPCC, 2007). The annual and seasonal temperature trends in the Kanchenjunga landscape indicate an increase at the rate 0.01 - 0.015 °C/year, with higher altitudes experiencing greater warming (Singh et al., 2011). Likewise, among the administrative units, Darjeeling was the most vulnerable compared to Sikkim, eastern Nepal and western Bhutan. Extensive studies on the effects of climate change on

Bhutia Basti village and adjoining areas of BTR should be done, as it represents one of the significant biodiversity zones of India.
8. The adjoining forest areas of Bhutia Basti suffer from illegal cattle grazing, firewood collection, encroachment on the fringes and poaching. More intense survey works and management practices should be done for mitigating the anthropogenic threats in BTR.

9. Natural habitats were converted to *Teak* and *Jarul* (monoculture) plantations in many areas of the reserve like *Sankosh, Kumargram, Bholka, Rydak, Dima, Rajabhatkhawa, Santrabari, Bhutri, Bharnabari,* and *Gudamdabri* blocks as well as in National Park areas during the sixth and the seventh Working Plan period before formation of BTR. Teak and Jarul plantations occupy 34% of total plantation of the Tiger Reserve, which is not congenial for wild animals. Natural carrying capacity of the habitat is reduced considerably on account of such adverse changes (Chaudhury, 2015).

10. Roads and infrastructure are development priorities that also pose inevitable threats to biodiversity and to the animal movement corridor outcomes in particular. Road networks and tourist inflow would enable easier access to the area but would also open the site to commercial development, which would hamper the ecology of the site. A number of PWD roads, including a National Highway, NH 31C, pass through the BTR. Consequently, wild animal death cases due to accidents have also increased. Railway and road construction in BTR area should be inspected thoroughly after proper study on the corridor networks and their management strategies (Chaudhury, 2015).

11. Separate waste collection and disposal system should be operated by the government for safeguarding the sensitive ecosystems of BTR. Effective management design should be done for plastic wastes generated in the forest edge villages like *Bhutia Basti*.

12. The vehicles used in the adjoining areas should be monitored regularly for proper mitigation of air pollution in the forest area. Installation of the modern devices in the vehicles for pollution control should be done

of the modern devices in the vehicles for pollution control should be done and routine checking system should be implemented. 13. An alternative fuel policy should be evolved and implemented in the forest villages like *Bhutia Basti* for reducing the pressure on the forest resources and the drudgery. Large scale installation of solar panels in these areas would be beneficial (Bhattacharya et al., 2015a). Biogas is a cheap, pollution free alternative energy source. It can also reduce the annual emission of  $CO_2$  from households. Implementation of biogas plant *Bhutia Basti* areas can reduce the pressure on fuel wood and can safeguard the forest resources.

14. While dolomite extraction from the riverbed has environmental implications, it keeps the river bed clear during heavy rains in the catchment and mitigates flood risk to some extent. This inherent dichotomy needs to be addressed through judicious planning, in terms of disaster risk mitigation, heritage and ecological conservation and safe development of the area. The restoration and conservation plan for the site should incorporate inputs from disaster management professionals, environmentalists and conservation architects. Extraction of boulders from river beds has been resumed recently near Santrabari in BTR. The ban on boulder extraction from river beds had raised the river beds, to levels higher than the adjoining road, thus increasing risks of floods and river bank erosion. The resumption of extraction, on a restricted scale can be a favourable initiative.

15. Over the years, the incidences of cattle grazing in the villages of BTR have exponentially multiplied. A study placed the number of cattle grazing in the forest every day at about 150,000 cattle graze in the forest every day. Excluding some blanks and steep slopes, the intensity of grazing is 2.5 cattle per ha. The number of households increased by about 66% from 1070 to 1000 (Units Figure 2017) 1970 to 1999 (Joint Forest Management, 2015). With the increase in households, cattle numbers have also increased rapidly. Reduction in cattle grazing in the forest areas can increase the soil stability, can reduce erosion and can balance the ecosystems. However, a management strategy, like rotational grazing of livestock, might be an alternative instead of sticking to the strategyof reduction of cattle and curtailing villager's rights overforests especially within the protected areas.

especially within the protected areas. 16. National and International cooperation and grants should be enhanced for the conservation of Buxa Tiger reserve and its village communities. Research grants should be raised for exploring the social and biological status of the area. Training programmes, seminars and workshops should be organized for highlighting the conditions of Buxa Tiger Reserve in international platforms.

#### Conclusion

**Conclusion** In spite of being positioned in a diverse and sensitive ecological zone, the *Bhutia Bati* village in Buxa is not adequately managed. The forest communities, who are residing for years and sustain livelihood from forest resources, are getting more vulnerable and marginalized. To reduce the threat faced by villagers especially in a protected area like BTR, there should be some area-specific policy involving legal changes to deal with the land scarce area circumscribed by national parks and sanctuaries as well as rivers that originate from hills causing severe damage and erosion of forest lands. More functional participation and cooperation of the local people can create trust and confidence and can reduce conflicts with forest authority which can

further help to preserve bioresources. Attention should also be given to marginalized tribals who are the worst sufferers during relocation. Active coordination between the revenue and forest departments in dealing with this kind of situation is extremely important. Active participation and collaboration of India and Bhutan government for integrated management of the *Jayanti* river bed and adjoining hills and streams of Bhutan could help to maintain environmental balance in the region.

It is unquestionable that the hill and forest areas of India have major contributions in maintaining climatic and ecological balance in the country. For a long time, these areas have not received their due emphasis on development issues. The present work is the first ever socio-environmental study done at *Bhutia Basti* village of Buxa Tiger Reserve so far. Extensive investigations at other forest areas of North Bengal should be done so that the places could be highlighted for conservation in future.

#### **Photographs**

All the photographic documentation is done by Dr. Sayan Bhattacharya. Nikon D5100 Digital SLR and Nikkor 18-140 mm. VR lens were used for capturing the images. All rights reserved.

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#### **References:**

Asian Nature Conservation Foundation (2015, September 4). Asian Nature Conservation Foundation [Online]. Available:

http://www.asiannature.org/sites/default/files/2003%20Buxa%20Final%20%20Report%20to%20Ortenberg.pdf

Bandyopadhyay, C., Neogi, B. 2011. A Regional Approach to Risk Mitigation of Cultural Heritage: A Case of Buxa Fort and its Environs. Journal of South Asia Disaster Studies 4(1): 1-18.

Bhattacharya, S., Ghosh, G., Banerjee, T., Goswami, S., Das, P. 2015a. Socio-environmental survey of an ecologically important hamlet of Darjeeling district, West Bengal, India International Letters of Natural Sciences 33: 51-72.

Bhattacharya, S., Ghosh, U.C. 2014. Socio-Environmental Surveys of Tinchuley and Takdah: Two Emerging Ecotourism Hamlets of North Bengal, India. International Letters of Natural Sciences 23: 9-26.

Bhattacharya, S., Maity, R., Sarkar, G., Ghosh, G., Mukherjee, D., Mukhopadhyay, C. 2016. Socio-Environmental survey of an ecologically

important forest edge hamlet in Buxa Tiger Reserve, West Bengal, India. International Letters of Natural Sciences 52: 67-83.

Bhattacharya, S., Shome, A., Dutta, A., Majumder, G., Banerjee, R. 2015b. Environmental, economic and agricultural surveys of an ecologically important forest edge hamlet in Darjeeling district, West Bengal, India. World Scientific News 5: 66-80.

Bhattacharya, S., Shome, A., Sarkar, S., Purkait, D., Ghosh, U.C. 2014. Socio-Environmental Survey of two ecologically important hamlets of North Bengal, India. International Letters of Natural Sciences 28: 102-118. Buxa Tiger Reserve (2015, July 11). Buxa Tiger Reserve [Online].

Available: www.buxatigerreserve.com Das, B.K. 2005. Role of NTFPs among Forest Villagers in a Protected Area

of West Bengal. Journal of Human Ecology 18(2): 129-136. Das, B.K. 2008. The Policy of Reduction of Cattle Populations from Protected Areas: A Case Study from Buxa Tiger Reserve, India. Conservation and Society 6(2): 185-189.

Das, B.K. 2009. Flood disasters and forest villagers in Sub-Himalayan Bengal. Economic and Political Weekly 44(4): 71-76. Das, B.K. 2012. Losing Biodiversity, Impoverishing Forest Villagers: Analysing forest policies in the context of Flood Disaster in a National Park of Sub Himalayan Bengal, India. Occasional Paper, 35. Institute of Development Studies, India: Kolkata.

Das, S. C. 2000. Management-cum-Working Plan 2000-01 to 2009-10 for the Buxa Tiger Reserve. Office of the Field Director, Buxa Tiger Reserve, Alipurduar, India.

Das, S.C. 2000. Biodiversity in Buxa Tiger Reserve, West Bengal, India: An overview. Tiger Paper 27(1): 29-32.

Dooars (2015, May 21). Available: Ecotourism [Online]. Available: http://www.ecotourism.co.in/dooars.html

Indian Bird Conservation Network (2015, October 11). IBA Book: West Bengal [Online]. Available: http://ibcn.in/?page_id=119 Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change

2007: Impacts, adaptation and vulnerability. Cambridge University Press: Cambridge, UK.

Joint Forest Management: A handbook (2015, September 30). Ministry of [Online]. Available: Forests Environment and http://rtmoef.nic.in/Docs/JFM_Booklet.pdf

K. Chaudhury, Wildlife management in Buxa Tiger Reserve (2015,

September 14). Rhino Resource Centre [Online]. Available: http://www.rhinoresourcecenter.com/pdf_files/138/1382156557.pdf Karmakar, M. 2011. Ecotourism and its impact on the regional economy- A study of North Bengal, India. Tourismos 6(1): 251-270.

Khalid, M.A., Patel, S. 1999. Ecological Assessment of Habitat Loss due to Boulder/Bed Material Deposit in Rivers of Buxa Tiger Reserve. A Research Report, Department of Forests, Government of West Bengal.

Lahiri Choudhury, D. K. 1975. Report on elephant movement and crop depredation in Jalpaiguri district and part of Madharihat Range of Cooch Behar Division in June–July 1975. Submitted to the West Bengal Government. 60 p.

Lamarque, F. 2008. Human-Wildlife Conflict in Africa- An Overview of Causes, Consequences and Management Strategies. Working Paper of IFCW and FAO, Rome.

Mukherjee, K. 2013. Bhutia Basti: A relocation effort in futility? Retrieved From: http://timesofindia.indiatimes.com/city/kolkata/Bhutia-Basti-A-relocation-effort-in-futility/articleshow/20723278.cms, Retrieved on 23rd April, 2016.

Prasad, B.N. 1985. Regional Non Wood Forest Product Industries. Forest Industries Development Group. Asia Pacific Region, FAO, Kualalampur.

Roy, P.B., Sah, R. 2012. Economic loss analysis of crops yield due to elephant raiding: A case study of Buxa Tiger Reserve (West), West Bengal, India. Journal of economic and sustainable development 3(10): 83-88.

Singh, S.P., Bassignana-Khadka, I., Karky, B.S., Sharma, E. 2011. Climate Change in the Hindu Kush-Himalayas: The State of Current Knowledge. International Centre for Integrated Mountain Development, Kathmandu, Nepal.

Sivakumar, S., Varghese, J., Prakash, V. 2006. Abundance of birds in different habitats in Buxa Tiger Reserve, West Bengal, India. Forktail 22: 128-133.

Wadia, D. N. 1919. Geology of India. New Delhi: Tata McGraw-Hill Publishing Company.

World Bank, Staff Appraisal Report. 1996. India Eco-development Project. South Asia Department II, Agriculture and Water Division. WPC recommendation 20. 2003. Preventing & mitigating human-wildlife

conflicts. IUCN-World Park Congress.

Zubri, C., Switzer, D. 2001. Crop raiding primates: searching for alternative human ways to resolve conflict with farmers in Africa. People and Wildlife Initiative Wildlife Conservation Research Unit, Oxford University, UK, 2001.

### The Connection Between the Quality of Life and **Sustainable Ecological Development**

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#### Abstract

The research aims to analyze the evolution of the concept of sustainable ecological development and the central rule of the government policy for the improvement of the quality of life. The paper, using the model of five capitals, explains how the sustainable ecological development can help to improve the quality of life of citizens. A minimum necessary condition for sustainable ecological development is the maintenance of the total natural capital stock at or above the current level. This work explores the link between natural capital and sustainability from a government policy perspective and it examines how sustainable ecological development must be integrated within public sector organization's planning. The research considers that the goal of sustainable ecological development is to use the natural resources wisely in the short-term so that these resources are available in the long-term. Ecological sustainability relies on the fact that humans can exhaust the natural resources, leaving nothing but polluted water and infertile soil for future generations. Ecological sustainability is the belief that all humans must use resources wisely and efficiently so that these resources never become exhausted or over polluted.

Keywords: Sustainable ecological development, quality of life, natural capital, social capital

#### Introduction

Nowadays sustainability is at the forefront of many organization's agenda. Government policies play a fundamental rule, but there is a disjoint between the government policy on sustainable development and its actual participation in the endeavor. The government should take account of sustainable development as a part of how it develops its policies. The system must be defined at various levels of aggregation. It is assumed that changes in the behavior of public institutions and organizations are a prerequisite for sustainable ecological development. Sustainable development and quality of

life were often analyzed separately until now, but it's necessary to understand the connection. Sustainable development is a demanding challenge for human beings to survive generation after generation while retaining economic growth and improving living standards. Exploring different dimensions of sustainability should relate to the exploration of quality of life and developments on a global level as it is there, where sustainability can be destroyed or ensured. A minimum necessary condition for sustainability is the maintenance of the total natural capital stock at or above the current level. In both the quality of life and sustainable development debates, the natural environment plays an important role (Gazzola, Dymchenko & Panova, 2014). The concept of sustainability is a wide approach everybody is talking about in a period when environmental problems caused by various human activities are requiring serious solutions. The basic meaning of the word sustainability is the capacity for continuance indefinitely into the future. The concept of sustainable development arose from increasing evidence that human activities have destroyed the global equilibrium and cannot be sustained forever. In the concept of sustainable ecological development, the word "ecological" emphasizes the necessary integration of economy and environment. Ecology is defined as the relationship between organisms and their environment. In terms of human beings, ecology also entails the interaction between human groups and their social and physical environments, also referred to as human ecology. Seeing that humans are organisms, even though they don't give considerable attention in general ecology and biodiversity dialogue, ecological management should in fact incorporate programs which focus on the wellbeing of humans, other animals and their environment, along with their interlinked relationships. We use the term "ecological" for describing a body or process which is beneficial to the environment, or results in minimum damage to the environment. Ecological management can be defined as the act of incorporating personnel to effectively and efficiently achieve desired objectives pertaining to the relationship between organisms and the natural environment, in a manner that is beneficial or causes minimum damage to the environment. The word sustainable relates to a process that can be maintained over a long period. With the evolution of environmental theories, including sustainable development models, the term sustainable is commonly linked with the definition of sustainable development. Sustainable development is development where the current generation can adequately meet its own needs without compromising the needs of future generations (McKenzie, 2004; Gazzola et al., 2013). In this light, the word sustainable is used to describe a process, which can be conducted over a time frame with minimal long-term detrimental effect to the environment.

#### Methodology

The research methodology is based on the theoretical analysis of available literature on sustainability frameworks, as well as methodologies for the integration of development models and decision-making. For the research, the authors use some of the basic methods of the scientific research to obtain the information necessary to the complex systemic processing of the issue. The methods usually complement each other and, in consequence, overlap. The authors predominantly use methods of qualitative research. The first part is about the literature review. The authors describe and

The first part is about the literature review. The authors describe and synthesize the literature on the topic of sustainability because it is very wide and varied and on quality of life. The literature and definitions, research was conducted to analyze the lines of thought, retrieved in the major and specialized journals. To complete the analysis were also considered the actions introduced by supranational and national organizations.

The second part is about the development of one model useful for the public sector organizations to improve the quality of life of the citizens. The model help to develop the concept of sustainability in public organizations and to solve embraces a wide range of complex questions from "what is socially and ethically acceptable?" to "how do public organizations decide what they can afford?" It is important to ask: "What kinds of investments are most cost-effective to improve the quality of the life?" "In what ways does the system deliver good value for the money we spend now, and where can we do better?"

The main contribution of this line of research is to explain the important relation between the Natural Capital Framework of sustainable development (Porritt, 2007) and the quality of life model with the rule of government policy.

#### **Literature Review**

Brundtland Commission report introduced the first well known definition of sustainable development in 1987: "Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs." (World Commission on Environment and Development WCED, 1987). Sustainability is based on the idea that resources should as needed for present needs but not be used faster than they can naturally regenerate and be available for future and that the negative effects of the processes for production of goods cannot be transferred to future generations. Elkington goes more into detail when arguing that companies should not only focus on enhancing its value through maximizing profit and outcome without worrying about the consequences of general environmental but concentrate on environmental and social issues equally (Elkington, 1997). In effect sustainability implies: "... a broad interpretation

of ecological economics where environmental and ecological variables and issues are basic but part of a multidimensional perspective. Social, cultural, health-related and monetary/financial aspects have to be integrated into the analysis" (Söderbaum, 2008). Moreover, referring to the definition by the "Brundtland Commission" (1987), Adams (2006, page 1) observes: "Over these decades, the definition of sustainable development evolved. ... This definition was vague, but it cleverly captured two fundamental issues, the problem of the environmental degradation that so commonly accompanies economic growth, and yet the need for such growth to alleviate poverty". The United Nations Secretary-General, Kofi Annan (2002),

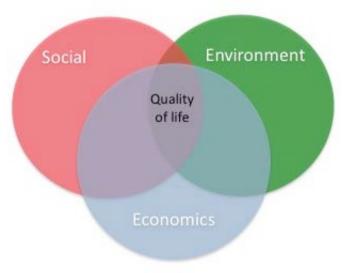
The United Nations Secretary-General, Kofi Annan (2002), challenged business leaders to join an international initiative, the Global Compact, that would bring companies together with UN agencies, labor and civil society to embrace a set of shared values and principles in the areas of human rights and labor and environmental standards. Costanza and Patten (1995) emphasized, taking the meaning of sustainability from biology, that: "Biologically, sustainability means avoiding extinction and living to survive and reproduce. Economically, it means avoiding major disruptions and collapses, hedging against instabilities and discontinuities. Sustainability, at its base, always concerns temporality, and in particular, longevity". Nevertheless, in general, as Pearce (1999, page 69) has commented: "defining sustainable development is not a difficult issue. The difficult issue is in determining what has to be done to achieve sustainable development, assuming it is a desirable goal". Sustainable development was further

Nevertheless, in general, as Pearce (1999, page 69) has commented: "defining sustainable development is not a difficult issue. The difficult issue is in determining what has to be done to achieve sustainable development, assuming it is a desirable goal". Sustainable development was further developed at the World Environment Conference in Rio de Janeiro in 1992 with Agenda 21 and Local Agenda 21. The Local Agenda 21 concept has since been taken up by an increasing number of cities in countries around the world (2003). In 2012, twenty years after the first Earth Summit the key directions of green economic development and poverty elimination were discussed at the Rio+20. The concept of sustainable development was revised by putting the emphasis on the social and human dimensions that inherently broaden the scope of ecological and economic pillars of sustainable development. According to the Rio Declaration 1992 and Agenda 21 (2003), any strategy for sustainable development has to include all dimensions of economic, social, ecological, spatial and cultural development (World Bank, 2001). Sustainable social development here means continuous progression towards the creation of a human society that treats equally all cultural, racial and language differences. Equitable distribution of resources, revenues and information, are other necessities of social justice. Ecologically sustainable development is a long-standing and internationally recognized concept. The concept has been affirmed by the World Summit for Sustainable Development (WSSD, 2002). The Australia's National Strategy for Ecologically Sustainable Development (Commonwealth of Australia, 1992) defines ecologically sustainable development as the use, the conservation and the enhance of the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.

The second concept we analyze is Quality of life (QOL) represent human perceptions of different aspects of the environment. It is "meant to represent either how well human needs and aspirations are met or the extent to which individuals or groups perceive satisfaction or dissatisfaction in various life domains" (Costanza, et al. 2006, p. 268). Quality of the life is a focus on a person's well-being and mental state. In the social sciences, quality of life is defined as the overall well-being of individuals in a broad and a multidimensional sense (Böhnke, 2005). Moreover, quality of life has been often analyzed as a property of society overall, using a macroperspective. But it can also refer to conditions or evaluative judgments from a micro-perspective. Therefore, quality of life should be best conceptualized in terms of individuals' life situations (Vesan & Bizzotto, 2011). The notion of quality applies to several domains that may affect human life experience. This implies analyzing the different aspects that contribute to individual well-being, both at individual and macro level.

Sustainable development is connected with the improvement of quality of life (Beck, van der Maesen & Walker, 1998) through education, justice, community participation and recreation. The social sustainability (Colantonio, 2008) is a fundamental component of sustainable development to encompass human rights, labor rights, and corporate governance (Walker & van der Maesen, 2004) that is becoming increasingly entwined with the delivery in sustainable community discourse and the urban sustainability discourse. The goals of social sustainability are that future generations should have the same or greater access to social resources as the current generation (Mak & Peacock, 2011). Sustainability is connected to the quality of life in a community. It is about whether the economic, social and environmental systems that build the community are providing a healthy, productive, meaningful life for all the community residents, present and future. Social sustainability is a life-enhancing condition within communities, and a process within communities that can achieve that condition (Davidson & Wilson, 2009). Social sustainability can be also defined as the well-being maintenance and improvement of the current and future generations (Chiu, 2003). It incorporates equity of access to key services (including health, education, transport housing and recreation), as well as equity between generations, meaning that future generations will not be disadvantaged by the activities of the current generation (McKenzie, 2004). The literature analysis of the link between quality of life and sustainability reveals some interesting temporal components to the concepts. When describing the connection between quality of life and sustainability, livability is thought to be the result of the interaction between the physical and social components with this relationship being very much related to the "here and now". Sustainability is viewed as being more heavily influenced by the physical and economic components and usually associated with future (van Kamp et al., 2003; Shafer; Lee & Turner, 2000). We can show the interaction using the three pillars (Cato, 2009) and in accordance with the WCED (1987) sustainability ideal in Figure 1.

Figure 1 – Sustainability and the quality of life



Source: Schafer et al. 2000, page 166

#### The Different Level of Sustainability

It's possible to recognize three levels of sustainable development connected with the QOL: survival sustainability, maintaining quality of life, improving quality of life.

The survival sustainability is a basic level of sustainability. The definition of sustainability is related to the natural systems function, how to produces what is Necessary for the ecology to remain in balance. Also it considers That human civilization takes resources to sustain our modern way of life. There are several examples Throughout history where a civilization has damaged its own environment and seriously affected its own survival chances. Sustainability considers how we might live in harmony with the natural world, protecting it from damage and destruction (Goodland, 2002). It is widely acknowledged that many societies collapsed due to an inability to adapt to the conditions brought on by these unsustainable practices. The survival sustainability involves the maintenance of ecological life-support systems, the social capacity to solve major problems with actions that

enabling the survival of humans and the economic capacity to meet subsistence needs of the population. At this basic level of sustainability all three requirements must be met simultaneously.

The second level is related to the maintenance of the normally expected quality of life. In some regions, this quality of life, is far beyond the level required for basic survival. Sometimes the pursuit of sustainability and improved quality of life may conflict. It is possible for communities to put such large amounts of effort into improving the experiential aspects of their quality of life (aesthetic, time saving, or stimulus generating aspects) that they fail to put enough effort into ensuring survival sustainability. This is what modern societies are doing (Sutton, 2000).

The third level of sustainability considers sustainability to be a paradigm for thinking about a future in which environmental, societal, and economic considerations are balanced in the pursuit of development and improved quality of life without impairing the ability of future generations to enjoy quality of life and opportunity at least as good as ours (Dorsey, 2003).

	Economic	Social	Environment
Survival sustainability	Subsistence	Capacity to solve important problems	Protection of life support systems Prevention of species extinction
Maintaining quality of life	Maintenance of decent standard of living	Maintenance of decent social quality	Maintenance of decent environmental quality
Improving quality of life	Improving standard of leaving	Improving social quality	Improving environmental quality

Figure 2– The different level of sustainability

Source: adapted by Sutton, 2000

#### The Central Rule of Public Sector

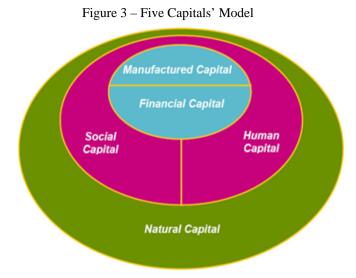
The public sector is facing two major challenges: a struggle to find operational efficiencies in delivering services today, a need to do more with less, and a need to show leadership and take immediate action on climate change and wider sustainability issues. The evolution in the role of public organizations has led to the recognition of a social and environmental aspect to their activities which obliges them to seek sustainable growth and not one "at all costs"; this requires that they modify the concept of growth and its sustainability. The concept of growth refers to the material increase in size and development considers the improvement in the organization without size change. Given these definitions, growth cannot be sustainable indefinitely on a finite planet (Costanza & Daly, 1992). If public sector bodies do not take on this leadership challenge, citizens may find themselves cut off from sustainable lifestyles.

Sustainable development does not represent an option but is rather a necessary condition for success in the medium-long term and becomes an important strategic factor (Clarkson, 1995) also for public sector organizations. Growth and development must be compatible with the needs and expectations of the citizens: consensus and social legitimization favor the conditions of trust necessary to achieve earnings and competitive advantages (GBS, 2001). There is a high probability that action taken to achieve local sustainability, that is not combined with the action of the Government policy to achieve global sustainability, is doomed to failure. At a time when sustainability is at the forefront of many organization's agenda, there is a disjoint between the public sector's supposedly central role in sustainable development and its actual participation in the endeavor. The reason behind this is the difficulty in integrating the numerous needs and requirements of different cultures and localities into a single, comprehensive blueprint. The difficulty in mapping out sustainable practices for public sector organizations lies in the wide variety of stakeholders (Freeman, 1984) and the dynamic tensions between them. What's more, the process doesn't stop upon implementation. Complex decisions must be made constantly, and because these policies and programs do not exist in a vacuum, there is no getting around the learning-by-doing process.

because these policies and programs do not exist in a vacuum, there is no getting around the learning-by-doing process. Public organizations involved in sustainable development should take an active part in the process of planning and implementing development activities as well people can enjoy their benefits. Government policy has to consider every aspect of politics, economy, and society that is an important goal and means of sustainable development.

#### **Result and Discussion**

The Five Capitals' Model (Figure 3) is widely accepted as a practical expression of the principles of sustainable development Also public sector organizations use five types of capital to deliver its services.



Source: Forum for the Future

A sustainable organization must maintain and where possible enhance these stocks of capital assets, rather than deplete or degrade them. A community is healthy and sustainable when five kinds of capital are present in people's lives:

1) Natural capital (also referred to as environmental or ecological capital): the quality and productivity of the natural environment. It considers any stock or flow of energy and matter that yields valuable goods and services. Natural capital is the basis not only of production, but of life itself.

2) Human capital: it consists of health, knowledge and motivation. It considers the life skills, social skills and technical skills that give people the self-efficacy to lead autonomous lives.

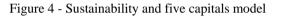
3) Social capital: it takes the form of structures, institutions, networks and relationships which enable individuals to maintain and develop their human capital in partnership with others, and to be more productive when working together than in isolation. It includes families, the web of voluntary organizations like trade unions, clubs and societies, play groups, Land care groups, and so on.

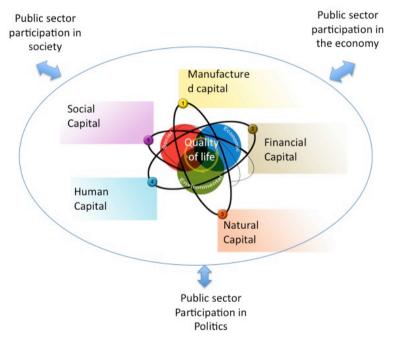
4) Manufactured capital: it comprises quality of housing, accessible transport, medical and welfare services, food distribution systems, communication infrastructure, and so on.

5) Financial capital: access to liquidity, fair wages. Plays an important role in our economy by reflecting the productive power of other types of capital, and enabling them to be owned and traded. Its value is purely representative of human, social or manufactured capital. The Five

Capitals Model provides a basis for understanding sustainability in terms of the economic concept of wealth creation or "capital".

The Five Capitals Model can be used to allow organizations to develop a vision of what sustainability looks like for its own operations and services. This vision is developed considering what an organization needs to do in order to maximize the value of each capital. However, an organization needs to consider the impact of its activities on each of the capitals in an integrated way to avoid "trade-offs". Using the model in this way for decision-making can lead to more sustainable outcomes. Starting from the main representations of sustainability (Figure 1) we can join in the model the Five Capitals Framework of sustainable development (Figure 3) (Porritt, 2007, p. 139) integrating it with rule of the public sector organizations (Figure 4).





Source: Gazzola, 2015

The model provides a basis for understanding sustainability in terms of the economic concept of wealth creation of capital. The system conditions established through these relationships show that the goal may sometimes be achieved at the cost of the destruction of value in one or more of the remaining capitals. (Schienke et al., 2009).

The maintenance of critical natural capital is an important objective of sustainable development. Natural capital, e.g. renewable and nonrenewable resources and the ecosystem services that the natural capital stocks provide, are now the limiting factors of economic development. (Korhonen, 2004). The rule of the public sector is fundamental for the participation in politics, in societal and in the economic decisions to support the quality of life.

The maintenance of social capital is also critical for the QOL. Social capital is investments and services that create the basic framework for society. A systematic community participation and a strong civil society, including government, can achieve this goal. Cohesion of community for mutual benefit, connectedness between groups of people bring to accepted standards of honesty, discipline and ethics. Commonly shared rules and laws promote social sustainability (Goodland, 2002).

According to Daly (1996) it's possible to define the focus of sustainable development with the 'full world' metaphor: modern world has become 'full' of human-manufactured capital and 'empty' of natural capital. The natural resource use and waste and emission generation of economic systems are unsustainable. With the industrial revolution and rapid economic expansion, the human economic system has grown rapidly relative to the ecosystem, making the ecosystem 'full', because the economic system is the subsystem of nature and nature is not growing and materially closed. (O'Hara, 1997).

#### Conclusion

Conclusion Sustainable development that considers the five capitals, in particular the natural capital, supports quality of life (Eckersley, 1999) and implies its improvement (Beck, van der Masesn & Walker, 1998). Sustainable ecological development can be defined as maintenance and improvement of the quality of life of the current and future generations (Chiu, 2003). Sustainable development focuses on a "good" life for all humans living today and for future generations in harmony with the environment. Quality of life has several components, including physical, mental, social and spiritual. It is also used in a collective sense to describe how well a society satisfies people's wants and needs (Eckersley, 1998). However, it is

and spiritual. It is also used in a collective sense to describe how well a society satisfies people's wants and needs (Eckersley, 1998). However, it is generally assumed that this "good" life can only be maintained in the long run when natural limits, such as the carrying capacity of ecosystems and resource availability, are respected. In this way, the sustainable development concept extends the perspective from today to the future, from here to the people on the entire planet and from human beings alone to their coexistence with the natural environment. Sustainable development means encouraging economic growth while protecting the environment and improving our quality of life, all without affecting the ability of future generations to do the same same.

Public sector organizations must develop a framework that evaluates the natural capital impacts on environmental, economic, and social decisions and plans currently being implemented in cities and communities. The public sector plays a vital role in developing effective platforms and mechanisms to encourage responsible development for the long term. This requires a proactive leadership that fosters sustainability thinking and acting, along with appropriate guidance, tools, etc. A distinct 'tool set' help formulate and implement activities by which sustainability-based policies and programs are incorporated into public policy organizations. Synergy, or generating results that are more than the sum of separate parts, is also a key aspect in implementing in that there must be cooperation and coordination among a variety of entities oriented towards the same visions and goals.

variety of entities oriented towards the same visions and goals. Without the engagement of the public sector it will be impossible to create a sustainable society. Legislation is gradually pushing public sector organizations in this direction. But there is a good case for public sector organizations to take a leadership role on sustainable development, moving quicker than the legislation requires. Just as leading private sector organizations have found that there is a strong business case for sustainable development in enhancing profitability and shareholder value, so there is a corresponding public value case for sustainable development (Gazzola & Colombo, 2013).

A governmental strategy for sustainable ecological development provides broad strategic directions and framework for governments to direct policy and decision-making. The strategy facilitates a coordinated and cooperative approach to sustainable ecological development and encourages long-term benefits over short-term gains (Commonwealth of Australia, 1992). The government takes account of sustainable ecological development as a part of how it develops its policies, how it runs its buildings and how it buys its goods and services (Gazzola, 2015).

#### **References:**

Adams W. M. The Future of Sustainability: Re-thinking Environment and Development in the Twenty-first Century. Available at: http://iucn.org, 2006.

Annan K. Strengthening the UN: An Agenda for Further Change. Report. The Secretary General United Nations, September 9, 2002.

Beck W., van der Maesen L. and Walker A. (eds). The Social Quality of Europe. Bristol: Policy Press, 1998.

Böhnke P. First European Quality of Life Survey: Life Satisfaction, Happiness and Sense of Belonging. Luxembourg: Office for Official Publications of the European Communities, 2005 Brundtland Commission. Our Common Future, Brundtland Report. United Nations World Commission on Environment and Development, 1987.

Cato M. Green Economics: An Introduction to Theory, Policy and Practice. London: Earthscan, 2009.

Chiu, R. L. H. Social Sustainability, Sustainable Development and Housing Development: The experience of Hong Kong. Forrest R., Lee J. (Eds.) Housing and social change. East-west perspectives: Routledge, 2003.

Clarkson M.B.E. A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. In Academy of Management Review, Vol. 20, Issue 1, pages 92-117, 1995.

Colantonio A. Urban Social Sustainability Themes and Assessment Methods. Proceedings of the Institution of Civil Engineers: Urban Design and Planning. Vol. 163, Iss. 2, pages 79-88, 2010.

Commonwealth of Australia. National Strategy for Ecologically Sustainable Development. Ecologically Sustainable Development Steering Committee Endorsed by the Council of Australian Governments, 1992.

Costanza R. and Daly H. E. Natural Capital and Sustainable Development. Conservation Biology. Vol. 6, issue 1, pages 37-46, 1992.

Costanza R., Fisher B., Ali S., Beer, C., Bond L., Boumans R., Danigelis N., Dickinson J., Elliott C., Farley J., Gayer D., MacDonald Glenn L., Hudspeth T., Mahoney D., McCahill L., McIntosh B., Reed B., Rizvi S., Rizzo M., Simpatico T., Snapp R. Quality of Life: An Approach Integrating Opportunities, Human Needs, and Subjective Well-being. Ecological Economics, Vol. 61, issue 2-3, pages 267-276, 2006. Costanza R., Patten B. C. Defining and Predicting Sustainability. In

Ecological Economics. Vol.15, Iss. 3, pages 193-196, 1995. Daly H. Beyond Growth: the Economics of Sustainable Development.

Boston, Beacon Press, 1996.

Davidson K. and Wilson L. A Critical Assessment of Urban Social Sustainability. Adelaide, The University of South Australia, 2009.

Dorsey, J. W. Brownfields and greenfields: the intersection of sustainable development and environmental stewardship. Environmental Practice, 5(01), 69-76, 2003.

Eckersley R. (eds.). Measuring Progress: Is life getting better? CSIRO Collingwood, Publishing, Victoria. pp. 3-34. Available at: http://www.richardeckersley.com.au/attachments/MP_chapter_1.pdf, 1998. Eckersley, R. Quality of Life in Australia: An Analysis of Public

Perceptions, The Australia Institute, Vol. 23, Issue September, 1999.

Elkington J. Cannibals with Forks: Triple Bottom Line of 21st Century Business. Capstone Publishing, Oxford, 1997.

Freeman R.E. Strategic Management: A Stakeholder Approach, Pitman, Boston, pages 275, 1984.

Gazzola P. Making sustainable ecological development a part of government policy, International Conference: "Applied Ecology: problems, innovation", proceedings ICAE-2015, Tbilisi State University of Iv. Javakhishvili (TSU), Georgia, 7-10 maggio 2015 isbn 978-9941-0-76442 pp. 6-11, 2015.

Gazzola P., Colombo G. Aesthetics and ethics of the sustainable organizations. European Scientific Journal ESJ, December 2013, special edition, Vol.2, pp. 291-301, ISSN: 1857 - 7881 (Print) ISSN: 1857 - 7431 (Online), 2013.

Gazzola P., Dymchenko O. and Panova O. The System Development of Water Supply and Sewage Economy in Ukraine: Challenges and Prospects of Resource-saving Strategy. Proceeding 18th International Conference: Current Trends in public sector research, Masaryk University, Faculty of Economics and Administration, Department of Public Economics, 16-17 January Brno, 2014.

Gazzola, P., Dymchenko, O., Sribnyi, V., Panova, O. Towards Sustainable Urban Development: Challenges and Opportunities for Ukraine, 10th Annual International Scientific Conference, Theoretical and Practical Issues of Public Economics and Administration, Petr Tomacek, Ivana Vankova editors, 2013.

Goodland, R. Sustainability: human, social, economic and environmental. Encyclopedia of global environmental change, 5, 481-491, 2002.

Gruppo di studio per il Bilancio Sociale (GBS), Principi di Redazione del Bilancio Sociale, Adnkronos Comunicazione SpA, Roma, 2001.

Korhonen J. Industrial Ecology in the Strategic Sustainable Development Model: Strategic Applications of Industrial Ecology. Journal of Cleaner Production, Vol. 12, pages 809–823, 2004.

Mak M., Peacock C. Social Sustainability: A Comparison of Case Studies in UK, USA and Australia, 17th Pacific Rim Real Estate Society Conference, Available 2011, at:

http://www.prres.net/papers/Mak_Peacock_Social_Sustainability.pdf, 2011.

McKenzie S. Social Sustainability Towards some Definitions, Hawke Research Institute Working Paper Series No 27, 2004, Available at http://www.hawkecentre.unisa.edu.au/institute/, 2004.

O'Hara SU. Toward a Sustaining Production Theory. Ecological Economics. Vol. 20, issue 2, pages 141–154, 1997. Pearce, D., Markandya, A., Barbier, EB. Blueprint for a Green Economy.

Earthscan: London, 1989.

Porritt J. Capitalism as if the World Matters. London: Earthscan, 2007, pages 360, 2007.

Schienke E. W., Tuana N., Brown D. A., Davis Kenneth J., Keller Klaus, Shortle James S., Baum S. D. The Role of the National Science Foundation Broader Impacts Criterion in Enhancing Research Ethics Pedagogy. In Social Epistemology: A Journal of Knowledge, Culture and Policy, 2009, Vol. 23, Issue 3/4, pages 317-336, 2009.

Shafer C.S., Koo Lee B., Turner S. A Tale of Three Greenway Trails: User Perceptions Related to Quality of Life. Landscape Urban Plann. Vol. 49, pages 163–178, 2000.

Söderbaum P. Understanding Sustainability Economics: Towards Pluralism in Economics. Earthscan, 2008.

Sutton, P. Sustainability: what does it mean. Green innovation website. Retrieved from http://www.green-innovations.asn.au/sustblty. Html, 2000. United Nations Department of Economic and Social Affairs. Division for

United Nations Department of Economic and Social Affairs. Division for Sustainable Development Agenda 21. 2003. Available at: http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.ht m#pre, 2003

van Kamp I., Leidelmeijer, K., Marsman, G. and de Hollander, A. Urban Environmental Quality and Human Well-being: Towards a conceptual framework and demarcation of concepts; a literature study. Landscape and Urban Planning, Vol. 65, pages 5-18, 2003.

Urban Planning, Vol. 65, pages 5-18, 2003. Vesan P. and BizzottoI G. Quality of Life in Europe: Conceptual Approaches and Empirical Definitions. Walqing Working Paper 2011.5, A literature review for WP4 of the WALQING project, SSH-CT-2009-244597, Moncalieri, January 2011. Consulted online 28/02/2012 at www.walqing.eu., 2011.

Walker A.C. and van der Maesen L.J.G. Social Quality and Quality of Life, in W. Glatzer, S. von Below and M. Stoffregen (eds), Challenges for Quality of Life in the Contemporary World. The Hague, London, Boston: Kluwer Academic Publishers, pages 13–31, 2004.

WCED (World Commission on Environment and Development). Our Common Future. Oxford University Press, Oxford, UK, 1987

World Bank. World Development Indicators 2001, The World Bank, Washington, D.C. [The most important publication regarding development and economic, social and environmental indicators at country level, 2001.

WSSD World Summit on Sustainable Development. United Nations Conference on Environment and Development (UNCED) Earth Summit, held in Johannesburg, the 10th anniversary, 2002.

www.forumforthefuture.org/project/five-capitals/overview

## The "Badanti" Social Phenomenon in Lazio and Molise Regions and the Implication of Romanian Women

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#### Abstract

The social phenomenon of "BADANTI" is referring to a parallel social work system developed in Italy by a large number of Romanian emigrants, especially women, through their day to day jobs, mostly unqualified and often illegally. The present paper focuses on the research of the "Badanti" phenomenon especially in Lazio and Molise regions where the largest number of Romanian emigrants can be found. For example, in Lazio region the Romanian nationals represent the largest number of emigrants, approximately 40% of the total emigrants while in Molise region the Romanian emigrants represent approximately 38% of the total emigrant population.

The Romanian women are part of the parallel social work system as unqualified workers by taking care of children and the elderly mostly in private homes. Although well appreciated for a job well done by their employers, who are mostly private persons, the state social work system will soon enter into a crisis because of the "Badanti". Actions should be taken in order to preserve the welfare state and avoid the collapse of a national social work system witch could lead to grater implications in a society that can't afford to relay on emigrants to constitute an illegal and parallel social work system.

The sociological research regarding the "Badanti" phenomenon took place in the two Italian regions between April and November 2016 using questionnaires and interviews as methods of research.

Keywords: "Badanti", social work system, Romanian women, Lazio, Molise

#### Introduction

Starting 2007-2008 a new social phenomenon was brought into the public attention in Italy. The media and then several research institutes started to look into the implication of the immigrants (Friedman & Randeria,

2004) upon the Italian society, especially on how women immigrants have an impact on their society (Geddes, 2003). The phenomenon was called "Badanti" and it refers to the persons called badante who are immigrants, mostly form Eastern Europe and mostly women who work in housekeeping and nursing old people or kids (Bommes & Morawska, 2005). Etymologically speaking the word *badanti/badante* (badare=to take care of) would translate from Italian language as caretaker. The Italian dictionaries explain the word badante as "persons who have as profession to survey and take care old and disable people". Referring to this phenomenon, professor Giovanni B. Sgritta in his book entitled *Badanti e anziani in un welfare senza futuro* concludes "the Badante is all an Italian phenomenon. What made it happen? To whom it may serve? Definitely to the families, but also to the state: in fact raises families from increasingly difficult tasks and allows the state to leave things as they are, that is to put on the shoulders of the women, in the first place, the responsibility to treat and assist children and the elderly. The lengthening of life expectancy and declining birth rate have fueled the aging process of our country. Carers are the spontaneous response, private, these requirements; make up for the failures of politics and the weakening of families and family support networks. Research published here sheds new light on the size and nature of the abavement of the spontaneous of spins. the phenomenon: outstanding solution to the problem of aging freezes a situation where families and women continue to play a leading role. And then?" (Sgritta, 2009).

The "Badanti" phenomenon as seen by specialists Specialists in social work and sociology from Italy have different judgments regarding the "badanti" phenomenon and what should be done regarding it. There were made many researches and studies regarding this phenomenon including ones by state authorities. Some specialists consider this phenomenon benefic for the state. "To whom it may serve? Definitely to the families, but also to the state: in fact

raises families from increasingly difficult tasks and allows the state to leave things as they are, that is to put on the shoulders of the women, in the first place, the responsibility to treat and assist children and the elderly."(Sgritta, 2009).

Other specialists see this phenomenon as one that affects not only the social work system but also the life of the badante. Elena de Filippo considers that "The social care has important implications for this women (badante). For most of them it means lack of intimacy, forced domestic partnership and continuing working rhythm" (de Filippo, 2010). Many of the specialists are concerned by the fact that some of these women (badante) are often victims of abuse. In Bordogna Tognetti's opinion

the fact the they "work in an isolated environment because often the residencies of the people whom they take care of are situated in peripheries and they can not ever leave the elderly alone" represents the main risk of being victims of abuses, along the fact that "they never have time to meet with compatriots that work in the same field of activity" (Tognetii, 2004). Martire Zindato considers that an aggravating fact regarding

Martire Zindato considers that an aggravating fact regarding exclusion is represented by single mothers. "In this cases, motherhood represents a major risk towards exclusion" (Zindato, 2005).

represented by single mothers. In this cases, motherhood represents a major risk towards exclusion" (Zindato, 2005). Some specialists criticize the welfare system that is not prepared to face today challenges. "the absence of a welfare system capable to face challenges of single mothers immigrants is visible...the paradox is that are the immigrant women, who take care of Italian families, to pay the price of a weak and residual welfare system. They are the first to pay the price of such critical issues"(de Filippo, 2010).

# Statistical data regarding Romanian immigrants in Italy (Lazio and Molise regions)

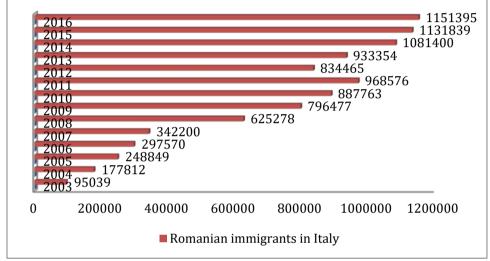
Italy is one of the most attractive western countries in Europe for immigrants (Joly, 2004). Starting 1990 when the iron curtain fall a very large number of immigrants from Eastern Europe came to Italy. Moreover, with the E.U. enlargement waves towards former communist countries, more immigrants fled their countries towards Western Europe (Kofman, 2000). Romanian immigrants represent, in 2016, the most numerous foreign populations in Italy. There are officially over 1.1 million Romanian immigrants in Italy according to the Italian Statistical Institute. These are people officially registered with the Italian institutions, but there are voices that the real number of Romanian immigrants in Italy exceeds 3 million people.

Year	2003	2004	2005	2006	2007	2008	2009
Romanian immigrants in Italy*	95039	17781 2	248849	29757 0	342200	625278	796477
Year	2010	2011	2012	2013	2014	2015	2016
Romanian immigrants in		96857		93335	108140		115139
Italy*	887763	6	834465	4	0	1131839	5

However we can see that the number of Romanian immigrants increased spectacularly after Romania became part of the European Union in 2007. Italy considered different conditions for access to its labor market for Bulgarians and Romanians: The former were able to work there freely in exchange for Bucharest's willingness to cooperate on combating organized crime (Porumbescu, 2015). Actually, Romania and Bulgaria "are considered

to be the EU countries with the lowest standard of life, with a high rate of unemployment" and the population from these two counties are "the leading providers of manpower for the European market" (Niță, 2016).

The number almost doubled between 2007 and 2008 as the borders became free and Romanian became European citizens and had the same working rights as the local people. Romanian immigrants in Italy represent 22.9% of the total immigration population placing them in the first place of the immigrants by nationality.

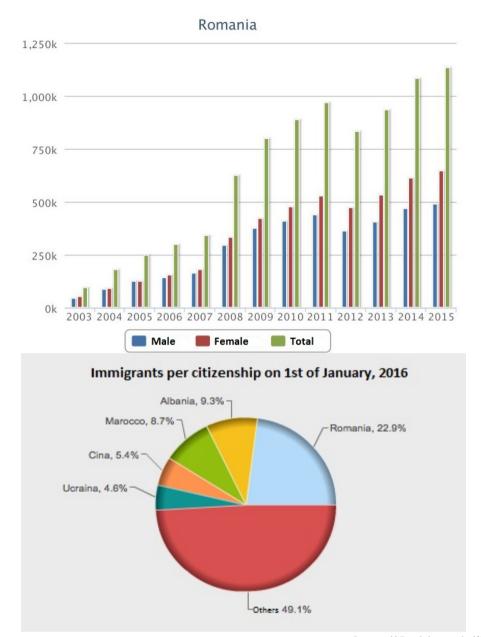


* Data collected from the ISTAT– Istituto nazionale di statistica (<u>http://dati.istat.it/#</u>, July 2016)

From the 1.1 million Romanian immigrants from Italy, more than 650.000 are women and more than 80% of these works as badante. They provide cheap services helping a weak welfare system at important costs for their personal life such as humiliation, lack of opportunities to a fulfilling career witch should award any hard working people with promotions and pecuniary satisfactions, lack of a health insurance for them and their family (often consists with one or more children), lack of medical care as a paradox for people who take care of other people, lack of personal social life and tremendous efforts for social integration.

Even if the badante are appreciated for their hard work by the Italian social care system, sometimes in mass media they are humiliated publically because of their status of immigrants.

Nevertheless they never fail to do their job well and even if are seen, by some, as a threat to the Italian social care system more and more they are the ones picked for these kinds of jobs despite other offers (even ones provided by the Italian care system).

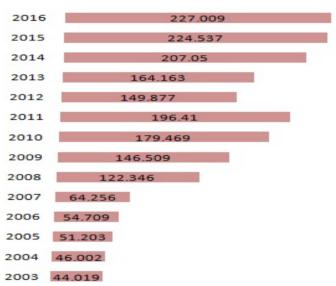


* Data collected from the ISTAT – Istituto nazionale di statistica (<u>http://dati.istat.it/#</u>, July 2016)

In the Lazio Region, witch is one of the most developed one in Italy because the capital Rome is part of it, we find the biggest Romanian community from Italy. Officially the Romanian immigrants in Rome are 227.009 conforming Italian Institute for Statistics but unofficial there are over one million. From these, 124.018 are female and 103.011 are males.

Year	2003	2004	2005	2006	2007	2008	2009
Romanian immigrants in Lazio* Year	44.019 2010	46.002	51.203 2012	54.709 2013	64.256 2014	122.34 6 2015	146.509 2016
Romanian immigrants in Lazio*	179.46 9	196.41 0	149.87 7	164.16 3	207.05 0	224.53 7	227.009

* Data collected from the Istat – Istituto nazionale di statistica (http://dati.istat.it/#, July 2016)

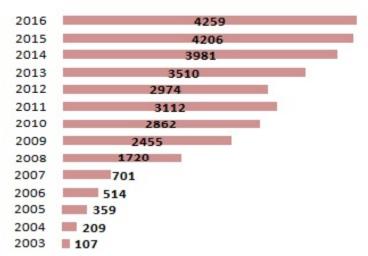


#### Romanian immigrants in Lazio

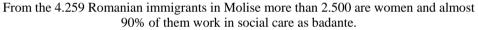
A similar situation we see in the Molise region, keeping the proportions. Here we can observe a Romanian population of immigrants over 4.200, representing almost 38% of the total immigration population by nationality.

Year	2003	2004	2005	2006	2007	2008	2009
Romanian immigrants							
in Molise*	107	209	359	514	701	1720	2455
Year	2010	2011	2012	2013	2014	2015	2016
Romanian immigrants							
in Molise*	2862	3112	2974	3510	3981	4206	4259

* Data collected from the ISTAT – Istituto nazionale di statistica (http://dati.istat.it/#, July 2016)



#### **Romanian immigrants in Molise**



# Research results regarding the Romanian badante in Lazio and Molise Region

The results of the research conducted in two Italian regions, Lazio and Molise, revealed that over 80% of the Romanian women immigrants work in social care as badante.

For example, in Lazio region, from 124.018 Romanian female immigrants, 79% work as badante. The rest of them are divided between waitresses (7%), baristas (2.9%), hotel industries (2.2%), shop cashier (1.9%), shop women (2.3%), cook (0.9%) and others (4.1%).

In the Molise region the percentage is even bigger. From the total of 2.542 female Romanian immigrants, 88.2% work as badante in the home care system, while the rest are divided between waitresses (4%), baristas (0.9%), hotel industries (1.2%), shop cashier (1.1%), shop women (1.8%), cook (1.2%) and others (1.6%).

The data are collected from Romanian female immigrants that work in these services and combined with the official data from the Italian Institute for Statistics.

#### Conclusion

In conclusion, even if are many voices that condemns immigrant female that work in this field as badante the truth is that they are doing a big favor to the Italian social system for providing quality services that the official system cannot provide. The truth is that this kind of service is unqualified and can be sometimes dangerous for the children or for the elderly. Also, it is not normal to have a parallel social care system and take advantage over it as long as you keep it "underground" and unqualified (Triandafyllidou, 2006).

In European Union, the health and social work sector (which includes residential care and non-residential social work) is counting today

approximately 10% of employment (Ilie Goga, 2014: 203). In our case, the solution could be a simple one and that is to help this badante to become qualified social workers and then both parties would win. Until then, the parallel system of social care will continue to exist with all the risks it implies both for the badante and the elderly or the children to witch the provide social services.

#### **References:**

Bommes, M. and Morawska, E. International Migration Research: Constructions, Omissions and the Promises of Interdisciplinarity. Aldershot: Ashgate. 2005.

De Filippo, E. (ed). *Donne lontane sempre presenti. Percorsi di immigrazione ed emigrazione femminili in Campania*. Napoli: Gesco. 2009. De Filippo, E. *Napoli. Madre soli immigrate*. In Sgritta, G.B. (ed). Dentro la crisi. Povertà e processi di impoverimento in tre aree metropolitane, Milano: F. Angeli.Roma, 2010. Friedman, J. and Randeria, S. Worlds on the Move: Globalization, Migration

and Cultural Security. London: I.B.Tauris. 2004. Geddes, A. The Politics of Migration and Immigration in Europe. London:

Sage, 2003.

Ilie Goga, C. The status quo of regional social policy in the European Union. Revista de Stiinte Politice/Revue des Sciences Politiques, (43): 194-206, 2014.

ISTAT. Istituto nazionale di statistica. 2016-2017. Retrived from: http://dati.istat.it/#.

Joly, D. International Migration in the New Millennium: Global Movement and Settlement. Aldershot: Ashgate, 2004. Kofman, E. et all. Gender and International Migration in Europe:

Employment, Welfare and Politics. London: Routledge, 2000. Niță, A. M. Equity and inequities on the labour market in the European Union. In Reports from the Third International Scientific Conference "Is There Enough EUROPE and UNION in the European Union?" Sofia: Editura Minerva. 2016.

Porumbescu, A. Migration Policies in the European Union: Espoused Perspectives and Practices-In-Use. *Revista de Stiinte Politice/Revue des* Sciences Politiques, (46): 165-175, 2015.

Sgritta, G.B. Bandati e anziani in un welfare senza futuro. Roma: Edizioni Lavoro, 2009.

Triandafyllidou, A. Contemporary Polish Migration in Europe: Complex Patterns of Movement and Settlement. Lampeter: Edwin Mellen Press. 2006.

Tognetti Bordogna M. Fasi e fussi migratori: Le donne come protagoniste. Migrazioni. *Rivista delle Politiche sociali*, (3). 2004.

Zindato, D and Martire F. Le famiglie straniere: analisi dei dati censuari del 2009 sui citadini stranieri. Roma. 2010.

# Future Learning Environments for Tomorrow's Schools

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#### Abstract

Teachers who want to prepare their students to cope with an unknown future, must equip them with a set of competencies that are essential for success in society in general and in any enterprise or organizational unit. Therefore, in today's reality, real-life scenarios should dictate the pedagogy and the design of learning environments that will meet the standards of modern working environments. In this paper, we attempt to reexamine content, pedagogy and learning environments in the current era. Based on our experience, we recommend that educational institutions adapt their classrooms by turning them into unique learning environments which will allow for a pedagogy that combines content which has been adapted to the 21st century with advanced and innovative technology in the most appropriate way for acquiring the necessary skills. The goal is that eventually educational systems will affect the real world by introducing innovative pedagogies and learning environments which will make an impact on working environments. This paper focuses on the work that has been carried out over the past three years geared at proposing new characteristics for learning environments in colleges of education.

Keywords: Interdisciplinary Teaching, Pedagogy, Learning Environment

#### Introduction

Teachers who have just completed their training must express their capabilities and skills in a way that will enable them to educate and prepare their students to cope with an unknown future. In today's world, we must cope with constant and extremely rapid changes in all areas and aspects of life. In addition to educating students to be good citizens, imparting universal values and providing abundant knowledge, the education system today must teach its graduates to look ahead and cope with this unknown future. Therefore, while continuing to focus on knowledge disciplines and pedagogy, teacher training must direct its primary attention toward creating an atmosphere of openness in the learning environment, coping with changes occurring now and in the future and being open to a different type of learning that will lead to success in meeting future challenges. This paper focuses on work over the past three years geared at proposing new characteristics for learning environments at colleges of education.

#### Competencies of Graduates of the Educational System in the 21st Century

Amar and Bar David (2016) identified a number of skills that meet the needs of the 21st century economy and that should be required of every graduate of the educational system. In addition, many scholars in the fields of education and occupational studies (Claro & Ananiadou, 2009; Bybee & Fuchs, 2006; Boyles, 2012), have identified a number of competencies that Fuchs, 2006; Boyles, 2012), have identified a number of competencies that all agree are required and essential for success in society in general and in any enterprise or organizational unit in particular. Among these competencies are pro-active social awareness, involvement, motivation, initiative, creativity and innovation, strategic thinking, collaboration, openness and flexible thinking, critical thinking, independence and accountability, social empathy and more. Today it is the obligation of educational institutions at all levels to provide their graduates opportunities to acquire and express these competencies during their studies and to practice them before joining the employment market and embarking upon their lives their lives.

#### **TPCK Model**

To meet this need and as part of their work at a teacher education college, the writers of this paper together with other colleagues have created a structured framework for teacher training adapted to this goal. This framework is based on the Technology, Pedagogy and Content Knowledge (TPCK) model (Mishra & Koehler, 2006). After years of work with a company called Steelcase Education, the model was extended to include active observation in a learning environment adapted to the learning content.

In this paper, we propose a new look at the components of the TPCK model. We attempt to reexamine content, pedagogy, technology and learning environments in the current era, in which we in the educational system must do our best to prepare our students for the larger world that is waiting for them when they complete their studies in the sheltered environment of school.

**Content – The Importance of Interdisciplinary Teaching** The content taught in the schools today is based upon unidimensional teaching according to knowledge disciplines and does not facilitate high-

level thinking unless it is supported by advanced or innovative pedagogy, such as research-based learning or problem-based learning. Students taught according to existing teaching methods are unable to connect or attribute a particular area of knowledge to broader topics originating in other knowledge areas or disciplines. This also finds expression in programs for training teachers. Pre-service teachers are required to study one or sometimes two teaching disciplines and for the most part are not trained to create the interdisciplinary links required for high-level thinking and synthesis between different fields. When subject areas are taught in isolation from one other, learners cannot synchronize and synthesize between fields of knowledge, as is required by the natural cognitive processes that take place with the help of computerized systems). The many attempts to introduce innovative pedagogies have had limited success and have not yet become accepted teaching procedures in the educational system. Thus, we must ask the following question: How can we elevate teaching and learning to high levels of cognitive perception and processing?

Subjects taught in school need to be divided into various groups according to the optimal way of teaching them. The first group should include the linguistic subjects, which we will continue to teach through classical frontal methodology that integrates knowledge transfer with individual practice and experience. This group includes teaching the native language of each country (English, French, Hebrew, Arabic, Russian and more). The group also includes foreign languages as appropriate for each country (e.g., Spanish or German in France, Chinese or Japanese in the United States, Arabic and English for Hebrew speakers), arithmetic, mathematics, art, music, dance and movement, and social, national and international values. These subjects should be taught from an early age, and not when students are older, as is customary today. They should be adapted to the children's age and their progression in school. The second group should include subjects that can be taught in an

The second group should include subjects that can be taught in an interdisciplinary manner, that is, subjects that are profoundly and genuinely interconnected (interconnected disciplines). Learning these subjects is divided into a number of sub-groups: i) phenomenon-based learning; ii) problem-based learning; iii) research-based learning; and iv) process- and project-based learning. To each of these sub-groups we will assign a number of subjects that will be taught in an interdisciplinary manner while using different pedagogies, different technologies and sometimes even different and adapted learning environments.

i) Phenomenon-based learning: geography, history, civics, government, economics, sociology and anthropology

ii) Problem-based learning: mathematics, physics, robotics, geometry, computational thinking, data processing

Research-based learning: iii)

chemistry, geography, Biology, biotechnology, a. biophysics, information systems

Judaic studies, Bible, philosophy, sociology, history, art, theology b.

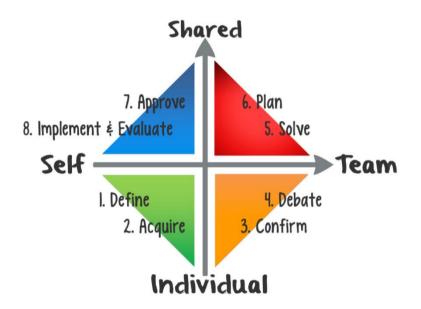
Process- and project-based learning: logical combination of all the iv)

above subjects based on new or innovative projects and processes. These are only suggested lists. Their content can be changed in accordance to age level, and areas of study can be added or removed to match their development or disappearance from the landscape of human achievement and creativity. Also, the same areas of interest can be taught using different teaching methods. For example, geography can be taught in depth using phenomenon-based learning. Yet it can also be taught through research-based learning, in the case of scientific topics such as global warming or population migration or even when studying the exodus from Egypt or ecological models/problems influenced by a tropical or a temperate climate. This will undoubtedly facilitate in-depth understanding of a particular field, its practical implementation, and most important, synthesis resulting from high-level thinking. All this serves to provide students with skills and competencies that will enable them to use and implement the knowledge they have acquired. Students who understand how to use specific knowledge in a broad and holistic manner will certainly have a better understanding of other relevant and related disciplines and will thus be able to draw conclusions and arrive at profound and intelligent insights.

### Pedagogy

In most schools, frontal teaching is still the norm. This method is based on the teaching methods practiced in most schools since the Industrial Revolution (Russell & Greenberg, 2008). We and many other researchers worldwide (Prince, 2004; Terenzini, Cabrera, Colbeck, Parente, & Bjorklund, 2001) have described the transition from traditional frontal teaching and learning to active and collaborative learning whose goal is to facilitate a shift from generating personal and individual learning products to collective and collaborative learning products. In an article published in 2016, Amar and Bar David described a new pedagogical model they referred to as P2PBE (Problem- to Project-Based Education). Since then this name has changed, and today it is the subject of renewed consideration based on a more general name: Challenge to Project Competency-based Education. This model incorporates phenomenon-, problem-, research-, project- and process-based learning. Its major goal is to facilitate learning that will ultimately

provide students with knowledge, skills and abilities suitable for the needs of the 21st century.



## Challenge to Project Competency-based Learning

This eight-stage model incorporates familiar and known learning and work processes. The model moves along two main axes. On the horizontal axis, the learner moves from individual work to teamwork, while on the vertical axis the learner is asked to move within the learning settings from individual products to shared products. In the following, we outline the eight stages of teaching/learning in initial chronological order that does not necessarily require continuing with individual or group learning.

Challenge Definition: Teaching every subject must begin by defining the challenge facing us, whether phenomenon, problem, research, project or process.

Knowledge Acquisition: Learners work independently or in pairs by searching computerized data bases, reading articles or books from the bibliography or searching for relevant human and professional sources of knowledge in the area being studied.

Knowledge Confirmation: This stage takes place vis- à-vis other learners who have derived similar or different information. Comparing the results of the initial work will lead to additional improvement before final confirmation by the teacher or by experts in their field.

Debate: The members of the team sit together and discuss the knowledge that each of them acquired and brought up for debate. The

accumulating knowledge among all the team members makes it possible first to agree on what is common and to disagree on what is different.

Solution: The team members together arrive at a solution or a number of agreed-upon solutions that solve the problem defined in the problem definition stage. This stage marks the beginning of producing one or more collaborative products of all the team members.

Planning: The team members plan a project to implement the problem solution creatively, using existing technology intelligently and efficiently. During the planning, each team member must have an assigned role so that the work will be collaborative and complementary.

Approval: The team members prepare and present the plan and reach agreement on the proposed solutions. Project presentation will be debated by all the learners and approved by the lecturer/teacher.

Implementation and Evaluation: Presentation of the implemented projects to all members of the class ends by comparing outcomes, receiving feedback and assessing and reflecting based on the feedback.

These eight stages occur at different periods of time, as determined by the lecturer/teacher and the progress rate of the individual and group work. The lecturer/teacher can decide to implement the entire model or only parts of it, in accordance with the sequence that seems most appropriate to the study content.

The model proposed above should bring about a complete change in the role of the teacher. The teacher remains a central and significant figure in the teaching and learning process. The teacher's presence in every stage of the process is essential. The teacher becomes an educator, director, moderator, advisor and trail guide. From the stage of presenting the problem or phenomenon or learning topic, the teacher directs and helps by clarifying understanding, asking relevant questions and sharpening the learning objective. Later the teacher helps the students search for and locate knowledge sources, filter the knowledge, assemble the information required for learning and present it. The teacher moderates group debates, listens to various proposed solutions, examines and assesses, and directs the students towards learning processes that provide the desired skills. In the transition to implementation and evaluation, the teacher acts as a coach, a counselor and even as another learner among the students, as someone who learns from the process and from the resulting variety of learning outcomes proposed by the students.

### **Learning Environments**

The classrooms in most schools have not changed much over the past one hundred years. The content, pedagogy and technology we have described in this paper have attributes that are not compatible with classrooms as they exist today. In the concept of the classroom prevalent today, each student is allocated a limited amount of space, with more space allocated to the teacher. Anyone entering the classroom understands that there is a clear hierarchy, knows who possesses the knowledge and the power and sees how the lesson or knowledge transfer is supposed to take place. Teaching and learning in traditional classrooms cannot continue when we must provide learners with new skills using innovative pedagogies and technologies. Classrooms must be turned into learning environments in which teachers and students can move around freely without any functional or territorial delineation. These move around freely without any functional or territorial delineation. These environments will allow for a pedagogy that combines content adapted to the 21st century with advanced and innovative technology in the best and most appropriate way for imparting the required skills. Since the system must enable students to acquire unique skills, it must incorporate various models of learning environments that are suited to diverse content and learning methods. Based on our experience, we recommend that educational institutions adapt some of their classrooms by turning them into unique learning environments dedicated to the different subjects being taught. Further, they should impart the skills described in the paper by Amar and Bar David (2016). In the following section, we describe some examples of learning environments currently operating in our institution.

**Dynamic Learning Environment** A dynamic learning environment is one that serves the needs of collaborative pedagogical activities, as described above. The environment consists of different learning areas in which one or more of the stages of the learning model take place. These areas are equipped with various means (Steelcase) that facilitate convenient and rapid transition from individual work to group work or teamwork. These include technological means for working with laptops, tablets or PCs, smartboards that provide access to technological accessories, collaborative and internet tools, as well as individual and group whiteboards and various software packages that facilitate the presentation of individual and group learning output.

These learning environments are situated in various rooms that are adjacent to one another and that allow students to move freely from one room to another as needed for their assignments. Another available option is that the entire class works with a teacher/lecturer in one room for the entire lesson and then moves to another room as necessary for the pedagogy and content being studied or in order to use technology.



The learning environment in this figure comprises four rooms at the teacher education college where we work. Each area in this environment contains different parts of the pedagogical model.

Besides these separate yet complementary spaces, it is also possible to design a larger and more meaningful space in which all the pedagogical activities take place in a single space that allows for constant movement in accordance with the lesson's pedagogy and ongoing needs.

Another example at the teacher education college is a space called "the Learning Space of the Future". Here the different learning areas are located in one large space that allows for all the stages of the pedagogical model to take place without leaving the room. Furthermore, this space facilitates cooperation between a number of different lecturers who can teach multidisciplinary content. The learning areas in this space are as follows:



Frontal area (1): problem definition, initial discussion and project presentation.

Technological area (2): immediate or ongoing knowledge acquisition.

Debate area (3): discussion and debate, solution presentation and project planning.

Instruction and guidance area (4): approval and confirmation within small and heterogeneous groups.

Areas for instilling knowledge (5): for teams the lecturer wants to offer enrichment.

Quiet area (6): for lecturers or learners to be by themselves for a short period to hold individual meetings.

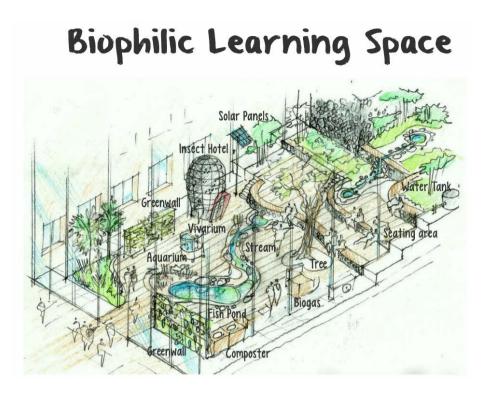


This kind of space is also appropriate for phenomenon-based learning or problem- or project-based learning.

### **Biophilic Learning Environment**

In most educational institutions, knowledge areas such as biology, zoology, botany, ecology, entomology and the like are usually taught in frontal lessons integrated with traditional laboratories. In these labs, students experiment with and investigate different individual topics, with the results of these experiments known in advance. Natural processes that take a long time (e.g., reproduction, photosynthesis, flowering) are taught in theory and separate from parallel processes that take place in nature. These various processes influence one another and all the study topics exist in amazing harmony: The environment influences reproduction and growth, insect life affects flowering, environmental conditions go together with alternative sources of energy, and more. Yet the average school graduate who majored in biology or environmental studies is not given the opportunity to understand the interaction between these processes. Inherent in these processes is synthesis and a particularly high level of thought.

In response to this problem in teaching the natural sciences, we decided to establish a unique learning environment called the Biophilic Learning Environment. In this space, all components of nature have been brought within the grounds of the academic institution. The learning and experimental space is situated inside a closed, transparent and controlled structure forming an ecosystem encompassing various processes from the animal and vegetable world and environmental activities. The space contains an ecological pond with fish and marine life, aquatic plants and three different depth areas, including a swamp and all types of swamp life. There is also a swamp water canal in which the water undergoes purification by microorganisms found in the soil and the roots of plants; an aquarium for observing fish and a vivarium for raising reptiles; a center for raising and observing insects; a nursery that includes all the components, from germination to mature plants. The space also serves as an ecological laboratory for teaching processes of conserving and preserving energy: a composter to produce biogas that will supply energy for lighting, cooking and other purposes and plant fertilizer substances; an instructional solar energy system; a natural water cooling system in which the water flows from a large coiled hose buried deep in the ground; and green walls that demonstrate possibilities for growing hydroponic vegetables and plants on horizontal surfaces while using recycled materials.



The biophilic learning environment is totally monitored by different sensors that display climatic data in real time, such as temperature, humidity, light, amount of oxygen in the water and more. The space features a climate control system based on air-conditioning units for cooling and heating together with a cooling system that operates by adding moisture to the air and a dimming system that is automatically controlled according to the amount of light required at different times of the day and seasons of the year. These computer-controlled systems lead to a reduction in energy costs. In addition, an air bellows operated by instructions from the control system is installed in a chimney on the ceiling of the structure. The space also features an irrigation system for watering the plants and water reservoirs with a total volume of 4500 liters containing recycled water or rainwater. The water is mainly rainwater from drainpipes or condensation water from air conditioners. Water level meters installed in the tank provide information on the amount of water collected. Personal tablets (Einstein) that are also programmed for data processing can be used to operate, control and collect data from all the systems connected to the computer.

Learning in the biophilic learning environment involves collecting information, solving problems and planning projects while working with advanced technological tools. Because the natural processes occur simultaneously, we have proposed a learning method called process-based learning. In this method, small groups investigate and learn about certain processes at different workstations. After the students have worked and experimented at all the workstations and have collected complementary data and created Big Data bases, representatives of the groups meet with their counterparts from other groups. In these meetings, they report on their observations, compare their results and discuss the implications of the processes and phenomena they have observed. In this way, all the students obtain a holistic picture of the various factors in the environment and how these factors are affected by the climate conditions during the lesson. When this type of learning takes place over time, learners can understand how every climatic change affects the plants and animals in the environment. As part of the learning experience, the learners also develop various tools that improve their processes of learning in the environment. To this end, a workshop is available to them containing tools appropriate for production and manual labor.

### Makerspace Environment

In recent years, a movement of amateur producers has begun to emerge. These producers design and produce almost everything according to the do it yourself (DIY) method using technologies that in the past were available only to businesses and now are accessible to everyone. Many refer to this as the Third Industrial Revolution. Across the world, makerspace environments are being established. These are places where producers meet and share their ideas and materials. This trend is slowly penetrating education as well, with municipalities and schools setting up makerspace areas within their jurisdictions.

Promoting and leading this trend in the educational system requires training teachers in the field and establishing makerspace centers in teacher education institutions. This concept turns teachers into "doers." It significantly improves their creativity and their ties to the technological world surrounding them and therefore to their students. A productive space for independent work and teamwork will enable pre-service teachers to turn ideas into reality using a wide variety of technological tools. This space will put into practice the theoretical knowledge acquired in the various courses by creating games and learning aids with the goal of making the learning process more enjoyable, experiential and meaningful for the students. The productive process will reinforce future teachers' skills in problem solving, teamwork and creative thinking.

Creative and practical independent work in these spaces will bring back the shop classes and workshops of the 1970s. Teachers trained in using the makerspace will be able to introduce the schools and the students to additional skills involved in manual thinking and manual work and the use of basic tools and technologies that are still in use.

### **Gaming Environment**

Gamification involves the application of game design, thinking games and game mechanics to improve non-game contexts. Gamification takes advantage of the human psychological tendency to play games. In education, the goal of gamification is to encourage students to carry out assignments they usually perceive as boring by making these assignments more exciting. Furthermore, various attributes of gamification can encourage users to engage in desired behaviors or develop desired skills.

The game space we are aiming at does not involve classical computer games in which a player stares at the computer screen and concentrates on playing with himself. The academic institution attributes great importance to social interaction among the students and to the social skills we expect them to acquire. Hence the game space must encourage social games such as those played on a large board, whether physical or projected by a computer, that promote teamwork and collaborative problem solving.

### **Virtual Environment**

Learning spaces in the virtual world, such as Second Life or OpenSim, provide teachers with a great deal of flexibility in creating or choosing the type of learning they would like to promote. In addition to the clear advantage of an environment that allows for distance learning, such a learning space also enables students to do assignments that cannot necessarily be carried out in physical learning spaces. The teacher can meet the students and tour with them anywhere in the world. They can enter and learn about some other period in history. Students can enter a virtual laboratory where they conduct physical experiments that would otherwise be impossible due to the need for expensive instruments and the lack of a place to carry them out.

### Conclusion

We believe that contemporary and multidisciplinary contents, innovative pedagogies and advanced technologies are integral to the future of schools but they are not the only essential components. Rather, diverse learning environments that are adapted to learners' needs and that replicate current reality in 21st century workplaces also constitute an essential aspect of tomorrow's schools. Just as during the Industrial Revolution schools were planned according to the available workplaces in the communities that sent the children to these schools, schools built in the future must be based on this notion of learning environments.

### **References:**

Amar, S., & Bar David, N. (2016). Realistic Intelligence and 21st Century Skills in Adapted Learning Environment. *American Journal of Educational Research*, 588-596.

Boyles, T. (2012). 21st century knowledge, skills, and abilities and entrepreneurial competencies: a model for undergraduate entrepreneurship education. *Journal of Entrepreneurship Education, Vol. 15*.

Bybee, R. W., & Fuchs, B. (2006). Preparing the 21st century workforce: A new reform in science and technology education. *Journal of Research in Science Teaching*, 43(4), 349–352.

Claro, M., & Ananiadou, K. (2009). 21st Century Skills and Competences for New Millennium Learners in OECD Countries. Paris: OECD Education Working Papers, No. 41.

Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. *Teachers College Record Volume 108, Number 6, June 2006*, 1017–1054.

Prince, M. (2004). Does Active Learning Work? A Review of the Research. *Journal of Engineering Education*, 93, 223–231.

Russell, A. L., & Greenberg, D. (2008). *Turning Learning Right Side Up: Putting Education Back on Track.* New Jersey: Wharton School Publishing.

Terenzini, P. T., Cabrera, A. F., Colbeck, C. L., Parente, J. M., & Bjorklund, S. A. (2001). Collaborative learning vs. lecture/discussion: Students' reported learning gains. *Journal of Engineering Education 90.1*, 123-130.

## Fiscal Responsibility in Autonomous Districts: New Profiles of Representation in the Case of the Special Regions of Italy

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### Abstract

The essay deals with the difficult relationship between fiscal responsibility and representation: it seems that the traditional rule "no taxation without representation" is less and less true, as the responsibility of the representatives, be they those of the national parliament or of the representative bodies of local institutions, is no longer a real guarantee. The case of the Italian system is significant: local taxes have been interpreted in a very singular way by the constitutional case law, as the representatives' responsibility connected with local government levies is limited to the determining only of certain aspects of the fiscal phenomenon. One first goal is therefore to analyse the atypical fiscal and financial responsibility of local administrators.

But a specific phenomenon of the Italian Regions with a special level of autonomy deserves attention. These special Regions have negotiated with the central government a specific regime: since the constitutional implementation process of 2009, they dispose of undeniably high percentages of their territories' tax revenue. The profiles of derived finance have been eliminated and it has been decided to return to the *self*-financing model, understood as the prevailing allocation in a fixed share of tax revenues produced within the territory. The case of the special regional revenues of Trentino-Alto Adige is a peculiar one and it is specifically studied in this essay.

This work discusses the question of representation regarding tax revenues in a different way, based on a particular type of relation between the wealthproducing context and the institutions.

Keywords: Special Regions, derived finance, political representation

### Introduction

One of the more forthrightly expressive manifestations of the representational relation regards the decisions about the levying of taxes: by

virtue of the famous rule "no taxation without representation", the power of taxation passes through the of deliberation of representatives, be they those of the national parliament or of the representative bodies of local institutions.

The guarantee of the representational relations between representatives and taxpayers surrounding the fiscal phenomenon has been partly nullified, in the Italian system, by the singular interpretation of the *tributo proprio* (local tax) that constitutional case law has given with respect to the category of local government levies, which in the case of the municipalities sees the representatives' responsibility limited to the determining only of certain limited aspects of the fiscal phenomenon; and in the case of the regions it no longer calls for areas of autonomous identification of elements to subject to taxation. One first goal is therefore to analyse the atypical fiscal responsibility – and, consequently, financial responsibility, or regarding the sphere of expenditure as well – of local administrators.

But a specific phenomenon, linked to the particular tax regime of the Italian Regions with different levels of autonomy, may lead to a further consideration. In line with their acts of establishment and following the agreements which these special Regions have negotiated with the central government since the constitutional implementation process of 2009, they dispose of undeniably high percentages of their territories' tax revenue. The profiles of derived finance – those which exclude the fiscal responsibility profile connected with representation – have been eliminated, and it has been decided to support a return to the *self*-financing model, understood as the prevailing allocation in a fixed share of tax revenues produced within the territory. The case of the special regional revenues of Trentino-Alto Adige is a peculiar one: they are now solely in a fixed share, and their predictability depends largely on policies adopted, especially those in the economic and social framework, apt to enhance the production of revenues. But the tendency is common amongst all areas with different levels of autonomy that retain tax revenues.

This choice puts the question of representation regarding tax revenues in a different way: if it is true that specific responsibility of the representative organ is still wanting with respect to decisions of taxation, the political and economic orientation is, however, capable of significantly affecting the amount of tax revenues, and thus a particular type of relation is established between the wealth-producing context and the institutions, whose ability to provide incentive for economic growth has a positive impact on the resources that can be spent for the region. I.

# *Representation and fiscal responsibility: the principle of no taxation without representation.*

The expression "no taxation without representation" comes from laisser-faire theory: the State upholding the rule of law at first responded to it by availing itself of the principle of legality, and in more recent times has also arranged constitutional guarantees. The expression, born in the context of the English-speaking world to state the guarantee which the British Parliament gradually won in order that decisions of public spending should not be the exclusive domain of the Government and the Crown, has been followed differently in the continental environment, and in an even more particular manner in the legal context of nineteenth-century Italy (Morana, 2007). Thus article 30 of the Statute, according to which *no tax could be levied and collected unless authorised by both Houses and approved by the King*, has ended up becoming a tool of over-centralisation at parliamentary level of public spending decisions: with the evolution of the form of government from constitutional monarchy to a parliamentary system, the meaning and the "contractual" import – between monarchy and Parliament – of the provision in question have been wholly depleted.

And indeed, with the passing of time this technical phrase has shown a significant evolution, insofar as under modern constitutions it implies recourse to an extensive political process, with a range of important political forces contributing to it, of such nature that the interest in taxation ends up being the outcome of an assessment broadened to the greatest extent possible. The guarantee of a deliberation in parliament no longer engages merely the interest of the individual, as might be gathered by virtue of its origin, but also general and public interests: nowadays it is seen "no longer as a right to self-taxation but rather as a strengthening of the principle of legality", which entails that the law will not limit itself to being the source of the executive powers but "will itself contain, in whole or in part, the governance of the matter covered by the same reserving of authority; and this is a reflection of the hierarchy of the bodies and the sources, i.e. the superordination of Parliament in relation to the Government and, by way of corollary, of the law with respect to acts of the executive" (Russo, 2002, 40). What appears fundamental today, then, are the actual awareness and

corollary, of the law with respect to acts of the executive" (Russo, 2002, 40). What appears fundamental today, then, are the actual awareness and informing of public opinion in the parliamentary democracies, factors capable of weighing a good deal more than the electoral mechanism: since the conviction that governments can be controlled by politicians and by parties regularly subjected to elections is now perhaps less firm and wellfounded than the wish that the providing of proper and extensive information about them for public opinion and the taxpayer may lead to a parallel control, in addition to that of the constitutional and legislative procedures, of public institutions' decisions on tax revenues and expenditure. It is more necessary that consensus should arise from complete information than from parliamentary procedures; it must, then, come of an awareness of what legislation's goals for the benefit of the community are (Fedele, 1978), and thus of what the financial requirements involved are.

The phenomenon of the executive branch's increasing arrogation of tax matters signals a clear change of perspective. The dominant conception in the liberal era, which may be summed up in terms of relations of "coercion" between State and taxpayer, found guarantees in the reserving of authority to parliamentary deliberation, deemed to serve as a protection of the sphere of individual freedoms.

Conversely, in the republican constitution such reserving of authority has been interpreted by jurisprudence and constitutional case law as meaning that the law will compulsorily govern the elements needed to identify certain performances and the subjects bound to effect them. But above all, the reserving of authority to legislation has been reinterpreted in the light of the new solidarity-oriented approach of the constitution, which has led to an attenuation of guarantee-oriented profiles: these are no longer geared to protecting solely individual interests – those of the taxpayer – but also general interests (Antonini, 2005).

The goal-oriented dimension of fiscal solidarity has its roots in the principle of essential equality and thus in the inadmissibility, for the legislative system, to accept excessively unequal individual situations, which thwart the aspiration to effective equality between citizens. This goaloriented constraint is not necessarily guaranteed by the method of representation; or, rather, this last guarantee does not influence the substance of decisions pertaining to the taxation of assets, but only the disposition of taxable entities to submit to the same.

Therefore an exhuming of the rule "no taxation without representation" is of fundamental importance in order to assert the desirability of a responsible and informed involvement of taxpayers in taking up the duty of fiscal solidarity, which, however, also brings itself to bear upon those whose representatives, in the parliamentary procedure, may have opposed such taxation. Moreover, it does not give a guarantee regarding the "goodness" of taxation, or the fact that taxes are aimed at producing mechanisms of redistribution, thus of equity.

The invoking of the "consensus method" is desired by those who deem that it has in part been overshadowed by the so-called "bureaucratic taxation" model which, first with the asceticism of the welfare state and then as a result of the phenomenon of the surmounting of territorial limits – the now too-often evoked "globalisation" – has set itself as an alternative to the other model, that which links tax levying to a control exercised by the very

same parties who are recipients of the taxes. It is, indeed, the "bureaucratic taxation" model which, in a context of marked growth of public spending in function of the guarantee of social rights geared towards rendering uniform the citizens' life potential, as well as of openness and communicativeness of the national economic systems – permitting a centralisation of the power of taxation in the hands of the national government – has appeared as the decisive and primary condition for the fulfilment of public interests in abidance with the formal duty of parliamentary deliberation.

abidance with the formal duty of parliamentary deliberation. The same principle of self-taxation has acquired new prosperity and vigour in recent times, concomitantly with the strengthening of the autonomous districts, insofar as the effective exercise of the power of taxation by local bodies is often legitimised in terms of consent to taxation by the populations concerned. This is a matter falling within the broader question of fiscal subsidiarity (Buzzacchi, 2013), extolled in Italy in the previous decade (Antonini, 2005) but now, because of the weighty economic/financial crisis, evoked decidedly less often in the scientific and political debate.

The considerations that may be expressed on the relations between fiscal solidarity and consensus of the taxpayers in a context where there are perhaps several makers of tax legislation, coinciding with various levels of regional institutions, are the following. Of course the scope of parliamentary deliberation in matters of tax levying is indisputable, to the point that there are those who have observed that the old English maxim "no taxation without representation" can also be read in reverse, to stress that it is not only the democratic-representative character of those who decide that legitimises the levy, but also the levy that confers fullness of meaning to political representation. The maxim obtained with this reversal of perspective would then be "no representation without taxation", which is an expression of the awareness that only if a political representation brings itself to bear on its constituents' assets can the democratic supervision that they carry out be effective (D'Atena, 2009). A demonstration of the grounding of this principle – especially in its reverse version – is found in the issue of the European legislative system, where the absence of taxation power is, without doubt, closely linked to the EU institutions' low level of representativeness.

It is therefore established that the need to constrain the "sovereign's" power of taxation was already felt in pre-democratic times, and since then has been satisfied by the provision that a certain representation of those concerned by taxes must authorise such decisions; this need is still felt today, in an era in which the tax burden has reached levels demanding quite considerable sacrifices of taxpayers. The latter must have the ability to demand that taxes on property be established by the lone democratically legitimised body, be it parliament or the regional assembly. The observation

drawn from this is that the link between representation and the duty to pay taxes is not in doubt. Where such power shows itself in a role of imposing a burdensome performance on individuals, it is without question desirable that it be exercised in accordance with forms and methods that respect their will, even when the imposition fulfils a function benefitting the entire community. What may appear questionable is a possible distortion of that link

between taxation and representation, which indeed is usually defined in terms of "self-taxation". If it is true that the "self-taxation" which arises from decision-making processes that have taken place in representative bodies is the desirable form of the phenomenon, it is, however, also necessary that individual communities' decisions on tax revenues. which those communities intend to use for their own benefit, have an accurate perception of the financial requirement which a more extensive redistributive operation involves. If the self-taxation implies that the individual local communities will be able to take decisions that disregard the general interest reasons for levying the tax and instead remain anchored in strictly local evaluations, this principle and the constraint of "consensus" will cause some perplexity. The fear, indeed, is that decisions of local communities will disregard respect for the essential legitimating factor: in other words, that they will not seek to meet goals of redistribution and fiscal solidarity, but rather limit themselves to answering local-oriented interests, ensuring that resources levied remain in the district.

The functioning of regional public finance in Italy can now be analysed.

# Local taxes and finance derived therefrom in the Italian legislative system

With the question of the relation between consensus and taxation – which ought to be the very core of representation – being framed, our attention can now turn to the scope of local entities' financial autonomy in terms of powers of taxation.

It can be stated that the revenues of local entities in Italy are largely made up of taxes of which national law allocates the proceeds, in whole or in part, to these entities: the latter are instituted by national law, which establishes their governance except as regards those aspects expressly remitted to their autonomy.

This is what is considered "local tax": starting from the assumption that only a tax instituted by regional law would be regional, it has come to be recognised that the areas in such regard are quite restricted and that the phrase to be seen as prevailing is that of the "derived local tax", i.e. of a levy established by the central government the proceeds from which are used by the Region. From this has resulted the delineation of a "mixed" system, within which the regional tax revenues have come to be made up mainly of derived taxes (Amatucci, 2013) and of regional-national partnerships, whereas a smaller, residual, space has been reserved for the autonomous taxes, since there are few remaining sources of wealth not yet taxed by the central government and therefore available to the Regions.

The outcome of this evolution is thus that of a phenomenon which can hardly be defined as true autonomy (Gallo, 2015). The local entities' space of autonomy for taxation is in fact remitted to the legislator who, whilst having accorded to the Regions the power to establish their own taxes, at the same time has limited that power by instituting the prohibition of double taxation, i.e. excluding any tax imposed on the same element by both the national and regional authorities.

the national and regional authorities. This state of things is causing the Regions' legislative taxation powers to shrink, and they will probably be able to act in exercise of genuine autonomy only within the framework of the so-called "fees" and "special purpose charges", or in the fixing of local derived tax rates between the minimums and the maximums set by national law. And, from the standpoint of a meaningful connection between the responsibility for taxation and that for spending, the situation does not seem consistent (Winer, Kenney, Hettich, 2010); nor does it seem consistent with local political autonomy – as understood by the Italian Constitution – as a freedom of the Regions to carry out their own policies within the scope of their authority (Gallo, 2015).

out their own policies within the scope of their authority (Gallo, 2015). The development of local taxation towards a greater responsibility is proving to be, for the moment, purely theoretical, even with respect to the spontaneous orientation of the Regions and local entities themselves, which have prevented the imposition of local taxes from increasing the already heavy overall tax burden, for which the national taxes in force are certainly not intended to be substituted.

The item to stress, therefore, is that of a legislative framework and, indeed, that whereby spending decisions are ascribable to the Regions and local entities, decisions financed by shares of national taxes and by derived local taxes, thus, overall, from national sources. This fact cannot fail to pose questions at the level of the representation/responsibility cycle, especially in light of the considerations expressed regarding the phrase "no taxation without representation". But the particular situation of the Regions with differentiated autonomy, and specifically of the two autonomous Provinces, seems to indicate a different scenario and alternative solutions.

# The financing of the special Regions: the centrality of the allocation of tax revenues

The singular episode that will now be recounted is that of the agreements which the two autonomous Provinces, and then, on their model, other Regions with differentiated autonomy, have negotiated with the central government so as to establish a financial regime apt to ensure them adequate resources. If indeed the legislative framework of approximately fifteen years ago seemed that of a situation providing greater benefit for the special Regions, the evolution of the past few years has instead shown a strong subjection, even for these Regions, to unilateral interventions of the central government. Their authority regarding tax revenues had initially been framed as abstractly more extensive and limited "only" by the general principles of tax legislation; and the question of local taxes, which has been described above in general terms with respect to all the autonomous entities, seemed to present fewer restrictions than those of the special entities. But the case law of the Constitutional Court in these years of economic and financial crisis has come to include principles of financial coordination amongst the constraints to which the entities with different levels of autonomy are subject.

The special status Regions' need for certainty and stability of tax revenues – plainly apparent if one considers that the resources administered by these regions are hardly insignificant, exceeding, overall, €40 billion per year, amounting in 2013 to 23% of the entire expenditure commitment concerning them – has led them to seek negotiation procedures with the central government, potentially useful both in obtaining help both for their differentiated autonomy to attain the objectives of stability and alignment and in taking up direct coordination of the local entities' finances.

In 2009 negotiations seeking to determine the financial relations between the Government and the individual Regions and autonomous Provinces were begun. It was the Trentino Alto Adige Region that initiated the process: in particular, since 2009 three agreements have been made, converging with the 2009, 2013 and 2014 laws on stability.

When looking with specific attention at the model constituting the reference for all the special autonomous districts – that of the Trentino Alto Adige Region (Guella, 2015; Postal, 2011) – one may begin with the Milan agreement of 2009 and its subsequent transposal into the 2010 budget, in accordance with which that region has established a system of relations with the central government that seems rather novel, and which should be able to shelter it in part from a development presenting some quite burdensome prospects for the autonomous districts. The novelty consists in the establishment of revenue sharing, against a waiver of proceeds previously anticipated; in the broadening of powers of taxation with respect to national

and local taxes; in the acquisition of the exclusive authority in matters of local finance and, above all, in a particular mode of assistance in meeting public finance goals: the Region and the Provinces have agreed to take on competencies devolved by the central government and to finance them, thus realising their solidarity contribution to the broadened public finances. The primary goal pursued with the aforementioned successive

agreements has been an affirmation of the connection between resources and functions. This presupposes a system of necessary ascertaining of the adequacy of the allocations of means compared with competencies. The model derived therefrom is, in essence, based exclusively on jointly controlled tenths, correlated with a broad responsibility of a distinctly "functional" nature: this means that the special Region and the autonomous Provinces have relinquished various other non-tax revenue items, which over time had been allotted to them, to link the sum of the jointly controlled fixed share items prescribed in the acts of establishment to the financing of a set of functions much broader than the original. In this way the principle of connection has been respected and realised.

connection has been respected and realised. The regional revenues for Trentino-Alto Adige are once again only those in fixed share, with the advantage of predictability and the particular characteristic of being dependent on public policies capable of generating and producing revenues and on the fiscal policies pursued in the Region: this has eliminated the dimension of apportionment depending on the central government, which was highly discretionary. Thus the goal of stability and programmability of resources is favoured, and there is also a further participation of the autonomous entity in remediation and equalisation, having taken the form of assumption of new competencies without weighing on the treasury. The Provinces have taken on new functions within the sphere of authority of their autonomy with no subsequent parallel transfer of sphere of authority of their autonomy, with no subsequent parallel transfer of resources. The central government has derived benefit from this, having relinquished functions without needing to allocate any resources related thereto: the district has been allocated the set of public activities that it is capable of taking on by reason of the amount of the funds anchored by the act of establishment in the autonomous Region or Province.

act of establishment in the autonomous Region or Province. The special local body has also benefited, more on the qualitative than on the quantitative level: the special nature, that is, should not reside in greater availability of resources for equal responsibility, but in the particular capacity to take on a broader set of competencies (to which the correlated allocation of optimally managed resources corresponds) (Guella, 2015). Special financial autonomy is thus characterised by a significant proportion of autonomous resources – which remain in the territory – enabling the realisation of the fullest possible autonomy in terms of correlated allocation of competencies. The functions not exercised at the

national level – where only those which by definition cannot be regional remain – are growing, and for them the challenge is to operate an efficient management so that decentralised exercise of the functions turns out, concretely, to be less costly than is observable when the competencies are kept under national authority (on the qualitative level). The logic behind this model is that the resources will "remain" for the

The logic behind this model is that the resources will "remain" for the special Region, in that either they are produced locally or their most "productive" use will be local. There is no longer merely a conception of "financial" speciality, to which in fact is added an "instrumental" view of the autonomy of revenues and spending: the resources are instrumental in acquiring the broadest possible range of functions, with the intention of exercising them at costs lower than those incurred by the central government (Postal and Guella, 2011).

The system for guaranteeing the linkage of resources and functions developed by the first reform of 2009-10 was therefore based on the waiver of regional and provincial resources, and on the two Provinces' acquisition of further competencies. To this was added the lever of local financing, set under the full responsibility of the two autonomous Provinces, as is consistent with a special regionalism wherein local autonomy makes up an essential factor of the "Region system". The next reform to the act of establishment was in the same direction: an Agreement at the end of 2013 merged into the stability law for 2014. This has entailed further delegations, once again without prejudice to the national treasury, as well as new precision on provincial competencies regarding local financing. The result is that "the whole local government financial system –

The result is that "the whole local government financial system – including municipal finance – has been placed under the responsibility of the special autonomous entity, which answers to the central government only for its overall balances (on the expenditures side, with its own internal stability pact), and becomes responsible also for governing local taxes (on the municipal revenues side)" (Guella, 2015, 27).

Finally, with the third Agreement of 15 October 2014 between the central government, the Trentino-Alto Adige/Südtirol Region and autonomous Provinces, with waivers of fiscal areas and guarantees of predictability of resources, an additional quantitative contribution for the needs of remediation of the national public accounts was planned. The Trentino-Alto Adige Region and the two autonomous Provinces agreed, with the central government, the amount of a specific aid package for the public accounts, taking place through the negotiation of a precise quantum of assistance for public financing objectives. The Provinces' contribution is thus on a voluntary basis, without unilateral imposition, obtaining the result of respect, in the future, of the stability of the structure by virtue of the

detailed forecast of the quantitative profiles of the assistance for public financing objectives.

To recapitulate, the 2009 agreement has been followed by a triple revision, a fact which demonstrates that the goal pursued – a reassuring financial stability – has still not been attained, but that this is precisely the outcome sought. The process has continued and is reflected in the 2014 and 2015 stability laws, extending the scope of central government functions to be transferred and expanding the exclusive authority in matters of local finance.

In a scenario of precarious and unstable overall financial relations for the autonomous districts, such a structure of reciprocal relations between the central government and the autonomous Provinces clearly appears to be a result of effective "guarantees" for the latter. The extent to which this model is the coherent outcome of financial autonomy, and the manner in which it relates to the subject of representation and fiscal responsibility, must now be ascertained.

# The particular mechanism of responsibility in the special Regions' political and economic policy in relation to revenue maximisation.

The assessment that can be formulated shows that the prevailing nature of the finances of the special Regions and the autonomous Provinces remains that of a sharing in national tax revenues: indeed these make up the predominant source of finance, and there is now little ambition to switch to a structure based on genuine power of taxation. This guarantees a substantial maintaining of the autonomous entities' authority in revenues, achieving certainty and stability thereof; but it also marks the waiving of the use of taxes that can be called local.

It can thus be stated that, overall, the Regions with different levels of autonomy have obtained a structure quite distinct on the financial level from that of the other administrations; they have the assurance, for a few years at least, of a different treatment in terms of help in meeting goals in public finances and the internal stability pact; in many cases they acquire authority with respect to local taxes and, finally, agree to drop their litigation with the central government. One may wonder whether this can be called financial autonomy, and whether these Regions can be content with a system of funding for their expenditure that still depends on mechanisms of simple transfer. Given the condition of the ordinary Regions, this new season of the special Regions' finances is indubitably more favourable; but for all of them the model of real financial autonomy, based on the local taxes category – the role of which, in our system of public accounts, is becoming more and more irrelevant – is fading in the distance.

Thus it seems that the conclusion to be drawn, and which the Court of Auditors itself suggests, is that the special Regions count, at least, on the constituting of a unitary framework of fundamental principles and general criteria for all Regions, surpassing the present phase marked by bilateral agreements not confirmed by the acts of establishment: such a change would already contribute to an enhancement of their autonomy. With the attainment of a model of effective fiscal autonomy still awaited, the question remains whether the regime that has been negotiated in the special Regions for the coming years wholly evades any logic of representation or at least of responsiveness, or whether, to some degree, the working of such a principle, even in a context of absence of a traditional mechanism of responsibility linked to the vote, can be discerned.

Legal theory is quite rigorous on this point, condemning the failure of the federalist fiscal model and the departure from the principles and mechanisms of financial responsibility. Indeed, it has been observed that "financial autonomy should make it possible for the body having rights to obtain directly the necessary means through its own levying of tax, approved by the local community which benefits from such functions, independently of the choices made by the central government; even if this may never occur absolutely, because the resources so obtained are not necessarily sufficient for the exercise of the functions falling to the local body". But above all, it has been noted that "a democracy cannot function without the community's being responsible for its activities, as pertains to obtaining the financial resources required for the exercise of the functions which it resolves to exercise: the freedom to levy tax is essential in order to involve the lesser territorial group in the administration of the local power, in accordance with the greatest exigencies of democratic life" (Catelani, 2013; Uricchio, 2013; Gallo, 2015).

Moreover, certain economic studies that have analysed the *political economy* models of taxation consider, amongst the determinant factors, the existence of certain democratic institutions – the foremost of which being the right of citizens to participate in competitive elections –, just as they take into consideration the existence and protection of property rights (Padovano, Petretto, 2010). It is therefore undeniable, both from the standpoint of public law jurisprudence and from that of studies in economics, that the dimension of political representation is crucial in order to affirm mechanisms of virtuous financial autonomy, as much on the side of the dynamics of taxation as on that of the spending choices. Such an approach would lead one to express an almost disparaging assessment of the solutions attempted of late in the special autonomy districts, where the role of derived local taxes and of local taxes strictly speaking is henceforth non-existent.

And yet such a conclusion appears too reductionist, especially in light of the good working of autonomy within the Region that has opened this approach, Trentino-Alto Adige, and rather leads one to wonder whether there exist mechanisms of political representation, other than the traditional ones, capable of providing support for and confirmation of the productivity of a tax system.

The investment – in terms of negotiation with the central government – that the Region and the two Provinces have put in place in order to attain the financial status described above counts on the ability of these territories to demonstrate their "administrative" capacity in the arena of the functions involved. The tax regime sought seems to wish to be compared only with parameters of a functional nature; therefore it will be the assessment of its management efficiency that gives rise to any surplus for the benefit of the local government, which in this manner will see confirmation of the validity of the model of resources-functions linkage.

of the model of resources-functions linkage. The management efficiency, and more generally the administrative capacity, will be reflected in a single and significant parameter: the sum of tax revenues, which is transferred to the Region in a fixed portion the amount of which obviously increases by virtue of growth in the Region's wealth. Where economic growth, result of the improvement of social well-being, gives rise to higher incomes, it will cause greater revenues, of which a fixed portion will be transferred to the Region and the Provinces. They will therefore have every interest in carrying out functions – i.e. policies – under a system of efficiency but especially under highly efficacious policies, i.e. capable of giving results amounting to real improvement in economic and social terms. The productive capacity to administer will entail a dual effect: that of generating possible surpluses, if the functions cost less than as defined in line with the principle of linkage; and that of inducing well-being and fostering the production of greater wealth, from which will arise the induced effect of a more plentiful tax revenue. Revenue that flows into the central government's treasury, and which the central government guarantees in a fixed proportional share.

The mechanism therefore appears to be grounded in close relations between virtuous administrative activity and size of tax revenue, which is unquestionably intended to produce a high degree of satisfaction amongst the citizens, whose fiscal capacity increases if policies are well conceived and implemented, with a view to fostering economic growth in the district. And here, the particular factor of local taxation must also be considered, remitted to the governance of the regional authority, which in this perspective becomes true director of a productive and social system that, in the interest of all institutional levels, must bring about a strong capacity of administration. It seems that in these districts there is a switch from the fiscal responsibility typical of the representation mechanism to a different responsibility, of "functional" nature, where the citizen's control of the use of fiscal resources does not occur to a very significant extent as a result of the vote but has as its reference the progress of the district's growth, which produces tax revenue. The efficacy of regional spending, which translates into policies and functions apt to give impulse to development and wellbeing, finds in the tax revenues generated a parameter by which the administrators' capacity may be assessed in its quality and productivity. Put in a different way, taken to the extreme – but at the same time effective –, financial responsibility seems to find its most important comparative element in tax revenues, the growth of which is symptomatic of good local policies and establishes a relationship of responsiveness between administrators and administered that seems to function outside of the model of political responsibility connected to representation. The latter, according to this view, is deployed when the fiscal system of these districts is bound to local or derived taxes, with respect to which the representatives make choices for which they must answer to their citizens in various ways, but especially at elections; but it does not work if the choice of the fiscal model is based on the fixed portion of tax revenues, of which the increase or decrease is the responsibility of institutions, institutions which can determine that increase – or decrease – with an exercise of political-administrative functions able to conform to those revenues.

Thus functional responsibility seems to replace the fiscal responsibility typical of the phrase "no taxation without representation": the consistency of the governors' decisions with the will and interests of the governed still obtains through the dynamics of the vote, which, however, does not convey a mandate or an indication regarding the quality and quantity of the tax levy, but rather expresses the level of the citizens' satisfaction with policies the success of which produces growing wealth and, consequently, increased tax revenues available for spending that fosters the district's well-being. It is clear that the mechanism of political representation is not lacking in these autonomous institutions, but rather conveys an intention different from that which later determines financial responsibility. Given the nature of the financial revenues, there is no mandate that voters can give to elected officials regarding tax decisions; but the vote that produces representation can still be a statement of approval or disapproval for an autonomy in spending which may or may not have been able to produce growth, and thus financial wealth and, in the last analysis, tax revenue.

Here the definition of "democratic supervision" given above becomes valid again: only from a correct and broadened informing of public opinion and the taxpayer can there spring a parallel control, beyond that of the constitutional and legislative processes, of the decisions on public institutions' revenues and spending. As already stated, it is incumbent that consent emanate, even more than from procedures in parliament or councils, from a complete informing, and thus from an awareness of what the institutions' objectives – in this case local institutions – for the benefit of community are; of what spending decisions are adopted; of what effects these decisions may have on the lives and productive relations of people in the community and district.

The argument holding that "in the autonomous entities democracy can be said to be realised at government level when there is full awareness of the functions that are exercised by the local bodies" is thus applicable also in this context of financing not based on local decisions regarding tax levies, although this is formulated with respect to the situation in which the voter controls the local institutions' freedom to levy tax (Catelani, 2013, 2), which instead will become a secondary phenomenon in the framework of the Trentino-Alto Adige Region's finance system. But if mechanisms operated for transparency and information on the system for the gathering of resources and on the channels of redistribution thereof through several public offices at the service of the citizens and the region, one may assume that the supervision of the spending capacity of the regional and municipal levels would in any case be assured, allowing the recipients of such spending to assess its quality and productivity. It could be asserted that political responsibility would come into play especially around the spending decisions which, however, when judged on their aptitude to create wealth, were also apt to give information on the capacity to collect financial resources, insofar as the fixed share of revenue slated to remain in that district provided a measure of the "good governance" exercised there: and thus the entire financial circuit could succeed in being subject to an atypical, but not nonexistent, procedure of democratic supervision.

Finally, this particular financial structure should be evaluated in relation to questions regarding fiscal solidarity. If the system worked only on the basis of retaining tax revenues generated in the district, and thus allocating them to functions benefiting the community located there regardless of the fact that similar functions, in other parts of the country, were not adequately provided, it would be not be compatible with the constitutional framework inspired by aims of solidarity through financial equalisation. The novelty of the agreements examined above consists, however, also in their precise and concrete attention for assistance in attaining the objectives of national public finance, which translates into allocations to the treasury but, above all, in obtaining functions from the central government and the exercise of those functions, the conduct of which becomes the task of the autonomous Provinces without the transfer of financial resources dedicated to them – thus anticipating that the efficient management by the Provinces will render those functions just as realisable as those administered by the local institutions, and that this will also translate into significant savings on expense at central government level. We have here an altogether new and original arrangement to foster solidarity between entities, which proceeds with balancing the new mode of allocating resources to these districts, a mode which thus not only appears useful for guaranteeing resources for the communities having produced them, but is also oriented towards achieving targets of fiscal solidarity with respect to the national community as a whole.

### Conclusion

It will be possible to judge the success of the model that we have analysed here only after a certain time, as the system gradually becomes operational and prepares to carry out all the tasks requested of it; thus there is no presumption of pronouncing an assessment now. It is certain that, at least in the abstract, it amounts to a rather particular option for establishing the financial relations between the central government and the autonomous entities; and that it opens the prospect for methods of democratic control different in character from those tried thus far and deemed indispensable. The good performance of the financial framework described above may be able to open new avenues of accountability and responsiveness of administrators, as well as new mechanisms of supervision and appreciation for citizens, on the basis of which will stand the quantum of objective significance that is tax revenue.

### **References:**

Amatucci, Fabrizio, Il riconoscimento del potere delle Regioni di riduzione e azzeramento dell'aliquota IRAP. *Rassegna tributaria*, 2013, 56 (5), 1093-110.

Antonini, Luca, Sussidiarietà fiscale, la frontiera della democrazia. Milano: Giuffrè, 2005

Buzzacchi, Camilla, La solidarietà tributaria. Funzione fiscale e principi costituzionali. Milano: Giuffrè, 2011.

Buzzacchi, Camilla, Responsabilità fiscale nelle autonomie territoriali: il ruolo della rappresentanza nei sistemi di finanza propria delle autonomie speciali, in Buzzacchi, Camilla, Morelli, Alessandro, Pizzolato, Filippo, eds. Rappresentanza politica e autonomie. Milano: Giuffrè, 2016.

Catelani, Alessandro, Nuova legislatura e riforma delle autonomie territoriali, *Rivista AIC*, 2013, 2

D'Atena, Antonio, Le parole-chiave del federalismo fiscale. Roma: ISSiRFA – CNR, 2009.

Fedele, Andrea, Art. 23, in Branca, Giuseppe, ed. Commentario della Costituzione, Bologna: Zanichelli, 1978.

Gallo, Franco, La crisi del federalismo fiscale. Astrid Rassegna, 2015, 232 (7), 1-15.

Guella, Flavio, Postal, Gianfranco, L'autonomia in divenire. L'evoluzione dell'ordinamento provinciale dalle riforme del 2001 al federalismo fiscale, in Marcantoni, Mauro, Postal, Gianfranco, Toniatti, Roberto, eds. Quarant'anni di autonomia. Milano: Franco Angeli, 2011.

Guella, Flavio, Principio di connessione risorse-funzioni e revisione della disciplina finanziaria delle autonomie speciali. Le riforme dello Statuto della Regione Trentino-Alto Adige/Südtirol, dalla delega sul c.d. federalismo fiscale alla Legge di Stabilità 2015, *www.federalismi.it*, 2015, 8, 1-47.

Morana, Donatella, Libertà costituzionali e prestazioni personali imposte. L'art. 23 Cost. come norma di chiusura. Milano: Giuffrè, 2007.

Pezzini, Barbara, Sacchetto, Claudio, eds. Dalle costituzioni nazionali alla costituzione europea. Potestà, diritti, doveri e giurisprudenza costituzionale in materia tributaria. Bergamo: Collana della Facoltà di giurisprudenza, 2001.

Pizzolato, Filippo, Costa, Paolo, Il lato oscuro della sussidiarietà. Milano: Giuffrè, 2013.

Postal, Gianfranco, Il concorso delle autonomie speciali agli obiettivi di finanza pubblica: il Trentino Sudtirol: dalle norme di attuazione statutaria del 1992 all'accordo di Milano, *Le Regioni*, 2011, 5, 937-966, doi 10.1443/37166.

Russo, Pasquale, Manuale di diritto tributario, Milano: Giuffrè, 2002.

Winer, Stanley L., Kenney, Lawrence W., Hettich, Walter, Regimi politici, istituzioni e natura dei sistemi fiscali, in Padovano, Fabio, Petretto, Alessandro, eds. Public Choice and Political Economy. Milano: Franco Angeli, 2010.

Gallo, Franco, I principi fondamentali di coordinamento del sistema tributario nel federalismo fiscale, in Uricchio, Antonio, ed. Federalismo fiscale: evoluzione e prospettive. Bari: Cacucci editore, 2013.

Uricchio, Antonio, Complessità e criticità dell'attuazione del federalismo fiscale, in Uricchio, Antonio, ed. Federalismo fiscale: evoluzione e prospettive. Bari: Cacucci editore, 2013.

### **Multiple Benefits of Improving Energy Efficiency**

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### Abstract

The Intergovernmental Panel on Climate Change (IPCC) report states that buildings account 32 percent of the energy use and 19 per cent of the global emissions out of which almost a third can be attributed to the cooling sector. The aim of this paper is to establish the energy efficiency benefits and discuss health benefits from energy efficiency improvements in the emerging economies such as India. Air conditioners are important in targeting the improvement of energy efficiency policies and are the low-hanging fruit of climate policy in India because of its size and rapidly increasing market due to the aspirations of people in the country to improve their standard of living. Montreal Protocol's latest Amendment, that limits the use of a supergreenhouse gas Hydrofluorocarbons (HFCs) will provide an impetus to the energy efficiency innovations, and has historically catalyzed energy efficiency improvements of up to 35 per cent. Projected growth in power demand for cooling could have a crippling effect on India's fiscal status and prospects for economic growth to the extent it becomes necessary to further increase fossil fuel imports to maintain pace with high demand for electricity in the cooling sector. Modest energy efficiency improvements saves India billions of US dollars annually, several scores of Gigawatts (GW) of electricity, improved health outcomes in terms of reduced mortality and respiratory diseases and also indirect social impacts from improved health. Thus this paper sheds light on these benefits and establishing a clear unmistakable link between these energy efficiency improvements and health.

Keywords: Air-conditioner, energy efficiency, coal emissions, health

### Introduction

India plans to increase its generating capacity from a current 200 GW (gigawatts) to 800 GW by 2030 in order to sustain an economic growth rate of 8 per cent to 10 per cent for human resource development and poverty eradication. Since an excessive and increasing percentage of domestic power generation is used for air conditioning and refrigeration, improvements in

energy efficiency would significantly reduce demand. The Bureau of Energy Efficiency (BEE) has found that air-conditioning (AC) use represents the major share of peak demand in Indian cities. While the Maharashtra Electricity Regulatory Commission (MERC) study identified power demand from ACs at 40 per cent of the total demand for the city of Mumbai in a peak summer month, the BEE study estimates that 60 per cent of peak demand is summer month, the BEE study estimates that 60 per cent of peak demand is for AC in dozens of Indian cities. Some studies state that Indian AC companies reported sales growth of 30 per cent on average on a year-to-date basis, with 50% growth in some regions. A 2013 Super-efficient Equipment and Appliance Deployment (SEAD) initiative found that deploying super-efficient air conditioners could significantly reduce energy use by 2020, avoiding the need for more than 100 medium-sized (500-megawatt) power plants. Past transitions to superior refrigerants/technologies, driven by the regulatory regime of Montreal Protocol on Substances That Deplete The Ozone Layer have been associated with improvements in energy efficiency of up to 60 per cent. The best available AC technology can already reduce Ozone Layer have been associated with improvements in energy efficiency of up to 60 per cent. The best available AC technology can already reduce energy use by 35 per cent to 50 per cent compared to market averages. These energy efficient technologies are also cost-effective as energy savings over unit lifetimes more than pay for any additional initial consumer costs. Adopting AC technology that is both cost-effective and more energy-efficient could save over 118 TWh (Terawatt hours) in 2030 and potential peak demand saving is found to be 60 GW by 2030; this is equivalent to avoiding 120 new coal fired power plants of 500 MW each. Efficiency improvements for the far larger number of refrigeration applications with their even greater power demands would also yield significant energy savings, further reducing the domestic demand for power generation and delivery delivery.

delivery. Montreal Protocol bridges AC efficiency and climate change. Hydrofluorocarbons (HFCs) are '*super greenhouse gases*' that if left unchecked will by 2050 contribute from 14-27 per cent as much annually to global warming as CO₂, and effectively negate critical and anticipated reductions in CO₂ emissions [Velders et al., 2012]. They are growing at the rate of 10-15 per cent per year [Velders et al., 2012]. HFC are mainly used as refrigerants in air conditioning and refrigeration applications and have Global Warming Potential (GWP) that is several thousand times that of carbon dioxide (CO₂). Phasing out high- GWP HFCs is set to present gains between 87-146 GtCO₂e (Gigatons of carbon dioxide equivalent) emission reduction by mid-century and avoid up to 0.5 degrees of warming by 2100 [Velders et al., 2014]. The energy efficiency improvements for the aforementioned appliances run parallel to the refrigerant transition that will be brought around with Kigali Amendment to the Montreal Protocol for the exact same appliances. This gives us an opportunity to understand not simply the climate and energy benefits to be gained by such a two-pronged approach, but also the health benefits in vulnerable populations in a country like India, generated by modest improvements in energy efficiency of ACs.

Linking AC Efficiency and Climate Change In 2010 buildings accounted for 32 per cent of total global final energy use, 19 per cent of energy-related GHG emissions (including energy use, 19 per cent of energy-related GHG emissions (including electricity-related), approximately one-third of black carbon emissions, and an eighth to a third of fluorinated gases (largely used in cooling appliances) that are regulated under the Montreal Protocol on Substances that Deplete the Ozone Layer. [IPCC AR5, 2014] Globally, the cooling energy use is set to grow by 83 per cent by 2050 [IPCC AR5, 2014]. The finance and mechanisms under the Montreal Protocol provide for a transition for the AC industry from high GWP, HFC-based refrigerants to lower GWP refrigerants. The new generation of refrigerants have a positive impact on the energy efficiency of the ACs. Therefore, countries, especially India, with growing power demand and AC market must avail this unprecedented opportunity to address the phase-down of high GWP HFCs while addressing energy efficiency. Such efforts will by and large contribute to its emission reduction targets while providing health benefits from the reduced emissions.

### **Current status of AC market**

Current status of AC market The AC demand is growing at a dramatic rate of 20 per cent per year over the last decade, powering these energy intensive appliances is going to lead to a stress on the power demand, and will be a contributing factor to the need to add new coal fired power plants. In 2010 the dissemination of air-conditioners stood at a mere 3 per cent in India as opposed to 100 per cent in China amongst the urban households [NSSO, 2007; NSSO, 2012; Zhou et al., 2012]. This means an abundance of ACs in India have yet to be installed and would benefit the energy security, emission reductions and health of the people of the country vastly if the air conditioners that would introduced were energy efficient. The increased demand for AC can be attributed to various factors such as rising purchasing power and rapid urbanization various factors such as rising purchasing power and rapid urbanization, falling AC prices, and a hot and humid climate.

**Future AC stock projections** The case of China helps in understanding the substantial growth in household appliance ownership due to its rising incomes and urbanization. The saturation of air conditioners in urban China went from nearly zero in 1992 to about 100% by 2007 i.e. within a span of 15 years [Zhou et al., 2012]. Similar growth may be expected in India due to the factors mentioned in the foregoing section. According to **Table 1**, the total number of ACs in

2030 will reach a saturation of 73 per cent in urban households bringing the total number of ACs to 116 million, which will consume about 239 TWh of electricity.

	2020	2030			
Electricity consumed by ACs in business-as-usual in TWh/yr	77*	239*			
Total stock of room ACs in millions	37	116			
Total stock as percentage of urban households	30%	73%			

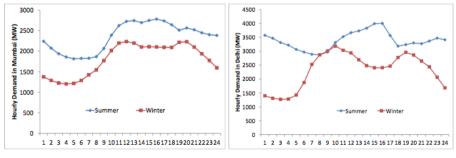
Table 1: Projected AC stock in 2020 and 2030

Source: NSSO 2012; Letschert et al. 2012; Shah et al. 2013; author's calculations *The electricity consumed in calculated by assuming the average EER of 2.89

### Impact of AC growth on the electricity demand

Studies show that the cooling demand in India is coincident within a sector and with the peak demand [N. Abhyankar and Phadke, 2012; A. Garg et al., 2010; NDPL, 2011]. These studies show the following: (a) If a household or a commercial establishment owns an AC, its contribution to the peak demand is significant, (b) Residential and commercial space cooling demand has a significant seasonal correlation, (c) diurnally, residential AC demand peaks at night and commercial AC demand peaks in the afternoon. But during the afternoon, there are a few hours where residential and commercial demands coincide, and (d) space cooling is the only end-use that shows significant seasonal variation [Shah et al. 2014]. We can take the instance of two cities during the summer and winter: Mumbai and Delhi; these cities have low penetration of ACs and most of the load is either commercial or residential. It can be seen from Figure 1 below that the usage is increased during peak afternoon hours of summer and drops during winter months; the drop is more evident, about 40 per cent in Delhi due to its propensity to have colder winters than Mumbai.

Figure 1: Average Hourly Demands on the Electricity Grid in Summer and Winter in Mumbai and Delhi



(a) Mumbai (b) Delhi Source: Shah et al. 2014; MSLDC 2012; DSLDC 2012

Further it can be seen from **Figure 2** below that the average heat index pattern during the summer months in India does not deviate drastically based on the geographic region, and thus it can be said that the cooling demand may have a high peak coincidence across geographic regions.

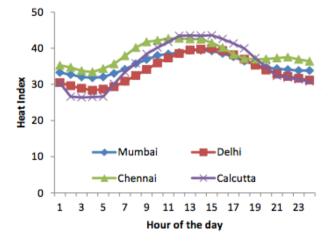


Figure 2: Average hourly heat indices across 4 Indian cities in May Source: ASHRAE 2012; Shah et al 2014

### **Energy Saving Potential**

The average EER of the AC in the Indian market is 2.89, which is 16 per cent lower than even China's lowest energy performance standards. Given the estimated stock, the efficiency gains associated with improving AC efficiency depend climate and usage factors. In India, a room air conditioner is assumed to run for about 8 hours every day for 6 months in a year i.e. 1440 hours/year.

If the efficiency is improved through compressor efficiency, compressor control, heat exchanger performance, expansion valves, crankcase heaters and controls, and standby power use, the total technical potential for saving electricity by improving efficiency of the room ACs in India is found to be 118 TWh at bus-bar in 2030 [Shah et al 2014]. Even a small percentage of improvements in energy efficiency of ACs per year, through the options mentioned in **Table 2** helps saves nearly 60 GW of peak demand that is equivalent to saving nearly 120 power plants of 500 MW each. As stated earlier the estimated electricity demand from ACs is set to increase to 239 TWh/yr by 2030, which translates to a peak demand contribution of about 143 GW. Meeting this demand requires construction of nearly 300 new coal fired power plants of 500 MW each [Shah et al 2014].

Table 2. Options for EE improvement from base case scenario				
Compressor efficiency	6.5-18.7%			
Compressor control	20-24.8%			
Heat exchanger	9.1-28.6%			
Expansion valve	5-8.8%			
Crankcase heater efficiency and crankcase	9.8-10.7%			
heater control				
Standby	2.2%			

Table 2: Options for EE improvement from base case scenario

Source: Author's adaptation of Shah et al 2014

It can be seen from **Figure 3** below that the measure of potential savings is significantly comparable to India's renewable energy targets of 100 <u>GW</u> solar power and 75 GW wind power generation capacity.

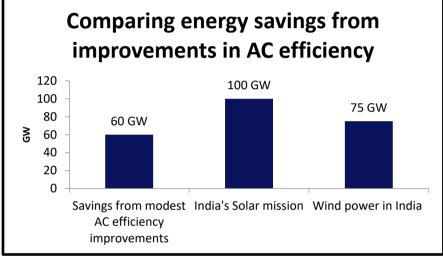


Fig 3: Comparing energy savings from improvements in AC efficiency Source: Author's adaptation of Shah et al 2014

In the above section, it may be seen that improving energy efficiency could save up to 120 coal-fired power plants from being built. In the next section, the health impacts of coal- fired power plants are discussed.

# Health benefits from avoiding the coal-fired power plants Coal in India

Out of the 210 GW electricity generation capacity in India, 66% is derived from coal, with planned additions of 76 GW and 93 GW during the 12th and the 13th five year plans, respectively [Guttikunda and Jawahar 2014]. The analysis above shows that out of such capacity, making small improvements in energy efficiency of ACs alone may save 60 GW. Given that generating electricity from coal results in high human health costs boosting AC efficiency for reducing health impacts and improving air quality is the low hanging fruit.

Indian coal-fired power plants are not efficient when compared to their western counterparts, and their average net efficiency is currently below 28%. Thermal efficiency is expressed as percent of the heat input used or by the heat input in kilo-calorie (kcal) required to produce a kilowatt-hours (kWh) of electricity. Approximately 0.770 kg of coal when burnt, produces 1 kWh of electricity in India, whereas the values are half that of India in western countries [Cropper et al 2012].

Grams of pollutant per kWh or the 'pollution intensity' also depends on the ash and sulfur content of the coal burned. Indian coal has high ash content, between 35 and 50 percent by weight, and lower sulfur content: about 0.5 percent by weight [Cropper et al 2012]. The high ash content and low calorific of the Indian coal means that the power plant's operational efficiency is adversely affected and this increases emissions per kWh electricity generated.

### Pollution from coal-fired power plants

The emissions from coal-fired power plants depend upon various factors. Sulphur dioxide (SO₂) and CO₂ depend on variety of coal used at the plant. On the other hand, Nitrous oxides (NO_x) emissions depend upon the operating conditions and the design of the power plant. The total annual emissions from the 111 power plants in India is given below in **Table 3**. Table 3: Total annual emissions from coal-fired power plants in India

Tuble 5. Total annual emissions from coar filed power plants in filda						
	PM _{2.5}	$SO_2$	NO ₂	VOCs	CO ₂	
Total in	580,000	2,100,000	2,000,000	100,000	665.4	
tons					million	

Source: Guttikunda and Jawahar, 2014

While the combustion of coal releases  $SO_x$ ,  $NO_x$ ,  $CO_2$ , CO, volatile organic compound (VOCs), dangerous amounts toxic substances like of mercury, lead, cadmium, arsenic, etc. all of which are tremendously detrimental to human health are also emitted; the 2010 global burden of disease (GBD) study states that outdoor air pollution from particulate matter (PM_{2.5}) and ozone is one of the top 10 health risks in India, with an estimated 695,000 annual premature deaths from respiratory illnesses, compromised immune systems, and cardio-vascular conditions [IHME, 2013].

Of the estimated annual anthropogenic emissions in India, the thermal power plants account for 15 per cent for  $PM_{2.5}$ , 30 per cent for  $NO_x$ , and 50 per cent of SO₂.  $PM_{2.5}$  is the only pollutant that is regulated in India. **Table 4** below gives an overview of prescribed limits of the pollutants in India and compares them with other countries.

	PM	$SO_2$	NO ₂	Mercury
India ^a	350 mg/Nm ³ (<	-	-	-
	210 MW)			
	150 mg/Nm ³ (210			
	MW)			
China ^b	30 mg/Nm ³	100 mg/Nm ³ for	100 mg/Nm ³	-
	(proposed all)	new		
	20 mg/Nm ³ for	200 mg/Nm ³ for		
	key regions	old		
		50 mg/Nm ³ for		
		key regions		
USA ^{c,d}	37 mg/Nm ³ for	245 mg/Nm ³ for	61 mg/Nm ³ for	-
	old	old	old	
	6 mg/Nm ³ for	50 mg/Nm ³ for	42 mg/Nm ³ for	
	new	new	new	
USA ^{c,e}	6.4g/GJ	640g/MWh	720g/MWh for	0.08g/MWh for
			old	lignite
			450g/MWh for	0.01g/MWh for
			new	IGCC

Table 4: Overview of Indian emission standards and comparison with other countries

^a:From Central Pollution Control Board, India (http://cpcb.nic.in/Industry_Specific_Standards.php); ^b:From standards information in Chinese

(http://www.zhb.gov.cn/gkml/hbb/qt/201109/t20110921_217526.htm). Prior to 2011, the standards were based on commissioning year (before 1996, 1997 to 2004, and after 2004);

^c:Power stations emissions handbook (http://www.ccsd.biz/PSE_Handbook);

^d:Emission rates are translated to mg/Nm3 based on assumed plant efficiency;

^{e.} In official units; for mercury this is based on 12 month rolling average.

Source: Guttikunda and Jawahar, 2014

The high ash content of Indian coal may lead to high PM emissions. Although all coal plants in India have electrostatic precipitators (ESPs), the high ash content of coal and its chemical composition reduce their removal efficiency (Cropper et al, 2012). There are no emission control regulations for sulfur dioxide or for nitrogen oxides or mercury for coal-fired power plants.

#### Box 1: Best Practices

#### **Best Practices: Dahanu**

 $SO_2$  concentrations are affected primarily by minimum stack height requirements and the requirement that electricity generating units of 500 MW or more leave space for a flue-gas desulfurization (FGD) unit as mandated by the then Ministry of Environment and Forests (MoEF). However, still not many plants in India use FGD units (7 are listed as using FGDs). The law states that generating units between 210 and 500 MW must have stacks of at least 220 meters; units greater than 500 MW must have stacks at least 275 meters in height.

Currently only Dahanu plant of 500 MW has installed a flue-gas desulfurization unit. The plant is located in an ecologically sensitive zone and its SPM emissions are among the lowest in our database (32.5 mg/Nm³ in 2008). Assuming coal with 0.5 percent sulfur content and an SO2 removal rate of 80 percent, the FGD at Dahanu saves 123 lives per

The heavy metals such as arsenic, cadmium, mercury, lead, copper zinc are also present in the particulate matter of flue gas. They contribute towards a myriad of health hazards [Finkleman, 2007] and reduce the efficiency of ESPs. The percentage of the various metals after chemical analysis was found to be zinc: 1-7 per cent; copper: 2-7 per cent; manganese: 5-8 per cent; cobalt 7-10 per cent; cadmium: 12-18 per cent; selenium: 60-70 per cent; cooline 7 10 per cent, cadinatine 12 10 per cent, steinfahl 00 70 per cent; mercury: 70-80 per cent and traces of arsenic, iron, lead and chromium were found [Reddy et al, 2005]. Ozone pollution, also known as smog, is formed when NOx reacts

with VOCs in the presence of sunlight.

#### **Coal Cluster Problem**

Coal-fired power plants are generally located in the coal mining areas of the country such as western Maharashtra, northern Andhra Pradesh, northern Chhattisgarh, Orissa West Bengal, Jharkhand and Bihar. Some power plants are in the coastal regions, due to the availability of water for cooling from the sea and ease of importing coal due to the ports. In such cases, the coastal winds are beneficial, however certain cities like Chennai and Ahmedabad host coal-fired power plants within the city limits (impact of pollution is alleviated in case of Chennai since it is a coastal city) [Guttikunda and Jawahar, 2014]. The pollution caused by emission of  $PM_{2.5}$  from the coal-fired power plants in certain key regions, and its impact on mortality in the region is given below in **Table 5**.

In Delhi, up to 8 per cent of the ambient PM pollution can be attributed to the coal-fired power plants of 2000 MW, operated within 60 km from the city center [Guttikunda and Goel, 2013], thus the NCR with its highest population density of more than 21.5 million inhabitants in Delhi and its satellite cities, is exposed to higher PM pollution from coal-fired power plants. These land locked power plants pose a serious threat to the health of the inhabitants of the cities. While the impact of the emissions is felt within 200 km of the power plants. 200 km of the power plants, under windy conditions the influence can be tracked to distances as far as 400 km from the source region [Guttikunda and Jawahar, 2014].

Tuble 5. Hourin Impuets of Hitz, 5 in Science areas				
Cluster (size in	No. of plants	Installed	Modeled	Estimated
degrees)	(those more	capacity in MW	PM _{2.5} ^a —median	premature
	than 1000 MW)		(95 th percentile)	mortality within
			$\mu g/m^3$	the region ^b
Delhi-Haryana	8 (5)	8,080	3.9 (7.7)	6,400-8,800
$(2.5^{\circ} \times 2.5^{\circ})$ (in				
land)				
Kutch (Gujarat)	5 (2)	9,900	1.0 (2.8)	100-120
$(2.5^{\circ} \times 2.5^{\circ})$				
(coastal)				

Table 5: Health Impacts of  $PM_{25}$  in selected areas

Western	3 (1)	2,780	0.9 (2.3)	1,700-2,400
Maharashtra		····		····
$(2.5^{\circ} \times 2.5^{\circ})$				
(coastal)				
Eastern	10 (6)	14,800	3.2 (5.1)	1,100-1,500
Maharashtra and				
Northern Andhra				
Pradesh				
$(3.0^{\circ} \text{ x } 4.0^{\circ})$				
(inland)				
Madhya	21 (10)	29,900	9.1 (23.1)	7,900-11,000
Pradesh,				
Chhattisgarh,				
Jharkhand,				
Orissa				
$(4.0^{\circ} \mathrm{x} \ 4.5^{\circ})$				
(inland)				
West Bengal,	19 (7)	17,100	3.7 (5.6)	10,700-14,900
Jharkhand, Bihar				
$(3.0^{\circ} \text{ x } 4.0^{\circ})$				
(inland)				
Eastern Andhra	2 (2)	3,000	0.8 (1.8)	1,100-1,500
Pradesh				
$(2.5^{\circ} \times 2.5^{\circ})$				
(coastal)				

^a The PM2.5 concentrations are modeled grid averages and is the concentration due to the emissions from the coal-fired power plants only, which is incremental to pollution from other sources in the region. For these sub-regional domains, the CAMx dispersion modeling was repeated @ grid resolution of 0.1_, equivalent of 10 km. Median and 95th percentile value is based on averages for all the grids in the select sub-regional domain.
 ^b This is the estimate for the exposed population in the select geographical sub-region, but the influence of the power plant emissions reaches farther

Source: Adaptation of Guttikunda and Jawahar, 2014

#### **Health Impacts**

The direct link between air pollution and human health has been widely documented under the 2010 GBD study (IHME, 2013). Various epidemiological studies conducted in India have consistently demonstrated higher rates of respiratory and cardiovascular diseases in populations exposed to PM, NO_x, and ozone pollution [Guttikunda and Jawahar, 2014; Chhabra et al., 2001; Pande et al., 2002; Gupta et al., 2007; Wong et al., 2008; CBHI, 2010; Siddique et al., 2010; Balakrishnan et al., 2013].

Missing working days, loss of productivity, morbidity and mortality rate connected with air pollution has been converted to loss of gross domestic product (GDP) by a World Bank study of 2012, the study shows that the health impacts cost the nation USD 23.4 billion that is about 1.7 per cent of the GDP.

The water runoff from coal washeries carries pollution loads of heavy metals that contaminate ground water, rivers, and lakes thus affecting aquatic flora and fauna [Finkelman, 2007]. Very few coal-fired power plants desulfurize the flue gas.  $SO_x$  contributes to formation of small acidic particulates that penetrate into human lungs and are absorbed by the blood stream. It causes acid rain that damages the crops, forest and soil.

Smog can also cause many health problems such as coughing, wheezing, shortness of breath and chest pain. Ozone, a precursor to smog causes lung tissue damage, reduced lung capacity, asthma exacerbation, as well as increased risk of hospitalization for asthma, bronchitis and other chronic respiratory diseases [US EPA, 2007]. Some studies have also shown that prolonged ozone exposure may lead to premature death [Bell et al., 2005; Ito et al., 2005].

The health impacts of these pollutants emitted by coal-fired power plants are summarized below in **Table 6**.

Effect	Health Impacts	
Effect	Health Impacts	
Total premature mortality	80,000-115,000	
Child mortality under 5	10,000	
Respiratory symptoms	625 million	
Chronic bronchitis	170,000	
Chest discomforts	8.4 million	
Asthma attacks	20.9 million	
Emergency room visits	900,000	
Restricted activity days	160 million	

Table 6: Summary of health impacts of emissions from coal-fired power plants

Source: Guttikunda and Jawahar, 2014

In countries like India and China that have a moderate life expectancy, research suggests that coal burning reduces life expectancy by 2.5 and 3.5 years in those countries respectively [Burt et al 2013]. Box 2: Case in China

A recent study in China highlighted significant differences between two communities that were of comparable socio- economic status but one was exposed to high levels of airborne particulate matter through the use of coal-fired boilers in town, whereas the other was not. Researchers [Chen et al 2014] found that exposure to high levels of particulates 184  $\mu$ g/m³ led to an increase in cardiorespiratory causes of death (resulting in a 14 per cent increase in overall mortality) and a reduced life expectancy at birth of about three years.

Although not necessarily at a level that demonstrably increases mortality at the same rate as in the China case study, particulates that are smaller than 2.5 microns travel deeper into the bronchial passages and lungs causing increased negative heath impacts. These can include decreased lung function, asthma, for example, every 10  $\mu$ g/m³ increase in PM_{2.5} is associated with a 1 to 3.5 per cent decrease in measured lung function [Burt et al 2013].

Toxic mercury is emitted from coal-fired power plants and it mainly accumulates in water bodies. It causes neurological problems; children under age of six years are susceptible to brain and spinal cord damage. In adult it causes cardiac problems and affects vision, speech and hearing. Environmentally, deposit of mercury in lakes can make the fish unsafe to eat.

#### Conclusion

**Conclusion** Carbon dioxide emissions from coal-fired power plants, in India constitute about 70 per cent of the energy sector emissions [INCAA, 2010]. In India, the amount of power generated from coal will remain high at least through 2030 and unless a better way is proposed to manage pollution from the coal-fired thermal power plants, the environmental effects and human health costs will be high [Prayas, 2011, 2013]. AC energy consumption is set to increase from 8 TWh in 2010 to 239 TWh by 2030. Such growth would inflict undue stress on the Indian power sector that would lead to unprecedented construction of new power plants. By enhancing energy efficiency 40 per cent of the energy consumed by room ACs could be saved cost- effectively. This renders energy savings of 118 TWh or a peak demand saving of 60 GW by 2030. Achieving such an extensive level of energy saving is equivalent to avoiding the construction of 120 new coal-fired power plants of 500 MW each. power plants of 500 MW each.

power plants of 500 MW each. Merging the upcoming HFC phase-down, recently agreed under the Montreal Protocol, with accelerating energy efficiency will not only help achieve emission reductions for India, but also deeply and positively affect the energy demand. It would also result in economic gains from reduced fossil fuel imports. These economic gains may be better suited to be utilized for powering over 400 million Indians that yet do not have access to electricity.

electricity. Indian energy efficiency standards are some of the lowest in the world. The stringency of the standards and labeling program in India by the Bureau of Energy Efficiency needs to be improved vastly. It is also important to pursue efforts such as improved building design and cool rooms to reduce or postpone the electricity demand from ACs [Shah et al., 2014]. This will consequently, prevent the building of unnecessary coal-fired power plants and open opportunities for investments in cleaner technology. While the carbon dioxide emissions produced by coal-fired power plants by themselves may have no known direct effects on human health, they are a very significant contributor to global warming which itself poses one of the greatest threats to environment public health in the long term IUSGCRP. 2016].

[USGCRP, 2016].

The adverse and intensive effects of climate change impacts individual and societal health, mental health, and well being. Rising

greenhouse gas emissions and its resultant rise in temperature, changes in precipitation patterns, increases in the frequency and intensity of some extreme weather events, and rising sea levels. Such incidences and impacts of climate change endanger our health by affecting our food and water sources, the air we breathe, the weather we experience, and our interactions with the built and natural environments. Thus the scientific understanding of how climate change affects and imposes risks to human health must be explored in greater depth, evaluated and monitored [USGCRP, 2016].

Though coal remains main fossil fuel for power generation, realizing energy efficiency will convey greater health and environment benefits as well as mitigate climate change.

#### **References:**

A. Chunekar, K. Kadav, D. Singh, and G. Sant, (2011), "Potential Savings from Selected Super- Efficient Electric Appliances in India," Prayas Energy Group, Pune (India).

A. Garg, J. Maheshwari, and J. Upadhyay, (2010), "Load research for residential and commercial establishments Energy in Gujarat". Conservation and Commercialization (ECO III), Bureau of Energy Efficiency (BEE), Indian Institute of Management Ahmedabad.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, (ASHRAE), (2012), "International Weather for Energy Calculaions (Database".

Balakrishnan, K., Ganguli, B., Ghosh, S., Sambandam, S., Roy, S., Chatterjee, A., (2013), "A spatially disaggregated time-series analysis of the short-term effects of particulate matter exposure on mortality in Chennai, India", Air Qual. Atmos. Health 6, 111-121.

Bell M.L, Dominici F, Samet J.M., (2005), "A meta-analysis of time-series ozone and mortality with comparison to the national morbidity, mortality, and air pollution study", Epidemiology 2005; 16: 436-445.

Burt E., Orris P., Buchanan S., (2013), "Scientific Evidence of Health Effects from Coal Use in Energy Generation", Healthcare Research Collaborative, University of Illinois at Chicago School of Public Health, Chicago, Illinois, USA.

Central Bureau of Health Intelligence, CBHI, (2010), "National Health Profile 2010", CBHI, Government of India, New Delhi, India.

Chen Y., Ebenstein A., Greenstone M., and Hongbin L., (2014), "Evidence of the impact of sustained exposure to air pollution on life expectancy from China's Huai River policy", PNAS vol. 110 no 32 12936-12941. Chhabra, S.K., Chhabra, P., Rajpal, S., Gupta, R.K., (2001), "Ambient air

pollution and chronic respiratory morbidity in Delhi", Archiv. Environ.

Health 56, 8.

Cropper et al., (2012), The Health Effects of Coal Electricity Generation in India, Resources for Future, Washington D.C., USA.

Delhi State Load Dispatch Center (DSLDC), 2012, "Hourly Demand Data from the State Load Dispatch Center", New Delhi.

Finkelman, R.B., (2007), "*Health impacts of coal: facts and fallacies*", AMBIO J. Hum. Environ. 36, 103-106.

Gupta, S.K., Gupta, S.C., Agarwal, R., Sushma, S., Agrawal, S.S., Saxena, R., (2007), "A multicentric case-control study on the impact of air pollution on eyes in a metropolitan city of India", Indian J. Occup. Environ. Med. 11, 37-40.

Guttikunda, S.K., Goel, R., (2013), "Health impacts of particulate pollution in a megacity of Delhi", India. Environ. Dev. 6, 8-20.

Guttikunda, S.K., Jawahar, P., (2012), "Application of SIM-air modeling tools to assess air quality in Indian cities", Atmos. Environ. 62, 551-561.

Guttikunda and Jawahar, (2014), "Atmospheric emissions and pollution from the coal-fired thermal power plants in India", Elsevier, Atmospheric Environment (92) 449-460.

Institute for Health Metrics and Evaluation, (IHME), (2013), "*The Global Burden of Disease 2010: Generating Evidence and Guiding Policy*", Seattle, USA.

Indian Network for Climate Change Assessment (INCCA), (2010), "India: Greenhouse Gas Emissions 2007", Ministry of Environment & Forests, India.

Ito K, DeLeon SF, Lippmann M., (2005), "Associations between ozone and daily mortality: analysis and meta-analysis" Epidemiology 2005; 16: 446-457.

Jaiswal, A. (2012), "*Reducing Delhi's Power Crunch Through Appliance Efficiency*", NRDC Blog.

Krishnan, M. (2013), "AIR CONDITIONING SALES GROWTH", Economic Times of India.

Liziwe McDaid, (2014), "The Health Impact of Coal: The responsibility that coal-fired power stations bear for ambient air quality associated health impacts", Ground work.

Lucon and Vorsatz, (2014), "Buildings: Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)", Switzerland.

Maharashtra State Load Dispatch Center, MSLDC, (2012), "Hourly Demand Data from the State Load Dispatch Center", Maharashtra, India.

N. Abhyankar, (2011), "Load Survey of Residential and Commercial Consumers in Maharashtra," Lawrence Berkeley National Laboratory.

N. Abhyankar and A. Phadke, (Apr. 2012), "Impact of large-scale energy

*efficiency programs on utility finances and consumer tariffs in India,*" Energy Policy, vol. 43, pp. 308–326.

N. Shah et al., (2013), "COOLING THE PLANET: OPPORTUNITIES FOR DEPLOYMENT OF SUPER-EFFICIENT ROOM AIR CONDITIONERS", p. 80. N. Shah et al, (2013), "Avoiding 100 New Power Plants by Increasing

N. Shah et al, (2013), "Avoiding 100 New Power Plants by Increasing Efficiency of Room Air Conditioners in India: Opportunities and Challenges", Lawrence Berkeley National Laboratory.

N. Shah, P. Waide, and A. Phadke, (2013), "Cooling the Planet: Opportunities for Deployment of Superefficient Room Air Conditioners," Lawrence Berkeley National Laboratory.

N. Zhou, N. Zheng, J. Romankiewicz, and D. Fridley, (2012), "LBNL China Group Cooperation on Energy Efficiency in China: Standards and Labeling," Lawrence Berkeley National Laboratory.

National Sample Survey Organization (NSSO), (Apr. 2007), "Household Consumption of Various Goods and Services in India, 2004-05", Ministry of Statistics and Program Implementation, Government of India.

National Sample Survey Organization (NSSO), (Feb. 2012), "*Household Consumption of Various Goods and Services in India* (2009-2010)," Ministry of Statistics and Program Implementation, Government of India.

Pande, J.N., Bhatta, N., Biswas, D., Pandey, R.M., Ahluwalia, G., Siddaramaiah, N.H., Khilnani, G.C., (2002), "Outdoor air pollution and emergency room visits at a hospital in Delhi", Indian J. Chest Dis. Allied Sci. 44, 9.

Prayas, (2011), "Thermal Power Plants on the Anvil: Implications and Need for Rationalisation", Prayas Energy Group, Pune, India.

Prayas, (2013), "Black and Dirty e the Real Challenges Facing India's Coal Sector" Prayas Energy Group, Pune, India.

Reddy, M.S., Basha, S., Joshi, H.V., Jha, B., (2005), "Evaluation of the emission characteristics of trace metals from coal and fuel oil fired power plants and their fate during combustion", J. Hazard. Mater. 123, 242-249.

Shende, R., (2008), SPEECH AT USEPA OZONE LAYER PROTECTION AWARDS, ("Humanity has already benefited by about 60% improvement in energy efficiency in domestic refrigerators since the industry started looking at their design in order to change from CFC-12.").

Siddique, S., Banerjee, M., Ray, M., Lahiri, T., (2010), "Air pollution and its impact on lung function of children in Delhi, the Capital City of India", Water Air Soil Pollut. 212, 89-100

U.S. EPA, (January 2007), OAQPS Staff Paper: Review of the National Ambient Air Quality Standards for Ozone: Policy Assessment of Scientific and Technical Information.

Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J.

Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds, (2016), "*The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*", U.S. Global Change Research Program, (USGCRP), Washington, DC, 312 pp. http://dx.doi.org/10.7930/J0R49NQX

V. Letschert, L.-B. Desroches, J. Ke, and M. McNeil, (Jul. 2012), "Estimate of Technical Potential for Minimum Efficiency Performance Standards in 13 Major World Economies", Lawrence Berkeley National Laboratory.

V. Sharma, Energetica India, April 12, 2013, Addressing Energy Security: Demand Issues and Supply Concerns in India

Velders, G.J.M., et al., (2009), "The large contribution of projected HFC emissions to future climate forcing", Proc. Nat'l. Acad. Sci. U.S.A. 106:10949-10954.

Velders G.J.M., D.W. Fahey, J.S. Daniel, M. McFarland, S.O. Andersen, (2012), Preserving Montreal Protocol Benefits by Limiting HFCs, Science 335.

Velders et al., (2014), "Growth of climate change commitments from HFC banks and emissions", Atmos. Chem. Phys, 14, 4563-4572.

Wong, C.-M., Vichit-Vadakan, N., Kan, H., Qian, Z., (2008), "Public Health and Air Pollution in Asia (PAPA): a multicity study of short-term effects of air pollution on mortality" Environ. Health Perspect. 116, 1195.

World Bank, (2008), RESIDENTIAL CONSUMPTION OF ELECTRICITY IN INDIA. The World Bank, Washington DC, USA.

World-Bank, (2012), "An Analysis of Physical and Monetary Losses of Environmental Health and Natural Resources in India", Policy Research Working Papers, WPS- 6219. The World Bank, Washington DC, USA.

Xu Y. Zaelke D., Velders G.J.M. & Ramanathan V., (2013), "*The Role of HFCs in mitigating 21st century climate change*", ATMOS.CHEM.PHYS., 13:6083-6089.

# The ''Black Box'' Behind Prison-Based Vocational Training Programs

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#### Abstract

Despite the great importance of prison vocational programs, studies have pointed to a wide variety of barriers that inhibit the released prisoner's chances to integrate into the labor market. The present qualitative investigation was designed to crack the "black box" behind six vocational programs implemented in the Israel Prison Service (IPS). Our findings based on the interviews with all the supervisors in the programs emphasized several factors that seem necessary for the success of the different vocational programs. The interviews show that training in a correctional environment poses a number of major difficulties for the respondents. Furthermore, a significant part of the prisoners' motivation to participate in the training programs is not necessarily related to the desire to find work after release. It was also found that a relatively long training, which makes it possible to find work in the field even during the period of incarceration, holistically addresses the various needs of the prisoner, and corresponds to the job market requirements, increases the chances of its participants to find employment also after their release from prison. When the characteristics of the various programs were examined, it was found that in addition to the characteristics of prisoners, one must also consider structural characteristics such: to what extent do the programs comply with the requirements of the Israeli labor market, confer a formal diploma at the end of the training period, or allow integration into the work force after release.

Keywords: Vocational training, Prisoners, Israel

#### Introduction

The literature shows a strong connection between lack of employment and involvement in crime, when finding employment represents a turning point in the life of the offender (Uggen, 2000). Therefore, there is a vital importance to vocational training and work within the confines of the prison. As a result, many prisons in the Western world operate professional training programs (Christofferson, 2014; Newton et al., 2016) whose purpose is to provide prisoners with the proficiencies, work skills, education, and is to provide prisoners with the proficiencies, work skills, education, and preparation for placement in the labor market after their release (Visher et al., 2005). Ideally, vocational training should help the prisoners integrate into the labor market, maintain job stability, boost their ability to earn a living legally and through legitimate means, raise their self-esteem regarding their ability to earn a decent living outside the circle of crime, integrate into the community, and feel a sense of belonging to it (Hagan & Dinovitzer, 1999 ; Visher, Winterfield, & Coggeshall, 2005; Western, Kling, & Weiman, 2001; Wilson, Gallagher, & MacKenzie., 2000).

In the study by Hesisi, Weisburd, Shoham and Zelig (in press), differential success rates were found among the various vocational training programs that operate in Israeli prisons. In this qualitative study we would like to examine what are the variables that may predict the success of a vocational training program as reflected in the words of personnel working in prison vocational training programs. The programs which were evaluated in this study are the following: electrical trades, aluminum welding and building, construction, landscaping, training for the job market, and hairdressing.

In this article we will describe the main themes that emerge from interviews with the supervisors and inspectors of the vocational training programs in the Israeli correction system.

#### **Theoretical background**

### Integrating ex-offenders in the job market

Integrating ex-offenders in the job market The integration of ex-offenders in the labor market is of great importance. A number of empirical studies have found that inmates ranked the issue of employment as their top priority after release from prison (Bloom, 2006). Integrating into a legitimate job in the labor force allows the released prisoners to earn a living (Saylor & Gaes, 2007) and may neutralize, or at least reduce, their motivation to take part in crime (Bloom, 2006; Bouffard, MacKenzie, & Hickman, 2000). In addition, researchers noted that employment in the labor market increases the self-esteem of the released

prisoners, gives them a positive social network, a sense of belonging to the community, a normative daily routine (Hagan & Dinovitzer, 1999; Visher, Winterfield, & Coggeshall, 2005; Western, Kling, & Weiman, 2001; Wilson, Gallagher, & MacKenzie, 2000) and also serves as an informal control mechanism of their behavior (Sampson & Laub 1977; Uggen 1999; Uggen & Staff, 2001; Visher, Winterfield, & Coggeshall, 2005; Wilson, 1997; Wilson et al., 2000).

In light of the difficulties of ex-offenders to join the workforce, researchers (Visher et al., 2005) and decision makers in prisons (Newton, 2016) have raised the need for an effective intervention that will increase the chances of released prisoners to integrate into the labor market. Indeed, over the past decades, many prisons in the Western world began to develop and adopt diverse programs for education, employment, and training which are designed, among other things, to give prisoners the skills, the proficiencies, and knowledge which are necessary to enter the labor market after release from prison and to retain their jobs over time (Bloom, 2006; Bouffard, MacKenzie, & Hickman, 2000; Lawrence et al., 2002; Visher, Winterfield, & Coggeshall, 2005). There is currently a widespread notion that the period of incarceration provides the law enforcement system with an opportunity to teach the inmates job skills, proficiencies, and knowledge, and prepare them for vocational placement after their release (Visher et al., 2005), and thus, reduce the likelihood that ex-offenders will revert to crime in the future (Bouffard, MacKenzie, & Hickman, 2000; Bushway & Reuter, 1997; Davis et al., 2014; Newton, 2016; Visher et al., 2005). In this context, Visher, Winterfield and Coggeshall (2005: 295-296) noted hat A good job not only helps the prisoner's daily survival, but is also a key to the rehabilitation of self-esteem, an attachment to a conventional lifestyle, and a sense of belonging to the community. Work organizes the behavior and patterns of interaction with other people throughout the day, and it plays an important role as a source of informal supervision over the behavior of released offenders.

#### **Prison-based vocational training programs**

Prisons in many Western countries operate programs for vocational training (Bouffard et al., 2000) of various kinds, such as educational instruction, vocational training, prison industry, and employment services (Lawrence, 2002). The training programs operating in prisons are different in many ways; for example, while there are prisons which allow their inmates to choose whether or not to take part in the vocational training programs, there are prisons where prisoners are compelled to participate in these programs (Davis, 2013). Furthermore, while there are training programs that operate within the walls of the prison, there are several

vocational training programs where inmates work under the supervision of institutions and organizations outside the prison (Bouffard, MacKenzie, & Hickman, 2000; NIJ, 2015; Glaze & Parks, 2012). Cooperation between correctional facilities and organizations outside the prison gives inmates valuable work experience and improves their employment opportunities after they are released from prison (Bouffard, MacKenzie, & Hickman, 2000). In addition, these programs are designed to help inmates get accepted to work and provide them with follow-up treatment after release from prison, including providing social, psychological and medical services, which are intended to help ex-inmates cope with the difficulties of re-integrating into the community (Lawrence et al., 2002).

While there are differences between the features of each program, the main aim of the program is to provide the prisoners with a positive routine, knowledge, tools, skills and work habits that will help them integrate into a profession in the labor market after their release from prison (Bouffard, MacKenzie, & Hickman, 2000; Lawrence, et al., 2002; NIJ, 2015; Visher et al., 2005). In addition, these programs are designed to instill in the prisoners a sense of commitment, responsibility, and motivation to join the work force (Gaes, Flanagan, Motiuk, & Stewart, 1999). To achieve this objective, vocational training programs in prison afford inmates the opportunity to acquire experience, job skills, and valuable knowledge in a range of professions, such as: computers (Gaes, 1999), hairdressing, auto mechanics, building maintenance, the electrical trades, painting, plumbing, food services, culinary art, gardening, custodial maintenance, upholstery, welding and heating, ventilation, air conditioning (NIJ, 2015), carpentry, electronic services, the arts and printing, construction, graphics, and more (Lawrence, et al., 2002). The types of training that are offered to inmates in prison vary according to the interests of the prisoners who take part in them, the budgetary considerations of the prison organization's decision-makers, the professions that are needed in the labor market, and the availability of instructors or teaching staff (NIJ, 2015).

# The connection between vocational training and recidivism among released prisoners

There is a vast corpus of literature devoted to evaluating the effectiveness of training programs in prison with respect to reducing recidivism (Wilson et al., 1999). A recent study conducted by Davis and colleagues (Davis et al., 2013) examined the effectiveness of 88 programs for education and vocational training. The researchers based themselves only on studies published from 1980 to 2011 which were of high methodological quality (rank 2 or higher on the Maryland Scientific Methods Scale (MSM). The study results showed that prisoners who participated in vocational

programs were characterized with a 36% lower probability of recidivism, as compared to prisoners not participating in such programs. However, it is important to note that a large number of studies in the analysis were based on low methodological quality, and suffered specifically from the problem of "choice", since prisoners in the treatment and control groups were not assigned randomly to the groups and there was no attempt to create a match assigned randomly to the groups and there was no attempt to create a match between participants in these groups. Another meta-analysis based on 33 empirical studies published between "1975 – 2000" examined the level of effectiveness of 17 vocational training programs, 27 education programs, and 4 employment programs that operated in prison to reduce recidivism. The study results revealed that prisoners who participated in the programs of education, employment, and vocational training in prison were characterized by a 39% recidivism rate compared to the inmates who did not participate in these programs, with a recidivism rate of 50% (Wilson et al., 2000). Specifically, inmates who did not participate in vocational programs in prison had a probability of returning to prison that was 1.55 times higher than those who took part in programs of this type. Another systematic survey conducted by Aos, Miller, & Drake (2006) examined the effectiveness of 571 rehabilitation programs in prison. In this study, too, the researchers based themselves only on studies defined as of high methodological quality, and the research results showed that prisoners who took part in one of the three vocational training programs were characterized by a rate of recidivism that was 12.6% lower as compared to inmates who did not participate in these programs.

inmates who did not participate in these programs. Beyond the rate of recidivism, numerous studies conducted in recent

decades address the effectiveness of vocational training programs using additional outcome measures.

For example, in a meta-analysis by Davis (2013), based on the results of eight in-prison vocational training programs, it was found that released prisoners who took part in the training programs were more than twice as likely to be hired as compared to the released inmates who did not take part in vocational training programs.

in vocational training programs. Various studies suggest several factors that may contribute to the increased effectiveness of vocational training programs in prison. The findings of the studies mentioned above indicate that the training programs in prison are more effective when it comes to adult offenders (Bierens & Carvalho, 2011; Uggen, 2000), with a high risk evaluation (Bloom et al., 2007; Redcross et al., 2009; Redcross et al. 2012; Zweig et al., 2011) and with a negative history of employment (Dixon & Casey, 2013; Webster et al., 2014). In addition, studies attribute effectiveness to vocational training programs that are operated using a holistic approach and which award the prisoner a certificate upon completion of training. Programs that operate

according to the principles of a holistic approach provide a response to all the prisoner's psycho-social needs and thus help the prisoner cope with the difficulties of life that are entailed in returning to the community and integrating into the work force as soon as possible (Bushway & Reuter, 2002; Management and Training Corporation Institute 2005). Furthermore, receiving a formal certificate helps ex-inmates get accepted to a place of work and reduces the likelihood that they will take part in crime after their release from prison (Erisman & Contardo, 2005; Passarell, 2013; Petersilia, 2011) 2011).

As mentioned above, in this article we sought to examine the relationship between participation in the types of vocational training programs in Israeli prisons and returning to criminal behavior after release and the possible explanations offered by the operators of the various programs for the results obtained in the quantitative section.

#### Method

Method Approximately 2,519 inmates participated in some type of vocational program (4.4%) between 2004-2012. 102 inmates participated in the electrical trades program, 163 prisoners participated in the program for aluminum welding or construction, 284 participated in the building courses (working at heights, roofing and siding, drywall, ceramic tiling, plumbing and painting), 224 participated in the hairdressing course, and 758 inmates participated in training for the work world (small business management, preparation for entering the working world, entrepreneurship, personal budget management, and business budget management).

In order to try to understand the quantitative research findings, a qualitative investigation was conducted, which was designed to crack the "black box" behind all the vocational training programs which were surveyed in the quantitative section. In the qualitative section, in-depth interviews were conducted with the head of the employment division, with the head of training and human resources, with all district officers in employment and training, with the Training Officer at the IPS National Training Center, and with the teachers who teach the training programs. Several prominent categories were singled out that are related to the perception of the IPS training system operators in the field of vocational training in the IPS.

#### Findings

The first category extracted from the interviews dealt with the motivation of the inmates to participate in the courses. A number of motivations of the inmates were mapped, beginning with participating in vocational training to obtain benefits in prison, attending in order to show a positive CV at the parole committee, and a motivation to learn a profession

in order to rehabilitate oneself and leave the world of crime. The second category extrapolated dealt with challenges and difficulties faced by the respondents in the ongoing work in prison. Under this category a number of difficulties were mapped, such as difficulty in finding candidates who fit the requirements of the courses and who would fulfill them and not waste taxpayer money; the difficulty of persuading inmates to join training courses; difficulties related to the characteristics of the prison population; and the difficulties may explain the relatively small number of prisoners who participated in vocational training in the research period. The third category extrapolated from the study related to the benefits of vocational training. In this category three sub-categories were culled: a. The contribution of vocational training to inmates while they are in prison (a way to pass the time, pleasure, relaxation, enrichment, raising self-esteem, acquiring learning habits). b. The contribution of vocational training to inmates after release as a key for finding employment, c. The contribution of working in the area of vocational training, to the private lives of stuff members, who described an enormous self-satisfaction in participating in the rehabilitation programs. The interviews revealed that participants in the electrical trades program – the program which was considerate to be the most successful program according to the interviewers- undergoes professional training of a

The interviews revealed that participants in the electrical trades program – the program which was considerate to be the most successful program according to the interviewers- undergoes professional training of a relatively long duration of 350 hours, in addition, undertake to work in the electrical trades plant for two years, where they receive on-the-job training (ojt). In other words, their IPS training consists of receiving both theoretical and practical training. Another factor that may reduce the chance of recidivism is their chances of finding work after being released from prison. The interviews revealed that contrary to other prisoners, the chances are great for prisoners who studied and worked in electrical trades to be absorbed into the large aircraft industry, thus ensuring a smoother entry into society.

Society. As for gardening, it emerges that training in this vocation also has a strong combination of theoretical and practical learning. In addition, gardening allows people a relatively easy absorption in working for gardening contractors or self-employed gardeners outside the prison, mainly for local government and public councils. Moreover, they say that being engaged in gardening during the course and outside of jail has a soothing therapeutic effect; thus, it may be that this specific occupation relaxes the prisoner and reduces the chances of recurring criminal behavior. In contrast to those vocations, it was claim that graduates of courses in aluminum and construction who do not work regularly in their fields of

In contrast to those vocations, it was claim that graduates of courses in aluminum and construction, who do not work regularly in their fields of training during their incarceration, have less chance to find employment in their field after release from prison. It was also found that the admission criteria for these training programs is very flexible, in order to increase the number of applicants for the training program and therefore are unable to pick out the most suitable candidates. This, in turn, may detract from the effectiveness of the programs.

#### Discussion

In this study, one may learn a bit more about "what works" when it comes to rehabilitation programs in general and training programs in particular. Our investigation shows that there are few characteristics that help boost the success of the training programs. For example, it was found that training programs operating in Israeli prisons, similar to what is seen in the literature, are more effective when it comes to more adult offenders (Bierens & Carvalho, 2011; Uggen, 2000), with evaluation of high risk (Bloom et al., 2007; Redcross et al., 2009; Redcross et al., 2012; Zweig et al., 2011), a negative history of employment (Dixon & Casey, 2013; Webster et al., 2014), and among prisoners without job stability before entering the prison and inmates who entered programs close to their release date.

Likewise, when the characteristics of the various programs were examined, it was found that in addition to the characteristics of prisoners, one must also consider structural characteristics such: to what extent do the programs comply with the requirements of the Israeli labor market, confer a formal diploma at the end of the training period, or allow integration into the work force after release. In this context, one can see that vocational training programs targeted towards specific areas of occupation in the labor market, may provide participants in vocational training programs an advantage over other programs due to the experience, knowledge, and tools acquired during already the prison period. That seems necessary for successful integration into the labor market. Certificates and focusing on specific work areas should also afford ex-prisoners an advantage over other former offenders, thereby increasing their chances of finding work in a competitive market and even high paying jobs (Lawrence et al., 2002). All these are expected to reduce the risk that ex prisoners will return to crime after their release from prison (Shoham &Timor, 2014).

It was further found that programs where there is follow-up treatment or at least some vocational supervision of the released prisoner, there are better results. This finding supports Dawe's claim (2007) that the time lapse between the release from prison and the ex-prisoner's registration at a manpower agency or acceptance to work is a critical point that affects the future of the prisoner. During this period, many ex-inmates tend to return to crime; and therefore, researchers stress the importance that close upon the release date, the prisoner is allocated advisory services and vocational guidance (Dawe, 2007; Newton, Day, Giles, Wodak, Graffam, & Baldry, 2016).

#### Conclusion

In conclusion, it emerges that in addition to the suitable matching of inmates with a particular program, the duration of the program, and its compliance with the demands of the Israeli market, the same characteristics that are true for all the rehabilitation programs, are also relevant in explaining the differential findings in this study, namely, training using a holistic approach and supporting the released prisoner in the period after the release from prison. Many researchers (Cullen & Gendreau, 2000; Harper, 2007) attribute effectiveness to vocational training programs which operate according to the principles of the holistic approach. Such programs focus not only on imparting work skills but also on providing a range of services to meet the social, health, and emotional needs of prisoners after release from prison. In this context, it is important to note that when the prisoner leaves prison, he must deal with a combination of difficulties, including - search for a place to live, job search, and social stigma. In Israel where less than onethird of the released prisoners have follow-up programs and vocational supervision (Peled-Laskov, Shoham, Kozkoro, in press), it is of paramount importance to provide the released prisoners with social, health, and emotional services in order to preserve the gains produced in the vocational training programs during incarceration.

In the research period 2004-2012, only a relatively small number of prisoners participated in programs. Therefore, despite the differential findings between the various training programs, we recommend expanding the number of inmates participating in the programs, extending the training period, allowing inmates to acquire vocational experience during their period of imprisonment, treating the training program as a holistic treatment program, and maintaining contact with the employers or relevant organizations which may assist their integration into the work force even before their release from prison.

#### **References:**

Andrews, D.A., Bonta, J., & Hoge, R.D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice & Behavior*, 17, 19-52.

Aos, S., Miller, M., & Drake, E. (2006). Evidence-based public policy options

to reduce future prison construction, criminal justice costs, and crime rates. *Federal Sentencing Reporter*, 19, 275.

Bierens, H. J., & Carvalho, J. R. (2011). Job search, conditional treatment and recidivism: The employment services for ex-offenders program reconsidered. *The BE Journal of Economic Analysis & Policy*, 11(1), 1-38.

Bloom, D. (2006). Employment-focused programs for ex-prisoners: What have we learned, what are we learning, and where should we go from here?.MDRC.

Bloom, D., Redcross, C., Zweig, J., & Azurdia, G. (2007). *Transitional jobs* for ex-prisoners: Early impacts from a random assignment evaluation of the Center for Employment Opportunities (CEO) prisoner reentry program. New York, NY: MDRC.

Bouffard, J. A., MacKenzie, D. L., & Hickman, L. J. (2000). Effectiveness of vocational education and employment programs for adult offenders: A methodology-based analysis of the literature. *Journal of Offender Rehabilitation*, *31*(*1*-2), 1-41.

Bushway, S. D., & Reuter, P. (2002). 6 Labor markets and crime risk factors.Evidence-based crime prevention, 198. Cecil, D. K., Drapkin, D. A., MacKenzie, D. L., & Hickman, L. J. (2000). The effectiveness of adult basic education and life-skills programs in reducing recidivism: A review and assessment of the research. *Journal of Correctional Education*, *51*, 207-226.

Christofferson, S. B. (2014). Prison-based employment interventions: Effects on recidivism. *The New Zealand Corrections Journal*, *2*, 28-31.

Cullen, F.T., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practice, and prospects. *Criminal Justice*, *3*, 109-175.

Davis, L. M. (2013). Evaluating the effectiveness of correctional education: A metaadults. Rand Corporation.

Davis, L. M., Steele, J. L., Bozick, R., Williams, M. V., Turner, S., Miles, J. N., & Steinberg, P. S. (2014). How Effective Is Correctional Education, and Where Do We Go *from Here? The Results of a Comprehensive Evaluation*. Santa Monica, CA: Rand Corporation

Dawe, S. (2007). Vocational Education and Training for Adult Prisoners and Offenders in Australia. Research Readings. National Centre for Vocational Education Research Ltd. PO Box 8288, Stational Arcade, Adelaide, SA 5000, Australia.

Dixon, A. & Casey, L. (2013) Vocational Training and Employability Skills in Prisons and Young Offenders Institutions. NIACE (The National Institute of Adult Continuing Education, England and Wales).: Available from: http://www.niace.org.uk/sites/default/files/resources/Vocational%20Training %20and%20Employability%20Skills%20in%20Prisons%20and%20Young %20Offenders%20Institutions .pdf [e-book accessed 12/12/2016]. Erisman, W., & Contardo, J. B. (2005). *Learning to Reduce Recidivism: A* 50-State Analysis of Postsecondary Correctional Education Policy. Washington, DC: Institute for Higher Education Policy.

Gaes, G. G., Flanagan, T. J., Motiuk, L. L., & Stewart, L. (1999). Adult correctional treatment. Crime and Justice, 26, 361-426.

Glaze, L. E., & Parks, E. (2012). Correctional populations in the United States, 2011. *Population*, 6(7), 8.

Hagan, J., & Dinovitzer, R. (1999). Collateral consequences of imprisonment for children, communities, and prisoners. *Crime and Justice, 26*, 121-162.

Harper, J. (2007). Vocational Education and Training for Adult Prisoners and Offenders in Australia: Research Readings. Support Document. National Centre for Vocational Education Research (NCVER).

Lawrence, S., Mears, D. P., Dubin, G., & Travis, J. (2002). The practice and promise of *prison programming*. Research Report.

Newton, D., Day, A., Giles, M., Wodak, J., Graffam, J., & Baldry, E. (2016). The Impact of Vocational Education and Training Programs on Recidivism A Systematic Review of Current Experimental Evidence. International journal of offender therapy and comparative criminology, 0306624X16645083

NIJ. (2015). Practice profile: *Corrections-based vocational training programs. National institute of justice.* Retrieved from

https://www.crimesolutions.gov/PracticeD etails.aspx?ID=24

Passarell, D. A. (2013). *The Effect Earning a GED While Incarcerated has on Recidivism Rates: A Research Synthesis.* The College at Brockport: State University of New York.

Petersilia, J. (2011). Beyond the prison bubble. Federal Probation, 75, 1-4.

Sampson, R. J., & Laub, J. H. (1997). A life-course theory of cumulative disadvantage and the stability of delinquency. Developmental theories of crime and delinquency, 7, 133-161.

Saylor, W. G., & Gaes, G. G. (1996). The effect of prison employment and vocational/apprenticeship training on long-term recidivism. *Forum on Corrections* 

*Research*, 8(1), 12-14.

Saylor, W. G., & Gaes, G. G. (1997). Training inmates through industrial work participation and vocational and apprenticeship instruction. *Corrections management quarterly*, 1(2), 32-43.

Seiter, R. P., & Kadela, K. R. (2003). Prisoner reentry: What works, what does not, and what is promising. *Crime & Delinquency*, 49(3), 360-388.

Shoham,E. & Timur,U. (2014). Once a criminal, always a criminal? Attitudes

towards reintegration of released prisoners among Israeli public. *Canadian Social Science*, 10(6), 106-118.

Uggen, C. (1999). Ex-offenders and the conformist alternative: A job quality model of work and crime. *Social Problems* 46(1), 127-151.

Uggen, C. (2000). Work as a turning point in the life course of criminals: A duration model of age, employment, and recidivism. *American Sociological Review*, 529-546.

Uggen, C., & Staff, J. (2001). Work as a turning point for criminal offenders. *Corrections Management Quarterly*, *5*, 1-16.

Visher, C. A., Winterfield, L., & Coggeshall, M. B. (2005). Ex-offender employment programs and recidivism: A meta-analysis. *Journal of Experimental Criminology*, 1(3), 295-316.

Webster, J. M., Staton-Tindall, M., Dickson, M. F., Wilson, J. F., & Leukefeld, C. G. (2014). Twelve-month employment intervention outcomes for drug-involved offenders. The *American Journal of Drug and Alcohol Abuse*, 40(3), 200-205.

Western, B., Kling, J. R., & Weiman, D. F. (2001). The labor market incarceration. *Crime & Delinquency*, 47(3), 410-427.

Wilson, D. B., Gallagher, C. A., Coggeshall, M. B., & MacKenzie, D. L. (1999). A quantitative review and description of corrections-based education, vocation, and work programs. *Corrections Management Quarterly*, *3*, 8-18.

Wilson, D. B., Gallagher, C. A., & MacKenzie, D. L. (2000). A metaanalysis of corrections-based education, vocation, and work programs for adult offenders. *Journal of Research in Crime and Delinquency*, *37*(*4*), 347-368.

Zweig, J., Yahner, J., & Redcross, C. (2011). For whom does a transitional jobs program work?. *Criminology & Public Policy*, *10*(*4*), 945-972.

## Manly of Wycherley and the Byronic Hero: Character Prototype and Type

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#### Abstract

The main purpose of study is to draw first a parallel between the Byronic Hero, a character type created by Lord Byron, and Manly the main character in Wycherley's final play The Plain Dealer, and then to throw into question whether or not Manly should be added to the cited forebears of the Byronic Hero. In tracing the roots of the Byronic hero, as a type, scholars have cited a number of literary sources that Lord Byron possibly drew upon in molding his phenomenal hero, such as *Satan* of Milton's Paradise Lost, Shakespeare's Hamlet, Werther and Faust of Goethe, Faustus of Christopher Marlow, Rene the hero of Chateaubriand's novella, the Greek Titan Prometheus, Cain from the Exodus, and Ahasuerus, the legendary wandering Jew who ridiculed Christ as he bore the cross to Calvary. Yet Byron's debt to Wycherley especially to his character Manly is totally overlooked by scholars, despite the striking affinities, echoes, and parallels between the two characters in question. To elaborate this case, the major traits of the Byronic hero such as total independence, self-alienation and aimless wandering, stoicism, misanthropy, extremism, self-contradiction, and charisma would be carefully examined in the type and then compared to those of the prospective prototype. What would arise may thrust the idea that Manly of Wycherley should be included as one of the Byronic Hero's forebears beside others, and it might substantiate the proposition that Manly of Wycherley is not only an early prototype but also a precursor of the Byronic hero. More likely Manly is one of the paradigms Byron drew upon in molding his hero. Manly is not, however, the sole influence on the poet, but for certain one of the many sources that influenced Byron's creation.

**Keywords:** Self-alienation and aimless wandering, stoicism, misanthropy, extremism, and self-contradiction

#### Introduction

The Byronic hero is a ruling literary personage, as Taine called, provided and developed fully by the British Romantic poet Lord Byron, and

afterward invested with admiration and sympathy by the poet's contemporaries as well as by several English authors in the 19th century and worldwide in the 20th century too (Abrams et al, 1993; Christiansen, 1988; Dumas, 1997; Harvey, 1969; Thorslev, 1962). The Byronic Hero is an imaginary character that can be found in almost every work written by Lord Byron. It first appears in Byron's <u>semi-autobiographical</u> poem <u>Childe Harold's Pilgrimage</u> (1812– 1818). Afterwards, the Byronic hero made several appearances in other works, including his series of poems on Oriental themes: <u>The Giaour</u> (1813), <u>The Corsair</u> (1814), <u>Lara</u> (1814), and it took its final shape in Byron's <u>closet</u> <u>play Manfred</u> (1817). In this play, Byron introduces a more elaborate version of a Faustian noble tormented with guilt over an unnamed offense with his only love Astarte whom is said to be *of his own blood* (Thorslev 1965). Bounded by remorse for transgression, incest with Astarte, Manfred wanders alone seeking freedom from his unbearable sin. This story is unluckily labelled by many as Byron's veiled confession of his incestuous relations with his halfsister Augusta Leigh; however, such idea cannot be substantiated. The incestuous love in <u>Manfred</u> is not necessarily related to the poet's personal life, simply because the theme of transgression was quite recurring in the writings of Byron's contemporaries. Abrams and others, for instance, assure that *the theme of incest was a common one both in Gothic fiction and in the writings of Romantic authors such as Goethe, Chateaubriand, Scott, and Shelley* (513). Whatever said and told, the Byronic hero remains the most impressive and influential character type ever created by a single author. Among all characters provided by other Romantic writers, Byron's

Among all characters provided by other Romantic writers, Byron's creation has exerted an everlasting influence worldwide, a notable influence that can be traced even in the present times. As noted by many, the most notorious descendants of the Byronic hero come from the Bronte sisters: Rochester from Jane Eyre and Heathcliff from Wuthering Heights (McCarthy, 2002), Fitzgerald's Jay Gatsby in The Great Gatsby (Harvey, 1969), Hemingway's Jake Barnes in The Sun Also Rises, and even Rowling's Severus Nape in Harry Potter; all the above beside others fall into the same category (Markos, 2013). Even some Russian authors admired Byron's peculiar contribution, and introduced their own version of the namesake hero (Christiansen, 1988).

As agreed upon by scholars and critics, peculiarly recognizable attributes were attached to a number of fictional characters, and even attached to characters taken from real life like the French Emperor Napoleon Bonaparte, yet the image of Napoleon is deliberately molded and shaped to look like another version of the Byronic hero. Fundamentally, all Byron's heroes are endowed with the same essential traits despite the various guises and circumstances they occur in. Lord Macaulay, a historian and critic, first sums up the traits of the Byronic Hero as follows, *a man proud, moody, cynical,* 

with defiance on his brow, and misery in his heart, a scorner of his kind, implacable in revenge, yet capable of deep and strong affection (cited in Christiansen, 1988, P. 201). Others describes the hero as a totally autonomous, self-alienated and restless wanderer, misanthropic, stoic, self-contradictory, extremely radical or outlaw, yet charismatic, besides being remorse-torn (Abram et al 1993). Furthermore, the Byronic hero is always at odds with the whole world. To him the common norms and mores of the old establishment are always erroneous. Led by his conviction, he strives to set right what goes wrong as he thinks, yet with no avail. When failed to realize his expectations, he grows frustrated, disappointed, detesting his own people, and then deserts his homeland seeking rest amid adventure.

#### **Cited Sources of the Byronic Hero**

Several critics have cited a considerable number of literary works as possible sources available for Byron to draw upon in portraying his archetype hero. No critic, however, is quite certain whether Lord Byron had read those works or not, let alone Byron's constant denial. Most scholars depend upon strong echoes i.e. textual echoes and some of the affinities, similarities, and parallels existent in Byron's hero and its counterparts in earlier literary works, and then raised the possibility that the Byronic Hero had possibly descended from those available examples of *the noble outlaws* (Thorslev, 1965). Satan of Milton's Paradise Lost, the emblem of disobedience and defiance to higher authority, has always come first as a source of inspiration; the same is said about Shakespeare's *Hamlet* and <u>Werther</u> of <u>Goethe</u> (Thorslev. 1962). Others hold the idea that the Byronic Hero is noticeably similar to <u>René</u>, the hero of <u>Chateaubriand's novella</u> of 1802 (Christiansen, 1988). The Greek Titan Prometheus is also cited as a possible source that Byron might take after. Prometheus, like Milton's version of Satan, is known for his ardent defiance to the authority of Zeus, the ruler of gods, who never concedes despite the painful punishment imposed upon him at the hands of Zeus. Cain, the remorse-torn personality from the Exodus is another possible source. Abrams et al, who classify Manfred as the supreme representation of the Byronic Hero, believe that beside the Greek Titan Prometheus and Milton's fallen angel, Satan, Manfred's literary forebears include the villain of gothic fiction and melodrama, and Ahasuerus, the legendary Wandering Jew who ridiculed Christ as he bore the cross to Calvary, and thus doomed to live until Christ's second coming (Abrams et al, 1993, P. 513). In additions, the story of Faust, who defies the authority of God and pledges his soul to the devil to gain superhuman powers is also listed as a possible source. Regardless of the notable affinities, Byron often denied that he had ever heard of Marlowe's <u>Doctor Faustus</u>; and because he knew no German, he denied any knowledge whatsoever of Goethe's Faust. Ironically, his friend M. G. Lewis admitted that he read parts of Faust to him in extreme translation (Abrams et al, 1993, P.513).

Except for the above cited sources, neither the 19th century nor the 20th century critics have made references to Manly, the main character in Wycherley's play <u>The Plain Dealer</u>, regardless of the compelling echoes, parallels, and similarities found in the portrayals of both the Byronic hero and its counterpart Manly. This case is probably overlooked by critics for the likelihood that Manly is introduced in a comic context whereas the Byronic hero is introduced in a more dark and dire context. Accordingly, this study is launched to highlight the striking, yet neglected, affinities seen in both the prototype Manly and the Byronic hero as a phenomenal type.

#### **Authors and Their Creations**

Before delving into the texts of both authors, it is worth mentioning that most critics believe that Wycherley and Byron are to a great extent identifiable with their creations. As for Byron, many believe that his hero is the living, breathing incarnation of the author himself. The same is said about Wycherley and his character, Manly. After the very first performances of his play, Wycherley was labeled by contemporaries as Manly Wycherley, and he seemed interested in the label name endowed upon him, as noted by Wilson:

Some critics have argued that Manly is identifiable with Wycherley himself, a Puritan and a ferocious moralist... Surely the fact that the author of <u>The Plain Dealer</u> was known as Manly Wycherley, a name which he accepted complacently, is enough to show that in the Restoration Manly was regarded as an admirable character. (Wilson, 1965, PP.164-165)

Other circumstantial evidences may validate the parallel we plan to draw between the creations of both Wycherley and Lord Byron. Like his hero, Byron himself was a charismatic rebel who stood firmly against the old establishment, and the story of his expulsion from the House of Lords is quite known after which he left for the Continent, frustrated and disappointed. Wycherley, *a Puritan and a ferocious moralist*, in Wilson's words, was also known as a straightforward person who is overly critical of the established societal norms and mores. After <u>The Plain Dealer</u>, Wycherley quit writing and deserted for good the Beau Monde corrupt society of London. And as the events tell, the experiences and states of mind expressed by the personae often accord closely with known facts of the authors' life and with the personal confessions in letters and journals. Like their creators, Manly and the Byronic hero are outcasts and aliens not only to the societal

grains, but also to the salient literary traditions observed by their contemporaries. More possibly, one may think, Lord Byron was bored with the Romantic archetype hero, thus he twisted the ideal to fit his own personal tastes and trends; and hence he introduced a peculiar personality, totally different from the Romantic common run. In the same vein, Wycherley was apparently bored with the ideal rake as a Restoration Hero archetype, such as Horner, in his play The Country Wife, Mirabell in Congreve's The Way of the World, Dorimant in Etherege's The Man of Mode and the like, and thus twisted the ideal in his final play to fit his own personal tastes and trends. As noticed by many, Wycherley *began in the vein of Etherege, but developed a* darker and more severe kind of satire (Stone, 1969, P. 197). Another critic notes that Manly, the newly shaped character, represents a serious departure from the ordinary Restoration comic treatment of the man or woman who rails against society and age (Righter, 1974, P. 118). And Wycherley's departure from the ordinary in his play The Plain Dealer proved quite appealing and influential to dramatists of his age and after. As acknowledged by critics, numerous changes took place in the portrayal of the common ruling rake of Restoration drama and even after. In Righter's words, after The Plain Dealer, the characters

tended to be harsh, bitter, and convinced that some profound malaise lurked at the heart of all human experience... Disgust with society, railing against age, becomes the inevitable mark of any man of wit and sense. (1974, P. 120)

Another remark might be thrown here to show some coincidental similarities in the circumstances that might affect the views of both authors, and nonetheless may help bring the parallel closer to mind. Both Lord Byron and Wycherley were known as charismatic characters, effortlessly entered into a sequence of liaisons with ladies of fashion, and more likely recognized the vices that infested the life of the Beau Monde, hence the ungracious views they projected in their literary creations. More coincidental than ever, the words with which Lady Caroline Lamb, later a lover of Byron, describes him as being "mad, bad, and dangerous to know" (Gross, 2000, P. 148) might be applicable not only to the poet but also to his heroes. A case in point is the description of Conrad in The Corsair (1814), *the man of* loneliness and mystery, / Scarce seen to smile, and seldom heard to sigh (I, VIII). The same words, with slight variation however, find their roots in words uttered by Olivia, the mistress of Manly. She admits that Manly is irresistibly charming, yet he is a strange and brute lover: I always loved his brutal courage, because it made me hope it might rid me of his more brutal love (The Plain Dealer, II. i. 621-622).

**Compatible Traits of the Byronic Hero and Manly** As cited and acknowledged by many scholars and critics, the main features of the Byronic hero, can be summed up as follows: 1. totally autonomous man, independent of any external authority or power; 2. self-alienated and restless wanderer; 3. misanthropic; 4. extremist; 5. stoic: 6. self-contradictory person; and 7. Charismatic figure, yet remorse-torn. Most self-contradictory person; and 7. Charismatic figure, yet remorse-torn. Most of the above are basically the same features Wycherley endowed on his renowned character Manly. Though the Byronic heroes appear in different contexts and situations than those of Manly, the similarities in their traits cannot be taken in any sense as merely coincidental, and neglected as such. Being an avid reader, Lord Byron more possibly read or viewed on stage Wycherley's play, and more possibly spellbound by the peculiar attributes projected in Manly, hence the effect is hard to neglect. To give Wycherley fair dues, the following parts will go over the traits of the Byronic hero and then measure them against their counterparts in the portrayal of Manly, and then leave it for the reader to judge whether or not Manly should be included as one of the forebears of the Byronic hero. as one of the forebears of the Byronic hero.

**Totally autonomous and independent individual** The Byronic Hero is a totally autonomous and independent person, feeling highly superior in his passions and powers to the common run of humanity whom he regards with disdain (Abram et al, 1993). Marked by a strong and bold belief in himself, he behaves as a commander not a prentice to any philosopher or a subject to any rule of hierarchy or monarchy. What matters to him is the dictates of his own intuitive perceptions, rather than the matters to him is the dictates of his own intuitive perceptions, rather than the ideas or instructions of others. Only his mind generates the values he goes by. He also acts as if he possessed the absolute truth, mindless of what others might think or say about him. At the same time, he is totally fierce to critics or detractors and thus savagely retaliates when wronged or slighted. To him, almost everything has gone astray. The established norms, the traditions, the common practices of his people never won his favorable regard. In other words, he is a self-reliant individual who acts according to a self-generated moral code and gives no heed whatsoever to any established authority, human or supernatural. Childe Harold, for instance, is depicted as follows, Ah, me! In sooth, he was a shameless wight,/ Sore given revel ungodly glee;/ Few earthly things found favour in his sight (Childe Harold, Canto I, 2, 10-1). Even Napoleon, the real character, is portrayed as immensely overconfident and self-reliant who views with contempt men and their thoughts: Ambition steeled thee on too far to show/That just habitual scorn which could contemn/Men and their thoughts; and further the poet insinuates that Napoleon shouldn't wail or whine after his fall for, 'tis but a worthless world to win or lose (Childe Harold,, Canto 3. 40, 352-354, 359). Ironically

disdain of the world is illustrated as a virtue not a vice in Byron's hero: If, like a tower upon a headlong rock, /Thou hadst been made to stand or fall alone, /Such scorn of man had helped to brave the shock (Childe Harold, Canto 3, 41, 361-363). Besides, the Byronic hero commits fatal mistakes yet never repents or regrets his wrong doing: For he through sin's long labyrinth had run, /Nor made atonement when he did amiss (Childe Harold. Canto 1. 5. 37-38). Like Childe Harold, Manfred gives the least heed to any established authority, or common traditions and thoughts. He sets himself apart as a totally autonomous man, independent of any external authority or power, be it God or devils. His own mind, as he says in the concluding scene (Manfred, 3.4.127-40), generates the values by which he lives "in sufferance or in joy", and by reference to which he judges, requites, and finally puts an end to his life. The idea of total independence is further stressed in the image of Manfred which is deliberately twisted and molded to look different from the image of Faust of Goethe or Faustus of Marlow. To look more conceited and more independent than these characters, Manfred even in the worst hours of distress, ardently rejects the idea of pledging his soul to the powers of darkness to gain superiority (Abrams et al, 1993). Unlike Faustus, he utters extreme disdain of others and reliance on the dictates of his own mind, when addressing the spirits he himself invokes:

Thou didst not tempt me, and thou could not tempt me; I have not been thy dupe, nor am I thy prey— But was my own destroyer, and will be My own hereafter. (Manfred, III. iv. 137-140)

Like a Byronic hero, Manly of Wycherley is noticeably an autonomous man. He gives the least regard to the *Arts, and Rules, the prudent of the World walk by*, and worse reproaches Lord Plausible for advising him to abide by: *Tell not me (my good Lord Plausible) of your Decorums, supercilious Forms, and slavish Ceremonies;* and he goes further in his denial of what is already established and accepted by his own society: *Let them [Arts and Rules of the world]. But I'll have no Leading-strings, I can walk alone; I hate a Harness, and will not tug on in a Faction.* Manly prefers to *be singular, like no Body, Follow Love, and esteem no Body,* rather than *be general and follow every Body* (The Plain Dealer, I. i. 1-5, 11-14). His denial arises once again in his exchange with Freeman his close companion. Manly insists on his own self-generated formula to measure against the merit of people instead of the already established rules of hierarchy that endows the title of Lordship on Plausible and the like:

A Lord! What thou art one of those who esteem men only by the marks and value Fortune has set upon 'em, and never consider intrinsic worth; but counterfeit Honor will not be current with me, I weigh the man, not his title; 'tis not the King's stamp can make the Metal better, or heavier: your Lord is a Leaden shilling, which you may bend every way; and debases the stamp he bears, instead of being raised by 't. (I. i. 211-219)

Manly's self-generated codes put him into constant disputes with friends and foes. For instance, he discards the advice of his companion Freeman to be more pragmatic and less critical of others' failings; he also neglects Fidelia's advice to ignore Olivia's betrayal and halt his plan for revenge; he discards Lord Plausible's advice to play by the rules; and he resents the request of Lady Blackacre to testify on her behalf at the House of Justice, simply because he holds no respect for the current juridical system and the whole enterprise of Westminster Hall. Actually, he would not appear at court but by the threat of subpoena. At court, utter aversion is explicitly felt in his contemplation: *I hate this place, worse than a man that has inherited a chancery suit: I wish I were well out on it again*; and later he ponders, *This, the reverend of the law would have thought the palace or residence of Justice; but, if it be, she lives here with the state of a Turkish emperor, rarely seen; and besieged, rather than defended, by her numerous black Guard here (III. I. 1-3 & 7-11). The double entendre given here cannot be missed by the play's witty audience. Black Guard stands for both the dark-skinned guard of the Turkish Sultan and to <i>blackguard* in its common meaning: a mean, reprehensive person utterly lacking in principle, the same ideas Manly holds toward corrupt lawyers and justices who wore black robes (Stone, 1965). By and large, both Manly and the Byronic hero are radically independent; they reject the old establishment and go by their own self-generated values.

#### Self-alienation and restless wandering

As cited by the majority of scholars, the Byronic Hero is always restless and weary for a reason, not really hard to unravel. His restlessness and weariness are normal consequences of thwarted expectations. Failing to see things go in the direction he pleases, Childe Harold becomes disappointed, a desperate self-alienated person whose homeland *seemed more lone than Eremite's sad cell* (Canto I. 4. 36),/ *Nor calm domestic peace had ever deigned to taste* (Canto I. 5. 45). These two alexandrine lines knit up the thought of Byron's two Spenserian stanzas 4 and 5. His hero lost touch with realities and interest in his people, and consequently alienates himself from the used-to-be his fellow companions, such as *concubines and carnal companie;/ And flaunting wassailers of high and low degree*, with whom he used to raise *ungodly glee* (Canto I. 2. 17-18). He grows *sore sick at heart/ and from his fellow bacchanals would flee*; (Canto I.6.45-46), stalking like a ghost amidst the crowd, till he decides to leave his homeland: *Apart he stalked in joyless reverie, /And from his native land resolved to go* (Canto I. 6. 50-51). Soon Harold departs and aimlessly wanders throughout the Continent looking for rest amid adventure:

Awaking with a start, The waters heave around me; and on high The winds lift up their voices: I depart, Whither I know not; but the hour's gone by, When Albion's lessening shores could grieve or glad mine eye. (Childe Harold, Canto III, 1. 5-9)

Self-alienation and restless wandering as attributes of the Byronic hero have their roots in the attributes of Manly. From the very beginning, Manly appears restless, discontent, and weary; thus he is constantly planning to leave his native land, believing that his departure may bring him some relief. Even when his plan is interrupted by a call of duty, to defend his homeland against the Dutch, his desire to leave never wanes. It is only delayed but never forgotten. He incessantly remains determined to depart for the Indies once the war halts. Early in the play, one of his ship's crew confides: *he* [Manly] *sunk the value of five or six thousand pound of* 

he [Manly] sunk the value of five or six thousand pound of his own, with which he was to settle himself somewhere in the Indies, and his aversion to this side of the World, together with the late opportunity of commanding the Convoy, would not let him stay here longer, tho' to enjoy her, for he was resolved never to return again for England. (The Plain Dealer, I. i. 135-140)

Manly has always an ardent desire to leave, simply because he was weary of this side of the World, and ...he had a mind to go live and bask himself on the sunny side of the Globe (I. i. 143-147). A striking echo to these words can be found in Byron's description of Childe Harold's resolution to leave homeland, something which may sound as a mere duplication of Wycherley's words:

> And from his native land resolved to go, And visit scorching climes beyond the sea, With pleasure drugged he almost longed for woe, And even for change of scene would seek the shades below. (Canto I. 6. 50-51)

Manly's aversion to *this side of the World* is further noticed by most of his acquaintances not only by the sailors. All are familiar with his gloom and outrageous behavior: *Within, swearing as much as he did in the great storm, and cursing you, and sometimes sinks into calms and sighs, and talks of his Olivia* (I. i. 618-620), describes one of his companions. Being utterly dejected, Manly more possibly finds an outlet in the battlefield; and at home he finds more possibly mental relief in outrageous railing and hectoring at others. He often yells, cynically mocks, plainly insults, and openly disdains almost everybody; his obnoxiousness, cruelty, and short-temper often come off for a reason or not. Nobody escapes his sharp cynical tongue, yet ironically enough all his targets tolerate his outrageous behavior, probably because of his charismatic personality and glorious martial past. The play is unmistakably packed with examples of his outrageous railing and unchecked outbursts. Soon after the sinking of his warship and forced return to England, his self-alienation becomes more obvious than ever. At home, he commands his companions to bar his door against any visitor:

Have more care for the future, you Slaves; go, and with drawn Cut laces, stand at the Stair foot, and keep all that ask for me from coming up; suppose you were guarding the Scuttle to the Powder room: let none enter here, at your and their peril. (I. i. 175-180)

His desire to avoid others, whom he shuns mercilessly, persists to the end of the play. In the final scene, however, he invites everybody to the house of Olivia for no other reason but to use them as a mocking witnesses to Olivia's debauchery.

#### Misanthropic

Misanthropy is defined as the general hatred, distrust or contempt of human species or human nature. In Western philosophy, misanthropy is often connected to isolation from human society. Socrates gives a better explanation of the consequences that might lead to misanthropy, *Misanthropy develops when without art, one puts* 

Misanthropy develops when without art, one puts complete trust in somebody thinking that man is absolutely true and sound and reliable and then a little later discovers him to be bad and unreliable ... and when it happens to someone often ... he ends up ... hating everyone. (Stern, 1988, P. 94)

Misanthropy is then a potential result of thwarted expectations or even excessively naïve optimism. The potential misanthrope recognizes that the majority of men are to be found in between good or evil, either-orcategories (Stern, 1988, P. 95). Aristotle sees the misanthrope, as an essentially solitary man, is not a man at all: he must be a beast or a god, a view reflected in the Renaissance view of misanthropy as a *beast-like state* (Jowett, 2004).

In light of what's related above, it doesn't take a great deal of imagination to state at ease that the Byronic Hero, as well as Manly, is a misanthropic individual, a man who trusts very few and suspects or even scorns the rest, a real scorner of what's on and above earth. Both characters in question are excessively over-confident, and regard nearly the whole world beneath their notice and unworthy of consideration. Since the world thwarts their expectations, and denies their way of life, they end up selfisolated, antisocial, eremitic, reclusive and hating almost everyone. (Stern.1988). Lord Byron describes Conrad, one of his representative type as follows: *That man of loneliness and mystery*, / *Scarce seen to smile, and seldom heard to sigh* (The Corsair. I, VIII). In another place, the hero deliberately alienates himself from the rest of the world, deeming everyone evil, even himself, and seems indifferent to see his society think not well of him:

> He knew himself a villain- but he deemed The rest no better than the thing he seemed; And scorned the best as hypocrites who hid Those deeds the bolder spirits plainly did. He knew himself detested, but he knew The hearts that loathed him, crouched and dreaded too (The Corsair, I, XI)

Like Conrad, Childe Harold deems himself outcast and alien to his own townspeople: But soon he knew himself the most unfit,/ Of men to herd with Man, with whom he held/ Little in common; untaught to submit/ His thoughts to others. With no qualm, he seems, Proud though in desolation; which could find/ A life within itself, to breath without mankind (Childe Harold, Canto 3, 12,100-108). Even Napoleon is depicted as another misanthrope who looks with contempt to the whole world and often displays, That just habitual scorn which could contemn/Men and their thoughts (Childe Harold, Canto 3. 40, 353-354).

The misanthropic inclinations of the Byronic hero have their roots and counterparts in Wycherley's play The Plain Dealer too. This play is actually based on Molière's *Le Misanthrope* where Manly, the main character, supposedly *Le Misanthrope*, doesn't fail to be so. He openly expresses disgust, extreme hatred, and bitterness toward the whole world. Like Conrad, Manly admits before Lord Plausible, *Very well; but I, that am an unmannerly Sea-fellow, if I ever speak well of people, which is very seldom indeed* (I. i. 55-57). Instead, he always rails and hectors at others, and unmistakably all his discourse is backed by a loathing of the world, sometimes loathing of unfair fortune, and other times loathing of sex. He counters everything, whether pleasurable or insulting, with satiric, yet savage thrusts, as Bruce describes: *Manly's mask that of the insensate bully whose reputation for plain-dealing allows him to tyrannize, scold and threaten-- is not an attractive one, but his face is uglier still (Bruce, 1974).* He mocks everyone and worse scorns and disdains; his mockery takes the form of a brilliant yet savage satirical wit. After he comes back home, he secludes himself from the rest of the world, especially the intruders he mercilessly shuns as it is evident in his exchange with his fellow sailor:

 $2^{nd}$ Sailor: Must no one come to vou. Sir? Manly: No man. Sir. 1st. Sailor: No man, Sir; but a Woman then, an't like your Honour— Manly: No Woman neither, you impertinent Dog. Would you be Pimping? A Sea Pimp is the strangest Monster she has. (I. i. 183-189)

Moreover, Manly takes pride in being at odds with the whole world, as he says to Freeman: in lieu of being mortified, am proud that the World and I think not well of one another (I. i. 354-357). Olivia, the lady with whom he entrusts his heart and money, gives a better insight of Manly's misanthropy as caused by naïve optimism and overconfidence: he rails at all Mankind, and she adds he that distrusts most the World, trusts most to himself, and is but the more easily deceived, because he thinks he can't be deceived (IV. ii.249-251). Her secret husband Vernish too hints in derision on Manly's disappointment and his misanthropic trends, now and hereafter: Manly will now hate the shore more than ever, after so great a disappointment (IV. ii. 176-178). Novel holds the same impression: I'm sure; for you must know, Madam, he [Manly] has a fanatical hatred to good company: he can't abide me (II. i. 641-64). Manly's outrage knows no limit. Even at court, he could not keep himself in check nor conceal his aversion of the whole world to the point of exceeding what is normal and tolerable. Heinously, he draws upon himself three Quarrels, and two Law-Suits at Westminster Hall. Such a ridiculous conduct drives his close companion Freeman to reprimand sharply: Nay, faith, you are too curst to be let loose in the World; you should be ty'd up again, in your Sea-kennel, call'd a Ship. But how could you quarrel here? (III. i. 616-619). Other characters such as Lord Plausible, Olivia, Novel, Alderman, cite and resent his outrageous hectoring, yet Manly never budges nor shows regret; to the contrary he brags,

For my part, I have no pleasure by them, but in despising them, whosesoever I meet them; and then, the pleasure of hoping so to be rid of them. But now my comfort is, I am not worth a shilling in the World, which all the World shall know; and then I'm sure I shall have none of them come near me. (III. i. 881-887)

Hectoring at others has no logical explanation but it can be understood as *a* cry *of despair* (Dobree, 1924, P. 92), and a psychological outlet for a tormented soul. Manly thus often inflicts his pain on others, more likely endeavoring to find some relief through persecuting others. Unmistakable misanthropic trends as such have encouraged scholars to regard Manly not only a rejectionist of the state of affairs, but also an agent of destruction:

Manly is a malcontent on a grand and emotional scale, and while there is a bitter truth in what he says, there is a great deal of absurdity and false judgment. He too is a monomaniac...an agent of destruction...negative, savage, and wholly self- absorbed. (Righter, 1974, P. 114-118) In brief, Manly unmistakably shares with the Byronic hero misanthropic inclinations which drive them into self-isolation and hatred of

the whole world.

#### Stoicism

Stoicism is generally defined as the quality or behavior of a person who accepts what happens without complaining or showing emotion, or the endurance of pain or hardship without the display of feelings and without complaining. To elaborate further, *stoicism exalts the ideals of virtue, endurance, and self-sufficiency.* In brief, *virtue consists in living in conformity to the laws of nature.* A stoic would often abide by no human laws, but by what the laws of nature dictate and by what his own intuition and heart prescribe. Endurance lies in the recognition that what is experienced is experienced by necessity (Holman, 1976). To a stoic character, pain in life is inevitable, and thus individuals, fated to suffer, must endure bravely whatever fortune decrees, and never complain nor ask for mercy. *Self-sufficiency resides in extreme self-control and self-independence which holds in restraint all feelings, whether pleasurable or painful* (Holman, 1976). Lord Byron, like other Romantics, held Stoicism dearly, and in turn it became one of the major traits endowed on his hero. Being mesmerized by such a Greek old philosophy, Byron depicts his hero first as an individual who denies all the established laws, hierarchies and monarchies, and abides by his own self-generated rules; second, he endures bravely the injuries and heavy burdens of outrageous fortune, and would

bear, without complaining, to drudge and labor under a weary life. As a typical stoic, Childe Harold stands unbowed, neither complaining nor asking for mercy even during the worst distressing hours: 'Tis said, at times the sullen tear would start, /But Pride congealed the drop within his ee (Canto 6, 53-54). Not only Childe Harold, but even the image of Napoleon Bonaparte is intentionally molded in a manner to make Napoleon look lukewarm in the eyes of friends and foes, as expressed in the verses that describe Napoleon after defeat:

Yet well thy soul hath brooked the turning tide With that untaught innate philosophy, Which, be it wisdom, coldness or deep pride,

.....

When fortune fled her spoiled and favourite child, He stood unbowed beneath the ills upon him piled. (Childe Harold, Canto 3, 343-345)

Though fortune fled him, Napoleon *stood unbowed* among *the whole host of hatred stood hard by, / To watch and mock thee shrinking, thou hast smiled/ with sedate and all-enduring eye.* (Canto 3, 350-351) In other words, by necessity Napoleon endured the ills of his outrageous fortune. For good or ill what is done is done, and thus must be endured without complaining or asking for mercy; one should accept what fate decrees without complaining or showing emotions.

Manly, the forebear, shares his descendent the same stoic trends. He remains markedly dignified despite the plight he suffers at the hands of his close friend and his mistress Olivia, the lady who nonchalantly betrayed his trust and squandered lavishly his money on a secret husband. As a stoic, Manly is willing to starve and bravely endure *want*, with the least intension to lower himself before those whom he despises. Though penniless and starved, he fiercely resents Freeman's suggestion to borrow money from intimate friends: Because I know 'em already, and can bear Want, better than Denials; nay, than Obligations (V. ii. 55-56). Hunger to him can be endured, but not humiliation, especially before men. And as a virtuous stoic, he gives his last twenty pounds to his fellow sailors despite his urgent need. To my Boats Crew: Would you have the poor, honest, brave Fellows want? (III. i. 891-892), said he to his fellow sufferer, Freeman. He is totally convinced that he is a victim of fate as he admits before Olivia: Chance has used me scurvily (II. i. 821), and thus must bravely withstand the decree of outrageous fortune. The same idea of being victimized by fate and others Manly reiterates before Freeman: Well, but it has been the fate of some brave Men: and if they who' not give me a Ship again, I can go starve anywhere, with a Musket on my shoulder (V. ii. 106-108). As indicted above, when the odds stand against him, Manly never succumbs nor concedes, yet bravely bears the unbearable, embracing the same stoic idea which dictates that what is experienced is experienced by necessity thus must be tolerated without complaining. What Manly feels and says can also find its compelling echo in Manfred's contemplation:

What I have done is done; I bear within A torture which could nothing gain from within The mind which is immortal makes itself Requital for its good or evil thoughts----

#### Extremism

Extremism as a trait can be also seen in the portrayals of both the prototype and the type. The Byronic hero is known to be so extreme in all things! hadst thou in betwixt,/ thy throne had still been thine, or never been,/ For daring made thy rise as fall. (Canto 3. 320-321). Extremism, as related in his verses, is behind the rise and fall of not only Napoleon, but also of other Byronic heroes. Manly of Wycherley is, likewise, excessively extreme in the way he outwardly manifests himself. He is extreme in his love as well as in his hate, and seems quite absolute in his judgment of other people. Just as he is absolute in appraising their virtue, if there is any, he is so absolute in judging their vices. One moment, he fancies her, [Olivia] ..., the only Woman of Truth and Sincerity in the World (I. i. 642-643), so perfect a Beauty that Art could not better it, nor Affectation deform it... she is all truth (I. i. 679-684). Not only this, but also he admits before Freeman, Ishould (I confess) doubt the Love of any other Woman but her, as I do the friendship of any other Man but him[Vernish] I have trusted; but I have such proofs of their faith, as cannot deceive me (I. i. 719-722). Above all, Olivia was a miracle of a Woman, to him (I. i. 740). Now, after he discovers her infidelity, she all of a sudden turns to be an instance of ingratitude, falsehood, and disdain; And henceforward I [Manly] will despise, contemn, hate, loath, and detest you, most faithfully (II. i. 826-827). And worse, the used-to-be a miracle of a woman suddenly becomes a mere mercenary whore (V. ii. 151). In so much as he is so absolute in appraising Olivia's and Vernish's fidelity, he is so absolute in judging their vices. An extremist, like Manly, would reduce life to such simple either-or categories. If some people are partly corrupt, he illogically concludes, then all men are totally frauds. Once he discovers Olivia's hypocrisy, while eavesdropping to her exchange with Lord Plausible and Novel, he desperately utters, Do 'ye hear that? Let us be gone, before she comes; for hence forward I'll avoid the whole damned Sex forever, and Women as a sinking Ship. This demand for absolute assurance in all matters turns the extremist into a grotesque leading a life of gloom and melancholy, a potential result of thwarted expectations and excessively naïve optimism.

As a grotesque, Manly is extremely suspicious of the intents of his close companions. He suspects Freeman's honest appeal for friendship, and misinterprets the genuine feelings of his page Fidelia. Once, his repulsive stand forces Freeman to voice a sudden piercing cry, You are severer than the Law, which requires no man to swear against himself (I. i. 297-299). And when Manly persists in his extremity, Freeman explodes, I should tell you, that the World thinks you a Mad-man, a Brutal and have you cut my throat, or worse, hate me! (I. i. 326-328). To use but Byron's words, Manly seems Lone, wild, and strange,... exempt/ From all affection and from all contempt

(Conrad, I, XI). Like Manly, the Byronic hero exists in states of extreme emotions, including anger, which sometimes leads to violent outbursts. He is actually passionate yet dangerous, especially to those who love him.

## **Self-contradiction**

Self-contradiction as a typical trait of the Byronic hero is first detected by Macaulay; he describes the Byronic hero as *implacable in revenge, yet capable of deep and strong affection*. Abram et al. detects the same sense of contradiction in the personality of the Byronic hero. On one hand, he is willing to fight and struggle for sake of the oppressed; on the other hand, he looks with disdain to the common run of humanity (Abram, et al. 1993). In Byron's words, his hero is a paradoxical, self-contradictory person *whose spirit is antithetically mixt/ One moment of the mightiest, and again/ On little objects with like firmness fixt* (Childe Harold, Canto I. 36. 117-119). This same sense of contradiction can find its roots in the character of Manly.

Streaks of contradictions come out in the conduct of Manly at court. Though he often claims to hate hypocrisy, he too frequently forces himself to act like a hypocrite. At Westminster Hall, he does really become one, and ironically he is fully conscious of his hypocritical role, as clear in his meditation:

> How hard it is to be an hypocrite! At least to me, who am but newly so. I thought it once a kind of knavery. Nay, cowardice, to hide one's faults; but now the common frailty, love, becomes my shame. (III. i. 32-36)

Olivia, his mistress, notes the same sense of contradiction in Manly; she comments,

Is there anything more agreeable, than the pretty sullenness of that? than the greatness of your courage? which most of all appears in your <u>spirit of</u> <u>contradiction</u>, for you dare give all Mankind the Lye; and your Opinion is your only Mistress, for you renounce that too, when it becomes another Man's. (II. i. 770-775)

Her insight holds true considering the bizarre behavior of Manly especially after Olivia's denial of him. One moment, Manly acts as a passionate lover of Olivia, and values his love as *a miracle of a woman*. Another moment, after he discovers her betrayal, he becomes an extreme avenger desperately seeking the vindication of his injured pride and *shows himself more ruthlessly perfidious than any of the other characters* (Bruce, 1976). Her infidelity triggers off an eruption of anger and unleashes a destructive impulse; however that impulse is held back momentarily by the tyranny of love or lust. Subsequently, other streaks of contradiction arise. The request he lays on Fidelia to intercede for him before Olivia is at best ridiculous and suggestive of a tormented and contradictory spirit. Ironically, he claims his plan to flirt with Olivia is meant only to humiliate and cuckold her secret husband; *I cannot live, unless I have her*, (III. i. 123), said he to Fidelia and adds but think of revenge: I will lie with her, out of revenge. Go, be gone, and prevail for me, or never see me more (III. i.136-138). In fact, his call for revenge reveals more contradiction rather than what he claims; it is actually marked by an urgent and unscrupulous desire for possession and manipulation no more no less. Further, as all his attempts fail to take her back, unrestrained revenge takes over and manifested first in damaging her reputation among friends. He claims she allows him to sleep with her for money, a claim the events cannot verify, and it may reveal a desperate wish to manipulate Olivia and to look untouched and honorable before friends. Soon after, he devised a heinous design to humiliate before others the lady he used to adore. He commands his lieutenant Freeman,

Well then, bring 'em all, I say, thither, and all you know that may be then in the house; for the more Witnesses I have of her infamy, the greater will be my revenge: and be sure you come straight up to her Chamber, without more ado (V. ii. 445-451).

The blazing desire for revenge never wanes till he exposes her debauchery to the whole host of mockery. Once revenge accomplished, the other trend of deep and strong affection takes over. Behind his hardened heart, a tender soul and charming manners emerge. Feeling triumphant and relieved, he offers Olivia some of the retrieved money and jewelries: *Here, Madam, I never yet left my Wench unpaid.* He takes some of the Jewels, and offers them to Olivia; she strikes them down: Plausible and Novel take them up (V. iii. 153). Further, he passionately vows to keep the strong oaths he set forth to Fidelia especially after she takes off her disguise and appears as a sensational charming young lady. In a few words, one may remind that Manly's soul is antithetically mixed in so much as the soul of the Byronic hero is.

## **Charismatic personality**

The last but not the least, one may relate that both Lord Byron's heroes and Manly are charismatic figures. This specific case is fully documented in any discussion of the Byronic hero, yet seldom highlighted in Manly. However, the prototype and the type are both charismatic persons who invest their charisma to seduce and manipulate. Their attraction, ripe with sexual charisma, does not enthrall women only, but also helps them

excel and manipulate among men too. An unfortunate female may describe being drawn to a Byronic hero for reasons she cannot fully comprehend, more possibly because he is unpredictably changeable and often excessively cruel to her. Like a Byronic hero, Manly is depicted as irresistibly charming to most women he contacts. Olivia his mistress confesses: Then, that noble Lyon-like mien of yours, that Soldier-like weather beaten complexion, and that manly roughness of your voice; how can they otherwise than charm us Women, who hate Effeminacy! (II. i. 744-748). She adds, for we Women adore a Martial Man, and you have nothing wanting to make you more one (II. i. 756-758). Fidelia hopelessly devotes her life to Manly, and actually mesmerized by his charismatic personality for no tangible explanation. Among men, Manly is feared, respected, and admired. Men such as Lord Plausible, Freeman, Novel, Major Oldfox, and Alderman keep chasing Manly wherever he goes swallowing complacently the brunt of his sarcastic tongue and constant mockery of their sycophancy and hypocrisy. Ironically enough, he chides them squarely in the face, yet they keep crouching over him.

In conclusion, one may feel inclined to suggest that Manly is a strong candidate to be taken as a prototype and precursor of the Byronic hero. Once again, one may restate that Manly is not the only available literary figure that Byron drew upon in portraying his ever-lasting influential type, yet certainly Manly of Wycherley is one of sources that had a hand in the creation of the Byronic hero. Out of the discussion, one may effortlessly detect the compelling similarities, affinities, and echoes found in the features of the two characters in question. *Self-reliance*, self-*alienation and aimless wandering*, stoicism, misanthropy, extremism, self-contradiction, and charisma are all traits endowed on both the Byronic hero and its forebear Manly. Such unmistakable realities may help find a substantial response to the hypothetical inquiry related in the introduction of this study: whether or not Manly should be included within the host of the already cited sources that Lord Byron drew upon in shaping his ruling personage, the Byronic hero.

## **References:**

Abrams M. H. et al. (Eds.). (1993) .<u>The Norton Anthology. Vol. 2</u>. 6th edition. New York: W.W. Norton and Company,

Becker, L. (2003). A History of Western Ethics. New York: Rutledge Press. Bruce, D. (1974). Topics of Restoration Comedy. New York: St. Martin's Press.

Byron, G. G. Childe Harold, and Manfred. Cited in Abrams M. H. et al. (Eds.). (1993) .<u>The Norton Anthology. Vol. 2</u>. 6th edition. New York: W.W. Norton and Company, Byron, G. G. (1959). <u>The poems of Byron</u>. London: Oxford University Press.

Christiansen, R. (1988). <u>Romantic Affinities: Portraits From an Age, 1780–</u> <u>1830</u>, 1st edition. New York: G. P. Putnam's Sons.

David, S. (2008). Ancient Philosophy. In E. Craig. Encyclopedia of Philosophy. New York: Rutledge.

Dobree, B. (1924). <u>Restoration Comedy 1660-1720</u>. Oxford: Clarendon Press.

Dumas, A. (1997). <u>The Count of Monte Cristo</u>. Hertfordshire: Wordsworth. Eisler, B. (1999). <u>Byron: Child of passion, fool of fame</u>. London: Hamilton,

Gilbert M. (1946). *The Stoic Philosophy*. In Bertrand Russell, *A History of Western Philosophy*.

Gross, J. D. (2000). <u>Byron: The Erotic Liberal</u>. Plymouth: Rodman and Littlefield.

Harvey, W. W. (1969). Dickens and the Byronic Hero. <u>Nineteenth-Century Fiction</u> *Vol.24 No.3*. California: University Press.

Hawkins, Ann, R., ed. "The Byron Chronology". *Romantic Circles*. University of

Maryland. Web. 13 Feb. 2012.

Holman, H. (1976). <u>A Handbook To Literature</u>, 3rd edition. Indianapolis: The Odyssey Press.

John, J. (2001). <u>Dickens's Villains: Melodrama, character, popular culture.</u> Oxford: University Press. 2001.

Jowett, J. (2004). The Oxford Shakespeare: The Life of Timon of Athens. Oxford University Press. 2004.

Markos, L. (2103). <u>Heaven and Hell: Visions of the Afterlife in Western Poetic</u> <u>Tradition</u>. Eugene: Cascade.

Macaulay, T. B. (1841). The Dramatic Works of Wycherley, Congreve, Vanbrugh, and Farquhar. In <u>Critical Essays</u>. Vol. 2 1841. Retrieved on Feb 6, 2005.

McCarthy, F. (2002). Byron: Life and Legend. London: John Murray.

Righter, A. (1974). William Wycherley. <u>Restoration Dramatists: A Collection of</u> Critical Essays. Ed. Earl Miner. Princeton. Princeton University Press. 1974.

The Satanic and Byronic Hero. The Romantic Period: Topics. Norton Topics Online. (2012). Norton Anthology of English Literature.

Schneider, A. K. (2008). Byronism. <u>The Literary Encyclopedia</u>.

Stein, A. (2009). <u>The Byronic hero in Film, Fiction and Television</u>. Carbondale: Southern Illinois University Press.

*Stern, P. (1983).* Socratic Rationalism and Political Philosophy: An Interpretation of Plato's *Phaedo. SUNY Press.* 

Stone, G. W. (Ed). (1969). <u>British Dramatists, From Dryden to Sheridan</u>. Carbondale, Southern Illinois Press. .

Thorslev, P. L. Jr. (1965). <u>The Byronic Hero: Types and prototypes</u>. Minneapolis: University of Minnesota Press.

Thorslev, P L. Jr. (1962). The Byronic Hero and Heroic Tradition. Minneapolis: University of Minnesota Press.

Wilson, J. H. (1965). <u>A Preface to Restoration Drama</u>. Boston: Houghton-Mifflin.

Wycherley, William. <u>The Plain Dealers</u>. Cited in Stone. G. W. The British Dramatists: From Dryden to Sheridan. Carbondale, Southern Illinois Press. Note; *All citations of* **The Plain Dealer** *refer to this edition*.

Zimbardo, R. (1965). <u>Wycherley's Drama: A Link in the Development of English Satire</u>. New Haven. Yale University Press.

# **Confining Concrete Columns with FRP Materials**

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#### Abstract

Fiber Reinforced Polymers (FRP) as a kind of composite materials have became widespread in the strengthening of reinforced concrete structures as an alternative way of traditional strengthening methods. Usage of such polymers as an important application of composites for strengthening has rapidly increased in recent years. Confinement of concrete as a type of inelastic, non-homogenous, non-linear and brittle material has considerable advantages in strengthening with externally bonded by FRP. The lightweight and high strength capacity of FRP sheets and strips which may eliminate the low tension capacity and brittle behavior of concrete sections gain considerable increase in construction industry. In this study codes for strengthening concrete columns investigated to discuss the confinement effect of concrete by FRP material including the mechanical properties.

Keywords: Stress-strain models, reinforced concrete sections, strengthening

## Introduction

In the last decade, the use of fibre reinforced polymers (FRP) as reinforcement is rapidly growth in many civil engineering applications such as rehabilitation of RC (Reinforced Concrete) buildings, strengthening of bridge piers, etc. These materials with advantages of high strength capacity, high resistance to corrosion, lightweight and ease of application have been caused rapid increase in construction industry. The purpose of such composite materials is to obtain the new features by creating superior properties of a new material production other than existing components. The superior properties of FRP enhance the strength and ductility capacities to be one of the best options in strengthening as external reinforcement (Erdil, 2013; Anil, 2008; Smoak 1996). In order to investigate the gain in strength and ductility of concrete columns several methods have been researched and proven effective in increasing the axial load capacity of reinforced concrete columns. These methods include concrete, steel, and fiber reinforced polymer (FRP) jackets. Lateral confinement using FRP or spiral reinforcement has been demonstrated to increase compression strength, deformability, and energy absorption capacity of concrete (Ozbakkaloglu and Akın, 2011; Canbay et al., 2006; Campione et al., 2004). FRP reinforcement behaves linear elastic up to failure and exerts an

FRP reinforcement behaves linear elastic up to failure and exerts an ever-increasing confining pressure on the concrete core to gain stress and strain capacity in case of loaded axially. The confining mechanism provides a considerable enhancement in the strength and ductility of concrete. There are various studies experimentally investigating the strength and strain capacities by retrofitting existing concrete columns with various strength levels wrapped with several layers of FRP to examine the performance of FRP composites to improve for seismic strengthening in structural engineering (Oncu et al., 2010; Moehle, 2000). The results of such studies obviously indicate that provides significant increase in failure stress and strain of the confined concrete.

## **Materials and Methods**

Strengthening is the process of enhancing capacity of damaged components of structural concrete to its original design capacity, or an improving over the original strength of structural concrete. Confinement of concrete with externally bonded FRP is an important application of FRP composites. Fiber-reinforced polymer strengthening technique is essentially composed of high tensile-strength fibers bonded to the concrete surface using an epoxy resin in a matrix of polymer resin. The epoxy resin process refers to a "matrix" material of reinforced with fibers provides bond strengths exceeding the shear or tensile strength of the concrete. These FRP products are mostly used as external reinforcement in the construction industry in the form of bars, cables, sheet materials and plates. FRP products may succeed in the same or better reinforcement objective of commonly used metallic products such as steel reinforcing bars, prestressing tendons, and bonded plates (Bisby and Williams, 2004). High strength polymer fabrics are used in Strengthening of reinforced concrete beams against bending and shear, slabs against bending, enhancement of the shear capacity, ductility and compressive strength of columns. Use of fibre reinforced polymer materials in concrete strengthening has rapidly increased on site into different shapes as referenced material in many applications by Task Grup 9.3 FRP (2001) as shown in Fig.





(b)



(c) (d)
 Figure 1. Some typical FRP application examples in strengthening reinforced concrete structures: (a) flexural strengthening of slab; (b) flexural strengthening of beam; (c) strengthening and confinement of a column; (d) wrapping of a concrete tank.

Bonding FRP systems are useful tools to increase the axial compression strength and also increase ductility capacity of a concrete member. In case of earthquake resistance capacity, enhancing the ductility of members subjected to combined axial and bending forces is one of the main objectives of strengthening of concrete sections. The characteristic stress-strain behavior of FRP-confined concrete is related to to determine the confining pressure and the resulting increase in the compressive stress in the concrete. On the other hand for FRP confined concrete to generate force-deformation relationship models proposed by codes ACI440.2R-02, ACI440.2R-08 and Turkish Earthquake Code (TEC2007) are available to determine the effectiveness of polymer amount on specimens. The

confinement strength of the concrete model related to the confinement pressure;

$$f'_{cc} = f'_{co} + k_1 f 1$$
 (1)

where,  $f_1$  is confinement pressure and  $k_1$  is coefficient of effectiveness,  $f'_{cc}$  is compressive strength of confined concrete and  $f'_{co}$  is unconfined concrete strength. The fundamental properties of FRP materials evaluated to enhance strength and ductility of concrete sections the ACI 440 and TEC2007 code requirements summarized (Erdemli and Karasin, 2014; Erdil et al., 2011).

**TEC 2007 Model**: This model is defined in section 7E titled as "Effects of FRP Confinements on Strength and Ductility of Reinforced Concrete Columns" in TEC 2007. The code evaluates strength and ductility enhancement using FRP confined concrete columns. For strength enhancement it is stated that in order to increase the axial load capacity of a column using FRP material strength of confined columns given as;

$$f_{cc} = f_{cm} \left( 1 + 2.4(f_1 / f_{cm}) \right) \ge 1.2 f_{cm}$$
(2)

$$f_1 = \frac{1}{2} \kappa_a \rho_f \varepsilon_f E_f$$
(3)

where  $f_{cc} = f'_{cc}$  is compressive strength of confined concrete,  $f_{cm} = f'_{co}$  is unconfined concrete compressive strength,  $\rho_f$  is defined as the volumetric ratio of FRP and  $\kappa_a$  is defined as section effectiveness factor for rectangular cross section as;

$$\rho_{f} = \frac{2 n t_{f} (b + h)}{bh}$$
(4)  

$$\kappa_{a} = 1 - \frac{(b - 2r)^{2} + (h - 2r)^{2}}{3bh}$$
(5)

Where n and  $t_f$  are number of plies and nominal thickness of one ply of FRP reinforcement respectively, b, h are dimensions of rectangular cross section and r is radius of corners rounded rectangular sections to turn an elliptical section.

$$\varepsilon_{\rm f} \leq 0.004 \text{ and } \varepsilon_{\rm f} \leq 0.50 \varepsilon_{\rm fu}$$
 (6)

 $\epsilon_f$  and  $\epsilon_{fu}$  are effective and ultimate strain level of FRP reinforcement, and  $E_f$  is a tensile modulus of elasticity of FRP. In order to check enhancement of column ductility ultimate strain capacity indicated as

 $\varepsilon_{\rm cc} = 0.002 \ (1+15 \ (f_1 \ / \ f_{\rm cm}) 0.75 \ ) \tag{7}$ 

The model implies at least 20% strength enhancement of the current compressive strength.

**ACI440Model:** In the part 12 of ACI440.2R-02, it is indicated that wrapping FRP systems completely around certain types of compression members will confine those members, leading to increases in axial compression strengths. Bonding FRP systems to concrete members can also

increase the axial tension strength of the member. Confinement is also used to enhance the ductility of members subjected to combined axial and bending forces. In this code equations related to strength and strain are introduced for strengthening of concrete members subjected to axial force. The strength of confined concrete can be computed from Eq. (8) using a confining pressure as result of the maximum effective strains that can be achieved in the FRP jacket given in Eq. (9).

$$f'_{cc} = f'_{c} \left[ 2.25 \sqrt{1 + 7.9 \frac{f_{1}}{f'_{c}}} - 2 \frac{f_{1}}{f'_{c}} - 1.25 \right]$$
(8)

$$f_1 = \frac{\kappa_a \, \rho_f \, \varepsilon_{fe} \, \varepsilon_f}{2} \tag{9}$$

The effective strain in the FRP jacket is limited to Eq. (10) as;

 $\epsilon fe = 0.004 \le 0.75 \epsilon fu$  and  $\epsilon_{fu} = C_E \dot{\epsilon}_{fu}$  (10) where  $C_E$  is environmental-reduction factor for fiber and resin type of

where  $C_E$  is environmental-reduction factor for fiber and resin type of Carbon/epoxy given as 0.95 and  $\tilde{\varepsilon}_{fu}$  is ultimate rupture strain of FRP. The  $\rho f$  and  $K_a$  parameters for noncircular sections to obtain confining pressure defined as;

$$\rho_{f} = \frac{2 n t_{f} (b+h)}{bh}$$
(11)  
(b-2r)² + (h-2r)²

$$Ka = 1 - \frac{(b-21)^{2} + (n-21)^{2}}{3bh(1-\rho_{g})}$$
(12)

In equations (11) and (12)  $\rho f$  is FRP reinforcement ratio,  $\rho_g$  is ratio of the longitudinal steel reinforcement area to the cross-sectional area of compression member and r, b, h are the radius of the edges and dimensions of the section. It is noted that for rectangular sections with aspect ratios b/h exceeding 1.5, or one of the face dimensions b or h, exceeding 900 mm it is assumed that confining effect of FRP jackets is negligible, unless testing demonstrates their effectiveness. Than enhancement of column ductility with FRP indicated as;

$$\epsilon'_{cc} = \frac{1.71(5f'_{cc} - 4f'_{c})}{E_{c}}$$
(13)

where  $E_c$  is modulus of elasticity of concrete and  $\varepsilon'_{cc}$  defined as increased ductility of a section results before compressive failure from the ability to develop greater compressive strains in the concrete.

## Conclusion

The usage of FRP composites in strengthening applications has many superiorities such as high tensile strength, Modulus of Elasticity, resistance to corrosion, the lightweight, speed and ease of application. It is noted that FRP strengthening are powerful techniques to enhance stres-strain performance of existing reinforced concrete structures which may need strengthening or retrofitted due to incorrect calculations and applications, the low quality of concrete, inadequate lateral reinforcement, change of usage, additional storey, environmental factors, poor workmanship etc. The models of TEC2007 and ACI 2002 codes with respect to the stress - strain relation of concrete sections confined by fiber composites

show some variations as comparing to each other. It is noted that reinforced concrete members wrapped with FRP materials for strengthening improve enhancement of compressive strength and ductility capacity of confined concrete.

## **References:**

American Concrete Institute (ACI). ACI 440.3R-04; Guide test methods for fiber-reinforced polymers (FRPs) for reinforcing or strengthening concrete structures; ACI Committee: Farmington Hills, MI, USA, 2002. American Concrete Institute (ACI). ACI440.2R-08, Guide for the design and construction of externally bonded FRP systems for strengthening concrete structures; ACI Committee: Farmington Hills, MI, USA, 2008. Anil, Ö. Strengthening of RC T-Section beams with low strength concrete using CFRP composites subjected to cyclic load. Construction and Building Materials, 2008, 22, 2355, 2368

Materials. 2008, 22, 2355-2368.

Bisby, L.A.; Williams, B.K. An introduction to FRP strengthening of concrete structures. ISIS Educational Module. Canada, 2004.

Campione, G.; Miraglia, N.; Papia, M. Strength and strain enhancements of concrete columns confined with FRP sheets. Structural Engineering and Mechanics. 2004, 18, 769-790.

Canbay, E.; Ozcebe, G.; Ersoy, U. High-strength concrete columns under eccentric load. Journal of Structural Engineering. 2006, 132, 1052-1060.

Erdemli, S.; Karasin, A.. Use of frp composite material for strengthening reinforced concrete, European Scientific Journal. 2014, 10(3), 41-49. Erdil, B.; Akyuz, U.; Yaman, I.O.; Irfanoglu, A. A Comparative study of force-deformation relationship of FRP-confined concrete columns. III ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Corfu, Greece, 25–28 May, 2011. Erdil, B.; Akyüz, U.; Yaman, İ.Ö. Confinement effectiveness of CFRP in axial members under various loading conditions. Advanced Materials

Research. 2013, 747, 277-281.

Oncu, M.E.; Karasin, A.; Yılmaz, S. Behavior of strengthen concrete sections with CFRP under axial loading. Journal of New World Sciences Academy Engineering Sciences. 2010, 5, 515-525. Ozbakkaloglu, T.; Akin, E. Behavior of FRP-confined normal and highstrength concrete under cyclic axial compression. Journal of Composites for Construction. 2011, 16, 451-463.

Saadatmanesh, H.; Ehsani, M. R.; Jin, L. Repair of earthquake-damaged RC columns with FRP wraps. ACI Structural Journal. 1997, 94, 206-214.

Smoak, G. Guide to concrete repair, United States Department of the Interior Bureau of Reclamation, The Minerva Group Inc., 1996.

Task Grup 9.3FRP (Fiber Reinforced Polymer) reinforcement for concrete structures, July 2001. 'Design and use of externally bonded fibre reinforced polymer reinforcement (FRP EBR) for reinforced concrete structures', fib CEB-FIP Bulletin 14, Swithzerland, 2001.

Turkish Earthquake Code for Buildings. TEC2007, Ministry of Public Works and Resettlement. Ankara, Turkey, 2007.

Turkish Standardization Institute. TS 500, Requirements for design and construction of reinforced concrete structures, Ankara, 2000.

## The Determinants of Efficiency in Turkish Banking Sector After Global Finacial Crisis

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## Abstract

In this study, we analyzed the efficiency changes of the Turkish banking sector between the years 2005-2014, when the global financial crisis was experienced. Data Envelopment Analysis (DEA) methodology was applied to obtain efficiency scores. Then, panel regression analysis was performed to explore the main determinants of efficiency changes. The findings have shown that internal factors are more effective than external ones on banks efficiency. The financial crisis was found to have a slight impact on banks' efficiency in managing their financial resources. GDP and inflation had negative relationship with bank efficiency due to the unanticipated inflation rate and volatile economic growth. The empirical findings imply that more efficient banks generate higher returns accordingly.

**Keywords:** Bank Efficiency, Financial Crisis, Data Envelopment Analysis, Panel Regression Analysis

## Introduction

The banking industry is the key factor for the economical prosperity of all countries, and its capacity of intermediation between the borrower and the lender facilitates the economic activities as a part of the financial sector. Furthermore, it should be noted that the efficiency of the banking sector plays an important role for the monetary transmission mechanism and for the stability of the financial system.

A financial crisis is a disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities (Mishkin, 1997).

The global financial crisis that broke out in 2007 has shown the close connection between financial fragility and current-account imbalances, and between banking and currency crises. The global financial crisis was a result

of unregulated mortgages and credit boom that were pushed by the low interest rate. The expansion in risky mortgages to subprime borrowers primarily resulted in the outbreak of the global financial crisis.

The financial crisis that started in the United States of America and other industrialized economies has contaminated other parts of the world in four different ways (Kibritçioğlu, 2011):

The wealth effect (pure contagion): State and private players lost parts of their savings invested in industrialized and emerging economies.
The financial effect (financial contagion): In order to restore their liquidity and avoid additional risks, investors from all over the world withdrew their capital from developing countries and cancelled new investments. Furthermore, liquidity bottlenecks arose because banks worldwide limited the extension of new credit.

•The real economic effect (trade contagion): Owing to the cooling down of the global economy, the demand for goods exported by developing countries shrank, thus causing their external revenues to plummet. •The transfer effect: Likewise, developing countries' revenues from

transfers such as remittances and development assistance decreased as well.

The analysis of efficiency determinants is important as guidance towards enhancing economic growth since banks contribute to economic growth and stability. Several approaches have been used to estimate banks' efficiency and its determinants. In banking efficiency literature, DEA seems to be used much more compared to other analyses. DEA is used to measure and analyse the relative efficiency and managerial performance of banks that have similar inputs and outputs.

Casu and Molyneux (2003) investigated whether there had been any improvement and convergence of productive efficiency across European banking markets (France, Germany, Italy, Spain and England) since the creation of the Single Internal Market. The DEA results revealed that country-specific factors were still important determinants in explaining differences in bank efficiency levels across Europe.

differences in bank efficiency levels across Europe. Das and Ghosh (2006) investigated the performance of Indian commercial banking sector during the post-reform period 1992–2002 by using DEA. The findings suggested that medium-sized public sector banks performed reasonably well and were more likely to operate at higher levels of technical efficiency. A close relationship was observed to exist between efficiency and soundness as determined by bank's capital adequacy ratio. The empirical results also showed that technically more efficient banks were

those that had, on an average, less nonperforming loans. Aysan and Ceyhan (2007) analyzed the performance of the Turkish banking sector during 1990-2006 by conducting a panel data fixed effects regression analysis. The results have revealed that the efficiency change is

negatively related to the number of branches. They found a positive relationship between loan ratio and efficiency change, and also suggested that bank capitalization was positively related to efficiency change. The return on equity was not statistically significant in explaining any of the efficiency measurements. There was also no robust relationship between foreign ownership and efficiency.

foreign ownership and efficiency. Pasiouras et al. (2007) analysed the cost efficiency of Greek banks and its determinants. They applied a DEA approach to estimate technical, allocative and cost efficiency, using additionally a tobit regression to find the internal and external factors influencing the level of bank efficiency. They found that GDP per capita and unemployment influenced banks' efficiency adversely. The degree of capitalization, the number of branches and quantity of ATMs influenced bank efficiency differently, depending on the measure of efficiency used.

of efficiency used. Hermes et al. (2009) analysed whether the relationship between financial liberalization and efficiency was conditional on the quality of bank regulation in a multi country setting. They evaluated bank efficiency measurements at the individual bank level by using SFA model, and pointed out that the positive impact of financial liberalization on bank efficiency was conditional on the quality of bank regulation and supervision. Sufian (2010) investigated the efficiency of the Malaysian and Thailand banking sectors in and around the Asian financial crisis 1997 by using the DEA. The empirical findings from the multivariate regression analysis suggested that more efficient Malaysian banks had greater loans intensity, higher proportion of income coming from non-interest sources and more profitable.

more profitable.

Diler (2011) analysed the impacts of 2007 global financial crisis on the efficiency and productivity of Turkish banks, during 2003-2010 periods by using Data Envelopment Analysis (DEA) and Malmquist Productivity Index. The analysis indicated that in the pre-crisis period banking sector's risk taking measurement was positive, but in the post-crisis period, it was negative depending on the reduced efficiency scores. However, during the pre-crisis period, moderate credit growth rates were accompanied by reduced NPLRs

## Methodology

Data envelopment analysis (DEA), introduced by Charnes et al. (1978) based on Farrell's work (Farrell, 1957), is a nonparametric technique for measuring the relative efficiency of a set of similar units, usually referred to as decision making units (DMUs). DEA is capable of handling multiple inputs and outputs without requiring any judgement on their importance.

In DEA, the most efficient DMU's are identified by DEA efficiency equal to one. Any DMU with efficiency less than one would be considered relatively inefficient, which denotes the existence of banks having greater efficiency within the data set of banks analyzed. Using DEA will let us determine the amount of excess inputs utilized by each inefficient bank and determine by how much the outputs need to be increased without any change in the number of inputs. In other words, a more efficient bank would achieve the same amount of outputs by using less amount of inputs, or it achieves the same level of output by using less amount of inputs.

Table 1. DEA Input oriented Model

Input-oriented		
Envelopment model		Multiplier model
$\min \theta - \varepsilon \left( \sum_{i=1}^m s_i^- + \sum_r s_r^- \right)$	$\sum_{r=1}^{s} s_r^+$	$\max z = \sum_{r=1}^{s} \mu_r y_{ro}$
subject to		subject to
$\sum_{j=1}^n x_{ij}\lambda_j + s_i^- = \theta x_{io}$	$i=1,2,\ldots,m;$	$\sum_{r=1}^s \mu_r y_{rj} - \sum_{i=1}^m \nu_i x_{ij} \leq 0$
$\sum_{j=1}^n y_{rj}\lambda_j - s_r^+ = y_{ro}$	$r=1,2,\ldots,s;$	$\sum_{i=1}^m v_i x_{io} = 1$
$\lambda_j \geq 0$	$j = 1, 2, \ldots, n$	$\mu_r, \mathfrak{v}_i \geq arepsilon{>}0$

We assume that there are n DMUs to be evaluated. Each DMU consumes varying amounts of m different inputs to produce s different outputs. Specifically, DMU_j consumes  $x_{ij}$  of input i and produces  $y_{rj}$  of output r. We also assume that  $x_{ij} > 0$  and  $y_{rj} > 0$ .  $s_i^-$  and  $s_r^+$  are slack variables.  $u_r =$  weight chosen for output r and  $v_i =$  weight chosen for input i.

The basic DEA - CCR model implies the assumption of constant returns to scale. This assumption was later relaxed to allow for the evaluation of variable returns to scale and scale economies. BCC model implies the assumption of variable returns to scale. The BCC model is obtained by simply adding a convexity constraint  $\sum_{j=1}^{n} \lambda j = 1$  to the dual of the CCR model. A bank exhibits constant returns to scale if a proportionate increase or decrease in inputs or outputs move the firm either along or above the frontier. A bank which is not on the frontier is defined as experiencing non-increasing returns to scale if the hypothetical bank with which it is compared exhibits either constant (CRS) or decreasing returns to scale (DRS). A similar definition applies for non-decreasing returns to scale (VRS) is considered technologically efficient; the VRS score represents pure technical efficiency (PTE), whereas a firm which is efficient under the assumption of

constant returns to scale (CRS) is technologically efficient and also uses the most efficient scale of operation. Aly *et. al.*, (1990), suggest that, from the measures of technical (TE) and pure technical (PTE) efficiency, it is possible to derive a measure of scale efficiency (SE):

SE = TE / PTE

where  $0 \le SE \le 1$ , since CRS  $\le VRS$ . If the value of SE equals 1, the firm is

where  $0 \le SE \le 1$ , since CRS  $\le$  VRS. If the value of SE equals 1, the firm is scale efficient and all values less than 1 reflect scale inefficiency. If scale inefficiency exists (*SE* < 1), the source of inefficiency is the result of operating at either increasing or decreasing returns to scale. Data on banks' inputs and outputs are required to estimate bank efficiency, using the DEA approach. According to the literature, there are three approaches that can be used in defining and selecting banks' inputs and outputs. These are the production approach, the intermediation approach, and profit approach. According to the production approach, a bank is viewed as a producer by using inputs such as capital and labour to produce loans and deposits. The intermediation approach defines a bank as an intermediary that transfers assets from the surplus units to deficit units. The profit approach regards banks as financial institutions, trying to maximize profit through competition. competition.

## **Data and Analysis of Variables**

This paper measures and evaluates the relative efficiency of annual data of 20 commercial Turkish Banks through 2005 - 2014, using three approaches of Data Envelopment Analysis (DEA) in this study. The first is the intermediation approach in which deposits, equity and funds borrowed the intermediation approach in which deposits, equity and funds borrowed are inputs; total loans and receivables and securities are outputs. The second is the profit approach in which interest expenses, personnel expenses and other operating expenses are inputs; interest income and other operating income are outputs. The third is the production approach in which interest expenses, personel expenses and non interest expenses are inputs; interest income and non interest income are outputs. The data used in this study are taken from The Bank Association of Turkey, Turkish Statistical Institute and Database Depolation and Supervision Association Banking Regulation and Supervision Agency. The effects of some selected internal and external factors on

The effects of some selected internal and external factors on efficiency are analyzed by a least square estimation of panel data in the second stage. The bank specific (internal) variables included in the regression models are TL-TA (total loans divided by total assets), ROE (return on equity), ROA (return on assets), EQASS (equity over total assets) NPL_TL (non performing loan over total loans) and II_TA (interest income over total assets ). GDP (gross domestic product) and INF (inflation) are employed as a proxy for economic conditions. The dummy variable is

included in the regression model to see the effect of global financial crisis on the efficiency of Turkish banking sector.

differentiate between fixed effects Hausman test is used to model and random effects model in panel data in OLS. In this case, random effects (RE) is preferred under  $H_1$  hypothesis. Using the efficiency changes as dependent variables, internal and external factors as independent variables can be defined in the multivariate regression models as follows:

 $\Delta TE_{it}^* = \beta_0 + \beta_1 (ROE) + \beta_2 (ROA) + \beta_3 (II_TA) + \beta_4 (EQASS) + \beta_5 (NPL_TL) + \beta_6 (INF) + \beta_7 (TL_TA) + \beta_8 (GDP) + \beta_9 (DUMMY) + \epsilon_{it}$ 

#### **Empirical Findings**

The efficiency change in the banking sector between 2005-2014 was examined by using both CCR and BCC models under intermediation, profit and production approaches.

Efficiency results summarized in Table 2 indicate that domestic banks, especially state banks, are more efficient than foreign banks. The restructuring programs implemented especially for the state banks following 2001 crisis, is an important factor for the increase in the efficiency of state banks. Isik and Hassan (2003) pointed out that foreign banks were found to be more efficient in Turkey. The global financial crisis might be the reason behind the efficiency decrease in foreign banks between years 2007 and 2014.

The pure technical efficiency for banks is quite high, using three models compared with technical efficiency. These results could reveal that there have been some improvements in inputs and outputs used, reflecting that PTE allows efficiency to vary with bank size. The results also show that most of the technical efficiency is in the form of scale inefficiency. Table 2. Efficiency Scores According to Intermediation, Profit and Production Models

	Intermediation			Profit		P	Production		
	TE	PTE	SE	TE	PTE	SE	TE	PTE	SE
2005	0,90	0,95	0,95	0,93	0,97	0,96	0,94	0,96	0,98
2006	0,94	0,96	0,98	0,89	0,94	0,95	0,96	1,00	0,96
2007	0,96	0,99	0,98	0,96	0,99	0,97	0,95	0,99	0,96
2008	0,95	0,98	0,96	0,97	0,99	0,98	0,90	0,96	0,94
2009	0,96	0,98	0,98	0,92	0,98	0,94	0,94	0,98	0,96
2010	0,95	0,96	0,99	0,93	0,97	0,95	0,95	0,97	0,98
2011	0,94	0,97	0,97	0,95	0,98	0,97	0,90	0,94	0,95
2012	0,92	0,96	0,96	0,93	0,98	0,95	0,90	0,93	0,96
2013	0,94	0,98	0,96	0,88	0,96	0,91	0,92	0,96	0,96
2014	0,92	0,97	0,95	0,82	0,96	0,85	0,90	0,9.5	0,95

Turkey's banking system demonstrated a much stronger structure, considering the financial global crisis in 2007, mainly due to the legal regulations implemented a few years earlier. Foreign banks experienced

inefficiency during the financial global crisis. State and private banks were not affected as much as foreign banks but prudent bank operations led credit mechanism to slow down during the global financial crisis. The results, on the technical efficiency, show that only a few Turkish banks were inefficient in generating profit. The financial crisis was found to have a slight impact on the banks' efficiency in managing their financial resources.

	Intermediation			Profit			1	Production		
	TE	PTE	SE	TE	PTE	SE	TE	PTE	SE	
	Prob.	Prob.	Prob.	Prob.	Prob.	Prob.	Prob.	Prob.	Prob.	
с	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
	(2.013)	(2.630)	(3.353)	(1.635)	(2.719)	(2.444)	(1.718)	(2.238)	(2.579)	
INF	0.0244	0.1151	0.0438	0.7660	0.7718	0.0000	0.4528	0.8111	0.4457	
	(-2.270)	(-1.583)	(-2.030)	(0.298)	(-0.290)	(-4.523)	(0.752)	(0.239)	(-0.764)	
EQA SS	0.7847	0.5449	0.0146	0.7338	0.2324	0.8692	0.9627	0.2912	0.9549	
	(0.273)	(-0.606)	(-2.465)	(0.340)	(1.198)	(-0.164)	(-0.046)	(1.058)	(-0.056)	
NPL_TL	0.0755	0.0193	0.1394	0.4341	0.4325	0.6527	0.0806	0.0157	0.4351	
	(-1.787)	(-2.361)	(1.484)	(0.783)	(-0.786)	(-0.450)	(1.757)	(-2.439)	(-0.782)	
ROE	0.1533	0.1263	0.9788	0.1425	0.3476	0.2934	0.2671	0.7043	0.1224	
	(1.433)	(1.536)	(0.026)	(-1.472)	(0.941)	(-1.053)	(-1.113)	(0.380)	(-1.552)	
ROA	0.1485	0.0956	0.9094	0.0194	0.9543	0.0507	0.2763	0.3085	0.0998	
	(-1.451)	(-1.675)	(0.113)	(2.357)	(-0.057)	(1.967)	(1.092)	(1.021)	(1.654)	
TL_TA	0.3081	0.0768	0.0004	0.3776	0.1672	0.2417	0.8467	0.7179	0.3996	
	(-1.022)	(-1.779)	(3.626)	(-0.884)	(-1.386)	(-1.174)	(-0.193)	(0.361)	(0.844)	
GDP	0.4597	0.6856	0.0581	0.0524	0.5267	0.3036	0.2963	0.0260	0.1988	
	(-0.740)	(-0.405)	(1.906)	(-1.952)	(-0.634)	(-1.031)	(-1.047)	(2.245)	(1.289)	
II_TA	0.2830	0.9655	0.0384	0.1905	0.8381	0.0009	0.1069	0.1843	0.7636	
	(-1.076)	(-0.043)	(-2.085)	(-1.314)	(0.204)	(3.365)	(-1.620)	(-1.332)	(0.301)	
DUMMY	0.5659	0.3605	0.0025	0.9743	0.8075	0.3221	0.4936	0.0215	0.7550	
	(-0.575)	(-0.916)	(3.061)	(0.032)	(0.243)	(-0.992)	(-0.686)	(2.319)	(-0.312)	
R-squa red	0.067514	0.093104	0.168709	0.100958	0.078576	0.347869	0.085255	0.183471	0.078203	
Adjusted R- squared	0.020890	0.047769	0.127145	0.056006	0.032605	0.315262	0.039517	0.142645	0.032113	
S.E. of regression	0.076093	0.059786	0.039698	0.092636	0.056253	0.059582	0.069612	0.056173	0.046098	
F-statistic	1.448.050	2.053.240	4.058.975	2.245.903	1705.533	1.066.868	1.864.007	4.493.930	1.696.756	
Prob(F-statistic)	0.170720	0.036013	0.000093	0.021089	0.090570	0.000000	0.059966	0.000024	0.092622	
Meandependent var	0.362634	0.506980	0.450055	0.674013	0.714381	0.565533	0.400241	0.414859	0.318209	
S.D. dependent var	0.083330	0.069412	0.054123	0.099637	0.061960	0.078976	0.079140	0.069331	0.055298	
Sum squared resid	1015.002	0.643378	0.283660	1.544.665	0.569588	0.639010	0.872262	0.567981	0.382513	
Durbin-Watson stat	1.604.375	1060.439	1365.551	1.291.467	1876.335	1.353.767	0.993005	1.565.808	1.868.773	
Hausmann	C	hi-Sq. Statist	tic		Chi-Sq.	d.f.		Prol	b.	
Test		0.000000			9			1.00	0	

Table 3. Effects of Internal and External Factors on Efficiency Change

The effects of internal and external factors on bank efficiency are summarized in Table 3. The impacts of ROA on technical efficiency and scale efficiency are positive under profit approach since more efficient banks generate higher returns accordingly.

NPL represents credit risk. The negative coefficient of NPL_TL with bank efficiency under intermediation approach implies that greater credit risk reduces the degree of bank efficiency. On the other hand, there is a positive coefficient of NPL_TL with bank efficiency under production approach. The empirical finding is consistent with the analysis of Sufian (2010) and skimping hypothesis of Berger and DeYoung's (1997). Under the skimping hypothesis, a bank maximising the long run profits may rationally choose to have lower costs in the short run by skimping on the resources devoted to underwriting and monitoring loans, but bear the consequences of greater loan performance problems.

TL_TA is a measurement of bank's loans intensity calculated as the ratio of total loans to bank total assets. The findings imply that banks with higher loans to asset ratios tend to be more efficient. The scale efficiency under intermediation approach is positively related to TL_TA consistent with that of Sufian (2010).

that of Sufian (2010). Bank performance is sensitive to macroeconomic conditions. Generally, higher economic growth encourages banks to lend more, permits them to charge higher margins, and improves the quality of their assets. GDP exhibits negative relationship with bank efficiency under profit approach but positive relationship with scale efficiency under intermediation approach and pure technical efficiency under production approach. However, during the period under study, Turkish economy had experienced a volatile economic growth, which could result in banks to suffer from lower demand for their financial services, increasing loan defaults, and thus lowering output. The empirical finding under profit approach is consistent with that of Pasiouras et al (2007).

The positive coefficients of GDP (under both models) reveals that Turkish banking sector has exhibited a higher efficiency. Demand for financial services tends to grow as economies expand and societies become wealthier. The high economic growth have encouraged Turkish banks to lend more, permiting them to charge higher margins, as well as improving the quality of their assets. The similiar results reported earlier by Hermes et al. (2009) and by Sufian (2010) suggest that GDP has positive relation with bank efficiency.

INFL is negatively related to Turkish banks' efficiency under intermediation approach and profit approach. The results have shown that, during the period under study, the levels of inflation have not been anticipated by Turkish banks, resulting in the banks' costs to be more than their revenues, consequently having adverse effects on the efficiency.

## Conclusion

The financial crisis was found to have a slight impact on banks' efficiency in managing their financial resources. The empirical results have shown that more efficient banks generate higher returns. GDP and inflation had negative relationship with bank efficiency because of the unanticipated inflation rate and volatile economic growth. Besides, high credit risk causesed inefficiency in managing banks' financial resources. Compared to external factors, internal factors seem to have been more effective on efficiency changes of Turkish banks during the analysis period. Furthermore, banks should focus on the efficiency to become more competitive. Through

the banking sector with high competitive power, economic dynamism would be promoted, and economic stability would be ensured. It should be noted that the critical points for the efficient banking sector are optimal usage of resources, concentration on intermediary function, diversification of product and services, efficient risk management, regulation and supervision.

## **References:**

Avkiran, N.K. (2006) Productivity Analysis in the Services Sector with Data Envelopment Analysis (Third Edition). Australia: University of Queensland

Business School, The University of Queensland. Berger AN, DeYoung R. (1997). Problem loans and cost efficiency in commercial banks. Journal of Banking and Finance 21(6): 849–870. Cooper, William W., Lawrence M. Seiford, and Joe Zhu, eds. *Handbook on data envelopment analysis*. Vol. 164. Springer Science & Business Media, 2011.

Claessens, S., & Kose, M. M. A. (2013). Financial crises explanations,

*types, and implications* (No. 13-28). International Monetary Fund. Das, A. & Ghosh, S. (2006). Financial deregulation and efficiency: An empirical analysis of Indian banks during the post reform period *Review of* Financial Economics 15, 193–221.

Demirgüç-Kunt, A., & Detragiache, E. (1998). The determinants of banking crises in developing and developed countries. *Staff Papers*, *45*(1), 81-109. Diler, Müge (2011). Efficiency, Productivity and Risk Analysis in Turkish Banks: A Bootstrap DEA Approach *BDDK Journal of Banking and Financial* Markets Cilt:5, Savi:2.

Önen, F. K., Eken, M. H., & Kale, S. (2016). Kriz Dönemlerinde Türk Bankacılık Sektörünün Toplam Faktör Verimlilik Değişimi. *International* Journal of Research in Business and Social Science (2147-4478), 5(5), 1-18.

Hermes, Niels, and Vu Thi Hong Nhung (2010). The impact of financial liberalization on bank efficiency: evidence from Latin America and Asia, Applied Economics 42.26: 3351-3365.

Isik, I. & Hassan, M. K. (2002). Technical, scale and allocative efficiencies of Turkish banking industry", *Journal of Banking and Finance*, 26, 719-766. Kibritçioğlu, Aykut (2011)) "Effects of Global Financial Crisis on Turkey [

küresel finans krizinin türkiye'ye etkileri ]", Economics Bulletin, Vol. 31 no.1 p.A16.

Minsky, H. P. (1970). Financial instability revisited: The economics of disaster. Board of Governors of the Federal Reserve System.

Mishkin, Frederic S. (1997). The Causes and Propagation of Financial Instability: Lessons for Policymakers In Proceedings-Economic Policy Symposium-Jackson Hole (pp. 55-96). Federal Reserve Bank of Kansas City.

Sufian, F., & Habibullah, M. S. (2010). Does economic freedom fosters banks' performance? Panel evidence from Malaysia. *Journal of Contemporary Accounting & Economics*, 6(2), 77-91.

# Flood Routing Model Using Genetic Expression Programing

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## Abstract

A change depending on the time of the flood wave moving in a stream using flood routing approach is examined. Flood routing of flood discharge along the river with their account and calculating the changes in the water level of flood protection structure size is determined to safety. The aim of this study, Sutculer flood event will be modeled by Genetic Expression Programing (GEP) method. The GEP method makes use of few hydrologic parameters such as inflow, outflow, and time. Simulation results indicate that the proposed a predictive model is an appropriate for the flood routing. Case study is presented to demonstrate that the GEP model is an alternative in implementation of the Muskingum model.

Keywords: Flood Routing, Muskingum Model, GEP

## Introduction

The damages caused by floods in terms of loss of life, property and economic loss due to disruption of economic activity are very high. Flood peak values are required in the design bridges, culvert waterways, spillways for dams, and estimation of scour at a hydraulic structure. Flood routing is important in the design of flood protection measures in order to estimate how the proposed measures will affect the behavior of flood waves in rivers so that adequate protection and economic solutions can be found. Flood routing is used in flood forecasting, flood protection, reservoir design, and design of spillway and outlet structures.

In the past few years, the applications of artificial intelligence methods have attracted the attention of many investigators. Many artificial intelligence methods have been applied in various areas of civil, geotechnical and environmental engineering. Ferreira (2001) suggested gene-expression programming as a new adaptive algorithm for solving problems. Sivapragasam et al. (2008) used genetic programing approach for flood routing in natural channels. Chu (2009) predicted the Muskingum flood routing model using a neuro-fuzzy approach. Azamathulla et al. (2011) used gene-expression programming for the development of a stage-discharge curve of the Pahang River. Karahan (2012) predicted Muskingum flood routing parameters using spreadsheets. Onen (2014) predicted penetration depth in a plunging water jet using soft computing approaches. Onen (2014) predicted scour around a side weir in curved channel using GEP. Karahan et al. (2015) presented a new nonlinear Muskingum flood routing model incorporating lateral flow. Luo et al (2016) presented evaluation and Improvement of Routing Procedure for Nonlinear Muskingum Models. In recently, Bagatur and Onen (2016) have presented development of predictive model for flood routing using genetic expression programming The objective of this current study is to develop a model for

The objective of this current study is to develop a model for prediction of flood routing in natural channels using GEP method. The performance of the models is evaluated by two goodness-of-fit measures, namely the root-mean-square error (RMSE) and the determination coefficient ( $\mathbb{R}^2$ ). The used GEP model approach is evaluated using hydrograph example and discussed with the observed results.

## Genetic expression programming

Gene expression programming (GEP) is an algorithm based on genetic algorithms (GA) and genetic programming (GP). This algorithm develops a computer program encoded in linear chromosomes of fixed-length. The main aim of GEP is to develop a mathematical function using a set of data presented to GEP model. For the mathematical equation the GEP process performs the symbolic regression by means of the most of the genetic operators of GA. The process starts with the generation of the chromosomes of a certain number of individuals (initial population). Then these chromosomes are expressed and the fitness of each individual is evaluated against a set of fitness cases. Then, the individuals are selected according to their fitness to reproduce with modification. These new individuals are subjected to the same developmental processes such as expression of the genomes, confrontation of the selection environment, selection, and reproduction with modification. The process is repeated for a certain number of generations or until a good solution is found (Ferreira, 2001, 2004, 2006).

The two main elements of GEP are the chromosomes and expression trees (ETs). The chromosomes may be consisted of one or more genes which represents a mathematical expression. The mathematical code of a gene is expressed in two different languages called Karva Language such as the language of the genes and the language of the expression trees (ET). The GEP genes composed of two parts called the head and tail. The head includes some mathematical operators, variables and constants and they are used to encode a mathematical expression. Terminal symbols which are variables and constants are included in the tail. If the terminal symbols in the head are inadequate to explain a mathematical expression, additional symbols are used. The flowchart of GEP is given in Fig. 1 (Onen, 2014).

In GEP method, the main operators are the selection, transposition, and cross-over (recombination). The chromosomes are modified to get better fitness score for the next generation by means of these operators. At the beginning of the model constructions, the operator rates which are specified show a certain probability of a chromosome. In common, recommended mutation rate is ranging from 0.001 to 0.1. Furthermore, recommended transposition operator and cross-over operator are to be 0.1, and 0.4, respectively.

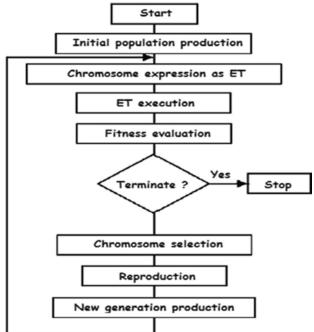


Figure 1. Genetic-expression programming (GEP) algorithm

To generate the mathematical function for the prediction of flood routing was the main aim of development of GEP models. For that reason, a development of GEP model was realized. The GEP model has two input parameters (inflow and time).

There are five major steps in preparing to use gene expression programming, and the selection of the fitness function is the first step. For this problem, it is measured the fitness  $f_i$  of an individual program i by the following expression:

$$f_{i} = \sum_{j=1}^{c_{i}} (M - \left| C_{(i,j)} - T_{j} \right|)$$
(1)

Where *M*=range of selection;  $C_{(i, j)}$  =value returned by the individual chromosome *i* for fitness case *j* (out of  $C_t$  fitness cases); and  $T_j$ =target value for fitness case *j*. If  $|C_{(i,j)} - T_j|$  (the precision) is less than or equal to 0.01, then the precision is equal to zero, and  $f_i=f_{max}=C_iM$ . For our case, we used an M=100 and, therefore,  $f_{max}=1,000$ . The advantage of this kind of fitness function is that the system can find the optimal solution for itself (Ferreira, 2001).

The second major step consists in choosing the set of terminals T and the set of function F to create the chromosomes. In this problem, the terminal set consists obviously of the independent variable, i.e.  $Q = f\{I,T\}$ . The choice of the appropriate function set is not so obvious, but a good guess can always be done to include all the necessary functions. In this case, we used the four basic arithmetic operators (+, -, *, /), and some basic mathematical functions (1/x, x², x^{1/2}).

The third major step is to choose the chromosomal architecture, i.e. the length of the head and the number of genes. The fourth major step is to choose the linking function. And finally, the fifth major step is to choose the set of genetic operators that cause variation and their rates. It is used a combination of all genetic operators (mutation, transposition, and recombination) with parameters of the optimized GEP model (Guven and Gunal, 2008).

This major step is to choose the chromosomal architecture, i.e. the length of the head and the number of genes. After several trials, length of the head, h = 8, and three genes per chromosome were found to give the best results for GEP models. The sub-ETs (genes) of GEP were linked by multiplication. Finally, a combination of all genetic operators was used as the set of genetic operators. Parameters of the training of the GEP models are given in Table 1.

Parameter	Description of parameter	Setting of parameter		
P ₁	Chromosomes	30		
P ₂	Fitness function error type	$\mathbb{R}^2$		
P ₃	Number of the genes	3		
$P_4$	Head size	8		
P ₅	Linking function	*		
P ₆	Function set	+, -, *, /,1/X, $X^{1/2}$ , $X^{1/3}$ , $X^2$ , $X^3$		
P ₇	Mutation rate	0.044		
P ₈	One-point recombination rate	0.3		
P ₉	Two-point recombination rate	0.3		
P ₁₀	Inversion rate	0.1		
P ₁₁	Transposition rate	0.1		

Table 1. Parameters of the optimized GEP model

The performance of GEP models is validated in terms of the common statistical measures coefficient of determination  $(R^2)$  and root-mean-square error (RMSE).

$$R^{2} = \left(\frac{\sum Q_{x} Q_{y}}{\sqrt{\sum Q_{x}^{2} \sum Q_{y}^{2}}}\right)^{2} \qquad (2)$$
$$\left[\sum (Q_{x} - Q_{y})^{2}\right]^{1/2}$$

$$RMSE = \left\lfloor \frac{\sum (Q_o - Q_p)^2}{n} \right\rfloor^{1/2}$$
(3)

Where  $Q_x=(Q_o-Q_{om})$ ;  $Q_y=(Q_p-Q_{pm})$ ;  $Q_o=$ observed values;  $Q_{om}=$ mean of  $Q_o$ ;  $Q_p=$ predicted value;  $Q_{pm}=$ mean of  $Q_p$ ; and n=number of samples

## Introduction basin, gauging station and sutculer flood

Situated on the western Taurus zone of the region, east Dedegöl, located in the south Kuyuluk mountain elevations. Aksu stream flowing and bridge forming deep canyons on the Taurus belt, it reaches the Mediterranean Sea. Sutculer district's annual average rainfall is 916.7 mm. The daily maximum rainfall was measured 212 mm in September 1990.

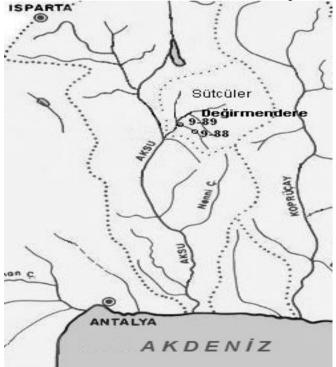


Figure 2. The Flow gauging stations in Aksu River and floodplain

Rainfall started as fraught around Sutculer near town center, and then rainfall turned to rain, and continued without interruption for 4 hours too severe. With the start of precipitation in the form of fraught, delayed flow and deposited with the conversion of rainfall caused a rapid stream. Among them 10 km away with two stations is located where Değirmendere excessive swelling results during the flood, stuck on which bridges are under water, bedside damaged farms producing fish involved and occurred four casualties (Ülke, 2006).

Local falling rainfall is 111.4 mm for 4 hours; this value corresponds to a 25-year time-intensity-iteration value. The water levels in river have found 6.00 m during floods and the discharge was reached 206 m³/s. Flood routing calculations were performed between 9-88 and 9-89 numbered stations (Fig.2). Properties of those stations are presented in Table 2. Flow values measured in the numbered stations 9-88 and 9-89 are shown in Fig 2. **Table 2.** Properties of Station

Tuble 2. 1 Toperties of Button								
Station number	Elevation	Latitude	longitude	Rainfall area km ²				
9-88	750	37° 28' 38.8"	30° 58' 41.40"	131				
9-89	320	37° 27' 50.1"	30° 54' 29.90"	314				

#### Studies and developing of gep models

The GEP model approaches make use of few hydrologic parameters (inflow, outflow and time) as Muskingum model. In developing of GEP model, one case study will be considered here (Fig.3). This case study is based on the inflow and outflow hydrographs exhibiting multiple peaked discharge characteristics (Viessman and Lewis, 2003). This example is hypothetical and probably does not relate to any real-life observation.

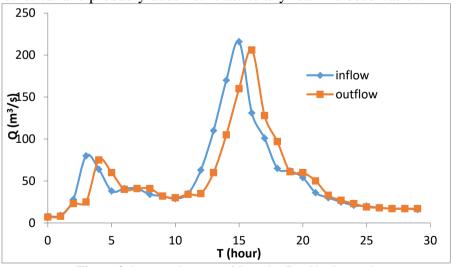


Figure 3. Input and output of Sutculer flood hydrograph

Flood routing procedures may be classified as either hydrological or hydraulic. Hydrological methods use the principle of continuity and a relationship between discharge and the temporary storage of excess volumes of water during the flood period. Hydraulic methods of routing involve the numerical solutions of either the convective-diffusion equations or the one dimensional Saint-Venant equations of gradually varied unsteady flow in open channels. The hydraulic methods generally describe the flood wave profile more adequately when compared to hydrological methods, but practical application of hydraulic methods are restricted because of their high demand on computing technology, as well as on quantity and quality of input data. In practical applications, the hydrological routing methods are relatively simple to implement and reasonably accurate. An example of a simple hydrological flood routing technique used in natural channels is the Muskingum flood routing method (Gill, 1978; Tung, 1985).

In this paper, gene expression programming (GEP) technique is evaluated as an alternative solution against to Muskingum model. Thus, GEP models will be developed without Muskingum flood routing parameters and model. The proposed models include only inflow (I), outflow (Q) and time (T) parameters as model approaches. After all the parameters are defined, the models are simulated. The powerful soft computing software package GeneXproTools 4.0 (Ferreira, 2006) was used to develop GEP-based models for flood routing prediction in this work. This program provides a compact and explicit mathematical expression for flood routing. The terminating criterion was the maximum fitness function, which in turn is a function of the root-mean-square error (RMSE). The program was run for a number of generations and was stopped when there was no improvement in fitness function value or coefficient of determination ( $\mathbb{R}^2$ ).

In the beginning of model studies, the program could not be obtained sufficient predictive model for multiple peaked hydrograph of case study. Therefore, the hydrograph was separated two single peaked hydrographs. Thus, effective models were obtained with three brackets for hydrographs.

The simplified analytical form of the proposed GEP model is expressed for first and second single peaked outflow hydrograph of case study as respectively:

$$Q = \left[ \left( \frac{1}{(I^{0.5} - T) - T - 6.59} \right) \right] \left[ I - \frac{2I}{(761T - I - 9.41)} \right] \left[ \left( \frac{2I + T - 9.98}{(2I + T - 9.98)^{0.5}} + \frac{10.46}{(T - 9.98)} \right) \right]$$
(8a)

$$Q = [0.74 - 1/0.74I(T - 5.1)] [126.1 + 0.15I^3 - I] [4.11 - I^{1/3} + 16.89/(I + 2.90)]^{1/3}$$
(8b)

where I and Q are the amounts of inflow and outflow respectively at time T. In case study, Eq. (8a) is valid for  $0 < T \le 10$  and Eq. (8b) is valid for  $10 < T \le 29$ .

As seen from Figure (Fig.4) GEP model performs extremely well in routing the multi-peaked hydrograph for case study

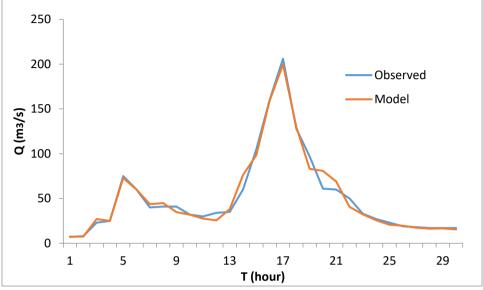


Figure 4. Comparison of observed and predicted outflow values for case study

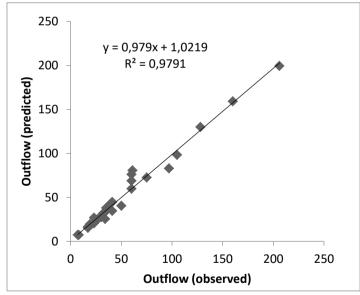


Figure 5. Comparison of observed values versus predicted outflow values for case study

The proposed GEP approach gives good results ( $R^2=0.979$  and RMSE=6.56) compared to the existing predictor for case study (Fig.5). Peak is predicted accurately (199.56 m³/s) and without Muskingum model.

## Conclusion

This study demonstrates the potential of the GEP model for flood routing in natural channels. Therefore, the GEP approach can be used to derive a new model for the prediction of flood routing in natural rivers. The proposed GEP models are tested for the data sets given in literature and it has been shown that the model results are good agreement with the observation values. The comparison shows that the model expressions have the least root mean square error and the highest coefficient of determination. The GEP model predicts the outflow, with an  $R^2$ =0.979 and RMSE=6.56 for case study. The study suggests that GEP techniques can be successfully used in modeling flood routing from the available observed data.

## **References:**

Azamathulla H.M, Ghani A.A, Leow C.S, Chang C.K, 'Gene-Expression programming for the development of a stage-discharge curve of the Pahang river,' Water Resour. Manage, Vol. 25, 2011, pp. 2901-2916.

Bagatur and Onen, "Development of Predictive Model for Flood Routing Using Genetic Expression Programming," Journal of flood risk management, 2016, DOI: 10.1111/jfr3.12232 (in press).

Chu, H. J. (2009), The Muskingum flood routing model using a neuro-fuzzy approach. KSCE Journal of Civil Engineering, *13*(5), 371-376.

Ferreira C, "Gene expression programming: A new adaptive algorithm for solving problems," Complex Systems Vol. 13 (2), 2001, pp. 87-129.

Ferreira C, "Gene expression programming and the evolution of computer programs," in: L.N. de Castro. F.J. Zuben (Eds.). Recent Developments in Biologically Inspired Computing. Idea Group Publishing, 2004, pp. 82–103.

Ferreira C, "Gene-expression programming: Mathematical modeling by an artificial intelligence," Springer. Berlin, 2006,

Gill MA, ''Flood routing by the Muskingum method,'', Journal of Hydrology Vol. 36, 1978, pp. 353–363.

Guven A, Gunal M, "Genetic programming approach for prediction of local scour downstream hyraulic structures," J Irrig and Drain Eng Vol. 134(2), 2008, pp. 241-249.

Karahan, H. (2012). Predicting Muskingum flood routing parameters using spreadsheets. *Computer Applications in Engineering Education*, 20(2), 280-286.

Karahan, H., Gurarslan, G., & Geem, Z. W. (2015). A new nonlinear Muskingum flood routing model incorporating lateral flow. *Engineering Optimization*, 47(6), 737-749.

Luo, J., Yang, X., Xie, J. (2016). Evaluation and Improvement of Routing Procedure for Nonlinear Muskingum Models. *International Journal of Civil Engineering*, 14(1), 47-59.

Sivapragasam, C, Maheswaran, R, Veena, V, "Genetic programing approach for flood routing in natural channels," Hydrol. Process, Vol. 22, 2008, pp. 623-628.

Onen F, 'Prediction of penetration depth in a plunging water jet using soft computing approaches,' Neural Computing and Application, Vol. 25, 2014, pp. 217–227.

Onen F, 'GEP prediction of scour around a side weir in curved channel,'' Journal of Environmental Engineering and Landscape Management Vol. 22 (3), 2014, pp. 161–170.

Tung Y.K, "River flood routing by nonlinear Muskingum method," Journal of Hydraulic Engineering, ASCE Vol. 111, 1985, pp. 1447–1460.

Ülke, A, "Muskingum Metodu Kullanılarak Taşkın Ötelenmesi," Yüksek Lisans Tezi, Süleyman Demirel Üniversitesi, Fen Bilimleri Enstitüsü, 2003.

Viessman W, Lewis G.L, "Introduction to hydrology," Pearson Education. Inc., Upper Saddle River. New Jersey. USA, 2003.

# Mad Users' World - Paradox of Users and Polluters!! - Make A Breakthrough in Environmental Accounting

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## Abstract

If sustainability becomes part of expectations held by society, it must become a business goal-this ensures ongoing survival/competitiveness. Providing information about social and environmental performance will increase the trust a community has in the organization. Entity is treated as distinct from owners and ignores externalities caused by the reporting entity, expenses not controlled by the entity are excluded and externalities caused by the entity can not be reliably measured and so not recognized. This is the contention. This article is conceptual in nature and used secondary data. The limitations of the study are that primary data with secondary data can give a better interpretation. The current attempt is to leave the planet in the same state at the end of the accounting period as it was in the beginning by one the modes of accounting to create responsibility to the users and produces.

## Keywords: Environment, Accounting, Pollution, climate

## Introduction

The gradual flooding of the Statue of liberty, the city of Venice slowly is collapsing into the canals. Stonehenge is eroding under the extreme weather. World Heritage sites on five continents were bound to be affected by factors including rise in sea levels, intense storms and wild fires. It becomes difficult to save every heritage centre. There are going to have to be hard choices made in every country. Skara Brae, a 5000 year old Neolithic settlement in Scotland is at risk from coastal erosion and disappearing into the ocean. It is a very tough challenge, but if we recognize the scale of the problem and most people don't realize how big it is or how fast the changes are coming. "It is important to recognize the adoption is continuous change," Beavers said. "It is not isolated action; it is not a single step. It is a really a process."(The Deccan Herald, May 28, 2016). Likewise, Lakes like Chilka(Orissa); Lok tak(Manipur), Dal and

Likewise, Lakes like Chilka(Orissa); Lok tak(Manipur), Dal and wular(Kashmir) etc, are heavily polluted. The coastal area of Mumbai has become acidic and polluted. Mercury has risen in the sea water in the Gujarat coast in India.

Charapunji(India) gets a bumper 11 metre annual rainfall while Jaisalmer(India) gets only 0.2 metre. In some region or the other, there are floods every year. If there are no floods, then droughts affect. There are more than 4600 large dams in India. One hundred dams are more than 100 years old. And 381 large dams are between 50 and 100 years old. In July 2007, Jaswant Sagar dam in Jodhpur, Rajasthan, collapsed. The 118 years old dam collapsed due to widespread in the downstream area. Dams were considered as solutions but now they pose many problems and challenges.

There are number of industries including heavy industries in India viz., 920 textile mills, 326 sugar mills, 110 Cement plants, 251 paper and pulp board mills, 8 major steel plants, 12 oil refinaries, 47 pesticides mills, etc., discharging their wholly or partially treated effluents on land and water bodies. Eighty percent of the Indian population drinks polluted water from sources like rivers, lakes, ponds, wells. Most of the rivers are heavily pollute, e.g., river Ganga at Kanpur, Varanasi, Patna, Hooghly at Calcutta, Mahi at Baroda, Yamuna at Delhi, Mathura, Agra, Gomati at Lucknow; Khan at Indore, Chambal at Nagada, Narmada at Hoshangabad are highly polluted. The reasons behind all are due to the above mentioned heavy to medium to ordinary industries and buyers cause for pollution.

## **Religion and environment**

If a Muslim plants a tree or sows seeds, when a bird or animal or person eats it, it is regarded as a charitable gift(sadaqah) for him"-imam Bukhari. Hygiene and cleanliness (*tahara*) is integral part to Islam and that it is actually a major sub-branch of Muslim belief. The Prophet used to repair his own shoes, sew his clothes. This shows reusing and repairing things instead of buying new is not a sign of poverty but they are a sign of power. (Authenticated by Al-Albani)

The pope John Paul II sent a message titled as "Peace with God the creator, peace with all of creations" in 1990. The world peace is threatened lot only by the arm race but also by lack of due respect for nature. The tribal people of India, love and live and worship the nature which spell out the basis of this relationship."Mankind has no right to abuse environment" says Pope Francis.

In Jainism, all elements have life, the earth, water, planet, animals and humans are said to have life force. Respect for all life is a cardinal principle of Jainism.

According to the Guatemalan Mayan vision of the cosmos, every form of life emerges from the same origin or seed. Some seeds become trees, others flowers, others water, others human beings. Interrelatedness calls for utmost respect between people and nature and among people themselves

utmost respect between people and nature and among people themselves Society, Politics and Economics Society, Politics and Economics are inseparable therefore economic and accounting issues have to be examined along with the political, social and institutional framework in which the activity takes place. There is a social contract between business and society. Society allows a company to operate so long as it adheres to the norms and values of that society. The users consume more than what they can affordable. If an organization and the users do not operate legitimately, the society can revoke social contract. Business organization is the best place to address the social and environmental issues because they have longer terms of operations. Management seldom tries to make proper arrangement to save the environment unless it is required as per law as there is no direct relationship between investment and benefits. Environmental accounting is taken to mean the identification and reporting of environment related cost such as

mean the identification and reporting of environment related cost such as liability cost and costs related to waste disposal. It is accounting for any costs and benefits that arise from change to a firm's products and processes where the change also involves a change in environmental impact.[The Chartered Accountant 721 November 2005].

US President Barack Obama has announced his Clean Power Plan which will help shut down old coal power plants, prevent construction of new ones and promote renewable energy sources on a massive scale to reduce GHGs by 32% in 2030.

Pope Francis has announced its plan to reduce energy consumption by 50% in 2050 and increase carbon price by four folds. The Father of our nation has issued warning: that "nature can meet all the needs of humanity but it cannot satisfy its greed". He embodied India's civilisational message of "simple living high thinking".

Sir Francis Bacon said, "Nature must be bound into service and *made a "Slave"*. Such a view point cleared the way and provided the justification for a very large scale disruption of environment in the last few centuries.

Meetings of world leader is not the need of the hour, indeed, meeting local women leaders is badly needed for sustainable development. Modern economy is not capable of providing jobs and improving living standards for all. The gap between rich and poor is widening in nation

after nation. Real wages are declining as employment growth sputters. There are more than 100 million unemployed with no sign of promising new jobs. We have growth that impoverishes rather than enriches. The major barriers to reuse of water are psychological, not technical.

Empowerment of human is not possible by shifting from his native place, but finding jobs in his own native- Dr. Amartiya Sen, the economist from India. Instead of economy in service of community we have reverse. In the original Greek, economics (Oikonomia) meant 'good housekeeping' and it is that broader humanitarian vision that has vanished. "True economics, studies the community as a whole and locates market activity within it"-Herman Daly. Developing countries are fooled by the western policies of industrialization. In fact we have given up traditional knowledge and biological resources of the South to illogical, self-centered, erratic, consumerism, unsustainable and market oriented system of the West.

One-third of Greenland is already emptied the ice during summer. Oceans that have risen by 2.5 mm a year will start to rise by a steady 7mm a year. It is because Greenland heats up by at least 2.7^o Celsius. In many cases, the predicted warming exceeded 8^o Celsius. The Arctic Ocean icepacks has thinned by more than 30% in the past three decades which is equivalent to Netherlands each year during the same period. We burn nearly six billion tons a year fossil fuel and released 220 billion tons of carbon dioxide in 2014 to the atmosphere. Deforestation and land use have added 110 billion tones. The world loses 15 billion trees each year. (The Deccan Herald, May 4, 2016).

Climate change may render parts of the Middle East and North Africa uninhabitable, force people to migrate around 500 million (Max Planck Institute for Chemistry, Germany). High temperature reaching 46°C in summer, windblown desert dust may force people to migrate (The Deccan Herald, May 4, 2016).

The Solar Impulse 2, a solar powered aircraft, that has completed around the world journey to draw attention and give hope to clean energy technologies (The Deccan Herald, May 4, 2016, Page 6). Bangalore city has touched almost 40^o C in 2016, Summer began early in February instead of March. Bangaluru is no longer an air-

conditioned city. Sometimes it is hotter than Chennai. (The Deccan Herald, May 4, 2016).

According to WHO, air pollution is claiming annually the lives of 7 million people world wide and 5,70,000 of them are from India. According to 2014 WHO report, Delhi is 11th most polluted city. The 2016 report, 20 most polluted cities are in India out of 3000 cities in 103 countries which includes Gwalior, Allahabad, Patna and Raipur-figure among top 7 seven most polluted cities (The Deccan Herald, May 21, 2016,pp 10).

Rain raises toxic foam levels at Bellandur lake(Bangalore, India). People struggle to bear the stench from polluted water body. The foam level that was earlier at 15 feet has increased to 25 feet on May 20, 2016 after a day rainfall (The Deccan Herald, May 21, 2016,pp 2).

Nearly 40 million Indian will be at risk from rising sea levels by 2050 which will have impact on Mumbai, Kolkota from India. The other cities are: Guangzhou and Shanghai in China, Dhaka in Bangladesh, Yangon in Myanmar, Bangkok in Thailand and Ho Chi Minh city and Hai Phong in Vietnam. Many of the cities will be affected due to coastal flooding and storm surge zone but have limited capacity to adapt due to their fixed location. The livelihood can be negatively impacted by natural disasters, economic crises and climate change. (UN Report-GEO-6, 2016) (The Deccan Herald, May 21, 2016, pp 6).

Deccan Herald, May 21, 2016,pp 6). Environmental damage almost always hits those living in poverty the hardest. The overwhelming majority of those who die each year due to air, water pollution are poor people in developing countries. It is predicted by UNO that Bangladesh will be out of world map before 2050. One tsunami can wipe of this country as this country is flat and seven feet above the sea level. The business are citizens of society in that they benefit from society and so owe duties back to society in the same way that individual human citizen do.

Moving from wood to coal in Europe had taken between 96 and 160 years. Electricity took 47 to 69 years to enter into mainstream use. For example, Ontario shifted away from coal between 2003 and 2014. Indonesia took three years to move two third of the population from kerosene stove to LPG stove. France's nuclear power program using 4% of the electricity supply to in 1970 has increased to 40% in 1982. Strong government intervention, shifts in consumer behavior with incentives and pressure from shareholders make all these possible (The Deccan Herald, April 19, 2016).

Significant shifts in technology, political will with regulations, tariffs and pricing regimes and behavior of users and adopters would help to move to a cleaner energy. According to Prof. Benjamin Sovacool, Director of Sussex Energy Group at the University of Sussex in the UK, future transformation can happen much more rapidly.

Director of Sussex Energy Group at the University of Sussex in the UK, future transformation can happen much more rapidly. Intergovernmental Panel on Climate Change (IPCC) studies have showed that to keep global temperature rise within two degrees. The total carbon that can be put into the environment is about 1000 billion tons. According to a new study reported in Nature, 38% of oil reserves in Middle East, 50% of gas reserves of former Soviet Union countries and 82% of world coal reserves will remain un-burnt. IPCC projected 1000 billion tons we have already exhausted about 515 billion tons and the rate at which we

are putting carbon into the environment we will exhaust our carbon budget before 2040. It is the time to focus on Green GDP considering environmental degradation. It is the time to redefine, reorient business perception about business profits in the present global warming, global booming of pollution, climate change. It is the time to redefine financial accounting, recording costs and revenue, profit, divisible profit and rename it as environmental adjusted profits, environmental adjusted divisible profits, environmental adjusted EPS. It is the time to harmonise traditional financial bottom-line with environmental bottom-line new form of accountability but also new form of accounting.

#### **Environmental accounting**

"Environmental accounting "Environmental Accounting is the identification, measurement and allocation of environmental cost, the integration of these environmental costs into business decisions and the subsequent communication of the information to a company's stakeholders."

Accounting for environment helps in accurate assessment of costs and benefits of environmental preservation measures of companies (Schaltegger, 2000). It provides a common framework for organizations to identify and account for past, present and future environmental costs to support managerial decision- making, control and public disclosure (KPMG and UNEP, 2006).

Environmental accounting is a broader term that encompasses the provision of environment-related information both externally and internally. It focuses on reports required for shareholders and other stakeholders, as well of the provision of management information.

**Change development model from conventional model of accounting** The conventional growth oriented profit maximization models should be re-oriented and models which can sustain economic development without sacrificing bio diversity and interests of future generations should be evolved and incorporated in development planning. Loss to environment should be evolved included as an element of cost in all cost benefit analysis of companies. Economic growth rate should be discounted by the loss to environment. Net Profit, EPS, are to be discounted to the extent of environmental degradation contributed by companies to disclose true economic profits of the economic organizations to fulfill social contract and business organisations.

#### Significance of study

For India. both 'Environment Protection' and Economic Developments are the matters of great importance. However, there is need to tradeoff between environment protection and economic development(Make In India). For this purpose, Environmental Accounting is required to measure the environmental impact of economic activities by corporate and reporting such environmental activities. A standard system of environment accounting is already in place in the form of Responsibility Reporting in India and Global reporting Initiative(GRI) world wide.

#### **Review of literature**

Environmental Accounting and Profitability Different studies and their results in measuring the relationship between environmental disclosure and financial performances show a mixed results.

The Centre for Promoting ideas, USA found a positive association between profitability and Environmental Accounting. Waddock and Gravess(1997) Corporate Social and environmental disclosure and financial performance(Profitability) has positive association. Coven et.al.(1987) found no association between environmental

accounting and profitability.

Belkaoui and Kirkpin(1989) There is a significant pair of correlation but an insignificant regression co-efficient for the return on assets and corporate socio-economic environmental accounting disclosure. It is also identified different terms are used under social responsibility accounting such as: Social Performance Information, Social Audit, Social Accounting,

Social Responsibility Accounting and Social and Environmental Reporting. Healy&Palepu(2001) and Lundholm&Myers(2000), The research focus on relationship between voluntary disclosure and the effect of

 focus on relationship between voluntary disclosure and the effect of voluntary disclosure on return earnings.
 Choi(1998) there is a lack of specific studies regarding Corporate Social Environmental Disclosures in both in Developed and developing countries and profitability and corporate financial performances are used as explanatory variable for different disclosure level. The relationship between CFP and CSEDs is a controversial issues but yet to be solved. The profitability of the reporting company is depressed due to additional costs associated with the Social and environmental disclosure.

Roberts(1992), there is a positive relationship between profitability level of a company and CSED.

Patten(1992) , failed to find positive relationship between profitability and CSED and CSED has increased over years. Shil & Iqbal (2005), The most widely used technique for analysis of narratives in annual financial reports is Content Analysis. In order to deviate from this Multiple Regression Models is used. It was observed that most of the studies were conducted in developed world and very few studies focused on developing countries such as India. on developing countries such as India.

**Bassey Eyo Basseyl, Sunday O.Effiok, E.Eton(2013)** organizational performances enhanced due to environmental cost management which has influence on profitability. Lack of environmental reporting and disclosure standards significantly affects the reporting and uniformity in disclosure of environmental related information.

Akerlof(1970), More profitability firm are more likely to disclose more comparing to less profitability firm to screen themselves from less profitable firm.

**Inchausti(1997)** A good company has incentives to differentiate oneself from less profitable company in order to raise capital and managers of very profitable company can earn personal advantage such as continuing their position and compensation arrangement.

#### **Global Excise**

United Kingdom Companies Act requires companies to report on GHG emission in the annual report. Environment accounting is also known as "total cost accounting" or "Whole cost accounting". A few companies in order to gain attention and stimulate interest, they use different name for it. For example, Barclays, the UK bank, names it as "Citizenship report", Glaxosmithkline calls it as "Corporate responsibility report" where as other companies uses name as "ESG"(environment, social and governance )report.

In Norway, publicly owned and listed companies must report on environment degradation and investments must be reported in the Board of Directors or separate report.

In France, the Grenelle II Act requires listed and large companies to report on Carbon Reporting in the annual Management report and in 2011 further disclosures on climate change is mandated.

In Denmark 1,100 of the largest companies are required to Carbon Reporting. Moreover climate and human rights are to be reported in the annual report.

In Malaysia, publicly owned companies are to publish Carbon report information in the annual report. Malaysia Stock Exchange requires listed companies to describe how material economic, environmental, social risks and opportunities are managed.

In Indonesia, reporting on CR in the annual company report is mandatory for publicly listed and Limited Liability companies.

In South Africa, the King III, code of government principle listed companies are required to apply King III or disclose why they do not.

The reporting system on environment either is to satisfy legal requirements or becomes a fashion to distinguish from other companies rather than accountability to environment. It is the time to disclose environmental cost incurred as part of financial statement and future expected liability due to environmental degradation to be treated as liability in the balance sheet. Already there are mechanism to in place to disclose as a part of financial statements in order to create socially accountable to the society.

#### **ACCA Curriculum**

ACCA has introduced a new paper in 2013 namely "Environmental Accounting and Reporting" with the theme of "accountability, transparency and sustainability". The social and environmental effects are assessed due to economic activity of the business. Traditional belief is that business need only report upon the things that are measurable and that are required under laws, accounting standards or listing rules

#### Sebi

**India:** In 2012, SEBI issued an order to top 100 companies based on market capitalization has to prepare stand alone Responsibility reporting is in this direction of recording of externalities and reporting legally in the financial accounting and auditing. In 2015 it is extended to 500 companies who are listed in BSE or NSE. In addition to the above, Companies Act 2013 also emphasizes 2% Of the profits to be spent on CSR activities. All the companies who fulfill the above requirements as per SEBI have to follow pattern prescribed under Responsibility Reporting.

#### Worldwide provisions and legislations

The world bodies have developed disclosure schemes on environments. Some are voluntary in nature. The voluntary disclosure schemes are from **Carbon Disclosure Project (CDP)**, Japan Voluntary **ETS(JVETS) and California Climate Action Agency(CCAR).** The regulatory disclosure scheme from the US State of New Mexico's mandatory green house gas reporting, the California Global Warning Solutions Act (2006), National greenhouse and Energy Reporting System(NGERS) and the Australian Government's National Greenhouse and

Energy Reporting Act 2007. The United States Environmental Protection Agency (EPA) provides a framework for identifying environmental costs. Environmental costs are divided into four categories. a) Conventional company b) potentially hidden c) contingent d) image/relationship costs.

Due to ISO 14001 certification of companies environmental management System has been increased in 2009 as compared to 2007. World Academy of Science, Engineering and Technology 63 2012 Mark de Haan has discussed the modes of the international harmonization of environmental accounting: comparing the National Accounting Matrix

including Environmental Accounts of Sweden, Germany, the UK, Japan and the Netherlands. These countries have presented their results in a National Accounting Matrix including Environmental Accounts (NAMEA). The second section presents a preliminary comparison of the results which shows that comparable accounts will not automatically lead to comparable results. United Nations Handbook of National Accounting, Studies in

United Nations Handbook of National Accounting, Studies in Methods Series F, No. 78 Integrated Environmental and Economic Accounting: An Operational Manual, United Nations discussed about growing pressures on the environment and increasing environmental awareness that have been generated the need to account for the manifold interactions between all sectors of the economy and the environment. The conventional national accounts focus on the measurement of economic performance and growth as reflected in market activity. It also deals with the sustainability of growth and development, the scope and coverage of economic accounting that needs to be broadened to include the use of nonmarketed natural assets and losses in incomegeneration resulting from the depletion and degradation of natural capital. The conventional accounts do not apply the commonly used depreciation adjustment for human-made assets to natural assets. Since sustainable development includes economic and environmental dimensions, it is essential that national accounts reflect the use of natural assets in addition to produced capital consumption. In 2001, The United Nations Division for Sustainable Development

In 2001, The United Nations Division for Sustainable Development (UNDSD) emphasized their belief that environmental management accounting systems generate information for internal decision making rather than external decision making. This is in line with my statement at the beginning of this article that EMA is a subset of environmental accounting as a whole. The UNDSD make what became a widely accepted distinction between two types of information: physical information and monetary information. Hence, they broadly defined EMA to be the identification, collection, analysis and use of two types of information for internal decision making: physical information on the use, flows and destinies of energy, water and materials (including wastes) monetary information on environment-related cost, earnings and savings.

environment-related cost, earnings and savings. In 2003, The UNDSD Identified Four Management Accounting Techniques for the identification and allocation of environmental costs: input/ outflow analysis, flow cost accounting, activity based costing and lifecycle costing. These are referred to later under 'different methods of accounting for environmental costs'.

**SETAC** (The Society of Environmental Toxicology and Chemistry): Guidelines were issued by the Society of Environmental Toxicology and Chemistry (SETAC) in 1993, a multi-disciplinary, a code of practice and ethics requires that company which manufactures are required to

take back their products after consumers use. It is also known as Take-back Legislation. It is worth to note that German companies have to collect packaging materials. Some companies like Ciba-Geigy, Church & Dwight and Dow Chemical have adopted Life Cycle Costing technique in health care, pharmaceuticals, agricultural products and chemicals. ICMA, India:"The Cost Accounting Standards on pollution control-

14 (CAS-14) was issued by the Cost Accountants of India. This standard gives broad outline on principles and methods of classification, measurement, assignment of costs to product or service and the presentation and more importantly disclosure in cost statements.

Oracle Environmental Accounting and Reporting enables organizations to track their greenhouse gas (GHG) emissions and other environmental data against reduction targets. This facilitates environmental reporting under the legalized or voluntary reporting schemes. The Oracle Business Intelligence can provide immediately environmental data to identify and manage CO2 and cost reduction opportunities. It helps organisation to improve ROI. Environmental Accounting and Reporting extends the capabilities of both Oracle's E-Business Suite Financials and JD Edwards Enterprise One family of applications.

Advantages or Oracle Environmental Accounting and reporting:

Increase environmental data collection reliability and efficiency. Comply with Global Greenhouse Gas Regulations 1.

2.

It improves environment and financial performance. 3.

It integrates with financial accounting solutions to leverage existing 4. business processes and maintain a single source of truth.

5. It brings out accurate, repeatable and verifiable methodologies for greenhouse gas calculations in accordance with global standards.

6. It also supports for multiple reporting standards, shorter reporting cycle times, internal tracking and flexible ad hoc reporting.

The most important accounting standards specifying it and when to recognize (all) liabilities are IAS F 91 and FAS 5.

A liability is recognized in the balance sheet when it is possible that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and amount at which the settlement will take place can be measured reliably (IASC 1995-96, [IAS F 91].

The Canadian Association for Accounting Standards has issued a special guidelines (Can, 1993, Sec. 3060: 39). If the liability cannot be measured reliably it is a contingent liability which should be disclosed as a note to the financial statement. Special guidelines are issued regarding the provision for environmental liabilities due to contaminated landfills. Provisions should be made for future removal and site restoration costs net of

expected recoveries and charged to income. The accumulated provision should be recorded as a liability.

If goods are sourced from suppliers it has to be certified to be complaint with social and environmental standards such as SA 8000, ISO 14001, OHSAS 18001 or relevant labels like Rainforest Alliance, Rugmark and RSPO.

#### NVGS

The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business(NVGS) notified by Ministry of Corporate Affairs, the Government of India, in July, 2011 with respect to reporting of environmental degradation on Voluntary basis.

#### **Responsibility Reporting**

SEBI has mandated inclusion of Business Responsibility Report (BRR) for the top 100 listed entities, as a part of the Annual report dated August 13, 2012. The top 100 listed companies are based on Market Capitalisation at BSE and NSE as on March, 2012. It becomes mandatory to furnish the Business Responsibility Report to the Stock Exchange where they are listed and publish the report on their websites. They are expected to follow guidelines and formats provided in SEBI's Circular. The format has follow guidelines and formats provided in SEBI's Circular. The format has to be adhere to. It is applicable to all companies including finance companies. The Indian subsidiary has to prepare a separate Business Responsibility Report as per SEBI even though multinational holding company prepares report as per Global Reporting Initiative(GRI). If Indian Holding company prepares report as per GRI, the Indian subsidiary is exempted from the Business Responsibility Reporting. Failure to comply with will be construed as non-compliance with clause 55 of Equity Listing Agreement. The reports are can be limited to three products and services on their contribution to company's turnover. Even cases filed against the company with respect to environmental violation have to be reported.

#### Listed Companies in India

From 2015 onwards 500 listed companies in India has to prepare annual business responsibility reports covering their activities related to environment, According to Securities Exchange Board of India. It has moved from 100 to 500 listed companies in India. The top 500 listed companies are based on their market capitalization at the end of March every year. This is green initiative through annual reports. (The Times of India, Nov.30, 2015) **Carbon tax**: In order to reduce fossil fuel use in energy resource as

per the Kyoto Protocol, the Government of India imposes levy Rs.50 for each metric ton of coal(domestic and imported). This fee is also known as environmental tax or tax on carbon. The amount collected from the fee will

help to create National Clean Energy Fund for financing research and innovative clean energy technologies in India.

#### Conclusion

Change in the pattern of thinking and recording all business related activities whether quantitative or qualitative in nature are to be recorded quantitatively which is not a difficult task in the computerized world, and reported to all stake holders disclosing the quantum of value of environmental degradation by every polluted business or non-business organization. Corporate are facing the challenges to determine their true profits, after considering environmentally sustainable costs. For this, companies have a duty to account for the environment. Environmental costs are social costs. They should take account of its every significant external environmental impacts and in effect, to determine what profit would be left at the disposal of the stakeholders (if any). The current attempt is to leave the planet in the same state at the end of the accounting period as it was in the beginning. More over business entities have social and moral responsibility to make changes in the pattern of disclosure of profits after adjusting economic environmental costs due to pollution that it generates in doing business. Environmental cost adjusted net profit, EPS, ROCE, ROI, Dividend per share has to be disclosed in the financial statements. The appropriated environmental cost from profits are to be used for the social welfare and reduce carbon footprint for the betterment of the society. Government and professional organization can bring out rules and legislation to incorporate environmental adjusted cost to profit and EPS. However, tax is to be imposed on net profit before environmental cost adjustment. Any carbon credit certified can be given tax incentives.

#### **Reference:**

#### Journal

The Greenhouse Gas Protocol(GHG) initiative- A Corporate accounting and reporting standard(Revised Edition, 2004) of the World Resources Institute(WRI) the World Business Council for Sustainable and Development(WBCSD).

Kyoto Protocol, 1997.

Intergovernmental Climate Change 2001, Working Group I: The Scientific Basis.

The Japan Gas Association " Guidelines on the introduction of environmental accounting in city gas companies" (FY 2000 version). Guidelines are issued by Ministry of Environment 2002, Japan Environmental Accounting/CSR survey main survey report, October 2009

ICB_ Rules.pdf , A guide to Industry Classification Bench Mark(Equity) Version-2.0 November 2015.

#### **Research Articles:**

Noor Mohammad (2012), "Need to implement the Environment Accounting Education for Sustainable Development", World Academy of Science, Engineering and Technology, Page 63.

O'Mahony, M. and Timmer, M.P.,(2009) "Output, Input and Productivity Measures at the Industry Level: the EU KLEMS Database", Economic Journal, 119(538), pp. F374–F403.

OECD (Organization for Economic Co-Operation and Development) and WTO (World Trade Organization), and World Bank(2014). Global Value Chains: Challenges, Opportunities, and Implications for Policy. Report prepared for submission to the G20 Trade Ministers Meeting Sydney, Australia, 19 July 2014. Paris, Geneva and Washington, DC.

Osakwe, P.N., (2007), "Foreign Aid, Resources and Export Diversification in Africa: A New Test of Existing Theories" MPRA Paper No. 2228. Munich: Munich Personal RePEc Archive.

Palanivel, M. and P. Raja Guru (1999), "The Present Status of the River Noyyal" in Proceedings of the Workshop on Environmental Status of Rivers in Tamil Nadu, Bharathiyar University, Coimbatore.

Panwar, N.L., Kaushik, S.C. and Kothari, S.(2011) "Role of Renewable Energy Sources in Environmental Protection: A Review. Renewable and Sustainable Energy Reviews", 15, pp. 1513–1524.

Park, S.-H. and Chan, K.S. (1989), "A Cross-Country InputOutput Analysis of Intersectoral Relationships between Manufacturing and Services and their Employment Implications. World Development, 17(2), pp. 199–212.

Park, S.-H., (1989) "Linkages between Industry and Services and their Implications for Urban Employment Generation in Developing Countries", Journal of Development Economics, 30(2), pp. 359–379.

Pedersen, E. (2011), "Health Aspects Associated With Wind Turbine Noise. Results from Three Field Studies", Noise Control Engineering Journal, 59(1), pp. 38–46.

Pereira, A.A, (2006), "Biotechnology Foreign Direct Investment in Singapore", Transactional Corporations, 15(2), pp. 99–124.

Pfaltzgraff, L.A., De Bruyn, M., Cooper, E.C., Budarin, V. and Clark, J.H.( 2013), "Food Waste Biomass: A Resource 257 References for High-Value Chemicals", Green Chemistry, 15(2), pp. 307–314.

Pietrobelli, C. and Rabellotti, R. eds. (2007), "Upgrading to Compete: SMEs, Clusters and Value Chains in Latin America" Cambridge, MA: Harvard University Press.

The IUP Journal of Accounting Research and Audit Practices, 2011, vol. X, issue 2, pages 28-44

The Japan Gas Association "Guidelines on the introduction of environmental accounting in city gas companies" (FY 2000 version).

## The System of Economic-Statistical Indicators of the Analysis of Foreign Economic Relations of the **Country: A Case Study on Syria**

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#### Abstract

Abstract In modern conditions of globalization, the quality of static data of foreign economic relations of the country plays an important role in decision-making about the foreign economic sphere of the country. This is without their quality leading to wrong static analysis of the indicators of foreign economic relations and methods of evaluation. As a result, it is impossible for correct decision not to be made by the government. Also, there are questions about what are the important priorities in the development of foreign economic relations of the country. According to the analysis of static indicators of foreign economic relations of Syria before and during the crisis, we noted that there was a deterioration of all indicators of foreign economic relations due to armed conflict. This includes the increase in the external debt 2.75 times in 2014 compared with the period before the in the external debt 2.75 times in 2014 compared with the period before the crisis, the decline in exports and imports, and the improvement of e-government. In addition, work without high-quality cannot control foreign trade transactions.

Keywords: External economic relations, foreign trade, economic sanctions, exports, imports, the financial crisis, globalization

#### Introduction

In evaluating foreign economic relations, the author suggested the use of economic indicators on the basis where it became possible to reason the foreign economic policy of Syria. It is a detailed multi-criteria analysis which uses a reliable and qualitative data. However, it is able to display real situation of foreign economic relations and the prospects of their development and strengthening (Figure 1).

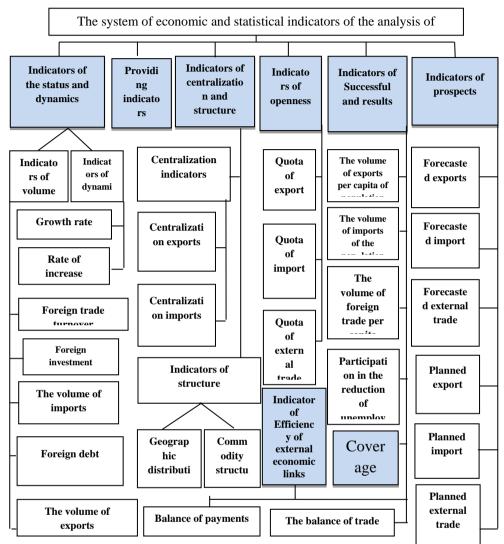


Figure 1. The system of statistical and economic indicators of foreign economic relations. Source: Compiled by the author [6, page 17]

Consequently, economic openness gives the country an advantage in the development of foreign trade activities. Also, economic sanctions are barriers that limit the desire for openness. In order to assess the country's participation in the international division of labor in every way, the World Bank recommended the use of the indicators of quotas. The indicators of quotas can be defined as the ratio (in %) of exports, import, and external trade to GDP. However, those indicators do not reflect the differences between the economies of developed and developing countries according to their level of economic development. Also, they do not include other forms of foreign economic relations (investment, financial, etc.).

Therefore, the following indicators are recommended for assessing the effectiveness of foreign economic relations at work (Table 1).

 Table 1. Indicators for assessing the efficiency of foreign economic relations for developed and developing countries (%)

Indicator	Formula	For developed countries	For developing countries
A	$\frac{E}{I}(1)$	≥100%	≥100%
В	$\frac{FDI}{GDP}(2)$	≥15%	≥10%
ſ	$\frac{GDP}{ED}(3)$	≥113%	≥170%

A - Coverage ratio of imports by exports %;

 $\beta$  - The degree of participation of foreign direct investment to GDP %;

∫- Coverage ratio of External debt by gross domestic product %;

E: Exports billion dollars U.S.;

I: The volume of imports billion U.S.;

FDI: Foreign direct investment billion dollars U.S.;

GDP: Gross Domestic Product (GDP) billion dollars U.S.;

ED: Billion external debt U.S. \$.

Source: Calculated by the author. Data Source: World Bank http://data.worldbank.org

Furthermore, we can build the following equation on the basis of Table 1. Therefore, the synthesis of performance is given as:

# $Y_{\text{COFER}} = A x \beta x \int x 100\% = \frac{E}{I} x \frac{FDI}{GDP} x \frac{GDP}{ED} x 100\% \ge 17\%^{18}$

 $\mathbf{Y}_{\text{COFER}}$  - Coefficient of the efficiency of foreign economic relations of the country

[6, page. 18]

The next step will identify the main reasons for ineffective implementation of Syrian economic relations before and during the crisis. *Analysis Indicators of Macroeconomics and External Economic Relationship of Syria* 

The investigation of the influence of socio-economic crisis is reflected in the comparative analysis of foreign macroeconomic indicators before and during the crisis (Table 2).

Table 2. The most important macroeconomic indicators of the Syrian economy in the period 2000 - 2014

2000 - 2014							
Period		GDP bln. Dollars. USA	GDP per capita Dollars. U.S.	Unemploy ment rate %	Budget deficit to GDP%	The level of economic growth%	
Before the	2000	19,7	1201	9,5	-0,07	2,7	
crisis	2001	21	1282	10,3	3,14	5,2	
	2002	21,8	1206	11,7	-1,07	5,9	
	2003	20,9	1389	10,8	-3,27	5,6	

¹⁸ Calculated by the Author

	2004	24,5	1563	12,3	-5,26	6,9
	2005	28,4	1761	8,1	-5,3	6,2
	2006	33,1	2059	8,2	-3,56	5
	2007	40,3	2583	8,4	-3,42	5,7
	2008	52,6	3573	10,9	-7,44	4,5
	2009	54,1	2923	8,1	-8,65	6
	2010	60,5	2658	8,6	-5,85	3,4
In the	2011	56	2658	14,9	-5,37	-2,3
conditions	2012	40	1867	35,4	-14,68	-3,6
of	2013	33	1514	49,7	-16,56	-3,23
instability	2014	23	1038	57,7	-12,14	-3,2

Source: Calculated by the author based on UN data, world factbook CIA USA, GWB, Syrian Centre of Statistics, Syrian Investment Agency SIA, SCPR - Syrian Center for Policy Research

Comparative analysis of macroeconomic indicators Syria showed a significant reduction of economic indicators during the crisis. Thus, GDP declined by 2.6 times, GDP per capita - 3.4 times, and unemployment rate rose to 57.7%. Budget deficit to GDP ratio increased to - 12.1%. In addition, there was a recession as a result of the crisis.

The most important indicators of foreign economic relations is an indicator of openness (export quotas, import quotas), as well as indicators of external debt and foreign investment (Table 3).

Table 3. The most important indicators of Syrian foreign economic relations in the period

			The	2000 - 2014 A	В	ſ
Period	Quota export%	Import quota%	external debt to GDP%	The coverage ratio import from export %	Foreign direct investment to GDP%	Coverage ratio of foreign debt%
2000	35,4	28,6	112,71	123,78	1,37	88,72
2000	35,4	28,0	112,71	121,23	0,52	99,64
2001	38,1	30,5	92,26	124,92	0,53	108,39
2002	33,5	28,6	91,79	117,13	0,77	108,94
2004	40,1	39,8	77,65	100,75	1,12	128,78
2005	40,4	41,6	19,66	97,12	1,76	508,65
2006	39,5	38,7	16,8	102,07	1,99	595,24
2007	38,6	37,8	14,1	102,12	3,08	709,22
2008	28,95	34,2	10,22	84,65	2,79	978,47
2009	19,37	28,21	10,49	68,66	4,75	953,29
2010	20,23	28,74	8,7	70,39	2,43	1149,43
2011	18,75	35,48	8,87	52,85	0,12	1127,4
2012	6,56	26,37	10,18	24,88	0,01	982,32
2013	3,98	17,61	14,4	22,6	23,53	366,67
2014	5,7	19,57	50,43	29,13	8,17	198,29

Source: Calculated by the author based on UN data, world factbook CIA USA, GWB, Syrian Centre of Statistics, Syrian Investment Agency SIA, SCPR - Syrian Center for Policy Research Analysis of macroeconomic indicators shows a direct relationship between the decline in GDP and the indicators that characterizes the openness of the Syrian economy. Therefore, a decrease in GDP of export quota was reduced to 5.7%, the import quota to 19.6%, the external debt of Syria increased to \$ 11 billion, and its share in GDP rose up to 50.4%. On the other hand, the decline of economic openness indicators data does not determine the overall degree of efficiency of the foreign economic relations of the country.

When evaluating the foreign economic relations of Syria, the author proposes to characterize the efficiency of external economic links (EEL) in the calculation of the indicators.

However, the calculation of the rate of the efficiency of foreign economic relations of Syria, during the 2000 - 2010 biennium, show a gradual improvement through the action of the following factors:

- After a change of government in 2000, the new government began the process of economic transition from a closed economy to an open type;

- The Government's priorities were aimed at reducing the external debt, as well as attracting foreign investments;

- The volume of domestic production increased, while import coverage ratio of exports and became positive (greater than 100%).

As a result, the management of foreign economic activity in Syria during the analyzed period was effective as the external economic links (EEL) efficiency ratio (over 17%) (Graph 1).

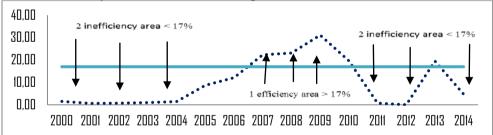


Figure 1. Dynamics of efficiency ratio of Syrian Foreign Economic Relations (YEEL) in the period 2000 - 2014

Source: Calculated on the basis of the author of the application of formulas (4) and a data in Table 3

The graph 1 defined the boundaries of the zone by characterizing the efficiency of foreign economic relations of Syria. During the period of social and economic crisis, the ratio below 17% is mainly due to a sharp decline in output (GDP), import and export coverage ratio (below 100%), and an increase in external debt. In 2013, the efficiency ratio was more than 17% increase in its impact factor based on the growth of FDI to GDP. This is

mainly due to the increase in foreign trade activities with SoyuzNefteGaz and other Russian companies in the field of oil production.

Consequently, this was performed on the basis of a comprehensive analysis of inter-related macroeconomic and external economic indicators identified in priority areas. Thus, this helps in the development of the foreign economic relations of Syria in conditions of instability.

In the course of the study, author disclosed institutional and legal factors which are influencing the conduct of the state's foreign economic policy. However, such factors include the lack of a permanent state of control over the adoption and enforcement of laws that is regulating the external economic links (EEL).

Forecast Indicators of External Economic Relationships of Syria

In this paper, the author proposes to use the short-term model (e.g., Brown model) to predict the development of various trends in foreign trade situation in Syria.

To implement the preferred direction of applied statistical research in the thesis, the following advanced scorecard was used:

U1: The export quota (volume of exports / GDP (%))

U2: Import quota (imports / GDP (%));

X1: Foreign direct investment to GDP (%);

**X2:** The unemployment rate (%);

X3: US dollars on the world price of oil;

X4: The budget deficit to GDP ratio (%);

**X5:** The external debt to GDP ratio (%);

X6: The level of economic growth (%).

To export quotas, calculated significance level P-value for the X2, X5 <0.05 (a measure of the significance of F in the ANOVA table as  $F_{tab.} = 2.79$  < $F_{ex}$ .= 19.18) confirms the importance of R2.

To import quota, U2 significance P-value for the X1, X6, close to 0.05 (the index value of F in the ANOVA table is expressed as  $F_{tab.} = 2.79 < F_{ex.} = 7.18$ ).

Using regression analysis, the inclusion and exclusion of variables obtained the following regression equation of exports and import quotas.

 $Y_{I} = 33.6 - 0.6 X_{2} + 0.1 X_{5;\dots(5)}$ 

 $V_2 = 30.4 - 0.5X_1 + 0.8X_6$ .....(6)

Results of forecasting of Syrian export and import quotas in period 2015 - 2016 will be the following: (Count 5).

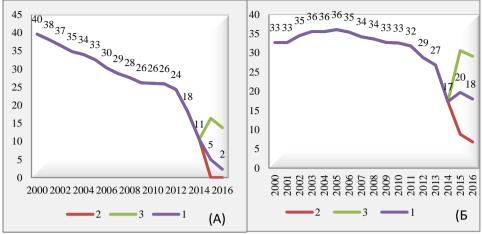


Figure 2. Confidence intervals, which may vary projected quota of exports and imports of Syria during the 2015 - 2016 (Chart 2)

1- quota (A) exports; (B) imports; 2- the lower bound; 3- upper boundary; Source: Calculated by the author based on the data tables 3 and 4.

However, the confidence interval is an alleged export quotas in various stages:

According to the calculated data, the participation of Syria in the international division of labor will decline in 2015 and 2016. Due to the armed conflict, Syria has a closed type of economy.

Under certain conditions, the end of the armed conflict in Syria, the most important task is to restore the national economy. To do this, we must connect the Syrian economy into the world economy through the development plan for future economic development. When designing the development plan, it is advisable to use the adaptive model that gives the forecast in the short term. For example, F parameter characterizing the importance of the table Analysis of variance is in the following ratio:  $F_{ex} = 8.86 > F_{im} = 4.09 > F_{tab.} = 2.79$ . Also, R squared = 0.87 for y1, y2 = 0.62. Based on this, we obtain the following equation:

 $Y_1 = 20.4 - 0.08x_1 + 0.01x_2 + 2\ 0.08\ x_3 + 31.14x_4 + 0.03x_5 + 2.28x_{6.....(7)} \\ Y_2 = 33.3 - 0.37\ x_1 - 0.24\ x_2 - 0.37\ x_4 + 0.39\ x_{6....(8)}$ 

On this basis, the equation variables traced the opportunity to the Government of Syria to influence the resulting figures (export and import quotas) positively or negatively. For example, the Syrian government will be able to influence the change of factors X1, X2, X3, X4, X5, and X6 (See Table 4). Therefore, the result will be as shown in Figure 3.

	on the factors x1, x2, x4, x5, and x6 in the period $2017 - 2019$ .						
Period	$X_1$	$X_2$	X ₃	$X_4$	$X_5$	$X_6$	Y ₁
2017	2	50	50	-15	50	-2.5	3.654502
2018	4	45	50	-10	40	-1.5	11.05807
2019	6	40	50	-8	30	0.5	17.33361
Period	$X_1$	$X_2$	X ₃	$X_4$	$X_5$	$X_6$	Y ₂
2017	2	50	-	-15	-	-2.5	24.76037
2018	4	45	-	-10	-	-1.5	23.79556
2019	6	40	-	-8	-	0.5	24.33163

Table 4. Forecast export quotas and import Syrian government to account the alleged effects on the factors x1, x2, x4, x5, and x6 in the period 2017 - 2019.

Source: Calculated on the basis of the author of the data in Table 3

If the government in the implementation of foreign trade policy changes, then the performance variables will be achieved. Also, maybe the alleged quota exports and imports in the period 2017 - 2019 will be comply with the following parameters. (See. C. 3)

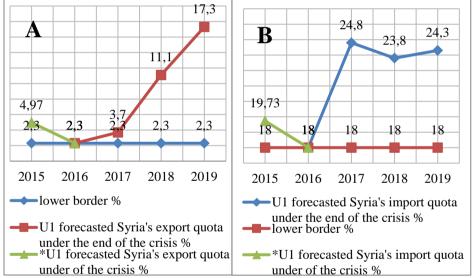


Figure 3. Forecast of export quotas (A) and imports (B) taking into account the expected impact of the government on the factors x1, x2, x4, x5, and x6 in the period 2015 - 2019. Source: Calculated by the author

* Calculations based on Brown's model

#### Foreign Economic Models of Syrian National Economic Recovery in the Post-war Period, Taking into Account its Features and Drawbacks

At the end of the armed conflict in Syria, the government in the reconstruction phase proposes two possible directions for the funding of economic recovery: Western and Eastern models (See Table 5).

Eastern model (Russia, China, Iran, and others)	The Western model (EU countries; USA, Canada, etc.).		
,	Features		
Small cash flow as an external debt	Huge financial inflow as foreign debt (Marshall		
(from Russia, Iran);	Model);		
Ease of integration into the Eurasian	Ease of integration into Western alliances		
Union BRICS;	(WTO, EU) and the Arab Union;		
Long-term investments in the service	In the future, Syria will be able to export its		
sector (dams, bridges, railways, and	products and services to the Western and Arab		
airports & etc.);	markets;		
In the case of the coverage of external	FDI inflows mainly in the technical-industrial		
debt, discount can be obtained in the	sector;		
future;	Increase in the number of international partners.		
Political and economic independence.			
Li	mitations		
Long-term process of economic recovery;	Political and economic dependence on Western		
Limitation of production of new	countries (as a result of globalization);		
manufacturing technologies.	Short-term investments;		
	Coverage of external debt with interest.		

 Table 5. The features and shortcomings of Western and Eastern models of funding the

 Syrian economy in the postwar period

Source: Compiled by the author

However, some features of the eastern model, despite the strategy being implemented slowly, require a large period of time to carry out economic plans. This is because the effectiveness of this model can manifest itself in the long run.

In the future, if the eastern countries are not possible to finance the processes of restoration of Syria's economy, the government will have to depend on western sources.

For the results of the Western model, strategic plans are implemented quickly (by a large amount of money). Also, they receive future benefits possible in the short term. However, in the future, there is a risk of becoming dependent on the West. Therefore, this requires the intervention of international lenders in the economic and political decisions of the country.

#### **References:**

Anosov. LA (2014). The Russian Far East: development strategy in the XXI century": Monograph / M  $\therefore$  Institute of Economics, Russian Academy of Sciences. 214c.

Chaplyuk VZ, Popov GY, & Al Humssi Ahmad (2016). Statistical study of foreign direct investment in the Middle East" / Economics and Entrepreneurship, Room 2 part 1.

Chaplyuk VZ, Popov GY, & Al Humssi Ahmad (2016). Statistical Analysis of Foreign Economic Relations of the Middle East" // Internet magazine

"Science of Science» http://naukovedenie.ru/PDF/71EVN116.pdf Volume 8, №1 (January - February).

Chaplyuk VZ & Al Humssi Ahmad (2016). Status and prospects of development of foreign economic relations of Syria: monograph - Moscow People's Friendship University.

Dyuzheva NV (2012). Russia on the world space market: a model of

increasing exports to developing countries, M .: Economic Education. EG Anisimov & Saurenko TN (2008). The methodology of formalizing cooperation and assess the sustainability of a customs union" // Vestn. Ros. customs. Acad. - 2013. - № 3. 96.

Grigoruk NE (2014). Statistics of Foreign Economic Relations and International Trade": a textbook / MGIMO (University) MFA Russia, dep. Accounting, statistics and auditing. - M: MGIMO-University.

Glinkin SP (2014). The new direction of Russian foreign and foreign economic policy - cooperation in BRICS"; g. authors. - M: Institute of Economics, Russian Academy of Sciences.

Irina Ahmed Zein Aydrus (2014) "The future of Syria map transport routes" Council International Affairs. Russian on URL: http://russiancouncil.ru/inner/?id_4=3548#top-content

Irina Ahmed Zein Aydrus (2013). The conflict in Syria and its importance for the world market of oil and gas"; Russian Council on International Affairs 2013 access mode: http://russiancouncil.ru/inner/?id_4=2744#topcontent

Murtuzalieva SY (2014). Experience in the development of foreign economic relations" // Entrepreneurship, April.

Mustafa Al Alabidulah Kafra (2004). Article "especially the Syrian economy and the process of development", The Journal of Al-Alhuar

Mutamadin http://www.ahewar.org/debat/show.art.asp?aid=22619 Panasiuk MV (2008). The economy and foreign trade activities of the Islamic Middle East": Tutorial / MV Panasiuk - Kazan: TSHPU. - Pg. 192. Pilipenko AI & Polovnikova VA (2010). Mathematical modeling of financial

operations": Proc. Benefit / - M .: University textbook: INFRA-M, Pg. 360.

## Environmental Disclosures and Size of Selected Indian Firms

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#### Abstract

Business responsibility is an easily said but hard to assume construct of sustainability literature. Out of the nine principles of Business Responsibility Reporting (BRR), the sixth principle envisages the environmental concerns of the businesses. The objective of this study is to explain the response of corporate entities towards Environmental Concerns (EC). The environmental concern of an organization has been gauged through environmental disclosures by these firms under the sixth principle of BRR. The general lack of emphasis on environmental disclosures still remains to be a key challenge to encourage Indian corporate houses to develop and adopt clean technologies, energy efficiency and renewable energy initiatives. The role of clean technologies/environmental technologies is pivotal in ensuring adequate environmental disclosures. But the moot point is, do the firms of certain size would disclose more on EC. There is plenty of literature which suffices the relationship of size and environmental disclosure but by appearing green (disclosures) an organization cannot be green. An organization will be green through its clean technology and energy initiatives. There is a major shift in the sustainability literature by focusing on prevention rather than damaging and curing later. Clean energy initiatives are the first steps to towards preventing/minimizing the environmental damage. Therefore, the next important question arises what explains the variation in clean energy initiatives in an organization. Is it the size of the firm or regulation which leads to disclosing environmental concern (EC.?) The relationship between size of the firm and environmental disclosures related to EC has been found to be significant by applying't' test in the selected sample of 40 companies, while the variation in clean technology initiatives in the same sample has been measured using binary logistic regression. Out of the two independent variables i.e. size and environmental concern it is established that instead of size it is the regulation which significantly pushes companies towards clean technologies and energy initiatives.

**Keywords:** Environmental disclosures, Clean Energy Initiatives, Binary Logistic Regression

#### Introduction

The lack of environmental disclosures still remains to be a key challenge to encourage Indian corporate houses to develop and adopt clean technologies, energy efficiency and renewable energy initiatives. It is important for businesses to assess the environmental risks and issues at local and global level. In order to meet this sustainability challenge it is pertinent to involve internal as well as external stakeholders of the business to preserve environment (Miles & Datta, (2012). Although under the National Voluntary guidelines (NVGs) as formulated by Ministry of Corporate affairs emphasis has been laid upon sustainability disclosures but the quality, sufficiency, adequacy, accuracy and details of disclosure parameters still needs a validation. Most often annual reports do not adequately capture environmental performance, hence leading us to believe that whatever performance these companies are boasting of isn't the true one (Chaterjee, 2012). Before the advent of NVGs 2011, India had no formal environment performance disclosure guidelines for listed companies in their annual reports. However under the requirements of companies act 1956 companies would at the most disclose energy conservation measures adopted by them (Khandelwal, 2011). Subsequently SEBI mandated these guidelines under clause 55 of listing agreement and mandated it for top 100 companies by market cap to disclose about environmental concerns (EC) under business Responsibility framework.

#### **Review of literature**

Cohen, (1998), has reviewed vast economics literature on monitoring and enforcement of environmental policy. In his paper he has studied both public and private mechanisms designed to compel firms to comply with both formal and informal environmental regulations. He has studied both positive theories based on incentives as well as normative theories based on punishment. Considering the fragmented nature of literature inventory on environmental enforcement this article puts everything together and helps in understanding what impedes environmental enforcement. Gupta (n.d.) analyzed the Indian corporate sector with respect to environmental disclosures and found that only of few companies were voluntarily disclosing on environment. The major reasons identified for this were lack of environment legislations mandating such disclosures. A positive relation was found between Large High polluting Industries with high debt equity ratios and environmental performance. Mathews, (2000), delves upon the aspects of social and environmental accounting. This paper examines the social and environmental accounting literature over period of 25 years (1970-1995). This paper also explores the involvement/adaptation of cost and management accounting techniques in these emerging fields. Although a lot of management accounting information is generated for the internal use of the management and not for other stakeholders but nevertheless the benefits of saving environmental cost (damages) cannot be ruled out. Khanna, (2001) management and not for other stakeholders but nevertheless the benefits of saving environmental cost (damages) cannot be ruled out. Khanna, (2001), points towards the shift in the approach towards environment protection from regulation driven to being self-regulated one i.e. from 'government push' to 'business led.' This paper provides a glimpse of non-mandatory approaches and their implications towards economic and environment performance. A study by Nurhayati et. al. (2006) found that size of the firm and type of the Industry explains better the extent of Natural Environmental disclosures in Indonesian companies than others. The mattered most because the larger firms are more under public scanner and are subjected to regulatory scrutiny. Montabon et al. (2006) has researched Environment Management Practices firms are more under public scanner and are subjected to regulatory scrutiny. Montabon et al (2006) has researched Environment Management Practices from 45 corporate reports based on their environmental reporting data. Their study found a relationship in EMPs performance measures as depicted in the earlier studies. Brammer and Pavelin (2008), the paper studies the quality of disclosure along the five aspects of quality of disclosure. These aspects such as group-wide environmental policies, environmental impact targets and environmental Audit are studies with respect to the size of the firm and its nature of business. It was found that larger firms in the sectors related to nature of business. It was found that larger firms in the sectors related to environmental concerns have high quality of disclosures on the other hand media exposure had no role play in ensuring environmental disclosures. Beck, Campbell and Shrives (2010), this paper applies content analysis to study the environmental disclosures. It found a few significant differences in the environmental reporting between United Kingdom and German companies over a period of five years. They found that diversity of information has widened over a period of time. Dawkins and Fraas (2011), have studied relationship between corporate environmental performance and the level of voluntary environmental disclosures. They have meaningfully approached towards the environmental disclosures. They have meaningfully approached towards the environmental strategies and disclosures of the companies in enhancing the company visibility and climate change visibility leading to enhanced environmental performance. Amongst the various environmental items studied are beneficial products and services, pollution prevention, recycling, clean energy, substantial emissions, climate change

etc. Galani et. al. 2011, studies Environmental disclosures of companies in Greece with respect to their firm sizes and found a positive relation between size of the firms and their level of environmental disclosures. They also studied profitability (EBIDITA) and listing status but their failed to explain the level of environmental disclosures in a firm. The paper also revealed that only 5 % companies disclosed expenditures related to environment protection. Oba & Fidido (2012) studied environmental disclosures in Nigeria for businesses in two Industry types i.e. Oil and natural gas and Construction. The environmental disclosures for both Industries were scanty but oil and natural gas Companies faired better than Companies in Construction sector. The study recommended an existence of a formal but oil and natural gas Companies faired better than Companies in Construction sector. The study recommended an existence of a formal framework to increase the comprehensiveness of disclosures. It also suggested corporates to perceive environmental reporting to be their moral and corporate duty. Schot, J. (1992), this paper focuses on constructive technology assessment and active management of process of technological change. Technological assessment (TA) helps government in framing strategic technology policies and changing the technologies like solar energy or nuclear energy by inviting opinions from various interested groups. Here the government acts as a creative social regulator of technological change. It also acts as a practical instrument for public policy making. In this scenario Government through its policies and regulations becomes an actor of stimulating shift towards clean technologies. Kemp, (1994), delves upon the technological shift from hydrocarbon based technologies to more sustainable environment friendly technologies. But this shift is going to be gradual because there is cost attached to these technologies. As far as technologies based on renewable sources are yet to be cost efficient apart from other policy and regulation thrusts required for fundamental changes in energy technologies which yield environmental issues faced by the Asian region. This region is in a state of dilemma that whether it should try to uplift its world's one third poor population through industrial development or should walk on the path of sustainable development. However there are options for sustainable development by way of national responses towards policies on environmental concerns, emission control, use of bio fuels and unconventional energy resources. He has also talked about private sector unconventional energy resources. He has also talked about private sector engagement through drawing the attention of financial institutions towards Environmental Performance to be an importance indicator. He has specifically emphasized upon right policy mix backed by local, national and regional cooperation towards maintaining environment quality

#### Hypothesis

H1: There is significant mean difference between environmental concerns (ECs) of firms of larger size

H2: The size of the firm and ECR (predictor variables) are not independent of clean technology & energy initiatives (response variable) i.e. All beta coefficients are not equal to zero.

#### Methodology

#### **Objectives of the study**

The key objectives of this paper are as follows:

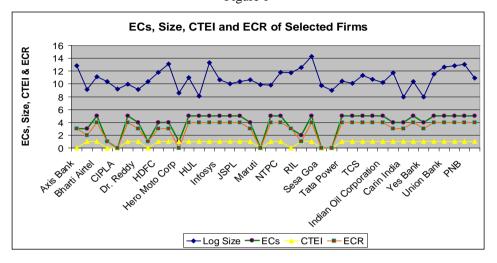
- **1.** To find the nature of Environmental Concern (EC) in the annual reports of selected Indian companies.
- 2. To gauge the extent of EC (Environmental disclosures) in the annual reports of selected Indian companies.
- **3.** To identify whether the environmental disclosures vary across the size of a firm.
- **4.** To find if companies of certain size and with Environmental Concern Regulation (ECR represented through Environmental disclosures except clean technology and energy initiatives) are undertaking clean technologies & energy initiatives (CTEI).

#### **Broad Research Statement**

Environmental Concern (Environmental disclosures) in annual reports are significantly different based upon the size of the firm and predicting whether or not a firm would undertake Clean technology & energy initiatives (response variable) given its size and Environmental Concern Regulation (ECR) (predictor variables)

#### **Sample Selection and Data Collection**

Since the objective of this study is to explain the response of firms towards Environmental Concerns (ECs). The environmental concerns of an organization are gauged through environmental disclosures by these firms under the sixth principle of BRR. Data has been collected from the annual reports of selected 40 firms regarding environmental disclosures under five parameters where in, the first one is related to clean technology, energy efficiency and renewable energy initiatives, the second is related to projects related to clean development mechanism with a mention of environmental compliance report, the third is related to identification and assessment of potential environmental risks, the fourth one relates to extension of ECs to the Group/Joint Ventures/Suppliers/Contractors/NGOs/others and the fifth and the last is related to strategies/ initiatives to address global environmental issues such as climate change, global warming, etc. The general lack of emphasis on environmental disclosures still remains to be a key challenge to encourage Indian corporate houses to develop and adopt clean technologies, energy efficiency and renewable energy initiatives. It is Figure 1



important for businesses to assess the environmental risks and issues at local and global level. In order to meet this sustainability challenge it is pertinent to involve internal as well as external stakeholders of the business to preserve environment (Miles & Datta, (2012). Although under the National Voluntary guidelines (NVGs) as formulated by Ministry of Corporate affairs which helped shape BRR, emphasis has been laid upon sustainability disclosures but the quality, sufficiency, adequacy, accuracy and details of disclosure parameters still needs a validation. Very often annual reports do not adequately capture environmental performance, hence leading us to believe that whatever performance these companies are boasting of isn't the true one (Chaterjee, 2012). Nevertheless the role of clean technologies/environmental technologies is pivotal in ensuring adequate environmental disclosures.

#### **Research Method and Statistical Model**

Analysis of data and hypothesis testing has been done by using an Independent sample t-test which is a parametric test. Hypothesis formulation and testing on the sample data is pertinent to settle on the validity of results. The Independent t test studies each variable in isolation by comparing the means of two groups and establishing whether or not they are statistically different. In order to find if the firms of certain size would disclose more on Environment Concerns (ECs) an independent sample t test has been used to analyze the mean differences of the data on the basis of size of the firm. There is plenty of literature which suffices the relationship of size and environmental disclosure but by merely appearing green (disclosures) an organization cannot be green. An organization will be green through its clean technology and energy initiatives. There is a major shift in the sustainability literature by focusing on prevention rather than damaging and curing later. Clean energy initiatives are small but significant steps towards preventing/minimizing the environmental damage. Therefore, the next important question arises what explains the variation in clean energy initiatives in an organization, is it the size of the firm or regulation with respect to disclosing environmental concern. The variation in clean technology initiatives in the selected sample has been measured using binary logistic regression. Out of the two independent variables i.e. Size and Environmental Concern Regulation (ECR) (Environmental disclosures under BRR regulation as mandated by SEBI except CTEI disclosure) the binary logistic model intends to find whether size or the regulation pushes companies to shift towards clean technologies and energy initiatives.

Logistic regression equation/model: logit(p) = a + b1x1 + b2x2logit(p) = a + b1x1 + b2x2logit(p) = a + b1EC + b2Size

Variables Incorporated	Explanation	Proxy	Nature of Variables
	Dependent Variable Pi	cked	
CTEI	Clean Technology and Energy Initiatives	If Disclosed then 1 otherwise 0.	Dichotomous
	Independent Variables F	Picked	
Size	Total Assets of the Firm	Log Size	Continuous – Interval Variable
ECR	Environmental Concern Regulation (Environmental disclosures under BRR except CTEI disclosure)	No. of disclosures	Continuous - Interval Variable

Table 2

#### Model Variables

#### **Empirical Results and Discussion Result of 't' test**

Since the literature affirms that the firms of certain size would disclose more on EC an independent sample't' test has been used to analyze the mean differences of the data on the basis of size of the firm. The relationship between size of the firm and environmental disclosures related to EC has been found to be significant by applying't' test in the selected sample of 40 companies. There is a significant difference in the scores for larger (M=4.45, SD=.887) and smaller (M=3.15, SD=.477) firms (refer

# Table 2); t (25.374) =2.515, p = 0.019 (refer Table 3.) This implies that firms of larger size disclose more on Environmental concerns (ECs.) Table 3

	Group Statistics							
_	Log Size	Ν	Mean	Std. Deviation	Std. Error Mean			
ECs	>= 10.50000000	20	4.45	.887	.198			
	< 10.50000000	20	3.15	2.134	.477			

Table 4 Independent Samples Test

	-	Levene for Equ Varia								
						Sig. (2-	Mean	Std. Error	Diffe	dence l of the rence
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
ECs	Equal variances assumed	31.444	.000	2.515	38	.016	1.300	.517	.254	2.346
	Equal variances not assumed			2.515	25.374	.019	1.300	.517	.236	2.364

#### **Result of Binary Logistic Regression**

The variation in clean technology initiatives in the selected sample has been measured using binary logistic regression. Out of the two independent variables i.e. Size and Environmental concern (Environmental disclosures under BRR regulation as mandated by SEBI, it is found that instead of size it is the regulation which significantly pushes companies towards clean technologies and energy initiatives. The results of Binary Logistic Regression are as follows:

#### **Case Processing Summary**

Case Processing Summary							
Unwei	Unweighted Cases ^a						
Selected Cases	Included in Analysis	40	100.0				
	Missing Cases	0	.0				
	Total	40	100.0				
Unsel	Unselected Cases						
	Total	40	100.0				

Table 5	

a. If weight is in effect, see classification table for the total number of cases.

The minimum ratio of valid cases to independent variables for logistic regression is 10 to 1, with a preferred ratio of 20 to 1. In this analysis, there are 40 valid cases and 2 independent variables. The ratio of cases to independent variables is 20 is to 1, which satisfies not just the minimum requirement but also the preferred requirement (Table 4.)

Table 6

#### **Goodness of Fit of the Model**

Iteration History ^{a,b,c,d}							
				Coefficients			
Iterati	on	-2 Log likelihood	Constant	LogSize	ECnew		
Step 1	1	24.449	.199	145	.853		
	2	20.813	1.421	308	1.242		
	3	20.140	2.867	471	1.482		
	4	20.081	3.597	551	1.579		
	5	20.080	3.699	562	1.592		
	6	20.080	3.701	562	1.592		
	7	20.080	3.701	562	1.592		

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 40.032

d. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Our Initial - 2 log likelihood is 40.032 but after the independent variables are entered into the Block 1, the - 2 log likelihood again measured is 20.080 (Table 5). The difference between ending and beginning -2 log

likelihood is the model chi-square that is used as the test of overall statistical significance.

Omnibus Tests of Model Coefficients						
	-	Chi-square	df	Sig.		
Step 1	Step	19.952	2	.000		
	Block	19.952	2	.000		
	Model	19.952	2	.000		

Table 7 Omnibus Tests of Model Coefficients

In our model, the model chi-square is 19.952 (40.032 - 20.080), which is statistically significant at p<0.05 (Table 6). This validates the relationship between the dependent and the chosen set of independent variables.

#### Strength of the Model

Model Summary						
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square			
1	20.080 ^a	.393	.621			

Table 8

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

The model summary table above shows the Cox & Snell R Square and Nagelkerke's R Square, which is a modification of former and considered as a better indicator. These are considered to be the measures of strength of association of the model. These are called as Pseudo R squares and their values are generally much lower that the R squares in the Ordinary Least Square Regression. Their values lie between 0 and 1. Since Nagelkerke's R Square is .621, it implies that the model moderately explains the variance by 62% (Table 7.)

 Table 9

 Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	1.767	8	.987

Another measure of Goodness of Fit test is Hosmer-Lemeshow test (Table 8). It indicates how well the model with predictors fits the data over the null model with no predictors. An H-L goodness-of-fit test statistic which is greater than .05 is specified for well-fitting models. This implies that we fail to reject the null hypothesis that there is no difference between observed and model-predicted values.

Classification Table					
			Predicted		
			CTEI		
	Observed		0	1	Percentage Correct
Step 1	CTEI	0	6	2	75.0
		1	2	30	93.8
	Overall Percentage				90.0

Table 10 Classification Table

a. The cut value is .500

The classification table (Table 9) is another measure of fitness of model. It doesn't have any significance value but it's a rudimentary way of finding out the overall percentage of model fit which is 90%. This implies that 90% of companies which have undertaken CTEI and have disclosed them have been accurately classified as having done a disclosure (1) and not done a disclosure (0). Moreover out of the total companies which have undertaken CTEI and disclosed them (1), 93.8 % have been accurately predicted.

This table also talks about the sensitivity, specificity and predictive values of the test itself. Following are the calculation of these test characteristics:

#### Sensitivity [Observed (1) Predicted (1)]

It refers to the 'True Positive' out comes of our test i.e. 30/(31+2) = 93.75%. It refers to the statistical power of a test. This implies that companies which have undertaken CTEI have been 93.75 % correctly predicted.

#### Specificity [Observed (0) Predicted (0)]

It refers to the 'True Negative' outcomes of our test i.e. 6/(6+2) = 75%. This implies that companies which haven't undertaken CTEI have been correctly predicted.

#### False Positive [(Observed (0) Predicted (1)]

It refers to False positive outcomes of our test i.e. 2/(6+2) = 25%. It falsely asserts that companies haven't undertaken CTEI but they have been predicted to have it. It's an error or mistake in detection very much similar to type I error. Putting it simply in 2 out of 8 it is wrongly predicting CTEI when it's not there.

#### False Negative [(Observed (1) Predicted (0)]

It refers to False Negative outcomes of our test i.e.2/(2+30) = 6.25%. It falsely asserts that companies haven't undertaken CTEI when they are observed to have it. It's a mistake like an undiagnosed disease similar to type II errors. It pinpoints towards the failure of policy to unearth the difference between appearing green and being green. But in our case only 2 companies out of 32 companies is wrongly predicted bringing down the percentage of false negatives to mere 6.25%. It's an encouraging result.

false negatives to mere 6.25%. It's an encouraging result. Hence, if it is argued that our companies are a population that lacks clean technology energy initiatives (CTEI) and it depends upon Environmental Concern Regulation (ECR) disclosures mandated under business responsibility reporting and size of the firm to ensure replenishment of this lacking, we will have to scan the predictability of the model. Therefore in order to gauge to what extent this study is successful in diagnosing this we look up to the sensitivity and specificity of the model. Though a test with highest sensitivity and specificity is considered best for diagnosing but it is tough to get one in real life situations. Fortunately in this study sensitivity (93.8%) and specificity (75%) both are high with low possibility of either type I error (25%) or type II error (6.25%) in our hypothesis testing.

# Relationship of Individual Independent variables with the dependent Variable

First of all we will examine the multi-collinearity in the table given below. It is detected by examining the standard errors for the beta coefficients. A standard error of more than 2.0 indicates multi-collineraity amongst the independent variables. Hence results for such variables are not interpreted. But in our model none of the variables have Standard error more than 2.0 implying that there is no such numeric problem as multi-collineraity (Table 10). Now let's interpret variables in equation one by one.

variables in the Equation							
		В	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Log Size	562	.498	1.275	1	.259	.570
	ECR	1.592	.529	9.045	1	.003	4.913
	Constant	3.701	4.818	.590	1	.442	40.470

Table 11 Variables in the Equation

a. Variable(s) entered on step 1: Log Size, ECR.

**Size** The independent variable size has been controlled by taking its log and also it is centralized to purge out numeric problems like multi-collinearity The Probability of Wald statistic for variable size is 0.259 which

is higher than the level of significance of 0.05 leading to acceptance of null hypothesis that the beta coefficient for size is equal to zero (Table 10.) This is a scant reflection of the relationship that companies which have larger size would undertake clean technology energy initiatives (CTEI.)

#### **Environment Concern Regulation (ECR)**

The Probability of Wald statistic for variable EC without CTEI is 0.003 which is significant at p value equal to or less than 0.05 leading to rejection of null hypothesis that the beta coefficient of environment concern (EC without CTEI) is equal to zero (Table 10.)

#### Conclusion

Conclusion The study is based on two hypotheses, one which examines if the firms of certain size would disclose more on ECs using an independent sample t test. The relationship between size of the firm and environmental disclosures related to EC has been found to be significant which is evidenced in literature e.g. Nurhayati et. al. (2006), Brammer and Pavelin (2008), Galani et. al. (2011.) Since disclosures are just a way of appearing green but in order to become green an organization should undertake clean technology and energy initiatives. In order to capture this major shift in the sustainability literature variation in clean technology initiatives in the selected sample has and energy initiatives. In order to capture this major shift in the sustainability literature, variation in clean technology initiatives in the selected sample has been measured using binary logistic regression. Out of the two independent variables i.e. size and environmental concern regulation (ECR), it was found that it's not size but the ECR that is pushing companies to move towards clean technologies and energy initiatives. The study also leaves ample scope for future studies with larger sample size to find which other firm characteristics apart from size leads to improved ECs and which other independent variables would push adoption of clean technology energy initiatives (CTEI) amongst firms initiatives (CTEI) amongst firms.

#### **References:**

Beck, A., Campbell, D., and Shrives, P. (2010), Content Analysis in Environmental Reporting Research: Enrichment and rehearsal of the method in a Britain-German Context, The British Accounting Review, Vol. xxx, pg. 1-16.

Brammer, S., and Pavelin, S. (2008), Factors influencing the quality of corporate environmental Disclosures, Business Strategy and the Environment, vol.17, pg 120-136.

Chaterjee, B. (2012), NVGs are Litmus Test for Indian businesses

Commitment to Sustainability, sustainability outlook, October issue 9-11. Cohen, M. (1998), Monitoring and enforcement of environmental policy, SSRN electronic journal, DOI: 10.2139/ssrn.120108.

Dawkins, C., and Fraas, J. (2011), Coming Clean: The Impact of Environmental Performance and Visibility on Corporate Climate Change Disclosure, Journal of Business Ethics, 100: 303-322.

Galani, D., Gravas, E., & Stravropoulos, A. (2011), The relation between Firm Size and Environmental disclosure, International Conference on applied economics ICOAE 2011, 179-185.

Gupta, V. (n.d), Environmental accounting and Reporting – An Analysis of Indian Corporate Sector.

Kemp, R. (1994), Technology and transition to environmental sustainability: The problem of Technological regime shifts, Futures, DOI: 10.1016/0016-3287(94)90071-X

Khandelwal, A. (2011), Responsible Business Guidelines; A fact check on India Inc., sustainability outlook, September issue 4-7.

Khanna, M. (2001), Economic analysis of Non-mandatory approaches to Environmental Protection, Journal of Economic Surveys, Vol. 15, No. 3, DOI: 10.1111/1467-6419.00141

Mathews, M. (2000), The development of social and environmental accounting research 1995-2000, retrieved on 15 January, 2016, https://books.google.co.in/books?id=1re2hECcRQQC&pg=PA247&lpg=PA 247&dq=Mathews,+M.+(2000),+The+development+of+social+and+environ mental+accounting+research+1995-

2000&source=bl&ots=S7zG7gawAl&sig=xTvn7KRdWoX-

X2idBSbYqMRAY1w&hl=en&sa=X&ved=0ahUKEwi74Zjg_enKAhVQ1I4 KHc6sBFwQ6AEIKTAB#v=onepage&q=Mathews%2C%20M.%20(2000)

%2C%20The%20development%20of%20social%20and%20environmental%20accounting%20research%201995-2000&f=false

Miles, K., & Datta, T. (2012), Sustainability Reporting Enabler of Responsible finance for sustainable development, sustainability outlook, October issue 24-26.

Montabon, F., Sroufe, R., & Narasimahan, R. (2007), An Examination of Corporate Reporting, Environmental Management Practices and firm Performance, Journal of Operations Management, Vol. 25, pp 999-1014.

Nurhayati, R., Brown, A. & Tower, G. (2006), Understanding the level of Natural Environment Disclosures by Indonesian Listed Companies, APCEA 12(3) 4-11.

Oba, V. & Fodio, M. (2012), Comparative analysis of Environmental Disclosures in Oil & Gas And Construction Industries in Nigeria, Journal of Sustainable development in Africa, Vol. 14 No.6, 19-28.

Schot, J. (1992), Constructive Technology Assessment and Technology Dynamics: The Case of Clean Technologies, Science Technology Human Values, vol. 17 no. 1 36-56, doi: 10.1177/016224399201700103

The extent of Environmental Disclosures in Annual Reports, Retrieved on August 2014, http://www.ukessays.com/essays/accounting/the-extent-ofenvironmental-disclosure-in-annual-reports-accounting-essay.php Zhang, Z. (2008), Asian Energy and Environmental Policy: Promoting Growth While Preserving the Environment, Munich Personal RePEc Archive, retrieved on 26 December, 2015, https://mpra.ub.unimuenchen.de/12224/

# Impact of Crude Price Volatility on Levels of Economic Activity: Evidence from Iraq

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# Abstract

Global oil markets witnessed intense price volatility in the recent years. Volatility of crude oil price is perceived as a significant source of economic fluctuation. It could likely affect levels of economic activities whether in oil exporting or in oil importing economies. The following study proves that the impact of oil price shocks is not exclusive to oil importing economies. Iraq's developing economy which is highly dependent on oil exports as a main source of revenues is vulnerable to oil price shocks. This study employs a multivariate autoregressive regression (VAR) model to investigate the impact of crude oil price volatility on levels of economic activity in Iraq. The time series datasets employed in the study are tested for stationarity and co-integration using the augmented Dickey-Fuller (ADF) unit root test and Johansen test for cointegration respectively. The model's results confirmed the highly significant impact of volatility of crude oil price on levels of GDP in Iraq.

**Keywords:** Crude Price, Volatility, Crude Exports, Multivariate Vector Autoregressive (VAR) Models

# Introduction

For the last few decades, levels of crude oil consumption and export are both used as indicators to measure economic growth whether in oil importing or in oil exporting economies. The kind of energy that crude oil generates, and the derivative products it provides affect almost every aspect of our modern life. As one of the most easily extracted source of energy, crude oil's favorable characteristics entitles it to stand globally as the most highly valued energy source. The importance of crude oil as a strategic commodity that affects global economic and national security stems from the fact that its availability and volatile prices influence the health, welfare, and security of billions of people and their nations. Oil global supply is not very reliable and it is subject to instability and supply-side shocks. Multiple reasons stand behind this supply's uncertainty. Political instability and wars represent important generators of oil supply and price shocks. Upon the 1973 Arab oil embargo against the countries that supported Israel, Yom Kippur War (October 6, 1973) triggered the media and the economists' concerns about oil price surges. Another enormous supply shock occurred upon a huge drop in the Iranian's production of oil after the overthrow of the Shah regime in 1979. Supply shortages entail oil price increases, meanwhile oversupply of oil drags prices down. Iraq's resumption of oil exportation in 1999 upon the United Nations Oil-For-Food program flooded the market causing a remarkable reduction in its price (Alnasrawi, 2002). Besides, it coincided with the Asian financial crisis that decreased the Asian demand over oil. A recent reduction of crude oil after the announced potential domestic reserves of United States that are expected to flood the global markets. Yet, increased demand on energy sources also triggers price surges, particularly when the supply does not confront the demand.

confront the demand. Global oil markets witnessed intense price volatility in the recent years. The fluctuations of oil prices in the global markets attracted economists' attention to the relationship between economic growth rates and changes in oil price, precisely, the form that it takes, and the extent to which it affects economic performance. From a theoretical perspective, oil price volatility affects levels of macroeconomic indicators through many transmission channels. The supply-side effect of surges in crude oil price on levels of real output is attributed to the impact that they may have on marginal costs of production. This effect is transmitted in its turn to the demand-side through the impact that crude price change may have on consumers' disposable income and investors earnings, thus, on levels of aggregate consumption and investment.

Since 1970s until recently, volatility of crude oil price is perceived as a significant source of economic fluctuation, and likely to affect many economies simultaneously. The consequences of oil price fluctuation on levels of real activities differ between oil importing and oil exporting countries. Positive surges of crude price are expected to boost revenues to finance development projects in oil exporting countries; meanwhile the effect of negative price shocks is expected to have reverse impacts. Empirical evidence proved that crude price increases have a significant negative impact on GDP growth and contributes to higher inflationary pressures in oil importing countries. The implications of oil price fluctuation also differ between developed and developing economies. The increase in oil price leads to energy efficient consumption in developed countries, but it is not necessarily the case in developing countries where it may be reflected in increased human costs, food costs as cooking fuel may become less affordable.

Oil reserves are unevenly distributed as most of the known oil reserves are located in politically or economically unstable areas of the world. More than half of the world's reserves are located in the Middle East. According to the statistics of the Organization of Arab Petroleum Exporting Countries (OAPEC), the Middle East with its vast oil reserves represents a global powerful force that holds approximately 56.4% of the world's oil reserves with an increasing trend in its share of the global production. Iraq is one of the five major members of OPEC that holds the reserve of 115 billion barrels, which represents 17.57% of the Arab producing countries' reserves and 9.91 % of the world's oil reserves. Despite its vast oil reserves, Iraq is still a lower middle income developing economy that suffers from tremendous deficiencies in development projects. Iraq's large quantities of oil resources represent the most important source of income to Iraqi economy, yet are unable to support any process of sustained development (Owen & Pamuk, 1998).

(Owen & Pamuk, 1998). The following study proves that the impact of oil price shocks is not exclusive to oil importing economies. Oil exporting economies are also vulnerable to crude price volatility especially in the countries whose economic structure depends largely on crude exports revenue. Iraq's developing economy is highly dependent on oil exports as a main source of revenues. Oil production and exports are the main components of Iraq's economy. The demand over Iraqi oil exports is likely affected by the movement of crude oil prices in the global market. This is reflected in Iraq's real GDP via the impact on Iraq's exports and oil income. This study attempts to ascertain that the correlation exists between the movement of oil prices and Iraq's economic performance. The high dependency of Iraqi economy on oil exportation activities indicates the vulnerability of Iraq's economic stability to crude price shocks. Hypothetically positive surges in oil prices should have a positive impact on Iraq's GDP through its positive impact on revenues. However, these positive surges may decrease the demand on Iraq's oil exports due to other factors like fluctuation of exchange rates and other political and regional factors. Thus, the study employs multivariate autoregressive regression (VAR) model to investigate the impact of crude price volatility on levels of economic activity in Iraq. The study begins by investigating the results reported by linear regression models. Linear models predict Iraq GDP by its two former lags of the differenced real GDP as independent variables alongide other variables that proxy crude price volatility and Iraq macroeconomic indicators using different tansformations of the variables. Yet, all have reported insignficant effect of oil price volatity on levels of real output. Thus, the study goes on to discover the results of VAR model that confirm the significance of oil price volatility effect on levels of real activities. The times series datasets was tested for stationarity using the augmented Dickey-Fuller (ADF) unit root test. The long run relationships among the variables are traced using the Johansen cointegration test, and finally, vector error-correction models (VECM) confirmed the existence of long run relationships among a few of the independent variables.

#### **Background Information on Iraq**

Background Information on Iraq Iraq is a lower middle income developing Middle Eastern country with a population of almost 34 million. Iraq's large quantities of oil resources represent the most important source of income to Iraq economy which relies heavily on oil revenues. The oil sector is the only economic sector capable of generating a substantial and regular inflow of external revenue into the country. Most of Iraq's development projects including infrastructure, industrial, and service sectors are financed by oil income. Oil revenues always supported the development of related industries, especially the petroleum refining, chemicals, and fertilizers. In a country where oil exportation is the only economic activity that provides income to the economy, implications of oil global markets' instability on economic activities and its influence on the economic growth are expected to be significant.

International sources estimated Iraq's proven oil reserves at 112 billion barrels, and they could likely reach 214 billion barrels in the future. Also the country is endowed with 3,360 billion m³ of proven gas reserves. The potential production capacity of the currently producing fields is about 2.5 million barrel per day (Kumins, 2005). Oil production in Iraq has always shown a fluctuating pattern. Positive surges in oil production were always followed by a sharp reduction due to wartimes. The increase in the production of the year1979 when oil revenues recorded a very large contribution to Iraq's income was followed by a sharp reduction due to the outbreak of Iraqi-Iranian War in 1980. The

a sharp reduction due to the outbreak of Iraqi-Iranian War in 1980. The increase in the production between the years 1989-1990 that followed the recovery of the war alongside the implementation of some economic policies that boosted the private sector was also followed by a capacity reduction due to Iraq's invasion of Kuwait in 1990. Iraq's oil production peaked in 1990 to around 3.5 million barrel per day. Upon Iraq's invasion of Kuwait exports were halted by an economic sanction. After the first Gulf War, oil production was only sufficient for domestic consumption as it declined to about 500,000 barrels per day. Then with the start of the UN Oil-for-Food program, oil exports increased, and oil production averaged to 2.5 million barrel per day

during 1991-2001. Yet, this increase was followed by a decline in the production due to the 2003 US invasion of Iraq (Kumins, 2005).

#### Theoretical framework

Considering the commonalities between Iraq as an underdeveloped oil exporting country and other developing oil exporting countries, the below literature review demonstrates how the effect of oil price fluctuation on the literature review demonstrates how the effect of oil price fluctuation on the level of economic activities has been approached in the literature using a few case studies of some oil exporting developing countries like Thailand and Nigeria. It also reviews studies developed to check the same effect on the level of real GDP in some industrialized oil importing and oil exporting OECD and European Union (EU) countries. The similarities between the Nigerian economy and Iraq's economy as net oil exporters and war-inflicted countries are also considered as both economies are largely affected by the intensity of domestic and regional conflicts and political instability. Thus, it could be inferred that, as does Nigeria's economy, Iraq's economy with its massive oil reserves and oil export revenue that are not efficiently used to sustain development could also be subject to Dutch Disease Syndrome (DDS) (DDS).

Ibrahim and Chancharoechi (2014) paper attempts to analyze the inflationary pressure that oil price shocks create on the general levels and commodity-specific levels of prices in Thailand. The authors develop policy

Furnishing Price Index (HFI).

Ibrahim and Chancharoechi analyze that inflationary pressure that volatility in oil prices creates through a short run, then long run framework. They adopt LeBlanc and Chinn (2004) augmented Philips curve framework

that allows for discovering long run relationships among variables to analyze inflation dynamics on the long run. Their models include variables that measure aggregate and disaggregated consumer prices. They also include measures of real output represented by real GDP, US dollar oil prices represented by Brent spot crude oil, and a measure of Thai baht and US dollar exchange rate.

Ibrahim and Chancharoechi empirical approach is constructed in four steps. In the first step, they examine the integration, non-stationary properties of data using Dickey-Fuller and Phillips-Perron unit root tests. In the second step, upon proving that data on variables are non-stationary and integrated of the same order, they used residual based tests and VAR-based tests to examine long-run relations among variables. In the third step, they employed a Dynamic Ordinary Least Square (DOLS) to estimate the long-run coefficients for the co-integrated systems. Finally, they develop three alternative models for predicting the variables. The first model expresses the short run relations among goods prices and their determinants as it is developed to check the relations when the variables are not integrated. The other two models allow for inflation to respond to gaps in output and changes in oil price and exchange rate where they used lagged variables of the price level. Thus the two other models are used when the data are symmetrically and asymmetrically co-integrated.

short run relations among goods prices and their determinants as it is developed to check the relations when the variables are not integrated. The other two models allow for inflation to respond to gaps in output and changes in oil price and exchange rate where they used lagged variables of the price level. Thus the two other models are used when the data are symmetrically and asymmetrically co-integrated. Their results on the preliminary data show that the variables are integrated of order I, yet the null hypothesis of no co-integration is not rejected nor was the null hypothesis of symmetric adjustment. The results on long relations among variables show that an increase in real GDP by 1% leads to an expected increase in CPI by 0.42%. The exchange rate depreciation also creates inflationary effect. The variable that expresses the long-run inflationary effect of oil prices suggests that, in the long run, a ceteris paribus increase in oil prices by 10% creates an expected increase in the aggregated price measure of CPI by 0.89%. The same effect is also high for other disintegrated price measures in other sectors like transportation and communication TCI, and non-food and beverage prices NFBI. However, in the housing and furnishing sector HFI, the oil price inflationary effect was the lowest in the long-run because housing sector prices are governed more by non-oil related domestic market factors. Results on inflation dynamics shows that aggregate consumer prices and housing and furnishing prices show some degree of persistence. There is also a significant inflationary effect of exchange rate changes on all of CPI, NFBI, and HFI (Ibrahim & Chancharoechi, 2014).

In assessing Ibrahim and Chancharoechi paper, we should assert their main finding which is represented by confirming the large inflationary effects of the positive surges in oil price on some energy-intensive sectors like transportation and communication sector, yet the same effect will reduce, to a large extent, the use of energy in other industrial and production sectors to achieve cost cuts. This energy use reduction could also be witnessed in consumers' energy consumption. The lower rates of per capita energy use that could be achieved in Thailand will definitely reduce the inflationary pressures that these positive surges in oil price create.

Alongside the inclusion of disaggregated sectoral measures of price that allows for analyzing the specific-policy measure that should be developed to target each sector separately, Ibrahim and Chancharoechi analysis of the asymmetrical inflationary effect of changes in oil price on all other price measures represents the tide of their empirical research. Their paper is important because it does not only consider the short-run effects, but the long-run dynamics and the symmetry and asymmetry in the behavior of the inflationary pressures. So, hikes in oil prices will be immediately transmitted to other sectors as majority of the above measures experienced a positive short-run surges created by positive fluctuation in oil prices. However, the opposite effect is asymmetric, which means that negative surges or declines in oil price are never transmitted immediately to other sectors. Neither aggregated nor disaggregated sectoral measures of goods prices experienced any subsequent declines to the declines in oil prices.

Yet, in order to extend the analysis to include other developing countries than Thailand, the study should consider the different effects that such fluctuations bear on economic aggregates in the contextual case and the specificity of each economy, whether an oil-exporting or an oil-importing economy. The factor that Alley, Asekomeh, Mobolaji, and Adeniran (2014) considered in their estimation of the effect of oil price volatility on economic growth rates in Nigeria.

growth rates in Nigeria. Alley et al. (2014) provide a quantitative analysis to the impact of fluctuations in oil prices on the Nigerian economy. They apply the General Methods of Moment (GMM) to estimate the effect of positive and negative surges of oil price using data that covers the period between 1981 and 2010 during which Nigeria has experienced increasing rates of oil exports. Their findings confirm the positive impact of oil price increases on Nigerian oilexporting economy. Yet, the negative impact is represented by the uncertainty that such surges create regarding the expected revenue of oil exports.

Alley et al. start by reviewing the paradox that haunts the Nigerian oil-exporting economy which, despite its abundant resources, still suffers from high rates of poverty and inadequate economic development rates. Policy mistakes and mismanagement of oil revenue alongside the volatility in oil prices made the economy vulnerable to what is denoted as the Dutch Disease Syndrome (DDS). Thus, the high proceeds that are realized during

positive surges in oil prices disturbs the sectoral balance of economy by making oil sector more attractive for investments on the expense of non-oil sectors that are mandatory for development. Alley et al. also identify some origins and causes of oil price shocks. Alongside the political factors that may affect market forces and contribute to oil price shocks, they identify some economic factors. The low price elasticity of supply and demand on oil resources is one of the economic elasticity of supply and demand on oil resources is one of the economic factors that contribute to oil price fluctuations. The time required to adjust capital stock to more energy-efficient substitutes create time lags that makes demand and supply less responsive to price changes. Another cause is the shifts in demand for oil particularly of emerging economics and shifts in precautionary/inventory demand targeted to moderate price surges. The higher than unity income elasticity is another factor that causes oil price volatility. Finally, the shift of oil contractual agreements from long term, predetermined spot prices contracts to short term market-based prices contracts also contributes to the volatility of oil prices.

The authors also provide a comparative analysis of the different forms of impacts that oil price shocks have on economic activities in oil-exporting and oil-importing economies. In oil-importing economies, positive surges increase production costs which in turn create an inflationary pressure that reduces economic growth rates. Meanwhile, positive surges stimulate oil revenues in oil-exporting economies; however, stimulating oil sector may expose the economy to the Dutch disease syndrome that makes the net effect of such positive surge not as pleasant. On the other hand, negative surges in oil prices reduce flow of foreign revenue to oil-exporting economies that in turn causes economic, and sometimes political, instability. They also confirm the asymmetrical effects of negative surges of oil price on oil-importing economies. While oil price rise negatively affect the level of economic activities in oil-importing economies, yet negative surges in oil prices do not stimulate economic growth.

Alley et al. econometric model is based on the main equation of GDP where the dependent variable is the natural logarithm of Nigeria's real GDP and the independent variables are also represented in the natural logarithm of GDP components. Transforming the equation to the logarithmic form allows for interpreting the variables in terms of growth rates. It also minimizes the problem of different units of measurements among variables.

To capture the essence of the Nigerian economy as a net oil exporter, they develop their model on a few steps starting by disintegrating export into oil-export and non-oil export variables. They also disintegrate oil export variable into its basic equation of quantity of exports and price of exports. A variable that captures the influence of oil price shocks is also included in the model and is computed through an autoregressive process in which the

residual is regressed on its mean and lagged forms. The model is tested for co-integration among variables and the Johansen system co-integration test's results confirm the long run relations that exist among variable. Moreover, the unit root test confirms that all the series are stationary of the first order.

the unit root test confirms that all the series are stationary of the first order. The model's empirical results confirm the significant positive impact of oil exports on economic growth alongside the significant effect of oil price on economic growth. However, the negative impact of oil price volatility is statistically insignificant. Still, this negative impact could be interpreted in terms of the uncertainty that this volatility create on predicting government budget and the disturbance that this uncertainty causes to government's plans and fiscal operations. When negative surges may incline budgetary cuts, positive surges may incline an expansion in government spending that absorbs excess oil revenue.

absorbs excess oil revenue. Considering the specificity of the Nigerian economy as a net oil exporter and the differences in the impacts that oil price volatility create on levels of economic activities in other exporting economies represents the strength point of Alley et al. analysis. Another strength point is the analysis the authors provide for the presence of the Dutch disease syndrome (DDS) in the Nigerian economy which stands as an example of other developing, oilexporting economies that are characterized by the same paradoxical situation of massive resources and poor development rates. Economies that are not diversified to depend on productive economic sectors other than oil industry are more exposed to inflationary pressure created by oil revenue inflows that are caused by positive surges in oil prices. The authors extend their analysis of DDS to include the effect that such inflation has on exchange rate. The appreciation of domestic currency makes other non-oil sector tradable goods more expensive and less competitive in global markets, by which absorbing the windfalls of the appreciated price of oil exports (Alley et al., 2014)

of DDS to include the effect that such inflation has on exchange rate. The appreciation of domestic currency makes other non-oil sector tradable goods more expensive and less competitive in global markets, by which absorbing the windfalls of the appreciated price of oil exports (Alley et al., 2014) Another study that considers the repercussions of oil price volatility on the Nigerian Economy is Okoro's (2014). Okoro's uses Vector Autoregressive (VAR) model to examine the effect of volatility in oil prices on economic growth where the dependent variable is levels of GDP and the independent variables are: crude oil price, oil revenue, and oil price volatility measured by the World Bank indicator for Nigeria. The VAR frameworks allows for measuring the change of a particular variable in terms of its own lags and the lags of the other variables. The data are tested for stationerv and co-integration Okoro's

The data are tested for stationery and co-integration. Okoro's conducts the Augmented Dickey Fuller (ADF) unit root test and the result shows that all variables, except oil price volatility variable which is computed as ratio, are non-stationery. The existence of long run relationships among variables are tested using Johansen co-integration test which shows that such long run relationships exist among all of the variables. Therefore,

as more than one co-integration equation exists in the model, this allowed for estimating over-parameterized and parsimonious error correction. Over-parameterized and parsimonious error correction mechanisms (ECM) were used to deciding the most appropriate lag length and to deleting insignificant variables. Okoro's results confirm a significant negative impact of volatility in oil price on levels of economic growth in Nigeria. The study also provides some policy recommendations to minimize the effect of oil price shocks on the Nigerian economy which depends to a large extent on oil revenue. The recommendations include the diversification of the resources of budget revenue and the reduction of crude oil fiscal receipts monetization (Okoro, 2014) 2014).

Okoro's analysis develops on Jimenez-Rodriguez and Sanchez (2004) analytical framework presented in their working paper that provides empirical evidence of oil price shocks impact on real GDP growth in some OECD countries. Jimenez-Rodriguez and Sanchez (2004) work in its turn develops on the extensive work that Jimenez-Rodriguez conducted on analyzing the effects of oil price volatility on levels of real activities in multiple countries within different contextual regional circumstances. Jimenez-Rodriguez (2004) first evidence of the existing nonlinearity in the relationship between US GDP growth and fluctuations in the price of crude oil was first presented in her work in 2004 when she argues that the non-linearity exists when using data prior to 1984, and even before 1977. She uses a Vector Autoregressive (VAR) model that summarizes economic activity through a seven-variable system using time series dataset that covers the period between 1972 up to 2001. The variables, long run interest rate and federal funds rate as financial variables, wage, consumer price index and a measure of oil price change as prices variables. She discusses the results of the Granger-causality analysis in a bivariate and a multivariate context. The results therefore indicate that the interaction between oil price changes and macroeconomic variable is significant, with oil price changes Granger-causing the other variables included in the model (Jimenez-Rodriguez, 2004). 2004).

Jimenez-Rodriguez and Sanche (2004) extend the same analytical approach to include data on OECD countries. They use multivariate autoregressive models to assess the effects of oil price volatility on levels of real output in a few main industrialized OECD oil importing countries, alongside the United Kingdom and Norway as oil exporters. Jimenez-Rodriguez and Sanche developed both linear and non-linear models using quaterly data for each of the country under study. The results of the VAR model indicate the evidence of the non-linear impact of oil price volatility on GDP growth whether on importing or exporting economies GDP growth whether on importing or exporting economies.

The effects of an increase in oil prices on real GDP growth are found to differ substantially from those of an oil price declines. This finding contradicts the results of the linear approach which assume that oil prices have symmetric effects on the levels of real economic activities. The comparison between different models indicates that there is an evidence of non-linear impact of oil prices on real GDP growth in both oil importing and exporting countries (Jimenez-Rodriguez & Sanchez, 2004).

non-linear impact of oil prices on real GDP growth in both oil importing and exporting countries (Jimenez-Rodriguez & Sanchez, 2004). Yet, in the light of the political instability that is currently hitting major exporters of oil especially in the Middle Eastern region, applying a similar approach in order to analyze the same phenomena in other developing countries would be more insightful if it considers the political context within which oil transactions are taking place. Adding a binary variable that accounts for periods of political stability and period of political unrests and upheavals in regions of oil-importing countries may allow for discovering the interdependencies between economic and political factors that may cause oil price volatility. The inclusion of such a variable may also allow for discovering differences in the impacts of oil price volatility on levels of economic activates in different political context.

allow for discovering differences in the impacts of on price volating on levels of economic activates in different political context. Wolfers and Zitzewitz (2008) consider the effect of political factors like war expectations on oil prices. They develop a prospective estimate to the effect of a policy change on stock prices and oil prices using a financial market-based approach. They attempt to estimate how financial market participants incorporate an expected probability of a policy change like a war event into their expectations of price stock change, and how they behave accordingly. In their particular case it is the ouster of Saddam Hussein regime. They use a financial instrument known as the "Saddam Security" that was extensively traded online in Iowa Electronic Market where this contingent asset's payoff of \$10 was conditional to the ousting of Saddam Hussein as the leader of Iraq by a certain date. Wolfers and Zitzewitz focus on the June security that pays only if Saddam was out-of-office by June 30th, 2003. Their *ex-ante* analysis that was conducted one month before the 2003 Iraq war shows that the flow of war-related news affected to a large extent the variation in the movement of daily oil and equity prices. Their findings show a strong positive relationship between spot oil prices where a 10% increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the probability of 2003 Iraq war was associated with a \$1 increase in the pr The following analysis develops on Okoro's (2014) framework which in its turn develops on Jimenez-Rodriguez (2004) and Jimenez-Rodriguez and Sanche (2004) approach of extending the analysis beyond linear modeling to the use of non-linear VAR models in order to predict the effect of crude price volatility on levels of macroeconomic indicators. The study was supposed to consider a factor of economic instability, yet it did not was supposed to consider a factor of economic instability, yet it did not include any binary variable to account for the effect of economic instability because the dataset covers the decade that followed the overthrowing of Saddam Hussein's regime during which the country was inflicted with civil wars, sectarian conflicts, terrorist attacks, and the emergence of extremest Islamic currents as no data exist to covers any previous periods. Thus, the data timeframe did not allow for the inclusion of a dummy variable that allows for a comparative analysis to the effect of oil price volatility on Iraq's GDP between periods of political stability and periods of upheavals.

# **Data Description and Data Source**

Data Description and Data Source The time series datasets used in this study are derived from the database of Quandle Financial and Economic Data search engine with a specific source for each variable. The dataset on Iraq gross domestic products (GDP) measured at current prices billion US is used to proxy the level of economic activity in Iraq. Data on Iraq's GDP is derived from Angus Maddison Project Database published in 2015. The variable is differenced to overcome the problem of non-stationarity and two time lags of Iraq's GDP are included in the model as independent variables. The time series datasets on all of the variables cover the period hot was 2002 until 2015 that represents the post-Saddam Hussein era. The

The time series datasets on all of the variables cover the period between 2003 until 2015 that represents the post-Saddam Hussein era. The era that followed the overthrown of Al-Ba'ath party regime that ruled Iraq since late 1970s led by President Saddam Hussein whose regime was overthrown by US troops intervention in April 2003. The VAR model includes the following dependent variables to account for the effect of oil price volatility on the level of economic activity in Iraq during the above mentioned period of time. Two variables are included to measure the change in all prices a variable that represents the

in fraq during the above mentioned period of time. Two variables are included to measure the change in oil prices, a variable that represents the change in OPEC crude oil prices and Crude Oil Exchange Trade d Funds (ETF) Volatility Index. Two more variables are included to account for macroeconomic indicators: Iraqi government revenue of oil exports measured in billions of current US dollars and the exchange rate of the Iraqi national currency, Iraqi Dinar (ID), to US dollar.

The variable that measures the change in crude oil price is derived from the database of the Organization of Petroleum Exporting Countries (OPEC). The variable measures the change in the price of OPEC crude oil basket that includes prices of crude oil of a few major crude exporting

countries including the price of Basra light crude of Iraq, Arab light crude of Saudi Arabia, Qatar Marine crude of Qatar, Saharan Blend crude of Algeria, Iran Heavy crude, and more other non-Middle Eastern countries. The value of the change in measured in current US dollar. The variable is differenced and lagged for non-stationarity. To account for the effect of oil price volatility, Crude Oil ETF

Volatility Index that measures the market-based 30 days volatility expectations of the US Oil Fund LP using the Oil Volatility Index Ticker (OIL VIX, or OVX) methodology is used. The variable is transformed into the natural logarithm form to minimize the problem of differences in units of measurement used to measure the magnitude of different variables included in the VAR model. This logarithmic transformation of variables included for measuring the impact of dependent variable in terms of growth rate and non-percentage change. The data set of crude oil ETF Volatility Index is derived from Chicago Board Option Exchange (CBOE) database. Dataset on Iraqi government annual revenue of oil exports as the main economic sector and largest sectoral share in GDP measured in billion

current US dollar is derived from IMF Cross Countries Macroeconomic Statistics. Dataset on the annual exchange rate of Iraqi Dinar (ID) to US dollar is derived from the PENN World Table of the UC Davis Center of International Data. Both of the variables are transformed into their natural logarithmic form for the same reasons mentioned above; especially for the exchange rate as the difference in the unit of measurement is very huge since 1 US dollar stands for thousands of Iraqi dinar. They are also differenced and lagged for non-stationarity, yet the variable that measures export revenue was differenced twice as the first difference reported non-stationary time series, while the second difference did not.

# Methodology

Methodology Building on Jimenez-Rodriguez (2004) and Jimenez-Rodriguez and Sanche (2004) findings regarding the use of linear models that was lossing their significane in terms of predicting the effects of oil price volatitiy on levels of economic activities, this study starts by developing linear models that predict Iraq GDP as a dependent variable by two former lags of the differenced GDP as independent variables alongside all of the above mentioned varibles of oil price volatility and Iraq macroeconomic indicators using different tansformations of the varaiables and different level-log, log-log, log-levels models. Yet, all of the linear models reported low measures of goodness of fit alongside high p-values for the independent varibles confirming Jimenez-Rodriguez (2004) findings of insignificant effect that oil price fluctuation has on levels of GDP. However, multivariate vector autoregressive models reported completely different results that confirm the

signficance of oil price volatility effect on levels of real activities. Thus, the study follows Okoro's (2014) theoretical apporach of using VAR model to predict oil price volatility effect on Iraq's GDP. The dependent variable is the first order difference of Iraq's real GDP, and the set of independent variables includes two lags of the same differenced variable. The augmented Dickey-Fuller (ADF) unit root test is conducted to test of non-sationarity of time series datasets. Johansen cointegration test in conducted to trace long run relationships among the variables, and the results of Vector error-correction models (VECM) are developed to conclude the findings.

# **Data Analysis and Results**

The multivariate VAR model reports significant measures of goodness of fit as the model's R-squared value reported that 97.75 of the variation in the dependent variable, Iraq GDP, is explained by the variation of its former differenced lags and the log transformation of the above mentioned set of independent variables. The model also reported a low value of the Root Mean Squared Error (RMSE) measure of goodness of fit of time series prediction models that measures the goodness of fit from the opposite direction or the typical error side of the R-squared measure. The reported p-values associated with all of the independent variables indicate that all of them are significant in predicting Iraq GDP with a very highly significant negative effect of both of the change in OPEC crude oil price and the Crude Oil ETF Volatility Index on the level of real activity. This effect could be explained by the disturbance that such unanticipated changes in crude oil price create on government budget allocations for economic activities, especially when considering the huge budget allocation for public employment and the lack of revenue planning and economic forecasting that inflict Iraq's economic structure that totally depends on oil exports. The negative effect of the fluctuation in Iraqi Dinar (ID) to US dollar exchange rate also turned to be highly significant the thing that looks reasonable when considering the fact that the Iraqi economy is almost fully dollarized as the US dollar is used interchangeably in association with the ID for all large-scale and small-scale market-based transactions.

# Augmented Dicky-Fuller (ADF) Unit Root Test

Upon conducting the Augmented Dicky-Fuller (ADF) Unit Root Test on the lagged and differenced transformations of each of the variables' time series individually, the null hypothesis of non-stationarity was rejected for all variables at all of the 1%, 5%, and10% critical values except for the first difference of export revenue variable that reported non-stationary time series. The problem of non-stationarity was eliminated by taking the second difference of the variable time series.

# Johansen Test of Co-integration and Vector Error-Correction Models (VECM)

The results of the Johansen test of co-integration among the variables time series indicates the co-integration of the time series and existence of long-run relationships among the variables of the levels of GDP, growth rate of oil export revenue, and the change in the annual exchange rate of ID to US dollar. The test indicates a co-integrated vector and the existence of one cointegrating equation. Therefore, upon predicting the vector error-correction models (VECM), the co-integrating equation integrates the change in the annual exchange rate of ID to US dollar and the crude oil ETF volatility index, while other variables co-integration is not significant.

# Conclusion

Crude price volatility is a major source of economic instability in exporting countries whose economy depends largely on crude export revenue. Iraq economy that is endowed with massive reserves of crude oil and an extensive level of crude export is expected to be vulnerable to a large extent to oil price shocks in global markets. To investigate the impact of crude price volatility on levels of economic activities in Iraq, this study estimates a multivariate autoregressive regression (VAR) model that predicts Iraq GDP in terms of a set of independent variables that measure crude price volatility in global markets and levels of Iraq macroeconomic aggregates. Two independent variables are used to proxy the volatility of crude oil, namely the change in the price of OPEC crude oil basket that includes prices of crude oil of a few major crude exporting countries and Crude Oil ETF Volatility Index. Both of the levels of government revenue of crude oil exports and exchange rate of Iraqi Dinar to US dollar are used to proxy Iraq economic indicators. The time series datasets employed in the study are tested for stationarity and co-integration using the augmented Dickey-Fuller (ADF) unit root test and Johansen test for cointegration respectively. Contraty to the results reported by applying linear models, VAR model results prove that the indicators used to measure oil price volatility are significantly affecting levels of GDP. They also confirm the existance of long run relationships among the economic indicators used to proxy the levels of crude oil exports.

# **References:**

Alley, I., Asekomeh, A., Mobolaji H., & Adeniran, Y. A. (2014). Oil price shocks and Nigerian economic growth. *European Scientific Journal*, *10*(19), 375-392

Alnasrawi, A. (2002) *Iraq's Burden: Oil, sanctions, and underdevelopment,* Greenwood Press

Ibrahim, M. H., & Chancharoechi, K., (2014). How Inflationary are oil price hikes? A disaggregated look at Thailand using symmetric and asymmetric co-integration models. *Journal of the Asia Pacific Economy*, *19*(3), 409–422

Jimenez-Rodriguez, R. (2004). Oil price shocks: Testing for non-linearity. Center for Studies in Economics & Fiance - Working Paper, No. 115.

Jimenez-Rodriguez, R., & Sanche, M. (2004). Oil price shocks and real GDP growth: Empricial evidence from some OECD countries. European Central Bank Workign Paper Series, No. 362

Kumins, L. (2005). Iraq oil: Reserves, production and potential revenues. Congressional Research Service CRS, RS21626

Okoro, E., G. (2014). Oil price volatility and economic growth in Nigeria: A vector auto-regression (VAR) approach, Acta Universitatis Danubius Audoe, 10(1), 70-82

Owen, R., & Pamuk, S. (1998). A history of Middle East economies in the twentieth century. LB Tauris & Co. Ltd.

Wolfers, J., & Zitzewitz, E., (2009). Using markets to inform policy: The case of the Iraq war, *Economica*, 76 (302), 225-250.

doi:10.1111/j.1468-0335.2008.00750

# Work Stress Management in Constructions Industry and the Contractors' Commitment Level with the Labor Law

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#### Abstract

Stress was defined as the challenges that excites and weaken the individual, these challenges, when removed, most people's lives will become easier. The methodology of this work was based on two types of collecting data methods; the qualitative and quantitative. Qualitative method was based on conducting a critical literature review and investigating case studies related to the main reasons of work stress. While the quantitative method was based on collecting and analyzing data obtained from distributing 450 questionnaires to the employees in a private construction company as a case-study. The results of the data analysis showed that the stress's effect has many consequences on employee such as: low job involvement, a lack of interest for the organization, low performance (quality and quantity), a loss of creativity and responsibility, accident prone behavior as well as voluntary turnover. Also, the results have showed that the stress reduces the performance of workers and also decreases the quality of service by 33.9%, adversely impact on health of employees by 42.2%. Also, the stress leads to lack of the employees' interest of the organization and reduces their affiliation to it by 66%. Finally the results illustrated that the rate of the contractor's commitment to the texts of the Kuwaiti Labor Law was 68% as well the contractors are fair and give the employees their specified rights in the Kuwaiti Labor Law by 42.6%.

Keywords: Stress, employee, Labor law, Questionnaire and statistic

# Intoduction

The term stress was used to describe affliction, adversity, strain or hardship back in the 17th century. It originally refers to the feeling that anyone have inside under stress. In the 18th century, the same term referred to the strong strain, pressure, force or efforts that effect to the individual and his mental or organs power (CIOB, 2006). Stress was defined by Chowhiu, 2009. as the challenges that excites and weaken the individual and keeps him on his toes, these challenges, when removed, most people's lives will become easier, but more dull and boring. It also refer to the situations where the individual cannot meet the requirements and demands that are asked from him either psychologically or physically, which leads to breakdown of him or anyone else related. So, stress is a two sided weapon, it can be either life saver or destroyer. In this manner, demands are an equivalent term to stressors. Another definition of stress was presented by Ibem et al. (2001), where he described it as a cognitive, physical arousal and cognitive state. It is normally caused by the environment simulators and the perceived demands. When the body, emotions and intellect are simulated, the behavior of the individual will change. Therefore, stress is required in some level for normal life, accepts for when it comes out of control.

#### **Stress effects**

Sometimes stress has a short term impact, while other types of stress have a longer ones. Short term stresses have a small and quick to go impact on the individual and happens in the simulating events like sports or in meetings. On the other hand, long term stresses can cause series and permanent psychological or physical damage to the individual, the thing that can affect the moral of the whole team (Haq Z. 2008). Work pressures leads to bring about health concerns and turn out pressure on employees as well as effect on job performance of the employees. The pressures effect has many consequences for example; low job involvement, a lack of interest for the organization, low performance (quality and quantity), a loss of creativity and responsibility, accident prone behavior as well as voluntary turnover (Health 2011) addition, high stress leads to negative effect on the behaviors of employees, (ILO, 2001 and Leung 2006) said the stress leads to induces boredom, and a lack of motivation and initiative to carry any work and effort as well as a lack of concentration (Pflanz, 2006).

#### **Stress Resources**

According to Ibem et al, 2001 in general, the stress sources between the categories of workers in the construction industry can be divided to the five main groups. Table-1 shows a list of the different characteristics of work in addition to associated stressors. It is clear from this table that the main sources stresses include relationship related sources, personal, organizational policy as well as position related sources, characteristics related sources, environmentally and situation related sources in addition to work- time and nature related sources.

Working Characteristics	Stressors
Organizational function and culture	Environment, task environment, poor communication, poor development practices as well as problem-solving
Participants	Low post in decision making
Career development and job status	Job insecurity or redundancy, career uncertainty, work status and low pay, in addition to stagnation
Role in organization	conflict in task performance and role assignment as well as role ambiguity
Job content	lack of variety, high accuracy in job process, physical constraints, fragmentation of work in addition to under-utilization of skills,
Workload and work place	Lack of control over speed of work, deadlines and time pressure, work under-load and work over-load.
Work time	Long work hours, inflexible work schedule as well as unpredictable hours of work,
Interpersonal relationship at work	Low relationship with managers and supervisors, physical and social isolation, conflict among staff in addition to low social support from other staff,
Preparation and training	Concern about technical skill and knowledge as well as not enough preparation for dealing with additional difficult aspect of a job.
Other problems	Poor working environment (for example poor ventilation, poor lighting, not enough temperature control and etc) as well as staff shortages and also lack of resources.

Table -1: Stress Sources (Ibem et al, 2001)

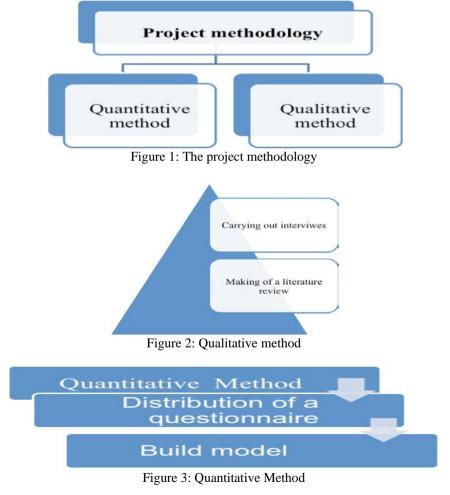
#### Stress signs & symptoms

According to Somerville and Langford (1994), there are two main sets of stress indicator: The first one is healthy and the second is unhealthy. Some examples of healthy indicators are stimulation, abundant energy, and calmness, ease of adaptability, decisiveness, control as well as rational and clear thought. Also some examples of unhealthy indicators are difficulty in thinking, sleeplessness, fatigue, anxiety, high levels of aggression in addition to inflexibility. Healthy indicators are considered desirable thing; however, unhealthy stress indicators lead to high stress level. Somerville and Langford (1994) in the research further classified the stress symptoms into different three aspects

- Behavioral Symptoms
- The Psychological Symptoms
- Physical Symptoms

# **Research Methodology**

The methodology of this work is based on two types of collecting data; the first one is qualitative method and the second is quantitative method. As shown in figures 1-3 below, qualitative method will be based on conducting a critical literature review and carrying out interviews. On the other hand, quantitative method is based on distributing a questionnaire, collecting, and analyzing data obtained from it in addition to build model.



# **Research Sample and Population**

The research population in this project is all the employees in Mohammad Abdalmuhsen & Sons Company in Kuwait. The number of employees in this company is very large, so the sample of questionnaire was a random sample represented by the (%25) of the workers. In this work 450 questionnaires have been distributed, 4 of them have been lost, and 14 of them have not been answered. The questionnaire was designed to make an assessment to the effect of stress on the performance of the workers as well as to determine the main reasons of work stress as well as to establish the level and extent of the contractors' commitment level with the Kuwaiti labor law.

# **Target group**

The target group in this part was the workers in the construction projects. The variety among the workers is due to the age, gender, education level and position. This information will be answered by each participant in the questionnaires at the beginning of the paper under the (personal information) headline.

# Mechanism

The questionnaire was distributed randomly to almost every worker in the shift that will be working during the researcher's visit. The visits and distribution process will be permitted by the management. Every participant will be asked to willingly to answer the questions under the supervision of the researcher, where any question or unclear ideas will be clarified. After completing the questions, every worker will be asked to return them to the researcher.

# **Questionnaire scale**

The type of questionnaire is a quantity survey, where the questions are multiple choice from five scale questionnaire (strongly agree, agree, uncertain, disagree and strongly disagree), where these choices determine whether the facing statement is true or not and the degree of its truth or untruth, the questionnaire results as shown in table-1.

	Table-1 Questionnaire's results						
Question #	Strongly	Agree	Uncertain	Disagree	Strongly	Not	
	Agree				Disagree	specified	
Kuwaiti labor law as well as the extent of the contractor's commitment in the texts that exist							
in Kuwaiti Labor.							
1	19	284	109	17	3	14	
2	75	115	203	33	5	15	
3	54	216	124	29	8	15	
4	45	145	168	60	13	15	
5	58	231	111	21	9	16	
6	54	217	108	42	9	16	
7	43	127	162	87	11	16	
8	30	210	144	35	11	16	
9	25	199	152	33	21	16	
			Stress effect				
10	63	217	111	25	16	14	
11	25	126	224	40	17	14	
12	15	180	201	33	2	15	
13	69	228	108	19	7	15	
14	74	114	206	26	11	15	
15	77	217	115	15	7	15	
16	69	113	185	53	11	15	
17	78	201	124	18	10	15	
18	54	139	184	41	13	15	
19	66	194	138	28	5	15	
20	33	215	138	31	14	15	
21	53	108	227	33	9	16	
22	43	216	120	43	8	16	
23	34	170	187	32	7	16	
			's behavior wi	Y	· · · · · · · · · · · · · · · · · · ·		
24	25	136	187	72	11	15	
25	71	202	129	21	8	15	
26	66	129	166	61	9	15	
27	67	195	123	36	10	15	
28	53	141	177	45	15	15	
29	49	195	128	43	16	15	
30	20	146	176	76	13	15	
31	56	96	235	36	7	16	
32	39	133	192	56	10	16	
33	19	132	183	79	17	16	
34	32	232	129	24	13	16	
35	34	126	200	58	12	16	

Table 1 Questionnaire's result

# **Statistical Analysis**

1- Participant's gender: This part represents mean, mode, median and frequency distribution as well as standard deviation for the gender of the

participants in the questionnaire. Where "Valid" is represents the acceptable data in order to analyze process. While, "Missing" is represents the data that have no value.

Number	Number Valid	
	Missing	0.0
Me	1.00	
Mee	1.00	
Mo	1.0	
Standard	0.000	

Table-2: Statistics "Gender type"

Table -2 Shows that the average value of the participant answers to gender type is Mean =1.00, also, the most frequent value of the gender type is Mode =1.00, and median = 1.00. Where is the standard deviation = 0.00.

Table -3 and Figure-4 below illustrate that all participants were male, and contributes with 100%.

Table -3: Frequen	cy Distribution "Gender type"	
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Gende	er type	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	446	100.0	100.0	100.0

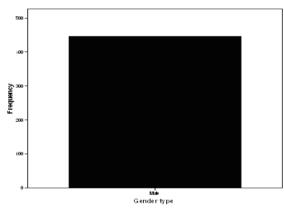


Figure- 4: Frequency Distribution "Gender"

2- Participant's ages: This part concerns the age of the respondents. The results are shown in table-4 and Fig.3. Table-4 Shows that the average value of the participant's age answers is:

Mean =33.7523, also, the most frequent value of the answers that occurs most of time is Mode = 29.00, and the median value is considered the middle value of participant's answers is 33.00. The median is particularly useful when separating data into two parts. The value of standard deviation is equal to (5.36748) that provide an idea of how close the entire group of participant's answers is to the value of mean. While with a small value of

standard deviation have tightly grouped, accurate data. Data groups with large value of standard deviations have data spread out over a wide range of values. Also table-4 illustrates that Participants' ages ranging from (23 to 55 years) who contribute with 99.6%. In addition to two participants did not answer about their ages, who contribute with 0.4%. While Fig.3 shows that the frequency distribution of table-5, it is clear that the ages between 29 and 31 are the most dominant.

Number	Number Valid	
	Missing	2.0
Me	33.7523	
Me	33.0000	
Mo	29.00	
Standard Deviation		5.36748

		Frequenc	iency Distric	Valid	Cumulative
Ag	ge	у	Percent	Percent	Percent
Valid	23.00	1	.2	.2	0.2
	24.00	7	1.6	1.6	1.8
	25.00	8	1.8	1.8	3.6
	26.00	6	1.3	1.4	5.0
	27.00	15	3.4	3.4	8.3
	28.00	13	2.9	2.9	11.3
	29.00	52	11.7	11.7	23.0
	30.00	37	8.3	8.3	31.3
	31.00	50	11.2	11.3	42.6
	32.00	30	6.7	6.8	49.3
	33.00	10	2.2	2.3	51.6
	34.00	43	9.6	9.7	61.3
	35.00	29	6.5	6.5	67.8
	36.00	15	3.4	3.4	71.2
	37.00	33	7.4	7.4	78.6
	38.00	18	4.0	4.1	82.7
	39.00	12	2.7	2.7	85.4
	40.00	13	2.9	2.9	88.3
	41.00	2	.4	.5	88.7
	42.00	12	2.7	2.7	91.4
	43.00	5	1.1	1.1	92.6
	44.00	10	2.2	2.3	94.8
	45.00	18	4.0	4.1	98.9
	46.00	1	.2	.2	99.1
	47.00	1	.2	.2	99.3
	50.00	1	.2	.2	99.5
	53.00	1	.2	.2	99.8

Table-5 Frequency Distribution "Age"

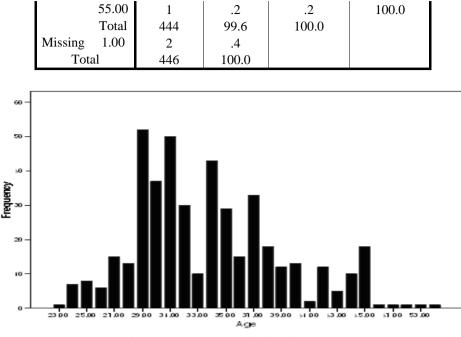


Figure - 1: Frequency Distribution "Age"

3- Participant's positions: Table-6 explains that the average value of the participants answers to the position is of mean value =1.7833. Also, the most frequent value of the position or answer that occurs most of time is of mode = 2.00, and median = 2.00 that is considered the middle value of participant's answers. While the value of standard deviation = 0.41247, which again provides an idea of how close the entire group of participant's answers is to the value of mean.

Number	Number Valid	
	Missing	3.0
Me	1.7833	
Mee	2.0000	
Mo	2.00	
Standard	Deviation	0.41247

Table-7 and figure-5 illustrate that the total of participants are 446, and their position divided as the following; 96 of them were administrative, who contribute with 21.5%. Most of participants were workers and who contribute with 77.8%. In addition to three participants did not answer about their positions, who contribute with 0.7%.

	Table -/ Frequency Distribution "Position"						
Position		Frequency	Percent	Valid Percent	Cumulative		
					Percent		
Valid	Administrative	96	21.5	21.7	21.7		
	Worker	347	77.8	78.3	100.0		
	Total	443	99.3	100.0			
Missing	Not specified	3	0.7				
	Total		100.0				

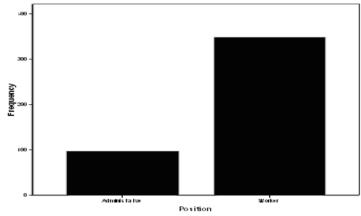


Figure -5 Frequency Distribution "Position"

4- Participant's education: The statistical analysis of this part is shown in tables (8&9) and Fig.6. These illustrate that the total of participants are 446, which show that the number of participants who obtained bachelor degree were 53 and who contributes with 11.9%, and the number of participants who obtained high school was 265 and who contributes with 59.4%. The number of participants who obtained higher education was 30 who contributes with 6.7%. Also, the number of non- educated participants was 75 who contribute with 16.8%. In addition to 23 participants did not specify their education level and who contribute with 5.2%. The previous tables show that the average value of the participant answers to position is of Mean value =2.6430, the most frequent value of the position is of Mode =3.00, and median = 3.00. While the value of standard deviation = 0.78959.

Number	Number Valid	
	Missing	23
Me	2.6430	
Med	3.0000	
Mo	3.00	
Standard	0.78959	

Table -8 Statistics "Education"

Table 9. Frequency Distribution Education					
					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Bachelor	53	11.9	12.5	12.5
	Not educated	75	16.8	17.7	30.3
	High school	265	59.4	62.6	92.9
	Higher education	30	6.7	7.1	100.0
	Total	423	94.8	100.0	
Missing	Not specified	23	5.2		
	Total	446	100.0		

Table 9: Frequency Distribution "Education"

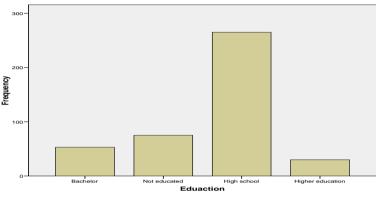


Figure 6: Frequency Distribution "Education"

**Samples of the statistical analysis of participant's questions:** First question: Are contractors committed to the texts of the Kuwaiti Labor Law?

Tables 10, 11 and Fig.7 illustrate the results of this question. The statistical analysis of the participant's is of Mean = 2.31, also, the most frequent value of the position is of Mode =2.00, and median = 2.00. While, the value of standard deviation = 0.650. The number of respondents who strongly agreed was 19, it represents 4.3%. While the number of respondents who agreed was 284 contributes with 63.7%, as well as 109 uncertain who contribute with 24.4%, while the number of respondents who strongly disagreed was 3 who contribute with 0.7%, and the disagreed was 17 who contribute with 3.8% and about 14 respondents did not answer to this question and contributes with 3.1%.

Table 11: Statistics	"First questic	on"
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Number	Valid	432
	Missing	14
Mean		2.31
Median		2.00
Mode		2
Std. Deviation		.650

Table 12. Trequency distribution $Q^{\#1}$					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	4.3	4.4	4.4
	Agree	284	63.7	65.7	70.1
	Uncertain	109	24.4	25.2	95.4
	Disagree	17	3.8	3.9	99.3
	Strongly Disagree	3	.7	.7	100.0
	Total	432	96.9	100.0	
Missing	Not Specified	14	3.1		
	Total	446	100.0		

Table 12: Frequency distribution "Q #1"

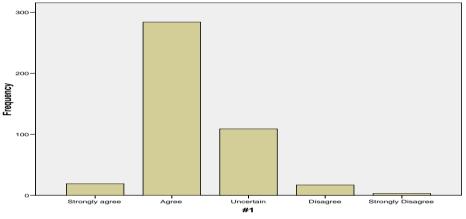


Figure 7: Frequency distribution "Q #1"

Question 2: Did the work time and nature in addition to the organizational policy within the company consider as the main reasons of work stress?

Tables 12, 13 and Fig.8 illustrate the results of this question. The statistical analysis of these tables explain that the average value of the participant's answers to the question is of Mean =2.34, also, the most frequent value of the position is of Mode = 2.00, and median = 2.00. Finally the value of standard deviation = 0.925. The number of respondents and their percentages as follows:- The strongly agreed was 63 who contribute with 14.1%, who agreed was 217 contributes with 48.7%, as well as 111 uncertain persons contributes with 24.9%, while who strongly disagreed was 16 who contribute with 3.6%, and who disagreed was 25 who contribute with 5.6%. In addition to 14 persons did not answer to this question and contributes with 3.1%.

Table 12: Statistics "Q#2"				
Number	Number Valid			
	Missing	14		
Mean		2.34		
Median		2.00		
Mode		2		
Standard Deviation		.925		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	63	14.1	14.6	14.6
	Agree	217	48.7	50.2	64.8
	Uncertain	111	24.9	25.7	90.5
	Disagree	25	5.6	5.8	96.3
	Strongly Disagree	16	3.6	3.7	100.0
	Total	432	96.9	100.0	
Missing	Not Specified	14	3.1		
	Total	446	100.0		

Table 13: Frequency Distribution "Q#2"

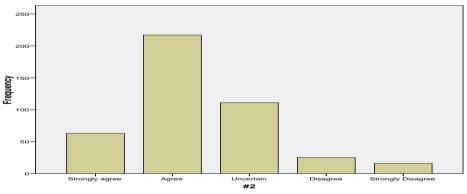


Figure 8: Frequency Distribution "Q#2"

Question 3: Does the work stress reduce the workers performance and also decreases the quality of services, which affects adversely on the performance of the organization in general?

The results of this question are shown in tables 14 and 15 and Fig-9. These show that the M=2.76 and the Mode =3.00, and the median =3.00. While the value of standard deviation = 0.848. The number of respondents who strongly agreed was 25 which represent 5.6%, while the number of respondents who agreed was 126 which represent 28.3% and 224 uncertain respondents contributes with 50.2%, while the number of persons who strongly disagreed was 17 who contribute with 3.8%, the respondents who

# disagreed was 40 who contribute with 9.0%. Finally, 14 respondents did not answer to this question and contributes with 3.1%.

Table 14: Statistics "Q#3"					
Number	Number Valid				
	14				
Mean		2.76			
Median		3.00			
Mode		3			
Standard Deviation		.848			

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	25	5.6	5.8	5.8
	Agree	126	28.3	29.2	35.0
	Uncertain	224	50.2	51.9	86.8
	Disagree	40	9.0	9.3	96.1
	Strongly Disagree	17	3.8	3.9	100.0
	Total	432	96.9	100.0	
Missing	Not Specified	14	3.1		
	Total	446	100.0		

#### Table 15: Frequency Distribution "Q#3"

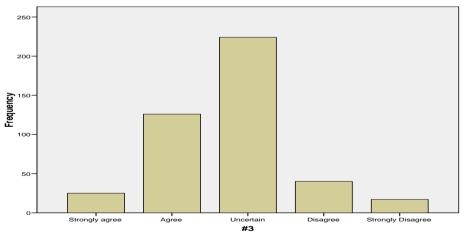


Fig-9 Frequency distribution of Q3

# Conclusion

Based on the analysis above the main points which can be drawn from this work are:

 $\blacktriangleright$  Work stress reduces the performance of workers and also decreases the quality of service by 33.9%.

 $\blacktriangleright$  Work stress has adversely impact on health of workers by 42.2%.

Work stress leads to lack of the workers interest of the organization  $\geq$ and reduces their affiliation to it by 66%.

The contractor's commitment to the texts of the Kuwaiti Labor Law was 68% as well the contractors are fair and give the workers their specified rights in the Kuwaiti Labor Law by 42.6%. ➤ The Rate of the interest from the work force authorities in

implementing the Kuwaiti Labor Law in construction was 60.8 %.

The continuous monitoring of the construction sites from the related  $\triangleright$ agencies by 38.1%

The basic rights of the workers are preserved in the construction industry in Kuwait by 50.2%.

 $\triangleright$  Work time and nature in addition to the organizational policy within the company were the main reasons of work stress by 62.8%.

The workers carry out their task in high quality in the case of work stress by 66.6%.

# **References:**

CIOB-Chartered Institute of Building (2006) "Occupational stress in the Construction industry"

Published Survey CIOB National Stress Results. Available

CIOB Published National Stress Survey Results. Available At:http://www.ciob.org.uk/resources/publications 1/ 11/2014.
Chow Hiu T.D (2009). "A study on the effect of stress level on working performance of Construction Project managers in Hong Kong" Department of real estate and Construction University of Hong Kong
El-Kot G. (2011) "Job stressors, supervisory support and work outcomes Among Egyptian Managers" Review of Management, *I* (4): 10-24.
Haq Z, Iqbal, Z. and Rahman A. (2008) "Job stress among community health Workers" A multi method, studies, from Deleiston, Juternational

health Workers" A multi-method studies from Pakistan. International Journal of Mental Health Systems, **15** (2): 1-8. **Health** and Safety Executive (UK Government) (2011) "Stress-related and

Psychological disorders" Available at

http://www.hse.gov.uk/statistics/causdis/stress/index.htm, 2/ 11/ 2014. **ILO** (2001) "*Safe work: Stress at work*" Available at <http://www.ilo.org/public/english/protection/safework/stress/index.htm, 2/11/2014

Leung M. Y, Liu, A. M. M. and Wong, M. K. (2006a) "Impacts of stresscoping

Behaviors on estimation performance" Construction Management and Economic" 24(1): 55-67.

Pflanz S.E., Ogle, A.D. (2006). "Job stress, depression, work performance, and

Perceptions of supervisors in military personnel" Military Medicine, 171(9), 861-865

**Sung-Hoon**, Zhen Z and Ung-Kyun, L. (2013) "Correlation Analysis Between Job Stress and Job Satisfaction of Building Construction Field Managers" *Journal of the Korea Institute of Building Construction*, **13**(5): 1-6.

**Wong J**, Teo, M., and Cheung, F. (2010) "Cultural determinants of stress in the Construction industry" *International Conference on Construction & Real Estate*: 44-49. Royal on the Park Hotel, Brisbane, Queensland: QUT Digital Repository.

Mind Tools Ltd. (2014) "Understanding the importance of optimum stress Levels [Online], available at: http://www.mindtools.com/pages/main/newMN_TCS.htm, accessed at 24/8/2014

**Oladinrin** T. O., Adeniyi O., and Udi, M.O. (2014). "Analysis of Stress Management among Professionals in the Nigerian Construction Industry" *International Journal of Multidisciplinary and Current Research* 

**Oladinrin** T, Adeniyi, O. and Udi, M.O. (2014) "Analysis of Stress Management among Professionals in the Nigerian Construction Industry" *Federal University of Technology*, *Vol.2*: 22-33.

**Bowen** P. Edwards, P. Lingard, H. and Cattell, K. (2014) "Structural Equation Modeling of Occupational Stress in the Construction Industry" [Online], Available at:

http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29CO.1943-

7862.0000807Journal, accessed in 10/12/2014

**Bowen** P. Edwards, P. Lingard, H. and Cattell, K. (2013) "Workplace Stress Experienced by Construction Professionals in South Africa" [Online], available

At:<http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29CO.1943-7862.0000625. Accessed in 10/12/2014

# Managing Cultural Diversity: The Case of Small & Medium Tourism Enterprises (SMTE)

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#### Abstract

For a long time, management has been developing and applying a standardized universal approach with its employees to optimize the operation of companies. This is regardless of the company's nature and the country where it operates. The failure of certain firms, the increasing globalization of trade, the circulation of goods, and the fast transfer of individuals and information have led to the need to take into account other aspects of management, in particular the intercultural factor.

Today, employees from different cultural backgrounds are working as a team in the same company. Nevertheless, differences in understanding values and visions of the world can create intra-team misunderstandings in collaborative work. Managing cultural diversity reduces these misunderstandings so that the benefits of the diversity emerge.

Managing cultural diversity means managing opposing opinions, constant contradictions, continuous oppositions, and different perceptions. Furthermore, managing cultural diversity contributes to improving team effectiveness where diverse teams often perform better than homogenous teams in problem solving and complex tasks. Greater diversity leads to innovative, higher-quality decisions, and solutions.

This paper sheds light on the importance of cultural diversity among the company's human resources and the role of cultural intelligence in intercultural management.

As part of the research, a study centered on the Lebanese small and medium tourism enterprises (SMTE) was conducted. The results obtained showed a shy diversity management approach in the Lebanese tourism sector due to several factors, namely: the economic instability and lack of training.

**Keywords:** Culture, Cultural Diversity, Cultural Intelligence, Diversity Management, Intercultural Management

# Introduction

The business environment is changing at a great pace with the globalization of the economy and cultures, the relocation of production, the development of new markets, the global competition, the accelerated pace of technological advances towards digital and instant communications, the globalization of consumer tastes, the increased cultural pluralism, the increased immigration, and the aging population. To cope with these changes and to keep a steady profit growth rate, companies are increasingly dependent on their greatest strength, the human resources.

The previously mentioned major changes have brought new challenges and new opportunities to which companies must adapt. The practices and styles of human resource management are no longer limited to a single, uniform, and universal model of performance. Companies must consider to include cultural diversity among its employees as a mean of human resources strength. Nevertheless, this cultural diversity must be managed intelligently to achieve the success of the company.

In this regard, a fundamental question arises: What are the key issues of management in an intercultural context?

However, this question raises other important questions:

• What is cultural diversity and, in particular, intercultural diversity within a company or, simply, in a global market?What are the different approaches to intercultural analysis in

international management?

• What role does Cultural Intelligence play in the management of cultural diversity?

# **Diversity and Intercultural Diversity**

Diversity could be defined as the existing differences between individuals from a variety of backgrounds, namely: Age, Sex, Disabilities, Social Ethnic/Country, Physical/Mental Class. Education/Culture, Professionalism, Religions, Traditions and Beliefs, Conflict, etc. (Peretti, 2006).

Companies recognized that differences between individuals, whether they are related to their belonging to certain groups or not, contribute to the economic performance of the organization. The main objective of these multi-cultural companies is to have different individuals working together harmoniously through appropriate cultural diversity management. Therefore, managing cultural diversity is about valuing all observable and nonobservable differences, including skills and cultures (F. Bournois, S. Point, J. Rojot, J.L. & Scaringella, 2007).

Culture is an essential vector for determining and understanding the individuals' modes of work. Culture is independent of education. However, it may be the result of education, but may also come from personal research (reading, travel, etc.). Above all, its concerns are majorly about the knowledge (academic or general) that each individual acquires. It can also mean ethnic traditions, ideology, religion, belief, etc.

Intercultural diversity refers primarily to cultural and linguistic

differences, as well as to the diversity of values and customs. According to the UNESCO (2002), cultural diversity can be defined as the principle of organizing a sustainable cultural plurality in and through societies. It is a mechanism for organizing the most productive dialogue that is possible between a relevant past and a desirable future. Cultural diversity is a mechanism that ensures that the creativity, the dignity, and the tolerance are partners rather than victims in the establishment of models for sustainable development. A management approach to cultural diversity is therefore needed to achieve productive work and the desired level of development.

How can diversity management be defined and what are its derived benefits?

# **Managing Diversity**

Managing diversity means managing opposing opinions, constant contradictions, continuous oppositions, different perceptions, emotions, relative understandings, difficult actions, and conflicts inherent in human nature.

Diversity management aims to improve the competitiveness and performance

of the company by capitalizing on:
The diversity of the people (gender, age, origin, religious beliefs, sexual orientation, physical and mental conditions);
The functionality of the organization (international settlements,

business, culture);

The style of interaction and mode of thinking (formations, training, communication).

Diversity is one of the few levers of business management that combines financial performance and social ethics (Centre de Ressources en Économie Gestion, CREG, 2013).

At the level of a company, diversity means: Human resources in terms of both their socio-demographic and psycho-graphic criteria

Belonging to various ideologies, mainly religious and political

Production

Objectives

Brands

- Consumers and / or users
- Different markets

# The Different Approaches to Intercultural Analysis in Management

According to Chevrier (2000), intercultural management, a discipline that emerged some fifteen years ago, is defined as a science management based on the analysis of cultural differences. It consists essentially of animating teams formed by people from different cultures, and by building joints between these teams. Thus, the management tools are used to reflect a conception of the organizational cultural context. There are two main approaches to national management models: the first one is a cultural approach that points at a strong link between culture and the modes of management, while the second one is a universal approach according to which, individuals' nationalities play only a small role in the management process.

# Why Manage Cultural Diversity?

Managing diversity is essentially a reinforcement of human and organizational capital. The advantages can be:

• Short-term (reducing certain costs related to turnover or short-term labor shortages).

•Medium- and long-term in large companies (retention of internal and external players, improvement of the company's reputation). According to the Human resources center "CREG" (2013) in the field

According to the Human resources center "CREG" (2013) in the field of Human Resources Management, diversity enables one to solve the problem of the lack of structural or cyclical labor. Companies known for their diversity management attract and retain the best of them. Investing in diversity management, therefore, helps companies win the competition for talent.

Furthermore, the promotion of diversity is a source of performance insofar as it strengthens the cultural values within the organization, ensures its reputation, retains top performers, motivates and promotes creativity of employees, and facilitates collaboration and teamwork. Consequently, differences in understanding values and visions of the world can create intrateam misunderstandings in collaborative work. Managing diversity reduces these misunderstandings and directs ideas constructively so that the benefits of diversity can emerge.

From a commercial point of view, a diversified workforce allows the company to better reflect the diversity of the company and thus to better understand the needs of its customers.

In addition, managing cultural diversity contributes to improving team effectiveness where diverse teams often perform better than

homogenous teams in problem solving and complex tasks. Greater diversity in approaches leads to innovation, higher-quality decisions, and solutions. Managing diversity also increases staff satisfaction and commitment to optimally utilize staff potential. It also improves productivity by reducing absenteeism and turnover. However, it helps to solve the problems of communication and social integration. The manager will also see that his/her efforts to manage diversity will improve the management of all the staff. In addition, cultural diversity is a wealth that allows the company to better understand the expectations of the markets when it launches and develops its activities on a global level

develops its activities on a global level.

How can the differences inherent in diversity become an opportunity for the company rather than a barrier to overcome? This is accomplished by carefully observing the behaviors of culturally different people. According to Marie-Soleil Pinsonnault (2008), the following points are the keys to the intercultural context that the manager must take into consideration:

#### The Environment

How does this culture react with the environment? Is it in control or

in harmony with it? Is the environment a constraint or a development tool? The Time: How does this culture consider time? Is it one thing at a time or several things at a time? Is the time fixed or fluid? Does culture live

in the present, past, or future? The Action: How does this culture work or expect to work? Is it rather focused on doing it, on the do-it-yourself, or on the know-how?

#### Communication

How does this culture communicate: high or low context? Formal or Informal, or Direct or Indirect?

High or Low Context: A weak context is a communication style where most information is transmitted by words rather than by non-verbal cues. The strong context is the style of communication where most of the information is conveyed by non-verbal cues rather than explicitly expressed words.

Formal or Informal: Informal communication is casual and spontaneous, while formal communication is more thoughtful and prepared based on learned experiences or organized training. Direct or Indirect: Communication occurs directly (in direct

conversations) or indirectly (in books, media, on the Internet, etc.). Indirect communication is slower and less interactive than direct communication. In direct communication, expression and formulation are often less precise and spontaneous, and the message may be altered because of the limited vocabulary of an interlocutor if the conversation takes place in a foreign

language. At the same time, the ability to ask direct questions if things are not clear can help with understanding. Also, the non-verbal elements can provide additional information about the message. In indirect communication, these complementary sources are absent but the communication as such is generally more elaborate and the information is more precise (Constanzo, 2006).

#### Space

The way to occupy space in the presence of others is one of the markers of identity. Therefore, the spatial proximity is different according to the culture. Edward T. Hall (1966) described four levels of social distance:

The Intimate Distance (Between 15 and 45 cm): Is an area that is accompanied by a great physical involvement and a high sensory exchange.

Personal Distance (Between 45 and 135cm): Is used in special conversations.

Social Distance (Between 1.2 and 3.7m): Is used during interaction with friends and co-workers.

Public Distance (Greater than 3.7m): Is used when talking to groups.

#### The Power

How does this culture exercise its power? Equal or hierarchical relationship?

#### Individualism

How does this culture manage its interpersonal relationships: individually or collectively?

#### **The Competition**

How does this culture interact with others? Is it focused on competition or cooperation?

#### The Structure

How is the culture structured at the organizational level? Is it a culture centered on flexibility or order?

**Theoretical Currents of Intercultural Management** For a long time, management has been developing and applying a standardized universal approach with employees who are optimizing the operation of the company. Thus, this is regardless of the company's nature and the country in which it operates. The failure of certain firms, the increasing globalization of trade, the circulation of goods, individuals, and information have lod to the proof to take intercement of the comparent of the company. information have led to the need to take into account other aspects of

management, in particular the intercultural factor.

Intercultural management relies on approaches that reject the uniqueness of the structures and functioning rules of the companies. Intercultural management considers that the interests, the behaviors, and the rationality of individuals do not develop in the same way. To deal with multiple situations of intercultural management, whether through partnerships, international mergers and acquisitions, transfers of know-how or in situations encountered daily within the company, the establishment of an intercultural managerial approach and work processes is necessary. According to Cazal, Chevalier, Davoine, and Louart (2011), the

approaches to intercultural management are:

- The Universalist Approach,
- The Interactionist Approach,
- The Institutionalist Approach,
- The Cultural Approach. _

The Universalist Approach: During the internationalization of companies in the 1950s and 1960s, research on management and organizational styles was based on the belief in the existence of universal management principles to be applied whatever the national context is. This hypothesis of convergence is based on the idea of the "logic of

industrialization". According to the scientific progress, the development of increasingly sophisticated technologies and production processes must lead all industrialized societies to the same point. In addition, societies increasingly resemble each other and a universal form of organization will emerge. Over time, it turned out that a universal management principle posed more problems relating to the behavioral ethics of the companies than it solved the difficulties encountered. However, it was necessary to choose a more flexible orientation that is emphasized by the famous "Think global, act local".

The Interactionist Approach: This approach developed by Aoki (1990), Crozier (2000), and Reynaud (1989) seeks to understand how individuals concretely construct national peculiarities, and invent rules of the game to articulate their interests. Country-specific rules, norms, or

institutions influence the strategies of actors. The Institutionalist Approach: This approach was developed by Maurice and Silvestre (1982). It is characterized by a careful analysis of the institutions and the rules or norms that prevail in each country. The decisions of individuals are informed by the identification of the legal or

normative framework in which individuals find themselves.

The Cultural Approach: For Hofstede (2005), individual behaviors, institutions and rules are simply a product of national principles or values. From this perspective, individual interests and economic calculations are not important. Also, individuals are driven by a mental program (oriented by national values).

According to Rosenzweig (1998), the point of departure is to recognize that cultural differences exist. The differences are manifested particularly in:

- Management style,
- Attitude towards the hierarchy,
- How to approach teamwork,
- How to express agreement and disagreement,
- Participation in decision-making processes.

The strategic management of diversity affects all the functions of the company, management and administration; human resources; marketing; production and engineering and financial management.

Intercultural management can thus be defined in a simplified way as the set of strategies that take into account the individual and the national cultures of the interlocutors (customers, staff, partners, public authorities, public opinion).

**Cultural Intelligence in the Management of Intercultural Diversity** Equipping the organization to understand diversity is an essential component of the affirmative leadership of business leaders. Above all, it is necessary to develop and integrate the competences of intercultural diversity among the basic knowledge of the human resources of the company. Indeed, a key element in the management of intercultural diversity is

to increase intercultural intelligence, among other things, by training and coaching. However, these are important levers for transforming corporate culture.

Training has better implications when prepared according to the specific needs of each level of employees and the requirements of the various departments. For the learning of different elements of intercultural diversity to be easier and faster, it is important to link it directly to the task. Although several basic concepts are suitable for all the staff, it must ensure that it is always better translated into everyday work.

For example, call center staff or service counter staff will receive intercultural customer service training. This training will focus, among other things, on communication styles, listening, dialogue, patience, and caring with groups of clients from all backgrounds.

The development of cultural intelligence in this regard, refers to the adoption of new behaviors. Also, it refers to framework in the field of intercultural diversity.

#### **Cultural Intelligence and Cultural Diversity Management**

Cultural intelligence is the ability to recognize the common beliefs, values, attitudes, and behaviors of group members. Most importantly, it refers to the ability to effectively apply that knowledge to achieving self-specific project or a range of activities. It is often perceived as a synonym for cultural knowledge; however, cultural intelligence is much more than the mere knowledge of another culture. Cultural Intelligence is the ability to negotiate effectively with people from different cultural backgrounds (Early & Ang, 2003).

According to Sauquet (1997), intercultural frictions will not be solved by tolerance, but by exerting an effort in gaining the knowledge and in understanding the other. The great challenge in a multicultural environment is to move from the stage of "*they are crazy these people*" to the stage of "*It* was a misunderstanding".

According to Livermore (2015), cultural intelligence includes four dimensions:

• The Drive: It is a motivational dimension. It is the force that pushes us to leave our comfort framework, and to undertake the efforts necessary to

understand others and to control the negative emotions towards the others.
The Knowledge: It is a cognitive dimension. It is the ability to apprehend and accept information that is incompatible with our normal

framework and to interpret them correctly.
The Strategy: It is a planning dimension. It has to do with the measures that need to be taken in light of the cultural differences.

• The Action: It is a behavioral dimension. It is a concrete application of the knowledge and the knowledge acquired in appropriate contexts. In

of the knowledge and the knowledge acquired in appropriate contexts. In other words, it is the ability to demonstrate behaviors adapted to the contexts. Cultural intelligence, therefore, is the effective and rational solution to the difficulties posed by multi-cultural environments (Romain, 2010). In an attempt to highlight the role of cultural diversity management in intercultural relations in the workplace, a study centered on Lebanese small and medium tourism enterprises (SMTE) was chosen. The choice of this case is linked to the intercultural nature of the tourism sector and the need for cultural intelligence concept as an integral part of diversity management.

**Cultural Diversity in Small and Medium Tourism Enterprises (SMTE)** The empirical study is made up several in depth interviews with SMTE's managers on one hand and of several focus groups with SMTEs' employees on the other hand. Questions asked were directly related to cultural diversity, cultural intelligence, and intercultural management.

The interviews with the managers revealed that the Lebanese companies are still largely in the hands of family groups. One of their major challenges is to improve the quality of production while remaining

competitive. However, the concept of cultural diversity is NOT a characteristic of the performance of tourism enterprises in Lebanon. The managers' answers highlighted the fact that they work by intuition, if not by improvisation, following the results of the previous years. Indeed, the directors of the Lebanese tour operators rely on the competitiveness and the financial results of the previous years to determine their future strategy. In addition, the future strategies of the tourism enterprises are exclusively short-term strategies to guarantee their temporary or annual survival in the Lebanese market. As a result, one can associate this strategy to the political and economic instability in the country. Moreover, the Lebanese tour operators do not make any decisions based on market studies.

Finally, there is a complete ignorance of the managerial measures other than the Risk Management which is the only point highlighted by the Lebanese tour operators interviewed.

On the other hand, the focus groups were useful for obtaining information from employees in the tourism sector. The analysis of the focus groups was based on comparison and contrast between the answers obtained from the focus groups participants.

from the focus groups participants. The results of the focus groups showed that the majority of the frontliner employees in the tourism sector in Lebanon are university students or new graduates. Therefore, their specialization at university is not necessarily in tourism or hospitality studies, but they are often specialized in business management. Essential courses received at the university deal with the topics of customer service, marketing, restaurant management, and tour operators. On the other hand, there are no courses taken that deals specifically with culture and intercultural differences. Some, on the other hand, have attended seminars on cultural diversity in companies.

The essential topics these employees were trained at are product knowledge and customer service. This leads to the saying that the interviewees have not been trained in any form about intercultural diversity. Also, their intercultural strategic thinking is totally subjective to their personal experiences at work.

What seemed to be constantly evident throughout the discussion was that the participants were well aware of the subject of "intercultural diversity" and its connection with the way of living in Lebanon. In other words, since Lebanon is characterized by a multitude of "subcultures", employees are always aware of the existence of the OTHER.

In conclusion, employees are motivated to know each other and learn about new customs. They are of great curiosity and this has often been noticed in the expressions appearing on their faces. This has also often been highlighted when they have asserted that they try to master several languages, to enable them speak with clients from different nationalities.

Intercultural motivation is natural among employees in the tourism sector as they are in continuous interaction with clients and employees of diverse cultures and nationalities. Nevertheless, how do they behave in intercultural interaction? They try to get along with other cultures but not beyond a certain limit that contradicts their own opinion and culture. Finally, these results show that employees have not received training on the subject of cultural diversity or cultural intelligence. They possess an innate intercultural competence characterized by a behavior of intercultural acceptance resulting from the identity of the multi-cultural Lebanese society. However, this intercultural behavior must be deepened and developed through training sessions through training sessions.

#### **Recommendations**

While intercultural communication at work may present obvious difficulties, diversity creates opportunities for innovation and opens the door to a wide range of opportunities. It is good to reflect the role that culture plays in a person's frame of reference, as much as it is important to remember that the individuals' values and the styles of communication are influenced by a number of key factors such as family life, personal experiences, and education. The following suggestions could help reduce the risk of misunderstandings in managing cultural diversity: 1) Openness to others

Respect differences; Avoid making a judgment about how to speak or the accent of the interlocutor.

Identify what an interlocutor might think or feel. Listen for the purpose of understanding, without preparing an answer. Try to put the interlocutor at ease.

2) Tolerance

Tolerance is essential for good intercultural communication. Thus, practices can include:

- Never assume
- Encourage discussion among employees
- Listen carefully
- Treat people with respect
- Show interest
- Try to discover common ground Use short, clear, and simple sentences
- Do not talk too fast
- Confirm that the person understood
- Do not speak loud the interlocutor hears very well _
- Avoid local expressions
- Define from the outset the meaning of important technical vocabulary

#### Avoid dual-negative questions

#### Conclusion

Today, several minority cultures are afraid to lose the original meaning of their culture and their heritage. They are against globalization because it erases their identity, their culture, their ideas, and conquers their whole way of living.

Managing cultural diversity should build a bridge of understanding and resolve intercultural conflicts.

Subsequently, the success in managing cultural diversity is by expressing openness to the idea that the more we learn from other cultures, the more we will discover that we often have more in common than we originally thought.

Cultural intelligence is a way to comprehensively manage the diversity of the workforce, the clientele, and the global markets.

Finally, cultural diversity can be a major asset for the multicultural company. By combining cultural differences, the company will allow its employees to enrich their behaviors, their imaginations, their performance, and their openness to the others.

#### **References:**

Aokim (1990). Toward an economic model of the Japanes Firm, *Journal of Economic Literature*, Nashville, Problèmes économiques, no 2-225, p. 1-14. Cazal, Chevalier, Davoine & Louart (2011). *GRH et Mondialisation : Nouveaux contextes, Nouveaux enjeux*. Editions Vuibert.

Chevrier S. (2000). *Le management des équipes interculturelles*. Editions Presses Universitaire de France-Collection : Sciences sociales et sociétés.

Costanzo Simona (2006). *No size can fit all, how to seize the chance for intercultural learning in international voluntary service*. published by the UNESCO. Retrieved from http://ccivs.org/New-SiteCCSVI/CcivsOther/culturaldiversity/nosizecanfitall/module%20final%2 0gb.pdf

CREG (2013). La gestion de la diversité au sein des organisations-centre de ressources en economie gestion. Retrieved from http://www.creg.ac-versailles.fr/spip.php?article674

Crozier, M. (2000). A quoi sert la sociologie des organisations?, 2 Volumes, Seli Arslan

Edward T. Hall (1966). *The hidden dimensions*. Anchor books editions.USA Livermore D. (2015). *Leading with cultural intelligence : the real secret to success*,  $2^{nd}$  edition, AMA publishing :USA.

success, 2nd edition, AMA publishing :USA. Early C. & Ang S. (2003). Cultural intelligence: individual interactions across cultures. Stanford University Press.California F. Bournois, S., Point, J., Rojot., J.L. & Scaringella (2007). Les meilleures pratiques RH. éditions d'organisation. Retrieved from http://www.creg.acversailles.fr/spip.php?article674

Hofstede G, & Hofstede J. (2005). Cultures and Organizations: Software of the Mind, 2nd Edition. McGraw Hill: USA

Marie-Soleil Pinsonnault (2008). Actions interculturelles de développement et d'éducation, Recueil des meilleures pratiques en gestion de la diversité culturelle Témoignages d'employeurs de l'Estrie. ISBN 978-2-923580-01-2. Bibliothèque nationale du Québec Bibliothèque nationale du Canada.

Maurice M., Sellier F. & Silvestre J.J. (1982). Politique d'éducation et organisation industrielle en France et en Allemagne. Paris : PUF.

Peretti. (2006). Tous différents, gérer la diversité dans l'entreprise, ouvrage collectif coordonné. Éditions d'Organisation.

Reynaujd D. (1989). Les Règles du jeu. L'action collective et la régulation sociale. Armand Colin.

Rosenzweig, P. M. (1998). Stratégies pour la gestion de la diversité. L'art de l'entreprise globale. Les Échos. Retrieved from www.lesechos.fr/formations/entreprise_globale/articles/article_6_2.htm.

UNESCO (2002). Déclaration universelle sur la diversité culturelle. Sommet mondial sur le développement durable. Johannesburg. Retrieved from http://unesdoc.unesco.org/images/0012/001271/127162f.pdf ROMAIN S. (2010). *L'intelligence culturelle, qu'est ce que c'est,* accessed

from http://lecocatrix.blogspot.com/search/label/Intelligence%20Culturelle

# Law Enforcement and Investigation of Cybercrime in Albania

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#### Abstract

Since 2000 until 2016, the Internet has expanded at an average rate of 918,3% globally; currently, around 4 billion people are online. Cyberspace today is one of the greatest legal challenges which have stimulated another form of crime, creating an environment for new methods of crime. Now, almost all crimes can be committed with the use of computers. This paper analyzes the procedures of cybercrime investigation according to the Albanian legislation such as handling of electronic evidence and the methods and tools of investigation. The paper deals also with the issues of cooperation with Internet Service Providers (ISP) and regional and international cooperation in the fight against cybercrime. Finally, the paper analyzes the work and progress of the new Cybercrime Investigation Units. This includes some interviews with cybercrime investigation agents providing information on the process of investigation of these crimes in Albania and the challenges faced by them.

Keywords: cybercrime, evidence, investigation, Albania

#### Introduction

Cybercrime has become one of the greatest legal challenges. Since 2000 until June 2016, the Internet has expanded at an average rate of 918,3% globally; currently, around 4 billion people are online (World Internet Usage and Population Statistics, 2016). Now, almost all crimes can be committed with the usage of computers. Viewing the current importance of this phenomenon on a global scale and at the national level, given the rapid growth of cybercrime in Albania in the recent years and the lack of reliable

studies in this field in our country, we decided to conduct a research on cybercrime investigation.

This study has to do with the analysis of the current situation in Albania related to the legal standards, mechanisms for investigation and prosecution of cybercrime, and the identification of problems and challenges encountered by investigators, prosecutors, police, and the Albanian government in the prevention and combating of cybercrime in Albania. Consequently, procedural measures and investigative tools used in cases of cybercrime investigators were described and analyzed. Included in the description are also the functions of the Department of Investigation of Cybercrime as a newly created body for the investigation of cybercrimes in Albania.

Criminal Procedure Code (hereafter CPC) in Article 149 provides the definition of criminal evidence as follows: "Evidence is a notice (information) on the facts and circumstances relevant to the criminal offence, which are obtained from sources provided for by the criminal procedural law, in accordance with the rules prescribed by it and which serve to prove or not the commission of the criminal offence, its consequences, the guilt or innocence of the defendant and the extent of his responsibility". Based on this article, criminal evidence is considered as any notice giving a fact or circumstance relating to a specific offense that is taken from sources that is known and provided by the procedural law. This is done in accordance with rules set by it and serving to prove the commission of the defendant, and his degree of responsibility as well as any interest for resolving the matter rightly (Elezi, 2013). Another element which should be considered when investigating a crime, especially cybercrime, is the jurisdiction. Jurisdiction is the right of the state authorities to resolve the issues involved in their functions by applying the law in any case (Schjolberg, 2013). Criminal jurisdiction is determined on the basis of the country where the criminal offense was committed or attempted to be committed, or where there is a consequences of the offense (Shegani, 2002). If the country is not known, then the jurisdictional powers are determined by the residence of the offender.

However, the determination of jurisdiction becomes more complicated in the case of cybercrimes where the perpetrator could be in a very great distance from the place where the crime was committed or where the consequences of crime came. In some cases, these distances exceed national boundaries. In these cases, the perpetrator is in a state, while the consequences of crime go to another country. Therefore, this leads to many difficulties on the part of the investigating bodies to investigate the related crime caused by the lack or limitation of jurisdiction. In order to eliminate the possibility of being in a situation like the lack of jurisdiction, the Albanian government has adopted a series of bilateral or multilateral agreements which make adjustment to such cases. As regards the regulation of relations with foreign authorities in criminal matters, Article 10 of the CPC stated that they are regulated by international conventions recognized by the Albanian state, the principles, and the generally accepted norms of international law and the provisions of this code.

At the end of this paper, conclusions were drawn from the research study and some recommendations for Albania were provided. Thus, the result of the findings issued during the preparation of this study was achieved. Aspiration to join the great community of the European Union has made it possible for the country to have legislation in accordance with international standards, adapted in accordance with the EU legislation against cybercrime. However, only the existence of a suitable legal framework is not enough to fight cyber criminality. Effective implementation of this legal framework is essential. To achieve this goal, it is necessary to create or improve mechanisms against cybercrime, activation of all stakeholders affected by cybercrime, combating this phenomenon, increasing the awareness of the population and the country's government on the risks that endanger the country, and increasing regional and global cooperation in combating cybercrime.

## **1.** Albanian Criminal Procedural Legislation Related to Computer Evidence

Procedural aspects of issues related to cybercrime are included in the actions and measures that apply specifically to this type of crime, as well as actions and measures to be applied in conventional crime. Here, we can mention the following provisions: With Law No. 10 054, date 29.12.2008 "On some amendments to the Criminal Procedural Code", Article 191 of the Criminal Procedure Code has been added to Article 191 which states that:

"Obligation to submit computer-based records: 1. In criminal proceedings regarding criminal offences in the information technology field, the Court, upon request of the prosecutor or the plaintiff, shall order the holder or the controller to submit the electronic data stored in the computer or in any other storage device. 2. During these proceedings, the Court shall order the service provider to submit any information about the subscribers, in connection with the services rendered by the provider. 3. When there is reasonable ground to believe that the delay may cause serious damage to the investigation, the prosecutor shall decide, by a reasoned decision, that it is obligatory to submit the computer-based records, set out in point 1 and 2 of this article, and shall immediately inform the Court. The Court shall review the prosecutor's decision within 48 hours from the notification date." As noted, the purpose of this article is to study the legal regulation of the

As noted, the purpose of this article is to study the legal regulation of the relations between law enforcement organs and Internet service providers. It aims to define by law the obligation of cooperation between the parties in the cases specified in the law for investigative purposes of criminal acts in the field of technology information. However, this provision clearly states the cases when it can be ordered to present the computer data, which should be done only by court order.

Under the provision, the requirement for the submission of data to the court can be done not only by the prosecutor, but also by the injured accuser. Despite the adjustment of liability for disclosure of data, the missing of time limits within which must be given the decision of the court was noted. This is upon the application by the interested parties, as well as deadlines within which data should be filed by controllers and internet service providers. In this provision, the legislator uses the term 'controller' from the field of information technology. This term means "any natural or legal person, public authority, agency or other entity who, alone or jointly with others, store, process, manage, archive and therefore control personal data".¹⁹

Definitions of computer data, computer systems, and service providers are given explicitly in the Convention on Cybercrime of 2001. Thus, this was ratified by Albania with the law no. 8888, 25.04.2002 "For the Ratification of the Convention on Cybercrime".

Further in this Convention, the definition of "subscriber information" was defined as:

"...any information contained in the form of computer data or any other form that is held by a service provider, relating to subscribers of its services other than traffic or content data and by which can be established: a) the type of communication service used, the technical provisions taken thereto and the period of service; b) the subscriber's identity, postal or geographic address, telephone and other access number, billing and payment information, available on the basis of the service agreement or arrangement;

c) any other information on the site of the installation of communication equipment, available on the basis of the service agreement or arrangement" (Convention on Cybercrime, 2011). Here, subscriber means "Any natural person, legal person, entity or association, part of a contract with a supplier of electronic communications services accessible to

¹⁹ See: Commissioner for the access to information and protection of personal data, information can be accessed at this web page: http://www.idp.al/index.php/sq/informacione/250-idp-sq/publikime/publikime-tendryshme/fjalor-terminologjik

the public for the provision of such services, or any beneficiary of these services through prepaid cards".²⁰

Consequently, the Code of Criminal Procedure of the Republic of Albania specifically regulates the procedure of seizure of computer data in case of cyber offenses in Article 208 / a stipulating: *"1. In criminal proceedings involving crimes in the information* 

technology field, the court shall decide, upon request of the prosecutor, to seize the computer-based records and the computer systems. The court shall set forth in this decision the right to access, request and take data from the computer, and prohibits any further actions or obtaining of the data or of the computer system. 2. When there is reasonable ground to believe that the required computer-based records are stored in another computer, or part of it, and they may be, in a lawful way, accessed from or made available from the first computer, which is being controlled, the court shall order, upon request of the prosecutor, an immediate search or access to the latter computer. 3. Following the court decision, the prosecutor or the judicial police officer delegated by the prosecutor, shall take measures to: a) prevent further actions, or taking the computer, only a part of it, or another data storage device; b) extract and receive copies of the computer-based records; c) prohibit access to the computer-based records, or to remove these records from accessible computers; ç) provide inviolability of the respective stored records. 4. The prosecutor may authorize calling a computer expert, or an expert in protection of computer-based records, to carry out these actions. The expert may not refuse this task for unreasonable cause."

As may be noted, this provision sets out in detail the procedure of sequestration of the computer data in case of the investigation of cybercrimes. In this provision, the legislator has determined the manner of sequestration of these data, the content of a court order for sequestration, as well as measures to be taken by the prosecutor or the judicial police officer in pursuance of this decision. Furthermore, the provision also provides possibility, but not the obligation to call an information technology expert who will assists in taking the measures prescribed in the provision. It is also noted that the expert has no right to refuse the task set without any reasonable reason. However, this is a kind of obligation given to the expert to obey the order of the prosecutor (Criminal Procedural Code, article 208/a).

Besides sequestration, Code of Criminal Procedure also provides expedited preservation and maintenance of computer data in Article 299/a. Through this provision, the legislator regulates the storage of computer data

²⁰ See: Commissioner for the access to information and protection of personal data, information can be accessed at this web page: http://www.idp.al/index.php/sq/informacione/250-idp-sq/publikime/publikime-te-ndryshme/fjalor-terminologjik,

when there are sufficient grounds to believe that it could be expected by the decision of the court for the seizure of data for risk loss, damage, or the decision of the court for the seizure of data for risk loss, damage, or the alteration of the data. In these cases, the prosecutor orders the accelerated storage of risked data immediately (Criminal Procedural Code, Article 299/a). However, the same provision is regulated which is also the case when the data are in the possession of a person. In this case, the prosecutor is permitted to order the person to store data in a term up to 90 days. This is with the obligation of not disclosing the procedures and actions undertaken by the conclusion of the investigation. Through this way, the legislator prescribes by law the confidentiality of investigations by third persons involved in the event. However, this is done in order to ensure an impartial investigation and prevention of interference in the investigation or alteration. investigation and prevention of interference in the investigation or alteration of evidence by other people.

of evidence by other people. Even in this provision, the legislator has used technical terms from the field of information technology, such as the term "traffic data". The definition of this term is given in the Convention on Cybercrime, article 1(d) as: "any computer data relating to a communication by means of a computer system, generated by a computer system that formed a part in the chain of communication, indicating the communication's origin, destination, route, time, date, size, duration, or type of underlying service." Article 299/b of the *time, date, size, auration, or type of underlying service.* Article 299/b of the Criminal Procedure Code continues the definition of the accelerated conservation and partial disclosure of computer data. This provision states, in more detail, the obligations of the person charged by the prosecutor with the accelerated storage data traffic. This person should undertake to cooperate in the highest degree with the prosecution to identify the service providers and other necessary evidence. Under this provision, it includes:

#### **1.1 Duties of the Proceeding Body**

**1.1 Duties of the Proceeding Body** Detection and investigation of forms of cybercrime by the proceeding body were very complicated. Cyber changes and deletion of data are carried out without a trace. Even when there is an identification of certain persons working in these systems, the circle of offenders and type of computers itself does not facilitate the detection and investigation of this type of offense. Computer crime, as a new form of criminal activity, has great damages and consequences in the world. Thus, in every country, it requires all the organization of criminal politics nationally and internationally and the application of methods of modern criminal investigation for its discovering and deterrence. In any case, the computer criminal proceeding authority has a duty to apply these methods and tools based on the knowledge of experts who recognize the electronic and computer operation (Begeja, 2007). When it comes to computer evidence, these rules should be kept in mind (UNODC, 2013). The process of collecting, transporting insurance and computer

evidence should not change the test. In addition, computer evidence can be examined only by specially qualified persons. Therefore, any action taken during the blockade, transportation, or the storage of computer evidence must be documented.

must be documented. The investigators who were present at the cyber scene should be careful when blocking computer equipment as evidence. This is because the inappropriate access of the data stored on the device might result to violations. Therefore, legal authority is needed before any further action. For this reason, police personnel found at the scene should immediately contact the prosecutor's office to inquire if they have proper jurisdiction (UNODC, 2013). Besides the legal issues in the case of the intervention of the data stored on the computer, police personnel should also be aware that the data on the computer or computer tests are generally very subtle. Therefore, only specially qualified personnel should be allowed to examine and analyze computer evidence.

#### **1.2 Electronic Evidence**

Electronic evidence evidence are materials that exist in electronic or digital forms (UNODC, 2013). Electronic evidence are essential not only for investigation and prosecution of cybercrime, but also for crime in general. Optimized legal framework for electronic evidence, together with law implementation and criminal justice capacity used to identify, collect and analyze electronic evidence, are essential for an effective crime response.

analyze electronic evidence, are essential for an effective crime response. Electronic evidence like DNA and fingerprints are hidden. They overcome legal borders faster and easier, and they can be changed, damaged, or broken easily. Electronic evidence are also effected by time. Electronic evidence of crime scene should be collected, saved, and transported carefully. Furthermore, the police officer who is at the crime scene must have regard for the following: identify, block, recognize and provide all computer evidence at the scene; document all the scene, as well as special places where evidence was found; label and protect computer evidence; transport computer evidence in the safest way possible etc. (Zverlevski et al., 2014).

The collection of evidence at crime scene can be done only by the person who has the legal authority for the seizure of evidence, which in advance, makes insurance and documentation of the site. The staff at crime scene, who is not qualified, is not allowed to explore the content or get the information from the computer or any other computer device, but only to record what they see on the screen without touching anything. For a correct and successful investigation, it is essential that judicial police officers should be informed about the investigative values of computer evidence. This should be done in order to evaluate the types of evidence at the scene and identify the equipment and materials found at the scene.

#### **1.2.1 Electronic Devices as Possible Evidence**

A *computer system* is composed of hardware and a software that processes data that are then stored in the hardware. Hardware is the mechanical and electronic parts of the computer system, whereas the software are data and computer programs.²¹ Computer system and its components can be important evidence in the investigation or criminal proceedings. Hardware, software, documents, email and the attached files, Internet search history, discussions in chat rooms, photos, database, and financial records, all of them may be possible and valuable evidence for investigation of crime scene. The device itself, with the stored information in it, can serve as computer evidence.

Hand devices are mobile data devices storage that ensure communication, photography, video recording, navigation, entertainment, and personal information management. Hand devices such as, cellphones, smartphones, PDAs, multimedia computer equipment, pagers, and GPSs can contain applications, data or information, like SMS-s, messages, e-mail, internet navigation history, contact lists, photos, and financial records. However, all of these devices may contain valuable evidences used for investigation or lawsuit.

When electricity is cut, data or computer evidence can be lost. Computer data or evidence on some devices such as smartphones or cellphones can be overwritten or corrupted if the device remains activated. For these reasons, judicial police officers or investigators who go first on the scene should be careful not to lose the data stored on the blocked device that serves as material evidence.

*Peripheral devices* are those devices, which are connected to a computer or computer system to increase users accessing capacity and computer functions. The devices themselves, as well as the functions they perform, are all possible evidence. The information stored in the device can serves as an evidence, too, such as fax numbers and outgoing or incoming calls, recent documents scanned, copied or printed, and information about the reasons for using the device (UNODC, 2013). These devices can also be a source of other evidence such as fingerprints, DNA etc.

²¹ See: Components of a computer system, available at: https://chortle.ccsu.edu/java5/Notes/chap01/ch01_3.html, and https://en.wikibooks.org/wiki/A-

level_Computing/CIE/Computer_systems,_communications_and_software/Components_of_ a_computer_system_and_modes_of_use/Types_of_hardware,

A computer network consists of two or more computers connected between them via a data cable or wireless connection. A network often includes printers and other peripheral devices such as hubs, switches, and routers. Computer systems and devices connected with them can constitute valid evidence for an investigation or proceeding. Also, the information contained may apply as potential evidence. Functions, capacity, and any other identifying information related to the computer system, components and connections, including internet protocol (IP) addresses of the local network (LAN), MAC addresses, addresses work interface card (NIC) etc, were also important.

#### **1.3 Investigative Devices and Tools**

**1.3 Investigative Devices and Fools** In most cases, objects or devices containing computer evidence can be treated using standard tools. Agents investigating the crime scene must be careful with the evidence collection and packaging to avoid transformation, damage, or destruction. Computer evidence, computers and electronic devices where it is stored, are fragile and sensitive to extreme temperatures, humidity, shock, static electricity, and magnetic fields. For this reason, the investigator at the scene should take measures on documents, photographs, packs, transports, and stored electronic evidence to avoid alienation, damage, and the destruction of evidence (UNODC, 2013).

Research and interviews conducted with employees of the Albanian State Police who deal with cybercrime investigation shows that they are equipped with all necessary equipment and investigative tools to investigate these crimes. The Albanian State Police, in cooperation with the Programme of Assistance and Training International Criminal Investigation (ICITAP), United States Department of Justice (USDOJ), and the Office of Crime and Drugs of the United Nations (UNODC) has drafted in 2009 a manual guide for cybercrime investigation and computer evidence in zooy a manual gates Police. However, this guide describes in detail the types of computer evidence and how to deal with them step by step, including actions to be taken since the first moment on the scene, identification of the computer evidence, their documentation, collection, package, transportation and storage makes it a very valuable guide for the investigation of cybercrime. The content of this guide is not made public because of the sensitivity of instructions included.

#### **Cybercrime Investigation Unit** 2.

In June 2014, the cybercrime sector and special structures near 8 district prosecution offices were established. For the first time in the Albanian prosecutor's office, a special unit for cybercrime offences started functioning.

Initially, this kind of investigation will be conducted in the Prosecutor's Office of Tirana, Durres, Elbasan, Vlore, Fier, Korce, and Shkoder. Offenses subject of this sector²² include: computer dissemination of materials in favor of genocide or crimes against humanity, threat due to racist and xenophobic motives through the computer system, dissemination of racist or xenophobic materials through the computer system, insulting due to racist or xenophobic motives through the computer system, computer fraud, computer falsification, unauthorized computer access, unlawful wiring of computer data, interference in computer data, interference in computer systems, and misuse of equipment.

Within the scope of the activity of this sector, serious immoral acts, pornography, fraud on works of art and culture, publication of another person's work with own name, unlawful reproduction of someone's work, violation of the rights to industrial properties, and violation of the rights to topography of semiconductor circuit were also included when committed through computer systems. This, however, is obvious based on the importance given to intellectual property protection from online crimes.

In General Prosecutor's Office, in 2014, the Directorate of Control of Investigation of Economic Crimes and Corruption (Task Force) was set up to control the investigation of corruption, economic crime, and investigation material in composition of the work of the Sector of Cyber Crime Investigation (Prosecution Office's Medium-Term Strategy for 2015-2017 and the Action Plan).

Another main objective is to strengthen the fight against cybercrime. Technological changes day by day, and crimes committed via computer are growing significantly. Thus, large amounts of income from crimes are generated and circulated on the Internet. Consequently, strengthening the fight against cybercrime is closely related with financial investigations which should be addressed in the searching, seizing and confiscation of crime incomes, and the investigation of money laundering on the Internet. In this regard, it is aimed at:

•Strengthening professional capacity and logistical structures investigation of cybercrime. Appropriate training of prosecutors and judicial police officers, familiarity with international legislation, and exchange of best international experience of computer crimes investigation;•Strengthening public-private cooperation in the area of information

technology;

²² See: General Prosecution Office, for the first time in the prosecutors' offices in Albania, Cybercrime Investigation Unit to available starts function, at:http://www.pp.gov.al/web/Fillon_funksionimi_i_struktures_së_antikrimit_kibernetik_654 _1.php#.VfSR29Kqqko

•Appointment of cyber experts in support of prosecutors and judicial police officers.

During 2014, 180 offenses were recorded in the area of cybercrime from which 76 were discovered with 86 authors; out of them, 10 were arrested, 2 were declared wanted, and 74 were free (Prosecutor General, 2014). This was compared with the same period, one year before 72 more offenses were recorded, with 17 more authors, and 1 more arrested author. State Police, in order to serve citizens better and to prevent and combat corruption and cybercrime, has put in function a software application for online reporting of cybercrime, which is located on the official website of the Albanian State Police.²³

In this context, the Ministry of Justice recommended the General Prosecutor: "severity of criminal policy towards security measures and punishment of criminal cases of organized crime [...] cybercrime; enhancing cooperation for strengthening and consolidation of joint investigation units, as well as specialized structures for prosecuting offenses of corruption, [...] and cybercrime [...]". Obviously, cybercrime is increasingly given a greater importance thus making possible the further development of methods of investigation and prosecution of this crime.

As noted throughout this chapter, the procedures of investigation and prosecution of cybercrime in Albania are clear and accurate. In recent years, more and more importance is being paid to the investigation of such offenses, strengthening more and more measures in this field, including international cooperation. Within this cooperation, a manual for internal use for cybercrime investigators has been created with the support of UNODC. It is a quite detailed manual, including procedures, methods of action of investigators at the crime scene, types of evidence, the handling of electronic evidence, etc. Thus, this significantly facilitates the work of the investigators of cybercrime in Albania. Also, newly created cybercrime sectors in seven country prosecutors are another sign of increasing the awareness of the Albanian state for the phenomenon of cybercrime. Although these taken steps are in the initial stage and need a lot of work to achieve the standard required for a more efficient protection from the risk of cybercrime, it seems that Albania is in the right direction to combat this dynamic and dangerous phenomenon.

#### 3. Research Analysis

This part provides an analysis of the Albanian reality related to the cybercrime in the country, as viewed by the eye of the best experts of this field that have been interviewed for the purposes of this research. The reason

²³ Material for the second meeting of GPP EU-Albania, priority nr.4. Domestic Relations

for choosing to conduct interviews is because it was thought to be the best way for discovering the challenges and real problems which the investigation bodies faces in practice.

The first question made to the interviewees is: in what aspects is the Albanian legislation more complete in the material, procedural or international unification aspects? The interviewees unanimously answered that regarding the international cooperation, the Albanian legislation is complete and efficient. This is based on the fact that the country has ratified all the international acts related to cybercrime and also other acts that have helped in the facilitation of the international investigation processes. Therefore, what the expert of the Security Policies highlights is that: "We should act more rapidly in the implementation of those international acts that we ratify, in order to be coherent with the evolution of technology and cybercrime typology." (Interview with Xh.Sh., 2015)

Furthermore, the Head of Cybercrime Unit at the Prosecution Office of Tirana declares that there is a problem in the field of international cooperation related to the letter rogatories seen as a procedure for obtaining international information for investigation purposes. Thus, he states that: *"Time, as regards cybercrimes, is very important and the letter rogatory is not the adequate solution for obtaining information about this kind of crime."* (Interview with A.G., 2015) Through this declaration, he stresses the need for the creation of accelerated procedures for the investigation of such a flexible crime which is also very fast in producing consequences. The same problem has been stressed also by the Head of Cybercrime Investigation Unit of the State Police, who states that: *"Letter rogatory is a serious problem, because in cases of cybercrime investigation, time is a very important element."* (Interview with E.P., 2015) In such cases, procedures like the letter rogatory, that require a lot of time, constitute a big obstacle in the investigation of cybercrime. This is seen when it is well-known that in the cybernetic space, time passes very rapidly and it is crucial in achieving results. He declares that in avoiding this obstacle, the police have found another solution, which is by utilizing the international acts and by cooperating with private agencies such as Facebook. *"This method has given results in the fight against cybercrime, in cases in which information from Facebook was needed."* (Interview with E.P., 2015)

A key point of the interview was the question on the problems encountered during the investigation of cybercrime in Albania. Each of the respondents had different views. Nevertheless, all were unanimous when they stated that Internet Service Providers (ISP) do not have the facilities for the storage of the minimum information required by law, monitoring and identification of cases. This is because the ISPs use, based on the lack of facilities, the same IP for a certain number of users. In normal conditions, the IP is the number that identifies an Internet user from another. Such an irregularity makes it more difficult to find the perpetrators. According to the expert of investigation of cybercrime in the forensic laboratory, something like this happens because in Albania, ISPs have not implemented IPv6 technology yet, which would make it possible to provide every user a unique IP. The forensic expert also notes that "*in the investigation field, there is a specialized human resources gap, but he stresses that the technology and equipment for the investigation of this crime exist and they are modern.*" However, what the expert of Security Policies stresses more regarding the problems of investigation is the problem of inspection and protection of digital evidence, as well as the presentation of evidence in court, which he notes that it is necessary to have specialized people to do something like that. Whereas the Head of the Cybercrime Unit, in the Tirana Prosecution Office maintains his view that the international letter-rogatory is the primary problem. This is then followed by the problem in infrastructure and equipment.

What has also been noted throughout this paper is that in the international arena as well as in the domestic one, the role and cooperation between national investigation authorities with the internet service providers is necessary. Thus, how is the Albanian reality? This question was asked to interviewees and the conclusion was clear: cooperation occurs because the law imposes it. As for concrete initiatives to strengthen this relationship between the relevant investigative authorities and ISPs, there is no such thing. Head of the Cybercrime Unit in Tirana Prosecution Office states: "We have sent a memo to the telecommunications office in connection with this matter, but in practice there is still nothing." Respondents emphasized that a strengthening of these relations is quite necessary to have the more positive achievements in the fight against cybercrime and cyber security. A very important role in the fight against cybercrime is the establishment of special structures for combating cybercrime, which are those that enforce laws and regulations. Subsequently, the representatives of relevant

A very important role in the fight against cybercrime is the establishment of special structures for combating cybercrime, which are those that enforce laws and regulations. Subsequently, the representatives of relevant institutions addressed the question whether they have these specialized units; and if yes, are they specifically dedicated to cybercrime? According to the respondents, such units have been created recently after a long absence. These are specialized units that focus only on cybercrimes. Such units are created at a local level in the prosecution offices and the police offices, as well as at the national level, which is ALCIRT. Forensic laboratory expert states that ALCIRT is not functional although it is the institution that should draft policies and coordinate nationwide cybercrime and security. He claims that in this area, there are no concrete results yet.

Respondents were also asked about the challenges (legal, technical, and institutional) facing the country in terms of cybercrime and critical

infrastructure. The Security Policy expert replied in this way: "There is a big challenge in this regard, as are retarded in this field. The positive moves in this area started very late even though they are international obligations." He stresses the need to identify the critical infrastructure as quickly as possible and that the political strategy against cybercrime must be approved. This has remained only a draft of ALCIRT, waiting to be approved.

Later access to technology and the Internet by the Albanian state and the confrontation with a new and very sophisticated kind of crime made it necessary to have experts that would deal precisely with investigating such crimes. For this reason, a number of individuals began to be trained in the field of cybercrime. Thus, how is the performance of such an activity, how much are trainings followed today in Albania, and who are the organizers of these trainings, domestic institutions or international organizations? According to the expert of Security Policy in Albania, trainings in the field of protection against cybercrime were held frequently. According to him, trainings were also conducted by Albanian trainers. He views it as a positive step and also as inclusion in school curricula of information about cybercrimes, and most of them are made by foreign organizations, such as the FBI, ICITAP, PAMECA, and the CoE. Hence, they noted that the trained persons never stand in their assigned positions for a long time, which results both in economic costs and a lack of experts in the field.

During interviews with some of the leaders and best experts in the cybernetics field, a very important point was understood, especially for national security and for the business and private sector. This has to do with the security of data with which their employees work. Interviewees emphasized that there is a problem with the data that the employees receive intentionally or unintentionally by means of portable tools such as USB, especially when these tools are obtained from unsafe sources. This is because they can be infected, thus causing data losses. This has to do with the policies that have to be followed especially by state institutions. They have a high lack of security of their personnel as regarding the technology and the data that they can take or insert on the internal systems of the institutions due to the lack of knowledge. Therefore, it is necessary that there should be an increase in the awareness and trainings of staff on the safe usage, and on the distribution, transfer, and the receipt of data of the work on which they have a access to.

#### **Conclusion and Recommendations**

Results of this analysis indicate that the Albanian legislation is in accordance with European standards and international conventions. Albania has signed and ratified all international conventions which cover protection against cybercrime. Despite this fact, Albanian legislation still needs to be amended to be fully in accordance with the ratified conventions and to ensure the necessary flexibility for the prevention and prosecution of such dynamic crimes.

dynamic crimes. However, only the existence of a suitable legal framework is not enough to fight criminality, such as cybercrime. An effective implementation based on the practice of the legal framework is also crucial. To achieve this goal, the creation or improvement of mechanisms against cybercrime, the activation of all stakeholders affected by the phenomenon of cybercrime in combating this phenomenon, increase of the awareness of the population and the country's government on the risks that the country fases, and increased regional and global cooperation in combating cybercrime are necessary. The government should increase cooperation with ISPs, and they should increase the number of awareness by raising campaigns about the dangers of the Internet and online security. Most law enforcement actors are not equipped with the necessary technological knowledge, whereas internet criminals are experts in computer technology. To combat these crimes, it is necessary to educate and develop human resources as one of the most reliable strategies. In addition, universities, schools of higher education, and academic institutions should

universities, schools of higher education, and academic institutions should open special courses designed to allow future generations of judges, prosecutors, and lawyers to be trained in this difficult, but very relevant and important area.

According to the study conducted in the context of this paper, after identifying the challenges and problems of the Albanian state in the fight against cybercrime, based on the analysis of the legal framework, achievements up to date, statistics and results obtained from the interviews conducted with specialists responsible for investigating, prosecuting and combating cybercrime, we were able to draw some recommendations to be followed by the Albanian government to improve the current situation regarding cybercrime in Albania. Thus, these recommendations are as follows:

It is necessary to take measures for the separation and movement of data and information more securely, both within public institutions as well as private ones, with the aim of preventing and combating crime and ensuring appropriate security policies.

Strengthening the existing institutions:

1. The identification of key institutions in the field of cyber security and to ensure that they have sufficient staff.

2. These institutions should have a mix of specialists, both from the legal field and from the information technology (IT), who must be constantly trained.

Updating the trainings curricula of the national public administration institutions and diplomatic academies.
 Strengthening the national CERT, enabling it to have the capacity to

respond to any incident.

5. There should be created conditions and taken measures to increase the cooperation and involvement of specialized agencies of law enforcement on a more adequate way of combating cyber crime.

The creation of a public-private task-force is another necessary step • in combating cybercrime more efficiently.

Improving the operational capacity and response of law enforcement authorities against cyber attacks. In this context, it is necessary to increase the number of experts in the field of investigation and prosecution of cybercrime. This is possible by frequently organizing specialized trainings, and sending relevant officials for specializations abroad. Through these trainings, the specialization of experts in the field of cyber crime, their knowledge of domestic and international legislation in the field, and on the methods and ways of implementing this legislation in the most adequate and effective ways can be achieved. In this context, the training of existing staff is not only necessary, but also getting more specialists in this field since specialists in the field of combating cybercrime in Albania are very few.

• In addition to legal experts, experts in the field of information technology are also needed. This should be present in every structure of the police, prosecution, and courts that deal with the fight against cybercrime, in order to assist law enforcement with the right technical experience in a much more effective investigation of cyber attacks.

#### **References:**

Akhgar, Babak, Staniforth, Andrew & Bosco, Francesca (2014). Cyber Crime and Cyber Terrorism Investigator's Handbook. US: Elsevier.

Begeja. S (2007). Kriminalistika. Tirana. Brunner, Elgin M. and Suter (2009). Manual. International CIIP Handbook 2008/2009, Center for Security Studies, Zurich: ETH.

Commissioner for the access to information and protection of personal data, accessed this web information be at page: can http://www.idp.al/index.php/sq/informacione/250-idp-

sq/publikime/publikime-te-ndryshme/fjalor-terminologjik.

Computer Abuse: The Emerging Crime and the Need for Legislation. Fordham Urban Law Journal, 1983.

Convention on Cyber Crime of Concil of Europe (2001). Criminal Procedure Code of the Republic of Albania (1995). Csonka, P (2005). The Council of Europe Convention on Cybercrime: A response to the challenge of the new age? In Broadhurst, R. & Grabosky, P.

Eds. Cybercrime: The challenge in Asia, Hung Kong: University of Hong Press.

Elezi. F (2013). Provat penale dhe procesi i të provuarit, Tirana: Botimet Erik.

Elezi. I (2013). E drejta penale (Pjesa e posaçme). Tirana: Botimet Erik. Elezi. I (2013). Kacupi. S, Haxhia. M, Komentari i Kodit Penal të RSH (Pjesa e përgjithshme). Tirana.

Gercke (2009). Impact of Cloud Computing on Cybercrime Investigation. Taeger/wiebe Inside the Cloud.

Internet Security Threat Report (2015). SymantecTM Global Intelligence Network. Vol. 20. April.

Internet Society (2015). Global Internet Report 2015, Mobile evolution and development of the Internet. Internet Society.

Law no.7895, date. 27.1.1995 "Criminal Code of Republic of Albania". Ammended

Magnin, Cédric J. (2001). The 2001 Council of Europe Convention on cybercrime: an efficient tool to fight crime in cyber-space?, LLM Thesies, Santa Clara University.

Marcella Jr., A.J., Greenfield, R.S. (eds.) (2002). Cyber Forensics: A Field Manual for Collecting, Examining, and Preserving Evidence of Computer Crimes, 2nd edn. Boca Raton: CRC Press.

Marcella, Albert J. and Menendez, Jr (2008). Doug, Cyber Forensics, Second Edition, A Field Manual for Collecting, Examining, and Preserving Evidence of Computer Crimes, US: Auerbach Publications.

Memorandum of Europian Commission no. 14/269 'Frequently Asked Questions: The Data Retention Directive'. Brussels, 8 April 2014. Middleton,Bruce(2004). Cyber crime investigator's field guide. US: CRC

Press LLC.

Recommendations No.R (89) 9, approved by the European Committee of Ministers of the Council of Europe on September 13 1989 and Report by the European Committee on Crime Problems: Computer-related crime. Recommendations No.R (95) 13. approved by the European Committee on Crime Problems (CDPC) at its 44th plenary session May29-June 2, 1995: Concerning problems of criminal procedural law connected with information technology.

Rees Al (2006). Cybercrime Laws Of The United States, Compilation, CCIPS.

Reyes, Anthony, Brittson, Richard, OShea, Kevin and Steel Jim (2007). Cyber Crime Investigations Bridging the Gaps Between Security Professionals, Law Enforcement, and Prosecutors. US: Syngress Publishing.

Schjolberg & Judge Stein (2013). Crossing jurisdictional boundaries, A presentation at the Europol-INTERPOL Cybercrime Conference. September 24-25. Europol Headquarter.

Schjolberg & Judge Stein (2014). The Third Pillar for Cyberspace, An International Court or Tribunal for Cyberspace, Draft United Nations Treaty on an International Criminal Court or Tribunal for Cyberspace. Edition 9. June.

Shegani. A. E (2002). drejta penale e krahasuar. Tirana.

United Nations Office on Drugs and Crime (2013). Comprehensive study on cybercrime, Draft. UNODC, New York: February.

United Nations Office On Drugs And Crime (2013). Comprehensive Study On Cybercrime Draft February 2013, Chapter Six: Electronic Evidence And Criminal Justice. Vienna: UNODC.

Zverlevski Marko (2014). Andonova, Spasenka. And Millosheski, Vlladimir. Cybercrime handbook Skopje: OSBE.

World Internet Usage and Population Statistics: http://www.internetworldstats.com/stats.htm

#### Interviews

Interview with Prosecutor. A.G. Head of Cybercrime Unit at Prosecution Office in Tirana, July 2015.

Interview with E.P. Head of Cybercrime Investigation Unit at the Police Headquarters of Tirana. Tirana, July 2015.

Interview with M.Gj. Expert in Forensics Laboratory. Tirana, August 2015.

Interview with Dr. Xh. Sh. Expert in Security Policies, Police Academy of Republic of Albania.

## **Emergency Telecommunications for Managing Disasters: A Complexity Science Perspective**

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#### Abstract

Telecommunications technologies have shown great potential for humanitarian relief on a global scale. The complexity of the disaster scenario makes necessary to develop new strategies in order to respond efficiently and in a timely manner to humanitarian needs when disasters occur. Given the rapid technological advances and their associated convergence, we argue that the elements (subsystems) of a telecommunications system cannot be seen in an isolated manner, neither be conceptualized only as infrastructure; an interdisciplinary perspective is required. We suggest that a fragmented approach to telecommunications systems limits their application and effectiveness in disaster relief and recovery. In our approach, we consider the emergency telecommunications of the main agents of such ecosystem is key to respond to disasters in a coordinated and orchestrated manner. Telecommunications technologies are important enablers, but should not be considered the center of the planning and execution stages of the disaster management process.

**Keywords:** Emergency Telecommunications, Disaster Management, Complexity Science, Climate Change

#### Introduction

Emergency telecommunications play a key role in practically all stages of the disaster management process. In order to respond expeditiously to preparing, warning, supporting and rebuilding when disasters occur requires the participation, coordination and orchestration of a wide variety of stakeholders (individuals, communities and institutions). The effective use of telecommunications systems to support this process entails more than the availability of infrastructure and connectivity. The understanding of the dynamics of the ecosystem at the local, regional and national levels is very significant to accomplishing the effective use of telecommunications technology. According to the International Telecommunications Union (ITU), we face a multi-hazard, multi-technology, multi-phased and multi-stakeholder disaster management scenario (ITU-T, 2013).

This article proposes that the telecommunication system is in itself an open system where the interaction and interdependence of technological, environmental, sociocultural and economic factors play a key role in the characterization of this system. We conceptualize emergency telecommunications as a dynamic and complex adaptive system. We posit that a complexity approach may lead to further findings towards the creation of a framework for disaster management involving the most significant stakeholders at the different levels of coordination. The ETC 2020 initiative by the Emergency Telecommunications Cluster (ETC, 2015; WFO, 2016) intends giving a rapid and effective response to disaster management and mitigation through the interplay of local, regional, national and international stakeholders, as well as, communications providers and equipment manufacturers. This initiative is relevant because it takes into account the interdisciplinary nature of the disaster management process and the characteristics of the particular contexts.

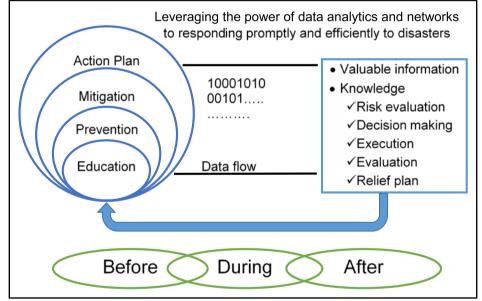
In the area of disaster communications, technology does not create value on its own. However, it is urgent to develop capacity building strategies in order to apply technology wisely to disaster prevention, education, execution, decision-making and relief. Furthermore, it is critical to develop a road map with guiding principles for Information and Communications Technologies (ICT) intervention when disasters occur.

education, execution, decision-making and relief. Furthermore, it is critical to develop a road map with guiding principles for Information and Communications Technologies (ICT) intervention when disasters occur. We start our exploration identifying the main agents of the ecosystem: Government, local, regional, national -and in many casesinternational authorities, academy, telecommunications providers, NGOs, and mainly, the affected population. We propose that associated to these agents, the elements shown in Figure 1 play a pivotal role in orchestrating an integral approach to use telecommunications technology in case of disasters. It is also important to acknowledge the importance of the information flows that have a direct impact in managing efficiently the required response at the three crucial stages of the technological intervention: before, during and after (See Figure 2).



Figure 2. Main components of an orchestrated approach to respond to disasters.

Figure 3: Data and information flows.



#### **Exploring a Complexity perspective**

Climate Change calls for urgent attention to initiatives and strategies centered in minimizing and preventing damages caused by natural disasters. A fragmented perspective in dealing with all the disciplines and different stakeholders involved imposes additional challenges that in many cases inhibit the deployment of a prompt and effective action plan. It has been shown that the availability of equipment is important to responding efficiently in all the stages, however, the main concern is to develop a comprehensive framework to allowing the coordination and harmonization of efforts; hence, the consideration of both technology and human factors is essential from the inception of the planning and action stages (ITU-T, 2013).

In order to create an emergency response framework that provides all the agents of the ecosystem with a seamless, resilient and on time communication experience ("desired reality"), we start our methodology exploring the condition of the current ecosystem in a particular context ("observed reality"). Evolving from the observed to the desired reality requires unity of vision and purpose among all the agents involved in this ecosystem. It is crucial to identify the issues where the use of technology is critical to accomplish the goals of an orchestrated emergency telecommunications environment. Therefore, it is key to raise questions related to those strategies that support the transition from the observed to the desired reality (García, 2006). We use as an example the floods occurred in Villahermosa, Tabasco, Mexico during 2007 and 2009. (See Photo 1 and Photo 2) (UNDP, 2014).

The floods in Villahermosa, Tabasco caused enormous losses both human and material. Particularly in 2007, the damage was estimated of around 5 billion dollars, affecting over a million people.

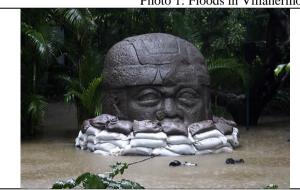


Photo 1: Floods in Villahermosa, Tabasco.

Affected infrastructure in the city of Villahermosa Tabasco, Park-Museum de la Venta.

Source: Cristel Cruz, Villahermosa Photo 2: Floods in Villahermosa, Tabasco.



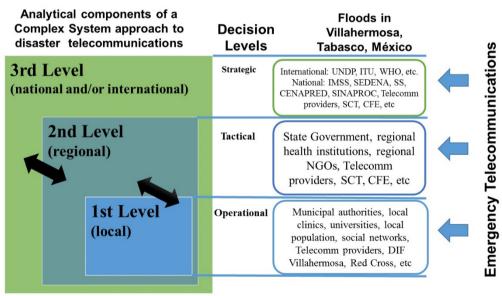
Source: Cristel Cruz, Villahermosa

After defining the research questions, we proceed to analyze the three levels of operation and the interactions among the stakeholders of such levels as shown in (Castañares-Maddox, 2009). From this analysis, we identify the elements of orchestration and hypervision necessary to provide an integrated response to disasters highlighting the key role of technology in responding quickly and cohesively during the three stages of the process (see Figure 3). Based on these results, an action plan -reflecting the nature of the context, the stakeholders' interactions and the required technologies- is defined. This action plan will depend on the specific type of disaster and on the elements described in and Figure 5.

Figure 4: Observed Reality, Research Questions and Desired Reality.



Figure 5: Complex System approach to disaster telecommunications.



IMSS: Mexican Institute of Social Security SEDENA: Ministry of National Defense SS: Ministry of Health CENAPRED : National Center for Disaster Prevention SINAPROC: National System for Civil Protection SCT: Ministry of Communications and Transport CFE: Federal Electricity Commission UNDP: United Nations Development Program ITU: International Telecommunications Union WHO: World Health Organization NGO: Non Governmental Organization DIF: System for Integral Family Development The use of emergent telecommunications technologies has been crucial in recent events worldwide, but particularly in the case of the Tabasco 2007 and 2009 floods, the use of mobile phones for allowing immediate distribution and communications of alerts, interaction among all the stakeholders; and most importantly, among all the affected citizens and relatives in Tabasco and elsewhere, had a substantial effect in diminishing the negative impacts of the event. The availability of mobile phones in practically all the households and inhabitants of the capital city of Villahermosa played an important role in the mitigation efforts during and after the floods, as well as in the previous stages of prevention (Appleby, 2013; UN Global Pulse, 2014).

As described in Figure 5, technology does not create value on its own; therefor, it is also fundamental to take into account the human behavior aspects involved in disasters, such as warning and crisis management. At the same time, it is important to develop public awareness strategies to face the challenges of disaster management in this conjuncture of global Climate Change.

Our approach to disaster management from the perspective of complexity science does not intend to provide the best solution, but to think differently and pose the right questions conducive to accomplish an integrated response to urgent requirements of emergency telecommunications applications when disasters occur. There is not a universal strategy or prescription, however, it is critical to identify the role of technology in all the stages of the process in order to use it wisely and effectively.

The wise and adequate use of combined technologies with a clear and integrated vision of the complex nature of disaster management may provide support to municipal, regional and national authorities in charge of disaster attention and prevention. A clear strategy to respond to urgent requirements, as well as the implementation of such strategy into a well-resourced plan, become key elements as it is described in Figure 3. Capacity building in aspects covering the technical and human factors involved in disaster management is also of vital importance.

The effective use of telecommunications technologies for disaster management depends also on the adequate and timely flow of communication among all the stakeholders (See Figure 5). Availability of trusted data and the use of data mining and satellite mapping information have been useful in combination with other visualization tools and emergent mobile telecommunications technologies.

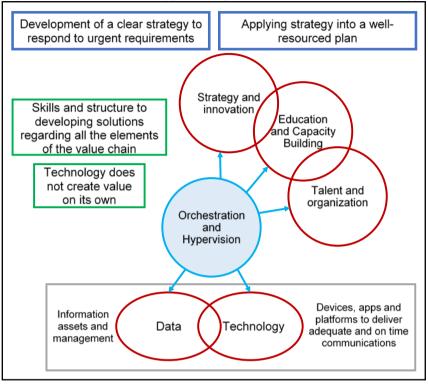


Figure 6: Orchestration and Hypervision processes and the role of technology.

#### Conclusion

The fast pace of technology design and development provides an opportunity to deploy ICT in a coordinated and effective manner to support affected populations by disasters. Furthermore, ICT have the potential to empowering those affected populations, telecommunications providers and governments to coordinate their responses to disasters. We stress our proposal to consider the emergency telecommunications ecosystem as an open and adaptive complex system of local and international agents, humanitarian agencies, healthcare specialists, private sector organizations, and governments, to mention the most important. Given the challenges of a fast-changing global context, such as Climate Change and other environmental and social issues, the coordinated response of all the stakeholders is urgently needed. When emergency telecommunications systems are deployed wisely, effectively, timely and in an orchestrated manner, they become key elements to accomplishing the task of assistance, support, safety and relief of affected populations.

#### **References:**

Appleby, L. Connecting the Last Mile: The Role of Communications in the Great East Japan Earthquake. Internews, 2013. Available:

https://internews.org/sites/default/files/resources/InternewsEurope_Report_J apan_Connecting_the_last_mile_Japan_2013.pdf

Castañares-Maddox E.J. Sistemas Complejos y Gestión Ambiental: el caso Corredor Biológico Mesoamericano México. Comisión Nacional de para el Conocimiento y Uso de la Biodiversidad. México, D.F., 2009.

ETC-Emergency Telecommunications Cluster 2020. A New Strategy for Humanitarian Connections, 2015. Available: https://www.etcluster.org/.

García, R. Sistemas Complejos: Conceptos, Métodos y Fundamentación Epistemológica de la Investigación Interdisciplinaria. Barcelona: Gedisa, 2006.

ITU-T Focus Group on Disaster Relief Systems, Network Resilience and Recovery. Technical Report on Telecommunications and Disaster Mitigation. ITU, 2013.

UNDP. Mexico: Country Case Study How Law and Regulation Support Disaster Risk Reduction. United Nation Development Programme. International Federation of Cross and Red Crescent Societies, Jun-2014.

UN Global Pulse. Using Mobile Phone Activity for Disaster Management during Floods, Global Pulse Project Series No.2, 2014. WFP. "ICT in Emergencies." World Food Programme, 2015. Available:

https://www.wfp.org/emergencies/ict

## Key Conceptual and Practical Considerations of LTA in Term of LTS

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#### Abstract

This paper is based on the assumption that the Land Tenure Administration (LTA) and the Land Tenure Security (LTS) are necessary to safeguard and protect the people rights and hence to provide the security of tenures. In this paper, Iraqi objectives of tenure were explored in detail in order to build an understanding of the concepts of LTA and LTS conducted in this research. Therefore, this paper is designed to provide an overview of the key evidence linked to the LTA and LTS aspects. In this context, land tenure types and how they are administered in different purpose and situations, and definitions of the key issues in both of rights and of the security levels were identified.

Keywords: Land tenure, Key factors, Iraq

#### Introduction

The English term 'Tenure' is derived from the Latin term which means 'the holding' or 'the possessing' (Basset and Crummey, 1993:12). This definition usually uses this term with "Land" to refer to the 'objects' to which ownership and other rights are to be connected. In practice, the land tenure term can incorporate various basic objects or units, land parcels being the most common. Other definitions adopting the same perspective included those who observed the term "Land tenure" to convey the multiple legislation elements involved in the rules regulating access to the land and its use and the management by different groups or individuals (White Paper, 2009:p.112). In this situation, the land tenure is not a new discipline. Much literature has focused on the tenure definition as a relationship between users and their rights to use the land (Dale, 1991; Fisher, 1995; UN-Habitat, 2003b). It is worth noting here that the link between the land and the tenure has been defined also as an administrative relationship between people with respect to land. More detailed definitions about this point have been provided in earlier reports where tenure has been defined directly as the reflection to relationships between the people as the user of the land according to specific rules/policy (Payne, 2001; UN-Habitat, 2003a; FAO, 2012). Therefore, in a brief word; the term of the land tenure can be defined as the various relationships that are established in order to access and manage them regarding the users' rights. Based on these definitions, the land tenure is defined within the context of this study as a as a set of historically and culturally complex relationships that enable the land users, as individuals or groups, to use and benefit from the land resources within specific managements which are governed by determining authorities. Essentially, what is being considered under this definition in this research is a variety of arrangement names, such as community, customary, communal, and collective forms, and these related forms of rights established through a range of processes: statutory, customary, religious and even informal. It could say that this definition is more relevant to the promise of achieving this human beneficial right officially under defined rules and managements with which the end-users' rights are safeguarded.

which the end-users' rights are safeguarded. In this section, the reviewing of literature has also focused on various rights associated with land tenure, in particular, these rights can be summarised into: cultivate or develop it, the right to transfer it to one's heirs, sublet all or part of it, use it to obtain formal credit, and access public services (see Payne et al., 2003; FAO, 2012). As with tenure status, all these forms of rights should be clearly acknowledged by the polity considerations using legal tools for protection of rights. In this respect, because the land tenure is a relationship among people, the holding of the rights may be associated with more than one person within the form of a bundle of rights. FAO (2012) speculated that the rules defining the rights of access to land reflect the balance, or imbalance, of polity power as much as anything else. Therefore, the users' rights of tenure are conventionally existed as a subset of the social relationships in policy considerations; apply to each of these rights.

While there are variations in the classification of tenures, the reviewing of literature also suggests that there is a board understanding of what considerations must be taken onto account to find an appropriate security. In fact, operational definitions of land tenure indicate the term of 'security' regarding the users' rights. According to FAO (2012), all forms of land tenure should provide all persons with a degree of tenure security. In addition, there is the fear of eviction characterise a significant exclusion of poor people from mainstream social, economic and civic opportunities. UN-Habitat (2006e: p.94) showed this issue by describing the Land Tenure Security (LTS) as a legal protection to the land users' rights obtained by authorities: "The right of all individuals and groups to effective protection from the State against forced evictions". In this context, UN-Habitat (2008:5)

was more specified provided outcome indicators on the different attributes including security of tenure, by defining LTS according to set of considerations.

considerations. In this context, White Paper (2009, p.47) echoed that legal protection and emphasis that the LTS is a vulnerable form and may not linked automatically with informal land rights of tenure: "Security of tenure is not so much derived from the legal status of the rights held, as from social consensus on the legitimacy of these rights and the reliability of mechanisms for arbitration should conflicts arise.", and therefore: "...Security of tenure takes various forms depending on the legal framework, social norms and value systems of each culture" (White Paper, 2009:p.115). This definition has become the main starting point of this research as it is relevant to the current situation in the Iraqi, where LTS is just the reflection to the satisfaction and success from the end-user's view and also as a result of the satisfaction and success from the end-user's view, and also as a result of the legal status of the rights which are held under the legal mechanism of the land authorities. This definition also inspires the aim of this research nor only because it has an ability to describe the key fundamentals of LTS such as legal status, society, customs and legal context of attributes that are necessary for providing an effective LTA, but also because it highlights the significant point of end-users being satisfied and have secured their rights. In a brief word, the role of land governance/ institutional authorities is the protection of the user's rights and the reliability of mechanisms to build an effective LTS. Therefore, the sustainable institutional framework is the principal mechanism through which LTS can be sought. Thus, the absence of ability to address the more fundamental supply rights of land, inappropriate regulatory structures and an weakness of used mechanism; all lead to lack of the LTS.

Land tenure administration (lta): concept, and key institutions The Oxford English Dictionary provides several definitions of the term 'Administration', including: both conformity to the law and also a degree of justification or ongoing social acceptance (Oxford, 2015). Similar definitions have been put forward by UN Habitat (2008:5), USAID (2013), and Payne (2002:5, 1997:3). Furthermore, the literature stressed that policies of land tenure need to be related to the clear legislative capacity of institutions, communities and other stakeholders associated with an administrative strategy (Abelson, 1996; Tebbal et al., 2001; FAO, 2002; Davis, 2004; UN-Habitat, 2006b; Gulyani et al., 2007). In this context, the globally negotiated Voluntary Guidelines on Land Tenure (FAO, 2012) uses the term 'legitimate tenure rights' to consist of all users of land, independent of legal status, including traditional settings and those using communal grazing areas and commons. In simple terms, the Land Tenure

Administration (LTA) defined by the UN-Habitat (2011: p. 15) as a governing system implemented by the state to "record and manages rights in land which can be determined as managing the public land and documenting and registration of freehold rights under the absolute ownership of properties". Also, LTA was defined as the way in which the rules of land tenure are applied and made operational (FAO, 2012). Consequently, UN-Habitat (2003a) describes LTA as a way of enhancing the peoples' rights in land and property within clear institutional forms.

In practice, the role of LTA as the engine of the security of tenure is promoted throughout. The LTA sets the framework for implementation of security policy and protects the user's rights. Also, the reviewed literature reveals that the land administrative key measures are the security level of land tenure, by managing users' prospects and solving their problems, enabling an effective management and monitoring of LTS and thereby reducing poverty (see Payne, 2012; FAO, 2012; Sietchiping et al., 2012). More detailed definitions about this administrative point have been provided in earlier reports where land tenure has been defined directly as the reflection to relationships between people ,the user of the land according to specific rules/policies (individuals/groups), and these land-related policies that govern and control their rights (Section 2.2.1). Focused on this triangular relationship of people, land and policy; in this research, the administration of land tenure has defined as a set of legal or customarily relationship among peoples with respect to land-related objectives, figure 1 is graphically illustrating this triangular relationship.

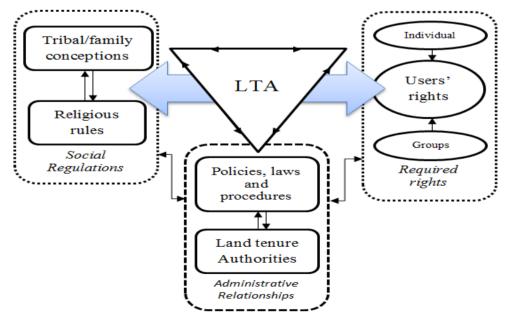


Figure 1: The land tenure administration's interactions (Author).

As an administrative process in which the individuals and group rights are protected by systems against the multiple claims from others, figure 1 showed that LTA can be interacted as a formulation of guidelines, norms, standards, rules, legal instruments, and the setting of a mechanism for managing and monitoring of tenures regarding the end-user's rights. However, this may be attributed to the fact that the land tenure as a concept has a vast diversity of its forms contributed to social, political, economic and even religious -related objectives.

#### **Principles of the LTA implementation**

The literature showed that the LTA is a crucial element in determining if and how peoples (end-users) can be able to acquire their rights, and associated duties, to use and control land, and how its implementation may be carried out by operational institutions, or even through customary authorities (see Payne et al., 2003; Cotula, 2004; Enemark, 2004; UN-Habitat, 2012; FAO, 2012). Many problems of implementation arise because of the obtained levels of Efficiency of the land authorities; in fact they are adversely affected by the quality of governance. Thus, Responsible governance of tenure conversely promotes sustainable social and economic development Social and economic conflict and the state instability, therefore, adversely affect the LTA implementation and encourage end-users rights. Furthermore, the implementation of LTA and secure access to land by the authorities requires an assessment of those circumstances that may influence or change this process as a result of the internal/external influences. The initial phases of emergency shelter provision and protect the end-users' rights require a clear resolution process arising from the authorities. Internally displaced persons are resulted as a result of those circumstances that linked to these impermanent situations such as war or even the post-war sphere, and then these initial phases of administrative weakness/misunderstanding that legally defined framework have during these critical related-situations. In identifying the LTA implementation principles, FAO (2012: pp4-5) summarised these principles of implementation which are essential to contribute to responsible governance of tenure of land:

a. **Human dignity**: recognizing the inherent dignity and the equal and inalienable human rights of all individuals;

b. **Non-discrimination**: no one should be subject to discrimination under the law and policies as well as in practice;

c. **Equity and justice**: Recognizing that equality between individuals may require acknowledging differences between individuals, and taking positive action, including empowerment, in order to promote equitable tenure rights and access to land, fisheries and forests, for all, women and men, youth and vulnerable and traditionally marginalized people, within the national context;

d. **Gender equality**: Ensure the equal right of women and men to the enjoyment of all human rights, while acknowledging the differences between women and men and taking specific measures aimed at accelerating de facto equality when necessary. States should ensure that women and girls have equal tenure rights and access to land, independent of their civil and marital status;

e. Holistic and sustainable approach: Recognizing that natural resources and their uses are interconnected, and adopting an integrated and sustainable approach to their administration;

f. **Consultation and participation**: Engaging with and seeking the support of those who, having legitimate tenure rights, could be affected by decisions, prior to decisions being taken, and responding to their contributions; taking into consideration existing power imbalances between different parties and ensuring active, free, effective, meaningful and informed participation of individuals and groups in associated decision-making processes;

g. **Rule of law**: adopting a rule-based approach through laws that are widely publicized in applicable languages, applicable to all, equally enforced and independently adjudicated, and that are consistent with their existing obligations under national and international law, and with due regard to voluntary commitments under applicable regional and international instruments;

h. **Transparency**: clearly defining and widely publicizing policies, laws and procedures in applicable languages, and widely publicizing decisions in applicable languages and in formats accessible to all; i. **Accountability**: holding individuals, public agencies and non-state

i. Accountability: holding individuals, public agencies and non-state actors responsible for their actions and decisions according to the principles of the rule of law;

j. **Continuous improvement**: States should improve mechanisms for monitoring and analysis of tenure governance in order to develop evidencebased programmes and secure on-going improvements. Thus, responsibility and the role of land governance authorities promote

Thus, responsibility and the role of land governance authorities promote sustainable social and economic development, therefore, the LTA implementation guidelines the state stability levels and then encourages sustainable rights of the end-users, and then protecting these rights officially (figure 2).

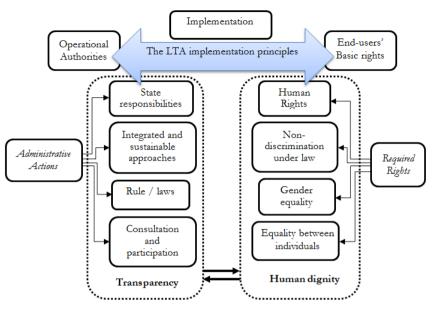


Fig. 2: The principles of LTA implementation (adopted from literatures)

From figure 2, it is seen that the role of authorities in their levels of implementation of LTA is based on their administrative mechanisms taken to manage and monitoring this administrative action. However, this process is required to be taken into a count that it deals with basic rights of human which are linked directly with Human dignity and then this, the administrative actions must work to protect and promote these basic rights regarding individuals or group discrimination such as the gender or beliefs under law and policies as well as in practice. The lack of adequate administration and implementation of LTA and secure access to land by the Authorities is one of the main causes of lack of rights and conflicts in the world. The most appropriate approach to identifying whether an LTA issue is likely to exist, and particularly at whether it is likely to give rise to conflict, is to seek answers to existing or not an integrated and sustainable approaches. In this context, the Implementation of LTA can describe as an indicator to the efficiency level of institutional authorities, the next section is deal with this point.

#### **EFFICIENCY of LTA**

From the literature reviewed in this chapter, it is seen that in order for LTA to be effectively implemented by institution authorities of land, keys elements of Efficiency of LTA should be addressed. In this context, this Efficiency requires the identification of the existing tenure arrangements adopted in the legally defined framework, and what formal legal interests actually exist in the area. This is likely to involve an assessment of what the tenure situation is, and at the same time for what informal or customarily defined interests actually exist. This assessment, therefore, should take into account changes arising from external influences such as displacement and, migration and develop an effective resolution process. In general, these key elements can and do work at both lines of success or failure and both sides have its composite influences on the operational performance in institution authorities of land and also on the achieving of LTA. Emerging from these ideas is the belief that the Efficiency of LTA is developed as dynamics level of authority's effectiveness regarding the land tenure that carried out into the end-users' rights security in the system. It describes the administrative status under which the planning and implementation procedures and processes are achieved in way in which people have the secured rights and then be satisfied. In practice, this level of satisfaction needs to be managed to enhance the end-users' rights within balanced procedures and clear processes in the authorities performance. It means that the Efficiency of LTA system should not be successful in just the short term, but over whole working levels of system with a Continuous improvement in which the system can achieve sufficiently flexible to deal with negative challenges and do more attractive positive factors and then the end-user's Satisfaction. The components and the interconnections of these key elements are important in LTA. Figure 3 is graphically presenting an overall of keys elements of Efficiency of LTA.

From Fig. 3, it is seen that the administration of tenure is a crucial concern for land users' right individuals, households or whole communities; particularly those vulnerable groups of slum dwellers and millions of evicted poor people in urban areas the world over. The figure addresses a range of issues linked to the increasingly prominent and fundamental issue of the administration of land tenure which seeks to achieve the security of tenure. It explores a wide range of land tenure systems linked to secure tenure from the primary perspective of land users' rights and tenure authorities, augmented by administrative experiences. Keys Elements provide a review of policies that have been adopted to address tenure concerns, and they will be used to identify the administrative strengths and weaknesses factors of the most prevalent approaches taken to obtain LTA throughout the Iraqi case.

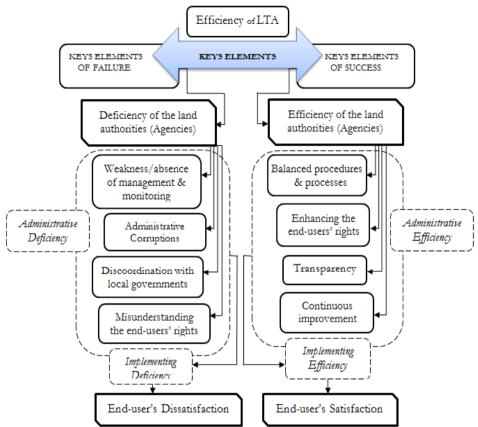


Fig. 3: Overall of Keys Elements of Efficiency of LTA (adopted from literatures)

#### Key factors and constraints of lta Success/Failure Keys Elements

In general, these key elements can be summarised into two main groups according to their Success/Failure role influences on the efficiency/deficiency of performance of institutional structures regarding LTA:

#### **A-Success Keys Elements of LTA**

A good land administration system is a major element to improve urban planning and infrastructure development, and in essential in the Guarantee ownership and security of end-users' rights. A good land system includes flexible legitimate institutional authorities with clear hierarchy that are closely operated and linked to each other. In this context, key issues for administrative success of the LTA are associated with different models of land tenure and security goals, rights-based approaches, systems of formal/informal tenures, and quality of land authorities /holders. In simple terms, it is important to stress that the development of organizational structure, legitimatise mechanisms, and technical issues are closely to success of LTA. Experiences indicate that issues related to these are frequently correlated to the possibility of applying an effective LTA. Establishing a successful system of the administration of tenures may be closely linked to land reform. Zimmermann (2006) focuses on the basic to the Governance capacity in the land sector to identify mechanisms under which the initial establishment of a land system can be implemented on ground. According to the World Bank (2004) the concern for success of LTA within land authorities in developed and developing countries can be contributed to increasing awareness levels in the core of system, and based on an understanding of security that involves influential factor related to the political, economic, ecological and social stability. In this connection, UN Habitat (2010) focuses on negative factors influence the success of LTA, with a lack of clear rules and regulations, and the corrupt system and management of land (private land, public land, and common property arrangements) as the most of the causes and negative factors contributing to week governance of LTA. Payne (2012) emphasis on crucial role of security levels that an institutional environment has under the operational system and these obtained rights that used to be planned and gained to people, and how these obtained rights that used to be planned and gained to people, and how they can benefit legally from it. In general, the need to control high levels of administrative system, best comprehensive and effective fashion of system must be built sustainably and addressed by complete institutional reform and capacity-building. These are clearly key elements that need to be addressed. FAO program (2006 to 2009) has initiated the closely relationship between good governance in land tenure and administration and the awareness for national development.

There is no doubt that the Success of governance of land tenure is increasingly competent and confident in the workings of all forms of tenure: public, private, communal, indigenous, customary, and informal. Thus, in order to achieve a best level of the land tenure security and to support the progressive realization of the end-user's rights; it needs to have mechanisms to hold all key issues to account; to strengthen the capacities and operations of actors to assess land tenure policy, and to recognise and strengthen customary tenure for resolving tenure disputes- formal and customary systems.

#### Failure Key Elements of LTA

The critical elements and application of the LTA can help to identify existing Constraints and required manages. It also helps to examine current practice and identify gaps which can potentially hinder the successful engagement of LTA and the obtained levels of LTS. It can be concluded that there are complex factors that control and govern negatively the LTA, and these obtained lessons of experience and emerging issues can help to review the main features of an innovative need of land policies and legislations regarding the end-user's needs. In this research, reviewing the literatures showed a total of twelve key Constraints have been identified and evaluated as the main Constraints to LTA and their Interventions (see UN-Habitat, 2003a; Payne, 2012; FAO, 2012; USAID, 2016). In this research, the essential constraints of LTA identified in literatures were summarised as follows:

a) Weakness of governance or lack of institutional managements: as previously reviewed, it is experienced that a land administration must be established with an affective capability of the relevant ministries, agencies that have a clear system to be able to govern the needs of peoples. In practice, this was evident across world that the effective governance of tenure can and do govern and protect LTA against multiply ownership claims and unfair expropriations. And so, USAID (2011) stresses on the fact that the unsecured tenure and property rights, poorly performing land markets, insufficient land/ housing laws, absent/ inadequate managements and a lack of tenure information, and livelihoods deprivation, all are vital consequences related to the weakness of governance and the ineffective legal performance in institutional structures. In this connection, Wiley (2013) focused on struggle over unfair shared rights and the Losing indigenous /minority rights by the social/ culture and religious conceptions and their old morals/ regulations that may be unfair and inadequate with modern administration systems of tenures. Weakness of governance encourages all these negative impacts in which the LTA is lacked;

b) **Bureaucratic routine / corruption in system procedures**: In its 2014 Corruption Perception Index, the Transparency International report ranked Iraq 170 out of 175, and 156 out of 189 countries in its 2015 overall (The World Bank, 2015). Furthermore, international surveys on business bribery also show high levels of bureaucratic corruption in the Iraqi province level, meaning that bribery is the norm to win a governmental contract in Iraq (see World Bank, 2011b; Transparency International, 2011; IAIU Iraq, 2012). In this case, the weakness of governance to achieve an adequate performance role regarding LTA aspects can be the main reason of Bureaucratic corruption in system procedures. In fact, the Bureaucratic routine in some cases has eroded the trust in system by encouraging people to avoid the legal procedures of system (UN-Habitat, 2010, 2012). Furthermore, many studies emphasis that this administrative corruption is a significant misunderstanding about how to reform local regulations with modern judicial systems, which have shared international experiences and approaches of land managements and monitoring (see Palmer, 1999; Tahir, 2006; Payne and Durand-Lasserve, 2012). Therefore, the rigid and old laws

and regulations are reflecting deeply a series of inadequate and slow progress contributing to different aspects in system procedures such as the weak legal and ineffective institutional structures, insufficient land/housing law, inadequate arrangements and a lack of information regarding land tenures;

c) Lack of legal/rights awareness: This is a vital problem in both levels of institutional managements and to land users, it is linked to ineffective institutional frameworks, inadequate arrangements and then to the Success of LTA. The person' situation in informal tenure can be resulted due to lack of awareness about their rights and misunderstanding about how to securing tenure through title / what legal documentations that they should have, this misunderstanding to the formal process and required documents can lead to severe consequences such as the forced eviction and informal occupancy (see Payne, 2001; UN-Habitat, 2003a; FAO, 2012);

d) **Informal Settlements or Illegal Occupation:** Civil Violent Conflict/Post-conflict, instability and displacement affect LTA heightening the risk of forced eviction, confiscation, land grabs, abusive or fraudulent sales or occupation of land or housing (Rolnik, 2012: para. 92). Also, FAO (2012) endorsed the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGTs). According to FAO (2012: p.16) ,these guidelines emphasis that: *"Where informal tenure to land, fisheries and forests exists, States should acknowledge it in a manner that respects existing formal rights under national law and in ways that recognize the reality of the situation and promote social, economic and environmental well-being". As noticed in the previous discussion, this illegal occupation can be resulted as a negative response to the weakness of the government and ineffective management and monitoring, the weak legal and ineffective institutional frameworks, inadequate arrangements and a lack of information, and all that can be empowered by instable state and insecurity situation such as a situation of war and even post- wars spheres (see Payne, 2003; USAID, 2005); e) Constrained sales or Poorly Performing Land Markets: Land* 

e) **Constrained sales or Poorly Performing Land Markets:** Land Markets at public and private components can reflect the effects of land legal regulations and management and economic support. Land availability is also required for rebuilding damaged infrastructure and livelihoods, with contentious Violence, insecurity, chaos and land grabbing complex LTA problems; constrained sales or markets in land on a countrywide (see World Bank, 2003; Zimmermann, 2006). Thus, the effective implementation of land policies, legal regulations and law enforcement, sufficient land/ housing law managements are the best way in which land markets performing can be enormously executed;

f) **Misdirected policy and poor executions:** The institutional performance adopted by the government at the national and local levels,

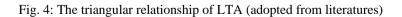
reflects the success or failure to provide an efficient ways for land users in order to enable them to obtain appropriate possession for safe land tenure and property rights. To decode the ineffective regulatory and legislative reasons that led to the inability or failure and even inequality in policies adopted by the government (see UN-Habitat report, 2012). Taking international experiences and approaches unserious and deeply inequitable and often unfair land ownership relations all led to wider land tenure crises, especially to vulnerable groups such as women and minorities, and then the insecurity dwelling.

g) **Refugee's Relocation problems:** War/Post-war sphere is a main cause to displacements. As observed in the previous intervention, the refugees became an international crisis and recently about 15.2 million refugees and 26.4 million internally displaced persons, with a further 14.8 million live in displacement as a consequence of natural disasters, most of them from the Middle Eastern region (see Yonetani, 2012:INRWA, 2016). In 2010, the UNESCO (2011) registered that the number of displaced people in the world surpassed 50 million. The highest percent of these people live in war/post war areas in the Middle Eastern region. In 2015, the UN Refugee Agency, UNHCR (2016) registered a high wave in the number of migrated people, citing the figure of 4.8 million from Syrian and Iraqi, most of them are in need of resettlement. This humanity problem is a reaction to various factors such as the state insecurity and inter-communal violence triggers the refugee relocation problems and ineffective institutional frameworks can increase the number of refugee's conflicts. The percentages of the vulnerable refugees, most deeply affected by the critical situation in their regions, however, the reasons remain unchanged. For example, Amnesty International (2016) emphases that at least 10% of Syria's most vulnerable refugees were resettled by the end of 2016. Therefore, resolution policies undoubtedly have a vital role to play in relation to conflicts on land rights, access to land and other resources are a further example of the dynamic levels of Efficiency of LTA.

The main influencing issues and limitations of LTA are summarised in table (1) and figure 4, they describe these key failure elements of LTA as identified in the literature.

Judicial authorities 1-National/inter- governmental agencies:	Constraints	Limitatio Main reasons			
governmental	Constraints	Main reasons			
		1110000000	Interventions		
<ul> <li>Managing and Monitoring agencies.</li> </ul>	<ul> <li>Authority gaps and insecurity issues.</li> </ul>	<ul> <li>War/Post-war sphere.</li> <li>Inter-insecurity sphere.</li> <li>The instability of state / regime.</li> </ul>	<ul> <li>Weak governance and deficiency of law management and monitoring settings.</li> <li>The refugees' relocation problems.</li> <li>Misdirected policy and poor executions.</li> </ul>		
<ul> <li>Implementing agencies.</li> <li>2- Non-governmental authorities:</li> <li>Social/ Culture and Religious conceptions.</li> <li>Tribal traditional regulations/ rules.</li> <li>Family conceptions.</li> </ul>	<ul> <li>Society's instability.</li> <li>Economics: Financial issues.</li> </ul>	<ul> <li>Civil Violent Conflict/Post-conflict instability.</li> <li>Tribal, ethnic clashes, violence/conflict.</li> <li>The complexity of social conceptions.</li> <li>Old morals/ regulations that may be unfair and inadeguate with modern administration systems.</li> <li>Or according to gender and indigenous / minority rules.</li> <li>Lack/deficiency of financial support.</li> </ul>	<ul> <li>Taking international experiences and approaches unserious.</li> <li>Data on land ownership usually is incomplete, and out of date.</li> <li>A significant misunderstanding about how to reform local regulations with modern categories.</li> <li>Transparency level; Bureaucratic corruption.</li> <li>Inequitable land distribution</li> <li>Conflict over unfair evictions.</li> <li>Constrained sales or markets in lands.</li> <li>Liveliboods deprivation.</li> <li>Lost indigenous / minority rights.</li> <li>Insufficient land / bousing law managements.</li> <li>Informal settlements or illegal occupation situations are empowered.</li> </ul>		
Individuals Groups Agenci		Land/ properties omponents Syst bits development Authorities Rights achieving g Plan	ems Statutory Customary Agencies		

**Table 1**: Overview of criteria to LTA limitations (Author)



#### Conclusion

This paper has explored the literature to answer the objective of the land tenure and its administration and securing issues in Iraq. The paper presented the LTA as the administrative skills in which the land tenure and

Implementation

rights of end-users may be legally defined and effectively managed and implemented within specific arrangements and process, and it has been confirmed that for the progress of the current study. It has also discussed the role of the Iraqi authorities in their levels of

planning and implementation of LTA as it is based on their administrative mechanisms, bringing to a light the features and lessons learned which have adopted to support the end-user's rights under the legally defined framework. From the literature review, it has become clear that there is agreement on role of LTA under the legally defined framework and the critical factors influencing the ability of success/failure in land authorities on what constitute common efficiency regarding the end-user's rights. These authorities are legal tools and administrative mechanisms for embedding laws to secure implementation of LTA and security of tenure for peoples, thereby; efficient LTA is a need of LTS in term of all tenure stakeholders.

Building on the discussion in this paper, the conclusion highlighted from the relevant literature, including the principles of LTA, as an engine of LTS issues in general, and then the challenges ahead. Literature reviewed showed that there is various land then the chanenges ahead. Enterature reviewed showed that there is various land tenure types under which the tenure users' rights are issued. It can be noted that the absence of transparency, accountability and legal rule of laws in LTA can easily led to misunderstanding the end-users' rights and LTS by a sphere of insecurity of tenure in which the end-users' rights can be misused and loose.

#### **References:**

Amnesty International (2016) Syria's refugee crisis in numbers. Available at: https://www.amnesty.org/en/latest/news/2015/09/syrias-refugee-crisis-innumbers/

FAO (2002) Land Tenure Studies 3: Land Tenure and Rural Development.

FAO (2009) Land Tenure Working Paper 11: Palmer, Fricska and

Wehrmann, Towards Improved Land Governance. FAO (2012).Voluntary Guidelines on the Responsible governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Rome. Available at:

http://www.faw.org/nr/tenure/voluntary-guidlines/en/ The Oxford English Dictionary (2015) definitions of the term legitimate. Available at:

http://www.oxforddictionaries.com/definition/english/legitimate Payne, G. and Durand-Lasserve, A.( 2012). "Holding On: Security of Tenure - Types, Policies, Practices and Challenges". Research Paper prepared for the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context, Raquel Rolnik, to inform her Study on Security of Tenure. Special

Rapporteur on 22-23 October 2012. Available at:<u>http://www.ohchr.org/Documents/Issues/Housing/SecurityTenure/Payne-</u>Durand-Lasserve-BackgroundPaper-JAN2013.pdf

USAID (2013) Natural Resources Management and Development Portal, Land Tenure and Property Rights Tools, Available at:

http://rmportal.net/library/content/tools/landtenure-and-property-rightstools/copy_of_definition-land-tenure

Sietchiping, R., Aubrey, D., Bazoğlu, N., Augustinus, C., Mboup, G. (2012). Monitoring tenure security within the continuum of land rights: methods and practices. UN-Habitat. Paper prepared for presentation at the-Annual World Bank Conference on Land and Poverty- Washington DC, April 23-26, 2012. <u>http://www.landandpoverty.com/agenda/pdfs/paper/sietchiping_full_paper.p</u> <u>df</u>

Spencer, C. (2015). U.S. Conflicts in the 21st Century: Afghanistan War, Iraq War, and the War on Terror [3 volumes]: Afghanistan War, Iraq War, and the War on Terror. ISBN 9781440838798

USAID (2005). Land Registration and Property Rights in Iraq, Iraqi Local Governance Program. RTI International / Research Triangle Park, NC 27709-2194, January 2005. EDG-C-00-03-00010-00. Available online from:

http://humanitarianlibrary.org/sites/default/files/2013/05/PNADE241.pdf UN-Habitat (2003). Handbook on best practices, security of tenure and access to land, implementation of the habitat agenda. Land and Tenure Section, Shelter Branch Shelter and Sustainable Human Settlement Development Division,Nairobi,2003.HS/588/99E, ISBN 92-1-131446-1.

UN-Habitat (2010). Iraq national housing policy', Republic of Iraq, ministry of construction and housing, Prepared Report with the support of United Nations human settlements programme. October 2010.

UN-Habitat (2011).' Monitoring Security of Tenure in Cities: People, Land and Policies'. HS Number: HS/130/11E, ISBN Number (Volume): 978-92-1-132415-0.

UN-Habitat (2012a). Evaluation of the UN-Habitat Urban Programme in Iraq 2004-2012, Evaluation Report 3/2012. HS Number: 049/13E, ISBN Series Number: 978-92-1-132028-2, ISBN: 978-92-1-132582-9. Available online from:<u>http://unhabitat.org/books/evaluation-of-the-un-habitat-urban-</u>

programme-in-iraq-2004-2012/

UN-Habitat (2012b). The State of Arab Cities 2012, Challenges of Urban Transition. HS Number: 021/12E ISBN: 978-92-1-132436-5. Available online from:<u>http://unhabitat.org/books/the-state-of-arab-cities-2012-</u> challenges-of-urban-transition/

USAD (2010). Land tenure and property rights in Afghanistan do LTPR conflicts and grievances foster support for the Taliban? Property rights and

resource governance briefing paper 5.US Agency for international Development, Inc., January 2010.

UNESCO (2011) 'Migration and Climate Change' UNESCO and Cambridge University Press; International Organization for Migration (2008) 'Migration and Climate Change' IOM Migration Research Series, Geneva. Available at https://www.iisd.org/sites/default/files/pdf/2008/migration_climate.pdf

World Vision Inc. (2016). What you need to know: Crisis in Syria, refugees, and the impact on children. March 1, 2016.

# Drainage of Buildings and Territories in Conditions of Low Permeable Soils

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Control of State Examination of the Leningrad Region

#### Abstract

Abstract This article shows specialty of the substantiation for optimum parameters of drainage systems in the low permeable soil for buildings and territories. This paper lists significant factors of a choice of the key parameters which defines the efficiency of drainage systems. It is being given their role in decision-making for geotechnical conditions of the Northwest region of Russia. The analysis is made for the drainage servicing objects with burying of the exploited volumes in limits of 6-7 meters. This article describes various features of the drainage of territories and buildings with a big area of the acquipped permeable surfaces. It investigates significant with a big area of the equipped permeable surfaces. It investigates significant factors for the choice of effective system of drainage: water drawdown power, texture of a geologic profile, structural-spatial concept of buildings, technological and environmental requirements, and safety regulations. This article shows dependence between each factor and parameters of drainage: constructional type, situation in the plan, an overhang confining layer, and water handling construction. The report notes that practice testifies to the requirement of the use of the complicated schemes and the drainage construction of drainage without pipe. This is in connection with increase in safety requirements and ecology.

Keywords: Drainage, optimum parameters, choice of effective systems

### Introduction

Nowadays, the design of the drainage systems has met new challenges related to the choice of the optimal concepts. First of all, they appear in the course of the selection of significant factors for particular building conditions. However, this is a territory with a big area of the equipped permeable surfaces in the composite geotechnical conditions.

In particular, the existence of bedded formation of the nonuniform helps to structure the low permeable soil clay soils with anisotropic filtration properties. Flooding happens because of the existence of a temporary perched ground water. This type of groundwater is formed at an infiltration of an atmospheric precipitation. Also, the emergence of a perched ground water does not always have a seasonal nature because of climate pattern of the territory and a lowland relief. The described geotechnical conditions are the characteristic of the Northwest region of Russia. They are of interest to the experts that develops design decisions in similar natural and geological conditions.

conditions. Subsequently, the author tried to reveal significant factors and to show their role in the choice of the essential parameters by defining the effectiveness of drainage systems. Furthermore, the author spoke about drainages and the servicing of objects with the burying of the exploited volumes in limits of 6-7 meters. The results of the analysis and the drawn conclusions are based on many years of experience in design. It includes successfully realized decisions checked by time in construction engineering. Also, we used our expert reviews in the work process. This served as justification for the updating of the projects which originally contains unsuccessful decisions.

#### I.

The main parameters of drainage include structural-spatial type, situation in the plan, an overhang confining layer, and water hauling construction. Thus, we will consider these factors sequentially: Structural-spatial type - horizontal gravity drainage in two options depth of drainage. The first – near surface, and the second – deep within 6-7 meters. The following important parameter is a drainage arrangement with respect to protected object. However, this parameter of drainage is known as the scheme or system. Contour and linear systems of drainage exist in Russia. Furthermore, parameter is the degree of hydrodynamic perfection. It characterizes the place of the provision of drainage with regards to a confining layer. Drainage located on a confining layer is regarded as perfect (sovershenny). If the drainage is located above a confining layer, then it is called drainage above water table (nesovershenny). At last, important parameter is a water hauling construction. In addition, it can have a pipe or might not have a pipe.

Consequently, there are significant factors that define the choice of the parameters of drainage without their priority subordination. It, however, include the water drawdown power, texture of a geologic profile, structuralspatial concept of buildings, technological and environmental requirements, and safety regulations. They significantly influence the choice of parameters of drainage and its effectiveness. In addition, we will talk explicitly about the roles of these factors.

Originally, we estimate the potential water drawdown decrease on the basis of information on the protected objects and geotechnical features of the construction site.

#### Power or Depth of Water Drawdown

It is defined considering drainage rate and the actual deepening of substructure or subsurface infrastructure of the urban environment. In this environment, water regulation is necessary. Also, we can determine the type of efficient system of drainage by this characteristic. If it is about subsurface infrastructure, then we make use of drainage and storm elements. Thus, such intrastructure, then we make use of drainage and storm elements. Thus, such elements solve some problem of the organization of the surface and underground drain. In case the protected object is burying the exploited volumes, then we use a drainage of a deep underlay of horizontal type. Also, the selection of an optimum design of the transportation of water will depend also on other significant factors (Kliorina, 2017). The use of both types of drainage is urgent when protecting against the flooding of buildings. Also, the territory is required. Therefore, their interference on change of the water mode of the territory has to be predicted beforehand. mode of the territory has to be predicted beforehand.

#### **Texture of a Geologic Profile**

According to these characteristics, we allocate several usually met options which influence the choice of the effective system of drainage. First option presents soils with low anisotropic filtration properties, and it has a low power in the top section. They are spread by conditionally waterproof soils within the deepening of the bases of buildings. Here, we call waterproof soils with a coefficient of permeability that is less than 0.005 m/days in the design practice of Russia. In this case, we choose a perfect drainage of the territory of subsurface type. The scheme of drainage is multilinear. Also, we determine distance between lines by calculation. The extent of drainage will depend on a configuration and the area of water-permeable surfaces. The determine distance between lines by calculation. The extent of drainage will depend on a configuration and the area of water-permeable surfaces. The choice of a design of drainage will be influenced by production requirements to the territory. They, in turn, depend on the purpose of the town-planning environment. The buried parts of buildings will require various type of drainage of a deep level. However, it is near a base drainage of preventive appointment with the contour scheme in the plan. The drainage should be brought closer as much as possible to a structure of the base. Also, it should be laid with a minimum bias. However, it is accommissible expedient be laid with a minimum bias. However, it is economically expedient. Construction of drainage will be defined by technical capabilities and convenience execution of work. In the second option, soils of a stratified superposition have low anisotropic filtration characteristics. Big strength of layer with the provision of the conditional confining layer are much deeper than the required zone of drainage or water regulation. Unlike the first option, it is necessary to use drainage above the water table of the subsurface and deeply put type. Consequently, it is here too important to predict their interference on the water regime. Besides, it is necessary to carefully prove calculations of the definition of the expenses of a drainage drain. They always surpass various expenses of the perfect type of drainage. Contour scheme of drainage of buildings. Drainage distance on the base and its construction depend on safety requirements. Calculation needs to be executed if the drainage lower than the base is buried. In the third option, soils are of a stratified superposition with the coefficient of permeability of layers, differing from each other more than 20 times. Usually, lamination is formed by layers of sandy pockets in almost confining layer. Also, there can also be a technogenic layer which is poured out on a soil surface. Flooding is usually caused by a perched ground water, subsoil waters in sandy pockets, and in permeable technogenic layer. In bore hole surveying, we often note the existence of local pressures because of the opening of sandy pockets. Here, decisions of the texture of a geologic profile similar to the first option will be required. When calculating the expenses of drainage drain, it is necessary to be guided by the coefficient of permeability of sandy aqueous pockets or a technogenic layer. pockets or a technogenic layer.

**Structural-Spatial Concept of Buildings** To choose efficient system of drainage, two main characteristics are important. The first is a structure of the base. The second is the existence of the standard or individual structural-spatial concept of the protected building and plane constructions. Therefore, these characteristics influence the scheme of a drainage and its construction. At the big area of the protected object, the contour scheme of drainage becomes more complicated at the expense of underground internal lines (Kliorina, 2003, 2017). We surely have to consider safety regulations. When deepening drainage below a sole of the base of the building, it is necessary to provide protective measures against a suffosion. They can be solved by the application of a construction of drainage without pipe. The similar constructions are timely. This happens when the building has a facade of ladder and ramps with the characteristic base. As Structural-spatial concept of buildings is continuously improved, it is important to correlate the decisions made on drainage to the quality of the environment and the objects which needs protection.

#### **Safety Regulations**

Level subordination of a drainage concerning a foundation base of the building or a construction matters. If the drainage is below the foundation

base, the requirement is timely for the protected object which is located nearby. We speak about the new buildings and the buildings exploited as well as the building services systems. In this case, the scheme of drainage is defined by calculated clearance distance. Therefore, the contour near a base drainage was removed from the foundation base of the building or applied to the construction of drainage without pipe. Today, we prefer the option of the construction of drainage without pipe that is explained by the size of construction site and the larger deepening of drainage.

### **Technological and Environmental Requirements**

Consequently, such requirements affect the choice of all parameters of drainage. The modern feature of buildings is the need for individual decisions of schemes and the construction of drainage. It is promoted by new materials and building method. An important aspect of the considered requirements refers to the compensation of the consequences of water drawdown. Therefore, it is solved by the modern technologies and by methods of the forecast. In various zones of water-permeable surfaces, the drainage solves the general problem – creation of optimum moisture conditions of the exploited subsurface structure (Kliorina & Lapshina, 2004). In addition, the general problem depends on particular demand. This demand, however, is defined by the use of the exploited subsurface structure and geotechnical conditions.

### Conclusion

1. In the paper, we considered difficulties of the choice of significant factors for the justification of the optimal solution of drainage. This is defined much by the differing specific conditions of construction.

2. We revealed significant factors for the choice of efficient system of drainage. These include: water drawdown power, texture of a geologic profile, structural-spatial concept of buildings, technological and environmental requirements, and safety regulations.

3. We investigated significant factors which determine parameters of efficient system of drainage of the territories and buildings. Also, we showed dependence between each significant factor and the main parameters of drainage are its structural-spatial type, situation in the plan, an overhang confining layer, and water hauling construction.

4. Experience shows the necessity of using complicated schemes and the construction of drainage without pipe due to increased safety and environmental requirements.

#### Recommendations

The data provided in this article can be useful to the experts in developing design solutions in similar natural and geological conditions.

## **References:**

Galina Kliorina (2003). Osobennosti geotekhnicheskogo vodootvedeniya pri stroitel'stve novykh i ekspluatiruemykh zdaniy // Trudy konf. «Rekonstruktsiya gorodov i geotekhnicheskoe stroitel'stvo», Tom 11. – SPb.; M.: Izdatel'stvo ASV.

Galina Kliorina & Marina Lapshina (2014). Sistemy vodoobustroystva na territoriyakh s rasprostraneniem khorosho fil'truyushchikh pripoverkhnostnykh gruntov / IZVESTIYA VNIIG im. B.E. VEDENEEVA. Galina Kliorina (2017). Inzhenernoe obespechenie stroitel'stva. Drenazh territorii zastroyki: uchebnoe posobie dlya stud.stroit.spets.- M,. «Izdatel'stvo Yurayt»,.

# Liability of the Custodian or Custodian Body for the Damage Caused by the Persons Totally Divested from the Ability to Act Due to Mental Disability

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#### Abstract

Liability of the custodian or custodian body for the damage caused by the persons totally divested from the ability to act due to mental disability is a kind of liability for the damage caused by the actions of the other person. In this case, his/her custodian or custodian body that is liable for his/her supervision shall be liable even for the damage caused by the person with mental disabilities. Obligation for supervision and care of the custodian or custodian body for the person with mental disabilities shall be the reason based on which they should respond in cases when the person with mental disabilities causes a damage to the third person. In order this kind of liability to come into consideration, in advance, there should be met some conditions as follows: 1. The damage is caused, 2. The damage is caused by the person that is incapable to judge and by the person who is under custody, 3. The damage has been caused since the custodian has not exercised adequately the supervision function as required according to the Law, decision of a body or any contract. These conditions should be fulfilled together in order that this kind of liability to come into consideration. Theoretical treatments regarding these kinds of liabilities, not in all cases, have brought the due clearance. In theoretical treatments of various authors that have treated this kind of liability there are presented dilemma which require a different analysis and approach in order that there to be identified some cases that have been left untreated until nowadays. Those authors, in their theoretical treatments, have ascertained that the custodian or custodian body shall be released from the liability for the damage caused by the person with mental disabilities or with mental slowdown development or any other circumstance according to which they could not judge his/her actions, if they can prove their innocence whether they have exercised adequately the supervision towards the person with mental disabilities or with mental slowdown development but the same authors have not given further explanations that who will be liable in such

cases if the person with mental disabilities does not have economic

conditions to make the compensation of the damage. This issue is regulated with legal framework of some countries treated in this paper. We have done this comparative analysis between the legal framework of these countries with the purpose of identifying the similarities and differences between them in regulating this liability.

Even that there are some differences in legal determinations, we should say that Kosovo, Croatia, Serbia, Albania, France, Italy, Germany and Spain have approximately similar regulation regarding this liability since all these countries cover this kind of liability with their legal framework.

Keywords: Damage, Liability, Supervision, Person with disabilities, Custodian

#### Introduction

Introduction Liability of the custodian or custodian body shall be an obligation in case there has occurred a failure during their custody to the person with mental disabilities who has caused damage to another person. The determination of the liability in such cases is of a big importance either to the person with mental disabilities or to the person to whom the damage has been caused. Taking into consideration the fact that the person with mental disabilities is totally divested from the ability to act, the determination of the liability in such cases is important since such determination releases such a person from the obligation to compensate the damage he/she has caused to the other person. Moreover, the determination of the liability, in such cases, is important even for the person to whom the damage has been caused since the other person. Moreover, the determination of the hability, in such cases, is important even for the person to whom the damage has been caused since he is enabled to get compensated regarding the damage that has been caused to him/her without his/her fault. In this paper there will be treated the case of the liability of the custodian or custodian body for the damage caused by the person with mental disabilities to another person. In this paper there will be treated the case of legal systems of countries of Europe and in this case there will be identified their similarities and differences in addressing this matter.

### Meaning

This kind of liability is part of the liability for the damage caused by the actions of other persons.

Prior of talking about this kind of liability, we should emphasize that in such cases the custodian or custodian body plays the crucial role. The custodian body exercises the supervising function through which it takes care for the personality, wealth, rights and interests of the persons that are not capable of taking care after themselves (Podvorica, 2011, 260, Aliu & Gashi,

2007, 267, Mandro, 2009, 491, Podvorica, 2006, 255). Hence, in our case, the persons with mental disabilities that have no capability to act and that are not capable to take care after themselves are put under custody and in such cases the custodian shall be liable for supervision of such category of persons. It is important to note that within the competences of the custodian body there shall be the representation of these persons in cases when there is necessary the protection of various interests related to their representation. Representation shall mean carrying out various actions by a certain action in a good and interest to another person either natural or legal person, while in our case we have to do with the representation of the person with mental disabilities as well as without capability to act (Latifi, 2009, 128, Kadriu, 2008, 395, Gams, 1972, 227). When we note the ability to act, we shall understand the ability of the person that independently can be holder of the rights and obligations (Latifi, 2009, 85). In our case, this category of persons has no ability to act due to mental disability or mental slowdown development and this is the reason they have been put under custody. Hence, the custodian or custodian body shall be liable for any action undertaken by such a category of persons.

According to this kind of liability, the custodian or custodian body that is assigned based on the Law, decision of a body or any contract shall liable for the damage caused by the person who is totally divested from the ability to act due to mental disability or mental slowdown development or due to any other reason he/she is not capable to judge (Alishani, 2002, 493). In such cases, the custodian or custodian body shall be liable for the supervision of the person totally divested form the ability to act. Based on this, there may be ascertained that the custodian or custodian body shall be liable in case of the cause of damage by the such persons, since the custodian or custodian body are supervisors of such persons that under the mental disability condition undertake actions which are considered invalid in the meaning of liability since such persons have not had the mental clarity to understand the unlawful action and in this manner the liability shall be conveyed to their supervisors (Nuni, 2012, 337). However, even that these persons are liable for the supervision of the persons with mental disabilities or mental slowdown development in case of causing the damage, if they prove that they have undertaken all actions for an adequate supervision but have failed to prevent the cause of the damage, they will not be liable for such a case. For this reason, this kind of liability shall be considered as a conditioned liability, since it creates the opportunity to the supervisors to prove their innocence (Tutulani – Semini, 2006, 256). In other words, in this case the basis of the liability shall be according to the supposed guilt since if the custodian proves that he/she has exercised the supervision properly and

the damage has been caused, then he/she will be released from the liability for the compensation of the damage (Dauti, 2013, 191). In order the liability of the custodian to come into consideration regarding the damage caused by the person who is incapable to act due to mental disability, in advance, there should be met some conditions as follows:

1. The damage is caused,

2. The damage is caused by the person that is incapable to judge and by the person who is under custody,

3. The damage has been caused since the custodian has not exercised adequately the supervision function as required according to the Law, decision of a body or any contract (Alishani, 2002, 493).

These elements of the liability of the custodian for the damage caused by the person with mental disability are in a way similar to the elements of the custodian's liability for the damage caused by the minor child. The difference is at the entities since in the first case the entity are the minor children while in this case the entities are the persons with mental disabilities regardless of age.

The damage is caused – the cause of the damage shall be the first element which prevails all other matters related to the liability for the caused damage. It can not be discussed about the liability if the damage to another person has not been caused previously (Millosheviq, 1972, 147). However, in order it to be considered as damage, it should derive as a consequence of an unlawful action based on which there has occurred even the cause of the damage by the person with mental disabilities (Tutulani - Semini, 2006, 253).

A person who as a consequence of an unlawful action causes damage to another person shall be liable for the compensation of that damage; hence in our case, this is reflected in the failure of the custodian during the exercise of the supervision to the person with mental disabilities or mental slowdown development. Hence, if the custodian or custodian body do not supervise properly the person with mental disabilities or mental slowdown development who conducts an unlawful action through which there is caused damage to the other person, then they are obliged to compensate that damage.

The damage is caused by the person that is incapable to judge and by the person who is under custody – This element is related to the cause of the damage by the person who is incapable to judge and that person should be under custody. Based on this element, the damage relates to the person who is incapable to act and who is under custody, since if one of this two

conditions is missing then the custodian or custodian body will not be liable for the damage caused by the person with mental disabilities. Taking into consideration the abovementioned, then there comes into consideration the second element of the custodian's liability for the damage caused by the person with mental disabilities or mental slowdown development. It is essential that the three elements that characterize this kind of liability to be present since otherwise there will occur circumstances, manner as well as other entity for the liability for the damage caused by the person with mental disabilities or mental slowdown development.

The damage has been caused since the custodian has not exercised adequately the supervision function as required according to the Law, decision of a body or any contract – This element is characterized by the action or non-action of the custodian or custodian body in the case of exercising the supervision towards person with mental disabilities or mental slowdown development. Based on this element, in order to come into consideration the custodian's liability for the damage caused by the person with mental disabilities or mental slowdown development beside the above two elements that related to the cause of the damage as well as the person that has caused the damage that was the person with mental disabilities or mental slowdown development, shall be even the negligence or inadequate of the custodian or custodian body during the exercise of the supervision towards such a person. Hence, in order the liability of the custodian to come into consideration regarding the damage caused by the person with mental disability or mental slowdown development, there should be necessarily met the three above-mentioned elements since these elements include entirely the circumstances that should exist in order the custodian or custodian body to be liable. It is worth to note that in such cases the liability of the custodian or custodian or custodian or custodian or custodian or custodian or development, 2002, 493). In other words, obligation of the custodian or custody body to supervise the person with mental disabilities or mental slowdown development should have any legal basis, either by Law, or by decision of a body or any contract.

legal basis, either by Law, or by decision of a body or any contract. Theoretical treatments regarding these kinds of liability not in all cases have given the proper clarity. By theoretical treatments of the abovementioned authors that have treated this kind of liability there are presented dilemma which require a different analysis and approach in order that some cases that have remained untreated till now to be identified. Authors in their theoretical treatments have ascertained that the custodian or custodian body shall be released from the liability for the damage caused by the person with mental disabilities or mental slowdown development or any circumstance according to which they could not judge his/her actions, if they can prove their innocence whether they have exercised adequately the supervision towards the person with mental disabilities or mental slowdown development.

Dilemmas are presented in case:

#### If the custodian or custodian body are released from the liability, then which entity should be liable in such cases in order to compensate the caused damage if the damaging person has not economic conditions to realize the compensation of the damage caused by him/her?

Such a respond has not occurred in any of the publications of the authors referenced in compilation of this paper and there can be freely ascertained that the non-determination of the liable entity for such cases has put a huge gap in the theory according to which the damaged person is seriously taken a chance to be compensated when the damage is caused in such circumstances mentioned above. This will also be in contradiction with the general rules of the justice according to which the person which is damaged can not remain uncompensated.

Moreover, based on analysis performed in the theoretical treatments regarding the custodian or custodian body's liability for the damage that has been caused by the person with mental disabilities or mental slowdown development or any other circumstance according to which he/she could not judge his/her actions, we have come into conclusion that beside the Serbian author Lubiśa Millosheviq and Albanian authors from Kosovo Dauti & Berisha & Vokshi & Aliu, all other authors do not mention cases how there should be acted if the custodian due to the poverty is not able to compensate for the damage caused by the person with mental disability for whom he/she is liable for his/her supervision. In this aspect there are given explanations by the Serbian author Lubiśa Milloshevic and the authors from Kosovo Dauti & Berisha & Vokshi & Aliu who have treated this matter quite enough. They have emphasized that the person with mental disabilities or mental slowdown development even if unconsciously has caused the damage, there may be required from him/her to make the compensation if he/she has enough wealth and if the custodian has no possibility to make the compensation of the damage due to poverty (Milloshević, 1972, 174, Dauti & Berisha & Vokshi & Aliu, 2013, 187). Such a thing may be required by the person with mental disabilities by taking into consideration the liability based on justice according to which every damage caused to any person should be compensated.

As a conclusion we could say that theoretical treatments and legal determination that have put gaps which will be necessary to be fulfilled in the future since in practice they can bring situations not favourable to

persons that have suffered the damage and that are taken a chance not to be compensated for the damage they suffered.

# Legal framework regarding the liability of the custodian or custodian body for the damage caused by the persons totally divested from the ability to act due to mental disability

Countries that have been analyzed in this paper, in their legal framework have established rules based on which there is determined the liability of the custodian or custodian body for the damage caused by the persons totally divested from the ability to act due to mental disability. Below, we are going to treat each country in the aspect of this liability, in order to identify the way of regulating this matter.

#### Kosovo case

**Kosovo case** Republic of Kosovo has regulated this matter in details with the Law on Obligational Relationships. According to this Law, there is determined that regarding the damage caused by the person with mental disabilities or mental slowdown development or any other circumstance that make him/her incapable to judge his/her actions, his/her supervisor shall be liable. It is worth to note that the supervisor should be obliged according to the Law, decision of the competent body or contract (LORK, §146.1). In such cases supervisors may be released from the liability only in they prove that they have exercised the supervision adequately but could not prevent the cause of the damage or if the damage would be caused regardless to the supervision (LORK, §146.2). In such cases the obligation to prove their innocence is on the custodian or custodian body or on each person that according to the Law or decision of the competent body or any contract is obliged to supervise the persons with mental disabilities or mental slowdown development. Such a determination as in the case of paragraph 2 of Article 146 of LORK is set by all legislations of countries which are object to be treated in this paper which means that all the abovementioned states have set very similarly the way of release from the liability of the persons that are liable for the persons that need their care and supervision. As a conclusion we should notice that in the Law on Obligational Relationships in the Republic of Kosovo there has not been determined the solidary liability for this kind of liability when the person that have caused the damage is the person with mental disabilities or mental slowdown development or any other reason due to which the person has no ability to judge.

Even that for this kind of liability there has not been determined the rule that guarantees the solidary liability, this matter has been covered by the liability based on justice. Regarding this, Kosovo in LORK has determined that in cases when the damage has been caused by the person who is not

liable for his/her actions and if the compensation of that damage can not be made by the person who has been liable for the supervision of the person with mental disabilities, then the court may, when required by justice, judge the damaging person and compensate the damage totally or partially if the damaging person is in a good financial situation (LORK, §151). Moreover, Albanian authors of Kosovo have treated one element

Moreover, Albanian authors of Kosovo have treated one element according to which in cases when the person with mental disabilities or mental slowdown development causes a damage to a third person and towards whom there has not been assigned the custodian or supervising person, then the municipality shall be liable for this damage since it has not assigned the supervisor to such a person who has caused the damage (Alishani, 2002, 493). Besides the theoretical treatments regarding this matter, such a determination is not included in the legal framework of any of the states that we are going to mention regarding this kind of liability and related to this we can say that theoretical treatments exceed the limit in which the laws or civil codes of the countries mentioned and that are going to be mentioned regarding this kind of liability stop.

#### Croatia case

Republic of Croatia has, very similarly to Kosovo, determined the liability of the supervising person for the cases of the cause of damage by the persons with mental disabilities or mental slowdown development. (COARC, §1055). Croatia has, by the Civil Obligations Act, determined that the persons that are incapable to act due to mental disability or mental slowdown development or for any other reason due to which they are not able to act shall not be liable for the damage caused. A different determination can be noticed in cases of persons with temporary mental disabilities that will be liable for the damage they have caused to another person. These persons will not be liable for such a damage only of they prove that the incapability has not been caused by their fault. (COARC, §1050. 1 and 2). Based on these provisions, Croatians have clearly determined that the persons with temporary mental disability shall be liable for the damage caused, unless they prove that their incapability has been caused by other persons. Based on this legal determination, there shall be released from the liability only the person with permanent mental disability or the person with temporary mental disability has not occurred by his fault but by the fault of other persons. In cases when the temporary mental disability of the person that has caused a damage to another person occurs as a consequence of the actions of another person, then regarding the caused damage there shall be liable the person from whom there has been caused the incapability of the person that has caused the damage. (COARC, §1050.3). In such cases of the cause of damage, the

supervisors shall be released from the liability if they prove that they have exercised the supervision adequately but did not manage to prevent the cause of the damage (COARC, §1055.2).

Even in Croatia, similarly as in Kosovo, regarding this kind of liability there has not been determined the solidary liability expressively. A distinction between the Civil Obligations Act of Croatia and Law

on Obligational Relationships of Kosovo occurs at the liability based on justice. In this case, Croatians have, by the Act, determined only the cases when the minor may be liable for the damage he has caused if the parent or other supervisor is at the financial situation due to which can not compensate the damage, but not in cases of the cause of damage by the person with mental disabilities. Even that Croatia has not determined expressively these mental disabilities. Even that Croatia has not determined expressively these cases by the law, it can, by an analogy, be based on rules that have been determined in cases of liability of the minors for compensation of the caused damage when the supervisor is at financial situation due to which can not compensate the damage. This can be realized due to the fact that both these two kinds of liability are included within the liability based on justice. As a conclusion we can say that Croatia has a legal determination similar to Kosovo regarding the liability of the supervisor for the damage caused by the person with mental disabilities or mental slowdown disability. In this aspect, there are noticed some distinctions that are characterized by

In this aspect, there are noticed some distinctions that are characterized by the advantages as well as disadvantages between these two countries.

#### Serbia case

Serbia has, as well in a similar way as Kosovo and Croatia, regulated the matter of liability for the damage caused by the persons with mental disabilities or mental slowdown development.

Based on the Law of Contracts and Torts in Serbia, persons with mental disabilities or mental slowdown development or any other mental disabilities or mental slowdown development or any other circumstance based on which they are incapable to judge their actions, shall not be liable for the damage caused to another person (LCTS, §159.1). In such cases, as a final fact there shall be taken the incapability of the person to judge his own actions. This legal determination comes into consideration only in those cases when his incapability has derived as a consequence of an action against the will of the person that has caused the damage since otherwise if the person that has caused the damage has brought himself to an unconscious state, he/she will be liable by himself/herself for that damage. Moreover in cases when the incapability to judge has derived as a consequence of an action of another person, then the person who has been the causing person of the incapability to judge shall be liable for the caused damage in these cases (LCTS, §159 (2 and 3)). Beside legal determinations, this matter has been treated by many Serbian authors who have noticed

similarly that persons with mental disabilities should not be liable for the damage they have caused to another person but their supervisor should be liable for such a damage (Shemiq, 1996, 1250, Millosheviq, 1972, 174). Beside the provisions according to which such persons are released from the liability for the caused damage, Serbia has, by the Law on Contracts and Torts, determined the provisions based on which there are obliged certain entities to supervise the persons with mental disabilities and to be liable for the actions of such persons (LCTS - \$164.1). certain entities to supervise the persons with mental disabilities and to be liable for the actions of such persons (LCTS, §164.1). According to these provisions, the person who is supervisor of the persons with mental disabilities shall be liable for the damage caused by such persons. Supervisor should, in such cases, have legal relations with the persons under his/her supervision. Legal relation should be created by the legal determination, decision issued by the competent body or any contract based on which the supervisor is obliged to supervise such persons. The supervisor shall be realised from the liability is he/she proves that he/she has exercised the supervision adequately and is not guilty for the damage caused (LCTS, §164.2). In the Law of Contracts and Torts of Serbia similarly to Kosovo and Croatia the solidary liability has not been determined expressively to such entities, and we shall consider this as a gap in the legal framework of these countries. However, regarding this, Serbia has, similar to Kosovo, determined the cases when regarding the damage caused by the person with mental disabilities for whom the supervisor is liable, and can not compensate the caused damage due to financial situation, then the court may, by

mental disabilities for whom the supervisor is hable, and can not compensate the caused damage due to financial situation, then the court may, by analyzing the economic conditions of the person that has caused the damage, decide the compensation to be made from his/her property (LCTS, §169). In this manner there has been established the legal security based on which the damaged person would realize the compensation of the damage caused to him/her by the person with mental disability or mental slowdown development or any circumstance based on which such a person is not able to judge his/her actions.

Regarding this matter, it is important to emphasize that the provisions based on which there are released from the liability the persons that are incapable to judge their actions shall be put within the provisions regulating the obligation based on fault, while the provisions based on which there are determined the entities liable for the damage caused by the persons with mental disabilities are systemized within the chapter regulating the matters of the liability for the others. A totally similar determination as this of Serbia is set even by the Laws of Kosovo and Croatia where there is ascertained the legal heritage from former Yugoslavian system based on which the existing legal heritage from former Yugoslavian system based on which the existing Laws of these countries have derived.

#### Albania case

Republic of Albania shall regulate this matter slightly differently in comparison to the above-mentioned states. Albania has, by the Civil Code, determined the provisions based on which there are regulated the matters of the damage by the minor persons and persons incapable to act. In this aspect, Albania has determined that the persons incapable to act shall not be liable for the damage they have caused (CCA, §613). Unlike the above-mentioned states, in Civil Code of Albania there is a provision where there are included jointly the minors under the age of fourteen (14) and persons incapable to act, the incapability of whom has derived due to any other reason. Regarding the damage caused by the person incapable to act there shall be liable his/her supervisor that has been obliged to do the supervision. Regarding this matter, by the Civil Code there is determined the legal status between the supervisor and person under supervision. We can say this since the above-mentioned states have expressively determined that the supervisor of the person with mental disabilities should be assigned based on the Law, decision of competent body or any contract, and these determinations are not included in the provisions of the Civil Code of Albania. Beside the provisions that oblige the supervision to be liable for the damage caused by the persons incapable to act due to mental disability, Albania has, by it Civil Code, determined even the provisions based on which the supervisors shall be released from the liability if they prove that the damage has been caused without their fault. The innocence of supervisors comes into consideration if they prove that they have exercised the supervisions adequately but they could not prevent the damage caused by the person with mental disability (CCA, §613). Albanian authors have treated this matter quite enough by identifying this kind of liability as a conditioned liability according to which they may be released from the liability if they can prove that they have exercised the supervisions adequately but have failed to avoid the cause of the damage (Tutulani – Semini, 2006, 256).

Albania has not, like all above-mentioned states, determined expressively the solidary liability in cases of liability for the damage caused by the persons incapable to act. Unlike the above-mentioned states which by certain provisions have charged the parties with better financial conditions to compensate the damage when the responsible party can not compensate the damage due to financial situation, Albania has, by its Civil Code, regulated this matter.

Albania has made an unclear regulation of this matter in Article 616 of the Civil Code by giving the opportunity to the person who at the moment of the cause of damage has had no action consciousness. We affirm that this provision is unclear since it has not determined that in which cases these persons may be liable. According to this provision, the court may reduce the measure of compensation by taking into consideration the age, consciousness level and economic conditions of the parties except when the party has made himself/herself unconscious. (CCA, §616). Based on this provision, the person who has been under the supervision of another person and has caused a damage shall be liable for such a damage. This determination has not explained the circumstances in which there would come into consideration the compensation of the damage by the incapable person. In this case there is needed more clearness since not in all cases there comes into consideration the compensation of the damage by the person incapable to act.

#### France case

France, has, by its Civil Code determined the liability for actions of the others. Determinations based on Article 1384 of CCF do not include the whole area that belongs to the liability for the actions of the others. Regarding this issue, the French have continuously made changes through which they have covered the areas not covered by Article 1384 of the Civil Code. As presented in the above-mentioned treatments, in France case regarding the liability of the custodian, school or other institution for the damage caused by the minor, there have been made continuous changes by promulgation of various acts that have served on other cases occurred later. Regarding this matter, Plenary Assembly with the purpose of covering better the cases of this kind of liability has been based on the term deriving from Article 1384.1 of the Civil Code that are "A person shall be liable for the damage caused by the persons he is responsible for" (Légier, 2008. 147). Based on these terms there is noticed clearly that all entities that are under Based on these terms there is noticed clearly that all entities that are under the supervision of other persons shall not be liable for the damage they cause since for such a damage their supervisors shall be liable. Regarding this, Plenary Assembly of the Court of Cassation has, by the decision Blieck of 29 March 1991, recognized the liability of an association that was supervising a centre of persons with mental disabilities, where one person of this centre had caused damage to a third person. Assembly had decided on the liability from point 1 of Article 1384 by taking into consideration the fact that this centre was liable to control and organize the manner of living of the person with disability who has caused damage to the other person (Légier, 2008. 148). This decision regarding this matter of the liability that derives from Article 13841, later has been used even for other cases. French author Légier notices expressively that the impact of the above-mentioned decision has notices expressively that the impact of the above-mentioned decision has spread even in other cases such as against a re-education institution or any psychiatric clinic which would take responsibility over the damages caused by the persons they have been liable for, or against a custodian who is liable for the action of the person with mental disability (Légier, 2008. 149). Hence, we should note that his decision based on which the centre for the

care of persons with mental disabilities should be liable for the damage a person with mental disabilities has caused to the third person had served as an example which should be applied even in other cases of this nature that would have occurred in the future and in this way this kind of liability to

have been covered by legal framework. In this aspect, we should say that France differs from the above-mentioned states regarding the regulation of this matter only at the normative definition since in the essence after the issuance of the Blieck decision, this kind of liability belongs to the supervisor of the person with mental disability who has caused the damage.

who has caused the damage. Regarding the presumption of the guiltiness for this kind of liability, a clear explanation is given by the Court of Cassation through the Jourdain decision (V 1997, 496) according to which in case the damage is cause then this is a full liability since the liable person can not take away from himself/herself the liability by proving that he/she is not the author that has caused the damage. In such cases the liability may not be taken into consideration only in cases of force majeure or when the other person who should be liable is guilty (Légier, 2008, 148). In this aspect, the supervisor should prove that he/she has exercised the supervision adequately but has failed to prevent the damage to be caused failed to prevent the damage to be caused.

Hence, based on all what was said above, we can ascertain that France as well, in the essence, regulates the matter of liability for the damage caused by the person with mental disability similar as the above-mentioned states but the difference is on the fact that in France this matter has not been expressively determined in the provisions of Civil Code, respectively in Article 1384 which determines these kinds of liability.

#### **Italy case**

Italy case Italy has, by its Civil Code, determined cases on the liability for damaging actions. Regarding this, according to Italian Civil Code, the person who at the moment of causing the damage has been without capability to act then he/she shall not be liable for the damage he/she has caused. (ICC,§2046). Regarding such cases, the ability to act shall be the key condition based on which the person may or may not be liable for the damage he/she has caused to another person. Amongst the persons that are not capable to act shall be minors until the adult age is reached or in case of their emancipation, and persons with mental disabilities or those with mental slowdown development that can not

mental disabilities or those with mental slowdown development that can not judge their actions and due to this they are not capable to act, either by a decision of the competent body or based on legal determinations. Hence, persons with mental disabilities or mental slowdown development shall not be liable for the damage they cause to another person since they have not been capable to act at the moment when the damage was caused. They will be considered liable for the damage caused to another person only if they have brought themselves at the incapable state based on which they have not been able to judge their actions and have caused damage to the other person (ICC, §2046). Regarding this kind of liability we can say that Italy has, similar to other above-mentioned states, determined cases of the liability for the persons that are not capable to act and have caused damage to another person. Moreover, Italians have similarly determined the liability of the person who by his fault has brought himself at unconscious state at the moment the damage was caused and regarding this he shall be liable to make the compensation of the damage.

Italy has, by its Civil Code, determined even the provisions which make liable certain entities for the damage caused by the persons incapable to act. In such cases, those persons who have been obliged to supervise the persons that are incapable to act shall be liable for the damage caused by such incapable persons (ICC, §2047). In such cases, obligation for supervision shall be the basis to require the compensation of the damage from the supervisor of the person who is incapable to act. In case there occurs a failure of the supervisor during the supervision of the person who is incapable to act, and such a failure causes damage to another person, then incapable to act, and such a failure causes damage to another person, then such a supervisor shall be obliged to compensate the damage due to the fact that he has been obliged to supervise the person who has caused the damage. Even in the ICC there has been determined the opportunity of proving the innocence of the supervisor by pretending that he has exercised the supervision adequately but has failed to avoid the causing of the damage. If the supervisor proves such a thing he will be released from the liability caused by the person he has been liable for (ICC, §2047). However, even in Italian Civil Code, as in all above-mentioned countries, exists a gap regarding the determination of the liable person in this case when the supervisor proves his innocence while the person who has caused the damage meets all conditions to be non-liable for the damage he has caused. Hereby, we think that there should be determined the liable entity for such Hereby, we think that there should be determined the liable entity for such cases that bring us to unclear situation regarding the liable entity for such damage caused by the person incapable to act. Although some countries have an indirect solution for this matter, it will be important that one such provision to be determined expressively in the legal framework regulating this matter which would avoid the dilemmas related to the matter of liability.

Moreover, the Italians have determined the cases when the damaged person can not realize the compensation of the damage from the liable entity that is the supervisor of the person incapable to act. In such cases if the above mentioned situation occurs then the judge may, by taking into consideration the economic conditions of the parties, punish the author that caused the damage, in this case the person incapable to act, by a reasonable compensation (ICC, §2047). The purpose of the lawmaker, in this case, shall be the full or partial realization of the compensation for the damaged person based on the general rules of justice.

At Italy case as well as at other above-mentioned states some essential elements related to this liability are characteristic. In all mentioned countries which have treated this kind of liability there are faced some common elements which come into consideration in such cases as 1. cause of the damage, 2. incapability to act due to mental disability or mental slowdown development and 3. supervision of the liable entity. In such cases it is important there to be indicated these three elements since if for one case in which there have not been indicated these three elements then there will not come into consideration the liability of the supervision for the damage caused by persons with mental disabilities treated in this part. Regarding this matter there have been given the due explanations both in theoretical treatments and in legal framework.

#### Germany case

By the German Civil Code there are determined the provisions based on which certain persons shall be released from the liability for the damage caused to other persons. In such cases person with mental disabilities or mental slowdown development that have not been conscious at the moment when the damage was caused shall not be liable for the damage they have caused (GCC, §827). German lawmakers, similar as lawmakers of other above-mentioned states, have drafted legal provisions based on which persons with mental disabilities or mental slowdown development that have not acted by their will shall not be liable for the damage caused to other persons. In order to be released from the liability for the damage caused, this unconsciousness state of these persons should not have been brought with their actions, since if the unconsciousness state has derived as a consequence of their actions then they shall be liable like they have conducted the action due to carelessness or negligence (GCC, §827). In such cases of liability, unconsciousness of the person in his actions is considered as essential element taken into consideration in the release of such person from the liability.

Beside the provisions through which the unconscious persons are not liable for the caused damages, Germans have, by their Civil Code, determined even the provisions based on which regarding the damage caused by the persons with mental disabilities or mental slowdown development there shall be liable their supervisor (GCC, §832). In our case, the supervisor of such persons may be the custodian who necessarily should have legal relation with the person who is incapable to act either based on the Law,

decision of any competent body or contract. This liability of the supervisor may come into consideration only in cases when he failed to exercise adequately the supervision towards the person with mental disability. In this case if the supervisor proves that he has exercised the supervision adequately but has failed to prevent the causing of the damage he/she will be released from the obligation on compensation of the damage caused by the person that has been under his supervision.(GCC, §832). In this presentation there is noticed that the legal framework of Germans regarding this matter is totally similar with the above-mentioned states regarding the release from the liability of persons with mental disabilities for the damage caused to another person. Moreover there are noticed similarities in determination of the liability of supervisors for the damage caused by such persons. There are determined identically even the cases of the release from the liability of supervisors when they prove that they have exercised the supervision adequately but have failed to prevent the causing of the damage. causing of the damage.

causing of the damage. Regarding these cases when the supervisor has the opportunity to prove his innocence by proving that he has exercised the supervision adequately, Germans have, by the Civil Code, determined even the cases when for this damage there may be liable more than one person or in other words existence of solidary liability. We should mentioned the fact that for this kind of liability Germans are the only, unlike all other countries mentioned in this paper, who have foreseen expressively the solidary liability based on which in certain cases parties shall be obliged that together or individually to be liable for the damage caused by the persons with mental disabilities (GCC, §840). There are some advantages to this determination since it does not put any gap or unclearness which would be presented in cases when one party may be released from the liability or in certain cases when it is required by the created circumstances based on which they should be liable together for the compensation of the damage caused by persons with mental disabilities. with mental disabilities.

#### Spain case

By Spanish Civil Code there are determined the provisions which regulate the cases of liability that derives from the fault or negligence. Spain has, by its Civil Code, determined the provisions according to which for the damage caused by the person with mental disabilities there shall be liable the custodian who is in charge to supervise such persons (SCC, §1903). In such cases person with mental disability should be under the supervision of the sustadian or should live in the sustadian centre and from such a centre there custodian or should live in the custodian centre and from such a centre there should be made the supervisions of such persons (SCC, §1903). Regarding the regulation of this liability, Spain has similarity with all above-mentioned

states since it has identically foreseen that for the damage caused by the persons with mental disabilities there shall be liable the custodian who is in charge to supervise such persons. Unlike other states, Spain has not, by the provisions of Civil Code, determine expressively with the general provisions that the persons with mental disabilities shall not be liable for their own actions, which we meet in legal systems of the above-mentioned states. Although Spain has, by it legal framework, determined that for the damage caused by persons with mental disabilities, their custodian shall be liable, however they have not determined that the person with mental disability shall not be liable for the damage caused to another persons. Moreover, totally similar like above-mentioned states, Spain has, by its Civil Code, determined provisions based on which the custodian or custodian body may prove that they have exercised the supervisions adequately but have failed to prevent the causing of the damage. In such cases they shall be released form the liability for the damage caused by the person with mental disability (SCC, §1903.6). In this aspect, it is worth to mention that in case of release of the custodian from the liability for the damage caused by the person to make the compensation of the damage, the liable entity for compensation of the damage. Spain has not, by the provisions of Civil Code, determined the solidary liability which should come into consideration in all kinds of the solidary liability which should come into consideration in all kinds of the solidary liability which should come into consideration in all kinds of the solidary liability which should come into consideration in all kinds of the solidary liability which should come into consideration in all kinds of the solidary liability which should come into consideration in all kinds of the solidary liability which should come into consideration in all kinds of the solidary liability which should come into consideration in all kinds of the solidary

Spain has not, by the provisions of Civil Code, determined the solidary liability which should come into consideration in all kinds of this liability. Regarding the solidary liability related to this case, except Germany which has determined expressively by it Civil Code, all other states have not determined expressively the solidary liability regarding this kind of liability; hence we should emphasize that Germans are the most advanced regarding the determination of the solidary liability in such cases. In this aspect, the matter of liability in cases when one party can not compensate the damage for which such a party is obliged to do so has been settled by other states based on the general rules of justice by obliging the other party to make the compensation of the damage when such a party has good financial status to do so, by not putting gap in their rules regarding the compensation of damage for this category of persons. In this manner, there shall be completed the obligation to compensate the damage caused by the person with mental disability towards the damage person, where without his fault, the damage has been caused to. It is logical and right that one party necessarily to be liable for the caused damage since in this way there shall be realized the implementation of provisions on general rules of justice according to which the caused damage by all means should be compensated; hence in this case it should be compensated by the custodian or custodian body. In other circumstances, the damage should be compensated by the causing person of

the damage if has good economic conditions only when the supervisors have proved their innocence. However, if the person with mental disability is guilty for causing the damage but such a person does not have good economic conditions to compensate that damage, then the custodian or custodian body shall be liable. This obligation should derive as a reason of liability for the supervision of the person with mental disabilities.

#### Conclusion

Based on all what is presented above we can ascertain that all above-mentioned states in this part with their legal framework have determined the provisions based on which they have determined the liable entities for the damage cause by the persons with mental disabilities towards other persons. Theoretical treatments regarding this kind of liability have indicated that all authors have noticed similarly that this category of persons should be protected due to their mental disabilities from which such persons cannot control their actions. Exclusion from this should occur only if they by their consciousness have caused the situation by bringing themselves into unconsciousness when the damage was caused.

Regarding the legal framework of the states that have been object of treatment for this kind of liability, we should emphasize that those states have determined the liability of certain entities based on the provision of the laws on obligations and civil codes.

laws on obligations and civil codes. Kosovo, Croatia and Serbia have, in a completely similar manner, regulated the liability for the persons with mental disabilities. Besides the determinations generally, in their laws they have determined provisions based on which the persons with mental disabilities are excluded from the liability. Moreover, in such situations these countries have determined even the provisions based on which supervisors of persons with mental disabilities shall be liable for the damage caused by such persons. Supervisors shall be assigned based on the decision of the competent body, legal obligation or any contract. In order to complete the similarities in the framework of these states we should indicate that these states have completely similarly states we should indicate that these states have completely similarly determined the opportunity of the supervisor to prove his innocence by proving that the damage has been cause without their fault Republic of Albania, regarding this kind of liability, has similarities as well as differences when compared with the above-mentioned states.

Initially it differs from other states since in one common provision it has set the minor under the age of fourteen (14) as well as persons incapable to act due to mental disabilities. We shall consider as inappropriate this determination of the Republic of Albania since there are not similar the cases of liability for the minors and persons incapable to act due to mental disability. We state this since it is necessary a completely different approach to the care and supervision towards normal minors compared to the care for persons with mental disabilities that belong to abnormal persons; hence for this reason we consider that inclusion of them in a common provision is not appropriate. Similarities of Albania with the above-mentioned states shall be identified at the determination of the liability of supervisors for the damage caused by the persons incapable to act. Legal determination based on which the supervisor may prove his innocence for the damage caused by the person with mental disability causes unclearness at Albania case. We state this since the provisions of Civil Code have put gap in this matter by not determining the liable entity if the custodian proves his innocence but the disabled person does not have economic conditions to make the compensation of the damage. We think that in this case there should existed a provision based on which in the last instance the custodian or custodian body shall be liable for the damage caused by the person with mental disability. We shall state this taking into consideration the fact that the supervisors are obliged to supervise the persons with mental disabilities. For this reason we shall state that they can not be absolved completely, in cases when the damage is caused by the persons with mental disabilities, due to the obligation for supervision.

Besides this, another unclearness which is created based on the provisions of the Civil Code of Albania is the case of determination of the liability of persons that at the moment when the damage is caused they have not been conscious for their actions. In this case, it is not specified when these persons should have been liable for the damage caused despite the fact that they have not been conscious for their actions; hence in this aspect we shall consider that Republic of Albania in the provisions of the Civil Code should include expressively the cases when such persons should be liable for the damage caused since the current content of this provision is not sufficient and creates unclearness.

France case is a more different example from the above-mentioned cases. We say it is a more different example due to the normative determination, since in France this matter has not been determined by the Civil Code but by decisions of the Court of Cassation. Based on the decision (*Blieck*) Plenary Assembly of the Court of Cassation has decided on the liability of a centre for the care of persons with mental disabilities for the damage caused to another person by e mental patient. From this case (*Blieck*) legal framework in France has, as a source of the law for such cases, this decision they should refer to in. Hence, France although has not determined this matter by the Civil Code, we can say that it has similarities with the above-mentioned states regarding the regulation of the liability of the supervisor for the damage caused by the persons with mental disabilities. Moreover, even at case of presumption of the innocence of supervisor, France through the decision of the Court of Cessation in the case (Jourdain)

has ascertained that the liable person can not be absolved from the liability by pretending that he is not the author of the caused damage. In order to be released from the liability, Court has noted that the entity should prove that the damage has been caused by force majeure or there exists another person liable for the damage caused by such persons. Hence, though these cases France is good enough in regulating the liability for the damage caused by the persons with mental disabilities.

the persons with mental disabilities. Italy has regulated this matter by the Civil Code. Italians have regulated the liability of the supervisor for the damage caused by the persons with mental disabilities in a provision according to which the supervisor of persons incapable to act shall be liable for the damaging actions of such persons. Within this incapability to act, they have set the minor until the adult age or their emancipation and person with mental disabilities or mental slowdown development. In this aspect, Italy does not differ at all from the states we have mentioned till now. Moreover, according to the provisions of the Civil Code they have let the possibility to the supervisors to prove their innocence whether they have exercised the supervision adequately but have failed to prevent the damage to be caused. Hence, we should state that Italy is on the side with states mentioned till now regarding the regulation of liability for the damage caused by the person with mental disability.

liability for the damage caused by the person with mental disability. Germany is the best indicator of the regulation of this liability in comparison with the states mentioned in this case. With the provisions of the Civil Code, they have determined that the persons that at the moment the damage was caused they have not had the due consciousness shall not be liable for the caused damage. Hence, through a general provision, Germans exclude this category of persons from the liability. With another provision, Germans shall, regarding the damage caused by such persons, set their supervisors liable entity. This liability of supervisors derives due to legal obligation, decision of the competent body or contract. Completely similar as other states, in Germany as well according to provisions of Civil Code the supervisors have the possibility to prove their innocence if they have exercised the supervision adequately but have failed to prevent the damage to be caused. Exactly in this case there is presented the superiority of German framework in comparison to the legal systems of other states mentioned in this part. We shall state this since regarding such cases, Germany by it Civil Code has determined the provisions which expressively determine the solidary liability of the entities in this case. Regarding this matter, Germany is the only state that has determined expressively the solidary liability of the entities for this kind of liability, and due to this we shall state that Germany has the most advanced and detailed regulation in comparison with other states mentioned in this part. Through solidary liability, there is created the possibility of compensation of damage by the party which has better economic status in comparison to the liable party which does not have economic conditions to make the compensation of the damage to the damaged person.

Spanish legal system has regulated this matter through the provisions of the Civil Code. Completely similar as other above-mentioned states, Spain as well has determined the provision based on which for the damage caused by the person with mental disability there shall be liable the custodian or custodian body that takes care about the supervisions of such person. In this aspect, there is no difference at all between the mentioned states and this makes us understand that the continental system in general has similarities in regulating this matter but the differences are noticed in some elements that comprise this kind of liability. Moreover, the Spanish legal system has let the possibility of absolvement of the custodian or custodian body if they prove that they have exercised the supervision adequately towards the person with mental disability but have failed to prevent the damage to be caused. Regarding the regulation in principle of this matter, Spain does not differ at all from none of the above-mentioned states, but the differences appear at the general determinations based on which the persons with mental disabilities are released from the liability of their actions. This provision is determined expressively in some of the states mentioned above, hence, we can state that Spain as well has similarly determined the liability of the supervisor for the damage caused by the persons with mental disabilities.

damage caused by the persons with mental disabilities. Based on that mentioned in this part, we can ascertain that all mentioned states have almost similar determination regarding the regulation of the liability of the supervisor for the damage caused by the persons with mental disabilities. As a conclusion, we can state that all legal systems mentioned in this part have determined expressively the liability of the supervisors regarding the damage caused by persons with mental disabilities but some of those systems have a more advanced regulation since they have foreseen more cases related to this liability including even the determination in expressive way of the solidary such as Germany case. Viewed as a whole, this matter is covered quite enough by legal frameworks in all legal systems mentioned above since by legal provisions there are determined the liable persons in case the damage is caused by such persons. Some of the legal systems which in their provisions have unclearness in certain cases, there would be necessary for them to take concrete actions on amending and supplementing those provisions in order to eliminate the unclearness and legal gaps with the purpose of a better regulation of this matter and protection of such persons that need continuous supervision.

#### Abbreviations

LORK Law on Obligational Relationships in Kosovo

COARC Civil Obligations Act in the Republic of Croatia

LCTS Law of Contracts and Torts in Serbia

- CCA Civil Code of Albania
- CCF Civil Code of France
- ICC Italian Civil Code
- GCC German Civil Code
- SCC Spanish Civil Code

### **References:**

Podvorica Hamdi, (2011), E Drejta Familjare, Prishtinë

Podvorica Hamdi, (2006), E Drejta Familjare, Prishtinë

Aliu Abdulla & Gashi Haxhi, (2007), E Drejta Familjare, Prishtinë

Mandro-Balili Arta, (2009), E Drejta Familjare, Botimi i Parë, Tiranë

Latifi Juliana (2009), E Drejta Civile – Pjesa e Përgjithshme, AlbPaper, Tiranë

Kadriu Osman, (2008), Hyrje në të Drejtën Civile, Shkup

Gams Andrija, (1972), Hyrje në të Drejtën Civile, Prishtinë

Alishani Alajdin, (2002), E Drejta e Detyrimeve, Pjesa e Përgjithshme, Botimi i dytë, Prishtinë

Nuni Ardian, (2012), E Drejta Civile, Pjesa e Përgjithshme, Tiranë

Tutulani – Semini Mariana, (2006), E Drejta e Detyrimeve dhe Kontratave, Pjesa e Përgjithshme, Tiranë

Dauti Nerxhivane, (2013), E Drejta e Detyrimeve, Botim i plotësuar dhe përmirësuar, Pjesa e Përgjithshme, Prishtinë

Dauti Nerxhivane, (2016), E Drejta e Detyrimeve, Botim i plotësuar dhe përmirësuar, Pjesa e Përgjithshme, Prishtinë

Millosheviq Lubiśa, (1972), E Drejta e Detyrimeve, Prishtinë

Dauti Nerxhivane & Berisha Ruzhdi & Aliu Abdulla & Vokshi Adem, (2013), Komentari – Ligji për Marrëdhëniet e Detyrimeve – Libri I,

Légier Gérard, (2008), E Drejta Civile - Detyrimet, Botimi i 19-të, Përktheu Edmond Xhabija

Shemiq, (1996), Pravni Zhivot

Law on Obligational Relationships in Kosovo No 04 / L - 077

Civil Obligations Act in the Republic of Croatia No 35 / 2005,

Law of Contracts and Torts in Serbia 1997

Civil Code of Albania

Civil Code of France

Italian Civil Code

German Civil Code

Spanish Civil Code

# Comprehending Public Means of Conditioning the Realization of Public Purpose in Poland

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#### Abstract

The subject of the article is very important in Poland, especially now that Poland has a lot of expenditures from budget. The problems which are present include polish solution, and they are the basis for further regulations. According to the accepted title, the study was devoted to the review of important issues connected with public means in Poland. One should regard as basic this type of financial means conditioning. Also, they should determine the completion of the so-called purpose/tasks public. Due to the adopted subject, the study is presenting in the only selective way, cardinal regulations concerning the accumulation and disbursing of public means by entities and by law. This was described based on the annual financial plan whereby Poland are accepting the character of one central budget - state budget and self-government budgets - of individual communes, districts, and provinces. Conducted deliberations have also supported the chosen positions of literature. Thus, they end with the motions of the Author.

**Keywords:** Public means, public incomes, revenues, public expenditures, public expenses, budget.

#### Introduction

Determining the principles of management with public means in Poland is the subject of this study. Raising this subject seems justifiable due to the fact that the management of public centers is guaranteeing the execution of public tasks standing before the people and self-government units.

It is the management of public means, applied both through the legislator, the learning, as well as the practice that did not wait until the statutory definition. However, the absence of a legal definition results in the notion of the legislator. Also, the practice uses numerous notions which is close to the meaning of management, disbursing, allocating, and which has public means at one's disposal without explaining resemblances or any appearing differences between them. This development time above all the management of public means has placed emphasis on determining the rules of recruiting them and allocating them. This is without explicit explanation of the management of these centres. However, it is a crucial issue in showing the system of the management of public means which is due to the conditioning of the performance of public tasks.

Subsequently, this study helps in drawing up the process of examining and comprehending public means, determining principles of recruiting them, and method of allocation by the state and the self-government units. For this purpose, various analyses were conducted based on chosen legal documents of comprehending public means. In the study, various literatures on the subject were used. Thus, this gives a clear picture of the subject of this study. Furthermore, one should start explaining and comprehending the

Furthermore, one should start explaining and comprehending the management of public means. Managing regulations arising from the Constitution of the Republic of Poland (with the Polish constitution hereinafter referred to or the Constitution) from 2 April 1997, D. U. Nr 78, was determined by amended pos. 483 which is in the chapter X. The public finance predicts that financial resources for public purposes were collected and disbursed for public means and was used to solve financial means.

Based on special status of public means, a way of disbursing which is associated with the realization of public purposes was decided upon. From here, one should acknowledge that public means are appearing in order to fulfill public purposes. Therefore, it also seems that explaining and comprehending public means without explaining and comprehending public purposes is difficult and impossible.

Analyses of comprehending public purposes, to which the Polish constitution is indicating sec. 1 in already appointed Act. 216, is turning up at Act 21 sec. 2 of the constitution. Here, the expropriation is only acceptable according to when is being made for public purposes and behind the just compensation. Not a single one contains the other provision of the Polish constitution of the definition of public purposes. Also, they do not directly determine the criteria regarding the determined circumstance as public purposes.

Implemented by the Polish constitution, comprehending public purposes was only used by the public finance law one time. Thus, this is in the case of discussing specific subsidies which can be granted from the budget of the self-government unit entities. It is not counted among the sector of the public finance and is inoperative in the destination of making profit for public purposes associated with the execution of individual task (Act 221 sec. 1 from 27 August 2009 about the public finance, vol. lk. D. U. from 2016r. pos. 1870 about the public finance). Besides this regulation, the public finance law, generally speaking, is not using this notion led by others in the form of public tasks.

Comprehending public objectives belongs to regulations of the administrative law which are a kind of tasks with comprehending administration. This task is popularly understood by certain distinguished group of people acting in concert in the destination of performing a determined task. With the land regulations in force, the literature on the subject is defining administration based on the legal validity of provisions of the law by the state. Also, it is being carried out by its suspended bodies as well as the local self-government collective and individual needs of citizens, resulting from the co-existing of people in the communities (Boć 1993). It is possible to attribute certain characteristic features to

It is possible to attribute certain characteristic features to administration. Firstly, administration is a kind of activity. Secondly, activity conducted by the civil service must have fastening in effective law and regulations. Thirdly, she is supposed to serve and satisfy the needs of the wide group of citizens. Fourthly, it is being carried out by national selfgovernment subjects determined by provisions of the law and other public operators. Also, administration fulfilling these features is performing the special type of tasks which one should regard as tasks about public character, i.e. public tasks.

The land of applicable regulations of the Constitution carrying out public purpose (see: Kopaliński, 2000; Ura, 1997) do not have a single condition of financial means for public means. According to the quoted plot Act 216 sec. of the Polish constitution, provisions of the separate act which define the principles of the accumulation and the disbursing of these funds were needed for determining public means.

However, such a definition of public means which has to do with visions of recruiting and allocating financial means are leading (appropriately Act 5 and 6 of recalled higher public finance law). Bearing in mind a point of view of the accumulation for public means, one should regard Act 5 as financial means. Thus, it is possible for it to be organized into the following frames categorized in terms of: <u>public incomes, foreign incomes, and revenues</u>.

Sec. 2 is defining the category of public incomes of appointed article. According to his plot, one should treat them above all as public. Also, other tributes incomes which describes adding these provisions of the public finance law from sources of tax, non-tax budget incomes, and a source of revenue of self-government units were described (Act 111 and 216, public finance law in relation to regulations resulting from provisions of the Act of 13 November 2003 about incomes of self-government units, D. U. from 2016 pos. 198 with changes ). Consequently, they are for example: public tributes which includes taxes, contributions, charges, and other financial benefits whose duty to incur for the State, local government units, target funds and other units in the sector of public finances results from different statutes than the budget statute. This, however, refers to "separate statutes." Other income which is based on separate statutes was due to the State budget, local government units, and other units in the sector of public finances. Next is that determining foreign incomes should understand centres

coming from the budget of the European Union and non-returnable centres. This is from the help given by Member States of the European Agreement about the free trade (EFTA) as well as centres coming from foreign alternative sources that is non-returnable (*Art. 5 ust.1 pkt.2 and 3 Public* Finance Law).

Besides these sources, the public money names the revenues of the State budget and budgets of local government units, as well as other units in the sector of public finances. However, they are gotten from the sale of securities and other financial operations; privatization of the State Treasury property and property of local government units; repayment of loans granted from public means; and received loans and credits.

Subsequently, these public centres catalogued by the legislator are supposed to be the subject of the legal validity of Act 6 of the public finance law for allocating. This is done in two <u>major ways</u>:

1) Public expenditures;

2) Public expenses, means expenses of the state budget and budgets of the self-government units.

Referring to public expenditures, according to Act 44, public finance law can be incurred for the purposes of the set amounts in:

1) Budgetary act;

2) Resolution of the budget self-government unit;
3) Financial plan of the unit of the sector of the public finance.
In addition, the public expenses came from:

Repayments of received borrowings and credit;

2) Repurchase of securities;

3) Given borrowings and credit;

4) Payments arising from separate acts of which an income from the privatization of the assets of the state treasury is a source of finance;

5) Other financial transactions associated with administering the national debt and the fluidity;

6) Payments connected with shares of the state treasury at international financial institutions.

The public finance noticing the provisions of the Act vast soil of the two regulations which are supposed to be on the alert are implementing the category of budgets through planning and passing. The minister of finance is presenting guidelines of the plan of the state budget for the next year. Also,

various arrangements to the Council of Ministers and the directions of action contained in the Long-standing financial plan for the people where placed into consideration. Materials for the draft of the budgetary act are drawing up, and disposers of budget parts were presented to the minister of finance (long-standing financial plan for the people is being drafted for the given financial year and for three consecutive years: main social policy objectives and economic; planned action and their influence on the income level and of the expenses of the sector of government institutions and self-government). Furthermore, the minister of finance is presenting the plan of the budgetary act for the next year to the Council of Ministers along with grounds. The ministry of Treasury constitutes incomes and expenses of the Office of the Sejm (the first, base house of the Polish Parliament), Office of

Office of the Sejm (the first, base house of the Polish Parliament), Office of the Senat (the second house of the Polish Parliament), Chancellery of the President of the Republic of Poland, Constitutional Tribunal, Government Inspectorate, Supreme Court, the Supreme Administrative court in the project of the budgetary act along with provincial administrative tribunals, the National Council of Judiciary, common judiciary, ombudsman, and Spokesman of children's rights. Also, the Council of Ministers passes the draft of the budgetary act along with grounds. Then, they submit it to the Sejm on the 30th of September which is the year proceeding the fiscal year (Constitution of Poland). Thus, the Sejm is passing the budgetary act. The Senat can pass amendments to the budgetary act within 20 days of the day of handing over. The president of the Republic also signs the budgetary act within 7 days. On the other hand, they act on the interim budget presented by the Speaker of the Sejm. In case of territorial budgets, the management board is drafting self-government units,

 For organ constituting self-government units,
 For regional account chamber - with the aim of giving one's opinion

- Up to day 15th of November of the year preceding the fiscal year. Opinion of the regional account chamber on the draft of a resolution budget of the management board of the self-government unit is obliged to be presented. This is before the passing of the budget to the body constituting self-government units.

Also, the organ constituting of self-government units is passing the budget resolution before beginning the fiscal year. This can be seen in particularly justified cases - not later than 31st of January of the fiscal year. Until adoptions of a resolution budget, not later than the 31st of January of the fiscal year, a draft of a resolution is done based on the financial management budget presented to the body constituting self-government units. In case of the failure to pass a resolution budget up to day 31 of

January of the fiscal year, regional account chamber at the end of February of the fiscal year budget is establishing self-government units based on their own tasks and commissioned tasks (Act 233 and 238 – 240 public finance law)

3. Through this way, only entities have public specific measures of the entitlement shown by the public finance law which can be divided into two categories. Firstly, it involves the ones which belong to the sector of the public finance. Secondly, it involves those which have public funds at one's disposal only to a certain extent (Act 233 and 238 – 240 public finance law). Individuals, according to the definition of the public finance, have the right to draw. They are forming the first group to disburse public means based on the state budget which is passed every year, budget of the self-government unit, and financial plans formed based on their individual organizational units. In accordance with the provisions of the Act, they are various public authority agencies, including; 1) Government administration agencies, agencies of State control and law protection, courts and tribunals; 2) communes, districts and provincial self-government, hereinafter referred to as "local government units", as well as their unions; 2a) metropolitan connections; 3) state higher schools; 4) research and development units; 5) independent public health care institutions; 6) state and self-government institutions of culture; 7) Social Insurance Institution, Social Insurance Fund for Farmers and funds administered by them; 8) National Health Fund; 9) Polish Academy of Sciences and organizational units created pursuant to separate statutes in order to execute public task. This is with the exclusion of enterprises, banks, and commercial law companies (Act 9 Public Finance Law).

The second, however, form subjects which have to do with the provisions of the law at one's disposal or the use of public means for the completion of public purpose/tasks. Next, it is possible to rank entrepreneurs among them provided they are acting in pursuant to the provisions of the act from 30 April 2004 in matters concerning the state aid (vol. lk. D. U. from 2016r. pos. 1808), non-governmental organizations operating based on the act from 24 April 2003 about the public good activity and about voluntary services (D. U. from 2016 as amended pos. 239), research institutes - act from 15 January 2015 about the amendment to the act on principles of the financing science, and some other acts (vol. lk. D. U. from 2015r. pos. 249).

With terms of use, managing public means by both groups passing budget appropriately on the rung of the state is regarded as self-government. The lack of taking the decision on this matter is indeed depriving their action from the possibility using public means.

#### Conclusion

In conclusion, the results of the study based on very short deliberations in Poland show that a state budget is a condition of using public funds and self-government. It is understood as the financial plan about annual character. Thus, this is because since it has been in force since 1 January up to 31 December, it is building the base for the title management of public means and, consequently, his lack excludes such possibilities.

Based on the tremendous warning provisions of the law which is standing on guard, planning and passing the budgetary act appropriately is an important issue for the completion of purpose/tasks. Also, there are budget resolutions for individual self-government units such as communes, districts, and provinces.

The lack of these financial plans is a hindrance in carrying out basic functions of the people and the self-government units.

#### **References:**

Elzbieta Ura (1997). Administration and the administrative law [in:] Administrative law, (ed.). Ura Elżbieta Warszawa: Woulters Kluwiers, 1997 Jan Boć (1993). Administrative law. Wrocław: Kolonia Limited.

Polish Public Financial Law (2016). http://prawo.legeo.pl/prawo/ustawa-o-finansach-publicznych.

The Constitution of the Republic of Poland (1997). http://www.sejm.gov.pl/prawo/konst/angielski/kon1.htm.

Władysław Kopaliński (2000). Dictionary of loanwords and foreignlanguage phrases with the occasional anthology. Warszawa: Wydawnictwo Rytm.

# Effect of the Economic Crisis on Housing Market in Poland

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#### Abstract

The housing market is an important part of the economy and stays with her in close connection. On the one hand, affects macroeconomic variables by participating in the creation of gross domestic product (GDP), the share of the resource (national wealth), creating jobs, providing tax revenues, or providing the opportunity to unfreeze the capital. On the other hand, the phenomena and processes occurring in the economy can affect stimulating or inhibiting effect on the development of the housing market, in particular by: changes in interest rates on loans, changes in demand for surface or changes in the attractiveness of other capital investments. The publication is devoted to the issues of the impact of the economic crisis (started in Poland in 2009) on the housing market in Poland. The main objective of this paper is to examine the dynamics of downward trends in the residential property prices exemplified by a medium-size city. A hypothesis is made that the dynamics of the decline of residential property prices in the times of crisis is much poorer in medium-size cities than in large urban agglomeration. The study covers the quarters of 7.5 years between 2009 and 2016 (I. half) - 30 quarters. The findings of the study on the residential property market in Koszalin are presented in reference to the data on residential property markets in 17 Polish largest cities. presented the results of analyzes are part of the research conducted by the authors on the real estate market and its functioning.

Keywords: Housing market, economic crisis, market analysis

#### Introduction

The resurgence of market economy in Poland in the 1990s resulted in the increased importance of the Polish real property market, particularly of its residential segment. The residential market is closely correlated with the economy, being its essential element [Case 2000; Hilbers et al. 2001]. On the one hand, it influences macroeconomic variables by participating in the generation of the gross domestic product (GDP), contributing to the national wealth, creating jobs, providing tax revenue or encouraging investors to dust off their frozen capital. On the other hand, the processes taking place in the economy may drive up or slow down the growth of the residential estate market, primarily by modifying interest rates, changing the demand for residential space or making other forms of capital investments more or less attractive [Ball 1998; Kucharska-Stasiak 2016]. Functioning and davalantment of the (residential) property market is determined by many attractive [Ball 1998; Kucharska-Stasiak 2016]. Functioning and development of the (residential) property market is determined by many factors, the main ones being demographic, economic, financial, legal and political factors [Schmitz et al. 2001; Aron et al. 2006; Kałkowski 2003]. Such specific features of the residential property market as market failure, ineffectiveness, low flexibility of supply and demand and, first of all, its local character implicate the fact that the responsiveness of local markets to the external signals is diversified in terms of its promptness and scope. The above indicated implication has become a rationale for this

study, the purpose of which is to assess the effect of the global economic study, the purpose of which is to assess the effect of the global economic crisis, that struck in August 2008, on housing market in Poland. The object of this study is the residential property market in largest cities in Poland. The paper verifies the research hypothesis about the diversified impact of the economic slowdown on local residential property markets of different size (urban agglomerations and medium-size towns). The analysis deals with the West Pomeranian city of Koszalin with the population of 108.6 thousand. The study covers the subsequent quarters between 2009 and 2016 (I. half). The data come from RCiWN (the Register of Property Prices and Value) of the Municipal Surveying and Cartographic Documentation Centre in the Municipal Surveying and Cartographic Documentation Centre in Koszalin Center and from BaRN (the Database of Residential Property Prices) of the Polish National Bank.

**Development Stages of Housing Market in Poland** Since the revival of the Polish real property market in the 1990s we have seen its subsequent development stages. Different authors use their own criteria to identify these stages (Table 1).

criteria to identify these stages (Table 1). The development stages on the residential property market overlap with the cycles in the Polish economy and, in connection with this economy, with the cycles on the real property market [Foryś 2013]. The fluctuations in the economy trigger trend movements on the real property market and, vice versa, the changes on this market are the driver of changes in the economy [DiPasquale 1996]. What is relevant for the market growth in the long run are cyclic trends and fluctuations [Rottke et al. 2003]. Similarly to other markets and the economy in general, the residential property market is subject to volatility. In time series of variables describing this market we can

single out the trend and the seasonal, random and cyclical fluctuations [Dehesh et al.1997]. The variables can be the supply, the demand and prices. However, due to the difficulty in estimating the supply and the demand, the most common subject of analyses are the residential property prices [Trojanek 2011].

	stages of the Polish leaf (lesidential)	property market after 1909
Considering the opening balance at Poland's accession to the European Union according to L. Kałkowski	Considering domestic legal and economic changes according to H. Henzel	Considering phenomena affecting Polish market after 1989 according to I. Foryś
a) period of transformation: 1990- 1999 – a decade of systemic transformation, 2000-2004 – a period preceding Poland's accession to the EU; b) period following Poland's accession to the EU (from 2005 onwards).	<ul> <li>a) stage I (1989-1992) – time of intensive work on changing legal regulations and market institutionalisation;</li> <li>b) stage II (1993-1995) – outflow of capital to the securities market, weakness of the money market, oversupply of industrial property, shortage of office space, inflow of foreign capital;</li> <li>c) stage III (1996-1999) – legislative changes, increased attractiveness of real property as capital investment;</li> <li>d) stage IV (from 2000 onwards) – emergence of mortgage banks and real property funds, decrease in transaction prices and rents, increased vacancy rate, process of adapting domestic property market to western markets.</li> </ul>	<ul> <li>a) period of adapting legal and organisational solutions to the requirements of market economy (1990–1997 - ownership transformations in 1990–1994 followed by the period [1995– 1997] of creating market mechanisms, incl. market institutions which ended with adoption of the Act of 21 August 1997 on real property management); b) period of verifying the adopted solutions and of pre- accession actions (1998–2004); c) period of convergence with international markets (from 2005).</li> </ul>

 Table 1. Development stages of the Polish real (residential) property market after 1989

Source: own elaboration based on [Kałkowski 2007, 36-71; Henzel 2007, 1–12; Foryś 2011, 12].

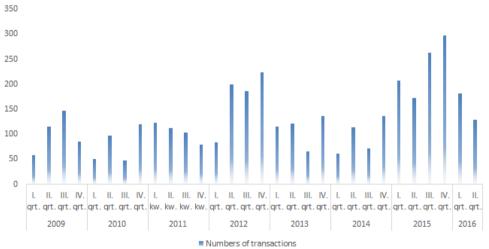
The real property market develops in accordance with the general economic trend, but the trends on this particular market can be shorter than the general economic ones and can occur locally at irregular intervals (specificity of local markets) [Quigley 1999; Kucharska-Stasiak 2016]. The property market cycle is defined as recurring but irregular movements in the

global revenue from all types of real property, also expressed by other real property market indicators, and preceding or lagging behind the mean of all types of real property [Key et al. 1994]. It denotes tendencies in the supply, demand, prices and rates of return on property in relation to the deviations from their long-time trends or mean values [Baum 2001].

Between 1990 and 2009 the Polish property market saw two booms (1996–1999 and 2005–2008) and three recessions (1990–1995, 2000–2004 and 2009 until now). It can be clearly seen that the bear markets lasted twice as long as the bull markets. Yet, the power and direction of the mutual impact between the economy and the property market vary geographically [Foryś 2013].

#### **Analysis of Housing Market in Poland**

Koszalin is a county-status city located in Central Pomerania belonging to the West Pomeranian Province. It has the population of 108.6 thousand and covers the area of 9 834 ha divided into 17 housing developments. In the years of 2009-2016 (I. half) the Koszalin secondary residential property market saw 3901 transactions. The low in the number of transactions (315) was hit in 2010, which accounted for a 22% drop in comparison to the previous year. The record year was 2015 with 999 sold properties, i.e. with the increase by 162% year to year (Fig.1).



**Fig. 1.** Quarterly numbers of transactions on residential property market in Koszalin in 2009-2016 (I. half) Source: own study on the basis of RCiWN MODGiK in Koszalin.

In the analysed period of time almost a half of transactions (46.96% of the total number) concerned flats in three housing developments located in the central part of the city. The least attractive were properties in the

developments located in the outskirts of the city where old family houses prevailed.

Between 2009 and 2016 (I. half) the residential property market in Koszalin saw a decrease in the mean transaction price of  $1m^2$  of floor area from PLN 3 744 in I. qrt. 2009 to PLN 3 570 in II. Qrt. 2016, that is of -4.64%. Similar tendency was reported on the property markets in 17 largest Polish cities, but the trend dynamics varied in individual cities (Fig. 2).

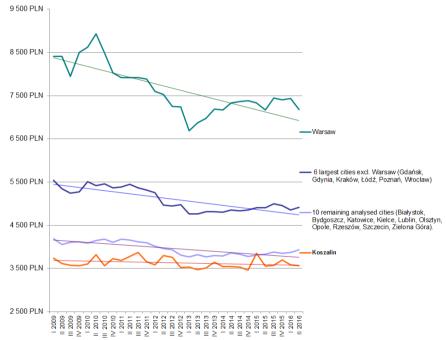


Fig. 2. Dynamics of mean residential property transactional prices on the secondary market (m²) Source: own study on the basis of RCiWN MODGiK in Koszalin and the Polish National Bank data. (www.nbp.pl).

In order to find out if the residential property market in Koszalin (quarterly mean prices of  $1 \text{ m}^2$ ) differ from the local markets in 17 largest Polish cities, we determined trend models for the Warsaw market in the next largest six cities (Gdańsk, Gdynia, Kraków, Łódź, Poznań, Wrocław) as well as in the ten remaining ones (Białystok, Bydgoszcz, Katowice, Kielce, Lublin, Olsztyn, Opole, Rzeszów, Szczecin, Zielona Góra):

 $\hat{y} = a_0 + a_1 t = 8423.79 - 49.91t (1),$ 0 6 largest cities $\hat{y} = a_0 + a_1 t = 5477.41 - 24.60t (2),$ 0 10 remaining large cities $\hat{y} = a_0 + a_1 t = 4175.36 - 13.77t (3),$ 

#### o Koszalin

 $\hat{y} = a_0 + a_1 t = 3690.40 - 3.76t$  (4).

The expression  $a_1$  denotes the quota value of the trend in one month. The expression  $a_0$  denotes a theoretical price of  $1 \text{ m}^2$  on the day of the first transaction in the analysed sample.

The analysis of econometric models created for the above cities shows that the larger the city (the higher unit prices of 1 m²), the deeper the drop in prices in the analysed period. Moreover, the verification of hypotheses about the accuracy of structural parameters in individual models made us reject the hypothesis  $H_0$ :  $a_i = 0$  in favour of the alternative hypothesis  $H_1$ :  $a_i \neq 0$  stating that they were statistically significant. The estimated model parameters and the basic regression characteristics for the analysed cities and for Koszalin are shown in Table 1. Seasonal fluctuations were not included in the considerations.

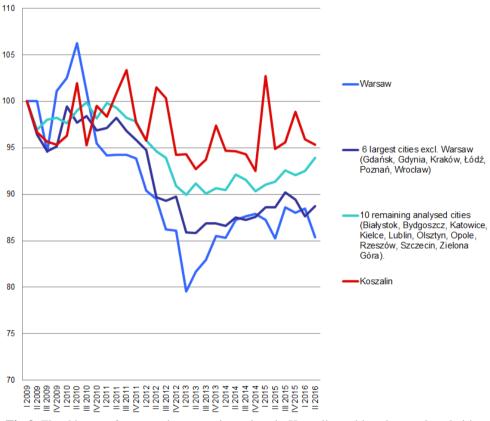
Table 1. Evaluation of trend parameters of transactional prices in Koszalin and in the				
selected cities				

Specification	Parameter evaluation	Standard error	Student's <i>t</i> -test	$R^2$	Random component error (PLN/m ² )	Number of observations
Warsaw						
Absolute term	8423.79	138.24	60.94	0.59	369.16	30
Variable t	-49.91	7.79	-6.4			
Six large cities excl. Warsaw						
Absolute term	5477.41	58.13	94.22	0.67	155.24	30
Variable t	-24.60	3.27	-7.52			
Ten remaining large cities						
Absolute term	4175.36	34.17	122.38	0.65	91.11	30
Variable t	-13.77	1.92	-7.16			
Koszalin						
Absolute term	3690.40	41.49	87.80	0.08	110.80	30
variable t	-3.76	2.34	-1.85			

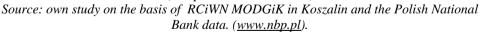
Source: own study on the basis of RCiWN MODGiK in Koszalin and the Polish National Bank data. (<u>www.nbp.pl</u>).

The random component error means that the quarterly mean price of 1 m² in the analysed cities differs from the one calculated on the basis of the model by the average of  $+/- s_u$  (in Koszalin - by PLN 110.80). The most significant drop in the residential property prices (represented by the slope of the trend line) was recorded on the Warsaw property market, followed by six next largest cities (Gdańsk, Gdynia, Kraków, Łódź, Poznań, Wrocław). The Koszalin residential property market was declining at the slowest rate.

In the analysed period of time the quarterly mean transaction prices in Koszalin differed by 150-600 PLN/m² from the prices reported in ten largest cities, and by 1100-1800 PLN/m² from the prices in six largest cities excl. Warsaw. In both cases, the biggest discrepancies were seen in the 3rd quarter of 2010, which could have meant that the Warsaw market responded faster to the signals of the economy than the remaining local markets. Noticeable differences resulted from the rate at which unit prices were changing as well as from the volume of the drop in prices in reference to the base period. Fig. 3 shows indices with the fixed base of mean unit transaction prices of residential properties in Koszalin and in the remaining surveyed cities (1st quarter of 2009 = 100).



**Fig 3.** Fixed bases of mean unit transaction prices in Koszalin and in other analysed cities  $(1^{st}$  quarter of 2009 = 100)



The most significant fall in unit prices in relation to the 1st quarter of 2009 (over 20%) was seen in Warsaw, followed by six largest cities (app. 14%) and ten large cities (up to 10%). In Koszalin the maximum price decrease in comparison to the  $1^{st}$  quarter of 2009 was reported in the 2nd quarter of 2013 (over 7%).

When looking at the results, we can conclude that throughout 2009-2016 (I. half) the drop in prices was observed in each of the above analysed

cases. That price decline can be expressed in absolute figures representing the change in the prices of 1 m² in every analysed quarter as well in relative terms in reference to mean prices on a given local property market. This measure can be expressed by means of the  $\frac{a_1}{a_0}$  ratio. The analysis results are shown in the table below.

Cities	Mean fall in price of 1 m ² over each quarter in PLN	Mean fall in price 1 m ² over each quarter in relation to mean prices on given local
Warsaw	49.91	0.6%
6 largest cities	24.60	0.4%
10 remaining cities	13.77	0.3%
Koszalin	3.76	0.1%

Table 2. Mean fall in unit transaction prices of residential property in Koszalin	and in
analysed cities between 2009 and 2016 (I. half)	

Source: own study on the basis of RCiWN MODGiK in Koszalin and the Polish National Bank data. (<u>www.nbp.pl</u>).

In medium-size cities the rate of price decrease over the period of the bear market is slower than in large cities, which has been confirmed by the results quoted above.

The analysis of quarterly fluctuations reveals that as a consequence of seasonality in Koszalin the price of  $1 \text{ m}^2$  in the quarters 1-3 was slightly higher than the average, and in the 4th quarter it fell below the average.

#### Conclusion

The trends on the Koszalin residential property market (its condition in the times of the economic crisis) generally do not differ from the tendencies on the other analysed local markets. Similarly to other cities, in Koszalin the unit transaction prices of residential properties traded on the secondary market were falling, but the dynamics of the price movements was much poorer. In the 2th quarter of 2016 the mean price of 1 m² was PLN 3 570, which meant the decrease 4.64%, of in reference to the 1st quarter of 2009, while in six largest cities excluding Warsaw the prices dropped by 11.29% and in the remaining ten cities – by 6.06%. Simultaneously, Warsaw saw the drop in prices by 14.62%. Conducted analyzes allowed for a positive verification of the hypothesis that the dynamics of the decline of residential property prices in the times of crisis is much poorer in medium-size cities than in large urban agglomeration.

#### **References:**

Aron J., Muellbauer J., Murphy A. (2006): Housing Wealth and UK Consumption, "Economic Outlook" vol. 30, nr 4.

Ball M., Lizieri C., Mac Gregor B. D. (1998): The Economics of Commercial Property Markets, Routledge, London, New York. Baum A. (2001): Evidence of Cycles In European Commercial Real Estate

Markets – and Some Hypoteses, (w:) Brawn S., Liu C.: A Global Perspective on Real Estate Cycles, Kluwer, Massachusettts. 2001. Case C. E. (2000): Real Estate and the Macroecomomy, Brookings Papers on

Economic Activity" nr 2.

Dehesh A., Pugh C. (1997): Real Estate Cycle, Internationalised Transmission Mechanism and Japanese Bubble Economy, "RICS Research Paper Series", vol. 2, nr 6.

DiPasquale D., Wheaton W. C. (1996): Urban Economics and Real Estate Market, Prentice Hall, New Jersey.

Foryś I. (2011): Społeczno-gospodarcze determinanty rozwoju rynku mieszkaniowego w Polsce. Ujęcie ilościowe, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin.

Hilbers P., Lei O., Zacho L. (2001): Real Estate Market Developments and Financial Sector Soundness, "IMF Working Paper".

<u>Kałkowski L., (2003): Rynek nieruchomości w Polsce, Twigger, Warszawa.</u> Key T., MacGregor B., Nanthakumaran N., Zarkesh F., (1994): Understanding the Property Cycle, RICS, London.

Kucharska-Stasiak E., (2016): Ekonomiczny wymiar nieruchomości, Wydawnictwo Naukowe PWN, Warszawa. Quigley J. M. (1999): Real Estate Prices and Economic Cycles,

"International Real Estate Review, vol. 2, nr 1. Rottke N., Wernecke M., Schwartz A., Real Estate Cycles in Germany –

Causes, Empirical Analysis and Recommendations for the Management Decisions, "Journal of Real Estate Literature, vol. 11, nr 3.

Schmitz A., Brett D. L. (2001): Real Estate Market Analysis. A Case Study Approach, Urban Land Institute, Washington.

Trojanek R., (2008): Wahania cen na rynku mieszkaniowym, Wydawnictwo Akademii Ekonomicznej w Poznaniu, Poznań.

# Legal and Social Aspects of Employment of Disabled Persons in Poland

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### Abstract

This study is an effort to characterize the legal and social aspects of the polish regulations relating to the employment of people with disabilities in sheltered conditions. In Poland, the role of activation of the disabled in the protected labor market performs three types of operations: sheltered workshops, factories professional activity, and social co-operation. Authors discuss the formal requirements to obtain the status, specific rights, and the obligations of employers who are employing the establishment of protected or reinsured activity. The research included in the study was supplemented by an analysis of available statistical data based on the number of operators protected labor market and the number of disabled people employed in these workplaces.

Keywords: disability, work, market, polish regulations, social exclusion

### Introduction

#### **Disability as a Social Category**

Researchers who were interested in disability issues created many different theories and concepts. The representatives of functionalism isolated the standards and behavior to be adopted by the sick person. However, social interactionists tried to interpret the disease and investigate how it affects behavior and human activities. Theories was also formed that disability was explained using social deviance and social theories of marking. Subsequently, an important approach to disability is also a form of discrimination and social exclusion. The interest of sociologists on the problem of disability was seen in the works already published in the sixties of the twentieth century (Mikołajczyk-Lerman, 2013).

Disability was initially analyzed from the perspective of social roles. They are separated team roles played by a disabled person. Society had difficulty accepting other roles for people with disabilities than those that

were automatically assigned to them. T. Parsons believed that the role of the patient is a functional element for the entire social system. He said that every person has been assigned to certain social roles. However, diseases has a significant impact on the body because it slows down the performance of assigned roles. The disease has been recognized as an undesirable state of the patient. Also, the patient attempts to eliminate diseases by seeking help and active participation in therapy. The patient through their own willingness might not recover as quickly as expected, because society gives him treatment time to get out of the current "normal" social roles (Sokołowska & Ostrowska, 1976).

In the past, disability was viewed as a form of deviance and marking, focused on the visibility of injuries and dysfunctions. This was the direction designated by E. Lemerta, E. Goffman, and H. Becker. Therefore, disabled people are stigmatized and labeled by society. This look at disability made him to begin to relate to prejudices and stereotypes. In this sense, disabled people are stigmatized when they have a disease, infirmity, and disability (2012) (Mikołajczak-Lerman, 2013).

Following Erving Goffman's theory, every society produces its ways of categorizing human communities. Also, representatives of each category equips the attributes that are considered a typical features and that are normal. The stigma are attributes that are disparaging and disclosed in social relations. Stigma is characterized by the fact that it does not believe that such a unit is fully human. Therefore, it is a form of discrimination resulting in the loss of opportunities in the social life. Each individual expects respect and loss of opportunities in the social life. Each individual expects respect and recognition. However, people with disabilities are not an exception. In a normal environment, they are often denied these privileges. As a result, branded unit detects such features, which aims to reject the expectations of the society. Stigma is a phenomenon that has great strength. The basis for stigma is fear and various forms of superstition. Consequently, E. Goffman distinguishes between three types of stigma. The first is associated with physical disgust that is felt at the sight of the deformation of the body. The second is the negative character traits. The third type of stigma is the stigma of racial minority religious. Thus, the strength of the stigma depends on its visibility. When the mark is not a recognized entity, the carrier can hide them when it interacts (Goffman, 1963). when it interacts (Goffman, 1963).

**The Methods of Functioning of Disabled People in the Society** The process involve in adapting the unit to live in a society is focused on the approaches which is biological, social, and psychological. People with disabilities often display the attitude of low self-esteem. This involves the acceptance of their disability. Disability is divided into two categories:

reversible and irreversible disability. Disability is perceived differently by a person who was born with certain defects, than a person who has become disabled by accident or by adversity. The process of acceptance of a sudden disability is very dramatic. The first reaction to what appears in his or her psyche is shock and depression. He or she finds it difficult to accept the fact that they have become disabled. Thus, they lost the value of their health. The response to disability, which is progressing slowly, is different from the sudden loss of health. Reaction to slow proceedings disease is not associated with a sudden shock. Such a man has a lot of hope that the disease will not have the impact that is expected to bring. The person has to come to terms with the situation (Klonkowska & Szmulc, 2013).

with the situation (Klonkowska & Szmulc, 2013). People who are born with the so-called congenital disability do not realize that they are different from other people by their own limitations. The visibility of these differences only appears in adolescence. Thus, this happens when the disabled person is in contact with their peers. Sometimes, her peers realize that it is different from all. For people who are physically challenged, they find it difficult to compare themselves with physically and psychologically healthy men. Such people are more readily to accept their situation because of their disabled body. However, such people often blame themselves. They believe that they have done something wrong and deserve such a fate. However, it is commonly believed among healthy people that such a fate. However, it is commonly believed among healthy people that disable persons are suffering the punishment for their sins. This is how the unit sees itself and the extent to which they accept each other. Therefore, this depends on personal characteristics and the maturity of the mind which affects the nervous system.

**Disability Workers as Part of a Labor Market** People with disabilities are a group of employees of sensitive law. According to available statistical research, the number of people with disabilities with certificate of disability in 2011 which amounted to 3 384 000 people, was approximately 2 024 000 people (Statistical Data of the Central Statistical Office LFS). Among people with disabilities aged 15 and so, there were 581 000 economically active (including approximately 495 000 are employed, while approximately 86 000 are unemployed). Also, 2 803 000 people were economically inactive. Consequently, the data for the people of working age was nearly 535 000 active professionals (including 452 000 who are employed, 83 000 who are unemployed, while the majority, almost 1489000 are inactive persons)(see: 1489000. persons)(see: inactive almost are http://www.pfron.org.pl/pl/programy-unii-europejs/program-operacyjny-kap/zakonczone-projekty/wsparcie-osob-ze-stwar/2453,Statystyki-aktywnosc-zawodowa-osob-niepelnosprawnych.html, access the web site: 04.01.2017 r.).

In the EU, we can distinguish between three main forms of support for

In the EO, we can distinguish between three main forms of support for the employment of people with disabilities:
1) Employment Subsidized: States uses subsidies for employers to offset part of the costs of employing people with disabilities, e.g. by subsidizing the salaries of employees,
2) Employing Supported - for the use of various forms of support for individual disabled workers, e.g. by financing the assistant of disabled

worker.

3) Sheltered Employment - Through supporting the organization of work under special conditions, e.g. through support to entities that have the status of a protected work (Grzonka, 2010, p. 1-2).

status of a protected work (Grzonka, 2010, p. 1-2). Also, the Polish State implementing the provisions of the National Constitution from 1997 (Dz. U. 1997 No. 78 pos. 483) and the provisions of international law and the European Union law promotes the employment of this social group. People with disabilities can be employed in the open or protected labor market. The so-called open labor market people with disabilities apply for jobs on the same basis as non-disabled people. On the other hand, the protected labor market covers employers with the status of a protected work or business activity. Subsequently, the law maker foresaw the possibility of creating and maintaining entities which protected labor market by private entrepreneurs. It also involves the case of establishment activity such as local government units such as local government units.

**The Status of "Protected Work Enterprise"** The meaning of the Polish regulations relating to people with disabilities application for granting the status of a protected work can apply for an employer who runs a business for at least 12 months. Thus, they employ at least 25 employees in full-time work and have met certain criteria. The first required condition is the employment rate of disabled people for at least 6 months. Legal norm indicates that this level must be at least 50% of employed people, including at least 20% of the workforce. This workforce must be a person with severe or moderate degree of disability. On the other employed people, including at least 20% of the workforce. This workforce must be a person with severe or moderate degree of disability. On the other hand, 30% of the staff will serve the blind or mentally ill or mentally disabled people with severe or moderate degree of disability. Another criterion applies which is building in the workplace. Buildings and facilities used by the employer must comply with the provisions and principles of occupational health and safety, including the needs of persons with disabilities. This can be seen in terms of its adaptation to the workplace, hygienic sanitation facilities, and traffic routes. Therefore, control made the polish National Labour Inspectorate at the request of the entity. This was accomplished by applying for the status of a protected work. The last requirement refers to the provision by the a protected work. The last requirement refers to the provision by the

employer of emergency, specialist medical care, and counseling and rehabilitation services. The fulfillment of the above conditions confirms the province governor issuing an administrative decision to grant the status of a protected work for a period of three years. The law imposed on the provincial governor and the State Labour Inspectorate is responsible for monitoring entities which have the status of sheltered workshops. Not less monitoring entities which have the status of sheltered workshops. Not less frequently than once every two years by the province governor, and at least once every three years, the State Labour Inspection often verify the fulfillment of the conditions and obligations upon which to achieve the status of a protected work. As a result of the inspection in the event of failure by the employer to certain conditions, the province governor issues a decision to revoke the status of a protected work. Also, the governor issues a decision to restore the deposit by the employer proposal. Therefore, this demonstrates the fulfillment of certain conditions. The standard of Act 30, paragraph 4, of the Law on the rehabilitation of the employer imposes disclosure obligations. Subsequently, they rely on the obligation to submit semi-annual palatine information confirming the fulfillment of the criteria of the entity operating in a sheltered workshop. In addition, the employer must provide information on any change in these conditions over a maximum period of 14 days of their occurrence. Employer operator work can enjoy numerous tax advantages. The law exempts the entity from taxes on real estate, agriculture, and forestry The law exempts the entity from taxes on real estate, agriculture, and forestry as well as transfer tax, provided that this action is in direct connection with the operation of the plant. The exception is the gambling tax, value added tax and excise tax, as well as income tax and tax on means of transport. Furthermore, the laws indicate that the sheltered workshop is also exempted Furthermore, the laws indicate that the sheltered workshop is also exempted from fees, except for stamp duty and fees as *sanatio*. However, it should be emphasized that the funds derived from tax must be properly spent. The employer is required to provide 90% of this amount to the capital fund rehabilitation of the disabled, while the remainder goes to the State Fund for Rehabilitation of Disabled Persons (pol. *PFRON*). This was according to the legal requirement that the operator is a protected labor oblige to create a capital fund for disabled persons (*pol.* ZFRON). The capital fund is created in particular with funds obtained from tax exemptions and fees, part of the income tax payments from individuals, revenue from legacies, and donations with the proceeds from the sale of fixed assets. This is acquired with its finance and interest on funds deposited into the account of the fund itself. Furthermore, the disposition of the operator of the operator of the plant sheltered Furthermore, the disposition of the operator of the plant sheltered employment. The employer in accordance with applicable laws and regulations (Rozporządzenie Ministra Pracy i Polityki Społecznej z dnia 19 grudnia, 2007 r. w sprawie zakładowego funduszu rehabilitacji osób niepełnosprawnych), decides on the allocation of these funds, in particular, to create jobs and adapt its ambient to the needs of people with disabilities.

Thus, this involves the purchase or modernization of machinery and equipment, financing of construction projects included in the records of a protected labor, and equipping and adaptation of space in the plant. In addition, an entity may finance part of the cost of introducing new technologies and prototype models and organizational programs in proportion to the number of full-time job of disability employed persons.

The funds from the described fund (ZFRON) may also be spent on the creation, modernization, renovation, expansion, rehabilitation, and maintenance of the database (clinic, physiotherapy), social (dormitory, hotel canteen), and leisure. Fund resources could be used to finance basic and specialized medical care and rehabilitation services. It should be emphasized that the funds from the ZFRON employer might be used to fund the training and re-skilling of workers in order to improve their professional qualifications, the additional remuneration of employees who use sign language, and teachers for the visually-impaired employees. The employer can also purchase vehicles to transport people with disabilities who have difficulty using public transport. The measures may also be allocated for sports activities, recreation and tourism, and the organizing of rehabilitation (Skóra, 2015).

Subsequent expenses arising from the described fund (ZFRON) may relate to individual's aid granted at the request of employees with disability. The grant can be allocated to cover the costs of stay and treatment in hospitals, nursing homes, purchase of medicines, individual rehabilitation equipment, adaptation and equipment of flats. They even maintain the blind guide dog or pay for a sign language interpreter. The amount of individual aid granted depends on the financial situation of the applicant and it is done randomly. Grants may be awarded as non-refundable aid or in the form of an interest-free loan, which can be completely or partially canceled in the event of a situation when it was used as intended. It should be emphasized that the ZFRON employer may also finance individual rehabilitation programs aimed at reducing restrictions on disabled workers. The law allows financing, among others, the costs of counseling, specialized medical and psychological research, and training in order to raise the professional qualifications of workers. Help conditioned the development of a rehabilitation program for employees with disability who in particular have the lowest qualifications. Thus, this constitutes an obstacle towards doing the work. In addition, they lost their ability to perform the current job or they are changing their professional qualifications. The preparation of a rehabilitation program deals with the committee appointed by the employer, which includes: a doctor or nurse performing benefits sheltered workshop, a physical therapist, and a counselor. Rehabilitation program in their contents in particular include: professional diagnosis of the situation of the disabled, the purpose and methods of the implementation of the program, and the schedule of rehabilitation activities. Subsequently, distribution should also provide deadlines for assessing progress in rehabilitation and designate individuals responsible for its implementation. The program should be developed with the participation of the disabled workers that it was designed for. Evaluation of the effects the implementation of the rehabilitation program is made by the committee. If justified, they need to modify the program, identify opportunities, and form further rehabilitation after completion. Also, the common tasks of employers operating plants in the field of vocational rehabilitation should be mentioned to carter for the social and therapeutic disabled. During their implementation, actors can allocate up to 10% of the funds coming from ZFRON. Also, measures may be spent in a special way for the creation and modernization of infrastructure rehabilitation, social investment activities, and research and analysis of the labor market of people with disabilities. The entity conducting the sheltered workshop, upon application, may be obtained from the PRRON grant to implement its activities. Subsequently, this assistance consists of financing up to 50% interest on bank loans taken out. The condition, however, involves the use of funds for purposes related to vocational rehabilitation and social disabled people. In addition, the employer may apply for reimbursement of costs incurred for the construction or expansion of facilities and the premises of the plant. Financing requirement is the employment rate of disabled persons of at least 50%. It also portrays the fact that the additional costs results from the engagement of this group of employees.

Until 1 January 2015, employer who holds the status of a protected work shall have the PFRON monthly grant of the compensation of employees with disabilities included in the records. Also, the amount of grant depends on the degree of disability. In the case of persons admitted due to a significant degree of disability, grant is awarded in the amount of 1 800 PLN. Help in the case of workers classified as moderate degree of disability is equal to 1 125 PLN. In contrast, when it comes to people with disabilities, a mild grant of 450 PLN is awarded. Additionally, in the case of persons with mental illness adjudicated, mental retardation, partial developmental disorder or epilepsy and blindness, the grant amount is increased by 600 PLN. Consequently, the amount of subsidy is fixed in proportion to the employee's working time and it cannot exceed 90% of the costs of the actually incurred monthly wage.

**Supported Employment Enterprise as a Part of Protected Labor Market** Units of local and regional authorities (commune²⁴, district²⁵), as well as a foundation, association or other social organization whose statutory task is professional and social rehabilitation of persons with disabilities, can create organizationally and financially separate unit. In addition, they can apply for this entity status of a supported employment enterprise under certain conditions.

The first determining factor in obtaining the status of a professional activity is to hire people with disabilities of at least 70% of the total crew.

In particular, they should be directed to work by the district labor offices, be counted as a significant degree of disability or moderate degree, and should be diagnosed with autism, mental retardation or mental illness. In addition, the program board took the investigation to take employment and continue vocational rehabilitation in conditions of protected labor. It should be emphasized that such a person cannot represent more than 35% of total employment with the employer.

Secondly, they must be complied with conditions similar to sheltered workshops in terms of facilities and rooms, emergency healthcare, and specialist healthcare. In addition, the applicant must spend his/her income on capital fund activity. The last condition is to obtain a positive opinion of the governor about the need for the establishment of factory activity.

Furthermore, the relevant application employer translates marshal of the province, which signed an agreement for funding from PFRON cost of setting up and operating the plant. One should note that the amount of the negotiated grant may not exceed 65% of the expenditure in question. In the case of co-financing, the operation of the plant does not exceed 90%. After fulfilling the above conditions and the control of the State Labour

Inspectorate, the province governor issues a decision on granting the status of a professional activity.

It should be emphasized that betting activity can lead any business. This is with the exception of manufacturing industry products fuel, tobacco, alcohol, and precious metals.

The cost of developing the plant was financed on the basis of an agreement with the organizer (PFRON). As part of these expenses, entity can finance adaptation based on the needs of people with disabilities production facilities or premises for the provision of services. This includes; job with the purchase of machinery, tools and equipment necessary to perform the work, and places of social and intended rehabilitation. Additionally, these measures can purchase or rent rehabilitation equipment. It can also provide means of transport for disabled workers.

²⁴ *pol.* gmina ²⁵ *pol.* powiat

Based on the costs of operation of the plant activity from the PFRON, they can spend the salaries of employees classified as significant or moderate degree of disability, up to 100% of the minimum wage, in proportion to the working time. The measures may be used to provide additional annual wages and salaries, retirement and death, as well as the jubilee. The law also covers the contributions of the employer and employee social security and health, as well as contributions to the Guaranteed Employee Benefits Fund and the Labour Fund. The entity may also finance the purchase of materials, energy, services, tangible and intangible, and the transportation of disabled people. It stressed that for the PFRON, the employer might pay for training workers with disabilities. However, this is often associated with preparing them to practice in the open labor market. In addition, the courses are related to the economic activity of the plant. The entity may also employ finance charges to benefits fund or the payment of holiday benefits. The law allows for the production or provision of services which is also related to the change in the profile operation of the plant.

Consequently, working time of persons with disabilities with severe or moderate degree of disability is at least 0.55 working hours specified provisions of the Act (i.e. 7 hours a day, 35 hours per week). It can be increased up to a height of 0.8 working hours at the request of the program team. However, the time spent on activities should not be more than 60 minutes a day, but can be extended to 120 minutes at the request of the rehabilitation staff.

rehabilitation staff. Head of department activity is obliged to create a program team which includes: counselor, psychologist, and job coach. The team develops individual programs of vocational and social rehabilitation. They assume, in particular, the diagnosis of the social and professional purpose, the expected results, deadlines for assessing the progress of the employee, and the person responsible for their implementation. Individual rehabilitation program is created with the participation of a disabled person. Then, it was approved by the manager of the plant. Based on the plan, the plant manager supports employees with significant or moderate disability which have reached a satisfactory level of the efficiency of social and professional finding of suitable jobs. However, operators of the supported employment enterprise create a fund activity with funds coming from tax exemptions and income generated in connection with their activities. Finance funds are collected in a separate bank account and must be recorded by the organizer. Financial resources of the capital fund activity can be spent on the improvement of the work of persons with disabilities, improve working conditions and rehabilitation, social conditions, and health and hygiene. Also, there is the purchasing of equipment that helps the disabled in independent living and participation in social, cultural, and recreational activities. Measures may also be spent on assistance in preparation to work after the plant activity. In addition, there are equal opportunities in the new place of employment. The law maker also aid in the construction, renovation and adaptation of housing and the costs of training, retraining and professional qualifications of employees with severe or moderate degree of disability. The fund may be forgiven to help in meeting other needs of people with disabilities, e.g. the purchase of medicines and individual equipment for the rehabilitation. In addition, supported employment enterprise in tax matters have similar privileges and obligations as sheltered workshops.

#### Conclusion

Analyzing available statistics from the first half of 2016, it should be noted that Poland had 1120 employers who have the status of a protected (supported) work enterprise. Thus, they are employing a total of 163 455 employees where 129302 were persons with disabilities. The employment rate of disabled persons stood at 79.1%. Most sheltered workshops were in the provinces of Wielkopolskie (171), Śląskie (122), and Mazowieckie (101). On the other hand, the smallest number was found in Lubelskie (21), Opolskie (17), and Podlaskie (16) province (http://niepelnosprawni.gov.pl/p,84,dane-dotyczace-zakladow-pracychronionej, access the web site: 04.01.2017 r.).

At the same time, it should be noted that there is an annual systematic decline in the number of employers engaged in this type of activity. Majorly, this is due to a reduction in the economic benefits of employing people with disabilities.

On the other hand, a yearly increase in the number of betting activity was recorded. In June 2002, in Poland, there were only 3 entities carrying out this type of activity, employing 138 people including 103 persons who were with disabilities. While analyzing data from June 2016, an increase to 100 vocational activity establishments employing a total of 5396 employees should be noted. This includes 4085 people with disabilities. Subsequently, the employment rate of disabled persons stood at 75.7%. The largest number of plant activity is in the *Podkarpackie Province*. Also, 13 employers employs a total of 625 employees of which 478 were people with disabilities (Http://niepelnosprawni.gov.pl/p,85,dane-dotyczace-zakladow-aktywnosci-zawodowej, access the web site: 04.01.2017 r.).

Summing up the above considerations, it is clear that the sheltered workshops, as well as betting activity such as subjects protected labor market, was entrusted by the legislator role. In addition, it aims at activating the work force and preventing the exclusion of disabled people from the labor market.

### **References:**

Goffman Erving (1963). *Stigma: Notes on the Management of Spoiled Identity*. New York: Prentice Hall.

Kłonkowska, Anna and Szulc Marcin (2013). *Społecznie wykluczeni.Niewygodni, nienormatywni, nieadekwatni. Gdańsk:* Wydawnictwo Uniwersytetu Gdańskiego.

Kotlarska- Michalska Anna (1999). Człowiek niepełnosprawny jako "inny" w ujęciu koncepcji socjologicznych i w świetle badań socjologicznopsychologicznych, Poznań: Rocznik Socjologii Rodzin XI UAM.

Mikołajczyk-Lerman (2013). Grażyna. Między wykluczeniem, a integracjąrealizacja praz dziecka niepełnosprawnego i jego rodziny. Łodź: Wydawnictwo Uniwersytetu Łódzkiego.

Sokołowska, Madalena and Ostrowska Anna (1976). Socjologia kalectwa i rehabilitacji. Wrocław: Ossolineum.