

# INTERNATIONAL COMPETITIVENESS OF COUNTRIES – EVIDENCE FOR SOME DEVELOPED AND EMERGING ECONOMIES

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## Abstract:

This paper identifies and analyzes the international competitiveness of some national economies (developed and developing) by emphasizing similarities and differences between the countries regarding the competitive advantages, on one hand, and the problematic factors for business environment, on the other hand. The experiences of the 11 analyzed countries by this paper (United States, United Kingdom, Germany, France, Japan, Brazil, China, India, Russia, Chile, Mexico) are able to outline some direction that some countries, especially Romania, must follow in order to obtain or increase international competitiveness.

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**Key Words:** National economies, international competitiveness, global competitiveness index, problematic factors

## Introduction

The explanation of international competitiveness by economists goes back many years to the theory of comparative advantage and factor pricing stated by Ricardo and Heckscher-Ohlin. Factor-based comparative advantage is an equilibrium concept, predicting a pattern of trade when prices, trade flows and exchange rates are in equilibrium (Adams, Gangnes and Shachmurove 2006, Coldwell 2000).

International competitiveness could be dangerous, obsessive, elusive or meaningless. These adjectives are used by Krugman (1994A, B, 1996) to describe international competitiveness. According to Krugman international competitiveness could result in the wasteful spending of government money supposedly to enhance US competitiveness, could lead to protectionism and trade wars and most important could result in bad public policy on a spectrum of important issues. He consider that the most popular and reasonable definition of competitiveness is “our ability to produce goods and services that meet the test of international competitiveness while our citizen enjoy a standard of living that is both rising an sustainable.” This definition is given by the Council of Economic Advisors.

The issue of national competitiveness is a matter of considerable important to both managers and public policy makers alike (Thompson 2004). In his opinion the notion of national competitiveness is “controversial and has both (1) a narrow, concise conception that relates primarily to cost conditions as determined by exchange rate, and (2) a broader, more nebulous conception that comprises the institutional and systemic circumstances of an economy, such as legal, governmental, public policy and other factors framing countries` wider business environments”.

Aiginger (2006), Kao (2008) and Onsel (2008) define competitiveness as the ability to create welfare, the relative ability of a nation to create and maintain an environment in which enterprises can compete so that the level of prosperity can be improved and suggest also that each comprehensive assessment of competitiveness should contain an outcome evaluation and a process evaluation, on one hand, and must be compared to other nations of similar economic development, on the other hand.

In this context, the aim of macroeconomic policy is very important in order to achieve simultaneous internal and external balance in the short run and of as rapid growths of living standard as possible in the long run (Boltho 1996).

### Why some countries are so competitive?

This paper analyze the experience of some countries competitiveness in order to identify similarities and differences between the countries, their competitive advantage and the problematic factors that have an negative impact on international competitiveness.

The analyze take into consideration 12 countries such as: United States, Germany, Japan, United Kingdom, France, Brazil, Russia, India, China, Chile, Mexico and Romania.

In order to analyze the experiences of some countries competitiveness Cho, Moon and Kim (2008) divide countries according to their size and degree of competitiveness as shown in Table 1.

**Table 1.** Typology of countries groups after size and degree of competitiveness (Adapting of Cho, Moon and Kim, 2008)

Size \ Competitiveness	Small	Medium	Large
Strong	Strong-Small Countries (SSC)	Strong-Medium Countries (SMC)	Strong-Large Countries (SLC) <b>United States, Germany, Japan</b>
Intermediary	Intermediary-Small Countries (ISC)	Intermediary-Medium Countries (IMC) <b>United Kingdom, France, Chile, Romania</b>	Intermediary-Large Countries (ILC) <b>China, India, Brazil, Russia, Mexico</b>
Weak	Weak-Small Countries (WSC)	Weak-Medium Countries (WMC)	Weak-Large Countries (WLC)

The World Economic Forum divides countries in 5 stage of development taking into consideration the level of GDP per capita and the key driven of an economy (Table 2).

**Table 2.** The pillars of competitiveness and stages of development

Stage of development \ Competitiveness pillars	Factor-driven economies Stage 1	Transition from stage 1 to stage 2	Efficiency-driven economies Stage 2	Transition from stage 2 to stage 3	Innovation-driven economies Stage 3
Basic requirements	60%		40%		20%
Efficiency enhancers	35%		50%		50%
Innovation and sophistication factors	5%		10%		30%
Total (%)	100		100		100
GDP per capita (US\$)	< 2000	2000-3000	3000-9000	9000-17000	> 17000
Countries	India	-	Brazil Chile China Mexico Romania Russia	-	France Germany Japan United Kingdom United States

**Table 3.** Global Competitiveness Index 2010-2011 (GCI – World Economic Forum)

Country	Overall index GCI		Basic requirements		Efficiency enhancers		Innovation and sophistication factors	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
United States	5.43	4	5.21	32	5.46	9	5.53	4
Germany	5.39	5	5.89	6	5.11	13	5.51	5
Japan	5.37	6	5.35	26	5.17	11	5.72	1
United Kingdom	5.25	12	5.58	18	5.28	7	4.98	12
France	5.13	15	5.67	16	5.09	15	4.83	16
China	4.84	27	5.27	30	4.63	29	4.13	31
Chile	4.69	30	5.15	37	4.51	35	3.91	44
India	4.33	51	4.30	81	4.42	38	3.96	42
Brazil	4.28	58	4.26	86	4.35	44	4.03	38
Russia	4.24	63	4.52	65	4.19	53	3.36	80
Mexico	4.19	66	4.51	66	4.09	61	3.46	69
Romania	4.16	67	4.36	77	4.18	54	3.24	91

**The United States** is an innovation-driven economy with a GDP per capita of 46.381 US\$ in 2009. It is on the 4<sup>th</sup> position on the Global Competitiveness Rank with one of the highest levels of business sophistication and innovation, with the largest market size in the world and with an efficient labor market. Regarding the basic requirements, the US has some problems with the macroeconomic environment like government budget balance, national saving rate, government debt, and country credit rating.

**Germany** is an innovation-driven economy with a GDP per capita of 40.875 US\$ in 2009. It is on the 5<sup>th</sup> position on the Global Competitiveness Rank, on the 2<sup>nd</sup> position at infrastructure with a very high level of basic requirements and on the 3<sup>rd</sup> position at business sophistication. Regarding efficiency enhancers, Germany has some weaknesses on labor market efficiency such as: lack of wage determination flexibility, inadequate practices for hiring and firing, high rigidity of employment.

**Japan** is an innovation-driven economy with a GDP per capita of 39.731 US\$ in 2009. It is on the 6<sup>th</sup> position on the Global Competitiveness Rank but in the first place at the pillars group innovation and sophistication factors. The sources of competitive advantage for Japan are capacity of innovation, company spending on research and development, availability of scientists and engineers, local supplier quality, state of cluster development, production process sophistication, market size, and efficiency of the goods market. The macroeconomic environment (3<sup>rd</sup> pillar of competitiveness) of Japan is characterized by a high level of government debt and an unbalanced government budget that put Japan on the 105<sup>th</sup> position with a score of 4.1.

**United Kingdom** is an innovation-driven economy with a GDP per capita of 35.334 US\$ in 2009. It is on the 12<sup>th</sup> position on the Global Competitiveness Rank with some competitive advantage that refers to: market size – domestic and foreign, efficiency of labor market, technological readiness, quality of management schools, extent of marketing, quality of scientific research institutions, university-industry collaboration in research and development. Also, there are some problems like macroeconomic environment, government budget balance and government debt.

**France** is an innovation-driven economy with a GDP per capita of 42.747 US\$ in 2009. It is on the 15<sup>th</sup> position on the Global Competitiveness Rank. That position is based on the same level of the basic requirements, efficiency enhancers and innovation and sophistication factors. At the infrastructure, the 2<sup>nd</sup> pillar of the global competitiveness index, France is ranked in 4<sup>th</sup> position having an important competitive advantage. Labor market efficiency is the pillar that has a negative impact on the international competitiveness of France (rank 60). From all the 5 developed countries chosen for the analysis, France has the lowest score at business sophistication and innovation.

**Brazil** is an efficiency-driven economy with a GDP per capita of 8.220 US\$ in 2009, GDP per capita that placed it in stage 2 of development. It is on the 58<sup>th</sup> position on the Global Competitiveness Rank. The great competitive advantage of Brazil, as other BRIC countries, is the market size, the 10<sup>th</sup> pillar of the global competitiveness index. Brazil is in a “unique situation in Latin America. While most countries are in search of products through which they can integrate with the global economy, Brazil is innovative in a number of high-tech activities in agriculture, energy,

aircraft, mining products, design, machinery and automobiles, among many others. So, Brazil has competitive advantages from innovation and business sophistication, pillars that are the best ranked in GCI. The country has many possibilities through which it can sustain growth for many years to come” (Havlik P et al, 2009).

**Russia** is an efficiency-driven economy with a GDP per capita of 8.694 US\$ in 2009, GDP per capita that placed it in stage 2 of development. It is on the 63<sup>rd</sup> position on the Global Competitiveness Rank. The best rank of Global Competitiveness is obtained by market size followed by infrastructure and higher education and training. Russia has serious problems at goods market efficiency, financial market development, business sophistication and institutions.

According to Havlik P et al (2009) the main challenge for the Russian economy in the medium and long run is whether it will succeed in replacing energy exports as the key growth driver by the development of other sectors (diversification towards manufacturing, high-tech branches, services, etc.), and how it will cope with the acute demographic crisis (the population is projected to decline by nearly 10 million in the coming decade).

**India** is a factor-driven economy with a very low GDP per capita of 1.031 US\$ in 2009, GDP per capita that placed it in stage 1 of development, stage with an important level of basic requirements. Nevertheless it is on the 51<sup>st</sup> position on the Global Competitiveness Rank. This position is based on efficiency enhancers like market size, financial market development, business sophistication and innovation. The worst position in Global Competitiveness Rank is taken by the 4<sup>th</sup> pillar – health and primary education. India has a large, highly diverse and extremely complex economy. Although it remains essentially a poor country, in recent years it has experienced relatively rapid economic growth and become one of the more attractive destinations for foreign investment in the developing world.

**China** is an efficiency-driven economy with a GDP per capita of 3.678 US\$ in 2009, GDP per capita that placed it in stage 2 of development. It is on the 27<sup>th</sup> position on the Global Competitiveness Rank. Being the 2<sup>nd</sup> largest economy in the world (place 2 in market size), China, unlike the other countries that are analyzed, has a competitive advantage from the 3<sup>rd</sup> pillar – macroeconomic environment (place 4 in GCI).

In brief, the Chinese economy can be characterized as a hybrid economy, combining elements of a developing country, a transition country and a „newly industrializing country” within the institutional and political framework of a „Socialist Market Economy”, which gives the state significant influence on the basically market-driven system (Havlik P et al, 2009).

Chinese products today “meet world specifications and quality requirements. Increasingly, they are also raising their level of technology. The changing nature of inward foreign direct investment points to China’s evolving role as a high-tech producer. As a result, Chinese goods have become more technically sophisticated and have increasingly been accepted in Western markets. Many of these products are made to specifications of developed-country importers. Some goods are produced by subsidiaries of large multinational trademark firms” (Adams, Gangnes, Schachmurove, 2006).

**Chile** is an efficiency-driven economy with a GDP per capita of 9.525 US\$ in 2009, GDP per capita that placed it in stage 2 of development. It is on the 30<sup>th</sup> position on the Global Competitiveness Rank. From the 12<sup>th</sup> pillars of Global Competitiveness Index, 3 pillars are sources of competitive advantage, such as: macroeconomic environment, goods market efficiency and institutions. Chile has also a developed financial market that base on availability of financial services, affordability of financial services, financing through local equity market and soundness of banks (See more in annex 1).

**Mexico** is an efficiency-driven economy with a GDP per capita of 8.135 US\$ in 2009, GDP per capita that placed it in stage 2 of development. It is on the 66<sup>th</sup> position on the Global Competitiveness Rank with major advantages offered by the market size and the macroeconomic environment. The pillars institutions, goods market efficiency, labor market efficiency, and financial market development are weaknesses for the Mexico economy in order to become a competitive one (See more in annex 1).

**Romania** is an efficiency-driven economy with a GDP per capita of 7.542 US\$ in 2009, GDP per capita that placed it in stage 2 of development. It is on the 67<sup>th</sup> position on the Global Competitiveness Rank. According to Global Competitiveness Report notable competitive advantages

are: at the 2<sup>nd</sup> pillar Infrastructure – mobile telephone subscriptions; at the 5<sup>th</sup> pillar Higher education and training – tertiary education enrollment rate and quality of math and science education; at the 6<sup>th</sup> pillar Goods market efficiency – time required to start a business, prevalence of trade barriers and trade tariffs; at the 9<sup>th</sup> pillar Technological readiness – broadband internet subscriptions and internet bandwidth; at the 10<sup>th</sup> pillar Market size – domestic and foreign market size indexes. None of these are better than competitive advantages of other countries taking into consideration in this analysis.

World Economic Forum in Global Competitiveness Report 2010-2011 has published the most problematic factors for doing business in each country. The identification of these factors was made by questionnaire method. From a list of 15 factors, respondents were asked to select the five most problematic factors for doing business in their country – factors that will have a negative impact on the international competitiveness of an economy –and to rank them between 1 (most problematic) and 5.

These factors are:

- Tax regulation
- Tax rates
- Inadequate supply of infrastructure
- Restrictive labor regulations
- Inefficient government bureaucracy
- Corruption
- Access to financing
- Inadequately educated workforce
- Crime and theft
- Foreign currency regulations
- Policy instability
- Poor public health
- Inflation
- Poor work ethic in national labor force
- Government instability/coups

The results for the most problematic factors (up to 10%) are presented in the table 4.

**Table 4.** The most problematic factors for doing business

<b>Countries/Economies</b>	<b>The most problematic factors</b>
<b>United States</b>	access to financing, inefficient government bureaucracy, tax rates, tax regulation
<b>Germany</b>	tax regulation, restrictive labor regulation, access to financing, tax rates, and inefficient government bureaucracy
<b>Japan</b>	policy instability, tax regulation, tax rates, and inefficient government bureaucracy
<b>United Kingdom</b>	tax rates, access to financing, tax regulation, and inefficient government bureaucracy
<b>France</b>	restrictive labor regulation, tax regulation, access to financing, and tax rates
<b>Brazil</b>	tax regulation, tax rates, inadequate supply of infrastructure, restrictive labor regulations, and inefficient government bureaucracy
<b>China</b>	poor public health, access to financing, policy instability, corruption
<b>India</b>	inadequate supply of infrastructure, corruption, inefficient government bureaucracy, and restrictive labor regulation
<b>Russia</b>	corruption, access to financing, tax regulation, and crime and theft
<b>Chile</b>	restrictive labor regulation, inefficient government bureaucracy, and inadequately educated workforce
<b>Mexico</b>	inefficient government bureaucracy, corruption, access to financing, and crime and theft
<b>Romania</b>	access to financing, inadequate supply of infrastructure, inefficient government bureaucracy, tax regulation, and tax rates

## **Conclusion**

United States, United Kingdom, Japan, Germany, France are countries in stage 3 of development with high level of GDP per capita and with notable competitive advantages based on innovation and sophistication factors such as: local supplier quality, state of cluster development, capacity for innovation, company spending in research and development, university-industry collaboration in research and development. Some of the basic requirement factors for these countries are considered the problematic one like: tax regulation, tax rates, access to financing sources and inefficient government bureaucracy.

From the BRIC countries three of them (Brazil, China, Russia) are in stage 2 of development. India is placed in stage 1 of development. The new Global Competitiveness Report released in September 2011 places Brazil and Russia in the transition stage of development from 2 to 3. The BRIC countries have some similar competitive advantage drive by efficiency enhancers like market size and goods market efficiency. The most problematic factors for BRIC countries in order to increase international competitiveness are other than in developed countries such as: corruption, inadequate supply of infrastructure, crime and theft.

As a conclusion, Brazil is a domestically oriented service economy; Russian economic development is heavily dependent on energy and raw material resources; the Indian economy is essentially service-led, supported by exports; and China's economic development is driven by manufacturing exports and investment. Nevertheless, looking at the more recent policies of the BRICs and their development plans for the future, a certain 'convergence' of strategies across all of them can be observed.

From the analyzed group of emerging economies, Chile and Mexico have improved the global competitiveness scores and ranks in the last years. This improvement was and is based on macroeconomic environment stability with a low level of government debt and an equilibrate government budget balance. Still, there are some problematic factors that must be removing in order to maintain this ascension, such as inefficient government bureaucracy. Unfortunately, according to last Global Competitiveness Report 2011-2012, Romania has lost 10 positions from the last report (currently 77 ranks). This means that Romania has serious problems with almost all pillars of competitiveness from basic requirements to innovation and sophistication factors.

In conclusion, Romania must learn from the experiences of the other countries in order to increase the international competitiveness and must deal with the problematic factors that affect business environment.

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