

## Financial literacy and its influence on young customers' decision factors

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**Abstract.** Dynamic changes in economic environment, especially regarding financial markets, cause the necessity to develop financial skills of societies. Despite the large number of different initiatives in this field, the financial education level around the world is rather low. This state is influenced by many factors and differs in particular target group of financial education. The paper focuses on the young people as the most important group for further development of societies. The purpose of the article is to verify the influence of financial knowledge and skills on financial decision factors. It presents the results of a pilot survey which was conducted at the turn of 2013 and 2014 in selected European countries combining descriptive theoretical and empirical methods. The survey assesses the level of young customers' financial literacy, examines young customers' decision factors and correlation between them and basic financial knowledge and skills.

**Keywords.** Financial Literacy, Financial Education, Young Customers' Financial Needs, Financial Behaviour.

### 1. Introduction and theoretical background – literature review

Turbulent changes in the economic environment along with the financial crisis have caused the necessity to rethink, which factors influence customers' financial decisions and their behaviour on the financial markets. Uncertainties in business conditions and limited opportunities have led banks to face bitter, aggressive competition (Vallace and Herrick, 2009). The dynamic development of financial markets does not go hand in hand with the financial literacy of societies (Lusardi and Mitchell, 2011).

Financial literacy is usually understood as a combination of awareness, knowledge, skill, attitude and behaviour, necessary to sound financial decision-making and ultimately achieving individual financial well-being (OECD/INFE, 2011). It is conceptualized from the perspective of two dimensions. The first dimension is understanding (the personal finance knowledge) and use (the personal finance application) (Huston, 2010). The second one is the financial knowledge and informed judgments decisions (Samy et al., 2008). The definitions of the financial literacy may be divided into conceptual definitions and operational ones. The conceptual definitions try to explain abstract concepts in concrete terms. They include the following categories: knowledge of financial concepts, ability to communicate about financial concepts, aptitude in managing personal finances, skill in making appropriate financial decisions and confidence in planning effectively for future financial needs. The operational definitions convert conceptual definitions (in the form of concrete terms) into measurable criteria, as the potential results of the financial literacy concept's operational analysis (Remund, 2010). There are many ways and strategies of measuring financial literacy (Hung et al., 2009). Despite that, there is still a lacking of the satisfactory operational definitions, which help to find the standardized way towards its measurement. The standardized measurement of

financial literacy is constantly one of the most important research priorities (Schuchardt et al., 2009).

While examining financial literacy, it is necessary to discuss about financial capability. That kind of capability is the result of the development of individuals' financial knowledge and skills. This capability gains access to financial instruments and institutions (Braunstein and Welch, 2002). Many authors underline that it plays an even more important role than financial literacy itself (Johnson and Sherraden, 2007).

Both terms, financial literacy and financial capability, are strictly connected with financial education, which is considered to be the solution to the problem of illiteracy. Financial education programs motivate individuals to develop their skills and capabilities and, as a result, societies to improve their level of literacy (Kozup and Hogarth, 2008; Williams, 2007). They are especially important because the lack of sufficient financial knowledge affects the well-being of individual households (Rooij et al., 2011) along with the national and global economy. Financial literacy's deficiencies cause ineffective money management. Furthermore, they also result in wrong consumer financial behaviours (Atkinson and Messy, 2012; Bumcort et al., 2011; Lusardi and Mitchell, 2011; Xu and Zia, 2012). Both can dramatically affect the financial health of local communities, as well as, the national and regional markets. The knowledge and information asymmetry between banks and customers is thought to be one of the reasons of the last worldwide financial crisis (Capiga et al., 2010; Crotty, 2009; Pyka, 2010). The determination of banks to raise profits (Blundell-Wignall et al., 2008), combined with severe competition in the banking service industry, results in the development of plenty of new financial products and loyalty programs, aiming at attracting customers. Almost all banks declare that they want to satisfy customers and fulfil their needs by preparing offers that match their expectations. As a result, financial products and services become more and more complex. The diversity of financial products and the large amount of different information that should be analysed and taken into account, cause rational financial decision-making become more and more difficult for customers, especially for the youngest ones. Youth is a very important target group for financial education programmes as well as for banks. Banks have appreciated their importance in the process of building long-term relationships. Banks' sales managers know that youth's commitment and loyalty leads to repeated buying in the future and long-term competitive advantage<sup>1</sup>.

That is why teaching them how to take an informed decision becomes so essential today. The financial education, as the process by which people improve their financial literacy, may influence their financial awareness, while choosing financial services and enhancing the knowledge on various types of products and their features. Additionally, financial education enables the change of attitudes and patterns of financial behaviours and the understanding of customers' rights and obligations. It is necessary to make rational, informed financial decisions.

The importance of financial literacy has already been noticed by scientists and researchers (Fraczek, 2014). They used to examine financial literacy from two perspectives: socio-demographic factors influencing its level or its results for society, economy and financial markets. The first group of research focused on the following factors: gender (Berggren and Gonzalez, 2010; OECD/INFE, 2013), income and level of education (Atkinson and Messy, 2012; Spataro and Corsini, 2013), cultural norms (Nannyanzi, 2009), motivation (Mandell and Klein, 2007) and age (Atkinson, 2007;

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<sup>1</sup> Competitive advantage is understood as the ability or the circumstances, which let a bank gain the advantage over other banks and financial institutions (Aaker, 1989; Barney, 1991; Fahey, 1989; Harasim, 2005; Korenik 2006; Pietrzak, 2003; Porter, 1998; Rue and Holland, 1986).

Atkinson and Messy, 2012; Chen and Volpe, 1998; Finke et al., 2011; Lusardi et al., 2010). The second group studied the connection between the level of financial literacy and the general well-being of societies (Mahdzan and Tabiani, 2013; Mandell and Klein, 2009; Nannyanzi, 2009; Spataro and Corsini, 2013).

The variety of definitions causes the necessity to precisely outline the perspective, which will be taken into account in this research. This paper follows the OECD definition and examines the financial literacy from the individuals' perspective. A literature review and analysis of the surveys' results was the foundation of determining the research gap. None of the abovementioned research examines the correlation between the level of financial knowledge and skills (understood as financial literacy) and the criteria taken into account in the process of making informed decisions while choosing financial products. Thus, the purpose of the paper is to verify the influence of financial knowledge and skills on youth' financial decision factors. Analysing the results of pilot field research the following research questions were asked:

- What is the level of youth' financial knowledge and skills compared to other target groups of financial education?
- What financial products are consciously chosen by young people?
- What factors are taken into account in the process of choosing financial products?
- Which youth's decision factors can be treated as informed ones?
- To what extent do informed decision factors influence youth's behaviour in the banking market?

The following research hypotheses were formulated:

- H1: The level of the research target group's financial knowledge is higher than the average level of financial knowledge in society.
- H2: Financial products and services used by youth correspond to their needs and expectations.
- H3: The most important decision factor for young customers is the price of financial products.
- H4: Youth use only basic financial knowledge in the process of assessing financial products and services.
- H5: Despite the higher level of financial knowledge, the research target group's decisions factors cannot be treated as informed ones.

Corroborating the relation between the level of financial literacy and financial decisions' determinants could be crucial for further financial education's programs. Many initiatives, conducted so far by different stakeholders, have not yet brought the expected results and it is commonly known that the level of financial literacy is still rather low in the society. The research results will also be important for banks and other financial institutions. The determination of the most important criteria of financial products' choice lets banks understand this specific target group and match banks' market behaviour to their needs. The results will also have some implications for young people. If they realize how easily they are influenced and how unreasonable they are, they will probably be more motivated to gain financial knowledge in the nearest future.

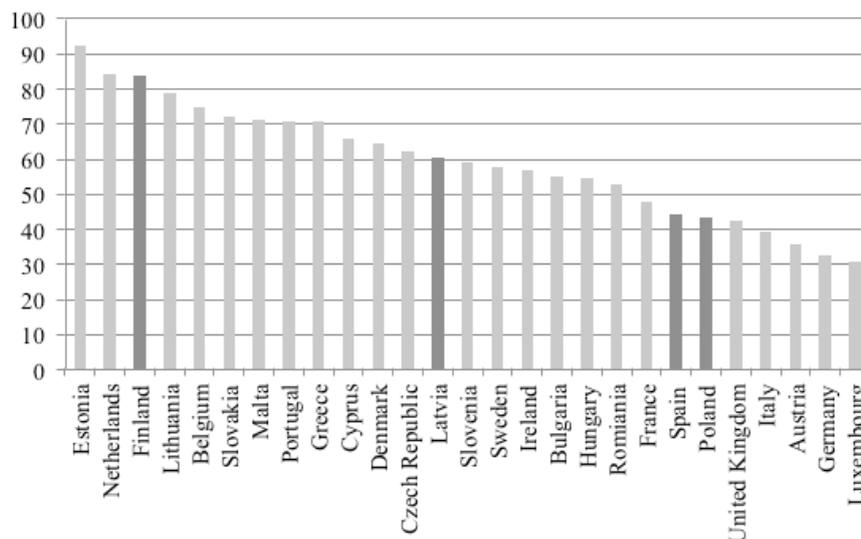
## **2. Research methodology**

The main purpose of the research is to assess the young customers' financial knowledge and to examine if there is any correlation between the level of knowledge

and the youth's behaviour in the banking market.

The two-step methodology is designed to achieve the research goals. The first step was based on an investigation of the current literature (academic and non-academic) on financial literacy, reports and historical data concerning the level of financial literacy and customers' market behaviour. As a result of the analysis of the literature, it was decided to focus on youth as a specific target group for educational programmes and banks. Youth is current and potential participants of the financial market; especially the banking segment. The results of this step present this target group underlining the role of young people in today's world and the future financial market. The profile of young people, their features (important from the perspective of the functioning and the development of the financial market), typical financial patterns and financial behaviour are also described. Additionally, the descriptive analysis of determinants of consumer satisfaction in the aspect of the hierarchy of consumers' financial needs were conducted.

The second step was an empirical survey. The data collected during the field research was compared to results of former research. The empirical study is still in progress. The article presents the results of the pilot survey that was conducted at the turn of 2013 and 2014 in the group of 181 young people at the age up to 24. The group consists of students of economy and business in four countries. The countries of Finland (37 people), Latvia (57 people), Spain (41 people) and Poland (46 people) were chosen as representatives of different banking markets countries. These countries were chosen from the perspective of competition measured by markets' concentration ratio (see fig. 1).



**Fig. 1.** European banking markets' concentration ratio (CR5) in 2010 (ECB 2012, 1)

Finland represents a highly concentrated market. Latvia is one of the countries in the middle of the scale. Spain is one of the banking markets with a low level of concentration ratio. Poland was chosen because today its banking market is one of the most interesting markets in Europe. Despite the global financial crisis, it generates increasing incomes. In 2011 the net profit of banks in Poland was 15, 7 billion PLN with revenues over 90,9 billion PLN, which is the best result in history. Furthermore, the rate of equity (ROE) was 12% and capital adequacy ratio – 13%. The figures from

2010-2011, show an increasing volume of personal customers' deposits and credits. The interest rates were kept at a relatively low level with the concurrent decrease of customers' required reserves (Deloitte 2012, p. 5). These countries also defer the way the banking market is developing. The authors realise that the countries' selection could be thought as one of the research limitation. During the realisation of complex research, it is planned to broaden the range of countries.

The data was collected by employing a PAPI method (personal and pen interviews) using two kinds of questionnaires. Firstly, the questionnaire focused on the level of financial literacy and was previously tested and used in research covering many countries (Atkinson and Messy, 2012). Some of the questions were also used in other coordinated research (Xu and Zia, 2012). Using the same questionnaire gave the opportunity to compare the general level of financial literacy of all populations in different countries with young people. The target group consists of youth studying economy and business because the purpose was to examine the role of informed decision-making. It was assumed that they are equipped with a basic level of financial literacy. This questionnaire included questions that verify basic knowledge of key financial concepts and the ability to apply numerical skills in financial situations (e.g. simple and compound interest, risk and return, and diversification of risk). The second questionnaire was prepared on the basis of a literature review and focuses on financial decisions' factors in the process of choosing banks and financial products. A seven-point Likert scale was applied starting from zero, which indicated that the factor is not important at all, to six, which meant the huge importance. Reliability analysis, measured with Cronbach's alpha<sup>2</sup>, showed adequate reliability levels for all of the scores.

The questionnaires were used to collect the information about the level of financial literacy, the scale of using the basic financial products and the criteria of financial products' choice used by young people that study economics. The goals of the research were:

- assessing the young customers' financial knowledge and skills (percentages of correct answers),
- the comparison of the field results with results in the level of financial literacy of societies in different country taking into account the fact that the level of financial literacy follows an inverted U-shape with respect to age,
- determining the financial products and services used by youth comprising target group (percentage of respondents who have the product),
- specifying the young customers' decision factors (criteria) influencing financial decision making (percentage of product owners' indications),
- the exploration of the relationship between the level of respondents' financial literacy and their expectations concerning banking products and services (Spearman's rank correlation coefficient). The research of this relationship is conducted by the prism of the criteria of choosing the financial products, used by respondents (young people).

To discover the strength of the relationship between two sets of data (level of financial literacy and expectations concerning banking products and services by the prism of the criteria in a particular country), the Spearman's Rank Correlation Coefficient<sup>3</sup> was used. In this research, only the banking account and the credit cards

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<sup>2</sup> Cronbach's alpha is a coefficient of internal consistency. It is commonly used as an estimate of the reliability of a test for a sample of examinees.

<sup>3</sup> The ranking of the countries in the level of financial literacy was achieved by giving the ranking '1' for the biggest number and '2' for the second biggest value and so on in each row of

were applied as the most popular banking products.

### 3. Results

#### 3.1. Youth as a very important target group of financial education

Although both measuring the level of financial literacy and the activities on financial education are usually addressed to the general public, proper target groups are defined to increase the efficiency of financial education. Evidence is, among others, national strategies on financial education developed in many countries (OECD, 2013). The most often specified target group is youth<sup>4</sup>.

In many cases, the two terms youth and young people are used interchangeably. The United Nations, mainly for statistical purposes, defines those persons as people between the age of 15 and 24 (UN, 2014). Taking into account this definition, almost half of all people in the world is under the age of 25 (44, 2% in 2010). Individuals between the age of 15 and 24, make up over one-sixth of the world's population (17, 7%). The youth is a very specific target group. They are in transition from financial dependence to financial independence. It should be noted that in many countries at this moment the consumption among children and youth is continuously rising (Sherraden et al., 2011). It was repeatedly found that, concerning age, financial literacy follows an inverted U-shape. It means that financial knowledge, skills and awareness are lower among younger and older individuals in comparison to middle-aged adults (Atkinson and Messy, 2012). It is also documented that a U-shaped age-related curve is reflected in the prices people pay for particular financial choices, e.g. use of credit cards; home equity loans and lines of credit; auto loans; mortgages; small business credit cards (Agarwal et al., 2009). It was proved that age is also related to risk tolerance, which means that, generally, risk tolerance decreases as people get older. However, there is also the so-called aging effect-after reaching a certain age the risk aversion increases (Yao et al., 2011). These findings are very important, because individual willingness to take financial risks affects financial preferences and needs. Concurrently it also affects behaviour on financial markets including spending money, savings, portfolio decisions.

Banks all over the world appreciated the role of youth as customers, and they offer them many products and services. Today's young people are making more and more financial decisions at younger ages. Their role in society is changing, and they have new-economic responsibilities. On the one hand, contemporary young people have access to more money and credit. More and more teenagers have a high spending rate when using cash, checks, or credit cards, and the age at which young adults receive credit cards is dropping (Pinto et al., 2005). On the other hand, unfortunately it does not mean that their financial literacy is sufficient. They are not ready to the complexity of the financial world and full of threats the modern financial lives. Many students are not even well prepared for personal money management e.g. on campus (KeyBank and Harris Interactive, 2006). As a result, they quite often make their financial decision on the basis of advertisements and promotions, rather than on

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the results on financial literacy presented in the table 2. Later, all of it was summed up and eventually the final ranking was created. The alternative way was by summarising all results (percentage of positive answers) at the level of each country and then ranking them. The result is very similar.

<sup>4</sup> Other specified target groups are: children, selection of adults, women including elderly and poor /extremely poor women, young people who do not attend schools, the unemployed, people with loans, socially disadvantaged individuals etc.

calculations and financial analysis. Research outcomes show that hundreds of millions of young people in the world are lacking financial knowledge, skills as well as financial management training. Thus, their financial literacy is rather poor (OECD/PISA, 2012; Sherraden et al., 2011). They usually receive poor scores concerning knowledge about risk, global investing, stock market valuation, impact of interest rate changes and tax planning (Volpe et al., 1996). A lack of knowledge does not enable them to make reasonable financial decisions and choose the best banks' offers. Many students who achieved lower financial literacy score cannot use their checking accounts and credit cards effectively (Mandell, 2006; May, 2005). Based on research conducted in America also show that student's ability to recognize the most dangerous aspects of credit cards lies, as well as, into the fact that they have a poorer understanding of the tax system in the aspect of the taxation of interest on savings accounts (Mandell, 2008). Today, many developed societies are less savings-oriented and more consumption-oriented than they were in the past (Federal Reserve Bank of San Francisco, 2005). This influences the negative savings rate and insufficient savings for retirement in many societies (Guidolin and La Jeunesse, 2007).

The lack of the appropriate level of financial literacy and adequate financial education of youth threaten their financial security in the future. It influences not only their current and future financial well-being but also their employment opportunities. Financially stressed employees (especially inexperienced young people) often bring their concerns to the workplace. It influences the work outcomes, use of work time and absenteeism. People who had higher levels of financial stress have lower levels of pay satisfaction, more often waste their work time, and more frequently are absent from work (Kim and Garman, 2004). On the contrary, the adequate level of financial literacy helps young entrepreneurs retain and maintain their micro-businesses for a the longer period, leading to increased employment of the youth.

Despite the workplace, the financial aspect of lives and the challenges facing today's youth have a tremendous impact on their quality of life. More than any other group, youth reactions on today's situation in the area of financial literacy (or illiteracy) will affect their families and communities as well as the countries and regions in which they live. In extreme cases, youth may react by unleashing risky or harmful behaviours against themselves or the society (e.g. stealing).

Although young people are quite often perceived as contributing to many society's problems it should be remembered that they are, in fact, important assets for the economic life of their communities. In today's world, young people need support to contribute to the well-being of society. It should be continuously underlining the significant challenges youth is facing, including challenges in the key areas of financial education and trainings as well as in the fields of economic opportunities. Thus, it is critical to equip young people with basic knowledge and management skills in finance such as financial decision making, earning and spending money, budgeting and using financial services. Such important elements of financial literacy like financial knowledge and skills create their financial awareness. These factors help young people to manage their money, using the credit effectively, building wealth, making informed and good financial decisions and in this way ensuring or improving their financial well-being.

There is some evidence that school-based personal finance education may positively impact on long-term behaviour on the banking market. It turns out, that students who participate in high school courses in personal finance tend to save more of their income in middle age than those who don't participate in such courses (Bernheim et al., 2001). Consequently, the more educated in financial field students are, the more expected and appropriate emotions regarding the need for savings or the consequences of excessive debt (Mandell, 2009). This relation is not always confirmed by every research. However, many analyses show that even if full course

in personal finance of students does not affect financial literacy, it improves the financial behaviour and self-reported levels of thrift (savings) as well as actual indicators of savings, including having a savings account (Mandell 2005). This positive impact of financial education on behaviour may even persist for a longer time (Lerman and Bell, 2006).

Presented features of youth generation, including demographic changes, as well as trends in their financial habits and behaviours, attitudes toward risk and spending money, seem to be a sufficient justification for further analysis and research. In such a research, it would be valuable to analyse the potential of young people as bank clients taking into account their level of financial literacy, as well as, the criteria of financial decision making.

### **3.2. The role of youth as a banks' customers**

Today banks and other financial institutions are facing a dramatically aggressive competition within the new, deregulated environment. In the banking sector, as a result of the financial crisis, the regulatory and political intervention changes the market structure. Additionally banks are under enormous pressure to restore public confidence in the role that they play in the society. With the economic, still challenging environment it is more critical than ever that banks and financial institutions maintain strong relationships with their customers. This process should start at the very beginning of customers' activity on financial because only then banks will have a chance to influence customers' financial habits. It is especially important because of high level of inertia observed on banking market that means that customs and habits determine to large extent consumers' behaviour (Siekierski, 2003).

Research continually confirms a significant correlation between satisfaction and repeated buying, brand loyalty and spreading a positive opinion of the product. In the banking sector (Dubrovski, 2001; Loveman, 1998; Salmen and Muir, 2003) it was found that higher customer satisfaction leads to increased cross-selling at the branch level. Customer satisfaction is thought to be a leading indicator of revenue and growth (Ittner and Larcker, 1998). Most scientists agree that customer's overall satisfaction is rarely concerned with a single aspect of the service package but rather with many aspects (Johnson, 1995). It is closely determined by the satisfaction derived from each interaction. This interaction can occur in a number of ways, from seeing a teller face-to-face, using an Automated Teller Machine (ATM) or conducting business online. There were many surveys focusing on consumer satisfaction determinants (see table 1). None of them extract young people as a special target group. Thus in this field the paper fulfils this gap.

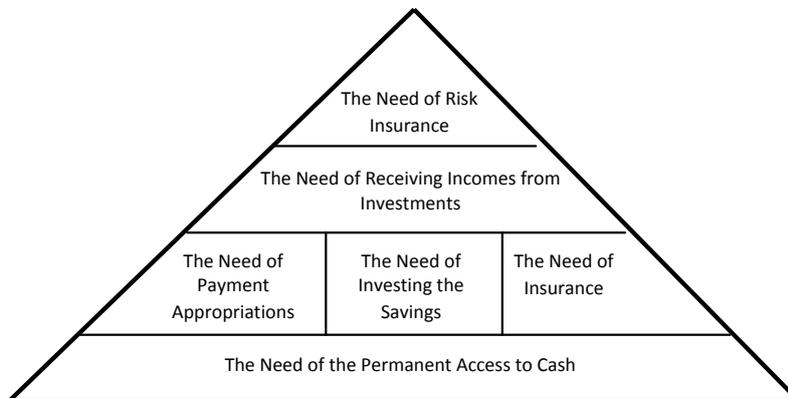
It is especially important because the knowledge as to what extent banks fulfil consumers' needs and expectations is crucial in the process of gaining competitive advantage, enriching bank's brands and protecting or increasing market share at a time when customer loyalty is no longer guaranteed. It is necessary today to specify the factors of consumers' satisfaction and loyalty.

Using consumers' satisfaction in the process of achieving competitive advantage requires from banks the comprehension of the satisfaction concept. The consumer satisfaction category is based on the premise that the profit is made through the process of satisfying consumers' needs. It is associated with expressive outcomes above or equal to expectations. The dissatisfaction is related to performance below expectations for instrumental outcomes. The banking product must meet expectations on both instrumental and expressive outcomes. The dissatisfaction may occur from either type of performance (Johnson, 1995). That is why finding out what factors are taken into account by customers in the process of choosing a bank and satisfying financial needs, becomes nowadays very important.

**Table 1.** Customers' satisfaction determinants in selected surveys (Klimontowicz, 2014)

Researcher	Determinants of satisfaction
Swan and Combs, 1976	· instrumental - the performance of the physical product
Maddox, 1981	· expressive - the psychological performance of the product
Hausknecht, 1988	· emotions interest, joy and surprise
Henning-Thurau and Thurau, 2003	
Bitner et al., 1990	employees' willingness to respond to a problem employees' responsiveness to customer needs and requests unsolicited employee actions
Johnston and Silvestro, 1990	hygiene factors enhancing factors dual factors
Mersha and Adlakha, 1992	knowledge of the service, thoroughness, accuracy, consistency, reliability, reasonable cost, willingness to correct errors, timely and prompt service
Prabhakar, 2005	
Johnson, 1995	attentiveness, responsiveness, care and friendliness

Customers take into account the economic and uneconomic factors in the process of satisfying their financial needs. The range of factors depends on the product, consumer's level of wealth, education degree, the place of living, age and others. It must be stressed that one financial need can be satisfied by diverse products and concurrently one financial product can satisfy diverse financial needs. According to Smyczek, all financial needs are hierarchical (see fig. 2).



**Fig. 2.** The hierarchy of consumers' financial needs (Smyczek, 2007)

The hierarchy of financial needs is a schema. That kind of needs can be partially fulfilled at lower and higher levels. Inversions or reordering for particular individuals is also possible. Based on Smyczek, the main factors, which influence customer decision at lower levels, are interest rates, commissions, charges and fees. Satisfying the higher needs consumers consider brand, confidence, reliability, trust and quality factors as service quality and simply procedures.

Answering the question on how to improve consumers' satisfaction is not as easy as it seems. Customer's satisfaction is created through a combination of responsiveness to the customer's views and needs. Creating consumers' satisfaction needs continuous

improvement of products or services, as well as continuous improvement of the overall customer relationship (Zineldin, 2005, pp. 329-343). Analyses show that the factors that are indicated by customers as crucial are not always the same factors, which are taken into account when the bank or the banking product is chosen. They quite often differ from satisfaction's determinants. Understanding these differences is of crucial importance towards creating the bank's competitive strategy (Deloitte 2012, p. 18).

The importance of measuring young consumers' expectations is paramount especially in the context of banking and financial services. Recent service developments, particularly with respect to the electronic delivery of these services, have resulted in a continuous increase in customer expectations and the consumer's subsequent demands as the quality of service improves. Any previous experience with traditional or electronic services, word-of-mouth, or advertising will have an influence on the expectations of the consumer. The new generation of consumers with their entirely different purchase behavior will probably cause some changes in banks market behavior. Banks should learn from young customers' experience by means of feedback to gain insights with a view towards increasing satisfaction.

### 3.3. Young customers' financial knowledge and decisions

Financial knowledge of young people has been examined by a commonly used questionnaire. It includes questions about division, time-value of money, interest paid on a loan, calculation of interest plus principle, compound interest, risk and return and diversification.

Taking into account the division, most of the responders could use mental arithmetic to undertake simple tasks (97%-100% correct answers). Most of them also understand how inflation impacts on the value of fixed cash amount. In most of the analyzed cases, more than 85% students believe that with the same money they will buy less in one year's time. In the case of the question on paying interest on a loan over 83% students gave the correct response (83%-89%). However, it should be noted that these questions were understood in a different way by particular students. Despite the quite high level of knowledge, the explanation for a part of correct answers was emotional (relationships described in the question), instead of calculations (e.g. no interest from friends). Just as division and time-value of money, calculating the simple interest was not a problem for young responders. Over 89% respondents knew how to count it. However, knowledge and skills of compound interest is much lower than knowledge and skills of simple interest. Similarly, the basic concept of risk and return is understood for most of future economists (over 93% correct responses). It must be mentioned that the results in Latvia were the worst. Only 74% of youth gave the correct answer. The simple question in the area of the diversification used in different countries proved to be challenging in comparison to the question in the area of risk and return. The percentage of correct answers was more varied. The gap between Finland (70%) and Poland (93%) was 23% (see table 2).

**Table 2.** Young customers' financial knowledge (% of correct answers)

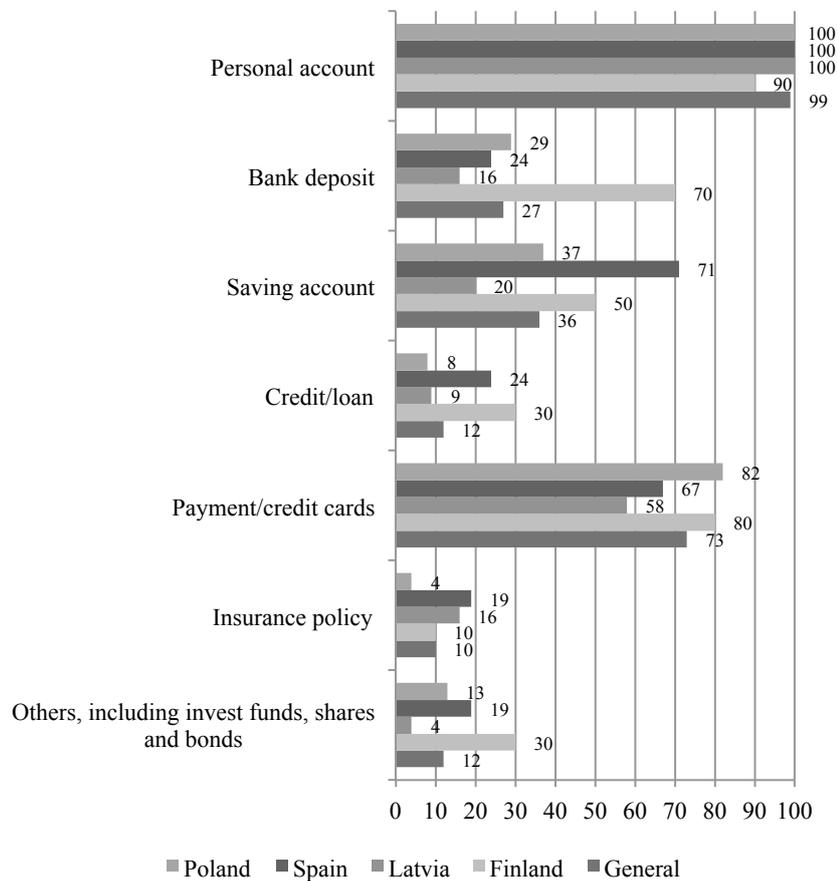
	Finland	Latvia	Spain	Poland
Division	97	98	98	100
Time-value of money	73	86	85	98
Interest paid on a loan	89	86	85	83
Calculation of interest plus principle	89	95	100	89
Compound interest	84	58	78	72
Risk and return	95	74	93	100
Diversification	70	81	73	93

The comparison of the target group's results with the results of research representing the whole of societies (see table 3) proved the first hypothesis. The full-time economic education seems to be very effective and much more efficient than education in action. The authors of financial education programs probably should rethink the way they spread knowledge in this field.

**Table 3** Financial knowledge in selected societies (% of correct answers) (Atkinson, 2007)

Country/ area of knowledge	Albania	Armenia	Czech Republic	Estonia	Germany	Hungary	Ireland	Malaysia	Norway	Peru	Poland	South Africa	UK	BVI
Division	89	86	93	93	84	96	93	93	61	90	91	79	76	84
Time value of money	61	63	80	86	61	78	58	62	87	63	77	49	61	74
Interest paid on loan	x	87	88	84	88	95	88	93	61	x	85	65	90	60
Calculation of interest plus principle	40	53	60	64	64	61	76	54	75	40	60	44	61	63
Compound interest and correct answer to previous question	10	18	32	31	47	46	29	30	54	14	27	21	37	20
Risk and return	77	67	81	72	79	86	84	82	18	69	48	73	77	83
Definition of inflation	81	57	70	85	87	91	88	74	68	86	80	78	94	87
Diversification	93	59	54	57	60	61	47	43	51	51	55	48	55	41

According to the concept of hierarchy of consumers' financial needs, the most important youth financial need is the permanent access to cash and making payments. Products and services, which were bought by young customers show that most of them fulfill this need, which proves the second research hypothesis. Despite one of the responders, all of them have a personal account and generally use payment or credit cards. The need for investing savings strongly occurred only among the Finnish youth. 70% of them own bank deposits while in Poland, Spain and Latvia the percentage of responders using this kind of financial product does not exceed 29%. Saving accounts are the most popular among Spanish responders. Sporadically young people use insurance policies, credits, loans and other financial products (see figure 3). Approximately they have been using their personal accounts and other financial products for almost three years and are satisfied with their bank (86% of responders). Taking into account that they also are not going to change their financial goods suppliers in the nearest future they can be a promising target group for banks.



**Fig. 3.** Financial products and services used by youth (% of responders)

During the research, responders were asked what factors they took into account for choosing particular financial products. They could choose the factors from the list and add additional factors in the list, should it have been necessary. Survey results confirm the general importance of charges, fees and interest rates in the process of decision-making. Additionally, respondents pointed safety, friends and family’s opinion, service quality and complexity and friendly procedure as the most important financial decision factors (see table 4).

Youth’s financial decision factors differ between products and services. Charges and fees are the most important factors for most financial products (hypothesis 3) as personal accounts, payment/credit cards, credits, loans, invest funds, enterprises’ shares and bonds. Interest rate is taken into account at the first place when responders choose bank deposits and saving accounts. Meanwhile for insurance policies the most important is safety.

Despite the factors reflecting the price and other above mentioned factors, the representatives of particular countries pointed out the following features that are important for them (see table 4):

- place of purchase for personal accounts and credits (Finland),
- image, trust and employees' professionalism for credits and loans (Latvia).

**Table 4.** Young customers' decision factors (% of product owners' indications)

Factors:	Products:							
	Personal account	Deposit account	Saving account	Credit/loan	Payment/credit cards	Insurance policy	Funds	Shares and bonds
<b>Place of purchase</b>								
Finland	67	29	20	67	13	0	0	0
Latvia	29	33	27	80	38	22	100	0
Spain	38	20	7	20	14	50	0	0
Poland	28	18	17	13	18	100	0	0
<b>Service complexity</b>								
Finland	0	0	20	0	25	0	100	0
Latvia	13	67	27	100	16	33	100	0
Spain	19	0	13	0	21	50	0	33
Poland	25	7	14	13	27	100	25	14
<b>Friendly procedures</b>								
Finland	56	29	20	33	25	0	0	100
Latvia	24	44	27	40	31	56	100	0
Spain	52	40	40	60	29	100	0	0
Poland	32	25	23	13	9	100	25	43
<b>Service quality</b>								
Finland	44	29	20	67	25	100	100	0
Latvia	35	89	100	100	31	100	100	0
Spain	33	60	27	40	29	50	0	0
Poland	15	14	9	0	9	75	0	0
<b>Habits</b>								
Finland	33	14	20	67	25	100	0	0
Latvia	5	33	36	20	19	22	50	0
Spain	10	0	7	20	0	0	0	0
Poland	12	0	20	0	8	50	0	0
<b>Interest rate</b>								
Finland	0	57	80	67	13	100	100	50
Latvia	5	100	100	100	13	22	100	0
Spain	10	100	67	80	29	25	0	100
Poland	9	86	54	38	5	0	0	29
<b>Friend and family' opinion</b>								
Finland	33	43	100	100	25	100	100	100
Latvia	42	33	73	100	28	78	100	0
Spain	43	60	33	40	21	25	0	33
Poland	27	25	6	25	10	75	25	29
<b>Image</b>								
Finland	22	29	40	33	13	100	100	100
Latvia	22	33	36	100	13	11	50	0
Spain	5	0	20	20	14	0	0	0
Poland	9	0	0	38	3	25	25	29

<b>Prestige</b>								
Finland	33	43	20	33	13	100	100	100
Latvia	13	44	27	60	3	56	100	0
Spain	10	20	13	0	7	0	0	33
Poland	4	0	0	0	5	25	50	14
<b>Charges and fees</b>								
Finland	22	57	60	100	25	100	100	50
Latvia	33	78	73	100	19	56	100	0
Spain	43	80	53	80	57	100	0	67
Poland	72	21	37	63	54	100	50	57
<b>Trust</b>								
Finland	22	0	40	100	13	100	0	50
Latvia	25	100	100	100	19	100	100	0
Spain	24	40	33	20	21	25	0	100
Poland	22	29	14	25	6	0	0	0
<b>Promotion / advertisement</b>								
Finland	11	29	0	0	0	100	0	0
Latvia	11	33	18	100	3	11	50	0
Spain	5	0	7	0	7	25	0	33
Poland	5	18	9	0	8	25	0	0
<b>Modernity</b>								
Finland	11	29	0	0	0	100	0	0
Latvia	11	67	55	60	22	56	100	0
Spain	14	20	13	20	21	25	0	33
Poland	16	0	6	0	15	25	0	29
<b>Safety</b>								
Finland	33	29	80	67	50	100	100	50
Latvia	36	100	100	100	28	100	100	0
Spain	29	80	47	80	50	50	0	100
Poland	20	18	20	13	22	100	0	29
<b>Employees' professionalism</b>								
Finland	22	29	20	0	13	0	100	0
Latvia	13	22	45	100	16	33	100	0
Spain	14	40	13	0	7	50	0	67
Poland	2	7	0	13	0	0	0	0
<b>Others</b>								
Finland	0	0	0	0	0	0	0	0
Latvia	0	0	0	0	0	0	0	0
Spain	0	0	7	0	0	0	0	0
Poland	2	0	0	0	1	0	0	29

The results of the research confirm the hierarchical character of financial needs. Young customers use basic financial products, which fulfill their basic needs. Only few of them use more complicated products. The decision factors depend on the product rather than on a the particular country and its banking market characteristics. The findings also confirm that as a result of globalization, the segment of young people becomes more and more homogeneous.

The last step of the empirical research was to verify to what extent knowledge and financial skills can influence the decision criteria concerning the choices on financial products. Table 5 shows the relationship between the financial literacy and criteria of

financial decisions among young educated financial consumers.

**Table 5.** The relationship between financial literacy and criteria of financial decisions among young educated financial consumers'

Criterion	Personal account	Payment/credit cards
Place of purchase	-0,800	0,400
Service complexity	<b>1,000</b>	0,400
Friendly procedures	-0,400	-0,400
Service quality	-1,000	-0,400
Habits	-0,200	-0,800
Interest rate	<b>0,800</b>	-0,316
Friend and family' opinion	-0,200	-0,800
Image	-0,738	-0,316
Prestige	-1,000	-0,400
Charges and fees	<b>1,000</b>	<b>0,600</b>
Trust	-0,105	-0,200
Promotion / advertisement	-0,894	<b>1,000</b>
Modernity	<b>0,949</b>	0,200
Safety	-0,800	-0,632
Employees' professionalism	-0,800	-0,800

The research results show that basic financial knowledge leads to using some easy-to-understand economic criteria in the choice of financial and banking products. Young people used only the simplest ones related to costs and effectiveness, which proves the fourth hypothesis. Choosing the banking accounts they also take into account aspects of service complexity and novelty, but choosing payment cards they follow banks' advertisements. Other factors are not correlated with the literacy level of target group. These results combined with emotional explanation, based on a number of answers, indirectly also proves the fifth hypothesis.

#### 4. Conclusions

Financial literacy seems to be the main challenge for societies in the nearest future. Financial knowledge and skills are quite poor all around the world. Even young economists, who achieved quite satisfactory scores in the test on financial literacy, make many mistakes in the area of finance. Some of them, take their financial decision on the basis of emotions and not on the financial knowledge and skills. The authors of the article have also noticed an excessive curiosity and misunderstanding of simple questions among many young people educated in the area of the economy. Reaching the higher scores in this field will demand rethinking the educational strategies and programs that have been used so far. Young people should be considered as a crucial target group of financial education. Their purchase behaviour and access to money have changed remarkably during the last few decades and as a result of globalisation they have become much more homogeneous the ever before. Banks have already realised that they are a very attractive target group and offer them many financial products. The access to financial products is very easy today. Even if banks declare that they focus on fulfilling young people's need and expectation, it should be remembered that banks are motivated to connect youth to them for a long

time and build long-term relations. Thus, a set of appropriate knowledge is necessary to make mindful and aware decision in the process of choosing a bank and financial products.

The results of pilot research proved that the target group represents the higher level of financial literacy compared to its level in society. Thus, it may be stated that even a basic level of financial knowledge leads to more rational decisions on the banking market. Most of the factors taken into account in the process of choosing a financial product were of a measurable character. Using them requires financial knowledge and skills on division, time-value of money, risk and return, interest rates and diversification. When choosing products familiar for them, they take into account their economic parameters. However, the basic financial knowledge influence only the main and obvious decision factors/criteria as effectiveness, costs, service complexity and novelty. From that perspective, youth is quite conscious while choosing banking products. Concurrently it can be observed that decisions concerning more complicated, difficult-to-understand for youth, financial products were based rather on other non-economic criteria such as trust, safety, image or family and friends' opinion. These criteria were not significantly correlated with financial knowledge and skills but still they are very important. Making conscious decisions on a banking market needs some broad and multi-faceted set of knowledge and skills and the financial education programmes should be simultaneously evaluated with financial market evolution. Otherwise, young people still will not be able to specify their expectations and will follow others' advice, including banks' advertisements.

Both, literature review and field research indicate many interesting survey gaps. In this paper, the authors focus on young people who might be prospects for banks and financial institutions. However, developing the problems of youth financial literacy and financial education, the role of families in this field should also be taken into account. The financial and economic socialization at a very young age, even from four to six years, is a factor affecting capacity to understand more sophisticated financial concepts by youth (Roos et al., 2005). It may mean that the primary source of financial socialization should be the family. Results of conducted surveys confirmed the hypothesis that parents have a role in the transmission of financial knowledge (Mandell, 2008). That is why youth's financial education is so important. Only educated young parents can show their children a correct attitude to family's finance and an appropriate way of making financial decisions. Additionally, financial education can help to change wrong habits in these fields.

Summarising, the higher level of financial literacy allows young people to make rational financial decisions and influences their behaviour on the banking market. In a long-time perspective, it will also determine the well-being of their households and the national and global economy.

## **5. Implications**

There is a significant concern about financial literacy by the researchers and authorities. However, many research gaps have to be fulfilled in future research. The further research should include aspects of youth's financial education mentioned in this paper. Their results will let authorities prepare better education programmes for young people to become more and more conscious and banks to match their offers with youth needs and expectations.

The research results allow to formulate some remarks that may be helpful in the process of developing financial education programs and strategies. The authorities should consider the following advice:

- programs of financial education should target specific groups in the population to serve best those most in need,
- programs should go hand in hand with the development of financial market and should take into account needed simplifications for less financially literate,
- financial education should start from youth,
- financial education should be a long-term education because small interventions are not effective in the case when financial illiteracy is so widespread in the population.

Financial education (especially of youth) may also help in achieving the UN Millennium Development Goals (MDGs). Some of them are successfully implemented e.g. the reducing the disparities of the access to the financial education and other initiatives between boys and girls as well as between women and men. It contributes to increasing the level of financial literacy and may improve the financial well-being of individuals. Taking into account the role of financial literacy for individuals and the economy as a whole, the realization the targets of the financial education gives the chance for achieving the universal primary education (including financial education), to promote gender equality as well as indirectly to eradicate extreme poverty and hunger and their consequences and to develop a global partnership for the widely understood development.

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