MYKOLAS ROMERIS UNIVERSITY

IN COOPERATION WITH MIDDLESEX UNIVERSITY

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IMPACT OF INCREASING E-PAYMENT VARIETY ON BANK COMPETITIVENESS

A master's thesis

Supervisor

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A master's thesis on financial markets

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ABBREVIATIONS

SST – Self - Service Technologies

CSS – Customer Self - Service

WSS – Web Self - Service

TBSS – Technology Based Self – Service

TAM – Technology Acceptance Model

UTAUT – Unified Theory of Acceptance and Use of Technology

EPS – Electronic Payment System

B2B – Business to Business

SSL – Secure Sockets Layer

S-HTTP – Secure Hypertext Transport Protocol

EDI – Electronic Data Interchange

BTC – Bitcoins

CA – Certification Authority

SEM – Security Mediator

ROE – Return On Equity

ROA – Return On Assets

GDP – Gross Domestic Product

PR-model - Pazar and Rosse model

SCP hypothesis - Structure Conduct Performance hypothesis / Structure-Conduct-Performance paradigm

SBM – Slack-Based Measures

DEA – Data Envelopment analysis

INTRODUCTION

Topicality and novelty of the research. After commercialization the opportunities of internet usage have increased numerous times. That also affect financial sector. One of the most common services of SST (self-service technologies) system is e-payments, which has transformed economic process in more useful way. Many banks developed this type of payment immediately after the creation of World Wide Web. As the online banking with all e-payment had extended that lead to appear new types of this payment system such as cards, mobile payments, financial service kiosks, biometric payments, person to person payments etc. As a result the financial sector has an impact of this wide variety. With all of the technical advantages, e-payments of the financial system have to facilitate with economy – wide diffusion including the establishment of viable institutional structures. Specifically, the banks, in order to encourage their customers to use the services of the online banking, need to know how much they are open to new technologies, what is their perception of usefulness, the ease of use on the customers view and the main factors causing the new e-payments usage. All of these factors are directly related to the competitiveness of the banks. They influence the customers' decision to choose or reject separate financial e-payment services in by different financial institutions. The high level on banks' competitiveness leads to a financial stability and development of new financial activities.

The level of scientific research. With reference to numerous scientists such as Humphrey (2003), which analyzed the establishment and promotion of e-payments, Castro, Atkinson and Ezell (2010), Globerson and Maggard (1991), Meuter, Ostrom, Roundtrre, Bitner (2000), who are the creators of self-services concept, the peculiarities and idea of concept of different types of payments are almost the same. The main difference between those payments types are implementation process and its realization. According to Dennis Abrazhevich (2004) two latter differences are result of the consumer perspective which depends on its behavior. On the other side K. Böhle (2002) argues that it can affect the market players and their actions. At the same time, the competiveness of the financial institutions could affect the main principles of banks' operations. According to Kasmans (2015) competitiveness of the financial intermediary is related to its financial stability and efficiency. Hiefh and Lee (2010) argues that it could affect the profitability of the institution. Also, it could has negative affect as increase in the risks states Martinez – Mierre and Repullo (2010).

To sum up, it is important to understand that analyzing the variety of e-payments on the impact for financial sector competitiveness among different institutions should be analyzed in two ways – from customer and from financial institution perspectives.

The scientific problem is what is the impact of increasing variety of e-payments on bank competitiveness?

The purpose of the research is to identify the key factors deriving from increase of variety of e – payments that affect financial institution competitiveness and offer guidelines for bank strategy development.

The object of the research is the analysis of impact for bank competitiveness influenced by growing variety of e-payments.

The objectives of the research:

1. To analyze the theoretical aspects of e-payments management.
2. To find out the main similarities and differences between different types of e-payments.
3. To understand impact of e-payments system for the banks.
4. To analyze the factors affecting the competitiveness of the financial institution.
5. To measure the links between customers perception of use and promotion methods of competitiveness.
6. To estimate main factors of increase in competitiveness availability.

The methods of the research:

1. Systematic analysis of the scientific literature.
2. The analysis of the secondary data: information from the internet and statistical data.
3. Analytical analysis of research data by using statistical programme of SPSS
4. Systematization, comparison and summarizing of the results.

According to the objectives of the research and methodology of the master theses, there were formulated several hypotheses before the research because of quantitative research method. Analysis of the empirical data and in accordance of the statistical procedures, it will be trying to understand if:

- Hypothesis 1: financial competitiveness is related to the technological achievement in e-payments operations.
- Hypothesis 2: perceived usefulness of personal bank institution is directly related to the income of the customers by increasing banks competitiveness.
- Hypothesis 3: low level of competitiveness is affected by the fear to use e-payments.

- Hypothesis 4: increase in financial competitiveness among financial institutions could be reached by the promotion of ease of use.

The usage of specific financial institution services could show how much competitive it is according to the other financial intermediaries. Investigation of these hypotheses could show the right way to the banks, how to increase its own financial competitiveness over the public channels by using customers services.

The structure of Master Thesis is based from three main parts. Firstly, the theoretical part analyze the general principals of e-payments variety and growing number of new activities related to online services, also there will be presented the basic idea of financial indicators of sustainability for the banks and competitiveness importance for financial sector. Secondly, the methodological part represents the methodology of the research, methods and course of the study. Finally, the third part is based on the analysis of statistical significant connections and differences from the data of the research with the conclusions and recommendations.

1. E-PAYMENTS CONCEPT AND SIGNIFICANCE FOR CONSUMER SECTOR

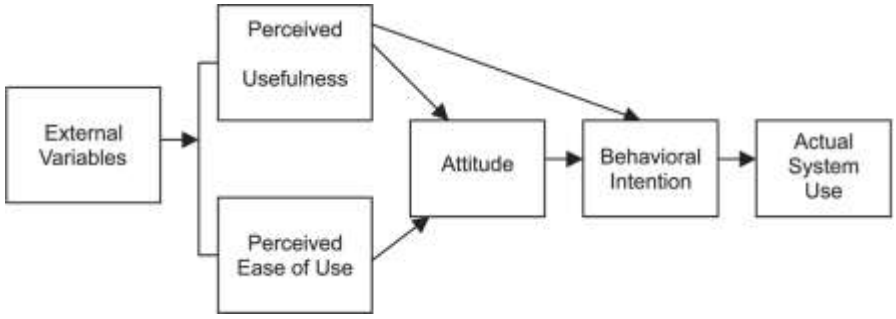
There is no doubt that technological advances had emerged the new business models based on e-services. Consumers could participate in the provision of the service from the beginning to end independently. Services, which are provided by online network gives consumers freedom, mobility and financial advantage in exercises of money operations. The main concept of e-payments was introduced in financial markets few years ago. Although, the beginning of payment method was found many times before as Self – Service Technology. It had a positive impact for customers on their own financial operations, which leads to an establishment and development of e-payment services. As a result it has formed the financial understanding of these kind of operations and behavioral view on consumers decisions. Improvement in e-payment methods could lead to sustainability of the financial institution that could positively affect banks competitiveness.

1.1. General aspects of Self – Service Technologies

There are a lot of types of services such as ATM's, online banking, e-shops, booking for hotels or flights, electronic kiosks, self-service gasoline stations, etc. (Castro et al., 2010). Along with technological development the SST (self – service technologies) have improved, which had led to new concept creation. In comparison with some of scientists, who analyzed this definition, we can found such formulations as CSS (Customer Self Service) - methods devised by the business in order to facilitate customer interaction with the service provider (Hwang et al., 2007), also WSS (Web Self Service) which is only available on internet, in the same way works and TBSS (Technology Based Self Services). It is defined as services, controlled by customer with help of outside vendor and technological development (Chou et al., 2009). To conclude the concept of SST it could be defined as a process when customer creates a service on his own at a particular time in a right place. For the identification of challenges associated with the use of self-service it is very important to clarify the factors determining the client's decision to start using this alternative way of services. In other words it is necessary to understand, what are external (not related to the same user) and internal (some personal user profiles) factors influencing people to choose this type of services.

In general there are three main models investigating the adoption of SST by potential user. That's are TAM (Technology Acceptance Model), UTAUT theory (Unified Theory of Acceptance and Use of Technology) and Innovation Diffusion Curve. To begin with TAM model explains what are the factors influencing the consumers decide to accept or reject new technologies (Davis et al, 1996). This model was also used to assess what is the market potential of new products, mainly dealing with computers and information systems. TAM model shows the cycle until the user decides to start to use the technology (see Fig. 1).

According to TAM, there are two main external factors that affect the consumer's decision to use SST - perceived usefulness and perceived ease of use. These variables are key in order to calculate what is the user's level of preparation and adaptation in relation to innovation (Curran et al., 2006).

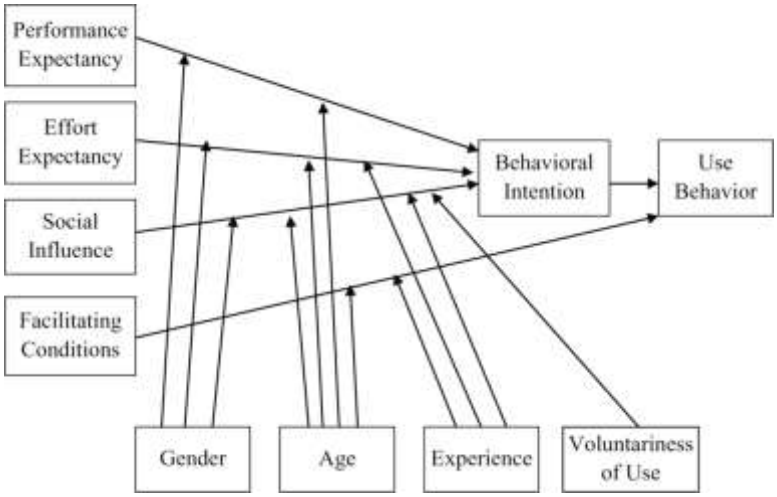


Source : Davis, Venkatesh, 1996, p. 20

Fig. 1 TAM (Technology Acceptance Model)

Perceived usefulness could be explained as the degree to which the user is convinced that technology will improve its own performance. At the same time perceived ease of use is consumer perception that the use of a particular technology does not require any physical or mental effort.

Not only TAM model, but also UTAUT theory was made by combining eight different models based on factors that influence the willingness of consumers to adopt technology. There are four main factors affecting consumer behavior and its further use of technology (Venkatesh et al, 2000). Performance expectancy, effort expectancy and social influence have the direct impact on user, at the same time the fourth element – facilitating conditions has the impact on usage (see Fig. 2).



Source: Venkatesh et al., 2003, p. 447

Fig. 2 UTAUT (Unified Theory of Acceptance and Use of Technology)

Vekanteshs' studies also showed that factors like gender, age, experience and voluntariness also has impact on individuals' technology acceptability. For example, e-payments are more applicable to young people rather than to older customers.

Finally according to the innovation diffusion curve all society could be divided into the five main categories according to the stage of adoption of innovations in which they are:

1. Innovators (2.5 per cent of all users) – first which adopt and begin to use innovation;
2. Early adopters (13.5 per cent of all users) – they are likely to absorb innovations and have high degree of opinion leadership;
3. Early majority (34 per cent of all users) - the innovation process takes more time for them, they are slower and are prepared to use innovation only after a certain period of time;
4. The majority (34 per cent. of users) – skeptics on innovations;
5. Laggards (16 per cent of all users) - a category which latest adopts the innovations, characterized by attention to the traditions, lowest social status, low financial liquidity and old age (Rogers, 1995).

As we can see from those three models adoption of self-service technologies is long and difficult complex. Decision to use or not those alternatives of services depends on customers experience, emotions and the surrounding elements. Also factors such as ease of use, cost, complexity, risk, technological and anxiety are included in this cycle. Moreover total time of SST adoption begins from technological readiness and continues till denial of current service. In every type of SST those factors should be analyzed fluently.

1.2. Concept of e-payments

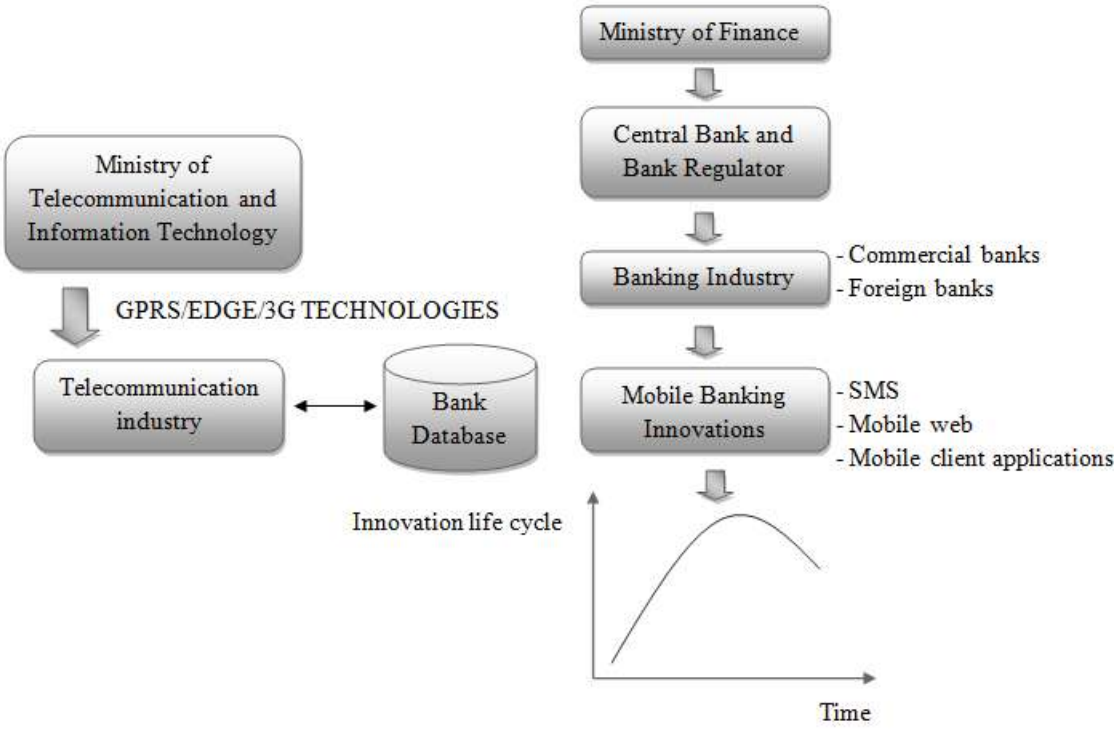
One of the most common services of SST is e-payments. There are a lot of definitions of this concept. According to Shon and Swatman (1998) e-payment could be described as a payment system, which only works over the internet. In addition to this in 2011, Huang and Chen to e-payments definition added methods based not only on internet, but also wired (in this ways works Money Gram and Western Union) and Wi-Fi channels. At the same it is useful to know that e-payments could be based on sovereignty, data minimization and sensitivity principles (Coquet et al., 2013). To sum up **e-payments** could be described as **a service or product by which customer gets a profit on his own with the link of connection**. There are also several types of connection manuals. Various authors differs e-payments by mobile or internet connection. Antecedent concepts diversify those payments by payment instruments as credit o debit cards or systems like PayPal. For the purpose of understanding what connection could be used by customers taking particular e-payment system the analysis of different types of e-payments are given below.

The first concept of e-payments was created after adoption of banking cards. It includes payments with debit or credit cards. Nowadays it is more understandable as self-service or online payment method because of the no connection channels it works only by a merchant. It's like a system of main three participants: merchant, consumer and bank. At this example bank is passive participant and act as intermediary (Kadabjova et al., 2011).

The second type of e- payments could be described as mobile payments. The main principle of this process is also based on the pyramid like in the previous type of e-payments. Participants are merchant (mobile phone), customer and bank. But in the different stages of the provision and execution of service there could be added some additional parts of his cycle. It depends on what classified parameters the service are provided. On mobile classification payments could be as medium (cash, paper, electronic), at the same time it could be distributed by size, the time of the payment and finally by the place of purchase (Bossuy, Hove, 2007). According to those factors, technically there are two models of e-payments system: carrier-centric model and PSP centric model. Both of them also could be divided into smaller parts of the e-payments. But the main idea of carrier-centric model is that using this e-payment model supplier could dominate and control process of payment from the beginning to the end in front of the customer. First payment of this model is when the customer buys directly from the supplier without the intermediary (it is called Wallet garden model), the second – when the intermediary occur (High – value garden model). In contrast to carrier-centric model, PSP centric model pays more attention to customer side. "The

customer connects to an intermediary party through the intervention of a carrier that provides the network connectivity" (Bossuy, Hove, 2007, p.39). Depending what participate in this model there could be types of it: Buy direct model (with financial network); combination of direct model and walled garden, mediated model (based on one more intermediary between carriers and financial networks) and mediated model with payment aggregator (Bossuy, Hove, 2007).

Practically mobile payments could be divided by SST categories. One of the latest self-service classification methods - classification by function and interface with technology. Here goods and services are classified into three categories based on technological development, which is reflected on the internet and *mobile communication* capabilities. In this way, mobile payments could be classified as payments for leisure (flights, shopping), payments for liabilities and mobile banking (Meuter, et al., 2000). In addition to this online banking was deeply analyzed by Wonglimpiyarat. According to the author mobile phones could be used as a channel to provide value-added services to the customers. They can act individually without the pressure of the bank.



Source: compiled according to Wonglimpiyarat V., 2014

Fig. 3 Mobile banking system

Also, Wonglimpiyarat says that mobile banking system depends on countries ministry of finance. In other words – all financial mobile banking services must be accountable for central bank and ministry of the finance. What is more they should satisfy the requirements for mobile banking and ensure trustable and safe banks' databases and reliable telecommunication industry.

Moreover for the expedient operations of mobile banking, there should be approval of ministry of telecommunication and information technology, that the system works in a good way (see Fig. 3). All of these factors are needed because of the satisfaction and trust of the bank services, which could influence users' decisions to accept or to reject e-payments.

The third type of e-payments is internet payments. The same methodology proceeds there like the both of previous – merchant, customer and the intermediary at this time it is internet. In practice it is distinguished two types of internet payments. Firstly, internet payments which are designed for communities' needs are called wholesale EPS (electronic payment system). It occurs on corporate level. In other words it could be salary payment, B2B (business to business) payments or international funds transfers. Generally it could be divided into financial electronic data interchange, bank clearing systems and corporate cash management. Secondly, retail EPS is designed for individual customer (Shon, Swatman, 1998). It is mainly used ATM's, telephone banking via internet, electronic funds transfers and internet payment systems or online banking (Shon, Swatman, 1998). Also, as the mobile e-payments, same internet payments could be classified by the intention of use. According to Shon and Swatman those categories would be third-party based systems, WEB based systems, electronic token based systems, and financial EDI based systems and micropayment – based systems. Electronic cheque is one of the best examples of the third – party based system. It is the same like usually cheques, but all the process of discharging or withdrawing goes over the internet. One party send electronically sign cheque to the another counterparty, which could request the given cheque realize to narrow or electronic money (Piller, Zaccariotto, 2009). Talking about WEB based systems the main principle is that consumer and merchant should use the same Web server for the transfer. It could be SSL (Secure Socket Layer) or S-HTTP (HyperText Transport Protocol) (Shon, Swatman, 1998). Next – electronic token based systems are e-payments type when transactions from purchaser go to vendor over e-mail or internet. At the same time financial EDI based systems are mainly used in B2B transactions and finally micropayment based systems e-payments are mostly small transactions over the customers.

What is more, one of the newest e-payment types is called cryptographic payment system. Most popular of it is bitcoins (or BTC). It was introduced in 2009 by Satoshi Nakamoto. Using this system transfer payments could be made without any intermediary. In a contrast to all e-payments systems, Bitcoin is not denominated in fiat currency. As a result for financial sector BTC could be used as currency, commodity or a separate investment. Contrary to the banks, bicoins transactions are irreversible, as a result those "money" will not be kept in some of the intermediary accounts. The main principle of this cryptographic currency is that it is generated all

over the internet by everyone who has the “bitcoin miner” application. This application is used to find the certain algorithm of boitcoin, which is “mined” and found with the help of graphic cards. According to Dostov and Shust (2014) Bitcoins are like string of digits, because they cannot be denominated in gold, silver or other precious metals, also in coppers or oil. Hence, the value of this cryptocurrency could be only based of perception of value and the benefit of use. Moreover, it is a system with limited number of bitcoins that’s why it could have embedded deflation of its coins, because over the time it is more and more difficult to mine it. What is more, each of the bitcoin is saved in the digital wallet of the owner. It is like separate account with a electronic signature which ensure the anonymity in the bitcoins system. There are a few features for bitcoin to be an attractive e-payment system:

1. Cryptographically guaranteed security of transactions;
2. Minimum fees of payments;
3. No set-up costs;
4. Low risk of charge-back;
5. Ease of use (Maggi et al., 2014).

But not even positive side is in the usage of bitcoins. There are a lot of negative sides of this payment system. Dostov and Shust (2014) prefer ordinary settlement systems (especially in business) rather than bitcoins because of:

- **Self-sufficiency**. Not all transactions could be executed by bitcoins. There is no universal acceptance of this currency, that’s why it is impossible to pay the salary in cryptocurrency or make a purchase in one way.
- **Limited number of Bitcoins**. It is could to pay off with this currency. But if you do not receive such amount of Bitcoins, it is possible to have the empty wallet of Bitcoins in the future.
- **The fair value**. It is hard to calculate how much goods will cost in Bitcoins. Moreover, the limited number of BTC changes its value over the time. As a result the same product could be estimated differently.

Other authors such as Douglas and James (2014) discover two main problems of BTC. Firstly, a big problem of this currency is anonymity. At the same time it could not only protect BTCs’ user personal information, but also be a good way to promote black market. Most popular example is a “Silk Road”, which was founded in 2011 for illegal drugs purchase. Furthermore, the second big problem is risk.

Using BTCs there is a risk that users bitwallet could be hatched without any compensation, because there is no intermediary with responsibility to cover your losses. Moreover, there is a risk that bitcoins as an innovation could became not popular. For this reason it could be withdrawn without any indemnity again.

Last but not least, bitcoins value is very volatile. During the time it has ups and down in its value. At the beginning it cost only 20 dollars. After that, the value of BTC increased by fifteen or even more times. Later it has decreased by two times. And the same scenario is repeating again nowadays. According to Mikołajewicz-Woz´niak and Scheibe (2015) it happens because of the demand and supply. As I mentioned before, the limited number of bitcoins reduces the supply for the customers, meanwhile increasing demand could not be satisfied. Accordingly the economic equilibrium of demand and supply cannot be reached. There is a big problem of this currency because it is known that currencies are characterized by inflation and deflation. In this case, the bitcoins has no competition against other currencies or precious metals what leads to opposition to lots of economic theories.

In the same way could also work such e-payment systems as PayPal transfer systems. Apart from the bitcoins, this system has virtual money on their account, but with the link of the bank. It is like separate account with the money you transfer from your personal bank account. In comparison with bitcoins, the system of PayPal also keeps your specific information in a secret, but in the way of fraud, money laundering or other illegal action, the personal information will be founded because of the added bank account.

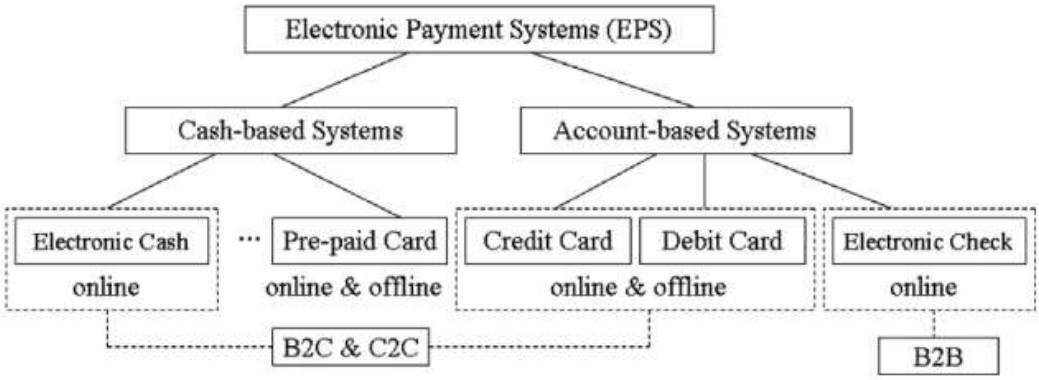
Last but not least e-payments type is electronic money transfer via other intermediaries like Western Union or Moneygram. It could described only as a semi e-payment system, because you have to go to some place from the “Western Union” or “Moneygram” with the real cash. The main idea is to transfer money without bank intervention. The information which is given is only full name, recipient’s name, their location and amount of the money. After transaction the customer will get the code which should be given to the recipient (Freund, Spatafova, 2008). Talking about the negative sides, at this time, there might be assumption that the real money was taken from the black economy. But the positive side is that you could always ask compensation in order to unsettled transfer.

To conclude, all e-payments could be classified as:

- Credit or debit cards;
- Mobile e-payments;
- Internet e-payments;

- Cryptographic currencies;
- Electronic transfer systems

The impact for financial indicators of the banks from these six categories is mostly the same. But there are a lot of internal and external factors influencing one e-payment type selection rather than another. Narrow classification of e-payment could be described as cash-based systems and account – based systems (see Fig. 4).



Source: Kim Ch. Et al., 2010, p. 85

Fig. 4 Classification of electronic payment systems.

Grouping six categories mentioned previously, the cash – based systems will include credit or debit cards and electronic transfer systems. Although, the account – based systems will include mobile and internet e-payments and also cryptographic currencies. Option of e-payment system use is up to all of the customers. It depends how big your transaction will be, what you are (business or physical person) and what you prefer.

To sum up, e-payment has become one of the most important factors for successful business and financial services. Internet banking services are gaining popularity, but some people worry about security issues and lack trust toward the internet banking services. In the online environment, e-payment is a process to complete the transaction. E-payment services are web-based use interfaces that allow customers to remotely access and manage their bank accounts or transactions. For that reason should be analyzed factors influencing consumer behaviors to select e-payments. Understanding online behaviors may help increase service satisfaction between products and users' needs.

1.3. Factors affecting consumer behavior to select e-payments

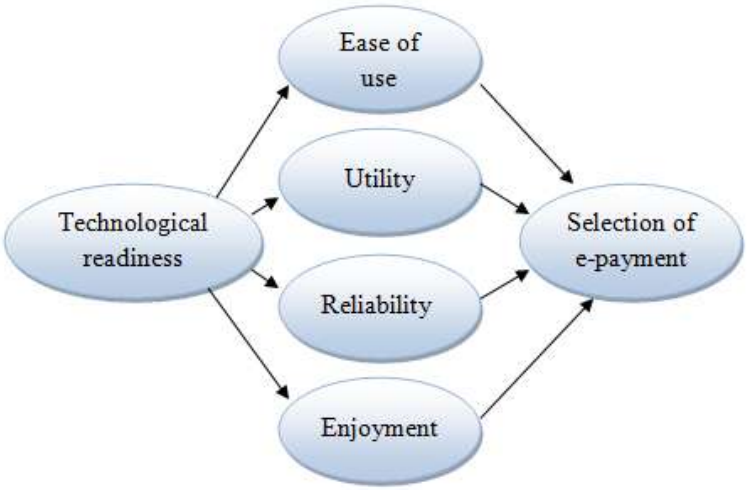
With the growing technological excellence and the expansion of the e-payments possibilities, business is looking for more applicable alternatives to industrial development at a low cost. E-payments in the services sector become an integral part of business. Users can operate a variety of e-payments choice of determining factors, such as quality of service, alternatives, availability, design and presentation, delivery etc. All these factors could affect customer in both ways - positive and negative i.e. e-payments could attract users and enable them to use it, or negative emotions to the consumer would lead to refusal of service.

To find out how the consumer responds to different types of e-payments, as a person, it could be used technology readiness index (TRI), which shows the individual openness to innovation. This index is defined by the four dimensions of consumers - optimism, innovativeness, discomfort and insecurity (Chen et al., 2008). The first two dimensions include proponents of e-payments, while the latter - define the traditional service users. For optimists technologies are convinced that such e-payments could provide efficiency, flexibility and time control. They see themselves as the leaders of the latest technology and usage of electronically payments to do transfers, so even negative aspects usually does not change their positive image formed on a e-payments (Sheng, 2011). Meanwhile, the innovators are ambiguous users, whose personal technology adoption is stronger comparing with e-payments with traditional payment systems. Here e-payments are self-justified, regardless of their complexity or lack of perfection. Thirdly, discomfort exposed to the user is not sufficient to ensure their skills and therefore cannot control the service process, while insecurity includes issues such as the lack of privacy or distrust of the same service (Liu, 2012).

These four dimensions can be divided in two scales – selection of e-payments (optimism, innovativeness) scale, and refusal of e-payments (discomfort, insecurity) scale. Participants of the first scale are affected by certain factors that determine the choice of e-payments, such as utility expression, reliability, ease of use, and enjoyment (see Fig. 5). Research of Davis, Bagozzi and Warshaw had showed that the utility is one of the main structures of choosing the appropriate product or service. Here the user is convinced that the choice of the product or service will not only satisfy his needs but also will receive some benefits (Elliott, 2012).

Ease of use is defined as the perception of e-payments as an appropriate level (Liu et al, 2012). This model argues that customer perceive e-payments by his own without any additional help.

For this reason, the user must be informed, and if necessary trained with a certain service, and its operational aspects. In other words, the more consumers are aware of all aspects of the service and the more e-payment is testing by them, the more he can trust them. Finally, delight, and as utility, provides the user additional value. Here, however, in contrast to recent versions, no matter what the e-payment result, if it gives the user satisfaction, it can lead to the services to consumer future development (Elliot, 2012).



Source: compiled according to Elliot, Hall, Meng, 2012

Fig. 5 Factors affecting consumer to select e-payments

In addition to these four factors it could be identified a few more. E-payments users could be also characterized by lack of time and privacy assessment. Here, e-payments helps them to ensure that - in addition to close contact with the service provider, the user can perform all the necessary tasks, such as money transfers, hotel accommodation, tax payments and so on. This consumer privacy of the e-payments view could be consumer divided into three levels:

1. Privacy of information (the right to control information about themselves, as a consumer);
2. Physical / property privacy (the right to limit the availability of other persons to the user account);
3. Decision-making privacy (the autonomy, when the user can decide for itself, without other intermediary intervention) (Chen et al., 2008).

The supplier of e-payment services, which provides all of these levels, may cause a consumer to become a user of e-payment if not it be able to lead to another e-payment type selection. Another factor is price.

To sum up these six factors: ease of use, functionality, reliability, pleasure, privacy and price perspective, we see that it can increase e-payments customer base, because it takes into account the needs of consumers. This user experience evaluation is based on past and present experiences and feelings, in other words that is the user satisfaction effect. The effect of businesses and business organizations is one of the most difficult stages, because here faced with customers' expectations.

However, no matter how attractive seems to be e-payments not all users are tend to promote them. This is the second scale to define the discomfort and insecurity exposed to users. The refusal of e-payments also has a number of factors, such as high the risk of forced use, technological anxiety and distrust. The risk generally affects users of the financial sector operations. The customer is afraid to transfer his money online without any help. Risk which is affected on consumer behavior was examined by Cunningham (1967) and Murray (1991). It was concluded that in order to reduce the risk of the presence of users, should be paid more attention to human psychological development, while retaining the person and freedom of choice, otherwise - the user can completely abandon e-payments.

In addition to this, today most companies and organizations are struggling to adapt their activities as e-payments, because it is economically profitable business. However, not all of organizations provide e-payments as an attractive alternative, but tries to force consumer to select this type of payment. Reinders, Dabholkar and Frambach (2008) found that the force of client use e-payments caused three types of problems: the effect of the approach on TBSS (technology based self –services); the effect of the approach of the service provider and the effect of intentions to act. Authors argue that those three problems are limitations on the user freedom of choice, which causes a negative understanding of the decision-making control. The user feels as if he has lost control of situation. Removal of the possibility leads to customer approach of the use of the e-payment evaluation. This can also lead to long-lasting effect and irreparable harm, when the customer may not want to try to use one of the e-payment methods. Other studies have shown that customers who have freedom of choice much more uses e-payments than those who are deprived of freedom of choice.

Forced use could also lead to negative approach of the e-payment supplier (Reinders et al., 2008). Customers who are forced to use e-payments may be less likely to take responsibility for the negative consequences that result after the transfer. Moreover, it is demonstrated that restriction the freedom for the customer leads to disappointment and frustration. Customer's consciousness formed negative attitude about who is responsible for limiting the choice, in this

case the service provider. Unequivocally, any client abuse negatively affects on their attitudes and not trusts the value of e-payments.

One more factor which highly affects consumer decision to accept or reject e-payments is security risk. According to Tsiakis and Stephanidis (2005), there are three main elements of security in electronic environment: encryption, digital signatures and checksums or hash algorithms. It is known that banks as providers have done everything possible to ensure the safety of customers' information - they are using certified SSL (. Secure Sockets Layer) - cryptographic protocol for information propagated on the internet, the others e-payment providers are giving for customers such guarantees as "pay-now systems" or "post-pay systems". The first case is more appropriate for the seller, in other words saying – money receiver. Because money is transferred before the items are given to the customer. The second case is better for the money seller, because firstly the items are received and then money goes to the receiver. In financial sector of the banks it could be described as put or call options. Similarly, the security risk is described by Montazemi and Saremi (2015). The main idea is that the trust of the e-payment of the bank is based on social exchange theory. The nature of the client is make benefit from the activity of the bank. Making e-payments, the client expects to increase the profit as structural assurances, social influence (public recognition), and physical benefits as transfers without any fee, e-point for the further online banking. Meanwhile, there are some more risks related to e-payments. It is economic risk, function risk, time risk, privacy risk, social risk, service risk psychological risk (Liu et al., 2015).

As the possible risks, the trust of e-payments acts in the same way. It could be described as technological trust which involves three dimensions: ability, integration and favor (Liu, 2012). In all three cases, persons are based on their experience and willingness to use the appropriate technological expression. Therefore, there was identified two technological confidence levels credibility and trust. One suggests that the reliability is directly exposed to the user beliefs especially depending on the character and intrinsic motivation, the next level explains that trust depends on the willingness and exposed to external motivation. The combination of these two aspects can avoid technological problems of mistrust, but the most important factor in consumers' choice of e-payments is technological anxiety. It is defined as a lack of confidence and uncertainty affecting the complex of decision-making process, which may cause danger (Liu, 2012). Here technological anxiety includes all of the following factors on the assumption of the risk of using technology developed products for the use of forced and technological mistrust users deliberately even not start to use e-payments, what causes anxiety technology (Liu, 2012).

Table 1. Decision to use e-payments process scheme

Technological readiness								
Selection of e-payments					Refusal of e-payments			
Optimism			Innovativeness		Discomfort		Insecurity	
Ease of use	Utility	Reliability	Privacy	Cost	Risk	Exploitation	Technological distrust	Technological anxiety

Source: compiled by the author

In addition to this, trust of e-payments could be also identified by CA (certification authority), SEM (security mediator) and one time ID module. Firstly e-payment systems should be on a list of CA to ensure the safety for the transaction, secondly e-payment provider should procure SEM which is an online partially trusted server and finally one time ID module will ensure the person identity at the same time of the transaction (Darwish, Hassan, 2012). Many bank institutions are providing such services as mediators or code cards for the protection of the client. But other e-payment systems are not giving such services yet.

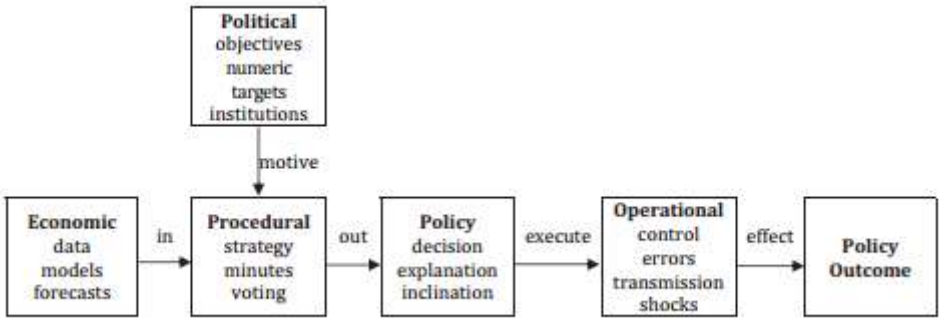
Finally, selection of e-payments is long and curious complex. Here the user before making decision to use or not e-payments eliminates his experience, emotions and the surrounding elements. Then those two alternatives are analyzed by e-payments, which include factors such as ease of use, cost, complexity, risk, technological and anxiety like. All those factors have impact on financial indicators of the banks, such as e-banking profitability (ROA + ROE), decrease in capital or affect in share premium. As a result, before developing e-payment system bank should understand what will be demand for this alternative of payments.

2. FINANCIAL INDICATORS DETERMINING THE CHANGES OF BANKS COMPETITIVENESS

The concept "financial indicators" has a wide range of the definitions. It depends on what sector it is used. It could show the financial stability of the banks, financial soundness or financial profitability of each of the bank. It could have positive and negative effect on financial institution competitiveness. It is necessary to understand how operates each of the financial indicators and how it must be used by separate financial intermediary.

2.1. Basic idea of financial indicators of sustainability for the banks

Financial indicators could be used for ranking the banks or trying to understand which of the financial markets are most profitable to invest in. According to Bluhm (2015), the most important financial indicators for the bank are transparency and accountability. They are closely related to the factors effecting consumers to select e-payments. At this time all financial information of the current bank as financial reports, ratings or event notifications on material events or bank integrity in the society should be easily accessible for all of the clients. It is called credible communication with bank activities (Ratnovski, 2013). What is more, Neuenkirch (2013), briefly believe that transparency allows predicting what could be the result of bank activities in the future. At e-payment case, transparency could be used to ensure the reliance of the bank. On this assumption, it could be founded by international index of bank transparency which is characterized by five subcategories (see Fig. 6).



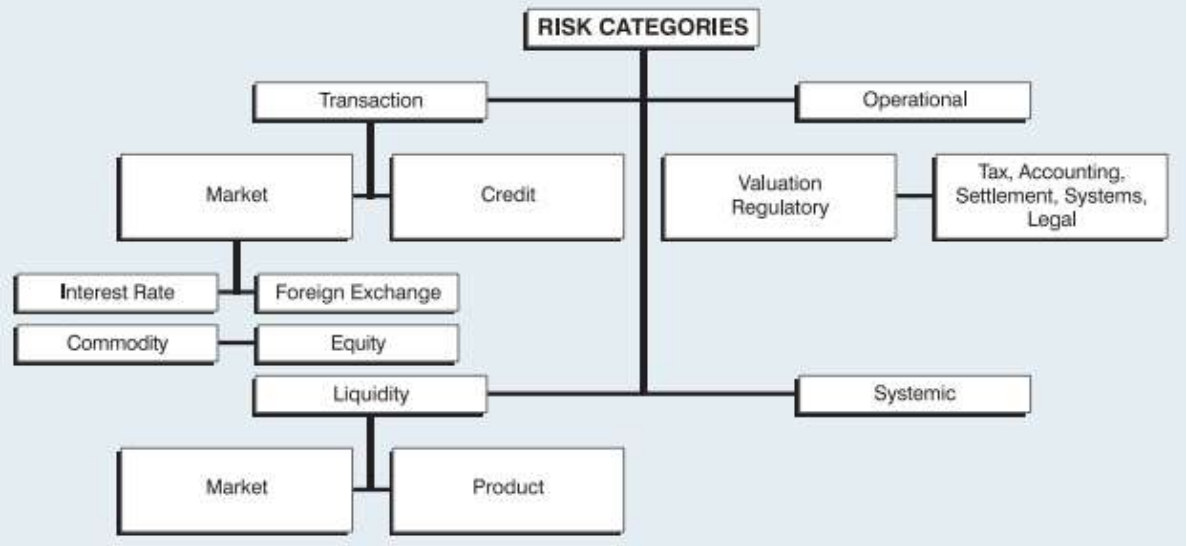
Source: Neuenkirch, 2013, p. 601

Fig. 6 Theoretical framework for central bank transparency

First category is economic data models forecast. It shows what monetary policy is used by the bank and what economic data is given for the client. Using past information, it could be predicted the financial results on economic growth or economic depreciation by separate financial institutions. What is more political objectives shows how financial institution (in e-payment case – banks) is generating relations between state government and making institutional targets for its' own future movement. It has a direct impact on the procedural strategy, which should be made on the resources and predictions of the accountability principles. That means, the bank should predict financial commitments without financial losses or the minimum amount of it. Executed policy decisions should lead to operational control errors transmissions shocks. It is closely related to macroeconomic disturbances which should be solved with no risk for client account safety (Neuenkirch, 2013).

Nevertheless, the overload of financial information for bank transparency could increase the uncertainty of bank activity. Not all of the individuals could absorb a huge amount of the financial material and data. Same studies have shown a negative link between inflation persistence and bank transparency (Cruijsen, 2010). As a result, transparency is mostly used to increase the demand in financial transactions sector. Consumers are trying to get as more information as they need in a shortest way. So, financial indicator of the bank which is called transparency must reveal the principal of operation by which the money will be sent to recipient with the provision of past financial information.

One more financial indicator of the bank is risk-taking factor. In broad aspects of the banks, the risk could be described as the possibility to commit financial liabilities. There could be described two types of risks in banks' life cycle – transaction and operational risks (see Fig. 7).



Source: Mainelli, 2002, p. 26

Fig. 7 Risk categories

Transaction risk is based on risk management and control on inflows of financial intermediary. In asset portfolio management it is very important to describe the assets allocation (Rogachev, 2007). At this time it could be divided into two parts as market and credit.

Both of them are based on the banks capital. Generally there is always a risk by making a credit on both of the agreement sides. At the same time market allocation involves such parameters as interest rates, commodity, foreign exchange, equity and liquidity. All of these factors are affected by lowering the risk. It could be described as financial exchange between bank and person in order to get some of the value. In the last stage the final product is given into the market and the same goes the added value for the bank as interest, dividends or even real estate or commodity.

According to Mainelli (2002), operational risk has three of the stages to control it. Firstly operational risk management should fix the minimum amount of capital loaned by the bank, secondly all decisions should be based on supervisory authority and third, it must be closely related to the current market conditions. Similar methodology is also used by Mohsni and Otchere (2015). For the risk-taking indicator there was identified two problems – accounting based risk measures and market measures of risk. Accounting based risk could be described by the solvency ratio. It shows whether cash flow is enough sufficient to cover short-term and long-term liabilities. Accordingly it must precise the volatility of ROA and ROE as well. As a result the higher value of the solvency ratio – the lower accountable risk. Market measures of risk include total risk and interest rate risk, because it was discovered that bank's balance is affected by the interest rate changes (Mohsni, Otchere, 2015). As a result authors offers to connect some risk in one formula to ensure high risk-taking level of the banks, see Formula (1).

$$R_{kjt} = \alpha_1 + \beta_{km} R_{kmt} + \beta_{ki} R_{kit} + u_{kjt} \qquad (1)$$

Here: R_{kjt} - daily return for bank j from country k;

R_{kmt} - the daily return on country k's market index;

R_{kit} - the daily change in the yield of country k's 10-year treasury bond;

β_{km} - a measure of systematic risk in country k;

β_{ki} - a measure of interest rate risk in country k;

u_{kjt} a random error term (Mohsni, Otchere, 2015)

From this formula differs two variables of the risk – interest rate risk and systematic risk. It seems that there are only two risks, which could influence the results of the banks. But both of them include more than one additional risk. Interest rate risk could be described as the impact of bank's economical profit from the changes of interest rates (Esposito et al., 2015). It takes re-pricing risk, yield curve risk and option risk. All of them arise from the time of maturity, when the bank cannot normalize its own assets and liabilities in time (Esposito et al., 2015). At the same time, systematic risk could be described as a risk, which is influenced by inability to cover liabilities by other financial institutions, which leads to instability in separate financial intermediary. To sum up systematic risk, it is like problems, which arises because of the other bank's problems. At this time, you can see that risk-taking factor could be unbalanced not only by the internal factors, but also by external attitudes.

To conclude, risk taking factor has very strong impact on banks profitability. Generally it is called risk-adjusted profitability. It is known that higher the risk which bank could operate, the higher gain of value will be reached. For that reason, the management of risk-taking factor must cover banks' deposit and credit strategy, diversification of financial institution portfolio management, input and output from different assets and liabilities and also global market interest rates. What is more, better result of risk-taking factor could be influenced by number of financial institution branches, banks' size and location, experience or existence in time (Fridrikson, Moro, 2014). Management of all these factors will cause the higher competition rate as well. Bank will be more competitive if it could collaborate with its own and market as well.

Last, but not least financial indicator, which could affect the competitiveness of the bank, is efficiency. From the broad look the definition of efficiency is made according to assets and liabilities of the company. Also, it could be described as an index which shows how produced goods and services operate with consumption of resources. It other words saying, it shows how efficient bank is (has profit or loss) against the internal and external financial liabilities. In financial institution sustainability case, efficiency could be described as the ratio by which the participants in the market could choose financial intermediary for their actions. In other words, it also could show the competitiveness of the financial institution. The strong impact of this financial indicator has two main factors – economic freedom and country governance indicators (Chan et al., 2015). Many researchers have showed that the higher level of governance involvement in financial intermediary regulations, the lower economic freedom will be. As a result it could lead to unprofitability of financial institution (Jahera et al., 2015). On the contrary, financial institutions which operate in countries of greater economic freedom, generate higher return of their assets. At the same time, some authors argue that no regulations from the

government will increase monopolistic regime through banking industry (Chan et al., 2015). What is more, financial institutions which operate independently could increase the risk of economical crisis. They can use such instruments with a higher risk than usual. If it will not verify, it could affect banks' profitability and lead even to bankruptcy. As a result, there are negative and positive sides of economic freedom. To summarize all of the variables and measure the level of efficiency there are few of the models.

Firstly, it could be used SBM DEA (Slack – Based Measures on Data Envelopment Analysis) model. This model is usually used to analyze network operations. In this separate case, e-payments analysis. SBM DEA takes two main indicators – inputs, which should be reduced as much as they can, and mostly desirable high level outputs of the financial institution. The decision making unit must be based on the result of the efficiency ratio, when it fluctuates between zero and one (when 0 – worst or lowest efficiency, 1 – best or highest efficiency of the financial institution) (Chan et al., 2015). This type of efficiency measurement is also used to compare efficiency between different financial institutions. According to Ohsato and Takahashi (2015), the result of different financial institutions will be almost the size if you take two very similar institutions. On the other hand, using this model in previous stage of the financial institution operations, the managers could be how far or close institution effectiveness is according to the market or any other high income generated company (Ohsato, Takahashi, 2014).

One of the latest is measures is time – dependent conditional efficiency model. It also includes inputs and outputs as the previous one, but the main idea of this model is time factor. Taking into consideration all financial sector efficiency it could be described as the stable/unstable or increasing/decreasing. At the same time, talking about separate financial institution it could move even in opposite side due to financial sector market (see annex 4). The decision making strategy of efficiency constructions in this case should be based on the time value due to the changes in the global market. If the market has an upward trend, limited time is given for the separate financial institution to overtake the results of global financial stability. Same goes with downtrend too (Matousek, Tzeremes, 2015). Latest researches showed that average of time to increase efficiency level according to market conditions, takes about two or three years.

Finally, third model which could be used to measure dependent and independent variables of financial institution efficiency is Tobit model. According to Aiello and Bonanno (2015), this model could show how efficient is bank or any other financial institution due to size of the institution, diversification, structure of capital, provincial level (market concentration, credit quality, branches density etc.) and also time to reached the high level of efficiency. The Tobit

model analysis showed that efficiency is mostly related to internal factors such as size of institution and structure of the capital. At the same time, external factors such as market concentration or GDP per capita has also influence of efficiency, but just in low level (Aiello, Bonanno, 2015). Also, same empirical research could be done by econometrics models. During the separate time period short-run and long-run technical analysis could show efficiency on current financial institution. It covers all before mentioned models and summarize the economic freedom and regulations of government conditions. It is mostly used during the economical crisis or after it. It could show how low your efficiency could be to generate profit even in the wors conditions (Assaf, et al., 2015).

To summarize all of these methods to eliminate the efficiency of financial institution, it could be said, that the main factors are:

- Inputs and outputs of financial institution. Bank is more competitive and effective when the inputs are higher than outputs;
- Time limit. If the bank cannot reach the high level of efficiency due to the market result in two or three years period, as a result it should change the strategy of the competitiveness;
- Internal variables. It seems that the internal variables must have the lowest impact of the financial effectiveness of institution. Despite this, labor force, size and experience of the institution, strategies in each of the elements are few of the most important factors to increase efficiency of the financial institution. Even if the financial result shows negative correlation between efficiency and inputs or outputs, the developed communication and presentation of company could lead to high competitive level according to efficiency.

To conclude all the ideas of financial indicators for banks sustainability it could be said that there are numbers of financial indicators which could affect the result of financial institution.

2.1. The impact of financial competitiveness for banks sustainability in e-payments operations

The technological development in e-payments sectors, leads to awareness of financial institution operations. As much technology based models are used in banks sector, the more attractive financial activities provider it is. In other words, the technological based services give the competitive advantage for the bank. The main question is what kind of financial competitiveness is used in finance sector?

Financial stability and competitiveness are two very important financial indicators for bank services. After the financial crisis of 2007, those two factors are widely used in finance sector. The main idea of them is that they cannot be used separately – there should be relations between financial stability and competitiveness. The connection between those two factors is constructed differently. According to Kasmans (2015), there are two measures of competition. It is called Lerner index and Boone indicator. At the same time the Herfindahl–Hirschman Index and the 5-bank concentration ratio can be used to measure the financial stability of the bank.

Firstly, Lerner index and Boone indicator include and analyze bank's total inputs and outputs over the particular period of time. In this case the output is mostly used by total assets, and input takes rates as labor, funding or physical capital or event all of them costs. In other words, Lerner index and Boone indicator are used to summarize the financial situation of the financial institution or profit and cost efficiency of the bank (Arrawatia et al., 2015).

At the same time, the Herfindahl–Hirschman Index and the 5-bank concentration ratio measure the degree of financial competition. They take all the rates as Lerner index and Boone indicator, but also add some specific units as return on assets, return on equity and financial institution possibility to take a risk. From this case study it is possible to see how much the financial institution could gain from market shares and increase their own profit by using the same amount of expenses as less efficient banks (Kasman, Kasman, 2015). To summarize, competitions indexes are closely related to the financial numbers of the banks. High rates represent the better competitiveness against other financial institutions. Stability indicator describes the concentration of bank's activities. The closely number of 0, the better financial stability could be recognized by the financial institution. As a result, according to Kasmans (2015) studies, there should be negative correlation between financial stability and financial competition to ensure the high profit and efficiency of the bank.

In contrast to Kasmans studies, it is assumed that there is U-shaped correlation between financial stability and financial competition. Martinez-Miera and Repullo (2010) established that in very concentrated markets exist low entry risks which affect the reduction of bank failure in those markets. At the same time, highly competitive markets have a margin effect which could increase the probability of bank failure in those markets. To sum up Martinez-Miera and Repullo theories it may lead to the conclusion that financial competition and financial stability are closely related and has U-shaped correlation, when decision are based on access of the market. It is more efficient for new financial institutions trying to entry new markets with new products. On e-payment case, this theory should be very important for new service providers to not failure in the

future. They should select the right market in right way with the purpose of strategy implementation.

One more model to measure the bank competition was used by Simpasa (2013). He suggested the H-statistics model (PR-model), which was proposed in 1987 by Pazar and Rosse. The main idea of this model is the measurement of bank's equilibrium between the revenue of the bank and input as well.

There are three stages according to H-statistics model. Firstly, when the H-statistics data is below or equal zero, then it shows the monopoly when the financial institution operates independently. Accordingly, there is no competition because of the market distribution. Secondly, when H-statistics is between zero and one it is considered as monopolistic competition, when there are more than one financial participant in the market and free entrance to the market. Finally, when the indicator is equal to one, the market structure is perfectly competitive and banks are driven by the power of the market (Yildirim, 2007). All it shows that the competitiveness of the banks is influenced by the market. There are numbers of market measures that have been used in analysis of banks competition. Al-Muharrami (2008) states that there are six properties as the size of the market, which could influence the result of H-statistics indicator; also it could be effected by number of shares in separate financial institution, consolidation in the market, structure of financial institution, operating allocation and possibility to intermediate with other financial institutions. The higher amount of number of shares of the financial institution, the more competitive it could be. It could participate not even in the local market but also abroad, which could lead to better development of competitiveness.

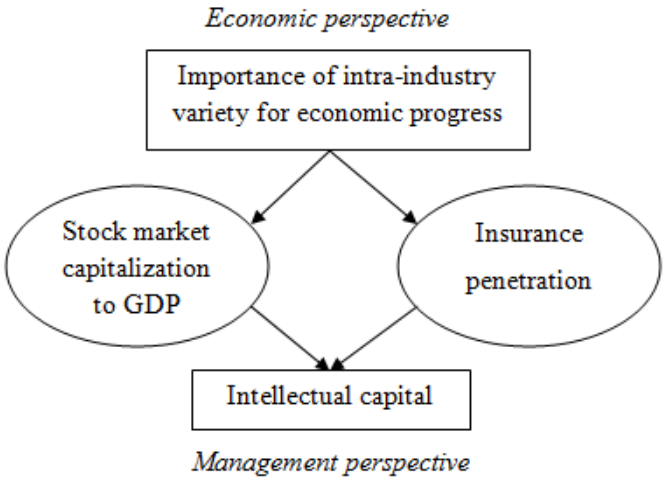
Also, greater results of competitiveness was found in those financial institutions, which were operating its' financial allocation according to activities. In practice, it is more useful to distribute the strategy of competition in each of the departments in financial institution. Each of it will have different strategies to competition because of the consumer unevenness, separate market size, and consumers' demand for requirements, numbers of the procedures per day or even employees' qualification. What is more, the cooperation with others financial institutions could influence the competition between each others. There are a lot of the firms which proceed in partnership, that effect stability in competition sector. The more of co-operation agreements are the fewer competitors are in the market. Also, this helps to have stronger competitiveness, because it was made of two or more financial institutions. In a simple way – the level of competitiveness is doubled by co-operations of several same direction companies.

On the other hand, Hsieh and Lee (2010) argue that competition is strongly related to the profitability. As a result, it could be affected by external factors as market structure, laws and regulations, corporate governance, level of economic development and intra-industry competition. Market structure will be measured by the degree of market concentration. The higher market concentration, the higher monopoly exists in financial institution (Hsieh, Lee, 2010). Consequently, the better competitiveness prevails in separate financial institution. The concept of market concentration is defined as the sum of specific kind of risks and control variables. For the risks it could be added capital risk, credit risk, market risk, liquidity risk and overall risk. All of these factors can directly affect the financial stability of the financial institution. The higher rate of the sum of the risks, more negative results could be found in the institution. Only factor that could lower the rate of the risks is control variables. It takes GDP of the country, share of state-owned banks, bank size, share of foreign banks, net interest spread, revenue and asset diversification (Jiang et al., 2010). In other words, control variables could be described as the indicators of stability of global economy, or variables which shows the profitability of the market. Stronger local or global economy could lead to better competitiveness according to market structure factor. As a result from the market structure perspective – competition and profitability has the direct link between each other. Another two external factors, which could influence the competitiveness of financial institution, are corporate governance and laws and regulations. To summarize, it could be described as the legal requirements. According to Hsieh and Lee (2010), the most important legal requirements for the financial institution competitiveness are entry barriers of securities, insurance and real estate business. From the economy side, the governance should ensure the high level of financial competition. For this reason, the previously mentioned barriers must be as low as they can. The securities, insurance and real estate services should be provided not only by the banks but also by others financial institutions as brokerage firms, insurance companies, credit institutions or even financial transactions companies.

On the other hand, the competitiveness by the bank side, will be stronger if the restrictions of the legal requirements will be higher that now. From this perspective, it could be ensured the stability of the financial institutions competitiveness, because the financial participants in the market would be less that nowadays. The fourth factor, which shows the competition and profitability of the financial institution, is level of economic development. The most relevant description of economic development is process by which recourse based structural changes becomes knowledge based economy of the country (Reyholds et al.,2008). It could be divided into three stages. First stage is called factor - driven economy. It consists on economy growth influenced by land, commodities, unskilled labor. It is the lowest level of economy development,

because it is driven by old economy measurements and typical financial industry. It requires the minimum knowledge to work with it. Then is investment – driven stage. At this level there appears industrialization, capital investment and other financial factors that increase the income to the middle level. It is the economy based on the financial recourses as trade exchange, financial transactions. In other words, it could be described as money based economy. Finally, the latest stage is innovation – driven economy. It is mostly related to technologies based economy as the self – service technologies (Reyholds et al.,2008). In online services case it is mostly related to e-payments. All of the economy is driven by the progress of technologies.

As a result competitiveness of the financial institution could be also described in such stages. If it belong to the last stage of economic development, then it is the most competitive rather than in two previous stages. It also confirms the fact that competitiveness and profitability of financial institution is deeply related to the technology development, in specific case – e payments.



Source: compiled according to Hsieh and Lee, 2010 and Peltoniemi M., 2015

Fig. 8 Scheme of intra-industry competition

Last, but not least factor affected competitiveness and profitability introduced by Hsieh and Lee in 2010 is intra-industry competition. Figure 8 shows, that two most important factors affecting intra-industry competition is stock market capitalization to GDP and insurance penetration. They indicate the degree of competition among banks. These factors are mostly related to the consumers sector. The high data of these indices could indicate that bank work properly and customer could rely on it.

In other words, the positive ratios will establish the intellectual capital for the service recipient. At the same time, it increase and financial competitiveness among banks industry, also high result could show that bank generates high profit and has financial stability as well. Intra – industry factor are not so important for technology development of bank services, because it has no direct impact on the e-payments services or online transactions. On the other hand, concerned selection of the bank could be influenced by previously mentioned ratios as stock market capitalization to GDP or insurance penetration as a result it will affect the use of e-payments.

At the same time, Michael Koetter (2008) in his recent researches has found that there is univariant relationship between competition and efficiency (see annex 2). To measure the market it was used quiet life hypothesis which consist on market power due to revenue and cost savings. Most important variables which he has used were market power, cost efficiency and profit efficiency. In ten years period (1996 – 2006 y, before the financial crises of 2007), market power has a slightly negative correlation with cost efficiency.

Moreover, there was opposite relationship between market power and profit efficiency (Koetter, 2008). Consequently, it could be said that growing market power and productivity of the financial elements might affect the depreciation of cost and profit efficiency. At the same time it also could affect banking sector. Competitiveness of the bank might be raised with the level of market power. Bank as the financial participant in the market will be able to increase its competition level with the demand of new financial activities or still existed enhanced products as payments online. But not only banks, but also other financial participants, will be interested in promotion of those activities. As a result too high demand of increased competition by new products could affect negative result of cost and profit efficiency. That could lead to banks' unprofitability. The amount of the expenditure for the promotion of competition could not be covered by the positive result. The participants of the market will be able to choose e-payments from the high variety of the suppliers in financial sector, so bank also has possibility to be rejected in order to take other services provider. At this time bank will lose the cost of one customers' attraction and retention.

All of the previously mentioned researches and theories state that there should be positive or negative relation between two variables of profitability and competitiveness. Those two concepts could be summarized by strategic choice of the financial institution management. Positive or negative correlation between profitability and banks' competition could be also described by SCP hypothesis (Structure Conduct Performance hypothesis) or differently called structure-conduct-performance (SCP) paradigm. This hypothesis was made by two variables – market power and strategic management theories (Brown et. al., 2005). Market power has direct impact to financial

indicators of the bank, at the same time strategic management of bank competitiveness could be influenced by capitalization, credit risk, cost efficiency and also diversification (see annex 3). According to market structure and bank strategic choice it could be defined four strategies to define the relations between profitability and banks competitiveness:

1. *Strategy of bank risk-taking competition management.* It states that market concentration has negative impact of risk-taking of the bank (Belkhaoui et. al., 2013). In other words – there are opposite relation between profitability and banks' competitiveness because of the low future profits.

At this case banks are trying to ensure or even to save its portfolio, when the markets are more concentrated. Banks becomes more risk – averse and starts to invest in low risky assets to keep their "charter value". At the same time low risk is equal to low profitability, but with high competitiveness, because of the high level of risk – control inside the banks industry.

2. *Strategy of bank cost and bank performance relations.* It states that cost of efficiency has direct impact on financial institution economic development with high profitability (Belkhaoui et. al., 2013).There the main variable should be intermediation cost which arises from the previously mentioned co-operation with other financial institutions due to higher competitiveness. If the bank makes strategy based on this variable it could reduce the expenditures and increase the financial competitiveness among other financial institutions.
3. *Strategy based on diversification of bank competitiveness.* It states that diversification could reduce financial institution value and profit so it could lead to outweigh the benefits of the bank. As a result there are negative effect between diversification and bank competitiveness (Belkhaoui et. al., 2013).
4. *Market share and bank performance strategy.* Normally, banks with large amount of market shares could generate the higher profit. As a result it could increase the competitiveness as well. So those two variables has positive relation between each other (Belkhaoui et. al., 2013).Such banks could offer the higher variety of financial instruments for their clients. In this way bank increase the interest of their customer for services. As a result it increase the higher level of competition as well.

What is more, all of these strategies are based on consumer integration in the perception of bank activities. As the Panagiotou (2005) has found there are financial based consumer beliefs of competitive challenges while making such strategies. Firstly, information about the bank strategy and competitiveness should be formulated before the public availability. Secondly, there could be formulated several different competitiveness strategies adjusted to different strategic groups in the

financial market, and finally, the same strategy in different financial institutions could be perceived differently (Panagiotou, 2005). In e-payments case it could be necessary to know that all of those three characteristic can influence the adoption of e-payments in consumer sector. If the strategy will be formulated without any considerations the market will not adopt the basic idea of the main financial institution which can lead to refusal of it.

To summarize, the impact of financial competitiveness for banks sustainability in e-payments operations depends on many factors such as cost and profit efficiency, financial stability, revenue and event intra-industry operations. The main aim of the bank is to define the strategic points to achieve the objectives of this financial institution. In this way, properly chosen strategy helps to understand what factors have a positive or negative or even direct or indirect impact associated with the bank's competitiveness. Also, it should be kept in mind that every financial strategy should be based on the case of electronic payments. There are some major differences between electronic payment and simple settlement strategies, such as:

- limits of the cost and prices,
- technological achievement,
- acceptance of technologies,
- time saving factors.

All of these four factors essentially replace the electronic payment and simple settlement strategies. In addition, banks must follow the rules, laws and international standards to ensure the positive intermediation to achieve high profits, growth and strengthen their weight on the market without under pressure of global and local government. Indeed, all of these factors can improve cost efficiency of the bank, which could lead to depreciation of financial institution product prices and improvement of financial stability, which could affect growth in competitiveness.

3. METHODOLOGY OF E-PAYMENTS SELECTION WITHIN THE BANK

Empirical research was undertaken and emphasized the financial indicators which influence the level of financial institution (specifically – banking sector) competitiveness according to selection of e-payments by various groups of the consumers' needs. This study applied analysis of one-parametric statistical criteria based on segmentations of the participants in the market and factors affecting consumer decision to choose or reject e-payments operations via separate bank. The purpose of the research was to identify the factors affecting banks' competitiveness of growing variety of e-payments in consumer's segment. Estimations of consumer's belief were made by quantitative assessment between the factors of theoretical model and instruments which could stimulate the selection of e-payments in banking industry thereby increasing the competitiveness of chosen financial institution.

Selection of case studies and theoretical readiness was grounded in established survey, which aim was to address different aspects of technological change to banks' competitiveness among other e-payments providers. In addition, this study used SPSS to collate descriptive statistics and level of reliability of competition assessment. The analysis of survey method could provide important information of respondents' past action. Bank as the financial intermediary could use this information for the increase in financial competitiveness. Those result could show what is important for the customer of the bank, while he is using bank' activities on e-payments.

The use of quantitative method survey was also used by researchers before. To evaluate e-finance operations due to status, innovations and competition challenges was used by Shahrokhi (2015), also determination of behavioral e-payment selection was found by Yang in 2015 based on the survey of various cultures decision to choose or reject banking services. What is more, competition factor of banking industry was also received by customer's survey method. Such authors as Arrowatia (2015), Yildirim (2007) and Kasman (2015) made quantitative assessment to bank's competitiveness, concentration and efficiency based on consumers' decisions.

For investigation of the bank's competitiveness based on selection of e-payments was concluded with a questionnaire of four major groups of the questions. Firstly, it was used to find out what proportion of consumers uses different types of e-payments through all financial intermediaries. Secondly, according to psychometric rating scale of Likert (when respondent need to choose from one to five, when 1 – strongly disagree, 5 – strongly agree) the questions were made to evaluate the basic factors which influence the decision making process of e-payment selection among bank's internal and external environment. According to this scale the result of

the survey could show the symmetry and the balance of several major variables. There was included only most reliable and relevant variables. For example, consumer openness to innovation (electronic payments) used to evaluate claims for determining e-payments rather than classical methods of settlements from Meuter and Ostrom (2003) study:

1. Technology gives people more control over their daily lives
2. Technology based services are much more convenient to use
3. Technology makes you more efficient in your occupation
4. Technology gives freedom and mobility

Perception of ease of use were used by Elliott survey (2012), in order to seek technological preparation influenced by consumer desire to choose e-payments in banking sector and a fear of technology were used by Liu (2012). Perception of online banking positive sides, there was used survey based Eriksson and Nilsson (2007) study and also for fear of consumers belief of bank competitiveness was assessed on the statements of Gelderman, Ghijsen and Diemen (2011) study. All of these questions were divided into four groups:

1. Questions based on ease of use;
2. Questions based on trust of financial institution competitiveness;
3. Questions based on benefits for customers from financial intermediary services (e-payment case);
4. Questions based on the security of financial institution to ensure high level of financial soundness to increase competitiveness.

Third part of the questions is made because of the clarification of factors which influence the level of financial competitiveness according to consumers' behavior. It also takes questions related to ease of use, security, trust and benefits, but the main idea here is to clarify financial indicators in current chosen (mostly used) bank. Finally, the last but not least group of the questions is related to demographical parameters such as age, incomes, gender, education etc. All of the questions have a specific type. To evaluate the distribution between different types of e-payments, there was used nominal scale of the questions. It is most reliable and relevant when it is needed to calculate the averages, medians and tendency of the specific variables. It is the number of variables which is used to identify a specific rage of the series. Second type of the questions was made by the ordinal scale. It is useful when it is needed to rank same category variables between each other. It could show the tendency over a specific time period setting out the numbers in certain consistency.

Usually it has a growing value of the variables. Finally, there was also used interval scale to measure the degree of difference or connections between two or more variables. Using all these types of questions scales it is easy to measure the result of the survey using SPSS program. The most popular and reliable confidence levels are of 90 %, 95 % and 99%. In this case, for the reliability and accuracy of the survey result there was undertaken confidence level of 95 % which shows the difference between the actual population and the received result of correlation estimation accuracy. In other words, all of the results were analyzed with standard error of 5 %. Using SPSS analysis there could be used such tests as chi-square test, which shows if the differences between the empirical and theoretical distributions are significant, (Čekanavičius, Murauskas, 2014).

Also, connections between variables for which the normality assumption is not met are calculated by Spearman (when there are one type of scale variable and one type of ordinal variable), Kendalls tau-B (when there are two types of ordinal variables) and Pearson (when there are two types of scale variables) tests. Such analysis of nominal scales could be completed by McNemar or Binominal test. At the same time Kolmogorov – Smirnov test, Friedman test and Kruskal Wallis test would be appropriate for ordinal scale and also t-test (for a big volume samples, usually more than thirty), Z-test (for a low volume samples, usually less than 30), independent samples t-test, paired samples t-test and ANOVA test for interval scale as well. In this case study mostly used test were the latest ones because there was comparable two or more variables between each other to measure connections or differences between variables. This case study model of analysis on SPSS contains four relevant elements:

1. Frequencies. It is related to the demographical data, which shows the distribution of the respondents, mean or median. This kind of information could show the potential customer of the financial institution, which could fthe increase in competitiveness according to the consumers; profile.
2. Calculation of averages. It could be also called “Descriptive Statistics”, when there are comparable means on one sample T-test or independent samples T-test. This kind of the analysis could confirm or reject null hypothesis with the level of confidence.
3. CrossTabs. It shows only the differences between variables, but do not show the cause of the distribution. It is percentage distribution of answers of the variables. For example it could show which of the factors of bank’s competitiveness are more important for a specific demographical group of the respondents.
4. Variance analysis. It calculated the connection between more than two variables. In other words, this analysis could cover k – unconnected samples.

According to these four analyses, it is important to know, which of the samples are connected and which is not. Unconnected samples could be described as the samples from the different totality (for example, male and female cannot be from the same sample). On the contrary could be described connected sample.

What is more, all conclusions were also made according to the test values. The main indicator of them was p-value, which shows if hypothesis was approved or not. Analysis of p-value shows:

1. If p-value is less than alpha of 0.05 ($p<0.05$), then it could be said that it is no statistically significant difference or link between the variables.
2. If p-value is higher than alpha of 0.05 ($p>0.05$), the difference is regarded as statistically significant.

Lover p-value shows stronger connection or difference between the variables. It depends what of the test will be done. For example, chi-square measures links and connections between the variables, same results will be showed by Kolmogorov – Smirnov test. At the same time such test as Mann Whitney U test, Wilcoxon or McNemar test will show the differences between two or more variables.

To indentify the representative result of the research, there was used a formula for the elimination of the sample:

$$n = \frac{1}{\Delta^2 + 1/N} \qquad (2)$$

Here: n – size of the sample

Δ^2- standard error (10%)

N - population of Lithuania (2 893 336)

According to this formula, representative result of the research must be at sample of 100 respondents in Lithuania. It was managed to collect more that it is needed what could lead to more reliable result of the calculations. Also, there were some of the foreign respondents during the research with some of the different opinion of competitiveness and e-payments in Lithuania financial sector. The results of them do not reflect the entire of the financial market participants abroad. Accordingly, it was presented only to make a broad view of differences in separate cultures. All the analysis is based on the local – Lithuania's market.

The obtained result indicated that from the 126 respondents of this research, there was almost the same percentage of males (60 %) and females (66 %). This distribution could be explained by the e-payment as a self-service peculiarity. It is not a specific service which would be used more by the separate gender; as a result each person could use e-payment services independently. It is more universal service, that's why it is not necessary to use segmentation of users by their gender for the financial institution. The competitiveness would not be affected by the demand of each of this demographical factor.

Table 2. Distribution of respondents by demographical characteristics

		Lithuanians		Foreigners	
		Frequency	Percent	Frequency	Percent
Gender	Male	60	47.6 %	11	68.8 %
	Female	66	52.4 %	5	31.3 %
Age	< 25 years	38	30.2 %	6	37.5 %
	25 – 35 years	29	23 %	6	37.5 %
	> 35 years	59	46.8 %	4	25 %
Marital status	Single	35	27.8 %	6	37.5 %
	Married/domestic partnership	56	44.4 %	8	50 %
	Divorced	17	13.5 %	1	6.3 %
	Widower	18	14.3 %	1	6.3 %
Education	General education	8	6.3 %	1	6.3 %
	Vocational training	9	7.1 %	0	0 %
	Secondary education	9	7.1 %	1	6.3 %
	Unfinished collage degree	6	4.8 %	0	0 %
	Collage degree	7	5.6 %	3	18.2 %
	Unfinished university degree	6	4.8 %	2	12.5 %
	University degree	81	64.3 %	9	56.3 %
Monthly personal income	< 1000 EUR	39	31 %	8	50 %
	1000 – 2000 EUR	28	22.2 %	4	25 %
	> 2000 EUR	59	46.8 %	4	25 %

Source: compiled by the author, using SPSS by survey data

What is more, the average of customers age is 37 years (see annex 5). According to the differences' of the age the value of each respondent was assigned into three age categories (intervals of the age). The first group was consumers up to 25 years, it is more related to the students or working young people, who do not have a lot of experience in banking sectors and its' services. On the other hand, this group could be potential bank services user for the future, which could increase the competitiveness and stability of the procedures of the financial institution. The second group of respondents according to their age could be described as working with average income consumers between 25 and 35 years old. Finally, the last group of respondents is older than 35 years. Talking about financial institution competitiveness according to e-payments systems, this group of the people are mostly using banking services. They are long – term bank services users, business members or ordinary customers with a highlight of future financial perspectives such as insurance, pension or investment in different assets.

In order to maintain and enhance the competitiveness of the bank toward other financial institutions due to e-payments operations, it is important to ensure banks' customers' needs according to their age. Those three groups could show how different factors can affect consumers' behavior to choose or reject to make e-payments via the separate bank.

Furthermore, as table 2 shows, the demographical factors as marital status, education or monthly income also could influence the selections of usage on e-payments in different financial institutions. The majority of respondents are married or in domestic partnership (44.4 %). According the education the majority has university degree (64.3 %) and even 46.8% of the consumers have higher than 2000 EUR income per month. This distribution was determined as grouping of age variables. There was made three intervals of income per month, which could show the status of respondents, who choose e-payments in different financial institutions. The bank, as financial intermediary could orientate in this group of the customers, which has the higher impact on its competitiveness according to the income per month. Globally view of this indicator could vary because of the economic situation of the country, currency fluctuations or cost of the living. In Lithuania, as you can see from table 2, the majority of respondents could be described as customers with the high income. The result showed that even 46.8% of respondents' income is above 2000 EUR.

They may be interested in:

1. Investment in securities. To increase financial competitiveness, bank as the financial intermediary could attract customers by suggesting better conditions of investment, wide range of investment strategies, consultations and representative result in investment in securities history.
2. Savings. To increase financial competitiveness according to the savings it could be represented new models of savings, better returns and individual plans for each of the customers.
3. Other activities. It could be investment in non-financial attributes such as study foundation, training, pension accumulation.

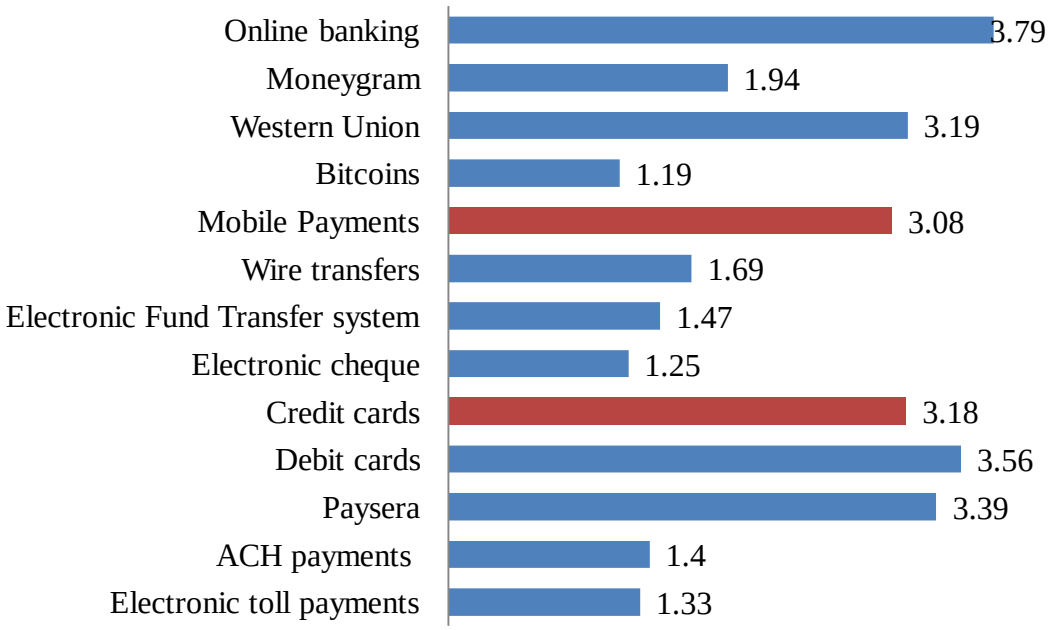
All of these suggestions there are just predictions on what could be done to increase the financial competitiveness of the bank using e-payments. The demographical result showed that potential e-payment user is educated and married or with domestic partnership male or female with a high income. The knowledge of user's profile helps bank to generate the strategy to increase the financial competitiveness according to demographical local data. Also, the development of the financial sector it is important to maintain the potential customers of the bank services. The research of customers, especially customers of banking industry, could show the tendency of major internal and external factors affecting consumers' decision to take different financial institution services. As a result, there is prediction that competitiveness is relate to the selection of e-payments. At the same time e-payments are related to consumers' decision to choose or reject separate financial intermediary. The impact of that has such factors as behavioral tendency and financial implementation.

4. RESEARCH ON IMPACT OF E-PAYMENT VARIETY ON BANK COMPETITIVENESS

The researches of different financial institutions give appropriate information for improvement of competitiveness. They are useful by minimizing the risk, helps to identify the opportunities in the market, consolidate the financial stability and improve few assessments in future operations. The most important benefit of this research is to analyze the factors, which could affect banks' competitiveness according to the impact of rowing variety of e-payments.

4.1. Factors affecting the competitiveness of different financial institutions according to the selection of e-payments

Each of the financial intermediaries offers a wide range of operations related to the e-payments. Consumer as the receiver of the service could choose that alternative of e-payment, which would be most beneficial to his financial and emotional needs. The higher level of customers in separate financial institution will lead to the higher competitiveness among other financial intermediaries.



1 - never; 2 – one time; 3 – from two to five times; 4 – more than 5 times

Source: compiled by the author, using SPSS by survey data

Fig. 9 Means of usage of different types of e-payments

In order to find out the distribution of the customers by e-payment services providers, it is important to measure a proportion of e-payment users. Because of that to the analysis there was only taken those result, which are related to the usage of e-payments.

Figure 9 shows the means of each of the e-payment services from different providers. Consumer could choose from a wide range of e-payments, which could be made over the financial intermediaries as banks, Western Union, Moneygram, Paypal and others. All payments also could be made with the cryptocurrencies, wire transfers or electronic fund transfer system. The descriptive statistics showed that almost the half of the different e-types is more unusable, at the same time, while another part of the results are more usable.

For conviction and confirmation for those predictions there should be made analysis of comparable means. One Sample T-test showed that there is statistically significant difference between the means of different types of e-payments, except two of them – mobile payments and credit cards (see annex 6). Analysis of mobile payments showed that Sig. (2 – tailed) = 0.477 was higher than p – value of 0.05. At the same time analysis showed the same results for credit cards usage, here the Sig. (2 – tailed) = 0.086, what is also higher than p – value of 0.05. The value of One Sample T- test was used of three points. Consequently, all of the means which is higher than the level of three could be represented as more usable than the others. There are six types of e-payments, which have higher mean than three points. Two of them cannot be statistically approved as the more likely to use because of the results of One Sample T-test. So there left only four of the major and most popular e-payment types in Lithuania. It is online banking, debit cards, Paysera and Western Union. The latest one has the least difference from the others, because Sig. (2 – tailed) = 0.047 and is higher than p – value of 0.05, but with a low range of those values. Bank as the financial intermediary provides online banking and debit cards by itself. Looking at this factor, the most competitive financial intermediaries could be only the other banks and institutions, which suggest for the customers the same variety of the e-payments as online banking and debit cards. Although, there are two more types of e-payment with a high mean of the usage. It is international online payment platform that enables to pay over the internet, by cash or mobile payments and Western Union company, that makes global money transfers. Using this data it could be said, that the most competitive financial institutions in Lithuania are EVP International as the new e-payment provider, Western Union and banks.

The analysis of the means showed that consumers generally prefer those three financial intermediaries for e-payment services. As a result, the most competitive financial institutions in Lithuania are banks and globally acting institutions held in local market, because Western Union as the Paysera was introduced and operates in local Lithuania market few years ago. Also the

analysis showed that those institutions and companies are mostly used in Lithuania by the customers that could be recognized as the better level of competition.

The latest result leads to an assumption that investment in increase of competition could be one of the factors affecting the consumers' decision to choose or reject financial intermediary for e-payments. First hypothesis of this analysis is that financial competitiveness is related to the technological achievement in e-payments operations. Due to this fact there was introduced Likert scale into analysis of usefulness and importance of self – service technologies. Attitudes of the consumers were measured by correlation. Firstly there was measured the openness to innovations according to the selection of popular e-payments providers.

Table 3. Correlation of openness to innovations

		Control over daily life	Usage of SST is convenient	Usage of SST is efficient	Service is mobile and free
Control over daily life	Pearson Correlation	1	.634**	.512**	.479**
	Sig. (2-tailed)		.000	.000	.000
	N	126	126	126	126
Usage of SST is convenient	Pearson Correlation	.634**	1	.837**	.697**
	Sig. (2-tailed)	.000		.000	.000
	N	126	126	126	126
Usage of SST is efficient	Pearson Correlation	.512**	.837**	1	.855**
	Sig. (2-tailed)	.000	.000		.000
	N	126	126	126	126
Service is mobile and free	Pearson Correlation	.479**	.697**	.855**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	126	126	126	126

**. Correlation is significant at the 0.05 level (2-tailed).

Source: compiled by the author, using SPSS by survey data

Correlation analysis of the openness to the innovations showed that all of the variables have statistically significant connection between each other. All of the values of Sig. (2 – tailed) are less than p – value of 0.05. What is more, Pearson correlation identifies strong or very strong connection between all the factors, because mostly of the values are higher than the level of 0.06 (see Table 3). What is more, the analysis of these variables means showed that all of these four indicators are more important because the values One Sample T-test are lower than p – value of 0.05 (see Annex 7). This indicates that the more services are developed technologically, the more e-payments are implied as productive and efficient. Furthermore, same results are indicated by correlation of the usefulness of Self – Service Technologies. Value of Sig (2 – tailed) is also lower than the p-value of 0.05 and the majority of the factors related to the usefulness of SST

more important for the customers (see Annex 8). One factor of usefulness to innovations is related to the errors of the usage of new technologies. According to the analysis of means it was recognized that this factor is more likely to have lower value than the average. As a result, it could be said that consumers believes that errors in new technologies are quite rare.

To sum up, investments in technological improvement of the e-payments operations are directly related to the competitiveness of the bank, because it could lead to decisions to use separate and individual financial institution activities such as e-payments.

Additionally, the decision to select or to reject e-payments in different financial institutions could be also related to the factors as ease of use, security or trust of e-payment services and obtained benefits as well. It is a prediction that there is positive correlation between ease of use and obtained benefits. What is more, a higher level in the security of e-payments leads to higher trust in this kind of service.

Firstly, correlation between received benefits of the ease of use of e-payments indicated that Sig (2 – tailed) is less that p-value of 0.05 and indicators of Pearson correlation are higher than 0.06. When value of Pearson correlation fluctuates in interval of [0.6 – 0.8] it represents the strong connection between variables, also when the fluctuations are in the interval of [0.8 - ∞] it represent very strong links between the variables. As a result, the majority of the relevant variables have strong and very strong connection between each other (see Annex 9). Additionally, One Sample T-test showed that there is statistically significant difference between the means of ease of use and obtained benefits by using e-payments, because the value of Sig (2 – tailed) = 0.00 is lower that p-value of 0.05. As a result the means of those factors showed that all of the indicators are more important for the customers. They believe that ease of use will increase their emotional and financial benefits as much as the improvement in simplicity of usage of e-payments. The hypothesis that perceived benefits of usage of e-payments have strong relations with ease of use was confirmed. The higher level of ease of use, the greater and more beneficial service of e-payments will be. Bank as the financial intermediary in order to increase its' own financial competitiveness must to ensure the ease of use of e-payments from the beginning to the end. All the information related to the use of e-payments must be easily found for all of the customers. Instructions of usage of e-payment must be given step by step related to the procedure of e-payments. As a result, all of the benefits related to the usage of e-payment must be obviously presented for the customers in such channels as internet, branches of the banks or even in local media. Increase of ease of use in financial market participants' sector could lead to opinion that I could be as easy as the usual financial services and even more beneficial than the others.

What is more, correlation of trust of e-payments and security indicated Sig (2 – tailed) is less that p-value of 0.05 in the majority of the variables. Coherent assurance of security has direct impact on the trust of financial intermediary. The correlation analysis also showed that there is no statistically significant connection between trust's variables and possibility of transaction fraud or leak of information, because the Sig (2 – tailed) value was higher than the p-value of 0.05 (see Annex 10). One Sample T-test also indicated that there is no statistically significant difference of mans of possibility of transaction fraud, when Sig. (2 – tailed) = 0.737 was higher than p – value of 0.05 and leak of information, when Sig. (2 – tailed) = 0.469 was higher than p – value of 0.05. As a result there could not be said that those two factors are more important rather than unimportant for the customers' decision to select e-payments of different financial intermediaries. The main factors affecting the trust of the – payment operations are improvement of e-payment security according to the traditional payment channels with a possibility to influence the customers' opinion of e-payments security.

To summarize, analysis of factors, which affect the competitiveness of different financial institutions according to the selection of e-payments it could be concluded that the most popular and strongest competition generated financial institutions in Lithuania are banks, Western Union and EVP International. The major indicators which could have the impact of them competitiveness are:

1. **Acceptability of technological achievement.**

Improvement of competitiveness according to the technological readiness to use e-payments must be presented in beneficial way for the customers. It should be related to the daily life of consumers, mobility and freedom.

2. **Factors related to the behavioral satisfaction.**

Result of the research showed that usage of e-payments must satisfy the behavioral customers' needs. Bank or any other institution in order to increase its' competitiveness must indicate the efficiency of the usage on e-payments. For example, during the e-payment operations the customers could see what of the efforts they are getting in time of accomplished actions. In the end of the e-payment, it could be showed the summary of the time, cost, and satisfaction of customer.

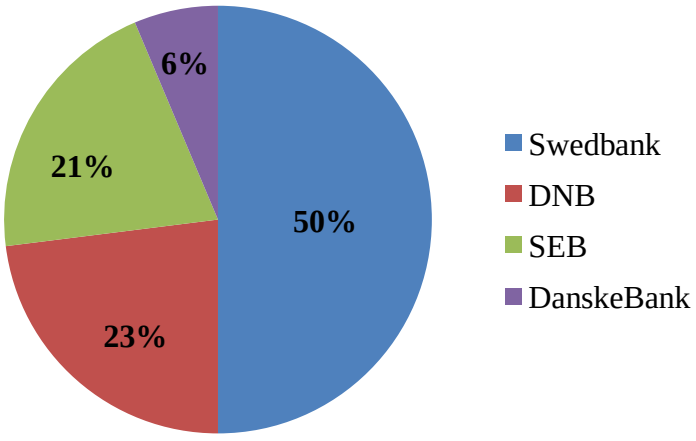
3. **Improvement of security.**

Bank as the financial intermediary has done all of the actions to improve the security of the customers. It uses File Transfer Protocol to ensure the safety of financial data. Most of the financial intermediaries use this kind of the protection.

Although, most of the financial institutions customers do not know what it is or even do not know that this kind of security exist. To represent safety and reliability of it, it must be obviously presented all important information about security protection. One of the suggestions for the financial intermediaries could be compulsory or obligatory introduction of the security by performing e-payment operations.

4.2. Aspects based on the decisions to choose "Swedbank's" e-payment services on the basis of promotion of same services by other financial institutions.

Within the selection of e-payments models that represent the competitiveness of each of the financial institutions a distinction can be made between the banks and the other financial intermediaries. As the review above shows the strongest competition generated financial institutions in Lithuania are banks, Western Union and EVP International. The further analysis will be based on the decisions to choose "Swedbank's" e-payment services on the basis of promotion of same services by other financial institutions, because of the large selection of this bank services according to the result of survey (see Fig. 10). The biggest part of Lithuanian customers' prefers "Swedbank" services. Ranking of the banks according to customers' selection of different financial institution is a way to find out Lithuania's banks competitive advantage. It also could help to define banks' profile, type of positioning, and strategy for competition.



Source: compiled by the author, using SPSS by survey data

Fig. 10 Distribution of consumers according to the selection of the bank

The examination of different types of e-payments popularity among the respondents showed that the most usually usable e-payments are domestic money transfers and payments of accounts. The result has distributed equally, event 93 % of customers prefer these types of services (see Annex 11).

What is more, the examinations of additionally usable services showed that mostly used e-payments are verification of account history and currency exchange. Accordingly, result distributed at 98 % and 79 % (see Annex 11). Therefore, it could be said that banks as the financial intermediaries has the most competitive advantage by the promotion of these four services. What is more education could have a direct impact on bank's competitiveness by using mostly popular types of e-payments. At this time it is domestic and international money transfers, verification of account history and currency exchange.

As a result, descriptive statistics of CrossTabs showed that only two of different types of e-payments have impact of education. Chi – Square Test of the international money transfers showed that there is statistically significant connection of international transfers' usage according to the education of the respondents, because the value of Pearson $\chi^2 = 0.048$, that is less than the p-value of 0.05 (see Table 4). It could be said that customers with higher education is more likely to use e-payments for international money transfers. The prediction is that higher education leads to probability in more responsible activities with broad aspect related to foreign operations. "Swedbank" as the e-payments provider must ensure properly performance of international operations according to the other providers. It should be used platforms which works and is acceptable in global view. Also, the connection of these platforms must be available for two sides of the operation, both provider and receiver as well.

Table 4. Chi-Square Tests of international transfers

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.667[a]	6	.048
Likelihood Ratio	17.537	6	.007
Linear-by-Linear Association	8.806	1	.003
N of Valid Cases	126		

a. 6 cells (42.9%) have expected count less than 5. The minimum expected count is .86.

Source: compiled by the author, using SPSS by survey data

What is more, analysis of the CrossTabs, shows the importance of the percentiles in the table of CrossTabs. Values of “a” and “b” shows if the percentage has statistically significant differences. According to this analysis it was found that selection of international transfers is directly related to the university degree, because there are difference values of “a” and “b” (see Annex 13). It is again confirmed a prediction that education is one of the factors which can affect the international competitiveness.

Secondly, Chi – Square Test of the currency exchange showed that there is statistically significant connection of need of currency exchange according to the education of the respondents, because the value of Pearson $\chi^2 = 0.000$, that is less than the p-value of 0.05 (see Table 5). It represents opposite connection of the selection of e-payments. At this time, customers with a low level of education as secondary degree are more likely to not use e-payment like currency exchange. The reason why it happens could be the same like in international transfer case. There is no demand in the customers group of low education to use international trade activities such as international money transfers, currency exchange or even more activities as trade of securities, taxation and regulatory abroad.

Table 5. Chi-Square Tests of currency exchange

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.848[a]	6	.000
Likelihood Ratio	45.122	6	.000
Linear-by-Linear Association	.001	1	.982
N of Valid Cases	126		

a. 8 cells (57.1%) have expected count less than 5. The minimum expected count is 1.29.

Source: compiled by the author, using SPSS by survey data

All of this data is also approved by the importance of the percentiles in the table of CrossTabs. Values of “a” and “b” shows statistically significant differences between secondary education and usage of currency exchange. A higher proportion of users (33.3 %) which has secondary education are more likely not to use currency exchange (see Annex 14).

On the contrary, using descriptive statistics of Chi – Square test, there was found that there is no more connection between customers’ education and mostly used usual and additional e-payments services. Also, in international money transactions and currency exchanges cases, there

was no difference between the percentages according to the usage of the services, because the values in tabs were found as “a” and “a” as well as “b” and “b”.

As a result the most reliable data is given above. To maintain financial competitiveness and promote the selection of e-payment services in “Swedbank” institution according to other financial intermediaries it must be touched two main factors:

- International accessibility.
- Mobility of international transactions and currency operations.

Those highly educated customers should know that they could make e-payments in “Swedbank” in a global way without the fear of insecurity of immatureness of operations, cancelation of the operation or possibility to reject payments in different currencies.

4.3. Factors increasing the competitiveness of “Swedbank” related to the impact of growing variety of different types of e-payments

Competitiveness of a certain bank could be defined as the ability to control the inflows of the customers according to the demand and the supply of specific services. It is like movements resulted from the consumers’ decision to choose or to refuse “Swedbank’s” services. The competitiveness became a new standard for emerging economies in a global view. Banks with a higher level of competitiveness have also higher probability to be chosen by the customers. As a result, there should be several essential factors increasing the competitiveness in banking sector. This section will be present two approaches to measure and indicate the factors affecting “Swedbank’s” competitiveness.

Table 6. Variables and definition of Panzar and Rosse empirical analytic model.

Bank-specific factors	
Scaling factor	S (f) = price of share x number of shares
Market accommodative factor	I (f) = market participants income
Network factor	N (f) = the number of branches of each bank/total number of bank branches
Risk factor	R (f) = loans/total assets,

Source: compiled according to Kim and Shin, 2013, p. 45

Firstly it could be defined the empirical analytic model based on the Panzar and Rosse methodology. According to this case study, the most important variables for the analytical model in this context are bank – specific factors based on the financial statement. It could be predicted that such factors as asset market share, total income and total assets or even loans might have direct or indirect impact on the "Swedbank's" competitiveness (see Table 6).

Measurement of scaling factor will take market value of the company. At this time it is "Swedbank". There is an upward trend in "Swedbank's" market value over the five years period (see Annex 16). Investors or other financial market participants will be interested in those results because of the purpose to invest or to do e-payments related to deposits, trading securities or other investments services. To increase bank's financial competitiveness it is necessary to give all information for the investment actions. All the banks, as the financial intermediaries, usually receive the same information about the trading of securities. In Lithuania's market "Swedbank" actively provides investment game in "zoom" program. This demo platform is acceptable only for young participants, which already has bank account. One of the suggestions of the "Swedbank' related to its enlargement of competition could be increase of acceptability of this game for a wide range of the market participants. It could be created two weeks trial version for all of the customers. This type of stimulation of competitiveness may attract even more potential future customers.

At the same time market accommodative factor measures income of market participants. Data of the survey showed than even more than 46 % of all respondents generate the income of more than 2000 EUR per month (see Annex 17). Also, 31 % gets less than 1000 EUR income per month and approximately 22 % of the customers receive from 1000 EUR to 2000 EUR. The results indicate that customers of the financial institutions could be described as wealthy with the positive financial stability. According to the competitiveness of "Swedbanks" financial institution and income factor it was found that evaluation of bank's services in three income categories has different impact on perceived usefulness of competitiveness. Analysis of variance indicated that importance of aspects according to the services provided by personal bank is different in various income categories. One Way ANOVA test showed that importance of prices of services has different value depending on income of the person, because $F = 68.486$ and value of $p<0.05$. What is more, reliability is also connected with the income of the customers, because $F = 25.960$ and value of $p<0.05$, speed is also one of the aspects by choosing e-payment services in personal bank, because $F = 12.885$ and finally, safety is differently perceived in various categories of the income because $F = 11.680$ and value of $p<0.05$ (see Annex 17). Based on the following result, there was analyzed Dunnet T3 and Games – Howell test. The data showed that there is

statistically significant difference of prices from services in various categories of the income. Customers which earn less than 1000 EUR are more likely to value the prices of the services (Mean = 5.0). At the same time, better prices of the services are less important (Mean = 3.69) for those customers which income is higher than 2000 EUR (see Annex 17). Similar distribution was found between income factor and reliability of the services of the personal bank. Customers with the lower income are also more likely to rely on the personal bank according to the other financial intermediaries. Dunnet T3 and Games – Howell values indicated that mean of 4.77 in lowest income category, mean of 4 in income category from 1000 EUR to 2000 EUR and mean of 3.37 in highest income category has statistically significant difference between each other (see Annex 17). Moreover, measurement between income and factors of speed and safety in personal bank services valuation indicated that One – Way ANOVA has values of *F (speed)* = 12.885; *F (safety)* = 11.680 and value of $p<0.05$ According to this performance of Dunnet T3 and Games – Howell tests showed that speed and safety are more important for the customers with the average income from 1000 EUR to 2000 EUR (Mean (speed) = 5; Mean (safety) = 5) (see Annex 17).

To sum up, perceived usefulness of personal bank institution is directly related to the income of the customers. The results showed that people, who earn less, are more likely to be satisfied with fluctuations of the prices of services. They prefer lower range of the cost of services in order to rely on it more. At the same time, customers with the average income are more appreciated with the speed and safety of the services. In order to increase "Swedbank's" competitiveness according to the income of the customers, it must be introduced the segmentation of the internal customers. According to this factor there might be proportional tax system for various groups of the customers related to the services they use.

What is more, market accommodative factor could be used for the promotion of separate financial institution competitiveness by different channels. Using this method it could be defined what specifically stimulate customers to use "Swedbank's" services according to their income. Comparable means of the descriptive statistics was analyzed by the test of One Way ANOVA. This test showed that that promotion of the "Swedbank" services is differently perceived in various categories of personal income. The importance of insurance was presented by the tests of Bonferoni and Sheffle, because $F = 36.976$ and value of $p>0.05$. It was found that there is no statistically important difference between means in different income categories, because value of $p>0.05$ (see Annex 18). It could be said that people with different income are same satisfied with the insurance for their actions in the usage of the services. Despite this, the income is statistically significant factor according to customer's anonymity. One Way ANOVA test indicated that is necessary to use Dunnet T3 and Games – Howell tests, because $F = 3.713$ and value of $p<0.05$.

The result showed that customers with the income from 1000 EUR to 2000 EUR (Mean = 5), value their anonymity more than people with the income of more than 2000 EUR (Mean = 4.85) (see Annex 18). What is more, income has statistically significant affect on factors as availability of instructions to use, possibility to make or get transaction in cash, insurance on safety of transactions and other services, taxation or worldwide acceptability. All of these factors was analyzed by Dunnet T3 and Games – Howell tests, because One Way ANOVA represented the results, where the value of $p<0.05$. Availability to the instructions of different services is more important for the customers with the higher income. As a result, it could be said that, customers, which generates the higher income are more likely to use a wide range of the services, which are promoted by the bank. They need more information about the operations and detailed principles of the services they use in order to not suffer from the specific kind of loss. At the same time, respondents with the lower income probably use daily services with low risks of the loss. Because of that, they do not try to find a lot of information of the usage possibilities. As a result, bank, as the financial intermediary, in order to increase its' financial competitiveness has to ensure the all information for the customers with the greater needs. It must be analyzed and presented all detailed information of the services used by the one customer according to his personal needs.

Last but not least, according to Dunnet T3 and Games – Howell tests all other factors are mostly more important for the customers with the average income rather the with the low or even high income.

Table 7. Means of worldwide usage and possibility of get/make transaction in cash in various groups of the income

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Worldwide usage	less than 1000 EUR	39	3.62	1.407	.225	3.16	4.07	1	5
	1000 - 2000 EUR	28	4.71	.460	.087	4.54	4.89	4	5
	more than 2000 EUR	59	3.54	1.222	.159	3.22	3.86	1	5
	Total	126	3.83	1.253	.112	3.60	4.05	1	5
Possibility in cash	less than 1000 EUR	39	2.97	1.564	.250	2.47	3.48	1	5
	1000 - 2000 EUR	28	3.93	1.303	.246	3.42	4.43	2	5
	more than 2000 EUR	59	3.63	1.401	.182	3.26	3.99	2	5
	Total	126	3.49	1.468	.131	3.23	3.75	1	5

Source: compiled by the author, using SPSS by survey data

Acceptability in worldwide usage and possibility to make or get transaction in cash are represented in Table 7. According to this data, it could be said that for customers with the average income it is more important to get or make transactions in cash (Mean = 3.93) (see Table 7). What is more, they prefer worldwide usage of the financial services (Mean = 4.71) (see Table 7). These results could be affected by the economical situation of the country. People with income of less than 1000 EUR, usually do not make difficult and international operations. At the same time, customers with higher than 2000 EUR income usually use more than one financial intermediary. As a result, if one of the financial intermediary is not accepted abroad, it is high probability that another will be. According to this data, "Swedbank" as the financial institution in order to increase its' own financial competitiveness should concentrate in the customers of the average income.

The third important factor which could increase "Swedbank's" financial competitiveness according to Panzar and Rosse empirical analytic model is *network factor*. It is mostly related to the number of bank branches. According to the "Swedbank's" activity in Lithuania, it has 68 branches in different cities of the country. What is more, bank provides services for 89000 corporate and 2 million private clients, from which 1.6 million use online banking and e-payments as well. Previous result indicated that even 400000 users of "Swedbank" are preferring services in physical branches rather than online banking. One of the hypotheses is that it could be affected by the fear of e-payments usage. The third group of Panzar and Rosse empirical analytic model argues that the competitiveness is also affected by the risk factor. Theoretical part of the analysis is also based on the risk management elements. Also, one of the hypothesis states that low level of competitiveness is affected by the fear to use e-payments As a result there must be analyzed risk factor in order to measure the level of competitiveness in separate financial institution.

Firstly, correlation between the risk factors showed that there is statistically significant connection between low level of submission of information and safety of personal information, because Sig. (2 – tailed) = 0.044 that is lower than value of p=0.05. Also, Pearson Correlation indicated that connection between those two variables quite strong because its' value is in the interval of [0.4 – 0.6] (see Table 8). The conclusion of this could be that low level of information is taken as unsafe e-payment method for customers. The competitiveness of the bank, in this case, could be affected by the rejection of services.

What is more, correlation also showed that there is statistically significant connection between confirmation of procedures and low level of submission of information as well, because Sig. (2 – tailed) = 0.000 that is lower than value of p=0.05

Table 8. Correlation between risk factors

		Safety of personal info	Confirmation of operations	Low level of info
Safety of personal info	Pearson Correlation	1	-.122	-.179*
	Sig. (2-tailed)		.174	**.044**
	N	126	126	126
Confirmation of operations	Pearson Correlation	-.122	1	.668**
	Sig. (2-tailed)	.174		**.000**
	N	126	126	126
Low level of info	Pearson Correlation	-.179*	.668**	1
	Sig. (2-tailed)	**.044**	**.000**	
	N	126	126	126

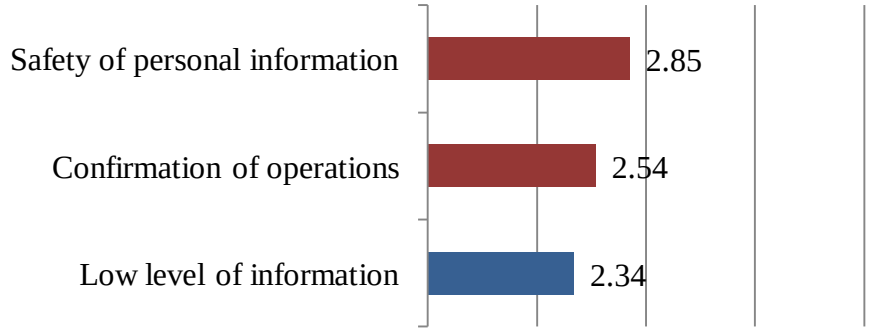
*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: compiled by the author, using SPSS by survey data

At the same time, Pearson Correlation indicated very strong relations between those two variables. The coefficient of it is 0.668, which is included in the interval from 0.6 to 0.8 (see Table 8). In this case, conclusion could be that low level of information is unreliable for customers by making such kind of operations related to the e-payments. As a result, customers need to be sure that their activities were made correctly without any financial loss.

According to the analysis there are three factors, which could negatively affect the competitiveness of the bank as safety of personal information, confirmation of operations and low level of presentence of information.



1 - never; 2 – one time; 3 – from two to five times; 4 – more than 5 times

Source: compiled by the author, using SPSS by survey data

Fig. 11 Means of risk factors affecting competitiveness of financial institutions

One Sample T-test showed that there is statistically significant difference between those three factors (see Annex 19), because the value of $p<0.05$. The descriptive statistics of those three factors indicated that the highest influence on the competitiveness have safety of personal information (Mean = 2.85) and confirmation of operations (Mean = 2.54) (see Fig 11). In order to ensure the better competitiveness among other financial institutions, "Swedbank" must to set up highly – risk customers profile, which could reject the separate bank services.

With reference to the analysis of variance, there was found that safety of personal information is important differently in various categories in marital status, because $F = 19.735$ and $p<0.05$ (see Annex 20). According to Dunnet T3 and Games – Howell test it could be said that importance of safety are more significant for people which are married or with the domestic partnership (Mean = 3.32) (see Annex 20).

These results could be affected by the fact that customers, who already have families are more responsible than the others, because of their marital status. They protect their family financial stability and personal information as well.

According to the analysis of One Way ANOVA, there was also found that confirmation of the operations are needful differently in different categories of marital status, because $F = 48.935$ and $p<0.05$ (see Annex 20). Tests of Dunnet T3 and Games – Howell showed that confirmation of the operations which was made by the customer is mostly necessary for widowers (Mean 5), than for single customers (Mean – 1.83), married or with the domestic partnership (Mean = 1.89) and for divorced people (Mean = 3.53) as well (see Annex 20).

One of the prediction what could influence all of these result could be that people with a high experience of the financial cycle are more likely to avoid all of the possible risks related to the financial statement. If new kind of e-payments will work inappropriate it could be corrected by the protocol of confirmation which was made in the past. According to the demographical data of marital status, those two types related to the possible risk shows that possibly older people distrust in e-payments operation. To satisfy this prediction analysis of variance was made between demographical data of age categories and two risk factors – safety of personal information and confirmation of the operations.

With reference to the analysis of variance, there was found that safety of personal information is important differently in various categories of age, because $F = 9.046$ and $p<0.05$, same results was presented between confirmation of operations and age factors, because $F = 14.496$ and $p<0.05$ (see Annex 21). Although, the predictions that older people more react to the safety was denied because Dunnet T3 and Games – Howell tests showed that people under 25 years (Mean = 3.29) prefer safety of the personal information more that people from 25 to 35

years (Mean = 2.55) and people above 35 years (Mean = 2.71 as well. What is more, Dunnet T3 and Games – Howell tests also showed that confirmation of the operation is more necessary for young people as well (Mean = 3.39) (see Annex 21).

As a results show safety of personal information and confirmation of the operations prefers young married people. It could be said that they consist not only on themselves but also on their families, because of the fear by information leakage. What is more, low financial experience over their life could affect to use more appropriate e-payment methods in suggested by other financial intermediaries.

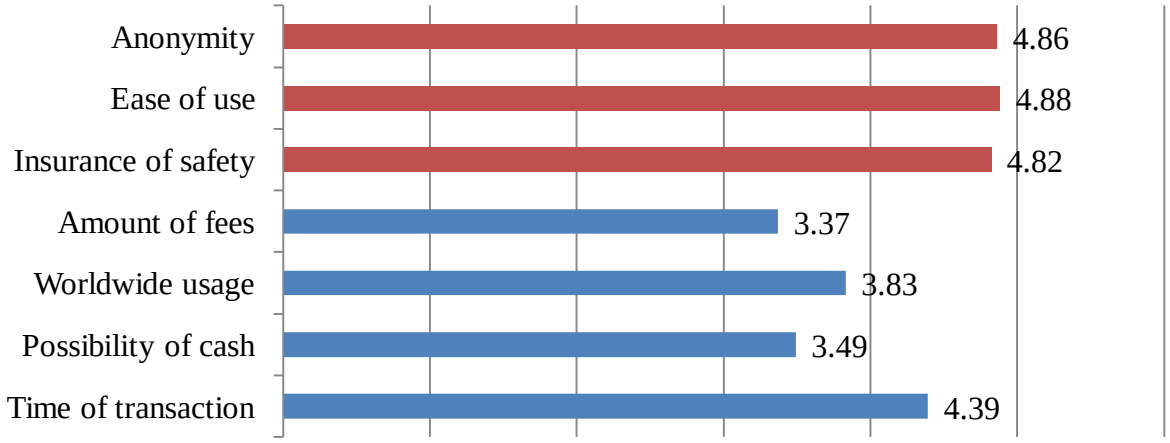
Also, customers are using risk – taking factor to ensure their financial stability. As a result, bank as the financial intermediary, in order to ensure its' financial competitiveness related to the fear to use e-payment operations could suggest for customers virtual training program, which will show the procedures and safety techniques of the transactions in e-payment case. As the analysis showed the profile of customer, which could be affected by the fear of usage is very favorable for the bank. These kinds of customers are young, with families or in domestic partnership. Obviously that in most cases the positive promotion of bank services could attract not even one of the customers, but also all of his family. What is more, young customers are receptive to new technologies and new financial operations as well. The high level of information and promotion of usage will reduce the fear of usage and increase interest in new financial activities.

Last but not least, the following analysis on the research is based on the promotion by the current financial activities. As it was mentioned before, the new potential customer could be affected by a lot of factors which could lead to use or to reject e-payment operations in various financial institutions. Most of the theories states that the most popular promotion methods in financial institutions are:

1. **Anonymity of the transactions.** Customers prefer being anonymous by making transactions over the financial institutions. On the other hand, another part of the customers prefer transactions which state the personal information about both counterparties, because of financial safety by making transactions.
2. **Ease of use.** The theoretical part argues that customers prefer those financial institutions that provide ease of use by making any e-payments.
3. **Insurance of safety.** As it was mentioned before, come of the customers need to be ensured by the confirmation of the operation by making transactions.
4. **Amount of fees.** One of the predictions is that low fees of the transactions will attract a higher amount of new potential customers. At the same time, theory states that low fees of the financial operations could be understood as unreliable or even unsafe.

5. **Worldwide usage.** Over the years it is more and more important to make international e-payments. As a result, method of e-payment is important for both counterparties so the method of transaction must be available for each of the customers.
6. **Discounts or special offers.**
7. **Possibility to make / get transaction in cash.** This factor is related to the financial procedures of the customers, because not all of the transactions could be purified.
8. **Time of transaction.** It is one of the most popular promotion methods in financial system. The theory states that lower time limit of transaction increase the possible number of the potential customers.

All of these eighth predictions must be approved by the statistical data. The last hypothesis states that increase in financial competitiveness among financial institutions could be highly reached by the promotion of ease of use (factor number 2). Measurement of those eight factors means showed that only seven of them are statistically significant. One Sample T-test indicated that discount on e-payment operations has no statistically significant difference among the other factors because, Sig. (2 – tailed) = 0.152 was higher than p – value of 0.05 (see Annex 22). As a result, for the further analysis there will be analyzed seven most reliable and statistically significant factors.



1 - never; 2 – one time; 3 – from two to five times; 4 – more than 5 times

Source: compiled by the author, using SPSS by survey data

Fig. 12 Means of competitiveness promotion methods

Measurement of comparable means showed that the most influencing factor on banks' competitiveness is ease of use as the hypothesis stated, because Mean = 4.88 (see Fig. 12). What is more, One Sample T-test showed that two more reliable and mostly effective factors on banks competitiveness are anonymity of the counterparties (Mean = 4.86) and insurance of safety (Mean = 4.82) (see Fig. 12). At the same time, the lowest impact has mount of the fees (Mean = 3.37). The theoretical view of this factor discussed before is approved by the statistical data as well.

Table 9. Correlation between factors of increase in competitiveness

		Anonymity	Ease of use	Insurance of safety	Fees	Worldwide usage	Possibility of cash	Time
Anonymity	Pearson Correlation	1	.480**	-.193*	-.382**	-.057	-.281**	.149
	Sig. (2-tailed)		**.000**	**.030**	**.000**	.525	**.001**	.097
	N	126	126	126	126	126	126	126
Ease of use	Pearson Correlation	.480**	1	.207*	-.259**	-.346**	-.128	-.004
	Sig. (2-tailed)	**.000**		**.020**	**.003**	**.000**	.154	.966
	N	126	126	126	126	126	126	126
Insurance of safety	Pearson Correlation	-.193*	.207*	1	-.170	-.165	-.150	.691**
	Sig. (2-tailed)	**.030**	**.020**		.057	.065	.093	**.000**
	N	126	126	126	126	126	126	126
Fees	Pearson Correlation	-.382**	-.259**	-.170	1	-.087	.365**	-.244**
	Sig. (2-tailed)	**.000**	**.003**	.057		.333	**.000**	**.006**
	N	126	126	126	126	126	126	126
Worldwide usage	Pearson Correlation	-.057	-.346**	-.165	-.087	1	-.092	.081
	Sig. (2-tailed)	.525	**.000**	.065	.333		.305	.369
	N	126	126	126	126	126	126	126
Possibility of cash	Pearson Correlation	-.281**	-.128	-.150	.365**	-.092	1	-.315**
	Sig. (2-tailed)	**.001**	.154	.093	**.000**	.305		**.000**
	N	126	126	126	126	126	126	126
Time	Pearson Correlation	.149	-.004	.691**	-.244**	.081	-.315**	1
	Sig. (2-tailed)	.097	.966	**.000**	**.006**	.369	**.000**	
	N	126	126	126	126	126	126	126

**. Correlation is significant at the 0.05 level (2-tailed).

*. Correlation is significant at the 0.01 level (2-tailed).

Source: compiled by the author, using SPSS by survey data

On the other hand, low mean of amount of the fees could be also affected by the other promotion methods. Factors mostly used to promote financial institution competitiveness were measured by correlation. According to the amount of the fees factor analysis of correlation showed that:

- There is statistically significant negative low connection with anonymity, because value of p=0.000 and Pearson Correlation = -0.382
- There is statistically significant negative low connection with ease of use, because value of p=0.03 and Pearson Correlation = -0.259
- There is statistically significant positive low connection with possibility to make or get transaction in cash, because value of p=0.000 and Pearson Correlation = 0.365
- There is statistically significant negative low connection with time of transaction, because value of p=0.006 and Pearson Correlation = -0.244 (see Table 9)

All of these result approved that amount of the fees has lower impact of the increase in competitiveness. Analysis also indicated that mostly all of the factors have negative or positive relations, but only in a low level. Although, correlation also indicated that statistically significant positive and high connection is between insurance of safety and time of transaction, because value of p=0.000 and Pearson Correlation = 0.691 (see Table 9). It could be said that increase in insurance of safety will affect the increase of time of transaction. In other words, customers which prefer and require insurance of safety will assess fast transaction time. As a result, bank as the financial intermediary in order to increase the competitiveness of the bank must be sure that time of transaction has the same value as insurance of safety by making transactions, because those two variables are closely related to each other.

One of the suggestion for the "Swedbank" in order to increase its' own financial competitiveness will be introduction of new insurance system closely related to the time of transaction. It could be offered for the customer several types of transaction speed and insurance level of safety. Faster transactions could be insured by safer systems. Also, those financial procedures could be taxed differently as higher taxation on faster operations, because according to the correlation analysis it has statistically significant low negative relations, because value of p= 0.006 and Pearson Correlation = -0.244 (see Table 9). Measurement of correlation on time of transaction and amount of the fees shows that higher taxation of the operations will propose faster procedures of financial services. This type of increase in competitiveness could be reached by the possibility to choose for the customer. It will have affect on such factors already discussed in theoretical part as no pressure on usage, possibility to do all action by own and possibility to

choose from several alternative actions. In this case, it will be reached customers management approach.

Finally, it is important to measure what kind of competitiveness promotion methods will affect the customers by demographical data. According to the previous analysis there was found that the highest impact on the financial institution competitiveness has ease of use (Mean= 4.88).

According to this it is important to know what factors will be most appropriate in different customers profiles before making action of increase in financial institution competitiveness.

Analysis of variance showed that according to test of Sheffle and Bonferoni insurance of safety is has the same impact in different age categories (see Annex 23). At the same time, factors of customers anonymity and ease of use has statistically significant difference between different groups of the age, because *F(anonymity)* = 3.959; *F(ease of use)* = 8.396 and value of $p<0.05$ (see Annex 23). Measurement of Dunnet T3 and Games-Howell tests showed that there is statistically significant difference between utility of anonymity during transactions in various age categories. Analysis indicated that middle age (Mean = 5) customers group prefers anonymity most regarding to young customers category (Mean = 4.76) or older customers category (Mean = 4.85). What is more, Dunnet T3 and Games-Howell also indicated that ease of use by making transaction are mostly important for customers over 35 years (Mean 5) (see Annex 23).

Another analysis of variance by using marital status showed that there is no statistically significant difference between ease of use and marital status, because comparing the means by Sheffle and Bonferoni test, the value of p was higher than 0.05. On the other hand, Dunnet T3 and Games-Howell test showed that factor of anonymity if preferred by the married customers or people with the domestic partnership (Mean = 4.86) among the other marital status categories (see Annex 24). At the same time, Dunnet T3 and Games-Howell test indicated that single people (Mean = 4.83) needs insurance of safety more that the other groups of marital status (see Annex 24).

Table 10. Means of preference of anonymity during transaction in income categories

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
less than 1000 EUR	39	4.77	.427	.068	4.63	4.91	4	5
1000 - 2000 EUR	28	5.00	.000	.000	5.00	5.00	5	5
more than 2000 EUR	59	4.85	.363	.047	4.75	4.94	4	5
Total	126	4.86	.351	.031	4.80	4.92	4	5

Source: compiled by the author, using SPSS by survey data

Those two analyses of One Way ANOVA showed that differences of demographical data according to factors related to increase in financial institution competitiveness are mostly noticeable in factor of customer' anonymity. Regarding to this "Swedbank" as the financial intermediary must satisfy the needs of anonymity for customers, which is married or in domestic partnership between 25 – 35 years old. What is more One Way ANOVA of Dunnet T3 and Games – Howell test also showed that anonymity is also one of the most important factor for customers which generated income from 1000 EUR to 2000 EUR (see Table 10). As a result the customer profile of preference of anonymity could be named as young men or women with the averagely income and possibility of growing family in married or domestic partnership of marital status.

To summarize all of this analysis, factors increasing the competitiveness of "Swedbank" related to the impact of growing variety of different types of e-payments could be as following:

1. **Market accommodative factor related to the income of customer**. Perceived usefulness of personal bank institution is directly related to the income of the customers.
2. **Risk factor**. As the previous analysis showed, young people are more likely to feel the fear of unsafe operations possibility. Management of this factor will lead "Swedbank" to high competition level among other financial institutions.
3. **Direct factors of increase in competitiveness of "Swedbank".** The analysis showed that higher impact of banks competitiveness has factors as anonymity during transaction, ease of use and insurance of the safety. Those three indicators must be satisfied in order to satisfy the needs of the customers and increase in competitiveness at the same time.

The main idea of the previous analysis is that in order to increase banks financial competitiveness it must be analyzed the reliable profile of the customer. These results could help to orientate into the right group of the customers without any potential loss of competition management. In financial sector, there are several types of the customers according to their demographical data and different needs. According to this factor, there must be used various types of the strategies related to the increase in competitiveness, because each of them could affect customers perception of use differently – in positive or in negative way.

CONCLUSIONS AND RECOMENDATIONS

Theoretical analysis of impact on banks competitiveness related to the increase of e-payments and research of the financial institutions customers' perception of use indicated statistically significant conclusions which lead to reasonable suggestions of improvement in competitiveness by bank.

CONCLUSIONS:

1. According to the review of the scientific literature it could be concluded that the increase in technological development leads to expansion of alternative services. Therefore, all e-payments are based on financial and technological development, which effects the refusal of traditional services replacing them by new progressive systems.
2. Theoretical models of e-payments management showed that the most important constructs in the selection of e-payments are: perceived ease of use, functionality, reliability, privacy and financial price perspective.
3. The analysis of the scientific literature related to the e-payments showed that models describing user path towards self-determination to use of e-payments, is complementary. Initial, because over time they are evolving and expanding into more complex and detailed models and even united into a single theory. This means that the e-payments adaptation process among consumers is not yet fully formed.
4. According to scientific literature the fundamental indicators determining the changes of bank' sustainability are risk taking factor which affects financial institution profitability, level of efficiency and mostly important factor of competitiveness.
5. The results of the financial research showed that potential e-payment user is educated, highly income generated, married or in domestic partnership men or woman.
6. Most competitive financial intermediaries of e-payments operations in Lithuania are EVP International, Western Union and banks, which acts globally, but is held in local financial market.
7. The results of the research showed that major indicators which could have an impact of financial institution competitiveness are acceptability of technological achievement, factors related to behavioral satisfaction and improvement in security.

8. Financial institutions in order to increase their own competitiveness must to ensure the ease of use of the e-payment from beginning to end. All information related to the usage of online operations must be simple available for the customers.
9. There are two main factors that must be approved by the institution in order to increase financial competitiveness by providing e-payments – international accessibility and mobility of international transactions and currency operations.
10. Three main factors that could negatively affect the competitiveness of the bank are safety of personal information, confirmation of information and low level of persistence of information.
11. Result of the research showed that perceived security in e-payments is positively associated with consumers' trust of e-payments.
12. Statistical data indicated that education has direct impact on bank's competitiveness by using mostly popular types of e-payments.

RECOMMENDATIONS:

1. **Demo platform for new financial activities.** One of the suggestions for the promotion of banks competitiveness will be financial game acceptable for all of the market participants for a specific period of time. It must represent safety, ease of use and worldwide acceptability. It could be as stimulation for current customers to use more financial activities or stimulation for new customers to start to use services of separate financial institution.
2. **Safety system related to the time of e-payments.** Faster transactions of e-payments operations could be insured by safer systems. What is more, taxation of this approach could be also taxed differently and customer could choose by itself what he need. At the same time, it will be satisfied the factor of possibility to choose.
3. **Applications of safety**. As the result of the research showed, competitiveness of the financial institution are closely related to the risk management factor and fear of use. As a result one of the suggestion will be to introduce the applications or programs for the customers of the bank by which they could verify whether their devices as safe enough to make e-payment operations.
4. **Opportunity of development**. Network factor showed that the number of the branches has positive impact of banks competitiveness. As a result at the financial stability of institution it must be created new branches to implement the service sector.

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Čeponytė L. *Impact of increasing e-payment variety on bank competitiveness* / Financial markets master thesis. Supervisor doc. dr. M. Lanskoronskis. – Vilnius: University of Mykolas Romeris, Business and Media School 2015.

ANNOTATION

This scientific research analyzed and evaluated the influence of e-payment for banks' competitiveness, according to impact of growing variety of e-payments for financial indicators of the banks. According to Panzar and Rosse models, TAM and UTAUT theories and also innovation diffusion curves it was analyzed selection of e-payments and the impact on the financial institution competitiveness. Methodology of demographical data and statistical analysis with SPSS of obtained result indicated the peculiarities of different types of e-payments and general aspects of competition indicators and their influence of banks operations.

Key words: e-payments, financial competitiveness, consumer behavior

Čeponytė. L. *Didėjančios elektroninių atsiskaitymų įvairovės įtaka banko konkurencingumui* / Finansų rinkų magistro baigiamasis darbas. Vadovas doc. dr. M. Lanskoronskis. – Mykolo Romerio Universitetas, Verslo ir Medijų mokykla, 2015.

ANOTACIJA

Šio mokslinio darbo analizė reprezentuoja elektroninių atsiskaitymų įtakos vertinimą bankų konkurenciniam pranašumui. Remiantis teoriniais modeliai tokiais kaip TAM ir UTAUT teorijos, Panzar ir Rosse pristatytais modeliais, bei inovacijų kreivės analize mokslinio darbo metu buvo nustatyti elektroninių atsiskaitymų tipai, jų įtaka finansinių institucijų konkurencingumui ir ateities perspektyvų vertinimas. Tyrimo demografinių rodiklių metodologija nustato potencialaus finansinės institucijos kliento profilį, o statistinė analizė naudojant SPSS programą identifikuoja statistiškai reikšmingus ryšius ar skirtumus tarp kintamųjų lemiančių konkurencijos didinimą ir poveikį vartotojui.

Pagrindiniai žodžiai: e-atsiskaitymai, finansinis konkurencingumas, vartotojo elgsena

Čeponytė L. *Impact of increasing e-payment variety on bank competitiveness* / Financial markets master thesis. Supervisor doc. dr. M. Lanskoronskis. – Vilnius: University of Mykolas Romeris, Business and Media School 2015.

SUMMARY

After commercialization the opportunities of internet usage have increased numerous times. That also affect financial sector. One of the newest and mostly used service in today's financial word is self – services. The big part of it could be excluded as electronic payment system. More and more alternatives of this payment method are growing up. As a result banks could suffer from that reason because of the competitors of the market. According to this the main aim of the scientific research is to identify the impact of increasing e-payments variety on banks competitiveness. Also the object is the analysis of impact for bank competitiveness influenced by growing variety of e-payments. The main tasks of the study are: to analyze the theoretical aspects of e-payments management, to find out the main similarities and differences between different types of e-payments, to understand impact of e-payments system for the banks, to analyze the factors affecting the competitiveness of the financial institution, to measure the links between customers perception of ease of use and promotion methods of competitiveness, to estimate main factors of increase in competitiveness availability. The methodology of master thesis: systematic analysis of the scientific literature, the analysis of the secondary data: information from the internet and statistical data and systematization, statistical analysis of research result by SPSS, comparison and summary of the results. The main factors which were found in the research are that most common financial competitors in Lithuania are EVP International, Western Union and banks. Also increase in competitiveness could be affected by behavioral, financial and demographical consumers' factors. Control of those three indicators could lead to a competitive sustainability and financial dominance in the market.

Čeponytė. L. *Didėjančios elektroninių atsiskaitymų įvairovės įtaka banko konkurencingumui* / Finansų rinkų magistro baigiamasis darbas. Vadovas doc. dr. M. Lanskoronskis. – Mykolo Romerio Universitetas, Verslo ir Medijų mokykla, 2015.

SANTRAUKA

Elektroninių operacijų sklaida pasaulyje turi didelę reikšmę, didėjant vartotojų poreikiams atsiranda naujos sistemos pakeičiančios įprastus atsiskaitymo būdus. Viena iš populiariausių paslaugų šiuolaikinėje visuomenėje yra savitarnos technologijos, kurios teigiamai paveikė elektroninių atsikaitymų atsiradimą. Tai lėmė finansinių institucijų konkurencijos didėjimą. Vartotojui, kaip finansinių institucijų potencialiam klientui yra svarbu teikiamų paslaugų kokybė ir naujumas, todėl šio mokslinio darbo tikslas yra nustatyti elektroninių atsiskaitymų įtaką bankų konkurencingumo atžvilgiu, analizuojant vartotojo požiūrį. Taip pat Darbo objektas yra statistinė analizė paremta banko konkurencingumo judėjimu dėl elektroninių atsiskaitymų įvairovės didėjimo. Pagrindinės darbo užduotys yra: išanalizuoti teorinius aspektus paremtus elektroninių atsiskaitymų valdymu, nustatyti skirtingų elektroninių atsiskaitymų tipų panašumus ir skirtumus, suprast kokią įtaką bankams daro elektroninių atsiskaitymų didėjimas, išanalizuoti faktorius lemiančius konkurencingumo didėjimą arba mažėjimą tarp kelių finansinių institucijų, išmatuoti ryšį tarp vartotojų suvokiamo paslaugų naudojimo paprastumo ir konkurencingumo skatinimo metodų, bei galiausiai nustatyti tinkamus konkurencingumo didinimo metodus vartotojų tarpe. Tyrimo metodologija paremta sistematine mokslinės literatūros analize, antrinės informacijos vertinimu, vartotojų tyrimu, bei gautų rezultatų analizavimu naudojantis SPSS programą, bei gautų rezultatų palyginimu ir išvadų pateikimu. Gauti rezultatai parodė, kad pačios populiariausios finansinės institucijos teikiančios vartotojams reikalingas ir populiarias elektrininių atsiskaitymų paslaugas yra „EVP International“ (Paysera sistema), Western Union ir dauguma Lietuvoje įsikūrusių bankų. Taip pat buvo nustatyta, kad finansinis konkurencingumas gali būti teigiamai paveiktas emocinių, demografinių ir finansinių faktorių susietų su vartotojų finansiniu stabilumu. Galiausiai, galima teigti, kad šių trijų faktorių analizė ir kontrolė užtikrina pasirinkto banko konkurencinį tvarumą ir finansinį dominavimą rinkoje.

ANNEXES

ANNEX 1

QUESTIONNAIRE

Thank you for agreeing to take part in my survey about the impact of growing variety of e-payments for bank competitiveness. I am conducting this survey in en effort to find out factors influencing consumers to select bank as financial intermediary for e-payment services rather than other financial institutions. Please, follow the instructions carefully and it should take only few minutes for you to finish.

1. Have you personally used e-payments in last 12 month? (If you answer "No", please skip to the question number 12)
    - Yes
    - No
2. How often you personally use these kinds of e-payments?

	Never	One time	2 – 5 times	> 5 times
• Online banking				
• Moneygram				
• Western Union				
• Bitcoins				
• Mobile Payments				
• Wire transfers				
• Electronic Fund Transfer system				
• Electronic cheque				
• Credit cards				
• Debit cards				
• Paysera				
• ACH payments The Automated Clearing House				
• Electronic toll payments				

3. Please express your personal opinion regarding the statements listed below, when 1- strongly disagree, 5 – strongly agree (use X for marking).

	1	2	3	4	5
Technology gives people more control over their daily lives					
Technology based services are much more convenient to use					
Technology makes you more efficient in your occupation					
Technology gives freedom and mobility					

4. Please express your personal opinion regarding the statements listed below, when 1- strongly disagree, 5 – strongly agree (use X for marking).

	1	2	3	4	5
SST require little work					
Using SST I can handle with my needs on my own					
Using SST I can make my own choices and decisions					
I believe that SST errors are quite rare					
Easy to get SST to do what I want it to do					

5. Please express your personal opinion regarding the statements listed below, when 1- strongly disagree, 5 – strongly agree (use X for marking).

	1	2	3	4	5
BENEFITS:					
E-payments save time and cost					
E-payment system is convenient					
The billing and transaction process are accurately handled on e-payment system					
Speed of e-payment system flow is faster than traditional payment system					

TRUST:					
E-payment system can protect my privacy					
E-payment system will not lead to transaction fraud					
Confidential information is delivered safely to customers					
The risk associated with e-payment system is low					
EASE OF USE:					
The structure and contents of the e-payments are easy to understand					
Learning to use an e-payment is easy					
I feel innovating by using e-payment system					
I can help other people to use e-payments because of the ease of use					
SECURITY:					
I am concerned about my security when using an e-payment system					
Matters of security have significant influence on me in using an e-payment system					
E-payment system is safer than traditional payment channels					
E-payment system seems to fail at worst possible time					
If you provide information to a machine or over the internet, you can never be sure it really gets to right place					

6. Do you personally use e-payment system on online banking? (If you answer "No" please skip to the question number 12) (Use "X" for marking).
    - Yes
    - No
7. Please, indicate which bank's e-payment system do you personally use:

_____

8. What kind of e-payment services you personally use?

Domestic money transfers	YES	NO
International money transfers	YES	NO
Payment of accounts	YES	NO
Payment of public transport	YES	NO
Payments of leasing	YES	NO
Parking fees	YES	NO
Shopping services	YES	NO

9. What kind of e-payment services you personally use additionally?

Currency exchange	YES	NO
Account history check	YES	NO
Loan applications	YES	NO
Operations related to deposit	YES	NO
Trading in securities	YES	NO
Pension accumulation	YES	NO
Insurance services	YES	NO

10. Please express your personal opinion regarding the statements listed below of yours personal bank services, when 1- strongly disagree, 5 – strongly agree (use X for marking).

	1	2	3	4	5
E-payments prices are better that other services providers					
E-payment is more convenient to use that other payments methods					
I value speed in my banking transactions over the internet					
I can rely on my e-payment safety and privacy					
I can do e-payment procedures without under pressure					

11. Please express your personal opinion regarding the statements listed below of yours personal bank services, when 1- strongly disagree, 5 – strongly agree (use X for marking).

	1	2	3	4	5
You do not consider it safe giving your personal information over e-payments					
Any e-payments should be confirmed later with something in writing document					
There is less or even no information how to do e-payments over my bank					

12. Please express your personal opinion regarding the statements listed below of criteria's which could influence you decision to choose type of e-payment, when 1- strongly disagree, 5 – strongly agree (use X for marking).

	1	2	3	4	5
You prefer anonymity doing transactions on e-payments					
Instructions to use / Ease of use					
Insurance of safety of the transaction					
Amount of the fees					
Acceptance of worldwide use					
Discounts, special offers for using e-payment type					
Possibility to make or get transaction in cash					
Time of transaction					

13. What is your gender?
    - Female
    - Male
14. Please indicate your age

    _____

15. Please indicate your nationality

    _____

16. What is your marital status?
    - Single

- Married or domestic partnership
- Divorced
- Widower
- Other (*fill by yourself)* _____

17. What is your education?

- General education
- Vocational training
- Secondary education
- Unfinished collage degree
- Collage degree
- Unfinished university degree
- University degree

18. Please indicate your personal income over one month (in Euros)

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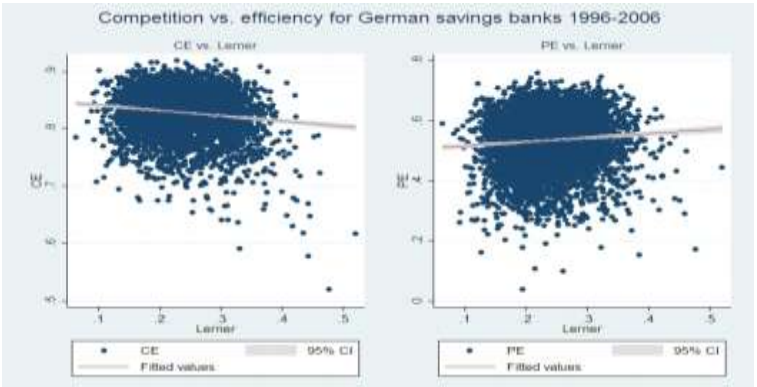
19. Please indicate your nationality

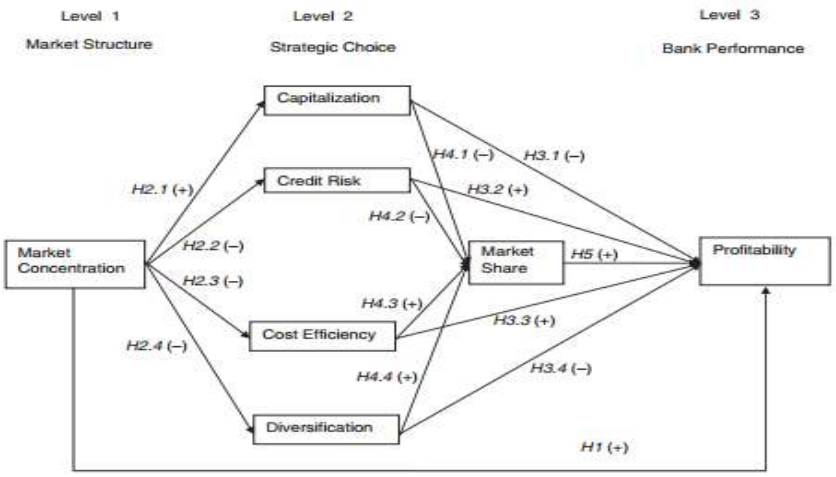
ANNEX 2



Source: Koetter, 2008, p.16

Fig. 2 The relation between efficiency and market power

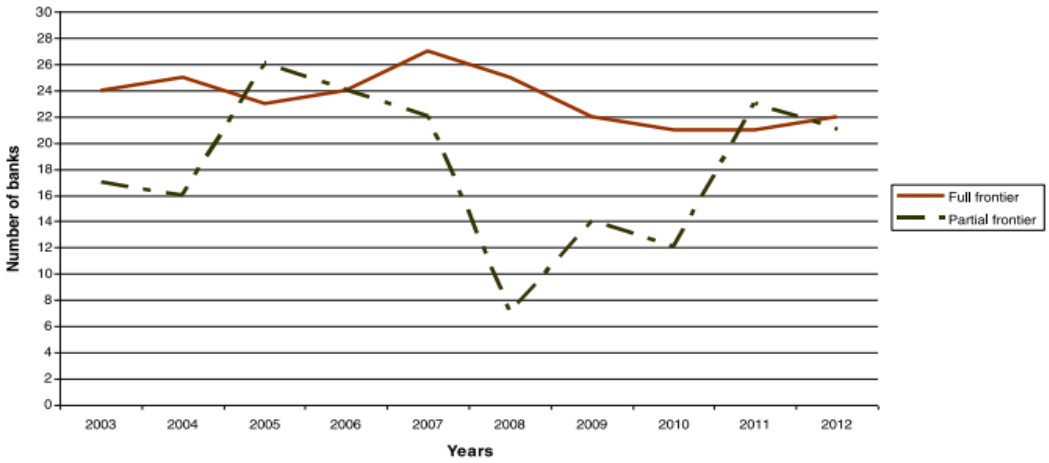
ANNEX 3



Source: Belkhaoui et al., 2013, p. 540

Fig. 2 Conceptual model of performance: causal relationship between market structure, strategic choice, market share and bank performance

ANNEX 4



Source: Matousek, Tzeremes, 2015, p. 7

Fig. 3 Diachronic representation of the number of banks with efficiency scores above samples' average efficiency value

ANNEX 5

Table 1. Mean of respondents age

N	Valid	126
	Missing	0
Mean		37.58

Source: compiled by the author, using SPSS by survey data

ANNEX 6

Table 1. One – Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Online banking	126	3.79	.406	.036
Moneygram	126	1.94	.846	.075
Western Union	126	3.19	1.064	.095
Bitcoins	126	1.19	.547	.049
Mobile payments	126	3.08	1.250	.111
Wire Transfers	126	1.69	.784	.070
Electronic Fund Transfer System	126	1.47	.909	.081
Electronic cheque	126	1.25	.579	.052
Credit cards	126	3.18	1.183	.105
Debit cards	126	3.56	.934	.083
Paysera	126	3.39	.810	.072
ACH payments	126	1.40	.621	.055
Electronic toll payments	126	1.33	.604	.054

Source: compiled by the author, using SPSS by survey data

Table 2. One – Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Online banking	21.926	125	.000	.794	.72	.87
Moneygram	-14.109	125	.000	-1.063	-1.21	-.91
Western Union	2.010	125	.047	.190	.00	.38
Bitcoins	-37.120	125	.000	-1.810	-1.91	-1.71
Mobile payments	.713	125	.477	.079	-.14	.30
Wire Transfers	-18.737	125	.000	-1.310	-1.45	-1.17
Electronic Fund Transfer System	-18.907	125	.000	-1.532	-1.69	-1.37
Electronic cheque	-33.863	125	.000	-1.746	-1.85	-1.64
Credit cards	1.733	125	.086	.183	-.03	.39
Debit cards	6.774	125	.000	.563	.40	.73
Paysera	5.391	125	.000	.389	.25	.53
ACH payments	-28.992	125	.000	-1.603	-1.71	-1.49
Electronic toll payments	-31.102	125	.000	-1.675	-1.78	-1.57

Source: compiled by the author, using SPSS by survey data

ANNEX 7

Table 1. One – Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Higher level of control	126	4.04	.784	.070
Higher level of confidence	126	3.75	1.050	.094
Higher efficiency	126	4.05	1.270	.113
Higher level of freedom and mobility	126	4.29	1.225	.109

Source: compiled by the author, using SPSS by survey data

Table 2. One – Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Higher level of control	14.889	125	.000	1.040	.90	1.18
Higher level of confidence	7.974	125	.000	.746	.56	.93
Higher efficiency	9.257	125	.000	1.048	.82	1.27
Higher level of freedom and mobility	11.777	125	.000	1.286	1.07	1.50

Source: compiled by the author, using SPSS by survey data

ANNEX 8

Table 1. Correlation of usefulness of SST

		Less work on SST	Helps handle with needs	Decisions making privacy	Rare errors	Satisfaction of needs
Less work on SST	Pearson Correlation	1	.734**	.714**	.658**	.650**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	126	126	126	126	126
Helps handle with needs	Pearson Correlation	.734**	1	.898**	.534**	.619**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	126	126	126	126	126
Decisions making privacy	Pearson Correlation	.714**	.898**	1	.490**	.611**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	126	126	126	126	126
Rare errors	Pearson Correlation	.658**	.534**	.490**	1	.436**

	Sig. (2-tailed)	.000	.000	.000		.000
	N	126	126	126	126	126
Satisfaction of needs	Pearson Correlation	.650**	.619**	.611**	.436**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	126	126	126	126	126

**. Correlation is significant at the 0.05 level (2-tailed).

Source: compiled by the author, using SPSS by survey data

Table 2. One – Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Less work on SST	126	3.83	1.111	.099
Helps handle with needs	126	4.32	1.040	.093
Decisions making privacy	126	4.39	.903	.080
Rare errors	126	2.60	1.020	.091
Satisfaction of needs	126	3.80	1.403	.125

Source: compiled by the author, using SPSS by survey data

Table 2. One – Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Less work on SST	8.343	125	.000	.825	.63	1.02
Helps handle with needs	14.214	125	.000	1.317	1.13	1.50
Decisions making privacy	17.263	125	.000	1.389	1.23	1.55
Rare errors	-4.365	125	.000	-.397	-.58	-.22
Satisfaction of needs	6.413	125	.000	.802	.55	1.05

Source: compiled by the author, using SPSS by survey data

ANNEX 9

Table 1. One – Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Time and cost safety	126	4.53	.826	.074
Convenient	126	4.24	.871	.078
Orderly billing and transactions	126	4.15	1.066	.095
High speed	126	4.34	.896	.080
Easy structure	126	3.87	1.073	.096
Easy learning	126	4.10	1.286	.115
Innovating	126	4.39	.955	.085
Can help other	126	4.10	1.445	.129

Source: compiled by the author, using SPSS by survey data

Table 2. Correlation between obtained benefits and ease of use of e-payments

		Time and cost safety	Convenient	Orderly billing and transactions	High speed	Easy structure	Easy learning	Innovating	Can help other
Time and cost safety	Pearson Correlation	1	.856**	.771**	.747**	**.699****	**.750****	**.273****	**.728****
	Sig. (2-tailed)		.000	.000	.000	**.000**	**.000**	**.002**	**.000**
	N	126	126	126	126	**126**	**126**	**126**	**126**
Convenient	Pearson Correlation	.856**	1	.857**	.777**	**.649****	**.665****	**.215***	**.707****
	Sig. (2-tailed)	.000		.000	.000	**.000**	**.000**	**.016**	**.000**
	N	126	126	126	126	**126**	**126**	**126**	**126**
Orderly billing and transactions	Pearson Correlation	.771**	.857**	1	.934**	**.807****	**.835****	**.445****	**.837****
	Sig. (2-tailed)	.000	.000		.000	**.000**	**.000**	**.000**	**.000**
	N	126	126	126	126	**126**	**126**	**126**	**126**
High speed	Pearson Correlation	.747**	.777**	.934**	1	**.886****	**.895****	**.582****	**.908****
	Sig. (2-tailed)	.000	.000	.000		**.000**	**.000**	**.000**	**.000**
	N	126	126	126	126	**126**	**126**	**126**	**126**

Easy structure	Pearson Correlation	**.699****	**.649****	**.807****	**.886****	1	.855**	.416**	.854**
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**		.000	.000	.000
	N	**126**	**126**	**126**	**126**	126	126	126	126
Easy learning	Pearson Correlation	**.750****	**.665****	**.835****	**.895****	.855**	1	.732**	.968**
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**	.000		.000	.000
	N	**126**	**126**	**126**	**126**	126	126	126	126
Innovating	Pearson Correlation	**.273****	**.215***	**.445****	**.582****	.416**	.732**	1	.756**
	Sig. (2-tailed)	**.002**	**.016**	**.000**	**.000**	.000	.000		.000
	N	**126**	**126**	**126**	**126**	126	126	126	126
Can help other	Pearson Correlation	**.728****	**.707****	**.837****	**.908****	.854**	.968**	.756**	1
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**	.000	.000	.000	
	N	**126**	**126**	**126**	**126**	126	126	126	126

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: compiled by the author, using SPSS by survey data

Table 3. One – Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Time and cost safety	20.805	125	.000	1.532	1.39	1.68
Convenient	15.954	125	.000	1.238	1.08	1.39
Orderly billing and transactions	12.114	125	.000	1.151	.96	1.34
High speed	16.805	125	.000	1.341	1.18	1.50
Easy structure	9.131	125	.000	.873	.68	1.06
Easy learning	9.557	125	.000	1.095	.87	1.32
Innovating	16.329	125	.000	1.389	1.22	1.56
Can help other	8.510	125	.000	1.095	.84	1.35

Source: compiled by the author, using SPSS by survey data

ANNEX 10

Table 1. One – Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Protection of privacy	126	3.99	1.230	.110
Low transaction fraud	126	3.18	1.031	.092
Safely delivered info	126	3.75	1.041	.093
Low risk	126	3.21	.765	.068
High level of security	126	3.83	.886	.079
Matters of security	126	3.89	.860	.077
Safer than traditional	126	3.52	.827	.074
Failures possibility	126	3.03	1.058	.094
Leak of info	126	2.93	1.104	.098

Source: compiled by the author, using SPSS by survey data

Table 2. One – Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Protection of privacy	9.056	125	.000	.992	.78	1.21
Low transaction fraud	1.988	125	.049	.183	.00	.36
Safely delivered info	8.133	125	.000	.754	.57	.94
Low risk	3.143	125	.002	.214	.08	.35
High level of security	10.455	125	.000	.825	.67	.98
Matters of security	11.602	125	.000	.889	.74	1.04
Safer than traditional	7.003	125	.000	.516	.37	.66
Failures possibility	.337	125	**.737**	.032	-.15	.22
Leak of info	-.726	125	**.469**	-.071	-.27	.12

Source: compiled by the author, using SPSS by survey data

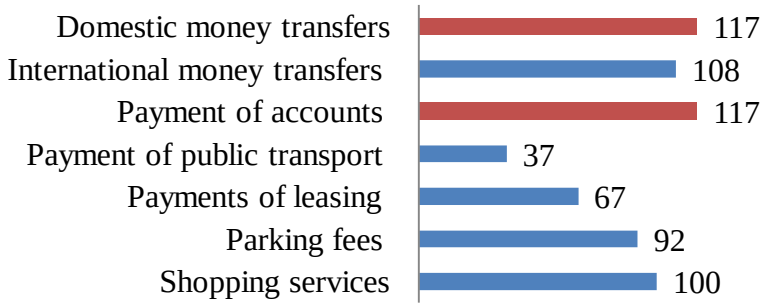
Table 2. Correlation between obtained benefits and ease of use of e-payments

		Privacy	Fraud	Safe delivery	Low risk	Concerned of security	Matters of security	Safer than traditional	Failures possibility	Leak of info
Privacy	Pearson Correlation	1	.620**	.667**	.486**	**.667****	**.748****	**.641****	**-.190***	**-.183***
	Sig. (2-tailed)		.000	.000	.000	**.000**	**.000**	**.000**	**.033**	**.040**
Fraud	Pearson Correlation	.620**	1	.885**	.832**	**.745****	**.826****	**.611****	**-.269****	**-.424****
	Sig. (2-tailed)	.000		.000	.000	**.000**	**.000**	**.000**	**.002**	**.000**
Safe delivery	Pearson Correlation	.667**	.885**	1	.890**	**.621****	**.729****	**.521****	**-.385****	**-.482****
	Sig. (2-tailed)	.000	.000		.000	**.000**	**.000**	**.000**	**.000**	**.000**
Low risk	Pearson Correlation	.486**	.832**	.890**	1	**.645****	**.741****	**.507****	**-.325****	**-.408****
	Sig. (2-tailed)	.000	.000	.000		**.000**	**.000**	**.000**	**.000**	**.000**
Concerned of security	Pearson Correlation	**.667****	**.745****	**.621****	**.645****	1	.961**	.757**	-.071	-.193*
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**		.000	.000	.431	.031
Matters of security	Pearson Correlation	**.748****	**.826****	**.729****	**.741****	.961**	1	.734**	-.075	-.194*
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**	.000		.000	.402	.030
Safer than traditional	Pearson Correlation	**.641****	**.611****	**.521****	**.507****	.757**	.734**	1	-.229**	-.275**
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.000**	.000	.000		.010	.002
Failures possibility	Pearson Correlation	**-.190***	**-.269****	**-.385****	**-.325****	-.071	-.075	-.229**	1	.961**
	Sig. (2-tailed)	**.033**	**.002**	**.000**	**.000**	.431	.402	.010		.000
Leak of info	Pearson Correlation	**-.183***	**-.424****	**-.482****	**-.408****	-.193*	-.194*	-.275**	.961**	1
	Sig. (2-tailed)	**.040**	**.000**	**.000**	**.000**	.031	.030	.002	.000	
	N	**126**	**126**	**126**	**126**	**126**	**126**	**126**	**126**	**126**

**. Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed).

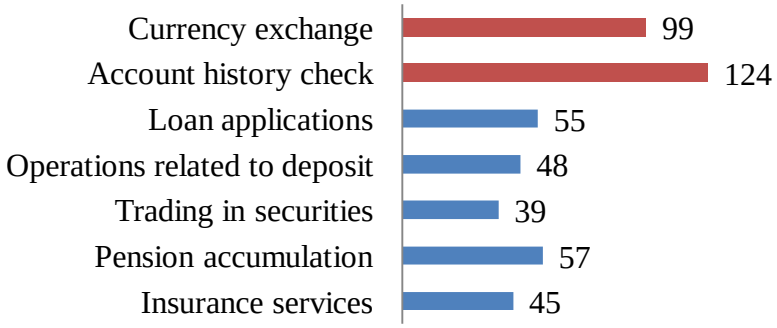
Source: compiled by the author, using SPSS by survey data

ANNEX 11



Source: compiled by the author, using SPSS by survey data

Fig. 1 Usual e-payment services



Source: compiled by the author, using SPSS by survey data

Fig. 2 Additional e-payment services

ANNEX 12

Table 1. Chi-Square Tests of domestic transfers

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.385[a]	6	.496
Likelihood Ratio	8.333	6	.215
Linear-by-Linear Association	4.064	1	.044
N of Valid Cases	126		

a. 6 cells (42.9%) have expected count less than 5. The minimum expected count is .43.

Source: compiled by the author, using SPSS by survey data

Table 2. CrossTab of domestic transfers

		Domestic transfers		
		Yes	No	Total
General education	Count	8_a	0_a	8
	% within Domestic transfers	6.8%	0.0%	6.3%
Vocational training	Count	9_a	0_a	9
	% within Domestic transfers	7.7%	0.0%	7.1%
Secondary education	Count	9_a	0_a	9
	% within Domestic transfers	7.7%	0.0%	7.1%
Unfinished collage degree	Count	6_a	0_a	6
	% within Domestic transfers	5.1%	0.0%	4.8%
Collage degree	Count	7_a	0_a	7
	% within Domestic transfers	6.0%	0.0%	5.6%
Unfinished university degree	Count	6_a	0_a	6
	% within Domestic transfers	5.1%	0.0%	4.8%
University degree	Count	72_a	9_b	81
	% within Domestic transfers	61.5%	100.0%	64.3%
Total	Count	117	9	126
	% within Domestic transfers	100.0%	100.0%	100.0%

Each subscript letter denotes a subset of Domestic transfer categories whose column proportions do not differ significantly from each other at the .05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 13

Table 1. CrossTab of international transfers

		International transfer		
		Yes	No	Total
General education	Count	8_a	0_a	8
	% within international transfer	7.4%	0.0%	6.3%
Vocational training	Count	9_a	0_a	9
	% within international transfer	8.3%	0.0%	7.1%
Secondary education	Count	9_a	0_a	9
	% within international transfer	8.3%	0.0%	7.1%
Unfinished collage degree	Count	6_a	0_a	6
	% within international transfer	5.6%	0.0%	4.8%
Collage degree	Count	7_a	0_a	7

	% within international transfer	6.5%	0.0%	5.6%
Unfinished university degree	Count	6_a	0_a	6
	% within international transfer	5.6%	0.0%	4.8%
University degree	Count	**63_a**	**18_b**	81
	% within international transfer	**100.0%**	**58.3%**	64.3%
Total	Count	108	18	126
	% within international transfer	100.0%	100.0%	100.0%

Each subscript letter denotes a subset of international transfer categories whose column proportions do not differ significantly from each other at the .05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 14

Table 1. CrossTab of currency exchange

		currency		Total
		Yes	No	
General education	Count	8_a	0_a	8
	% within currency	8.1%	0.0%	6.3%
Vocational training	Count	9_a	0_a	9
	% within currency	9.1%	0.0%	7.1%
Secondary education	Count	**0_a**	**9_b**	9
	% within currency	**0.0%**	**33.3%**	7.1%
Unfinished collage degree	Count	6_a	0_a	6
	% within currency	6.1%	0.0%	4.8%
Collage degree	Count	7_a	0_a	7
	% within currency	7.1%	0.0%	5.6%
Unfinished university degree	Count	6_a	0_a	6
	% within currency	6.1%	0.0%	4.8%
University degree	Count	63_a	18_a	81
	% within currency	63.6%	66.7%	64.3%
Total	Count	99	27	126
	% within currency	100.0%	100.0%	100.0%

Each subscript letter denotes a subset of currency categories whose column proportions do not differ significantly from each other at the .05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 15

Table 1. CrossTab of account history check

			history		
			Yes	No	Total
education	General education	Count	8[a]	0[a]	8
		% within history	6.5%	0.0%	6.3%
	Vocational training	Count	9[a]	0[a]	9
		% within history	7.3%	0.0%	7.1%
	Secondary education	Count	9[a]	0[a]	9
		% within history	7.3%	0.0%	7.1%
	Unfinished collage degree	Count	6[a]	0[a]	6
		% within history	4.8%	0.0%	4.8%
	Collage degree	Count	7[a]	0[a]	7
		% within history	5.6%	0.0%	5.6%
	Unfinished university degree	Count	6[a]	0[a]	6
		% within history	4.8%	0.0%	4.8%
	University degree	Count	79[a]	2[a]	81
		% within history	63.7%	100.0%	64.3%
Total		Count	124	2	126
		% within history	100.0%	100.0%	100.0%

Each subscript letter denotes a subset of history categories whose column proportions do not differ significantly from each other at the .05 level.

Source: compiled by the author, using SPSS by survey data

Table 2. Chi-Square Tests of account history check

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.129[a]	6	.980
Likelihood Ratio	1.785	6	.938
Linear-by-Linear Association	.852	1	.356
N of Valid Cases	126		

a. 7 cells (50.0%) have expected count less than 5. The minimum expected count is .10.

Source: compiled by the author, using SPSS by survey data

ANNEX 16

Source: http://markets.ft.com/research/Markets/Tearsheets/Summary?s=SWED%20A:STO

Fig. 1 Swedbank AB market value

ANNEX 17

Table 1.Frequencies of income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1000 EUR	39	31.0	31.0	31.0
	1000 - 2000 EUR	28	22.2	22.2	53.2
	more than 2000 EUR	59	46.8	46.8	100.0
	Total	126	100.0	100.0	

Source: compiled by the author, using SPSS by survey data

ANNEX 17

Table 1. Descriptive of income and attitude of Bank's services

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Better prices	less than 1000 EUR	39	5.00	.000	.000	5.00	5.00	5	5
	1000 - 2000 EUR	28	4.50	.509	.096	4.30	4.70	4	5
	more than 2000 EUR	59	3.69	.725	.094	3.51	3.88	2	4
	Total	126	4.28	.796	.071	4.14	4.42	2	5
Reliability	less than 1000 EUR	39	4.77	.427	.068	4.63	4.91	4	5
	1000 - 2000 EUR	28	4.00	.000	.000	4.00	4.00	4	4
	more than 2000 EUR	59	3.37	1.325	.172	3.03	3.72	1	5
	Total	126	3.94	1.112	.099	3.75	4.14	1	5
Speed	less than 1000 EUR	39	4.00	.000	.000	4.00	4.00	4	4
	1000 - 2000 EUR	28	5.00	.000	.000	5.00	5.00	5	5
	more than 2000 EUR	59	4.24	1.194	.155	3.93	4.55	2	5
	Total	126	4.33	.894	.080	4.18	4.49	2	5
Safety	less than 1000 EUR	39	4.23	.427	.068	4.09	4.37	4	5
	1000 - 2000 EUR	28	5.00	.000	.000	5.00	5.00	5	5
	more than 2000 EUR	59	4.10	1.155	.150	3.80	4.40	2	5
	Total	126	4.34	.896	.080	4.18	4.50	2	5
No pressure	less than 1000 EUR	39	4.46	.505	.081	4.30	4.63	4	5
	1000 - 2000 EUR	28	4.79	.418	.079	4.62	4.95	4	5
	more than 2000 EUR	59	4.25	1.060	.138	3.98	4.53	2	5
	Total	126	4.44	.825	.073	4.29	4.58	2	5

Source: compiled by the author, using SPSS by survey data

Table 2. Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Better prices	29.444	2	123	.000
Reliability	67.921	2	123	.000
Speed	132.357	2	123	.000
Safety	68.403	2	123	.000
No pressure	13.257	2	123	.000

Source: compiled by the author, using SPSS by survey data

Table 3. Test of ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Better prices	Between Groups	41.769	2	20.885	68.486	.000
	Within Groups	37.508	123	.305		
	Total	79.278	125			
Reliability	Between Groups	45.891	2	22.946	25.960	.000
	Within Groups	108.720	123	.884		
	Total	154.611	125			
Speed	Between Groups	17.322	2	8.661	12.885	.000
	Within Groups	82.678	123	.672		
	Total	100.000	125			
Safety	Between Groups	16.012	2	8.006	11.680	.000
	Within Groups	84.313	123	.685		
	Total	100.325	125			
No pressure	Between Groups	5.399	2	2.700	4.172	.018
	Within Groups	79.593	123	.647		
	Total	84.992	125			

Source: compiled by the author, using SPSS by survey data

Table 3. Test of ANOVA multiple comparison

Dependent Variable		(I) pajamos	(J) pajamos	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Better prices	Scheffe	less than 1000 EUR	1000 - 2000 EUR	.500*	.137	.002	.16	.84
			more than 2000 EUR	1.305*	.114	.000	1.02	1.59
		1000 - 2000 EUR	less than 1000 EUR	-.500*	.137	.002	-.84	-.16
			more than 2000 EUR	.805*	.127	.000	.49	1.12
		more than 2000 EUR	less than 1000 EUR	-1.305*	.114	.000	-1.59	-1.02
			1000 - 2000 EUR	-.805*	.127	.000	-1.12	-.49
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	.500*	.137	.001	.17	.83
			more than 2000 EUR	1.305*	.114	.000	1.03	1.58
		1000 - 2000 EUR	less than 1000 EUR	-.500*	.137	.001	-.83	-.17
			more than 2000 EUR	.805*	.127	.000	.50	1.11
		more than	less than 1000 EUR	-1.305*	.114	.000	-1.58	-1.03

		2000 EUR	1000 - 2000 EUR	-.805*	.127	.000	-1.11	-.50
	Dunnett T3	less than	1000 - 2000 EUR	.500*	.096	.000	.26	.74
		1000 EUR	more than 2000 EUR	1.305*	.094	.000	1.07	1.54
		1000 - 2000	less than 1000 EUR	-.500*	.096	.000	-.74	-.26
		EUR	more than 2000 EUR	.805*	.135	.000	.48	1.13
		more than	less than 1000 EUR	-1.305*	.094	.000	-1.54	-1.07
		2000 EUR	1000 - 2000 EUR	-.805*	.135	.000	-1.13	-.48
	Games-	less than	1000 - 2000 EUR	.500*	.096	.000	.26	.74
	Howell	1000 EUR	more than 2000 EUR	1.305*	.094	.000	1.08	1.53
		1000 - 2000	less than 1000 EUR	-.500*	.096	.000	-.74	-.26
		EUR	more than 2000 EUR	.805*	.135	.000	.48	1.13
		more than	less than 1000 EUR	-1.305*	.094	.000	-1.53	-1.08
		2000 EUR	1000 - 2000 EUR	-.805*	.135	.000	-1.13	-.48
Reliability	Scheffe	less than	1000 - 2000 EUR	.769*	.233	.005	.19	1.35
		1000 EUR	more than 2000 EUR	1.396*	.194	.000	.92	1.88
		1000 - 2000	less than 1000 EUR	-.769*	.233	.005	-1.35	-.19
		EUR	more than 2000 EUR	.627*	.216	.017	.09	1.16
		more than	less than 1000 EUR	-1.396*	.194	.000	-1.88	-.92
		2000 EUR	1000 - 2000 EUR	-.627*	.216	.017	-1.16	-.09
	Bonferroni	less than	1000 - 2000 EUR	.769*	.233	.004	.20	1.33
		1000 EUR	more than 2000 EUR	1.396*	.194	.000	.93	1.87
		1000 - 2000	less than 1000 EUR	-.769*	.233	.004	-1.33	-.20
		EUR	more than 2000 EUR	.627*	.216	.013	.10	1.15
		more than	less than 1000 EUR	-1.396*	.194	.000	-1.87	-.93
		2000 EUR	1000 - 2000 EUR	-.627*	.216	.013	-1.15	-.10
	Dunnett T3	less than	1000 - 2000 EUR	.769*	.068	.000	.60	.94
		1000 EUR	more than 2000 EUR	1.396*	.186	.000	.94	1.85
		1000 - 2000	less than 1000 EUR	-.769*	.068	.000	-.94	-.60
		EUR	more than 2000 EUR	.627*	.172	.002	.20	1.05
		more than	less than 1000 EUR	-1.396*	.186	.000	-1.85	-.94
		2000 EUR	1000 - 2000 EUR	-.627*	.172	.002	-1.05	-.20
	Games-	less than	1000 - 2000 EUR	.769*	.068	.000	.60	.94
	Howell	1000 EUR	more than 2000 EUR	1.396*	.186	.000	.95	1.84
		1000 - 2000	less than 1000 EUR	-.769*	.068	.000	-.94	-.60
		EUR	more than 2000 EUR	.627*	.172	.002	.21	1.04
		more than	less than 1000 EUR	-1.396*	.186	.000	-1.84	-.95
		2000 EUR	1000 - 2000 EUR	-.627*	.172	.002	-1.04	-.21
Speed	Scheffe	less than	1000 - 2000 EUR	-1.000*	.203	.000	-1.50	-.50
		1000 EUR	more than 2000 EUR	-.237	.169	.377	-.66	.18
		1000 - 2000	less than 1000 EUR	1.000*	.203	.000	.50	1.50

		EUR	more than 2000 EUR	.763*	.188	.000	.30	1.23
		more than	less than 1000 EUR	.237	.169	.377	-.18	.66
		2000 EUR	1000 - 2000 EUR	-.763*	.188	.000	-1.23	-.30
	Bonferroni	less than	1000 - 2000 EUR	-1.000*	.203	.000	-1.49	-.51
		1000 EUR	more than 2000 EUR	-.237	.169	.490	-.65	.17
		1000 - 2000	less than 1000 EUR	1.000*	.203	.000	.51	1.49
		EUR	more than 2000 EUR	.763*	.188	.000	.31	1.22
		more than	less than 1000 EUR	.237	.169	.490	-.17	.65
		2000 EUR	1000 - 2000 EUR	-.763*	.188	.000	-1.22	-.31
	Dunnett T3	less than	1000 - 2000 EUR	-1.000	.000	.	-1.00	-1.00
		1000 EUR	more than 2000 EUR	-.237	.155	.343	-.62	.14
		1000 - 2000	less than 1000 EUR	1.000	.000	.	1.00	1.00
		EUR	more than 2000 EUR	.763*	.155	.000	.38	1.14
		more than	less than 1000 EUR	.237	.155	.343	-.14	.62
		2000 EUR	1000 - 2000 EUR	-.763*	.155	.000	-1.14	-.38
	Games-	less than	1000 - 2000 EUR	-1.000	.000	.	-1.00	-1.00
	Howell	1000 EUR	more than 2000 EUR	-.237	.155	.286	-.61	.14
		1000 - 2000	less than 1000 EUR	1.000	.000	.	1.00	1.00
		EUR	more than 2000 EUR	.763*	.155	.000	.39	1.14
		more than	less than 1000 EUR	.237	.155	.286	-.14	.61
		2000 EUR	1000 - 2000 EUR	-.763*	.155	.000	-1.14	-.39
Safety	Scheffe	less than	1000 - 2000 EUR	-.769*	.205	.001	-1.28	-.26
		1000 EUR	more than 2000 EUR	.129	.171	.752	-.29	.55
		1000 - 2000	less than 1000 EUR	.769*	.205	.001	.26	1.28
		EUR	more than 2000 EUR	.898*	.190	.000	.43	1.37
		more than	less than 1000 EUR	-.129	.171	.752	-.55	.29
		2000 EUR	1000 - 2000 EUR	-.898*	.190	.000	-1.37	-.43
	Bonferroni	less than	1000 - 2000 EUR	-.769*	.205	.001	-1.27	-.27
		1000 EUR	more than 2000 EUR	.129	.171	1.000	-.29	.54
		1000 - 2000	less than 1000 EUR	.769*	.205	.001	.27	1.27
		EUR	more than 2000 EUR	.898*	.190	.000	.44	1.36
		more than	less than 1000 EUR	-.129	.171	1.000	-.54	.29
		2000 EUR	1000 - 2000 EUR	-.898*	.190	.000	-1.36	-.44
	Dunnett T3	less than	1000 - 2000 EUR	-.769*	.068	.000	-.94	-.60
		1000 EUR	more than 2000 EUR	.129	.165	.019	-.27	.53
		1000 - 2000	less than 1000 EUR	.769*	.068	.000	.60	.94
		EUR	more than 2000 EUR	.898*	.150	.000	.53	1.27
		more than	less than 1000 EUR	-.129	.165	.019	-.53	.27
		2000 EUR	1000 - 2000 EUR	-.898*	.150	.000	-1.27	-.53
	Games-	less than	1000 - 2000 EUR	-.769*	.068	.000	-.94	-.60
	Howell	1000 EUR	more than 2000 EUR	.129	.165	.016	-.27	.52

		1000 - 2000 EUR	less than 1000 EUR	.769*	.068	.000	.60	.94
			more than 2000 EUR	.898*	.150	.000	.54	1.26
		more than 2000 EUR	less than 1000 EUR	-.129	.165	.016	-.52	.27
			1000 - 2000 EUR	-.898*	.150	.000	-1.26	-.54
No pressure	Scheffe	less than 1000 EUR	1000 - 2000 EUR	-.324	.199	.270	-.82	.17
			more than 2000 EUR	.207	.166	.461	-.20	.62
		1000 - 2000 EUR	less than 1000 EUR	.324	.199	.270	-.17	.82
			more than 2000 EUR	.531*	.185	.018	.07	.99
		more than 2000 EUR	less than 1000 EUR	-.207	.166	.461	-.62	.20
			1000 - 2000 EUR	-.531*	.185	.018	-.99	-.07
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	-.324	.199	.319	-.81	.16
			more than 2000 EUR	.207	.166	.642	-.20	.61
		1000 - 2000 EUR	less than 1000 EUR	.324	.199	.319	-.16	.81
			more than 2000 EUR	.531*	.185	.014	.08	.98
		more than 2000 EUR	less than 1000 EUR	-.207	.166	.642	-.61	.20
			1000 - 2000 EUR	-.531*	.185	.014	-.98	-.08
	Dunnett T3	less than 1000 EUR	1000 - 2000 EUR	-.324*	.113	.077	-.60	-.05
			more than 2000 EUR	.207	.160	.482	-.18	.60
		1000 - 2000 EUR	less than 1000 EUR	.324*	.113	.077	.05	.60
			more than 2000 EUR	.531*	.159	.004	.14	.92
		more than 2000 EUR	less than 1000 EUR	-.207	.160	.482	-.60	.18
			1000 - 2000 EUR	-.531*	.159	.054	-.92	-.14
	Games-Howell	less than 1000 EUR	1000 - 2000 EUR	-.324*	.113	.065	-.60	-.05
			more than 2000 EUR	.207	.160	.401	-.17	.59
		1000 - 2000 EUR	less than 1000 EUR	.324*	.113	.065	.05	.60
			more than 2000 EUR	.531*	.159	.074	.15	.91
		more than 2000 EUR	less than 1000 EUR	-.207	.160	.401	-.59	.17
			1000 - 2000 EUR	-.531*	.159	.074	-.91	-.15

*. The mean difference is significant at the 0.05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 18

Table 1. Descriptive of income and promotion methods of Bank's selection

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Anonymity	less than 1000 EUR	39	4.77	.427	.068	4.63	4.91	4	5
	1000 - 2000 EUR	28	5.00	.000	.000	5.00	5.00	5	5
	more than 2000 EUR	59	4.85	.363	.047	4.75	4.94	4	5
	Total	126	4.86	.351	.031	4.80	4.92	4	5
Instructions	less than 1000 EUR	39	4.77	.427	.068	4.63	4.91	4	5
	1000 - 2000 EUR	28	4.79	.418	.079	4.62	4.95	4	5
	more than 2000 EUR	59	5.00	.000	.000	5.00	5.00	5	5
	Total	126	4.88	.325	.029	4.82	4.94	4	5
Insurance	less than 1000 EUR	39	4.77	.427	.068	4.63	4.91	4	5
	1000 - 2000 EUR	28	4.79	.418	.079	4.62	4.95	4	5
	more than 2000 EUR	59	4.86	.345	.045	4.77	4.95	4	5
	Total	126	4.82	.388	.035	4.75	4.89	4	5
Fees	less than 1000 EUR	39	4.77	.427	.068	4.63	4.91	4	5
	1000 - 2000 EUR	28	3.64	1.747	.330	2.97	4.32	1	5
	more than 2000 EUR	59	2.32	1.602	.209	1.90	2.74	1	5
	Total	126	3.37	1.747	.156	3.07	3.68	1	5
Worldwide	less than 1000 EUR	39	3.62	1.407	.225	3.16	4.07	1	5
	1000 - 2000 EUR	28	4.71	.460	.087	4.54	4.89	4	5

	more than 2000 EUR	59	3.54	1.222	.159	3.22	3.86	1	5
	Total	126	3.83	1.253	.112	3.60	4.05	1	5
Discounts	less than 1000 EUR	39	4.44	.502	.080	4.27	4.60	4	5
	1000 - 2000 EUR	28	3.86	1.840	.348	3.14	4.57	1	5
	more than 2000 EUR	59	2.15	1.827	.238	1.68	2.63	1	5
	Total	126	3.24	1.857	.165	2.91	3.57	1	5
Cash	less than 1000 EUR	39	2.97	1.564	.250	2.47	3.48	1	5
	1000 - 2000 EUR	28	3.93	1.303	.246	3.42	4.43	2	5
	more than 2000 EUR	59	3.63	1.401	.182	3.26	3.99	2	5
	Total	126	3.49	1.468	.131	3.23	3.75	1	5
Time	less than 1000 EUR	39	4.31	.832	.133	4.04	4.58	3	5
	1000 - 2000 EUR	28	5.00	.000	.000	5.00	5.00	5	5
	more than 2000 EUR	59	4.15	1.337	.174	3.80	4.50	1	5
	Total	126	4.39	1.073	.096	4.20	4.58	1	5

Source: compiled by the author, using SPSS by survey data

Table 2. Test of ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Anonymity	Between Groups	.878	2	.439	3.713	.027
	Within Groups	14.550	123	.118		
	Total	15.429	125			
Instructions	Between Groups	1.577	2	.788	8.334	.000
	Within Groups	11.637	123	.095		
	Total	13.214	125			
Insurance	Between Groups	.249	2	.124	.825	.441
	Within Groups	18.553	123	.151		
	Total	18.802	125			
Fees	Between Groups	143.235	2	71.618	36.976	.000
	Within Groups	238.233	123	1.937		

	Total	381.468	125			
Worldwide	Between Groups	28.570	2	14.285	10.484	.000
	Within Groups	167.589	123	1.363		
	Total	196.159	125			
Discounts	Between Groups	136.212	2	68.106	28.431	.000
	Within Groups	294.645	123	2.395		
	Total	430.857	125			
Cash	Between Groups	16.864	2	8.432	4.105	.019
	Within Groups	252.628	123	2.054		
	Total	269.492	125			
Time	Between Groups	14.010	2	7.005	6.631	.002
	Within Groups	129.935	123	1.056		
	Total	143.944	125			

Source: compiled by the author, using SPSS by survey data

Table 3. Test of ANOVA multiple comparison

Dependent Variable		(I) pajamos	(J) pajamos	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Anonymity	Scheffe	less than 1000 EUR	1000 - 2000 EUR	-.231*	.085	.028	-.44	-.02
			more than 2000 EUR	-.078	.071	.546	-.25	.10
		1000 - 2000 EUR	less than 1000 EUR	.231*	.085	.028	.02	.44
			more than 2000 EUR	.153	.079	.159	-.04	.35
		more than 2000 EUR	less than 1000 EUR	.078	.071	.546	-.10	.25
			1000 - 2000 EUR	-.153	.079	.159	-.35	.04
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	-.231*	.085	.023	-.44	-.02
			more than 2000 EUR	-.078	.071	.818	-.25	.09
		1000 - 2000 EUR	less than 1000 EUR	.231*	.085	.023	.02	.44
			more than 2000 EUR	.153	.079	.167	-.04	.34
		more than 2000 EUR	less than 1000 EUR	.078	.071	.818	-.09	.25
			1000 - 2000 EUR	-.153	.079	.167	-.34	.04
	Dunnett T3	less than 1000 EUR	1000 - 2000 EUR	-.231*	.068	.005	-.40	-.06
			more than 2000 EUR	-.078	.083	.722	-.28	.12
		1000 - 2000 EUR	less than 1000 EUR	.231*	.068	.005	.06	.40
			more than 2000 EUR	.153*	.047	.006	.04	.27
		more than	less than 1000 EUR	.078	.083	.722	-.12	.28

		2000 EUR	1000 - 2000 EUR	-.153*	.047	.006	-.27	-.04
	Games-Howell	less than 1000 EUR	1000 - 2000 EUR	-.231*	.068	.005	-.40	-.06
			more than 2000 EUR	-.078	.083	.616	-.28	.12
		1000 - 2000 EUR	less than 1000 EUR	.231*	.068	.005	.06	.40
			more than 2000 EUR	.153*	.047	.006	.04	.27
		more than 2000 EUR	less than 1000 EUR	.078	.083	.616	-.12	.28
			1000 - 2000 EUR	-.153*	.047	.006	-.27	-.04
Instructions	Scheffe	less than 1000 EUR	1000 - 2000 EUR	-.016	.076	.977	-.21	.17
			more than 2000 EUR	-.231*	.063	.002	-.39	-.07
		1000 - 2000 EUR	less than 1000 EUR	.016	.076	.977	-.17	.21
			more than 2000 EUR	-.214*	.071	.012	-.39	-.04
		more than 2000 EUR	less than 1000 EUR	.231*	.063	.002	.07	.39
			1000 - 2000 EUR	.214*	.071	.012	.04	.39
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	-.016	.076	1.000	-.20	.17
			more than 2000 EUR	-.231*	.063	.001	-.38	-.08
		1000 - 2000 EUR	less than 1000 EUR	.016	.076	1.000	-.17	.20
			more than 2000 EUR	-.214*	.071	.009	-.39	-.04
		more than 2000 EUR	less than 1000 EUR	.231*	.063	.001	.08	.38
			1000 - 2000 EUR	.214*	.071	.009	.04	.39
	Dunnett T3	less than 1000 EUR	1000 - 2000 EUR	-.016	.104	.998	-.27	.24
			more than 2000 EUR	-.231*	.068	.005	-.40	-.06
		1000 - 2000 EUR	less than 1000 EUR	.016	.104	.998	-.24	.27
			more than 2000 EUR	-.214*	.079	.033	-.41	-.01
		more than 2000 EUR	less than 1000 EUR	.231*	.068	.005	.06	.40
			1000 - 2000 EUR	.214*	.079	.033	.01	.41
	Games-Howell	less than 1000 EUR	1000 - 2000 EUR	-.016	.104	.986	-.27	.23
			more than 2000 EUR	-.231*	.068	.005	-.40	-.06
		1000 - 2000 EUR	less than 1000 EUR	.016	.104	.986	-.23	.27
			more than 2000 EUR	-.214*	.079	.030	-.41	-.02
		more than 2000 EUR	less than 1000 EUR	.231*	.068	.005	.06	.40
			1000 - 2000 EUR	.214*	.079	.030	.02	.41
Insurance	Scheffe	less than 1000 EUR	1000 - 2000 EUR	-.016	.096	.985	-.25	.22
			more than 2000 EUR	-.095	.080	.496	-.29	.10
		1000 - 2000 EUR	less than 1000 EUR	.016	.096	.985	-.22	.25
			more than 2000 EUR	-.079	.089	.678	-.30	.14
		more than 2000 EUR	less than 1000 EUR	.095	.080	.496	-.10	.29
			1000 - 2000 EUR	.079	.089	.678	-.14	.30
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	-.016	.096	1.000	-.25	.22
			more than 2000 EUR	-.095	.080	.712	-.29	.10
		1000 - 2000	less than 1000 EUR	.016	.096	1.000	-.22	.25

		EUR	more than 2000 EUR	-.079	.089	1.000	-.30	.14
		more than	less than 1000 EUR	.095	.080	.712	-.10	.29
		2000 EUR	1000 - 2000 EUR	.079	.089	1.000	-.14	.30
	Dunnett	less than	1000 - 2000 EUR	-.016	.104	.998	-.27	.24
	T3	1000 EUR	more than 2000 EUR	-.095	.082	.572	-.30	.10
		1000 - 2000	less than 1000 EUR	.016	.104	.998	-.24	.27
		EUR	more than 2000 EUR	-.079	.091	.770	-.30	.15
		more than	less than 1000 EUR	.095	.082	.572	-.10	.30
		2000 EUR	1000 - 2000 EUR	.079	.091	.770	-.15	.30
	Games-	less than	1000 - 2000 EUR	-.016	.104	.986	-.27	.23
	Howell	1000 EUR	more than 2000 EUR	-.095	.082	.479	-.29	.10
		1000 - 2000	less than 1000 EUR	.016	.104	.986	-.23	.27
		EUR	more than 2000 EUR	-.079	.091	.664	-.30	.14
		more than	less than 1000 EUR	.095	.082	.479	-.10	.29
		2000 EUR	1000 - 2000 EUR	.079	.091	.664	-.14	.30
Fees	Scheffe	less than	1000 - 2000 EUR	1.126*	.345	.006	.27	1.98
		1000 EUR	more than 2000 EUR	2.447*	.287	.000	1.74	3.16
		1000 - 2000	less than 1000 EUR	-1.126*	.345	.006	-1.98	-.27
		EUR	more than 2000 EUR	1.321*	.319	.000	.53	2.11
		more than	less than 1000 EUR	-2.447*	.287	.000	-3.16	-1.74
		2000 EUR	1000 - 2000 EUR	-1.321*	.319	.000	-2.11	-.53
	Bonferro	less than	1000 - 2000 EUR	1.126*	.345	.004	.29	1.96
	ni	1000 EUR	more than 2000 EUR	2.447*	.287	.000	1.75	3.14
		1000 - 2000	less than 1000 EUR	-1.126*	.345	.004	-1.96	-.29
		EUR	more than 2000 EUR	1.321*	.319	.000	.55	2.10
		more than	less than 1000 EUR	-2.447*	.287	.000	-3.14	-1.75
		2000 EUR	1000 - 2000 EUR	-1.321*	.319	.000	-2.10	-.55
	Dunnett	less than	1000 - 2000 EUR	1.126*	.337	.007	.27	1.98
	T3	1000 EUR	more than 2000 EUR	2.447*	.219	.000	1.91	2.98
		1000 - 2000	less than 1000 EUR	-1.126*	.337	.007	-1.98	-.27
		EUR	more than 2000 EUR	1.321*	.391	.004	.36	2.28
		more than	less than 1000 EUR	-2.447*	.219	.000	-2.98	-1.91
		2000 EUR	1000 - 2000 EUR	-1.321*	.391	.004	-2.28	-.36
	Games-	less than	1000 - 2000 EUR	1.126*	.337	.006	.29	1.96
	Howell	1000 EUR	more than 2000 EUR	2.447*	.219	.000	1.92	2.97
		1000 - 2000	less than 1000 EUR	-1.126*	.337	.006	-1.96	-.29
		EUR	more than 2000 EUR	1.321*	.391	.004	.38	2.26
		more than	less than 1000 EUR	-2.447*	.219	.000	-2.97	-1.92
		2000 EUR	1000 - 2000 EUR	-1.321*	.391	.004	-2.26	-.38
Worldwide	Scheffe	less than	1000 - 2000 EUR	-1.099*	.289	.001	-1.82	-.38
		1000 EUR	more than 2000 EUR	.073	.241	.955	-.52	.67

		1000 - 2000 EUR	less than 1000 EUR	1.099*	.289	.001	.38	1.82
			more than 2000 EUR	1.172*	.268	.000	.51	1.84
		more than 2000 EUR	less than 1000 EUR	-.073	.241	.955	-.67	.52
			1000 - 2000 EUR	-1.172*	.268	.000	-1.84	-.51
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	-1.099*	.289	.001	-1.80	-.40
			more than 2000 EUR	.073	.241	1.000	-.51	.66
		1000 - 2000 EUR	less than 1000 EUR	1.099*	.289	.001	.40	1.80
			more than 2000 EUR	1.172*	.268	.000	.52	1.82
		more than 2000 EUR	less than 1000 EUR	-.073	.241	1.000	-.66	.51
			1000 - 2000 EUR	-1.172*	.268	.000	-1.82	-.52
	Dunnett T3	less than 1000 EUR	1000 - 2000 EUR	-1.099*	.241	.000	-1.70	-.50
			more than 2000 EUR	.073	.276	.991	-.60	.75
		1000 - 2000 EUR	less than 1000 EUR	1.099*	.241	.000	.50	1.70
			more than 2000 EUR	1.172*	.181	.000	.73	1.61
		more than 2000 EUR	less than 1000 EUR	-.073	.276	.991	-.75	.60
			1000 - 2000 EUR	-1.172*	.181	.000	-1.61	-.73
	Games-Howell	less than 1000 EUR	1000 - 2000 EUR	-1.099*	.241	.000	-1.68	-.52
			more than 2000 EUR	.073	.276	.962	-.59	.73
		1000 - 2000 EUR	less than 1000 EUR	1.099*	.241	.000	.52	1.68
			more than 2000 EUR	1.172*	.181	.000	.74	1.60
		more than 2000 EUR	less than 1000 EUR	-.073	.276	.962	-.73	.59
			1000 - 2000 EUR	-1.172*	.181	.000	-1.60	-.74
Discounts	Scheffe	less than 1000 EUR	1000 - 2000 EUR	.579	.383	.323	-.37	1.53
			more than 2000 EUR	2.283*	.319	.000	1.49	3.07
		1000 - 2000 EUR	less than 1000 EUR	-.579	.383	.323	-1.53	.37
			more than 2000 EUR	1.705*	.355	.000	.82	2.58
		more than 2000 EUR	less than 1000 EUR	-2.283*	.319	.000	-3.07	-1.49
			1000 - 2000 EUR	-1.705*	.355	.000	-2.58	-.82
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	.579	.383	.401	-.35	1.51
			more than 2000 EUR	2.283*	.319	.000	1.51	3.06
		1000 - 2000 EUR	less than 1000 EUR	-.579	.383	.401	-1.51	.35
			more than 2000 EUR	1.705*	.355	.000	.84	2.57
		more than 2000 EUR	less than 1000 EUR	-2.283*	.319	.000	-3.06	-1.51
			1000 - 2000 EUR	-1.705*	.355	.000	-2.57	-.84
	Dunnett T3	less than 1000 EUR	1000 - 2000 EUR	.579	.357	.302	-.32	1.48
			more than 2000 EUR	2.283*	.251	.000	1.67	2.90
		1000 - 2000 EUR	less than 1000 EUR	-.579	.357	.302	-1.48	.32
			more than 2000 EUR	1.705*	.421	.001	.67	2.74
		more than 2000 EUR	less than 1000 EUR	-2.283*	.251	.000	-2.90	-1.67
			1000 - 2000 EUR	-1.705*	.421	.001	-2.74	-.67
	Games-	less than	1000 - 2000 EUR	.579	.357	.252	-.30	1.46

	Howell	1000 EUR	more than 2000 EUR	2.283*	.251	.000	1.68	2.88
		1000 - 2000 EUR	less than 1000 EUR	-.579	.357	.252	-1.46	.30
			more than 2000 EUR	1.705*	.421	.000	.69	2.72
		more than 2000 EUR	less than 1000 EUR	-2.283*	.251	.000	-2.88	-1.68
			1000 - 2000 EUR	-1.705*	.421	.000	-2.72	-.69
Cash	Scheffe	less than 1000 EUR	1000 - 2000 EUR	-.954*	.355	.030	-1.83	-.07
			more than 2000 EUR	-.653	.296	.092	-1.39	.08
		1000 - 2000 EUR	less than 1000 EUR	.954*	.355	.030	.07	1.83
			more than 2000 EUR	.301	.329	.658	-.51	1.12
		more than 2000 EUR	less than 1000 EUR	.653	.296	.092	-.08	1.39
			1000 - 2000 EUR	-.301	.329	.658	-1.12	.51
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	-.954*	.355	.025	-1.82	-.09
			more than 2000 EUR	-.653	.296	.088	-1.37	.07
		1000 - 2000 EUR	less than 1000 EUR	.954*	.355	.025	.09	1.82
			more than 2000 EUR	.301	.329	1.000	-.50	1.10
		more than 2000 EUR	less than 1000 EUR	.653	.296	.088	-.07	1.37
			1000 - 2000 EUR	-.301	.329	1.000	-1.10	.50
	Dunnett T3	less than 1000 EUR	1000 - 2000 EUR	-.954*	.351	.025	-1.81	-.09
			more than 2000 EUR	-.653	.310	.110	-1.41	.10
		1000 - 2000 EUR	less than 1000 EUR	.954*	.351	.025	.09	1.81
			more than 2000 EUR	.301	.306	.694	-.45	1.05
		more than 2000 EUR	less than 1000 EUR	.653	.310	.110	-.10	1.41
			1000 - 2000 EUR	-.301	.306	.694	-1.05	.45
	Games-Howell	less than 1000 EUR	1000 - 2000 EUR	-.954*	.351	.023	-1.80	-.11
			more than 2000 EUR	-.653	.310	.095	-1.39	.09
		1000 - 2000 EUR	less than 1000 EUR	.954*	.351	.023	.11	1.80
			more than 2000 EUR	.301	.306	.590	-.44	1.04
		more than 2000 EUR	less than 1000 EUR	.653	.310	.095	-.09	1.39
			1000 - 2000 EUR	-.301	.306	.590	-1.04	.44
Time	Scheffe	less than 1000 EUR	1000 - 2000 EUR	-.692*	.255	.028	-1.32	-.06
			more than 2000 EUR	.155	.212	.766	-.37	.68
		1000 - 2000 EUR	less than 1000 EUR	.692*	.255	.028	.06	1.32
			more than 2000 EUR	.847*	.236	.002	.26	1.43
		more than 2000 EUR	less than 1000 EUR	-.155	.212	.766	-.68	.37
			1000 - 2000 EUR	-.847*	.236	.002	-1.43	-.26
	Bonferroni	less than 1000 EUR	1000 - 2000 EUR	-.692*	.255	.022	-1.31	-.07
			more than 2000 EUR	.155	.212	1.000	-.36	.67
		1000 - 2000 EUR	less than 1000 EUR	.692*	.255	.022	.07	1.31
			more than 2000 EUR	.847*	.236	.001	.27	1.42
		more than 2000 EUR	less than 1000 EUR	-.155	.212	1.000	-.67	.36

	2000 EUR	1000 - 2000 EUR	-.847*	.236	.001	-1.42	-.27
Dunnett T3	less than 1000 EUR	1000 - 2000 EUR	-.692*	.133	.000	-1.02	-.36
		more than 2000 EUR	.155	.219	.858	-.38	.69
	1000 - 2000 EUR	less than 1000 EUR	.692*	.133	.000	.36	1.02
		more than 2000 EUR	.847*	.174	.000	.42	1.27
	more than 2000 EUR	less than 1000 EUR	-.155	.219	.858	-.69	.38
		1000 - 2000 EUR	-.847*	.174	.000	-1.27	-.42
Games-Howell	less than 1000 EUR	1000 - 2000 EUR	-.692*	.133	.000	-1.02	-.37
		more than 2000 EUR	.155	.219	.759	-.37	.68
	1000 - 2000 EUR	less than 1000 EUR	.692*	.133	.000	.37	1.02
		more than 2000 EUR	.847*	.174	.000	.43	1.27
	more than 2000 EUR	less than 1000 EUR	-.155	.219	.759	-.68	.37
		1000 - 2000 EUR	-.847*	.174	.000	-1.27	-.43

*. The mean difference is significant at the 0.05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 19

Table 1. One – Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Safety	126	2.85	.830	.074
Confirmation	126	2.54	1.563	.139
Information	126	2.34	.887	.079

Source: compiled by the author, using SPSS by survey data

Table 2. One – Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Safety	-2.039	125	.044	-.151	-.30	.00
Confirmation	-3.306	125	.001	-.460	-.74	-.18
Information	-8.337	125	.000	-.659	-.82	-.50

Source: compiled by the author, using SPSS by survey data

ANNEX 20

Table 1. Test of ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Safety	Between Groups	28.142	3	9.381	19.735	.000
	Within Groups	57.992	122	.475		
	Total	86.135	125			
Confirmation	Between Groups	166.738	3	55.579	48.935	.000
	Within Groups	138.564	122	1.136		
	Total	305.302	125			

Source: compiled by the author, using SPSS by survey data

Table 2. Descriptive of marital status and risk factors

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Safety	Single	35	2.69	.832	.141	2.40	2.97	2	4
	Married or domestic partnership	56	3.32	.471	.063	3.20	3.45	3	4
	Divorced	17	2.53	.514	.125	2.26	2.79	2	3
	Widower	18	2.00	1.029	.243	1.49	2.51	1	3
	Total	126	2.85	.830	.074	2.70	3.00	1	4
Confirmation	Single	35	1.83	.785	.133	1.56	2.10	1	3
	Married or domestic partnership	56	1.89	1.436	.192	1.51	2.28	1	5
	Divorced	17	3.53	.514	.125	3.26	3.79	3	4
	Widower	18	5.00	.000	.000	5.00	5.00	5	5
	Total	126	2.54	1.563	.139	2.26	2.82	1	5

Source: compiled by the author, using SPSS by survey data

Table 3. Test of ANOVA multiple comparison

Dependent Variable		(I) marital	(J) marital	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Safety	Scheffe	Single	Married or domestic partnership	-.636*	.149	.001	-1.06	-.21
			Divorced	.156	.204	.899	-.42	.73
			Widower	.686*	.200	.010	.12	1.25
		Married or domestic partnership	Single	.636*	.149	.001	.21	1.06
			Divorced	.792*	.191	.001	.25	1.33
			Widower	1.321*	.187	.000	.79	1.85
		Divorced	Single	-.156	.204	.899	-.73	.42
			Married or domestic partnership	-.792*	.191	.001	-1.33	-.25
			Widower	.529	.233	.167	-.13	1.19
		Widower	Single	-.686*	.200	.010	-1.25	-.12
			Married or domestic partnership	-1.321*	.187	.000	-1.85	-.79
			Divorced	-.529	.233	.167	-1.19	.13
	Bonferroni	Single	Married or domestic partnership	-.636*	.149	.000	-1.03	-.24
			Divorced	.156	.204	1.000	-.39	.70
			Widower	.686*	.200	.005	.15	1.22
		Married or domestic partnership	Single	.636*	.149	.000	.24	1.03
			Divorced	.792*	.191	.000	.28	1.30
			Widower	1.321*	.187	.000	.82	1.82
		Divorced	Single	-.156	.204	1.000	-.70	.39
			Married or domestic partnership	-.792*	.191	.000	-1.30	-.28
			Widower	.529	.233	.150	-.10	1.15

	Widower	Single	-.686*	.200	.005	-1.22	-.15
		Married or domestic partnership	-1.321*	.187	.000	-1.82	-.82
		Divorced	-.529	.233	.150	-1.15	.10
Dunnett T3	Single	Married or domestic partnership	-.636*	.154	.001	-1.06	-.21
		Divorced	.156	.188	.954	-.36	.67
		Widower	.686	.280	.114	-.10	1.47
	Married or domestic partnership	Single	.636*	.154	.001	.21	1.06
		Divorced	.792*	.140	.000	.39	1.19
		Widower	1.321*	.251	.000	.59	2.05
	Divorced	Single	-.156	.188	.954	-.67	.36
		Married or domestic partnership	-.792*	.140	.000	-1.19	-.39
		Widower	.529	.273	.310	-.24	1.30
	Widover	Single	-.686	.280	.114	-1.47	.10
		Married or domestic partnership	-1.321*	.251	.000	-2.05	-.59
		Divorced	-.529	.273	.310	-1.30	.24
Games-Howell	Single	Married or domestic partnership	-.636*	.154	.001	-1.05	-.23
		Divorced	.156	.188	.839	-.34	.66
		Widower	.686	.280	.091	-.08	1.45
	Married or domestic partnership	Single	.636*	.154	.001	.23	1.05
		Divorced	.792*	.140	.000	.41	1.18
		Widower	1.321*	.251	.000	.62	2.02
	Divorced	Single	-.156	.188	.839	-.66	.34
		Married or domestic partnership	-.792*	.140	.000	-1.18	-.41
		Widower	.529	.273	.237	-.22	1.28
	Widower	Single	-.686	.280	.091	-1.45	.08
		Married or domestic partnership	-1.321*	.251	.000	-2.02	-.62

			Divorced	-.529	.273	.237	-1.28	.22
Confirmation	Scheffe	Single	Married or domestic partnership	-.064	.230	.994	-.72	.59
			Divorced	-1.701*	.315	.000	-2.59	-.81
			Widower	-3.171*	.309	.000	-4.05	-2.30
		Married or domestic partnership	Single	.064	.230	.994	-.59	.72
			Divorced	-1.637*	.295	.000	-2.47	-.80
			Widower	-3.107*	.289	.000	-3.93	-2.29
		Divorced	Single	1.701*	.315	.000	.81	2.59
			Married or domestic partnership	1.637*	.295	.000	.80	2.47
			Widower	-1.471*	.360	.001	-2.49	-.45
		Widower	Single	3.171*	.309	.000	2.30	4.05
			Married or domestic partnership	3.107*	.289	.000	2.29	3.93
			Divorced	1.471*	.360	.001	.45	2.49
	Bonferroni	Single	Married or domestic partnership	-.064	.230	1.000	-.68	.55
			Divorced	-1.701*	.315	.000	-2.55	-.86
			Widower	-3.171*	.309	.000	-4.00	-2.34
		Married or domestic partnership	Single	.064	.230	1.000	-.55	.68
			Divorced	-1.637*	.295	.000	-2.43	-.85
			Widower	-3.107*	.289	.000	-3.88	-2.33
		Divorced	Single	1.701*	.315	.000	.86	2.55
			Married or domestic partnership	1.637*	.295	.000	.85	2.43
			Widower	-1.471*	.360	.000	-2.44	-.50
		Widower	Single	3.171*	.309	.000	2.34	4.00
			Married or domestic partnership	3.107*	.289	.000	2.33	3.88
			Divorced	1.471*	.360	.000	.50	2.44
	Dunnett T3	Single	Married or domestic partnership	-.064	.233	1.000	-.69	.56

		Divorced	-1.701*	.182	.000	-2.20	-1.20
		Widower	-3.171*	.133	.000	-3.54	-2.80
	Married or domestic partnership	Single	.064	.233	1.000	-.56	.69
		Divorced	-1.637*	.229	.000	-2.26	-1.02
		Widower	-3.107*	.192	.000	-3.63	-2.58
	Divorced	Single	1.701*	.182	.000	1.20	2.20
		Married or domestic partnership	1.637*	.229	.000	1.02	2.26
		Widower	-1.471*	.125	.000	-1.84	-1.10
	Widower	Single	3.171*	.133	.000	2.80	3.54
		Married or domestic partnership	3.107*	.192	.000	2.58	3.63
		Divorced	1.471*	.125	.000	1.10	1.84
Games-Howell	Single	Married or domestic partnership	-.064	.233	.993	-.68	.55
		Divorced	-1.701*	.182	.000	-2.19	-1.21
		Widower	-3.171*	.133	.000	-3.53	-2.81
	Married or domestic partnership	Single	.064	.233	.993	-.55	.68
		Divorced	-1.637*	.229	.000	-2.24	-1.03
		Widower	-3.107*	.192	.000	-3.62	-2.60
	Divorced	Single	1.701*	.182	.000	1.21	2.19
		Married or domestic partnership	1.637*	.229	.000	1.03	2.24
		Widower	-1.471*	.125	.000	-1.83	-1.11
	Widower	Single	3.171*	.133	.000	2.81	3.53
		Married or domestic partnership	3.107*	.192	.000	2.60	3.62
		Divorced	1.471*	.125	.000	1.11	1.83

*. The mean difference is significant at the 0.05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 21

Table 1. Test of ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Safety	Between Groups	11.045	2	5.523	9.046	.000
	Within Groups	75.090	123	.610		
	Total	86.135	125			
Confirmation	Between Groups	58.235	2	29.118	14.496	.000
	Within Groups	247.066	123	2.009		
	Total	305.302	125			

Source: compiled by the author, using SPSS by survey data

Table 2. Descriptive of age and risk factors

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Safety	less than 25 years	38	3.29	.732	.119	3.05	3.53	2	4
	25 - 35 years	29	2.55	.506	.094	2.36	2.74	2	3
	more than 35 years	59	2.71	.911	.119	2.47	2.95	1	4
	Total	126	2.85	.830	.074	2.70	3.00	1	4
Confirmation	less than 25 years	38	3.39	1.175	.191	3.01	3.78	2	5
	25 - 35 years	29	1.52	.509	.094	1.32	1.71	1	2
	more than 35 years	59	2.49	1.804	.235	2.02	2.96	1	5
	Total	126	2.54	1.563	.139	2.26	2.82	1	5

Source: compiled by the author, using SPSS by survey data

Table 3. Test of ANOVA multiple comparison

Dependent Variable		(I) age	(J) age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Safety	Scheffe	less than 25 years	25 - 35 years	.738*	.193	.001	.26	1.22
			more than 35 years	.578*	.163	.002	.17	.98
		25 - 35 years	less than 25 years	-.738*	.193	.001	-1.22	-.26
			more than 35 years	-.160	.177	.666	-.60	.28
		more than 35 years	less than 25 years	-.578*	.163	.002	-.98	-.17
			25 - 35 years	.160	.177	.666	-.28	.60
	Bonferroni	less than 25 years	25 - 35 years	.738*	.193	.001	.27	1.21
			more than 35 years	.578*	.163	.002	.18	.97
		25 - 35 years	less than 25 years	-.738*	.193	.001	-1.21	-.27
			more than 35 years	-.160	.177	1.000	-.59	.27
		more than 35 years	less than 25 years	-.578*	.163	.002	-.97	-.18
			25 - 35 years	.160	.177	1.000	-.27	.59
	Dunnett T3	less than 25 years	25 - 35 years	.738*	.151	.000	.37	1.11
			more than 35 years	.578*	.168	.003	.17	.99
		25 - 35 years	less than 25 years	-.738*	.151	.000	-1.11	-.37
			more than 35 years	-.160	.151	.643	-.53	.21
		more than 35 years	less than 25 years	-.578*	.168	.003	-.99	-.17
			25 - 35 years	.160	.151	.643	-.21	.53
	Games-Howell	less than 25 years	25 - 35 years	.738*	.151	.000	.37	1.10
			more than 35 years	.578*	.168	.002	.18	.98

		25 - 35 years	less than 25 years	-.738*	.151	.000	-1.10	-.37
			more than 35 years	-.160	.151	.542	-.52	.20
		more than 35 years	less than 25 years	-.578*	.168	.002	-.98	-.18
			25 - 35 years	.160	.151	.542	-.20	.52
Confirmation	Scheffe	less than 25 years	25 - 35 years	1.877*	.349	.000	1.01	2.74
			more than 35 years	.903*	.295	.011	.17	1.63
		25 - 35 years	less than 25 years	-1.877*	.349	.000	-2.74	-1.01
			more than 35 years	-.974*	.321	.012	-1.77	-.18
		more than 35 years	less than 25 years	-.903*	.295	.011	-1.63	-.17
			25 - 35 years	.974*	.321	.012	.18	1.77
	Bonferroni	less than 25 years	25 - 35 years	1.877*	.349	.000	1.03	2.73
			more than 35 years	.903*	.295	.008	.19	1.62
		25 - 35 years	less than 25 years	-1.877*	.349	.000	-2.73	-1.03
			more than 35 years	-.974*	.321	.009	-1.75	-.19
		more than 35 years	less than 25 years	-.903*	.295	.008	-1.62	-.19
			25 - 35 years	.974*	.321	.009	.19	1.75
	Dunnett T3	less than 25 years	25 - 35 years	1.877*	.213	.000	1.35	2.40
			more than 35 years	.903*	.302	.011	.17	1.64
		25 - 35 years	less than 25 years	-1.877*	.213	.000	-2.40	-1.35
			more than 35 years	-.974*	.253	.001	-1.59	-.36
		more than 35 years	less than 25 years	-.903*	.302	.011	-1.64	-.17
			25 - 35 years	.974*	.253	.001	.36	1.59
	Games-Howell	less than 25 years	25 - 35 years	1.877*	.213	.000	1.36	2.39
			more than 35 years	.903*	.302	.010	.18	1.62

	25 - 35 years	less than 25 years	-1.877*	.213	.000	-2.39	-1.36
		more than 35 years	-.974*	.253	.001	-1.58	-.37
	more than 35 years	less than 25 years	-.903*	.302	.010	-1.62	-.18
		25 - 35 years	.974*	.253	.001	.37	1.58

*. The mean difference is significant at the 0.05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 22

Table 1. One Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Anonymity	59.337	125	.000	1.857	1.80	1.92
Ease of use	64.938	125	.000	1.881	1.82	1.94
Insurance	52.603	125	.000	1.817	1.75	1.89
Fees	2.397	125	.018	.373	.07	.68
Worldwide	7.396	125	.000	.825	.60	1.05
Discounts	1.440	125	.152	.238	-.09	.57
Cash	3.762	125	.000	.492	.23	.75
Time	14.528	125	.000	1.389	1.20	1.58

Source: compiled by the author, using SPSS by survey data

Table 1. One Sample Statistics on Means

	N	Mean	Std. Deviation	Std. Error Mean
Anonymity	126	4.86	.351	.031
Instructions	126	4.88	.325	.029
Insurance	126	4.82	.388	.035
Fees	126	3.37	1.747	.156
Worldwide	126	3.83	1.253	.112
Discounts	126	3.24	1.857	.165
Cash	126	3.49	1.468	.131
Time	126	4.39	1.073	.096

Source: compiled by the author, using SPSS by survey data

ANNEX 23

Table 1. Test of ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Anonymity	Between Groups	.933	2	.467	3.959	.022
	Within Groups	14.496	123	.118		
	Total	15.429	125			
Instructions	Between Groups	1.587	2	.794	8.396	.000
	Within Groups	11.627	123	.095		
	Total	13.214	125			
Insurance	Between Groups	.259	2	.130	.860	.426
	Within Groups	18.542	123	.151		
	Total	18.802	125			

Source: compiled by the author, using SPSS by survey data

Table 2. Descriptive of age and factors of increase in competitiveness

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Anonymity	less than 25 years	38	4.76	.431	.070	4.62	4.90	4	5
	25 - 35 years	29	5.00	.000	.000	5.00	5.00	5	5
	more than 35 years	59	4.85	.363	.047	4.75	4.94	4	5
	Total	126	4.86	.351	.031	4.80	4.92	4	5
Instructions	less than 25 years	38	4.76	.431	.070	4.62	4.90	4	5
	25 - 35 years	29	4.79	.412	.077	4.64	4.95	4	5
	more than 35 years	59	5.00	.000	.000	5.00	5.00	5	5
	Total	126	4.88	.325	.029	4.82	4.94	4	5
Insurance	less than 25 years	38	4.76	.431	.070	4.62	4.90	4	5
	25 - 35 years	29	4.79	.412	.077	4.64	4.95	4	5
	more than 35 years	59	4.86	.345	.045	4.77	4.95	4	5
	Total	126	4.82	.388	.035	4.75	4.89	4	5

Source: compiled by the author, using SPSS by survey data

Table 3. Test of ANOVA multiple comparison

Multiple Comparisons

Dependent Variable		(I) amzius	(J) amzius	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Anonymity	Scheffe	less than 25 years	25 - 35 years	-.237*	.085	.022	-.45	-.03
			more than 35 years	-.084	.071	.500	-.26	.09
		25 - 35 years	less than 25 years	.237*	.085	.022	.03	.45

			more than 35 years	.153	.078	.151	-.04	.35
		more than 35 years	less than 25 years	.084	.071	.500	-.09	.26
			25 - 35 years	-.153	.078	.151	-.35	.04
	Bonferroni	less than 25 years	25 - 35 years	-.237*	.085	.018	-.44	-.03
			more than 35 years	-.084	.071	.720	-.26	.09
		25 - 35 years	less than 25 years	.237*	.085	.018	.03	.44
			more than 35 years	.153	.078	.157	-.04	.34
		more than 35 years	less than 25 years	.084	.071	.720	-.09	.26
			25 - 35 years	-.153	.078	.157	-.34	.04
	Dunnett T3	less than 25 years	25 - 35 years	-.237*	.070	.005	-.41	-.06
			more than 35 years	-.084	.084	.684	-.29	.12
		25 - 35 years	less than 25 years	.237*	.070	.005	.06	.41
			more than 35 years	.153*	.047	.006	.04	.27
		more than 35 years	less than 25 years	.084	.084	.684	-.12	.29
			25 - 35 years	-.153*	.047	.006	-.27	-.04
	Games-Howell	less than 25 years	25 - 35 years	-.237*	.070	.005	-.41	-.07
			more than 35 years	-.084	.084	.580	-.29	.12
		25 - 35 years	less than 25 years	.237*	.070	.005	.07	.41
			more than 35 years	.153*	.047	.006	.04	.27
		more than 35 years	less than 25 years	.084	.084	.580	-.12	.29
			25 - 35 years	-.153*	.047	.006	-.27	-.04
Instructions	Scheffe	less than 25 years	25 - 35 years	-.030	.076	.925	-.22	.16
			more than 35 years	-.237*	.064	.002	-.40	-.08
		25 - 35 years	less than 25 years	.030	.076	.925	-.16	.22

			more than 35 years	-.207*	.070	.014	-.38	-.03
		more than 35 years	less than 25 years	.237*	.064	.002	.08	.40
			25 - 35 years	.207*	.070	.014	.03	.38
	Bonferroni	less than 25 years	25 - 35 years	-.030	.076	1.000	-.21	.15
			more than 35 years	-.237*	.064	.001	-.39	-.08
		25 - 35 years	less than 25 years	.030	.076	1.000	-.15	.21
			more than 35 years	-.207*	.070	.011	-.38	-.04
		more than 35 years	less than 25 years	.237*	.064	.001	.08	.39
			25 - 35 years	.207*	.070	.011	.04	.38
	Dunnett T3	less than 25 years	25 - 35 years	-.030	.104	.988	-.28	.22
			more than 35 years	-.237*	.070	.005	-.41	-.06
		25 - 35 years	less than 25 years	.030	.104	.988	-.22	.28
			more than 35 years	-.207*	.077	.034	-.40	-.01
		more than 35 years	less than 25 years	.237*	.070	.005	.06	.41
			25 - 35 years	.207*	.077	.034	.01	.40
	Games-Howell	less than 25 years	25 - 35 years	-.030	.104	.955	-.28	.22
			more than 35 years	-.237*	.070	.005	-.41	-.07
		25 - 35 years	less than 25 years	.030	.104	.955	-.22	.28
			more than 35 years	-.207*	.077	.030	-.40	-.02
		more than 35 years	less than 25 years	.237*	.070	.005	.07	.41
			25 - 35 years	.207*	.077	.030	.02	.40
Insurance	Scheffe	less than 25 years	25 - 35 years	-.030	.096	.952	-.27	.21
			more than 35 years	-.101	.081	.458	-.30	.10
		25 - 35 years	less than 25 years	.030	.096	.952	-.21	.27

		more than 35 years	-.071	.088	.721	-.29	.15
	more than 35 years	less than 25 years	.101	.081	.458	-.10	.30
		25 - 35 years	.071	.088	.721	-.15	.29
Bonferroni	less than 25 years	25 - 35 years	-.030	.096	1.000	-.26	.20
		more than 35 years	-.101	.081	.637	-.30	.09
	25 - 35 years	less than 25 years	.030	.096	1.000	-.20	.26
		more than 35 years	-.071	.088	1.000	-.29	.14
	more than 35 years	less than 25 years	.101	.081	.637	-.09	.30
		25 - 35 years	.071	.088	1.000	-.14	.29
Dunnett T3	less than 25 years	25 - 35 years	-.030	.104	.988	-.28	.22
		more than 35 years	-.101	.083	.535	-.30	.10
	25 - 35 years	less than 25 years	.030	.104	.988	-.22	.28
		more than 35 years	-.071	.089	.807	-.29	.15
	more than 35 years	less than 25 years	.101	.083	.535	-.10	.30
		25 - 35 years	.071	.089	.807	-.15	.29
Games-Howell	less than 25 years	25 - 35 years	-.030	.104	.955	-.28	.22
		more than 35 years	-.101	.083	.447	-.30	.10
	25 - 35 years	less than 25 years	.030	.104	.955	-.22	.28
		more than 35 years	-.071	.089	.703	-.29	.14
	more than 35 years	less than 25 years	.101	.083	.447	-.10	.30
		25 - 35 years	.071	.089	.703	-.14	.29

*. The mean difference is significant at the 0.05 level.

Source: compiled by the author, using SPSS by survey data

ANNEX 24

Table 1. Descriptive of marital status and factors of increase in bank competitiveness

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Anonymity	Single	35	5.00	.000	.000	5.00	5.00	5	5
	Married or domestic partnership	56	4.84	.371	.050	4.74	4.94	4	5
	Divorced	17	5.00	.000	.000	5.00	5.00	5	5
	Widower	18	4.50	.514	.121	4.24	4.76	4	5
	Total	126	4.86	.351	.031	4.80	4.92	4	5
Instructions	Single	35	4.83	.382	.065	4.70	4.96	4	5
	Married or domestic partnership	56	4.84	.371	.050	4.74	4.94	4	5
	Divorced	17	5.00	.000	.000	5.00	5.00	5	5
	Widower	18	5.00	.000	.000	5.00	5.00	5	5
	Total	126	4.88	.325	.029	4.82	4.94	4	5
Insurance	Single	35	4.83	.382	.065	4.70	4.96	4	5
	Married or domestic partnership	56	5.00	.000	.000	5.00	5.00	5	5
	Divorced	17	4.00	.000	.000	4.00	4.00	4	4
	Widower	18	5.00	.000	.000	5.00	5.00	5	5
	Total	126	4.82	.388	.035	4.75	4.89	4	5

Source: compiled by the author, using SPSS by survey data

Table 2. Test of ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Anonymity	Between Groups	3.375	3	1.125	11.387	.000
	Within Groups	12.054	122	.099		
	Total	15.429	125			
Instructions	Between Groups	.689	3	.230	2.238	.087
	Within Groups	12.525	122	.103		
	Total	13.214	125			
Insurance	Between Groups	13.830	3	4.610	113.132	.000
	Within Groups	4.971	122	.041		
	Total	18.802	125			

Source: compiled by the author, using SPSS by survey data

Table 3. Test of ANOVA multiple comparison

Dependent Variable		(I) marital	(J) marital	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Anonymity	Scheffe	Single	Married or domestic partnership	.161	.068	.137	-.03	.35
			Divorced	.000	.093	1.000	-.26	.26
			Widower	.500*	.091	.000	.24	.76
		Married or domestic partnership	Single	-.161	.068	.137	-.35	.03
			Divorced	-.161	.087	.337	-.41	.09
			Widower	.339*	.085	.002	.10	.58
		Divorced	Single	.000	.093	1.000	-.26	.26
			Married or domestic partnership	.161	.087	.337	-.09	.41
			Widower	.500*	.106	.000	.20	.80
		Widover	Single	-.500*	.091	.000	-.76	-.24
			Married or domestic partnership	-.339*	.085	.002	-.58	-.10
			Divorced	-.500*	.106	.000	-.80	-.20

Bonferroni	Single	Married or domestic partnership	.161	.068	.115	-.02	.34
		Divorced	.000	.093	1.000	-.25	.25
		Widower	.500*	.091	.000	.26	.74
	Married or domestic partnership	Single	-.161	.068	.115	-.34	.02
		Divorced	-.161	.087	.404	-.39	.07
		Widower	.339*	.085	.001	.11	.57
	Divorced	Single	.000	.093	1.000	-.25	.25
		Married or domestic partnership	.161	.087	.404	-.07	.39
		Widower	.500*	.106	.000	.21	.79
	Widower	Single	-.500*	.091	.000	-.74	-.26
		Married or domestic partnership	-.339*	.085	.001	-.57	-.11
		Divorced	-.500*	.106	.000	-.79	-.21
Dunnett T3	Single	Married or domestic partnership	.161*	.050	.012	.03	.30
		Divorced	.000	.000	.	.00	.00
		Widower	.500*	.121	.004	.14	.86
	Married or domestic partnership	Single	-.161*	.050	.012	-.30	-.03
		Divorced	-.161*	.050	.012	-.30	-.03
		Widower	.339	.131	.090	-.04	.71
	Divorced	Single	.000	.000	.	.00	.00
		Married or domestic partnership	.161*	.050	.012	.03	.30
		Widower	.500*	.121	.004	.14	.86
	Widower	Single	-.500*	.121	.004	-.86	-.14
		Married or domestic partnership	-.339	.131	.090	-.71	.04
		Divorced	-.500*	.121	.004	-.86	-.14
Games-Howell	Single	Married or domestic partnership	.161*	.050	.010	.03	.29
		Divorced	.000	.000	.	.00	.00

			Widower	.500*	.121	.004	.16	.84
		Married or domestic partnership	Single	-.161*	.050	.010	-.29	-.03
			Divorced	-.161*	.050	.010	-.29	-.03
			Widower	.339	.131	.072	-.02	.70
		Divorced	Single	.000	.000	.	.00	.00
			Married or domestic partnership	.161*	.050	.010	.03	.29
			Widower	.500*	.121	.004	.16	.84
		Widower	Single	-.500*	.121	.004	-.84	-.16
			Married or domestic partnership	-.339	.131	.072	-.70	.02
			Divorced	-.500*	.121	.004	-.84	-.16
Instructions	Scheffe	Single	Married or domestic partnership	-.011	.069	.999	-.21	.19
			Divorced	-.171	.095	.355	-.44	.10
			Widower	-.171	.093	.338	-.43	.09
		Married or domestic partnership	Single	.011	.069	.999	-.19	.21
			Divorced	-.161	.089	.355	-.41	.09
			Widower	-.161	.087	.335	-.41	.09
		Divorced	Single	.171	.095	.355	-.10	.44
			Married or domestic partnership	.161	.089	.355	-.09	.41
			Widower	.000	.108	1.000	-.31	.31
		Widower	Single	.171	.093	.338	-.09	.43
			Married or domestic partnership	.161	.087	.335	-.09	.41
			Divorced	.000	.108	1.000	-.31	.31
	Bonferroni	Single	Married or domestic partnership	-.011	.069	1.000	-.20	.17
			Divorced	-.171	.095	.437	-.43	.08
			Widower	-.171	.093	.405	-.42	.08
		Married or domestic partnership	Single	.011	.069	1.000	-.17	.20
			Divorced	-.161	.089	.435	-.40	.08
			Widower	-.161	.087	.399	-.39	.07
		Divorced	Single	.171	.095	.437	-.08	.43

		Married or domestic partnership	.161	.089	.435	-.08	.40
		Widower	.000	.108	1.000	-.29	.29
	Widower	Single	.171	.093	.405	-.08	.42
		Married or domestic partnership	.161	.087	.399	-.07	.39
		Divorced	.000	.108	1.000	-.29	.29
Dunnett T3	Single	Married or domestic partnership	-.011	.081	1.000	-.23	.21
		Divorced	-.171	.065	.068	-.35	.01
		Widower	-.171	.065	.068	-.35	.01
	Married or domestic partnership	Single	.011	.081	1.000	-.21	.23
		Divorced	-.161*	.050	.012	-.30	-.03
		Widower	-.161*	.050	.012	-.30	-.03
	Divorced	Single	.171	.065	.068	-.01	.35
		Married or domestic partnership	.161*	.050	.012	.03	.30
		Widower	.000	.000	.	.00	.00
	Widower	Single	.171	.065	.068	-.01	.35
		Married or domestic partnership	.161*	.050	.012	.03	.30
		Divorced	.000	.000	.	.00	.00
Games-Howell	Single	Married or domestic partnership	-.011	.081	.999	-.22	.20
		Divorced	-.171	.065	.056	-.35	.00
		Widower	-.171	.065	.056	-.35	.00
	Married or domestic partnership	Single	.011	.081	.999	-.20	.22
		Divorced	-.161*	.050	.010	-.29	-.03
		Widower	-.161*	.050	.010	-.29	-.03
	Divorced	Single	.171	.065	.056	.00	.35
		Married or domestic partnership	.161*	.050	.010	.03	.29
		Widower	.000	.000	.	.00	.00
	Widower	Single	.171	.065	.056	.00	.35

			Married or domestic partnership	.161*	.050	.010	.03	.29
			Divorced	.000	.000	.	.00	.00
Insurance	Scheffe	Single	Married or domestic partnership	-.171*	.043	.002	-.29	-.05
			Divorced	.829*	.060	.000	.66	1.00
			Widower	-.171*	.059	.040	-.34	-.01
		Married or domestic partnership	Single	.171*	.043	.002	.05	.29
			Divorced	1.000*	.056	.000	.84	1.16
			Widower	.000	.055	1.000	-.16	.16
		Divorced	Single	-.829*	.060	.000	-1.00	-.66
			Married or domestic partnership	-1.000*	.056	.000	-1.16	-.84
			Widower	-1.000*	.068	.000	-1.19	-.81
		Widower	Single	.171*	.059	.040	.01	.34
			Married or domestic partnership	.000	.055	1.000	-.16	.16
			Divorced	1.000*	.068	.000	.81	1.19
	Bonferroni	Single	Married or domestic partnership	-.171*	.043	.001	-.29	-.05
			Divorced	.829*	.060	.000	.67	.99
			Widower	-.171*	.059	.024	-.33	-.01
		Married or domestic partnership	Single	.171*	.043	.001	.05	.29
			Divorced	1.000*	.056	.000	.85	1.15
			Widower	.000	.055	1.000	-.15	.15
		Divorced	Single	-.829*	.060	.000	-.99	-.67
			Married or domestic partnership	-1.000*	.056	.000	-1.15	-.85
			Widower	-1.000*	.068	.000	-1.18	-.82
		Widower	Single	.171*	.059	.024	.01	.33
			Married or domestic partnership	.000	.055	1.000	-.15	.15
			Divorced	1.000*	.068	.000	.82	1.18

Dunnett T3	Single	Married or domestic partnership	-.171	.065	.068	-.35	.01
		Divorced	.829*	.065	.000	.65	1.01
		Widower	-.171	.065	.068	-.35	.01
	Married or domestic partnership	Single	.171	.065	.068	-.01	.35
		Divorced	1.000	.000	.	1.00	1.00
		Widower	.000	.000	.	.00	.00
	Divorced	Single	-.829*	.065	.000	-1.01	-.65
		Married or domestic partnership	-1.000	.000	.	-1.00	-1.00
		Widower	-1.000	.000	.	-1.00	-1.00
	Widower	Single	.171	.065	.068	-.01	.35
		Married or domestic partnership	.000	.000	.	.00	.00
		Divorced	1.000	.000	.	1.00	1.00
Games-Howell	Single	Married or domestic partnership	-.171	.065	.056	-.35	.00
		Divorced	.829*	.065	.000	.65	1.00
		Widower	-.171	.065	.056	-.35	.00
	Married or domestic partnership	Single	.171	.065	.056	.00	.35
		Divorced	1.000	.000	.	1.00	1.00
		Widower	.000	.000	.	.00	.00
	Divorced	Single	-.829*	.065	.000	-1.00	-.65
		Married or domestic partnership	-1.000	.000	.	-1.00	-1.00
		Widower	-1.000	.000	.	-1.00	-1.00
	Widower	Single	.171	.065	.056	.00	.35
		Married or domestic partnership	.000	.000	.	.00	.00
		Divorced	1.000	.000	.	1.00	1.00

*. The mean difference is significant at the 0.05 level.

Source: compiled by the author, using SPSS by survey data