COMPARATIVE ANALYSIS OF PERCEPTIONS TOWARDS IT SECURITY IN ONLINE BANKING; STUDENTS OF MONTENEGRO VS. ALBANIAN STUDENTS

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Abstract

The purpose of this paper was to analyze and compare perceptions of Albanian students vs. students of Montenegro who are using online banking, to provide insight into similarities and differences of their view points and to create important set of information for all subjects active in banking industry. Survey based on six variables and specific questions assigned to each one of those variables was completed at high response rates, 207 respondents from Albania & 202 from Montenegro. Results were presented using descriptive statistics. Limitations of this research are relatively small sample and generic approach to problem. Suggestions for future researches would be based on going more deeply into the issue and analyzing larger samples. According to results, Albanian students were slightly more concerned and careful when dealing with online transactions compared to students of Montenegro who are more relaxed and perceive banks as reliable in assuring security of handling money and personal information online. Since there is gap in literature when it comes to research dealing with IT-security of online banking in both countries, this article is not only unique, but it may be stimuli for new research with different approaches in the future.

Keywords: Perceptions, IT security, online banking

Introduction

For many clients all around the world, handling money with no physical contact is normal every day activity. Clients are doing this through their personal computers, smartphones or some other devices that enable them to access their bank accounts and make transactions using internet. This way of maintaining money with no physical contact and making money transactions is known as “online banking”. There are many definitions of online banking provided by different researchers. However, all of those

definitions have some common elements. Those elements are all included in the following definition, provided by Muniruddeen Lallmahamood (2007) who defined internet banking as banking services over the public network (the Internet), through which customers can use different kinds of banking services ranging from the payment of bills to making investments. Internet banking or online banking has created new ways of handling banking transactions for banking related services and for e-commerce related transactions such as online shopping (Lallmahamood, 2007).

However, development of handling money with no physical contact did not provide new opportunities for clients, but new threats as well. In fact, criminals are able to steal money with no physical contact and without any tangible evidence remaining after their robbery. Knowing this fact turns on red alarm in heads of many clients. As banks' dependence on new technologies increases, their need to protect their own assets together with assets of their clients increases as well. This is where importance of IT security for banks' clients starts. Accordingly, as providers of online banking services, it is of crucial importance for banks to know awareness level and perceptions of their clients towards IT security of online banking. Since results of this research will enable banks to learn more about their clients, this work have potential to be important source of information for consideration by banks in terms of their planning and development activities. If we consider gap in the literature on this issue in both countries, Albania and Montenegro, this article becomes even more valuable.

Results regarding both countries are collected and concluded after preparing survey based on six variables and specific questions assigned to each one of those variables. The survey was distributed to clients who are actively using online banking. It was completed in both Albania and Montenegro at very high response rates. Even 207 respondents replied from Albania, while 202 respondents completed survey from Montenegro. Results were analyzed and presented using descriptive statistics. The main objective of this paper was to analyze and compare perceptions of Albanian students and students in Montenegro about IT security in online banking, to provide insight into similarities and differences of their view points and to create important set of information for all subjects active in banking industry. Students are selected as target group not only because of their need to use banking services, but because of their increased level of reliance on information technologies.

Considering purpose mentioned above, the main research question of this exploratory study is as follows: „Is there any difference between perceptions of Albanian students, and students of Montenegro towards IT Security of online banking? ".

In the following sections of this work, through theoretical background, all necessary definitions along with brief historical facts important for understanding this topic will be explained. Accordingly, information on online banking in Albania and Montenegro as countries in focus will be provided so readers can be more familiar with the situation in these states. After explaining used methodology, results will be analyzed, discussed and concluded.

I.
Theoretical Background

Muniruddeen Lallmahamood (2007) defines internet banking as banking services over the public network (the Internet), through which customers can use different kinds of banking services ranging from the payment of bills to making investments (Lallmahamood, 2007). On the other hand, Jagdeep Singh (2012) defines internet banking as online systems which allow customers to plug into a host of banking services from a personal computer by connecting with the bank's computer over the telephone wires. He is also mentioning some synonyms for internet banking such as online banking, PC banking, home banking or electronic banking (Singh, 2012).

According to Gordon and Loeb (2002), Information security is concerned with the protection of three characteristics of information: confidentiality, integrity, and availability through the use of technical solutions and managerial actions (Gordon & Loeb, 2002).

Banks are not only dealing with intangible money transactions, but also with protection of highly sensitive information such are credit cards' PINs, personal information about the customers, history of transactions regarding their bank accounts and all other kinds of information that could enable to third party conducting the criminal activities and making damage for both, customer and bank. According to Landwehr (2001), weaknesses of banks' information systems are named vulnerabilities, and it is likely that such vulnerabilities present opportunities for crime by third parties (Landwehr, 2001).

People perceive that electronic handling of money with no physical contact as one of the alternatives to keep money in safer forms than cash is. This means that almost all transactions can be realized via different devices including computers, mail or telephone, without physical contact. However, it is important to bear in mind that online banking resulted in new types of breaking the law and stealing the assets. Some of them are still new to the legal systems. Beside the physical security systems of banks, possibility of crime is still very high. Sometimes, in order to keep public image, banks do not even investigate and prosecute cybercrimes. If they would do that,

customers wouldn't deposit money in their banks (Pfleeger & Pfleeger, 2006). In short, big question emerge in heads of clients: “Is electronic way of handling money safe?”

Literature Review

Literature on IT Security and Online Banking

According to Shrinath (1997), statement that 'information is power' has nowhere been realized more significantly than in the banking industry. When discussing the risks and challenges for IT security in that period of time, Shrinath mentioned four risks: unauthorized system/data access by business users in the bank; unauthorized system/data access by application/system support personnel; unauthorized system/data access by customers; unauthorized system/data access by the public at large. Since most people do not realize that large banks are prone to high risk of security breakdown even without going so far as the Internet, author decided to examine and explain the most critical areas (Shrinath, 1997).

Lawrence A. Gordon and Martin P. Loeb (2002) wrote an article which presents an economic model that determines the optimal amount of investment necessary to protect a given set of information. Their model takes into account the vulnerability of information to a security breach and the potential loss if such a breach occur. After analysis conducted by Gordon and Loeb (2002), they suggested that in order to maximize the expected benefit from investment in information protection, a firm should spend only a small fraction of the expected loss due to a security breach (Gordon & Loeb, 2002).

Researchers' efforts to learn about perceptions of users regarding specific technologies resulted with birth of technology acceptance model. Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnila, S (2004) conducted a study about consumer acceptance of online banking. They investigated online banking acceptance in the light of the traditional technology acceptance model (TAM). The data for their results was consisted of group interview with banking professionals, researching TAM related literature and studies on e-banking. According to their results, perceived usefulness and information on online banking in the Web site were the main factors influencing online-banking acceptance (Pikkarainen et al., 2004).

When it comes to explanation of basic concepts involved with system security, introductory chapter of book entitled „Security in computing “written by Charles P. Pfleeger & Shari Lawrence Pfleeger (2006) was very helpful. Their book deals with broad range of computer security related topics such are: cryptography; secure systems development; basic communications technologies; advices on planning, risk, and policies;

Intellectual property; computer crime, and ethics. In short, it is possible to conclude that this book can serve as great guide to information about computer security attacks and countermeasures (Pfleeger & Pfleeger, 2006).

Interesting research was made by Luis V. Casalo, Carlos Flavian and Miguel Guinaliu (2007) who conducted it with purpose to analyze the influence of perceived web site security and privacy, usability and reputation on consumer trust in the context of online banking. Their paper described the positive effects of security and privacy, usability and reputation on consumer trust in a web site in the online banking context. This study is very interesting and valuable since it proposes link between security, privacy and trust in the online banking context (Casaló et al., 2007).

Muniruddeen Lallmahamood (2007) explored the impact of perceived security and privacy on the intention to use Internet banking. He used an extended version of the technology acceptance model (TAM) to examine the above perception and concluded that while perceived usefulness is a critical factor in explaining users' intention to use Internet banking, it is important to pay attention to the security and privacy of users' Internet banking. According to results, convenience, ease and time saving are the main reasons for the adoption of Internet banking, whereas security, trust and privacy appear to be the top main concerns for non-Internet banking users. As author mentioned, this may also imply that security concerns and privacy protection are perceived to be part of the overall service provided by the Internet banking services providers, and he suggests that banks should gain customers' confidence through raising security levels of the bank (Lallmahamood, 2007).

Many studies that are dealing with evaluation of clients' trust towards banking include „security" as important construct. This leads to conclusion that IT security is important for getting customer's trust in banking business. Yap, K. B., Wong, D. H., Loh, C., & Bak, R. (2010) wrote a paper with aim to examine the role of situation normality cues (online attributes of the e-banking web site) and structural assurance cues (size and reputation of the bank, and quality of traditional service at the branch) in a consumer's evaluation of the trustworthiness of e-banking and subsequent adoption behavior. One of their findings in this work stated that web site features that give customers confidence are significant for promotion of e-banking (Yap et al., 2010).

Mohanad Halaweh (2012) was writing about user perceptions of e-commerce security. In fact, both online banking and e-commerce are having common characteristics which are based on fact that there is no physical (face to face) contact between parties involved in transaction, and same technologies are being used for doing transaction. This means that both of them are exposed to same risks. Accordingly, these common characteristics

were very useful while identifying relevant variables for this study since some of them are simply modified and used for this research. Results of study conducted by Mohanad Halaweh (2012) showed that user characteristics, psychological state and intangible security features have a significant influence on e-commerce security perception. Additionally, in contrast, tangible security features and cooperative responsibility have a non-significant influence (Halaweh, 2012).

Singh (2012) commented that customers, both corporate as well as retail ones are no longer willing to queue in banks, or wait on the phone, for the most basic of services. Therefore, electronic delivery of banking services is becoming the ideal way for banks to meet their clients' expectations. Accordingly, author got idea to study the scenario of e-banking, so in his study he considered opinions of 100 customers from Ludhiana. The results of this work revealed that people are aware of e-banking, but not fully. In fact, the Customers are at ease after using e-banking mainly because it saves the precious time of the customer. It has also been found that Customer satisfaction varies according to age, gender, occupation etc. (Singh, 2012).

Literature Review on Online Banking in Albania

Shingjergji & Shingjergji (2012) analyzed evolution of Albanian banking system developed in accordance with political and economic situation. Accordingly, several phases of this evolution have been identified. The first phase goes back to 1863 when Imperial Ottoman Bank was established through opening branches in different cities. As Albania declared independency in 1912, new government conducted first steps for establishment of first Albanian national bank. Therefore, within the second phase of Albanian banking evolution, in 1913, Central Bank has been established in Albania for first time.

The third phase occurred in First World War when some new powerful banks have been established such are: Wiener Bank Verein, Pester Bank and Ungarische Bank. Their purpose was to finance respective army being in Albania at that time.

The fourth phase happened in 1925 when National Bank of Albania for first time in its history emitted Albanian currency known as LEK. Also, in this phase of banking development, Agrarian Bank was established in Tirana, as well as Bank of Naples which became great competitor to National Bank of Albania.

When it comes to fifth phase of Albanian banking development, in 1939, National Bank of Albania was used to cover war expenditures of Italia. In 1943, Italian invasion left the Balkans and Germany took over the control. Italian banks were obligated to leave, and National Bank of Albania this time collaborated with Germany. After liberation of the foreign invasion and

setting up the communist regime in Albania, its sixth phase begun. In fact, in 1945, the National Bank of Albania was converted to Bank of Albanian State (BAS) taking two functions: the central banking role and crediting role. Seventh phase of Albanian banking evolution is result of replacement of communist regime with free market economy in Albania. In 1992, first commercial banks were founded, and period from 1997 to 2004 was followed by rapid developments in the Albanian banking system.

Nowadays, there are sixteen functional private banks in Albania and they provide different services such are: deposits, accounts, transfers, loans, e-banking etc. (Shingjergji & Shingjergji, 2012). According to information from annual report for 2012 of Bank of Albania, consumption of e-banking credit transfer was not so high. In fact, only 3, 32% of transactions was conducted through e-banking.

Table 1: Share of customer payments in the banking system by payment instruments (Fullani, 2012)

Customer payment services	**2010**		**2011**		**2012**	
	Number	**Value (ALL billion)**	**Number**	**Value (ALL billion)**	**Number**	**Value (ALL billion)**
I Customer credit transfers of which:	81%	94%	79,15%	95,23%	75,5%	95%
1 Paper-based credit transfer	97%	97%	97,05%	97,25%	96,4%	96,69%
2 E-banking credit transfer	3%	3%	2,95%	2,75%	3,5%	3,32%
II Card payments at POS terminals of which:	7%	0%	9,33%	0,28%	12,7%	0,36%
1 Payments through debit cards	61%	42%	61,09%	43,23%	59,2%	35,3%
2 Payments through credit cards	39%	58%	38,91%	56,77%	40,7%	64,6%
III Direct debit	11%	4%	10,75%	2,29%	11,14%	2,41%
IV Cheques	1%	2%	0,77%	2,2%	0,72%	2,2%
Total Payments (I+II+III+IV)	7,377.033	3,398.102	8,038.656	3,899.439	8,758.818	3,719.562

It is important to mention that in the end of 2012, eleven banks provided home-banking services which was reflected through 48% annual

growth of online accessible accounts. This resulted in an increase in number of online conducted transactions presented in table 2 (Fullani, 2012).

Table 2: Home-banking transactions (Fullani, 2012)

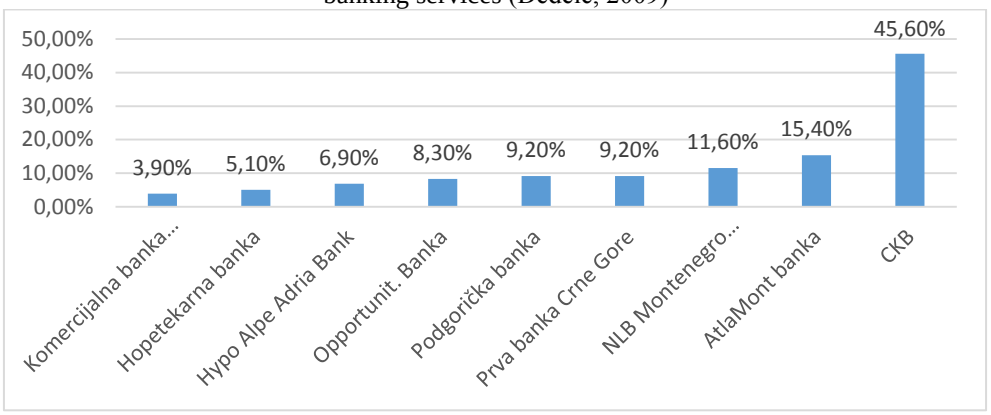
Year	Number of banks	Number of transactions	Value of transactions (in ALL millions)
2005	1	15.706	15.908
2006	1	19.096	16.834
2007	3	42.447	48.492
2008	6	88.261	63.240
2009	10	136.482	78.156
2010	11	162.385	91.277
2011	11	187.431	90.278
2012	11	236.215	117.234

Teliti & Mersini (2012) assessed Albanian e-banking services and analyzed legal framework of e-banking in Albania. They found out that the legal framework for regulating the payment system is incomplete and that internet banking is regulated only through the bank's internal acts and decisions by the Supervisory Board of the Central Bank of Albania. Authors strongly suggested that more tangible act must be drawn, such as a decision of the Council of Ministers or an order of the Ministry of Finance to specifically regulate internet banking, as a system of payment instruments (Teliti & Mersini, 2012).

Literature Review on Online Banking in Montenegro

Central bank of Montenegro has been established in 2001, and in the same year it started with reform in its payment system which started to work in 2005. Even though the law on e-banking has been adopted in 2003, utilization of e-banking services in Montenegro started in 2005. In year 2009, there was eleven banks operating in Montenegro and all of them are offering e-banking services. In addition to this, in 2004, service center for electronic operations entitled E-MON has been established. The mission of this center was to provide ability for using e-services to businesses and population in area of Montenegro. Data of two leading banks in Montenegro indicated that e-banking services are growing and developing intensively. Research on acceptance of e-banking services by clients of Montenegro showed results presented in Graph 1 (Dedeić, 2009).

Graph 1: Bank of Montenegro in which clients are either using, or are willing to use e-banking services (Dedeić, 2009)



Methodology

Methodology of this work is explained through following subsections: research design, population and sampling, variables and instrument, data and collection procedures.

Research Design

This paper is exploratory study dealing with IT Security of online banking in eyes of clients in Albania and Montenegro. Considering IT Security as an area that is yet to be researcher properly when it comes to online banking of Albania and Montenegro, this study is very important to provide beginning point for future research.

Population and Sampling

Population for this research were students of Albania and Montenegro who are users of online banking services. Respondents were randomly selected. Data for this study was collected by the means of a survey conducted in Albania and Montenegro in 2013. A total of 450 questionnaire forms were delivered to respondents in both countries. Half of the surveys (225) was delivered to Albania, while half (225) was delivered to Montenegro. Most of surveys were answered with good response rates. In Albania even 207 respondents out of 225 completed the survey giving a response rate of 92 percent. Situation was close in Montenegro since 202 clients out of 225 completed the survey giving a response rate of 89, 7 percent. It is important to note that purpose of this research is not to generalize the conclusions in the level of whole Albania and Montenegro, but rather to provide important introductory insights for future researchers of this issue in mentioned countries.

Variables and Instrument

For conducting this research, with aim to get closer insight into clients' (students) perceptions towards online banking in Albania and Montenegro, six variables were identified as a result of literature review. Those variables are as follows:

Privacy aspect - refers to confidence in the technology and online banking service provider when it comes to protection against privacy issues such are private information of client, information about money transactions conducted by client, information about client's personal passwords etc. Pikkarainen et al (2004) stated that as the amount of products and services offered via the Internet grows rapidly, consumers are more and more concerned about security and privacy issues (Pikkarainen et al., 2004).

Control aspect - When it comes to control perspective of IT security, as it is possible to conclude from survey questions of Yap, K. B., Wong, D. H., Loh, C., & Bak, R. (2010), this aspect refers to strictness of identity ascertaining when sending messages to client, or doing transactions by client, but also to general control by bank when it comes to online transactions' confidentiality (Yap et al., 2010).

Psychological aspect - According to Halaweh, Mohanad (2012), the psychological aspect of security incorporates the feeling of fear, the need to feel that one's money is secure, and the ability to control the payment process and performance of online transactions. Even though he made research about e-commerce, because of same nature of e-commerce and e-banking which is remote rather than face-to-face, his work was useful for preparation of survey in this study (Halaweh, 2012). Therefore, it is possible to conclude that many customers have the misconception that the use of e-banking is vulnerable and that there is a high probability that their money will be lost.

Tangible features - Halaweh, Mohanad (2012) defines tangible indicators as those technological security features of websites that can be checked by users, such as https, padlocks and security certificates. Tangible features need to be understood and checked by the customer over the website rather than captured through social communication; this involves having knowledge and experience of these features, such as knowing what a security certificate means and how to check whether it has expired (Halaweh, 2012).

Intangible indicators - When talking about intangible indicators such are famous website and reputation, Halaweh, Mohanad (2012) says that they are not seen on the website and cannot be directly checked over the website. They are affected by society in terms of communication and the environment: where the customer lives and what they hear from others, as well as their past experience (Halaweh, 2012).

Perceived IT security - Perceived IT security refers to general perception of online e-banking services by clients when it comes to IT security.

Accordingly, survey consisted of twenty questions was created. Questions were mainly adapted from previous researches considering Pikkarainen et al (2004), Casaló, Flavián, and Guinalíu (2007), Yap, K. B., Wong, D. H., Loh, C., & Bak, R. (2010), Halaweh, Mohanad (2012), Muniruddeen Lallmahamood (2007). All questions prepared for the survey, along with their references they were adapted from, are presented in Table 1 available in the next page.

Pikkarainen et al. (2004) conducted group interview with banking professionals in order to learn about consumer acceptance of online banking (Pikkarainen et al., 2004). Specific questions related to privacy aspect from his interview were adapted and used in this research to examine clients' concerns about their privacy and security issues in e-banking. Casaló, Flavián, and Guinalíu (2007) made research with purpose to analyze the influence of perceived web site security and privacy, usability and reputation on consumer trust in the context of online banking (Casaló et al., 2007). Since they are dealing with similar issue, questions regarding security and privacy were adapted and used in this study. Yap, K. B., Wong, D. H., Loh, C., & Bak, R. (2010) used survey to evaluate trustworthiness of e-banking and subsequent adoption behavior through several factors (Yap et al., 2010). Accordingly, several questions helpful to measure control aspect of IT security in e-banking were used in our study. Halaweh, Mohanad (2012) studied user perceptions of e-commerce security (Halaweh, 2012). Since both e-commerce and e-banking are having the same characteristics such is lack of face to face communication and physical contact which implies same issues and concerns for final users of such a services, many questions were adapted from his survey in order to measure psychological aspect, tangible and intangible indicators, and perceived IT security in general when it comes to online banking. Also, when it comes to Muniruddeen Lallmahamood (2007), one of questions used in his study was useful to adapt for this research when it comes to measuring psychological aspect of IT security (Lallmahamood, 2007).

Table 3: Review of survey questions

Questions	Adapted from
I trust in the ability of bank to protect my privacy	Pikkarainen et al (2004)
I am not worried about my personal information given to bank	
I think that my bank's information system respects personal data protection laws	Casaló, Flavián, and Guinalíu (2007)
I think that my bank's information system will not provide my personal information to other companies without my consent	
I think that my bank's information system respects user's rights when obtaining personal information	
I think that bank needs to ascertains my identity before sending any messages to me	Yap, K. B., Wong, D. H., Loh, C., & Bak, R. (2010)
I think that bank needs to ascertains my identity before processing any transactions received from me	
I trust that my bank uses security controls for the confidentiality of online transactions	
I don't fear when I am using e-banking services	Halaweh, Mohanad (2012)
I never have misconceptions about using e-banking services	
I don't feel anxious to use e-banking services because of its nature, which involves a lack of face-to-face communication	
I feel safe when I release credit card information through Internet banking	Lallmahamood, Muniruddeen (2007)
I don't check the presences of http(s) in the URL when I handle money transactions online	Halaweh, Mohanad (2012)
I don't check the small padlock icon on the bottom right corner of the website when I handle transactions online	
I don't check the digital security certificate of the web site when I handle money transactions online	
I would use e-banking services only provided by on a reputable bank	Halaweh, Mohanad (2012)
I would use e-banking services only provided by local bank	
I think my bank shows great concern for the security of any online transactions	Casaló, Flavián, and Guinalíu (2007)
I believe using e-banking services online is secure	Halaweh, Mohanad (2012)
Using e-banking services gives me a feeling of security	

Collection procedures

Surveys were filled by students (randomly selected) in Albania and Montenegro. This resulted in a sample that was well distributed in terms of demographic information (e.g. age, and education). The main reason why students were selected as target for this study is fact that probability of their involvement in e-banking services is high. As students, usually they are coming from different areas and they live far away from home. For those reasons, students depend on their parents who are most frequently using banks to send them money.

Considering students studying in 2013/2014 as generation well familiar with possibilities provided by newly developed technologies that enable using internet almost everywhere, it was decided to select them as focus of this research. Since it was not difficult to collect 450 surveys

completed by students who are in the same time clients using e-banking services, this decision seems to be successful.

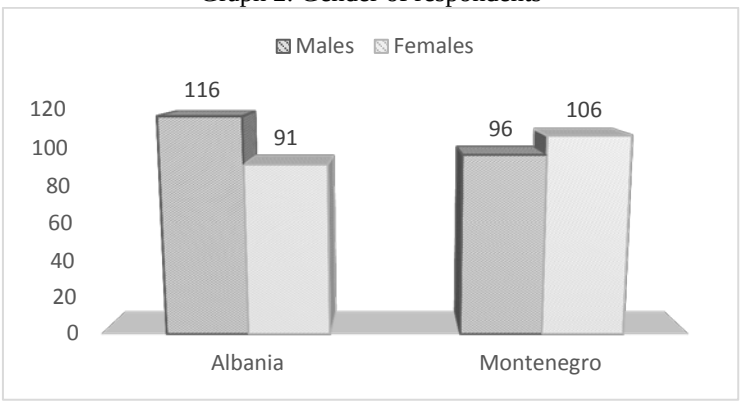
Seven point Likert scale was used in order to test the agreements of the respondents on six variables through twenty questions. The collected data is then inserted into an excel spreadsheet and analyzed descriptively. The surveys were distributed both online and personally. Online version of survey was created, and its link was sent via e-mail to potential participants.

Results

Demographics

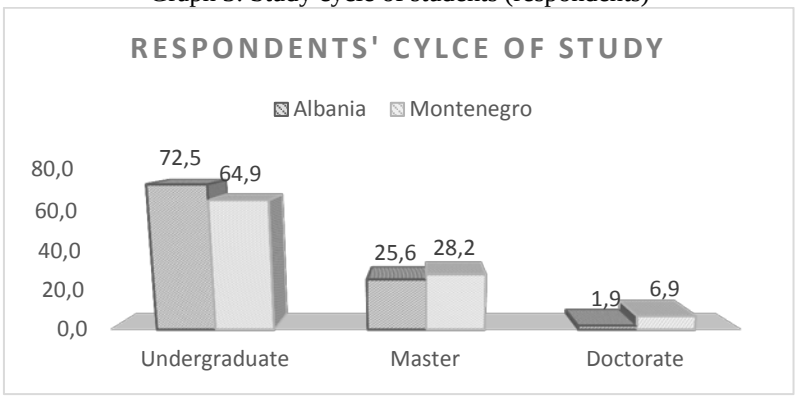
Demographics information includes respondents' department, positions within the department and their education levels, gender and age. When it comes to gender of Albanian respondents, number of males was higher than number of females. On the other hand, in a case of Montenegro, there was more females than males who participated in this research. Detailed information on gender are presented in graph 2 presented below.

Graph 2: Gender of respondents



When it comes to educational background of respondents, students of all three cycles of study (Undergraduate, Master and PhD) have been surveyed. Students of undergraduate degree covered 72,5% of Albanian respondents, and 64,9% of Montenegro's respondents. On the other hand, 25,6% of respondents in Albania and 28,2% of respondents in Montenegro were Master degree students. In Albania, 1,9% of respondents were PhD students, while in Montenegro, this number was 6,9% which is in total very low percentage of PhD students involved in the research. Statistics regarding this is presented in Graph 3.

Graph 3: Study cycle of students (respondents)



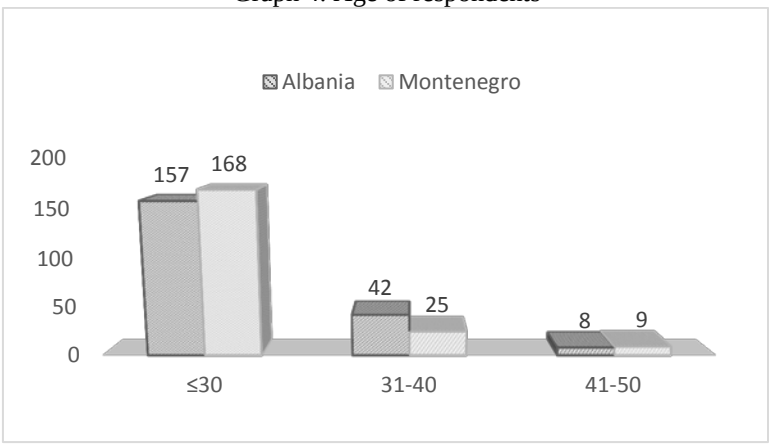
When it comes to departments studied by respondents involved in this study, situation is as presented in Table 4.

Table 4 – Departments of respondents

Department	Albania		Montenegro	
	Number of students	%	Number of students	%
Management	59	28,5	62	30,7
Architecture	34	16,4	29	14,4
Education	41	19,8	12	5,9
IT	39	18,8	29	14,4
Economics	12	5,8	17	8,4
Electrical Engineering	22	10,6	24	11,9
Mathematics	0	0,0	6	3,0
Biology	0	0,0	23	11,4
Total	**207**	**100,0**	**202**	**100**

When it comes to ages of respondents, according to Graph 4, it is possible to conclude that most of them were younger than thirty years, some were between 31 and 40 years of age, while only few were older than 41.

Graph 4: Age of respondents



Survey results

Before interpretation of results, with aim to assure that readers will properly understand all tables and related explanations, it is important to explain interpretation values. The meaning of interpretation values regarding 7 point Likert scale is as follows:

1 – Respondent strongly disagrees with the statement
2 – Respondent disagrees with the statement
3 - Respondent slightly disagrees with the statement
4 – Respondent is neutral (he/she neither agrees not disagrees with the statement)
5 – Respondent slightly agrees with the statement
6 – Respondent agrees with the statement
7 - Respondent strongly agrees with the statement

From Table 5, it is possible to conclude that in both countries, students trust equally to banks' abilities for protecting their privacy. Albanian students showed little bit more concern for information given to bank compared to students of Montenegro. Beside this, they slightly believe that their bank's information system respects personal data protection laws, while students of Montenegro more strongly believe in such a statement. Albanian students showed slightly more concern compared to students of Montenegro when asked about their opinion about providing of their personal information to other companies without their consent by the bank, and whether banks respect user's rights when obtaining personal information.

Table 5 – Privacy aspect

Variable: Privacy aspect	**Mean**	
Questions	**Albania (5,3)**	**Montenegro (5,7)**
I trust in the ability of bank to protect my privacy	5,5	5,5
I am not worried about my personal information given to bank	5,3	6,1
I think that my bank's information system respects personal data protection laws	5,4	5,9
I think that my bank's information system will not provide my personal information to other companies without my consent	5,2	5,3
I think that my bank's information system respects user's rights when obtaining personal information	5,2	5,5

Table 6 explains that students in both countries are of opinion that bank needs to ascertain user's identity before sending any message to him/her, or doing transactions. However, Albanian students again showed a little bit more concern compared to students of Montenegro, but in the same

time, more trust that banks are using security controls for confidentiality of online transactions.

Table 6 - Control aspect

Variable: Control aspect	**Mean**	
Questions	**Albania (5,6)**	**Montenegro (5,3)**
I think that bank needs to ascertains my identity before sending any messages to me	5,5	5,4
I think that bank needs to ascertains my identity before processing any transactions received from me	5,6	5,2
I trust that my bank uses security controls for the confidentiality of online transactions	5,6	5,2

When it comes to psychological aspect of respondents, Albanian students slightly agreed with the statements that they don't fear when using e-banking services, they don't have misconceptions about using e-banking services, they don't feel anxious to use them, and they feel safe when releasing credit card information through internet banking. Students of Montenegro agreed with the statements as well, but much more strongly compared to Albanian students (Table 7).

Table 7 - Psychological aspect

Variable: Psychological aspect	**Mean**	
Questions	**Albania (5,2)**	**Montenegro (5,6)**
I don't fear when I am using e-banking services	5,3	5,4
I never have misconceptions about using e-banking services	5,3	5,6
I don't feel anxious to use e-banking services because of its nature, which involves a lack of face-to-face communication	5,1	5,8
I feel safe when I release credit card information through Internet banking	5,1	5,5

There are specific tangible features of online banking that enable clients who are using these services to evaluate confidentiality of transaction, and to gain specific level of control over them in that way. When examining this aspect of online banking, Albanian students showed again more care through disagreeing with statements that they do not check URL, padlock icon and digital security certificate. Results from Montenegro indicated that their students do not pay too much attention to mentioned security tangible features such are URL, padlock icon and security certificate of the web site (Table 8).

Table 8 - Tangible features

Variable: Tangible features	Mean	
Questions	**Albania (4,6)**	**Montenegro (5,6)**
I don't check the presences of http(s) in the URL when I handle money transactions online	4,7	5,5
I don't check the small padlock icon on the bottom right corner of the website when I handle money transactions online	4,6	5,7
I don't check the digital security certificate of the web site when I handle money transactions online	4,6	5,6

There are intangible assets such is bank's reputation that sometimes affect clients without their awareness. It is interesting that Albanian students were more relaxed this time, and it seems that they are not affected by banks' reputation, location and concern for security as much as students of Montenegro are. However, it is important to underline that difference between perceptions is very small once more because while Albanian students slightly agreed with the statements (overall mark 5,2), students of Montenegro moderately agreed (overall mark 5,5). Detailed results regarding this aspect are presented in table 9.

Table 9: Intangible features

Variable: Intangible features	Mean	
Questions	**Albania (5,2)**	**Montenegro (5,5)**
I would use e-banking services only provided by on a reputable bank	4,9	5,3
I would use e-banking services only provided by local bank	5,5	5,6
I think my bank shows great concern for the security of any online transactions	5,3	5,5

Perceptions were again slightly different when it comes to students' statement about their faith in security of online banking services. Once more, Montenegro's students believe to this security more than Albanian students, but when it comes to another statement that examined their feeling of security, respondents from both countries provided same answer and slightly agreed with the statement (Table 10).

Table 10: Perceived IT security

Variable: Perceived IT security	Mean	
Questions	**Albania (5,2)**	**Montenegro (5,5)**
I believe using e-banking services online is secure	5,1	5,8
Using e-banking services gives me a feeling of security	5,3	5,2

Conclusion

This research provided important insights about clients' perceptions towards IT security of online banking in Albania & Montenegro, and comparatively analyzed results from these two countries. Response rate was good in target samples, 92% in Albania and 89,7% in Montenegro. Students are selected as a target group for this study for many reasons. Facts that they are mostly studying away from home, that they are receiving scholarships and that they are generation that was growing up with internet are enough to justify focus of this research. Limitations of this research are relatively small sample and quite generic approach to problem. Accordingly, suggestions for future researches would be based on going more deeply into the issue and analyzing larger samples. This article represents very unique set of information for the banks already operating in Albania and Montenegro, or having tendency to start business in these countries. This research empirically proved that students of Albania and Montenegro do not have same perceptions towards IT Security of online banking in their countries. Albanian students were slightly more concerned and careful when dealing with online transactions compared to students of Montenegro who are more relaxed and perceive banks as reliable in assuring security of handling money and personal information online. In the end, it is possible to state that both countries are good markets for banks, and have great potential for development of online banking.

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