

Financial Literacy among the Young

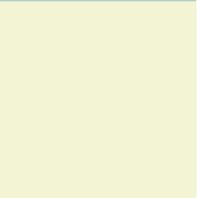
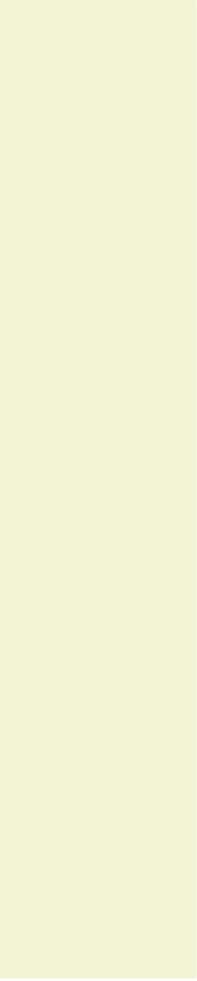
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Financial Literacy among the Young



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The Role of Banks in Education and Training

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Aleš Trunk

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BANGKOK · CELJE · LUBLIN

*Financial Literacy among the Young:
The Role of Banks in Education and Training*
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Introduction

Financial Literacy: Awareness, Knowledge, Skills and Behaviour

**Sergeja Kočar, Aleš Trunk, Valerij Dermol,
and Nada Trunk Širca**

This monograph focuses on various aspects of financial literacy and its importance for all generations, especially for the younger generation. Literacy, financial or any other is the permanently evolving ability of individuals to use socially agreed systems of symbols for receiving, understanding, creating and using texts in order to live within the family, school, workplace and society. Reading, writing and computing, i.e. skills, without which effective functioning in modern developed societies is virtually unimaginable, are considered basic literacy skills. Financial literacy is therefore essential knowledge and skill, and a prerequisite for successful and creative personal growth and responsible work in professional and social life. Internet, modern technology and digitalization have significantly changed the nature and importance of literacy.

For the successful functioning in a society that is confronted with global, economic, technological, social and cultural changes, the development of different forms of literacy, such as information, digital, media and, ultimately, financial literacy, is necessary. Financial literacy thus encompasses basic literacy, reading and mathematical literacy, being their upgrade at the same time, as it requires more knowledge and skills in a specific, financial field. All principles of general literacy apply, but also and above all, the understanding and the ability to use financial information in decision-making. In this context, financial literacy does not constitute a separate type of literacy, but is seen as an interweaving of general reading and mathematical literacy as well as other basic knowledge and skills related to personal and general financial matters. Financial literacy is one of the components of financial fitness – it is expressed as information on finances and financial trends, as well as understanding or knowledge of financial products and services, concepts and risks. Financial

literacy is defined as a combination of awareness, knowledge, skills and behaviour that is necessary for proper financial decision-making and achievement of one's own financial prosperity. Financial literate individuals are mathematically literate, they can effectively manage money, understand credit and debt management, are able to assess the need for insurance and protection, they can evaluate various risks and reimbursements related to saving and investment opportunities, and understand wider ethical, social, political and environmental dimensions of finance. Cognitive aspects of financial literacy include knowledge, education and information on various financial areas of money and resources management, banking, investments, loans, insurance and taxes. It also enables understanding of the fundamentals of managing money and other assets. On the other hand, financial illiteracy is manifested through elements of financial instability, such as over-indebtedness, inadequate savings, poor planning for the future (for example, for higher expenditures expected, security savings for a possible unexpected worsening of the financial situation, retirement savings) and inadequate investment practices.

Innovation, globalisation, technological progress and new electronic channels enable an individual to have an increasing choice of financial products and services. However, many individuals perceive them as complicated and incomprehensible. As various studies on financial literacy have shown, this is a result of poor financial knowledge of individuals. Individuals are becoming more and more aware that they lack the essential skills to understand and perform financial operations. Also, they often overestimate their understanding of financial services. The importance of financial education is increasing, but the financial awareness of the population will only be successful when everyone realizes that they are financially under-literate and that this kind of knowledge also brings benefits to themselves. Without financial awareness, it is not likely that individuals will be susceptible to financial education.

Many individuals do not plan choosing financial products and services that meet their needs. This makes them much more prone to borrowing and difficulties if their personal circumstances change (for example, due to loss of a partner, employment, prolonged illness, etc.). This is also the reason why is it difficult for individuals to ensure a satisfactory standard of living when they retire. Despite numerous confirmations of a low level of financial literacy, individuals

are increasingly aware that the understanding of financial matters is very important for them and their families.

According to Trunk Širca, Barle Lakota, Mohorko, Kolenc, and Dermol (2013), education has, since the beginning of the modern state and the establishment of mass education, been an important factor that contributes to strengthening of the links between political institutions and individuals. Investing in education and training of individuals at all stages of life benefits all age and income groups. It benefits the individual, the economy and the whole society. Financial education must complement the basic financial knowledge of individuals. Appropriate financial education should be offered by financial service providers, which should be properly trained. Financially educated users choose products and services that best suit their needs regardless of the place of the financial services provider. Thus they use the opportunities offered by the single market. Increased financial literacy and awareness of individuals promote competitiveness in the markets of financial products.

According to the European Commission (Evropska komisija, 2007), financial education helps children in understanding the value of money by teaching them how to manage and save it. Students and young people can gain rich experience for independent living, for example in handling student loans and returning them. Financial knowledge can help design important life decisions, such as buying a home and schooling of children, it helps individuals to create financial reserves for unforeseen events and investing and save for retirement. General financial awareness helps people avoid a variety of financial frauds and makes them more willing to follow regulatory authorities' alerts. They also choose financial services better and in line with their needs. Accordingly, it is less likely that they will buy products that they do not need or do not understand which could get them into financial difficulties.

In the economy, benefits of financial education are reflected in financial stability, as it helps the users to choose appropriate financial products and services, thus leading to lower penalty interest rates and to more diversified and safe savings and investment. The financially educated people are able to find more appropriate and cheaper financial products and services, thus activating the financial industry and improving economic prosperity. Changes are perceived in the promotion of competition, the promotion of innovation, and the de-

mands for better quality and greater diversity of products and services. People investing with more confidence enable the additional liquidity of capital markets, financing small businesses, which are the key element in supporting growth and job creation (Evropska komisija, 2007).

Financial education also benefits the society at large as it helps to prevent financial exclusion. Financially educated individuals will be able to take care of daily finances. Qualified individuals, including those with low income, will be able to plan and save some of their income. In summary, financial education helps to develop skills for a financially less burdened future. The contribution of financial education is reflected both on consumers and on the society as a whole, since informed clients are necessary for the functioning of competitive financial markets. One of the goals of the one-stop market in Europe in the 21st century is to strengthen the ability of all people to decide on the basis of information received (Commission of the European Communities, 2008). In Slovenia, we also note that improvement of financial literacy is needed. To this end, government and private institutions in Slovenia are more likely to engage in the literacy of different target groups with increased intensity.

Slovenia joined the Global Money Week under the slogan 'Work and Save Smart.' In cooperation with schools – during the lessons of domestic science, the NEIS carried out activities related to the upgrading of financial education for children and adolescents. The training was conducted through various channels: from the school radio, classroom discussions on the topic of money and finances, making posters, visits to financial institutions, lectures for parents and the like. Various activities on the topic of financial literacy of young people contribute to raising awareness of the importance of financial knowledge among other age groups as well.

The monograph is divided into four parts. In the first part – The Money, the Society and the Individual – we show the development of money and its importance in the society. We represent the importance and the role of financial education in the modern society; we treat and distribute financial education and training in the world and in Europe. In this part of the text, we present some good practices in selected European countries in greater detail. Special attention was also paid to good practices of the Slovenian institutions in the field of education and training for financial literacy.

In the second part – Various Aspects of Financial Literacy – we present the research on the financial literacy of Slovenes. We put special emphasis on the financial literacy of young people in the framework of the Programme for International Student Assessment – PISA. For the last few years, the developed and developing countries have been increasingly worried about the low level of financial literacy of their citizens. The reasons for this are the shrinking of public and private support systems, the modification of demographic profiles, such as the aging of the population, and the rapid development of financial markets. Concern was further enhanced by the financial crisis and the recognition that the lack of financial literacy is one of the factors contributing to the poor financial decisions of individuals and that these decisions can have serious negative consequences. Therefore, financial literacy is now recognised as an important element of economic and financial stability and development throughout the world (OECD, 2009; Šterman Ivančič, 2013, p. 21). Further in the second chapter, we presented the influence of the parents, the school and the society on the level of financial literacy among pupils. In this part of the monograph, we also present the importance of financial literacy and entrepreneurship for connecting the EU, and we also touch the area of the labour market, thus addressing youth unemployment as an incentive for self-employment.

In the third part – Education for Financial Literacy and the Role of Banks – based on a survey performed on bank clients, we confirm that the activities carried out by banks in order to improve the financial standing of clients affect the increase in the financial literacy of Slovenes. We also note that in addition to banking activities, other activities (which were not the subject of this research) influence the increase in financial literacy as well. Therefore we believe that it would be good to explore other reasons, for example: environment, upbringing within the family and the media, and to determine their influence on financial literacy. By means of the survey we also note that financially literate users of banking services are better acquainted with banking products, although they are equally used by both groups – financially literate and financially illiterate. The difference is that the former use them better and with less collateral damage. We estimate that this finding confirms that banks are not sufficiently engaged in the specifics of their various clients, such as market research by geographical regions and by age groups. As a

result, banks also do not adjust the supply to the requirements of regional markets and population groups, which makes banking products and services under-differentiated.

In the fourth part – Conclusions and Recommendations – we wrote the conclusions of the entire monographic publication and made recommendations and guidelines in the area of financial literacy, especially among young people.

References

- Commission of the European Communities. (2008). *Financial services provision and prevention of financial exclusion*. Retrieved from <http://www.bristol.ac.uk/geography/research/pfrc/themes/finexc/ec-financial-exclusion.html>
- Evropska komisija. (2007, 21. februar). Vizija enotnega trga 21. stoletja. Retrieved from http://europa.eu/rapid/press-release_IP-07-214_sl.htm
- OECD. 2009. *Financial literacy and consumer protection: Overlooked aspects of the crisis*. Retrieved from <http://www.oecd.org/finance/financial-markets/43138294.pdf>
- Šterman Ivančič, K. (Ed.). 2013. *Izhodišča merjenja finančne pismenosti v raziskavi PISA 2012 s primeri nalog*. Retrieved from http://www.pei.si/UserFilesUpload/file/digitalna_knjiznica/Documenta_8_ISBN_978-961-270-196-3_PDF/978-961-270-196-3.pdf
- Trunk Širca, N., Barle Lakota, A., Mohorko, J., Kolenc, K., & Dermol, V. 2013. Spodbujanje učenja o Evropski uniji na šolah. *Vodenje v vzgoji in izobraževanju*, 11(2), 93–105.

Part One

The Money, the Society and the Individual

Chapter One

The Development of Money and its Importance in the Society

Sergeja Kočar and Aleš Trunk

Money is a wider civilisation phenomenon. The history of its development is not uniform, but the stage of civilisation is important for its creation. It was created before the state was built and it changed its form and function during evolution. It is strongly linked to banking and the population. If we ask ourselves what money is, the answers can be very different. The authors also define it in different ways. Samuelson and Nordhaus (2002, p. 469) say that money is anything that can be used as a generally accepted equivalent in exchange. The transaction money, which is the sum of banknotes and coins that are in circulation outside banks, is pointed out as the most important. The widespread money follows by significance, including savings deposits, cash and check accounts. They see the key benefits of money in the possibility of protecting it against counterfeiting, its rarity and its usefulness as a general means of payment. 'We know more about money than any other object; because there is nothing that we should know about it and nothing can it hide from us as well. It is a thing that is entirely without characteristics, and therefore unable to do what even the weakest object can do: to hide the surprise or disappointment in itself,' notes Simmel (1978, p. 224). Arhar thinks that money is like a language. It is a means of communication between different market participants (Arhar, 2014, p. 5).

Györek (2003, p. 43) describes that the exchange of goods was already under way before the money was invented. Money only simplified and accelerated it. Throughout history, money went through various stages of development, from pegged to paper currency. The author believes that money performs five functions in national economies – it is a general measure of value that reflects the value of goods through the price; it appears as a means of conversion, since it physically mediates trade in goods; he performs a treasury role when it does not circulate and someone saves it for later purposes;

It can also function as a universal payment medium when it is fully covered by gold reserves and is convertible to gold at the emission bank; it is most commonly known as a means of payment in exchange transactions.

The philosophical view of money is different again. In his work, Simmel (1978, pp. 4–10) reveals this aspect, which he developed on the basis of the sense of values, practice of attitude towards things and mutual relations between people. It also monitors its effects on the individuals' sense of life, the interweaving of their destinies and the general culture. For him, money is an autonomous expression of the exchange rate, which changes the desired objects into economic ones and allows the substitutability of things. It confirms the original need for valuable money and the transition to its functional nature. Money becomes a tool, which affects the increase in the value of wealth. The author also highlights the phenomenon of psychological consequences of money, such as greediness, wastefulness, ascetic poverty, modern cynicism, and so on. The amount of individuals' money is also reflected in different levels of economic awareness, differences in risks and the transformation of specific rights into monetary requirements. Money has a great influence on the lifestyle. In the monetary economy, the prevalence of intellectual functions over the emotional, the dual role of mind and money, the expansion of material culture together with the backlog of individual, more intense pace and changes in life, as well as changes in the amount of money are visible. Laut (2001, pp. 14–15) pointed out in his work that an individual achieves freedom in the financial field when money works for a person, and not when a person works for it. The author thinks that we should build the spirit of well-being, which means that we get the ability that enables us to achieve material goals and provides us with emotional security, and also teaches how to properly dispose with the money.

In order to better understand the connection of money with an individual and the bank, it is necessary to examine the history of its development.

About the Development of Money over Time

Despite numerous studies of the origin of money, we do not know the exact period of its creation. The evolution of money goes back to a very early stage of history, far before the emergence of orga-

nized forms of the human community. The habits and benefits of the people were those that caused the emergence and subsequent use of money. The emergence of money is firstly a wider community-related and only later a narrower economic phenomenon (Vilar, 1990, p. 29). As a means of exchange, money first replaced shells and later also handicraft products. Consequently, this influenced relations between people, economic relations, the formation of social orders, etc. Moreover, the monetary exchange provoked countless quarrels and wars. In today's society, money is the reason for social stratification, through money we have learned the division of people into economic classes and social classes, from the lowest, through higher to the highest (Keynes, 2007).

A double role of money was studied by Aristotle in his papers on the state of society. In them, he gives a theoretical basis for defining the concepts of the economy as the art of acquiring useful things and chrematistics as the art of enrichment. For Aristotle, the first role of money (obtaining useful things for one's own needs) is necessary and is in accordance with nature, while the other (enrichment) is just the opposite – unnatural and without any boundary, it is the acquisition of property that goes beyond the natural limits of satisfying one's own needs, leading to the accumulation of money, which is achieved primarily through war, hunting, trade and robbery) (Aristotel, 2010).

Bailey and Law (2007), in their book *How Money Works* defined the key milestones in the development of money. It is believed that money developed in the Middle Stone Age (from 9,000 to 6,000 years BC) when the exchange trade between agricultural, livestock and military communities emerged. The goods were exchanged for goods. Cows were probably the first payment method. In the ancient times (from 3500 years BC until 476 of AD), the appearance of the script lead to the beginning of bookkeeping records. The Mesopotamia (today's Iraq) scribes have formed stone symbols representing various types of merchandise. The symbols were then replaced by the drawings of things, the scribes were drawing them onto pieces of clay. In addition, they also recorded the symbols for quantity – the numbers. The cuneiform writing developed from written symbols.

At that time, the first banking system developed in Mesopotamia, which marked a transition from trade to money. The rulers of the then Cappadocia (the province of today's Turkey) at that time guaranteed the quality of the silver casting, which later became money.

Alexander the Great contributed to general unification of the system of money, weights and measures, by determining the ratio of 1:10 between gold and silver.

Roman mints have put silver coins into circulation, and the inhabitants of today's England, for example, used swords as a means of payment during this period. In Africa, more specifically in Egypt, granaries functioned as banks. The goods were kept in the granaries and the records were written on papyrus. The data had to be accurate, otherwise state officials declared the culprit to be a thief and cut off his hand. In China, during this period, they began to use the cowry shells as currency. They were small and easy to carry; so many ancient people used them in trading. The cowry shells became so important for the Chinese that they used them for their pictogram, a symbol for money. Other items such as shovels, knives and hoes were used in China as money as well. Since the real items were too large to carry, they were designed as a miniature tool. And the tool was followed by round metal coins.

The first real coins were made in the land of Lydia, which was located on the territory of today's Turkey (6th century BC). The coins were made of gold and silver and furnished with the stamp of the king. Over time, the coins gained the same weight and composition. Thus they became a standard, a generally valid barter. When traders became aware of the usefulness of coins, their use expanded into Persia (today's Iran) and Greece. The Greeks retained the image of coins that were circular and had an image on both sides until today. Just like the Greeks, the Romans were proud of their money, showing their power by using it. In times of city states, during constant warfare, the winner forced the loser to take over his currency. In the 8th century AD, penny became the main English coin in England, while in the 10th century the Chinese began to use paper money.

An important milestone in the development of money is the determination of wages, determined at one penny a day in the 13th century in England. One hundred years later, the economist Nicole Oresme proved that the amount of precious metals in circulation determines the value of money. This was followed by the establishment of the first bank in Barcelona and the creation of the first investment funds dating back to the 15th century. In the modern period (from the 16th to the 19th century), very large quantities of gold were brought from America to Spain. It is estimated that the quantities would range

from 1,000 to 1,500 kilograms a year. It is also important that Hernand Cortez discovered that Aztecs and Maya had already used gold dust in hollow feathers as well as cocoa beans as money. In the Czech Republic, in the 16th century, the first tolar was minted. In England, the first joint-stock company was founded, named the Russian company. Soon, the Royal Stock Exchange was also founded.

The development of safes for gold, which developed into banks, is also interesting. The first cheques were also issued in England, where goldsmiths' certificates soon became money as well. In America, the development of money was slowed down, since the North American bank was only established in the 18th century, while the mint began to operate even later. Major changes in the money market take place in the twentieth century, especially the major economic crisis. In New York, the stock market falls apart. This period can be called the period of securities, which expanded the role of money and allowed its different form (Bailey & Law, 2007, pp. 6–9). The development of money is closely linked to the development of banking. Banks issued securities or certificates without guarantees, relying on trust only. In the twentieth century, payment cards and electronic banking appeared which we regard as new forms of money. Today, plastic money prevails, and banks are rapidly introducing digital business, which will further replace the paper one. The historical mission of money is neither only in 'facilitating trade' nor in the development of the 'market economy,' but also in the growth of the 'economic man.' Money has not only changed the 'world of things' and the 'world of people,' but also played an important role in changing the human 'inner world' – its interests, ideals, desires and moral criteria. Money has changed the system of values of people and thus assigned itself the central role of universal value (Aristotel, 2010).

In the subsistence exchange economy, the economy without money, the goods are exchanged directly. If A, producer of goods X wants to obtain the goods of a producer B, the barter trade will only be possible if B wishes to deliver goods Y and wants goods X at the same time. The subsistence exchange economy is only possible at a relatively low level of the economy, since money replaced exchange of goods on a higher level. The money divides exchange into two parts: the sale of one good for money and the purchase of the other, the desired good by using the money acquired. Undoubtedly, this function of money as a barter enables the modern economy to function

by division of labour and shortening of the time for the exchange of goods and services.

Money Today and the Importance of Financial Literacy

The feature of money in the monetary economics is that it serves as a general means of payment. In addition to all the aforementioned properties and shapes, the money has another characteristic – it is a unit of measure, i.e. a billing unit. The exchange of goods in the monetary economics is also facilitated by the fact that the market value of certain types of goods is expressed by a standard good. The price calculation represents the basis for all forms of economic calculation: the calculation of operations, the balance sheet, the calculation of costs, personal income or a social product without a common denominator, i.e. money, is therefore not feasible.

The faster the money loses value, the worse it performs its functions. Money that rapidly loses value as a general currency is increasingly rejected by people and replaced by other goods with trustworthy exchange ability or by foreign means of payment that have greater stability and trust. The less money loses the value, the better the exchange function can be performed.

In addition to other functions, money must perform the function of preserving the value of goods or services, this being the only way of enabling the time lag of transactions. Money as a value-holder allows us to keep the value for a long time. In the past, people kept money as a safe form of property, but today they want to keep it in various forms, such as transaction accounts and mutual funds. The greatest advantage of money over other forms of investment is its liquidity rate (accessibility). However, one thing is the same for money as a value-preserving asset or as a property object and for the money as barter; the function of money depends on the regulated currency situation. During the time of rapid value decrease, the money also loses the suitability of the means of preserving the purchasing power. Therefore, the main and, at the same time, the only problem with money as a value-holder of the value is fluctuation in inflation (Hausman, 2013).

Money as world money allows for international payments. At the time of the gold standard, this function was performed by gold, and today by national currencies. Not all national currencies perform this function, only the convertible ones. The most frequently, interna-

tional payments are made in the currencies of the economically most powerful countries and associations of countries (Setnikar-Cankar & Hrovatin, 2000).

The amount of money in circulation is regulated by monetary policy with the aim of achieving economic goals such as low unemployment, low inflation, high economic growth, and so on. Monetary policy is run by the central bank, which affects interest rates by changing the amount of money in circulation. The latter must be just right not to cause inflation, but to enable economic growth. As a rule, these processes take place at the state level; in the case of the euro, this task is carried out by the European Central Bank. Exchange rates between different currencies are affected by the economy, but also by various political and other events (e.g. elections, wars, natural disasters).

Križanič (2012, p. 34) defines four actors of modern money creation:

- *The central bank*, which purchases securities, gold and foreign currency from the state and commercial banks. As a body responsible for the operation of the monetary and credit system, it determines the interest rate and decides on the minimum reserves of commercial banks. It is also responsible for providing the economy with a sufficient amount of money for smooth production and maintaining price stability.
- *Commercial banks* that receive cash, gold and foreign currency from the economy and the population, and convert them into deposit money. They credit the economy by purchases of securities, while selling its securities and securities purchased from the economy (mainly bills of exchange) to the central bank. Commercial banks hold the cash reserve at the level prescribed.
- *The state* sells its securities to the central bank and thus finances part of its spending. It is the supreme monetary authority and defines frameworks for monetary and credit policy and announces the central bank's money for legal tender.
- *The economy and the population* invest cash, gold and foreign currencies in commercial banks. In the case of current accounts and sight deposits, it is converted to deposit money. Loans are taken at commercial banks and securities are sold to them.

Glogovšek (2008, p. 18) thinks that banks are distribution organisations that, in order to overcome time transfers in cash flow, take over activities in which exchange, transport, deposit and securing liquid assets at the state level are the key elements.

The irresponsible behaviour of financial institutions plays a key role in the financial crisis, which has developed into a serious economic, social and political crisis (e.g. financial crisis, banking hole). The lack of transparency in the financial system has led Europe's residents to a more difficult understanding of the complex and globalized market, overloaded with the range of financial products and services (European Economic and Social Committee, 2011, p. 4). In any case, the general financial education of all citizens contributes to the development of the overall competence, reduces the risk of financial exclusion and encourages individuals to financial planning and saving. Consequently, it also prevents individuals from getting deeply into debt.

Financial literacy is the level of literacy up to which a person understands the key financial concepts and has the capacity and confidence to manage personal finances. A financially literate individual can make appropriate short-term decisions and financial plans for important life events in a changed economic environment as well.

In the magazine on consumer issues, however, we find a different definition of financial literacy. The author defines the latter as the ability to use knowledge and skills to effectively manage financial resources (Remund, 2010).

Financial literacy is defined as a type of literacy that represents the ability to handle the money effectively. This includes understanding of the meaning and functioning of money, the ability to choose rational investments, and find sources of income. Some authors define it as the ability to read, analyse, manage and communicate about personal financial conditions, which affect material well-being. It also includes the ability to make financial decisions, discuss money and financial issues without discomfort (or nevertheless), planning for the future and competent response to life events that mark the day-to-day financial decisions, including events in the economy in general (Atkinson & Messy, 2012).

According to the PISA 2012 survey, financial literacy is an individual's knowledge and understanding of financial terms and risks, which also includes skills, motivation and self-confidence to use this

knowledge and understanding in making rational decisions in various financial content to improve the financial situation of the individual and society and to participate in management decisions (Pedagoški inštitut, 2014). The MF suggests that financial literacy allows individuals who want to invest in financial markets to choose products and services that best suit their needs. With appropriate knowledge, they can better evaluate the advice they receive and better exploit the opportunities offered by the market. At the same time, individuals are better aware of the consequences of their actions and contractual agreements that they conclude (Ministrstvo za finance, 2009). Expert Director of the International Centre for Financial Literacy (<http://gflec.org>), Annamaria Lusardi, is convinced that literacy has been very important already in the industrial society. At that time, the people who had the ability to read and write stood out, and today it is those who are financially literate. Today, financial literacy is the key to full integration in society.

Financial literacy covers basic literacy, including reading and mathematical literacy, and at the same time is an upgrade, since it requires more knowledge and skills, especially in the financial field (Mason & Wilson, 2000). All principles of general literacy apply here, in particular the understanding and the ability to use financial information in decision-making. In this context, financial literacy does not constitute a separate type of literacy, but a link between general reading and mathematical literacy and other basic knowledge and skills related to personal and other financial matters (Murray, 2010). Atkinson and Messy (2012) define financial literacy as a combination of awareness, knowledge, skills, and behaviour needed to make a proper financial decision and to achieve own financial prosperity. According to Kempson, Collard and Moore (2006), financially literate individuals are those individuals who are mathematically literate, who can effectively handle money and know how to handle loans and debts. They are able to assess the need for insurance and protection, but they also know how to assess different types of risks and repayments that are associated with different options of savings and deposits. They also understand the broader ethical, social, political and environmental dimensions of finance. Willis (2008) emphasises the cognitive aspects of financial literacy, which include education and information on various financial areas – how to handle money and resources, banking, deposits, loans, insurance and taxes.

References

- Arhar, F. (2014). Nagovor direktorja ZBS. In A. Žibrat & M. L. Novosel (Eds.), *Vse o banki* (p. 5). Ljubljana, Slovenia: Združenje bank Slovenije.
- Aristotel. (2010). *Politika*. Ljubljana, Slovenia: CV založba.
- Atkinson, A., & Messy, F.-A. (2012). *Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study* (OECD Working Papers on Finance, Insurance and Private Pensions 15). Paris, France: OECD.
- Bailey, G., & Law, F. (2007). *Kako je nastal denar?* Ljubljana, Slovenia: Arkadija.
- European Economic and Social Committee. 2011. *Financial education for all: Financial education strategies and best practices within the European Union*. Retrieved from <http://www.eesc.europa.eu/resources/docs/qe-30-12-894-en.pdf>
- Glogovšek, J. (2008). *Bančni menedžment*. Maribor, Slovenia: Pivec.
- Györek, V. (2003). *Denar, obresti, investicije*. Murska Sobota, Slovenia: Franc-Franc.
- Kempson, E., Collard, S., & Moore, N. (2006). Measuring financial capability: An exploratory study for the financial services authority. In *Consumer financial capability: Empowering European consumers* (pp. 39–77). Brussels, Belgium: European Credit Research Institute.
- Keynes, J. M. (2007). *Splošna teorija zaposlenosti, obresti in denarja*. Ljubljana, Slovenia: Studia humanitatis.
- Križanič, F. (2012). *Fiskalna restrikcija v času recesije*. Ljubljana, Slovenia: Ekonomski institut.
- Laut, P. (2001). *Denar je moj prijatelj*. Ljubljana, Slovenia: Prešernova družba.
- Mason, C., & Wilson, R. (2000). *Conceptualizing financial literacy* (Business School Research Paper 2000:7). Loughborough, England: Loughborough University.
- Ministrstvo za finance. (2009, 18. september). Ministrstvo za finance podpira finančno izobraževanje potrošnikov – spletni portal DOLC-ETA. Retrieved from http://www.mf.gov.si/nc/si/medijsko_sredisce/novica/article/43/84/
- Murray, T. S. (2010). *Financial literacy: A conceptual review*. Retrieved from http://publications.gc.ca/collections/collection_2011/fin/F2-205-2011-eng.pdf
- Pedagoški inštitut. (2014). *Rezultati preverjanja finančne pismenosti in reševanja problemsko zasnovanih nalog v okviru mednarodne*

- raziskave PISA 2012*. Retrieved from <http://www.pei.si/UserFilesUpload/izjava%20za%20medije.pdf>
- Remund, D. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *The Journal of Consumer Affairs*, 44(2), 276–295.
- Samuelson, P., & Nordhaus, W. (2002). *Ekonomija*. Ljubljana, Slovenia: cv založba.
- Setnikar-Cankar, S., & Hrovatin, N. (2000). *Temelji ekonomije*. Ljubljana, Slovenia: Fakulteta za upravo.
- Hausman, D. M. (2013). Philosophy of economics. In Edward N. Zalta (Ed.), *The Stanford encyclopedia of philosophy*. Retrieved from <https://plato.stanford.edu/archives/win2013/entries/economics/>
- Simmel, G. (1978). *The philosophy of money*. London, England: Routledge and Kegan Paul.
- Vilar, P. (1990). *Zlato i novac u povijesti*. Beograd: Nolit.
- Willis, L. E. (2008). *Against financial literacy education* (Public Law & Legal Theory Research Paper 08-10). Philadelphia, PA: University of Pennsylvania.

Chapter Two

The Importance and Role of Financial Education

Simon Starček and Aleš Trunk

Changes are a constant of today's society. The society is changing as well. It is changing ever faster and in a more and more complex way. At the same time, it changes the social values on which it is based. Today's society is characterised by individualism and a wide choice between the various options offered by different markets.

Financial knowledge, consequent education and training, as well as the related competencies of an individual, are becoming increasingly important due to dynamic, rapidly developing, globally integrated and complex financial markets and other requirements. The financial needs of individuals are becoming increasingly complex and demanding as well. With appropriate knowledge in the areas of finance, pension systems and taxes, one can improve understanding of financial products, services and concepts and develop the skills one needs to improve financial literacy, decision-making, security and ethical behaviour.

Also, the economic and social environment, within which individuals take financial and finance-related decisions, has been changing rapidly in recent years. Responsibilities for financial decisions and security in the future are transferred from the state and employers to the individual, which consequently also assumes the risks associated with decisions (Ministrstvo za finance, 2010). The volume of information that individuals need to obtain, understand and evaluate is increasing. Due to the increasing size and its complexity, this is especially recognised in the area of financial and tax system.

The reasons for the development and the size of the economic and financial crisis (started in the US in 2007) are numerous and complex. Analysts, economists and national governments in Europe and the world have sought the causes of the crisis mostly at the level of systemic issues, such as liquidity, solvency, accounting and other financial leverage issues. The susceptibility and understanding of the

significance of the crisis, the strategic responses of the countries and the rescue and recovery plans focused primarily on the level of corporate governance, elements of prudential and safe operations and maintaining an adequate macro credit rating level. Very few measures and responses to the crisis and initiatives for exiting it relate to the recognition of the need to improve consumer protection, the establishment of appropriate and effective educational frameworks, financial tools and ethics for the protection and better informing of the individual as a consumer and cooperation with financial service providers. The crisis has deepened the fact that economic development and economic competitiveness equal the increasing degree of social and financial exclusion (Gibanje za ustvarjanje novih prostorov skupnega in skupnosti, 2011).

In recent years, the at-risk-of-poverty rate has markedly increased in the countries of the European Union facing the most serious consequences of the economic crisis (Italy, Ireland, Latvia, Spain, Greece, Bulgaria, Romania, Slovenia). The significant differences between the EU Member States in the household situation are also reflected in the comparison of the at-risk-of-poverty thresholds (the poverty risk threshold according to the Eurostat methodology is 60 median disposable household income in a single country), expressed in Purchasing Power Parities (PPP). The increase in the risk of poverty in the countries of the European Union is the result of an increase in income disparities. In recent years, due to the economic crisis, the latter have lowered within a substantial part of households, while unemployment has also increased (UMAR, 2012). The data on the level and the threshold of poverty point to the degree of vulnerability of individual economic and age groups. The research and opinions of many economic and financial experts and institutions confirm that the average low level of financial literacy and education of people has also contributed to the worsening of the crisis (Kumelj, 2010).

Financial Literacy and Financial Education

The use of financial literacy and financial fitness concepts occurs since the 1990s. There are numerous different definitions of financial literacy, financial fitness and financial education; financial fitness and economic literacy are often mentioned as well (Orton, 2007; Schwartz, 2010). Although the concepts of financial literacy and fi-

financial fitness are often used as synonyms, there are differences between them. Financial literacy focuses more on understanding and knowledge. The concept of financial fitness, on the other hand, is more extensive, and in addition to cognitive aspects it includes behaviour, decision-making, and practical skills (Orton, 2007). It is also important to note that some of the studies show that approximately one fifth of adults (e.g. in France, Germany, the United Kingdom) are not literate enough to meet the basic requirements of modern society (Commission of the European Communities, 2012).

Literacy is the continually evolving ability of individuals to use socially agreed systems of symbols for receiving, understanding, creating and using texts for living within the family, the school, the workplace and the society.

Reading, writing and mathematics is considered basic literacy skills – i.e. skills, without which effective functioning in modern developed societies is virtually unimaginable. Literacy is perceived as an essential knowledge and skill, and a prerequisite for successful and creative personal growth and responsible work in professional and social life (Ministrstvo za šolstvo in šport, 2005). Internet, modern technology and digitization have significantly changed the nature and importance of literacy.

Nowadays, the development of various forms of literacy, such as information, digital, media and, ultimately, financial literacy is necessary. Financial literacy thus covers basic literacy, that is, reading and mathematical literacy, and at the same time it is an upgrade, since it requires more knowledge and skills in a specific, financial field (Mason & Wilson, 2000). All the principles of general literacy apply, and in addition, and above all, understanding and the ability to use financial information in decision-making. In this context, financial literacy does not constitute a separate type of literacy, but is seen as a mix of general reading and mathematical literacy and other basic skills and knowledge related to personal and other financial matters (Murray, 2010). Financial literacy is one of the components of financial fitness – it is expressed as information on finances and financial trends, as well as understanding of financial products and services, concepts and risks (Ministrstvo za finance, 2010). Atkinson and Messy (2012) define financial literacy as a combination of awareness, knowledge, skills and behaviour that is necessary for proper financial decision-making and achievement of one's own financial prosperity. Finan-

cially literate individuals are individuals who are mathematically literate, they can effectively manage money, understand the management of loans and debts, are able to assess the need for insurance and protection, they can evaluate various risks and reimbursements related to saving and investment opportunities, and understand the wider ethical, social, political and environmental dimensions of finance (Kempson, Collard, & Moore, 2006). Willis (2008) emphasises the cognitive aspects of financial literacy, which include knowledge, education and information on various financial areas: money and resources management, banking, investments, loans, insurance and taxes and, in addition, understanding of the basic concepts of managing money and other means. On the other hand, financial illiteracy is also reflected in elements of financial instability, such as over indebtedness, insufficient savings, poor planning for the future (for example, for higher expenditure expected, security savings for a possible unexpected worsening of the financial situation, retirement savings) and inadequate investment practices (Kozup & Hogarth, 2008).

According to the OECD (2005), financial education is a process by which financial service users/investors improve their understanding of financial products and services, concepts and risks and, on the basis of information, instructions and objective advice, develop capabilities and confidence to raise awareness of financial risks and opportunities, make decisions based on enough information, know where to seek help, and take other effective measures to improve their well-being.

Knowing how to manage one's own financial resources well is important for maintaining and increasing the prosperity of each individual. In order to be considered financially capable, one must be able to manage personal or family finances, capable of planning and making informed decisions in relation to financial products/services. One also has to monitor financial market developments within one's own needs. In this context, one faces decision-making issues such as self-control, delaying, timing of non-compliance of wishes, objectives, purpose and actual needs, problems in shaping one's financial strategy and problems in choosing the appropriate financial product/service.

The European Commission notes that the most common subject of financial education programmes in the EU is the fundamentals of

money handling, such as how to use a bank account, for example. This is followed by the ability to manage finance, including the management of loans and debts. Investing, saving and retirement, insurance and risk management issues do not rank so high, which means that they are areas that may need more focus in the future. As for the target groups, the same number of programmes are targeting both children and young people as well as adults. Only some schemes seem to be targeting more specific groups, such as group schemes in pre-retirement age, women, ethnic minorities or people with low incomes (Commission of the European Communities, 2007b).

In addition to the education process that brings understanding of financial products and services, it is very important to inform users of these products and services. The information includes facts, data and specific knowledge, by means of which individuals are acquainted with the financial opportunities, alternatives and the consequences of their selection. Guidelines provide training and guidance by which individuals acquire the skills and abilities to understand financial conditions and concepts. Advice helps individuals to understand general financial matters and products and make the best use of information and instructions acquired.

Numerous economic, social, demographic and political changes have influenced the increasing importance of financial literacy already before the onset of the 2008 economic crisis. In addition to social and demographic changes, such as the prolongation of life and consequently of the employment period, changes in lifestyles and life cycles, increased geographical and social population mobility, rising living standards, increased flexibility of the labour market and other changes are the crucial in the financial and economic area. These trends are also present in the financial services market. Technological development has enabled innovations in the field of marketing channels, market communication and customer service, while on the other hand it has lowered the operating costs.

Deregulation of the financial market has allowed the development of many new financial services in the fields of loans, credits, investments and insurance, which, at lower costs, have become more accessible to different user groups. Whilst just the previous generation of consumers only disposed with the current and savings account, the number and diversity of financial services today are considerably higher. The complexity of this changed accordingly, which means

TABLE 2.1 Factors That Have Contributed to Increase of the Importance of Financial Literacy

The complexity of the individual's needs	The complexity of financial products
<ul style="list-style-type: none"> • increasing instability of the working life of individuals, • reducing of the social security, • increase of the personal responsibility, • increase of the standard of living, • increase of the borrowing, • increase of the life expectancy, • increase of the number of independent entrepreneurs. 	<ul style="list-style-type: none"> • deregulation of financial markets, • wider range of financial services and increased dynamics of new services development, • new distribution channels, • increasing availability of information.

that many individuals have immense problems with understanding these services (Braunstein & Welch, 2002). A poor understanding can lead to inappropriate decisions or discourage an individual from financial services, as they simply avoid them because of fear of complexity (Kumelj, 2010).

In addition to the above-mentioned changes in the financial markets, concerns about financial knowledge and their financial practices have encouraged changes in the pension sector. In recent decades, in developed economies, guidelines in this area have indicated an increasing shift in state and employer responsibility for providing pensions towards individuals (OECD, 2005).

Many international studies have shown that individuals generally do not sufficiently understand financial matters and the fundamentals of the economy. At the same time, the education of individuals in the field of financial affairs becomes increasingly important, as innovation and globalisation increase the choice and complexity of the financial offered. Difficulties in the sub-prime mortgage market in the US, where many individuals, partly due to a lack of understanding of product characteristics, took mortgages larger than their own funds, serve as a warning on the magnitude of the problem (Commission of the European Communities, 2007b). Atkinson and Messy (2012) in the framework of the research performed underline the fact that a low level of financial knowledge has been noticed in surveying. In doing so, they find that in all the countries studied there is a significant lack of knowledge and understanding of the basic financial concepts.

The Social and Economic Importance of Providing Financial Education

The European Commission's Communication on a Single Market for 21st Century Europe (Commission of the European Communities, 2007a) declared financial education to be a vital component of its efforts to ensure the direct benefits of the single market for European citizens, in particular by strengthening citizens' ability not only to compare prices in order to obtain the best financial services in their Member State or across the border but also to understand some essential fundamentals of personal finance.

Globalisation provides individuals with access to an ever-increasing range of banking products and services that are appropriate for different needs and conditions. Technological advances, new electronic mediation channels and the integration of financial markets have increased the range of services offered and the ways in which services are available. However, many citizens see the products as too complex and their performance difficult to assess in the future. Individuals are getting to know more and more that they lack the essential skills to pursue and understand financial matters (Commission of the European Communities, 2007c). According to the European Commission (2010), as many as 30 million Europeans over the age of 18 do not have a bank account.

Ensuring an adequate level of financial education for individuals at all stages of life can benefit all age groups and income groups and professional orientations. Financial education can help the children to understand the value of money and teaches them how to manage and save money. Adolescents can acquire important skills for independent living, for example in handling student loans and repaying them. Adults can help in planning important financial activities, such as, for example, buying a home or parenting. An adequate level of financial knowledge helps the individual to create adequate financial reserves for unforeseen situations. It also helps with financial investment and retirement savings, educated individuals avoid fraud and other types of financial risks more effectively. At the same time, they prefer to choose financial services according to their needs and are more willing to take the regulatory authority's warnings into account.

An appropriate model of financial education, viewed through the prism of effects on the economy, can contribute to personal and

broader financial stability. Financially educated citizens who are able to find better, cheaper and more suitable products and services can give impetus to the financial industry and improve economic prosperity by fostering greater competition, promoting innovation, and demanding better quality and greater diversity. Citizens who are confident in investing can provide additional liquidity of capital markets from which small businesses can be financed, which are a key element in supporting growth and job creation. It should also be noted that the disproportionate nature of information between consumers and providers cannot be solved only through financial education (Commission of the European Communities, 2007c). Tracking the goal of raising the level of financial literacy gives a whole range of business opportunities. A number of advisory, educational and development companies, digital content development companies, smart applications, etc. can offer individuals and banks, insurance companies and other financial and non-financial institutions a lot of innovative customized tools and content, adapted to the needs of targeted populations. Thus, socially responsible business behaviour is promoted by encouraging good practices and expanding them in a technical partnership with all relevant stakeholders and national authorities. This way, financial education brings benefits to a wider society.

Indicators of the development and economic performance of individual countries are closely linked to the level of financial literacy, financial exclusion and the effectiveness of financial education programmes. The introduction and development of financial education is often based on the adopted national strategy. The research of Grifoni and Messy (2012) shows various reasons for the introduction of national financial education strategies. The introduction of strategies is often the result of mixing many factors and circumstances associated with the state of financial literacy and the financial inclusion of the population. The analysis of national strategies shows that these are often complementary to wider national efforts aimed at raising awareness of consumers. Another approach points to strategies that are more targeted at addressing individual content of financial literacy. Strategies often aim at raising awareness of the importance of financial literacy or stepping towards converging views on its development. In any case, they have been given an important place in many countries in the process of exiting the financial crisis.

The Concept of Financial Education

The development of financial education programmes in a country depends on cultural, economic and other social factors and needs. It is based on the adopted strategy and is part of a wider process of awareness and consumer protection. Nonetheless, financial education must be adequately placed and linked to other policies needed to protect citizens in the area of financial products or services, and to ensure transparent and efficient financial markets, so all relevant departments need to be involved.

The programme for the development of financial education should focus on (Ministrstvo za finance, 2011):

- *prevention*: raising awareness about the importance, necessity and usefulness of lifelong financial education,
- *universality*: providing accessible, free, impartial, honest, concrete, high quality and easy to understand information that is available to everyone and does not constitute a marketing channel for a specific provider or for a specific financial product/service,
- *guidance and counselling*: activities by which a financial product/service users improve their ability to understand and manage financial products/services, concepts and risks, and
- definition of possible financial education providers.

Financial Education Begins in Kindergarten

Children acquire information and knowledge about money from a variety of environmental resources (experiential in the family, playing: marketplace, store, money games, etc.) by experiencing and learning about everyday life. Numerous studies confirm the appropriateness of starting financial literacy for the youngest and their parents. Children (pre-primary level) first face money related contents, saving, lending, and giving, etc. with experiential learning through parents, cooperation with peers and kindergarten. Learning programmes for kindergartens advocate the principle of active learning and ensuring the possibility of verbalization and other means of expression through constant care for the prompt provision of a comfortable and learning environment that enables the emergence from both teachers' planned and unplanned guidance, as well as from the child's own initiatives. Developing awareness of problems and sensitivity to them

is the focus of teaching pre-school children. As well as the delivery of rational responses or solutions within particular science, it is important to promote and refer to the use of various strategies and tools for finding answers. The earliest money-related experience, as in other areas, is crucial in the development of a child's later perception and attitudes to money. The field related to financial content is included in the pre-school curriculum area.

Financial Education Adapted to Adolescents

Each target group needs an approach that is adapted to the level of maturity, pre-knowledge levels, key needs and key life decisions. Financial education schemes focus on the most important issues, which include important aspects of financial life planning for those who are first employed, the unemployed, those planning the family, young adults, indebted people, etc. It is important that programmes implemented under an individual education scheme are comprehensible and in a form that facilitates consultation or access of the user when needed. In the framework of financial education, financial challenges dealt with are related to the real events in the life of people. The key life circumstances at the level of elementary education are focused on experiencing and learning about everyday life. Through this, the key needs for financial fitness are expressed, namely the development of basic skills and knowledge for reconciling expenditure with income, personal finance monitoring, financial planning, basic risks and knowing where to seek advice (Ministrstvo za finance, 2010).

Among the most vulnerable social groups are young people entering the financial markets, business activities with banks and insurance companies and purchases, older people and individuals with low education. Young people are also one of the most active consumer groups. The key needs for financial competence at the level of secondary education are the acquisition of skills and skills to coordinate expenditure with income, personal finance monitoring and financial planning, basic familiarity with financial products/services, risk principles, roles of providers, supervisory authorities and consumer organisations.

Young people are extremely active in obtaining a wide range of data and information (the Internet, social networks) and using state-of-the-art communication channels and services. When entering the financial area and contacts with financial institutions, young peo-

ple are also exposed to a number of risks associated with spending, borrowing, lending, rentals, etc. Social differences can be a factor in finding ‘shortcuts’ to acquiring material and other goods that are related to a series of risky acts. Due to insufficient financial knowledge and experience, young people are exposed to numerous dubious on-line financial activities (online purchases) or even fraud (tax evasion, identity abuse, etc.).

Financial Education as a Lifelong Process

When designing the concept of financial education, it is necessary to start from its lifelong perspective. Particular attention should be paid to the elderly, where the key needs for effective adaptation to new circumstances, rapid social and technological changes are identified. In-depth training is needed to reconcile expenditure with income, personal finance monitoring, financial planning, and the choice of financial products, services and information on financial trends. The content of financial education should also be addressed to unemployed, socially deprived and financially excluded. For successful planning and implementation of programmes, it is necessary to design programmes for educators. These require the preparation of professional basics, didactic aids, materials for teachers who encounter the contents of financial education within the individual subjects they are teaching, and other educators. The content should be directed towards a more rational and higher-quality use of lessons designed for financial content.

Financial education must be tailored to the needs of the target population and follow the process of continuous improvement. In addition, financial education should cover areas such as banking, insurance, taxes, pension systems, investments, international business, financial risks, savings, financial planning and content related to personal (family) finances.

When establishing a financial education system, it is logical to follow the basic principles of the European Commission (Commission of the European Communities, 2007c) to provide quality financial education schemes to help in the initiation and implementation of financial education programmes. The principles emphasise the importance of promoting national cooperation bodies, providers of financial products/services, consumer organisations, education professionals and other stakeholders. Such cooperation can help improve

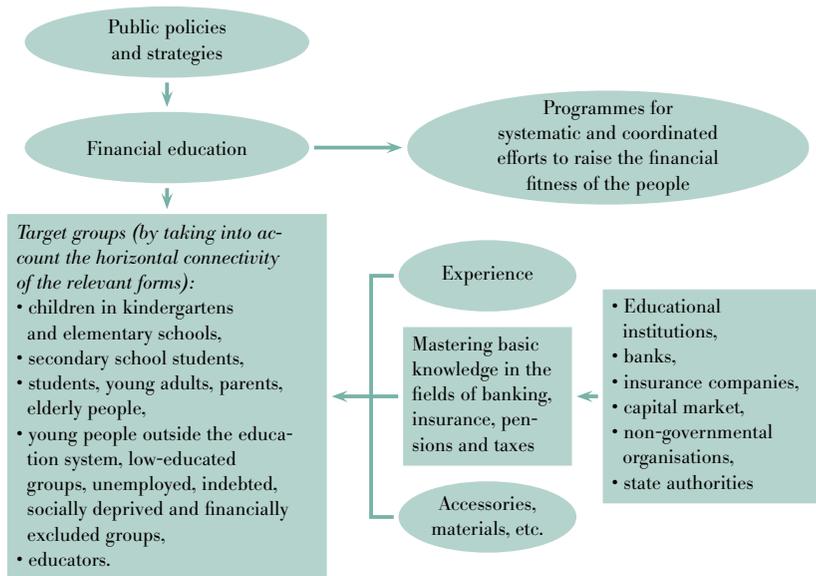


FIGURE 2.1 Conceptual Scheme of Financial Education

goals, supports more relevant coverage of different target groups, optimizes and prioritises resources and encourages learning from experience.

The concept of financial education should support socially responsible business behaviour by promoting good practices and disseminating them in a technical partnership with all relevant stakeholders and national authorities. Financial education should be included in the public policy system dealing with development and stability programmes, education and training, tax, consumer safety and protection, social inclusion, etc. The roles and responsibilities of stakeholders in financial education must be clearly defined. The responsibility of all is to provide accurate, high-quality, neutral information that is in the best interest of individuals and can be distinguished from advertising and market communication and financial consulting for business purposes (Ministrstvo za finance, 2010).

Summary of Findings

Research in many countries has shown insufficient financial consumer practices, and their average low level of financial literacy and education, regardless of their income and social status (Atkinson,

McKay, Kempson, & Collard, 2006; Kempson et al., 2006; Robson, 2012; Schwartz, 2010). The most vulnerable groups, such as adolescents, the unemployed, immigrants and the elderly, are particularly prominent. Moreover, the economic and social environment, in which individuals make financial and finance-related decisions, is increasingly changing. Responsibilities for financial decisions and security in the future are transferred from the state and from the employer to an individual, which consequently assumes the risks associated with the decisions. The financial needs of individuals are becoming increasingly complex and demanding.

Research confirms that financial education and, consequently, a higher level of financial literacy can influence the individual's better understanding of financial products and services, concepts and risks. Based on information received, instructions and objective advice, they can more effectively develop skills and confidence to raise awareness of financial risks and opportunities. Financial literate individuals are better informed about where to seek help and can take more effective measures to improve their prosperity. Robson (2012) points out that measures for strengthening financial literacy promote more appropriate financial decisions in relation to different life events. These measures also help vulnerable groups in accessing public funds and other rights, their financial inclusion and rising of their financial fitness. In this context, he emphasises that the relevant knowledge and competences of young people in this field significantly influence their better financial decisions at a later age.

Financial education cannot completely replace other factors that affect consumer protection, market regulation measures, the management of new forms of risk, the need for sustainable social programmes, investments in human resources, etc. Financial education should be part of an integrated strategy to address the protection and enhancement of consumer competencies and measures to raise the level of financial inclusion. Financial education strengthens awareness of the importance of competencies and skills in the financial field and can help reduce risks at the individual and society level. In doing so, it is necessary to strengthen effective regulatory system, adapted to constant technological and other changes, and to ensure the development of adequate financial resources and public policies to promote social and economic inclusion and increase prosperity.

All key factors such as the state, educational and research institutions, the financial and insurance sector, financial services consultants, supervisory institutions and others should be involved in the establishment of the concept of financial education.

When designing the concept of financial education, the emphasis should be on the quality of education programmes, the process of continuous improvement, orientation towards identifying and introducing good practices, and to educators. When preparing quality programmes, didactic tools, web and mobile applications adapted to the needs of users, it is also worthwhile to introduce free, independent and professional advisory financial centres (points) for all age groups.

References

- Atkinson, A., McKay, S., Kempson, E., & Collard, S. (2006). *Levels of financial capability in the UK: Results of a baseline survey* (Consumer Research 47). Retrieved from <http://www.fsa.gov.uk/pubs/consumer-research/crpr47.pdf>
- Atkinson, A., & Messy, F.-A. (2012). *Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study* (OECD Working Papers on Finance, Insurance and Private Pensions No. 15). Paris, France: OECD.
- Braunstein, S., & Welch, C. (2002). Financial literacy: An overview of practice, research, and policy. *Federal Reserve Bulletin*, 88, 445–457.
- Commission of the European Communities. (2007a). *A single market for 21st century Europe* (COM(2007) 0724 final). Brussels, Belgium: Commission of the European Communities.
- Commission of the European Communities. (2007b). *Fin-Focus*, No. 4.
- Commission of the European Communities. (2007c). *Financial education* (COM(2007) 808 final). Brussels, Belgium: Commission of the European Communities.
- European Commission. (2010). *Fifth meeting of the expert group on financial education*. Retrieved from http://ec.europa.eu/finance/finservices-retail/docs/capability/101217_report_en.pdf
- European Commission. (2012). High-level group issues ‘wake-up call’ for Member States to address literacy crisis (Press release 1P/12/940). Retrieved from http://europa.eu/rapid/press-release_IP-12-940_en.htm
- Grifoni, A., & Messy, F. (2012). *Current status of national strategies for*

- financial education: A comparative analysis and relevant practices* (OECD Working Papers on Finance, Insurance and Private Pensions No. 16): Paris, France: OECD.
- Gibanje za ustvarjanje novih prostorov skupnega in skupnosti. (2011). Pristop politologov h Gibanju 15-0. Retrieved from <http://www.150.si/index.php/sl/press/139-izjava-za-javnost-pristop-politologov-h-gibanju-15-0>
- Kempson, E., Collard, S., & Moore, N. (2006). Measuring financial capability: An exploratory study for the financial services authority. In *Consumer financial capability: Empowering European consumers* (pp. 39-77). Brussels, Belgium: European Credit Research Institute.
- Kozup, J., & Hogarth, J. M. (2008). Financial literacy public policy and consumer's self-protection – more questions, fewer answers. *Journal of Consumer Affairs*, 42(2), 127-136.
- Kumelj, K. (2010). *Vpliv znanja in psiholoških pristranskosti na finančno vedenje potrošnikov* (neobjavljeno diplomsko delo). Fakulteta za družbene vede Univerze v Ljubljani, Ljubljana, Slovenia.
- Mason, C., & Wilson, R. (2000). *Conceptualizing financial literacy* (Business School Research Paper 2000:7). Loughborough: Loughborough University.
- Murray, T. S. (2010). *Financial literacy: A conceptual review*. Retrieved from http://publications.gc.ca/collections/collection_2011/fin/F2-205-2011-eng.pdf
- Ministrstvo za šolstvo in šport. (2005). *Nacionalna strategija za razvoj pismenosti: osnutek*. Retrieved from <http://pismenost.acs.si/datoteke/komisija/strategija.pdf>
- Ministrstvo za finance. (2010). *Nacionalni program finančnega izobraževanja*. Retrieved from <http://www.mf.gov.si/fileadmin/mf.gov.si/pageuploads/sporocila/oecd/NPFI.pdf>
- OECD. (2005). *Improving financial literacy: Analysis of issues and policies*. Paris, France: Author.
- Orton, L. (2007). *Financial literacy: Lessons from international experience* (CPRN Research Report). Ottawa, Canada: Canadian Policy Research Networks.
- Robson, J. (2012). *The case for financial literacy: Assessing the effects of financial literacy interventions for low income and vulnerable groups in Canada*. Retrieved from <http://prosperscanada.org/getattachment/bd2f1be0e-9647-4377-9df6-8cfe3c0cc9f9/The-Case-for-Financial-Literacy.aspx>
- Schwartz, S. (2010). *Can financial education improve financial literacy*

and retirement planning? (Discussion Paper 12). Montreal, Canada: Institute for Research on Public Policy.

UMAR. (2012). *Poročilo o razvoju 2012*. Ljubljana, Slovenia: Author.

Willis, L. E. (2008). *Against financial literacy education* (Public Law & Legal Theory Research Paper No. 08-10). Philadelphia, PA: University of Pennsylvania.

Chapter Three

Financial Education and Training in the World and in Europe

Sergeja Kočar and Nada Trunk Širca

With the onset of a major economic and financial crisis over the last few years, many companies have collapsed, the unemployment rate has risen sharply, stock-indexes have collapsed, and some countries are on the verge of bankruptcy due to bad monetary policies of central banks. The consequences of the major financial crisis have paralysed the global economic system (Norberg, 2009). The crisis hit the global financial markets hard; stock market rates fell in the world and also in Slovenia. The market value of most of Slovene companies listed on the stock exchange decreased. At the time of the economic downturn, the market values of companies were extremely high. The large difference between the market value and the fundamental value was proven by Stubelj (2010) in his research where he justified the high market prices with the following facts: the market value may be higher due to (a) the increase in the price of shares by investors having internal information about the company, (b) the expected takeover value; (c) the purchase of shares at an excessive price for speculative reasons, with intent of selling at a higher price, and (d) a lack of investment opportunities for investors on the Slovenian capital market.

The above contributed to an exceptional decrease in the value of securities during the financial and economic crisis (from 2008 onwards). The value of shares of Slovenian companies was much lower than the value of shares in some developed financial markets, which is evident from stock exchange indexes. According to the Ljubljana Stock Exchange, the Slovenian stock exchange index fell by 60 (see <http://www.ljse.si>) in the period from 2006 to 2011, while in the developed financial markets, the stock market index fell only by 15 on average (Dow Jones index, NYSE index, S&P 500 index); The NASDAQ stock index even increased by 8 compared to 2006 (according to mwatch, see <http://www.marketwatch.com>). Due to the above facts,

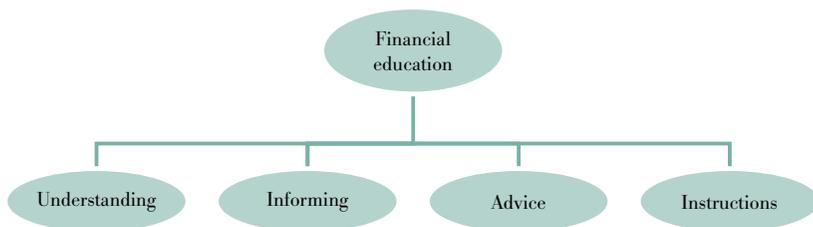


FIGURE 3.1 Demarcation of Financial Education (adapted from OECD, 2005)

financial education and training has become even more important for the individual's performance.

Financial Education in the Light of International Documents

Financial education is a process in which individuals improve the understanding of financial products and services, their associated risks and market opportunities. Only qualified individuals can make appropriate financial decisions (European Economic and Social Committee, 2011, p. 5). Education must be tailored to the needs of the target population and consistent with the process of continuous improvement. It should cover contents in the field of banking, insurance, tax, pension system, investments, international economic operations, financial risks, financial planning, saving and personal finance (Starček & Trunk, 2013). Training and education for financial literacy is a lifelong process.

From Figure 3.1 we can understand that, according to the OECD definition (2005), financial education includes understanding, information, advice and guidance. The information includes facts, data and knowledge that help individuals to become familiar with the financial opportunities and opportunities of the market. Guidelines provide training and guidance to individuals who thus acquire skills and abilities to understand financial conditions and concepts. Advice helps individuals to understand general finance and services, and fully enable the use of the information and instructions obtained.

For many years, the European Economic and Social Committee has been promoting financial education policies in order to protect individuals in the financial market. Financial instruments are becoming more complex every day, and the financial sector has behaved irresponsibly towards an ignorant individual in the past years. Financial education complements the measures aimed at providing

relevant information, protection and advice to users. The sum of these policies contributes to strengthening the ability of individuals to make decisions that are best in terms of their financial situation (Commission of the European Communities, 2007).

International research has shown that individuals have poor understanding of basic financial matters, and in particular, a lack of basics of the economy is perceived. Training of users in financial matters is becoming increasingly important, as innovation and globalisation increase the choice and complexity of financial services offered. This has also been shown in the US in the field of mortgage lending. Many individuals took mortgages that were higher than their financial ability. In the US, the reasons can also be found in the lack of understanding of the characteristics of products and services, so it is important that the EU is aware of these issues and, as a priority, provides assistance to all members.

The importance of financial education has been confirmed globally and at EU level. To this end, in May 2007, a White Paper on Financial Services Policy 2005–2010 and the Green Paper on Retail Financial Services were adopted, as well as the European Parliament resolution on financial services policy (Commission of the European Communities, 2007) in July 2007. In May 2007, the Economic and Financial Affairs Council (hereinafter ECOFIN) also addressed the issue of financial education. It called on Member States to strengthen their efforts to raise household awareness through appropriate information and education.

In presenting the vision of the single market of the 21st century, the European Commission has declared financial education the key content of its efforts to ensure the direct benefits of a single European market and a more competitive and more sustainable Europe. Citizens should be able to compare the prices of financial services in the Member States, and in particular they need to understand the basics of personal finance. With this orientation, the European Commission wishes to assist all interested in developing financial education schemes. The proposed activities include raising awareness of the need for training to eliminate poor financial education, promoting and strengthening the provision of quality financial education in the EU, the exchange of best practices and the development of practical tools for achieving goals (Evropska komisija, 2007).

Financial literacy education and training is performed by various

providers: financial supervisory authorities, adult literacy agencies, microfinance organisations, consumer representatives, educational institutions, individual financial companies and others. National authorities, such as government ministries, financial supervisory authorities, central banks and the like, are the driving force behind literacy in eleven Member States. The most active members in this area are the UK, Germany, Austria, the Netherlands and Italy. A lesser development in financial literacy is seen in Greece, Bulgaria and Latvia. Education is aimed at acquiring basic skills in the financial field, such as the fundamentals of money handling, how to open a bank account and the like. Advanced training is aimed at managing finance, including lending and borrowing. The areas that every financially literate person needs to know well, but we do not pay much attention to them, are savings, insurance and pension plans as well as risk management. Target groups of education should cover the entire population, although schemes representing the pre-retirement group, people with low incomes and the like are represented in minority.

The assessment of the performance of education and training is checked by monitoring participation in individual financial education programmes. Various criteria are used in interpreting the results, such as the growth in the number of participants, required publications, hits on websites, media coverage, demands received, and so on. A very effective method of estimating or evaluating progress is general research, which shows the current level of financial literacy of the population and priorities, as well as monitoring of progress after a certain period of time.

According to the European Commission (Commission of the European Communities, 2007, pp. 13–15), some countries have already recorded changes in the financial behaviour of individuals that may result from financial education. The estimates of the programme of financial education at the workplace in the United Kingdom show that 82 participants had planned to take action after the completion of their education. After three months, the actual situation was checked, and the 60 participants also realised the intent; for example, they began to pay contributions to the voluntary pension scheme, some repaid debts, and so on. In the USA, however, the analyses have shown that the retirement seminars on average result in a much higher number of insured persons and higher contributions to voluntary occupational retirement provision schemes. They also have a

positive impact on net worth and prosperity in the broader sense.

The European Commission is also active in this area. In order to monitor changes in the behaviour of individuals, it ensures education of the population in the EU in the field of financial education and encourages research in the subject area. The European Community (hereinafter the EC) also contributes to promoting the right of individuals to be informed and providing education to protect their interests. The EC also takes measures to support, supplement and control Member States' policy in this area. Financial education can also be beneficial because it supports the single market in financial services by helping to strengthen the individual's ability to find the most appropriate financial service in order to meet their needs, regardless of the location of financial services provider (Commission of the European Communities, 2007).

The European Commission has set up the Dolceta website (see <http://www.dolceta.eu/slovenia/index.php>), which offers education for adults in the field of consumerism. The website is translated into all EC languages and adapted to the specific features of each national market. One of the modules is dedicated to financial services, which include finance management, consumer loans, housing loans, as well as payment and investment methods. Also, on the basis of the initiative of the European Commission, a Europe Diary brochure was created, which is assigned to second-level students. Students are informed about the rights they have as individuals. It contains a chapter on money and debt, explaining how financial institutions operate and what they offer to consumers. It also warns of the risks of over-lending. In March 2007, the European Commission organized a conference on raising financial capacity to highlight the importance of providing quality financial education and the exchange of best practices (Commission of the European Communities, 2007, pp. 17–19).

EU Principles for the Provision of Quality Financial Education Schemes

In order to ensure financial security, the European Commission (Commission of the European Communities, 2007) published eight basic principles for the provision of quality financial education schemes. The European Commission also believes that the principles help national authorities, providers of financial products and

services, consumer organisations, employers and other stakeholders in their efforts to implement financial education programmes. The principles take into account the diversity of approaches and methods available to develop a successful financial education strategy (Commission of the European Communities, 2007, p. 21).

**Principle No. 1: Financial Education Should Be Accessible
All the Time and Should be Actively Promoted at All Stages of Life**

Accessibility of financial education allows citizens to solve the financial challenges they face in their everyday lives. It must be accessible and understandable to young people as well as to the elderly. Educational programmes must be tailored to the financial situation of citizens and their level of understanding of financial matters.

**Principle No. 2: Financial Education Programmes Must Be Targeted
to Meet the Specific Needs of Citizens**

In order to achieve the desired goal, it is first necessary to conduct a survey on the level of financial awareness of the population. It should be ensured that educational programmes are timely, easily accessible, clear, understandable and in a form that allows consultation or user access. Financial education must also meet the needs of first-time job-seekers, the unemployed, those who plan the family, and the like. Employers provide employee training by providing information on occupational retirement provision schemes, presumably through the on-the-job training methodology.

**Principle No. 3: Consumers Should Start Getting Educated
in the Field of Economic and Financial Matters as Soon as Possible,
Preferably at School**

National authorities should include financial education in the compulsory part of the school curriculum. This would enable young people to acquire basic economic and financial knowledge already in elementary and secondary schools. The European Commission issued a recommendation on key competences for lifelong learning that supports the development of the ability to use mathematical thinking in everyday situations, a broader understanding of the functioning of the economy, as well as the ability to plan and manage an individual's life.

Principle No. 4: Financial Education Schemes Should Include General Tools to Raise Awareness of the Need to Improve Understanding of Financial Issues and Risks

Individuals are not always aware that they lack knowledge of financial issues and risks. Awareness rising is the first step towards making individuals aware of the need for education. Successful awareness-raising tools are self-assessment questionnaires and advertising campaigns on financial knowledge. Consequently, target groups can focus on specific materials for financial education.

Principle No. 5: Financial Education by Financial Service Providers Must Be Fair, Transparent and Impartial; It Must Be Carried out in the Best Interests of Consumers

The financial sector should be encouraged to take the initiative and contribute to the development of financial education and to transfer its expertise. When providing financial education, a clear boundary between general financial education and the mere transmission of information to users about specific products or services must be set.

Principle No. 6: Financial Training Providers Should Get Appropriate Training So That They Can Manage Their Financial Education Programmes Successfully and Confidently

For the development of a successful financial education, it is crucial that training opportunities are offered to all those who are performing the training. This includes school teachers, social workers, bankers, volunteers and individuals who conduct training in a way that ensures the adequacy of education and training according to the type of target group (children, pupils, students, employees, elderly, and pensioners). Therefore, appropriate learning materials and training programmes should be developed.

Principle No. 7: National Cooperation between Stakeholders Should Be Promoted in Order to Achieve a Clear Definition of Roles, Facilitate the Exchange of Experience and Rationalise and Prioritise Resources; It Is Also Necessary to Promote International Cooperation between Providers in Order to Share Best Practices

National authorities, providers and users of financial products and services, education professionals and other stakeholders should be

encouraged to participate in financial education. Through joint activities, i.e. networking and transfer of good practices, the coverage of education and training in the field of financial literacy is improved, efficiency increases and learning experience is encouraged. A comparable approach is appropriate in international integration.

Principle No. 8: Financial Education Providers Must Regularly Evaluate and Update Schemes in Order to Comply with Best Practice in Financial Literacy

Financial education providers must include a regular evaluation of progress and achievement of goals in their programmes. If the programmes do not meet the objectives, they must be complemented to comply with the standards achieved by recognised researchers.

The European Commission calls on national administrations, financial service providers, consumer organisations and other stakeholders to develop national financial education strategies through appropriate financial education programmes, taking into account the above principles for financial education.

References

- Commission of the European Communities. (2007). *Financial education* (COM(2007) 808 final). Brussels, Belgium: Commission of the European Communities.
- European Economic and Social Committee. (2011). *Financial education for all: Financial education strategies and best practices within the European Union*. Retrieved from <http://www.eesc.europa.eu/resources/docs/qe-30-12-894-en.pdf>
- Evropska komisija. (2007). Vizija enotnega trga 21. stoletja (1P/07/214). Retrieved from [Http://europa.eu/rapid/press-release_IP-07-214_sl.htm](http://europa.eu/rapid/press-release_IP-07-214_sl.htm)
- Norberg, J. (2009). *Financial fiasco: How America's infatuation with homeownership and easy money created the economic crisis*. Washington, DC: Cato Institute.
- OECD. (2005). *Improving financial literacy: Analysis of issues and policies*. Paris, France: Author.
- Starček, S., & Trunk, A. (2013). The meaning and concept of financial education in the society of economic changes. In V. Dermol, N. Trunk Širca & G. Đaković (Eds.), *Active citizenship by knowledge management & innovation: Proceedings of the Manage-*

ment, Knowledge and Learning International Conference 2013 (pp. 1443-1452). Celje: ToKnowPress.

Stubelj, I. (2010). *Vrednotenje podjetij na podlagi pričakovanih dobičkov*. Koper, Slovenia: Fakulteta za management.

Chapter Four

Good Financial Education Practices in the International Environment

Sergeja Kočar and Aleš Trunk

In order to raise financial literacy to a higher level, the transfer of good practice is crucial, not just their existence in some EU countries, characterised by diverse projects and education programmes in the field of financial education. They are carried out by the public and private sectors and serve as a comparative analysis. The collection of good practice in financial education of the EU countries reflects the geographical diversity and target populations of individual countries, and also informs us about the activities of banks and banking associations in each EU country (European Banking Federation, 2011; European Economic and Social Committee, 2015). The results of good practices are summarised for the period 2009–2015, for the following countries: Germany, Ireland, Spain, France, Italy and Austria.

Germany

The financial education promoter in Germany is Sparkassen-Finanzgruppe (hereinafter referred to as SBFIC). The target group for education is the population living in the area of bank activity (European Economic and Social Committee, 2011, p. 10). With financial education, they want to raise awareness among consumers about the rational use of financial resources and financial planning, and consequently also encourage the local and regional development of financial education. Educational programmes are designed to promote economic growth, create the confidence and stability of households, businesses and local and regional economies. The programmes are coordinated by SBFIC and decentralized institutions, with the aim to provide financial and banking services. Statutory objectives include promoting financial education among the general population and raising awareness of children and youth in terms of spending

money and saving needs. SBFIC has been carrying out these activities for more than 70 years.

Key Educational Activities of the SBFIC for Raising Financial Literacy (European Economic and Social Committee, 2011, p. 11):

1. carrying out studies and analyses,
2. preparation of materials for teaching financial education,
3. the organisation of strategic forums where discussions are held on the future of financial education and the foundations for practical implementation of measures are formed,
4. the creation of specific programmes for entrepreneurs and employees in the field of economic business content,
5. creating special programmes for the promotion of financial education in South America,
6. education and training of users of banking services in order for them to understand economic and financial concepts and services as well as rights, obligations and related risks. They also transfer knowledge by means of promoting responsible spending and preventing over-indebtedness.

The results of financial education in Germany show a high prevalence of educational programmes resulting from a large number of banks. Because they are contingent in law, they allow the continuity and effectiveness of the implementation. The effectiveness of the German banking model provides the basis for both financial education and social and industrial development.

We also studied the activities of the Association of German Banks in the field of financial education (European Banking Federation, 2015, pp. 29–31). The Association of German Banks has been active for 25 years in the area of economic and financial literacy. For this purpose they have created a special educational programme called Schul-Bank. Schools and other educational institutions also use their portal called Geld and Unterricht, which offers general module training. The contents of the portal cover bank accounts and cards, savings, investments, as well as loans and financing. The website of the association provides the consumer with a wide range of educational materials, quizzes and other useful tips in the field of money management. Every three years the association carries out a research on the economic and financial culture among young people, and each

year they organize Schul-Banker, which is attended by more than 4,000 students annually. The content concerns the management of the bank, thus demonstrating the knowledge of financial literacy.

Ireland

The incentive for financial education in Ireland is The National Consumer Agency (hereinafter referred to as the *NCA*). The *NCA* is a public body established by the Irish Government in May 2007 with the aim of promoting the interests of consumers at local and national level (European Economic and Social Committee, 2011, p. 12). With financial education, the *NCA* wishes to provide all forms of support for financial problems and implement basic and specific education of consumers in the field of financial literacy.

The key *NCA* training activities for raising financial literacy are the following (European Economic and Social Committee, 2011):

- Providing personal financial advice, including telephone and written help. They also have an information centre in Dublin.
- Integrating money handling, property insurance, lending, saving and investment, retirement savings, advising on complaints, and comparing financial products and services from various providers to the content of educational programmes.
- Organising educational programmes for schools and seminars for adults with the goal of training in money management. Experts also carry out one-hour workshops at workplaces for production workers.
- Implementation of marketing campaigns on financial literacy that has proven to be very effective. They were performed on television, in the press, on the Internet and on the radio.

The results of financial education in Ireland show that it covers all segments of the population. An open portal has been set up, with the help of which individuals can clear their doubts and problems related to financial literacy. The effectiveness of the Irish *NCA* model allows every citizen access to free advice (European Economic and Social Committee, 2011).

We also examined the activities of the Banking & Payments Federation Ireland in the field of financial education (European Banking Federation, 2015, pp. 39-40). Like other banking associations, the

Banking & Payments Federation Ireland is very active in the field of financial literacy. For over ten years, Irish schools have been offering many training courses under the common title of Money-Go-Round. They are intended for elementary and secondary school students at the first and second level. For many years, the association has been working well with the Business Studies Teachers Association of Ireland. Each year they organize and financially support an event where the awards for the best achievements in the field of business studies are given. They are received by young students who won first place at the national competition in accounting, business and economics.

Spain

A financial education provider in Spain is Banco Bilbao Vizcaya Argentaria (hereinafter BBVA). The target group of education are education communities and people at risk of social and financial exclusion (European Economic and Social Committee, 2011, pp. 13–14). By financial education, BBVA wants to train users with basic financial services. They also want to achieve a change in awareness on the use of financial products and services – from I am aware of to I know and I know how to use it responsibly.

BBVA's key education activities for raising financial literacy include the implementation of a training plan called *Banka para todos* or Banking for All, implemented by BBVA in Spain, Portugal, and North and South America. The extension of financial education has been in progress since 2009 and the curriculum includes specific programmes for each geographical area (European Economic and Social Committee, 2011):

- In South America, specific educational programmes entitled 'Forward to the Future' are carried out. The target group is residents who already are bank customers and those who can open a bank account. They also created a website where information on savings, pensions, credit cards, bonuses and mortgages is available in plain language. Video clips and amusing comics are also available to illustrate the proper use of financial tools and instruments.
- In Spain and Portugal, financial education is carried out under the title 'Values of the Future.' The education is intended for secondary school students aged 11 to 14, with the aim of promoting

discussions on the right use of money. They offer 56 participatory workshops, four theatre and debut workshops and two project workshops. The students most suitable for each type of workshop are chosen by teachers.

- They also implement programmes called Smart Money, which are designed for adults and youth, while awareness of children is raised through educational programmes Teach the children to save money and Be smarter than the loan. Education is financially supported by the United States as well.
- They also provide training and education for volunteers. These are trained bankers with an appropriate financial and pedagogical background. They offer a lot of content, from opening a bank account to handling pocket money.

Prior to implementation of the educational programmes, they carry out special in-service training for lecturers and volunteers who want to teach others. Programmes are implemented directly or in cooperation with independent and non-profit advisory companies (European Economic and Social Committee, 2011).

The results of financial education in Spain show that BBVA, in the framework of the implementation of the educational plan entitled Banking for All, invested EUR 23 million in education and training in the period 2009–2011. Knowledge from the financial field was upgraded by 1.3 million people. The efficiency of the Spanish BBVA model is reflected in the return on investment in the society and the awareness of the social responsibility of all institutions in the country (European Economic and Social Committee, 2011).

We also studied the activities of the Spanish Banking Association (European Banking Federation, 2015, 77–78). The Spanish Banking Association has been active in the field of financial literacy for more than ten years. On the basis of the adopted NFPI for the period 2008–2017, in 2008, the association signed a memorandum on activities, development and promotion of financial education at the state level with member banks. The Banking Association actively cooperated with schools and other financial institutions in 2015 to promote financial education and training. With the representatives of banks, the Association formed a special working group that transfers its experiences and promotes cooperation in the area of financial literacy. They are in charge of organising the European Money Week

in Spain, and have created a website where members of the Association share experiences and suggest improvements. In more than a hundred schools, they have begun a training called *Your finances, your future*, which is voluntarily carried out by young students. The programme will educate at least 5,000 students aged 13–14 years.

France

The facilitator of financial education in France is the Ministry of Economy, Industry and Employment in cooperation with public and private institutions. The target group for education is youth, entrepreneurs, pensioners and other social groups (European Economic and Social Committee, 2011, pp. 15–16). With financial education, the Ministry of Economy, Industry and Employment wishes to provide consumers with knowledge and understanding of the financial world. The key educational activities of the Ministry of Economy, Industry and Employment in cooperation with public and private institutions for raising financial literacy (European Economic and Social Committee, 2011) are:

- The French Banking Federation carries out the service under the title ‘The Bank Key.’ The service raises citizens’ awareness of the functioning of banks, and also provides them advice from the banking sector. The programme is not marketing oriented, but it trains participants in financial products in an understandable language. It has four target groups: private individuals, professionals, young people and other social factors. They also provide information material and educational films. They also prepared a dictionary of financial terms, answers to frequently asked questions and access to useful websites.
- In 2009, the Institute for Public Financial Education published a book on personal finance, in order to reach guidelines for sound financial decision-making and careful handling of money. The French Public Consumer Association also organizes free activities to promote financial education.
- They also perform an educational programme entitled *Finance and Education*, which was established on the initiative of the French banks. They raise awareness and educate on the topic of proper money spending. Activities are carried out in cooperation with local communities.

In France, 75,000 people attended the financial education programme, over 4,000 educational were carried out in order to raise the public awareness of the importance of financial education (European Economic and Social Committee, 2011). The effectiveness of the French model of the Ministry of Economy, Industry and Employment in cooperation with public and private institutions is reflected in the joint implementation of financial education programmes with the local community. It is an example of good practice since it provides direct access to measures for raising financial literacy. The programmes are adapted to the target groups' specificity, thus enabling them to meet their needs.

We also studied the activities of the French Banking Association in the field of financial education (European Banking Federation, 2015, pp. 26–27). The French Banking Association has set up a free non-commercial project *Les clés de la banque*, which includes a website and 60 different financial booklets. In 2014, the site was visited by 3.7 million visitors. It also offers a range of quizzes and the ability to test banking and financial knowledge. Educational content is simple, pedagogically oriented and intended for anyone who accesses the web. They also offer a lot of educational videos and training for social workers to work with an adult population. Educational material for secondary school teachers was also developed at the association. The material is adapted to the content of the secondary school programme. They also run workshops for secondary school students in order to increase awareness of the importance of financial knowledge.

Italy

The incentive for financial education in Italy is the PattiChiari Consortium, an independent legal body established with a consortium of Italian banks and with the active involvement of its partner *Economiascuola* (European Economic and Social Committee, 2011, pp. 17–19). The target group of education is the general public, who is informed about life-in-general tailor made financial programmes. With financial education, the PattiChiari Consortium wants to help consumers to understand financial products and services and, consequently, to make the right decisions. Programmes include financial education intended for students with the aim of becoming financially responsible adults.

The legislation in the field of financial education is under the re-

sponsibility of the Senate and the measure is carried out by the Ministry of Education's services in cooperation with numerous institutions. The most active are commercial banks, educational institutions and various consumer associations. The content of financial education is adapted to individual regions. In Calabria, the emphasis is on raising the awareness of the importance of legal business with the goal of reducing the grey economy (European Economic and Social Committee, 2011).

Key Educational Activities of the PattiChiari Consortium to Raise Financial Literacy (European Economic and Social Committee, 2011):

- In cooperation with consumer organisations, they carry out adult education programmes. They have already been carried out in more than fifty cities throughout Italy. They want to improve the understanding of financial products and services and consequently ensure that responsible and well-founded decisions are taken.
- They set up a website dedicated to educating a wider community. It provides access to and transfer of materials as well as exchange of experience.
- With the Economy of a fingerprint plus programme, which is designed for adults, users are provided with information on the management of commercial sources. The programme covers multimedia applications and is intended primarily for young couples, households and the elderly. Content includes family budget management, responsible spending, avoidance of over-indebtedness and avoidance of excessive interest rates.
- School programmes cover the methodology of acquiring knowledge through work. The educational programme is called Combined Teaching. It allows students to learn very abstract and demanding concepts. The lessons are simple and interactive, as professionals transfer to their students the knowledge acquired at work.
- Our community, programme which includes the content of finances in everyday life, is also available to students. The goal of this training is to expose the students to immediate financial situations in the local community. The methods are innovative and practical. Students should be between 9 and 10 years old.

- The Fingerprint Economy Programme is aimed at adolescents in the age group of 12 to 13 years, as well as adolescents between the ages of 17 and 18 and those who finish their final year of study. They get education from the field of economics and finance and are encouraged to study the aspect of finances in their everyday life. The methodology is based on the everyday life simulations.
- They also organize a Financial Education Week. Banking experts present lectures in the field of economic reality and money management at schools.
- Students are provided with free multimedia CDs, while teachers receive materials for appropriate financial teaching.

The results of financial education in Italy show that in 2010/2011, a total of 27,425 pupils from 405 schools attended the education programmes. The promotion of financial education by the PattiChiari Consortium encouraged the Banco d'Italia to conduct a survey on the level of financial literacy of Italian households (European Economic and Social Committee, 2011).

The effectiveness of the Italian model is reflected in its usefulness, as it offers a wide range of initiatives and covers a wide range of target groups. It is also an exemplary model of a public-private partnership.

We also studied the activities of the Italian Banking Association in the field of financial education (European Banking Federation, 2015, pp. 42-43). The Banking Association of Italy in cooperation with banks and financial-banking institutions, has been introducing financial education schemes since 2003. Thus, the PattiChiari Consortium has developed a wide variety of educational programmes that are performed all over the country and include all segments of the population. They have developed educational tools for primary and secondary schools and a website dedicated to teachers and parents. A great deal of attention is given to research. With Italian universities and independent researchers, they study the financial fitness of the population, as well as the socio-pedagogical, cultural and evolutionary dynamics of financial education.

Austria

Austria has two promoters of financial education. The first is Österreichische Nationalbank (hereinafter referred to as oENB) in coop-

eration with the public and private sector (European Economic and Social Committee, 2011, pp. 22–26). The target group of education is the general public, especially students.

With financial education, oENB wants (European Economic and Social Committee, 2011):

- to improve financial literacy in Austria by promoting the responsible use of financial products and services across the population;
- to expand the basic economic knowledge of the population in order for them to understand consequences of fluctuations in exchange rates, inflation and other economic policy measures;
- to complement household knowledge of the impact of indebtedness;
- to communicate and promote understanding of the role of central banks, their powers and decisions;
- to create a basis for coordinating the activities of financial education at the state level.

oENB key education activities for raising financial literacy (European Economic and Social Committee, 2011):

- A symposium on financial education was held to exchange experiences with other coordinators of financial education and to exchange good practices.
- The museum of money where we can see the development and history of the monetary system was established. In 2010, 16,000 people visited the museum.
- Online education with related materials has been introduced.
- Web tools have been introduced, named the Inflation in the cockpit, including online games and competitions.
- A currency calculator was introduced.
- An online communication platform that allows the public to communicate with oENB was established. It is intended to assist individuals in resolving issues related to financial education.
- A credit calculator that calculates the most favourable loan offer and graphically displays it was made.
- An online programme entitled ‘Risk and Profitability’ was launched, accessible to the public and youth in the age range of 15

to 19 years. It raises youth awareness of the risks of financial decisions.

- A hotline for financial education, involving well-known experts was established. Public can consult them on financial challenges. In 2010, 36,000 tips were given.
- The euro bus was introduced, with a clear educational plan for educating the public on the euro and for financial education.
- Seminars for teachers on financial education were organised in cooperation with Volkswirtschaftliche Gesellschaft.
- Educational materials for students and the public were prepared and distributed in cooperation with the Österreichisches Gesellschafts und Wirtschafts museum. The materials are also available on the web pages.
- Children tour was carried out, providing primary school students with information on the practical use of money.
- The Verein für Konsumentenorganisation competition was prepared, aiming at youth and students. In 2010, it was attended by more than 1000 students, aged between 12 and 19 years.
- A one-day GEWINN Info Day congress was organised on the topic of economic issues concerning Austrian students in the age group of 16 to 20 years.
- Various competitions were organised in fifteen secondary and business schools. Competitions take place online on three difficulty levels. Competitors must write an essay (in the range of 1000 words) on financial topics and advocate why they have chosen an interest rate. The winning team visits the ECB President in Frankfurt.

The results of the financial education of oENB in Austria show that many of the activities carried out involving many different target groups have contributed to the good reception of educational programmes among the population (European Economic and Social Committee, 2011). The number of participants and their satisfaction were monitored. More than 40,000 a month visited the web platform. An investment fair attracted more than 5,000 students and 3,000 teachers.

The Euro bus was visited by 650,000 people, almost 10% of the Austrian population. The efficiency of the Austrian oENB model is

reflected in its scale, both in terms of the number of activities and beneficiaries. It was very well coordinated and expressed strong complementarity among the many actors of the programme.

The second promoters of financial education in Austria are Schuldnerhilfe Oberösterreich and Arbeiterkammer Oberösterreich in cooperation with the public sector (European Economic and Social Committee, 2011). The target group of education is the general public, especially youth. With financial education, Schuldnerhilfe Oberösterreich and Arbeiterkammer Oberösterreich wish to provide consumers with basic instructions on financial education and other consumer rights.

The key education activity of Schuldnerhilfe Oberösterreich and Arbeiterkammer Oberösterreich for raising financial literacy is the Financial driving license, an innovative form of financial education, which was presented in Upper Austria as part of efforts to prevent financial exclusion. The project is an example of good cooperation between public authorities and a consumer protection organisation. The participants of the programme must successfully complete several modules in the area of financial literacy. The content of the programme is adjusted to the age group of participants. After successful completion of the training, the participant obtains a license that confirms the individual's ability to drive in the financial world, with the possibility of sound judgment and responsibility. The license is free.

We also studied the activities of the Austrian Bank Association in the field of financial education (European Banking Federation, 2015, pp. 6–7). Members of the Austrian Bank Association independently carry out financial literacy education for different target groups. They cooperate a lot with charity institutions for raising financial knowledge, which are very numerous in Austria. We can point out the independent European organisation Three Coins, which is oriented towards Central, Eastern and South-Eastern Europe. They are engaged in the research and development of methods that promote the development of financial literacy. They develop educational tools that promote responsible personal finance management.

References

- European Banking Federation. (2015). *Importance of financial education*. Retrieved from <http://www.ebf-fbe.eu/wp-content/uploads/2015/06/The-Importance-of-Financial-Education.pdf>

European Economic and Social Committee. (2011). *Financial education for all: Financial education strategies and best practices within the European Union*. Retrieved from <http://www.eesc.europa.eu/resources/docs/qe-30-12-894-en.pdf>

Chapter Five

Good Financial Education Practices in Slovenian Institutions

Sergeja Kočar and Aleš Trunk

Financial education for individuals is becoming increasingly important due to dynamic, rapidly developing, globally integrated and complex financial markets. Financial needs of individuals are also becoming more demanding, as through financial education and training, they can improve their understanding of financial products and concepts and develop the skills they need to improve their financial literacy (Ministrstvo za finance, 2009).

FARS – Project Tax Literacy for Young People

In the school year 2014/2015, the project Tax literacy for young people was held among pupils and students; 2,500 of them participated. It was carried out by the Financial Administration of the Republic of Slovenia (hereinafter: FARS) with the support of MESS, NEIS and the Government Communication Office (Ministrstvo za izobraževanje, znanost in šport, 2015).

The project is aimed at children and adolescents who are getting acquainted with tax literacy. The key objectives of the project are to strengthen the fiscal culture with an emphasis on the education and training of children and adolescents and to strengthen social awareness of the importance of fulfilling tax obligations as a social value. At the FARS they point out that tax literacy is one of the components of financial literacy. It is being informed about taxes, tax liabilities and the social importance of paying taxes, as well as being able to understand or know the tax concepts and risks. Managing basic tax knowledge has a significant impact on raising the overall level of financial literacy and fiscal culture. It is also one of the active measures to reduce the grey economy (Ministrstvo za izobraževanje, znanost in šport, 2015).

According to the Ministry of Education, Science, and Sport (Ministrstvo za izobraževanje, znanost in šport, 2015), in June 2014 the

NEIS invited primary and secondary schools to participate in the project. The target population were the elementary school students of the last triad and second and third year students. 38 primary and secondary schools decided to participate, with 2,500 pupils registered. 93 lectures were conducted in the project – 56 in primary and 37 in secondary schools. The lecturers were FARS staff. The contents of the two-hour lecture were included in various school subjects, they were interactive and interesting, so they were included in the regular classes as optional contents or as the contents of the project day. Students were presented the history of taxes, taxes in modern society and in everyday life, the importance of paying taxes and the purpose of using tax revenues, and the social consequences of avoiding tax obligations. The summary of lectures is presented in a leaflet called *Youth and Taxes*.

After the completion of the lectures, an empirical survey was carried out with the help of a questionnaire, which involved 1600 pupils and students. The survey examined the awareness of young people of the importance of paying taxes. They were divided into two groups, namely a group of pupils who participated in the project and a group that did not participate. Such approach enables the study of statistically significant similarities or differences between groups. The questionnaire was divided into four substantive areas. They collected basic demographic data, checked the knowledge of concepts related to taxes and grey economy, checked the consumer's behaviour in relation to taxes, as well as the opinion on paying taxes and the purpose of their consumption (Ministrstvo za izobraževanje, znanost in šport, 2015).

The analysis of the survey showed a statistically significant difference in the awareness of the importance of paying taxes between project participants and those who did not participate in the project. From this we can conclude that the given contents had a significant impact on young people. The results also confirm that most of the information that young people have about taxation is negative (tax increases, dissatisfaction with taxes, and introduction of new taxes). This means that information about the positive aspects of paying taxes is insufficient and that the awareness that public goods, such as public education, public health, social transfers, infrastructure and the like are financed from the collected tax money is at a very low level.

A press conference was held in July 2015 to present the results of the project for tax literacy for young people. The key findings of the project promoters are that young people in Slovenia need a higher level of awareness of the importance of paying taxes. They are also convinced that the proper use of didactic and content approaches has increased the interest of young people in improving financial literacy and raising the fiscal culture. Based on the findings of the project, the decision was made to continue the education of young people in schools (Ministrstvo za izobraževanje, znanost in šport, 2015).

The Bank Association of Slovenia

The BAS is an important institution for the banking sector because it transmits good EU practices and brings together and connects various interest communities and organisations. It is also active in the field of financial literacy and financial education. In 2012, under the EBTN Leonardo da Vinci project, the European Financial Education Partnership – EFEP, co-financed by the EC, organized a conference entitled Financial Literacy in the EU and Slovenia. The aim of the project was establishing a connection between banks and schools, where the banking associations participated as a link in the organisation and negotiation of relevant content. The conference was attended by various institutions from Slovenia and abroad. The MF presented the NFEP, the NEIS presented the practical aspect of financial education in schools, the NLB presented a case of good practice in financial education at banks – NLB Bankarna, while AVE agency informed the participants of the training programme for financial advisers, which deals with innovative approaches for employment of vulnerable target groups in order to help families. An example of good practice from the Scottish Financial and Educational Partnership was well received from foreign guests. The European Banking Federation (hereinafter EBF) presented the EFEP project (Združenje bank Slovenije, 2015).

In 2013, the BAS was also active in the area of financial literacy. By the end of October, the All About Bank project was presented to the public. The project consisted of an electronic brochure and new websites designed to approach the financial literacy to clients, banks and savings banks. The initiative for the content preparation for the financial education purposes of the various target groups within population was given already in 2009. For this purpose, a working group

for financial education was formed, bringing together banking experts from various fields. Together they prepared the contents of web pages and brochures. The contents are written in a simple and understandable language, and information about banking operations is collected in one place.

The added value of the project is also the warnings on the relevant sites of the association. They advise users what they can do in case of an unanticipated life event. A dictionary of banking and financial terms with clear explanations and the website of the BAS www.vseobanki.si (Združenje bank Slovenije, 2013) have also proven to be very useful. The project was presented to representatives of the BS, MF, MESS, the Ministry of Economic Development and Technology, Consumers Association of Slovenia (hereinafter CAS) and the Slovene Federation of Pensioners' Associations. At the presentation of the project, France Arhar, director of the BAS, pointed out that in 2007 the EC recommended that the Member States should invest more in the financial literacy of the population. He also stressed the importance of trust in banks, so according to him, the project represents an opportunity for the entire banking system to establish trust between banks, savings banks and their clients by applying good practice.

In the framework of the European Money Week, from 9 to 13 March 2015, the EBF organized various activities for promoting the financial literacy of young people in more than 20 European countries. They have taken place both at European level as well as in individual countries in order to raise the level of financial education for pupils and students and to raise public awareness of the importance of financial literacy. The main objective is to spread financial knowledge among EU members by sharing good practices as the sustainable financial system is based on well-functioning financial institutions and financially conscious consumers (European Banking Federation, 2015).

BAS (Združenje bank Slovenije, 2015) organized or participated in the following events from the field of financial literacy during the money week:

- a national expert consultation and a professional forum of the domestic science teachers with a lecture on the importance of financial literacy;

- a workshop for pupils of the 5th grade at Rakek Primary School with a lecture on financial literacy;
- coordinating the round table called Financial Literacy Projects in Financial Associations and Other Financial Institutions, involving various financial and insurance institutions. Of the banks, NLB and Gorenjska banka participated. The participants exchanged good practices and agreed on the possibilities of mutual cooperation and integration in financial training activities. Financial institutions have specially trained staff and well-formed educational programmes adapted to various age groups. They highlighted the importance of contents consistency with the curriculum, the school management and their expectations;
- lectures for students called The role and position of banks in the financial and economic space, the importance and attitude of young people towards money and savings, carried out at the Secondary School of Civil Engineering, Land Surveying and Environmental Studies in Ljubljana;
- organising of a lecture on Internet Security, online banking for professors at the Vič general upper secondary school, Ljubljana;
- lecture at the workshop Knowing the euro cash for 8th grade students of the Elementary school Šmartno pod Šmarno gorō;
- organising of the expert meeting Financial Literacy in Slovenia. This is second such event, aimed at raising awareness of the importance of financial literacy and improving financial education among young people in elementary and secondary schools. The meeting was attended by 60 representatives of banks, regulators, financial associations, educators, representatives of ministries and CAS.

For BAS, the European week is a way of achieving that in the future, there would be less turmoil and more stability in the financial market. The current financial risks were presented, moral risks, shocks caused by high exchange rate fluctuations and the like. The need for knowledge and ingenuity of bank advisors as well as of users of services was highlighted. The greatest expert investment should be aimed at the younger generation (Križnik, 2015). A representative of the MF expressed her opinion on the poor preparedness to implement the NFEP, otherwise a good basis for raising financial literacy. The NEIS pointed out that Slovenia must update and complement

curricula because we are falling behind compared to EU countries. The good practice of literacy, below presented in more detail, was presented by the editor of the magazine *Moje finance*. He also emphasised that, despite efforts, they failed to agree on cooperation with NEIS, mainly because of content disagreement. The CAS representative emphasised that financial education should neither become a new channel for the product marketing of products, nor a tool for transferring responsibility for financial damage to users (Križnik, 2015).

NKBM presented the brand Dindin, which is intended for savers up to 10 years of age (Shirley, 2015). Dindin is a hero who helps the youngest and their parents get into the world of money. It teaches them about the importance and handling of money as well as about saving. The NKBM also created a special web sub-page (<http://www.nkbm.si/dindin>) for children and parents. The site contains interactive educational content, where questions can be asked and the role of money is explained. Children can send pictures, share drawings and have fun with online games. They also reach Varčevalnik (the Saver), that shows them how to save in order to achieve a specific goal. The parents are provided with advice related to developing a relationship with money and information on forms of saving. Among the financial literacy activities are events in Dindin's children's corners, which are located at NKBM branches in Maribor and Ljubljana. Sveta vladar (the Ruler of the World) is a brand targeting teens and students (<http://www.svetavladar.si/>). With online tools, easy financial planning, easier control of the cost of living, and an overall assessment of the cost of renting a home or a trip is provided. In order to increase the reputation and visibility of the brand, NKBM decided to support the 8th student marketing race organized by the Faculty of Economics and Business of the University of Maribor in cooperation with the Marketing Club. A student marketing race is a marketing challenge for students, as it allows them to face a real marketing case from practice. In cooperation with the Institute for Entrepreneurship Research, NKBM has established an entrepreneurial centre for business beginners and other companies that are planning or implementing development projects. It provides companies and private individuals with modern, safe, reliable and comprehensive financial and advisory support. The Bank organizes free workshops and professional education, available to all the business partners of

the Bank and the members of the Entrepreneur Centre. There are workshops for pensioners on the safe and proper use of the online bank NKBM (Shirley, 2015).

The BAS is actively pursuing the policy of connecting and promoting literacy of young people. At the initiative of the EBF, the BAS invited the Slovenian banks to approach the financial literacy of young people even more actively. Thus, in cooperation with NLB and Banka Koper, at the Vič general upper secondary school, they organized a Personal Finance and Card Business lecture for 3rd year students. For this purpose, the Gorenjska Banka organized a lecture for elementary school students called Safe Online Purchasing and Responsible Control of Money Spending (Združenje bank Slovenije, 2015).

Moje finance – Financial Literacy of Young People Project

On the basis of the results of the Financial Literacy of Slovenes survey 2011, the opinions of various Slovenian financial experts and government guidelines for the development of financial literacy, the *Moje finance* magazine also decided to plan the training of young people. The project was called Financial Literacy for Young People. The mission of the project is to improve the situation in the field of knowledge of personal finances and hence the financial literacy of the whole family. With the project, they want to teach young people how to plan their own financial future and reasonable money handling. Knowledge should be passed from young people to their parents.

The project started in 2013. In November, the magazine *Moje finance* published the cover page and the theme of the project – financial literacy. By the end of November, schools had the opportunity to apply, and in December the *Moje finance* presented the first responses from schools. In January 2014, they began to publish a newspaper supplement on financial literacy for young people and educate teachers at workshops. In September, they started activities in schools, and before that, they created an interactive website on personal finances for children, adolescents, parents and teachers (*Moje finance*, 2013).

The project included a supplement in *Moje finance*, a web subpage and voluntary education. In the supplement, the contents from the area of personal finances for young people are presented. The content of the supplement is based on the content of the teachers and students handbook, prepared for the purpose of teaching and

implementing the project by financial advisers and staff experts in cooperation with the editorial board of *Moje finance*. The contents of the manual cover consumerism, personal budgeting, saving and investment, career, and more. It was prepared on the basis of responses from an online survey on the financial literacy of young people and their expectations. The survey was conducted in June 2013 among pupils in upper grades of elementary schools, where they were asked what subjects they want to learn at the lessons of financial literacy. In support of the project and as a help to young people and parents, they have also created an interactive website that offers various tasks and challenges from the field of personal finance, as well as interactive games, competitions and contests. Voluntary education includes lessons of financial literacy for young people called Young people and money. They are carried out in the last triad of primary schools and in secondary schools. The lessons are carried out by school teachers, but experts from the wider local community can also get involved. The goal of the project is to prepare an all-Slovenian personal finance competition for all the students participating in the project every year at the end of it (*Moje finance*, 2013, pp. 2–7).

As stated in the magazine *Moje finance*, 90 schools were included in the project in 2015, 150 teachers and 500 young people from all over Slovenia were trained. In the autumn of 2015, the President of the State became the honorary sponsor of the project, thus confirming the correct training path conducted by *Moje finance* (Milič, 2015). In the first half of that year, four workshops were held at the Faculty of Economics in Ljubljana with the aim of making the transfer of knowledge between independent personal financial advisers and teachers as effective as possible. A second financial literacy contest for young people being active in the Youth and Money activities was also organised that year. Schools from abroad were invited to participate (*Moje Finance*, 2015).

NLB – Personal Financial Advice Project

Recognizing the importance of raising awareness among clients in the area of financial literacy, NLB also developed a Personal Financial Advice project in April 2010. The purpose of the project was to develop expert bases, instructions and appropriate tools for counselling, education and training of users of banking financial services. The key objective of the project was to raise the level of financial

knowledge and acquire new clients by establishing long-term cooperation based on satisfaction and trust.

The key acquisitions of the project are (Nova ljubljanska banka, 2010):

- Personal Financial Advisory Services (hereinafter referred to as PFAS), which include free personal consulting and workshops in Bankarna. For the internal training of employees who will provide PFAS services, the School for Personal Financial Advisers has been established.
- Brochures, magazines and financial manuals that present the content from the field of personal and family finances in an interesting, clear and comprehensible way.
- Development of the website www.financni-nasvet.nlb.si, which provides basic information and interactive advice on organized personal finances, quizzes and financial simulators, which enable insight into the existing, recommended or desired financial position.
- My financial image module, including new services in NLB Klik online bank.

NLB as the largest Slovenian financial institution developed PFAS with the aim of being socially responsible and joining pro-actively the international initiative for a systematic raise of financial awareness, knowledge and responsible personal finance management. PFAS includes various structured tips, calculations and tools for monitoring, managing and improving the management of personal and family finances. It is intended for average financially literate individuals who are NLB clients or visitors of NLB Bankarna. It is specially adapted to the customers of personal banking, as the personal banker has an in-depth relationship with his clients, a better insight into the personal and financial situation, the volume of financial operations of the client with the bank is greater and, ultimately, these clients are financially stronger and more demanding (Nova ljubljanska banka, 2010).

PFAS includes personal finance, personal financial advice, as well as a review of advisory contents and services, a review of consulting and communication tools as well as sales guidelines based on financial advice.

In NLB, the concept of personal finance defines the summary of financial laws and guides used by individuals or families in making money related decisions. With them individuals or families acquire, manage, conserve, value, and consume money, taking into account financial risks and future life-cycle events. A key part of personal finance is financial planning, which includes analysis of the financial situation, setting goals, making and implementing a financial plan, and monitoring and assessing suitability (Nova ljubljanska banka, 2010, pp. 2-3).

Groznik (2001, p. 10) described personal finance as anything that relates to an individual's property and what influences it. The decisions one takes depends of every individual, his character and the environment in which he lives. This includes life-relevant considerations, such as for what amount of salary a person is willing to work, whether he intends to live in a house or an apartment, will he be able to pay for the costs of schooling of his children, how he wants to live when he is retired, and the like. There are many questions about personal finances and a lot of different answers. What is sensible and acceptable to one is inappropriate and irrational for another. This brings out the importance of financial planning. Garner and colleagues (Garner, Coplan, Nissenbaum, Raasch, & Ratner, 1995, p. 2) are convinced that financial planning cannot shape the future, but it helps us to understand it. According to Keown (2003, p. 3), personal financial planning is a continuous process that changes according to the current financial and living situation.

A special consulting service, called the 360° financial advice, was developed as part of the project. It covers various advisory contents from the organisation and management of personal finances, the creation of savings, reasonable borrowing and deleveraging, the assessment of the state of personal finances and financial goals. If a client decides on one of the above-mentioned advisory contents, the bank adviser must carry out an overview of cash flow and assets, prepare an assessment of financial security, assess the effectiveness of creating financial savings, assess the indebtedness, assess the state of personal finances, and assess the feasibility of financial objectives.

Advisory services in the NLB can be provided by consultants having experience in marketing of the classical banking offer, having obtained licenses for marketing services of mutual funds and life insurance, and having successfully completed their training in the Per-

sonal financial advice school. The personal financial advice school is performed as an internal educational programme at the NLB educational centre. It consists of a basic and advanced programme, aiming at knowing the area of personal finance and the system of implementing PFA in NLB, independently preparing personal financial advice for a client, independently managing a consultative interview, identifying, interpreting and preparing an appropriate financial solution for the client. The content of the school includes cash flow, property, safety margin, saving, indebtedness, pension reserve, life insurance and 360° financial review. Advisors can use the knowledge of personal finance for passive counselling, where they give clients general advice on personal finance, and for active counselling where they provide consulting services, such as proactive advice including a financial solution and 360° financial advice. The school is intended for the target group of participants who carry out the work of a personal banker, a personal finance consultant, a financial adviser or a manager of a branch office. They acquire knowledge in a regular classroom for 15 pedagogical hours, in a computer classroom for 12 pedagogical hours and through e-education at the workplace for 13 pedagogical hours. In addition to classical study materials, each participant also has access to the electronic manual. The participants successfully complete the schooling by passing the e-exam by individual subject groups and the e-final exam (Nova ljubljanska banka, 2010).

PFA consists of many different and interlinked advisory contents within which various advisory services are found. Well-organized personal or family finances are a prerequisite for managing the cash flow and assets. Together with creating savings and rational borrowing, we can get to a high level of personal finance. Based on the assessment of the situation and possible improvements and the planning of future life events and financial goals, we can create a financial plan. The content and complexity of the personal finance plan vary according to customer needs.

Every advisory content may have one or more advisory services. Services are the basis by which bank consultants in the sales process analyse the client's personal financial situation and help to choose the appropriate product. The advisory service comprises a series of general advice in the field of advisory content, such as reviewing, calculating and evaluating the current situation, and suggestions for

improvements, general terms and conditions of personal financial advice, as well as concrete advice in the form of a completed financial work sheet or a personal finance plan.

In his work, a bank consultant uses various consulting tools. One of them is a desktop presentation of personal finances. It is a useful tool that contains visually appealing and comprehensible descriptions of definitions, formulas, laws, and tips. Among the advisory tools NLB also includes quizzes, which are published on the NLB web portal. With their help, an individual can self-assess one's financial literacy, examine one's attitude towards money or consumption habits as well as the organisation of one's personal finances. In order to assess the financial profile of the client, the consultants use two questionnaires: The financial risk assessment of the household and the Individual's inclination to risk. Financial worksheets are useful consulting tools as well. These are printed mind maps that contain descriptions, average values, and empty selection fields, space for client data, and calculations that are important for the client to visualise their financial situation, future financial events and consequences more easily. Bank consultants use 20 different financial working papers in their work. They also use financial simulators in their work: budget simulator, property, status estimates, savings, and annuity simulator. They are prepared in the form of Excel files. In the NLB Klik, an additional My Budget module was developed, which represents the cash flow and My assets, which represents the balance sheet. This enabled the users of banking services to independently manage personal finances (Nova ljubljanska banka, 2010).

As a socially responsible bank, NLB takes care of raising the financial literacy of the general public and its clients by communicating advisory content. Various communication tools are used, among them promotion, consulting brochures, NLB Bankarna, implementation of financial workshops and advisory contents on the NLB web portal. Advisory services, together with the offer of banking financial products and services comprise financial solutions such as financial independence, safety margin and retirement reserves, borrowing potential, and the like. Financial solutions are strongly supported in marketing campaigns. NLB Bankarna is a special bank branch of an open interior, equipped with modern banking technology, which facilitates the use of modern marketing channels even for most demanding clients. The relaxing attitude of employees invites to visit,

stimulates thinking about personal finances and offers the use of PFA. Free of charge financial workshops and seminars took place daily, carried out by consultants and other financial experts of NLB. In NLB Bankarna, consultants use a sales approach based on financial advice, conclude transactions and provide banking services. On the web portal, consulting topics in the areas of financial independence, the foundations of personal finances, financial needs, reasonable borrowing and the creation of savings and investment services are available (Nova ljubljanska banka, 2010).

Sales in NLB are based on financial advice. In addition to the concluded business, the implementation goal of the consulting service is also the creation of long-term cooperation and trust. In mutual advisory relations, they are able to better understand the client and his personal and financial situation. This enables better advising and stronger mutual trust and cooperation. In the long term, the customer becomes more loyal, less price sensitive, and recommends banking services to others. NLB strives for ethics when working with clients. Sales culture involves the mental attitude and behaviour of employees towards clients and their work, which is reflected in their commitment, responsibility and ethics. NLB's ethical standards are contained in the NLB Bank Code. Bank advisers are required to ensure fairness and objectivity in financial advice and to protect the confidentiality of information as well as disclosure of all relevant information and conflicts of interest (Nova ljubljanska banka, 2010).

In October 2011, the NLB Personal financial advice school was selected for the best Slovenian HRM project. The organizer of the competition was Planet CV. NLB also received the European Financial Management Association Award in October 2012 at the 40th Congress of EFMA in Barcelona (European Financial Management Association, 2012).

NLB also extends its corporate social responsibility to other segments of banking customers. At the end of 2015, the NLB Centre for Innovative Entrepreneurship was established in NLB, located at the bank's headquarters in Ljubljana. The centre is open to a wide range of customers. The business centre is a combination of a bank branch and a financial business consultancy, information training centre and a space for meeting, networking and cooperation among innovators, entrepreneurs and businesses. The innovative 'eco' entrepreneurship system includes 'host' management, social entrepreneurship, start up

entrepreneurship, collaborative practices, the operation of innovation centres and business accelerators, as well as the development of massive funding and donation offers. It successfully establishes networks with institutions and NGOs that are already active in this field and can be linked appropriately. The NLB Centre of innovative entrepreneurship is already becoming a trusted partner in an entrepreneurial support environment, a co-creator of positive social change, a meeting place and an incubator of new ideas. In cooperation with strategic partners, it offers banking and other business contents to support the development of good business practices in an effective way (Nova ljubljanska banka, 2015). It is also an example of NLB's good practice in the field of education and training for the financial literacy of clients.

References

- European Banking Federation. (2015). *Importance of financial education*. Retrieved from <http://www.ebf-fbe.eu/wp-content/uploads/2015/06/The-Importance-of-Financial-Education.pdf>
- European Financial Management Association. (2012). *Sales force effectiveness: Getting full value from sales channels*. Retrieved from https://www.efma.com/web_v2/public/assets/content/study/2012/sales_force_effectiveness/1-GS7VD_summary.pdf
- Garner, R. J., Coplan, R. B., Nissenbaum, M., Raasch, B. J., & Ratner, C. L. (1995). *Ernst & Young's personal financial planning guide*. New York, NY: Wiley.
- Groznič, P. (2001). Kaj so osebne finance? In *Moje finance: vodnik za upravljanje osebnega premoženja* (pp. 9–20). Ljubljana, Slovenia: Finance.
- Keown, A. J. (2003). *Personal finance*. Upper Saddle River, NJ: Pearson Education.
- Križnik, B. (2015, 12 March). Mlada generacija se tudi v Sloveniji izgublja v finančnih labirintih. *Delo*. Retrieved from <http://www.delo.si/gospodarstvo/finance/mlada-generacija-je-tudi-v-loveniji-slabo-financno-pismena.html>
- Milič, M. (2015, 10 September). Finančno opismenjevanje otrok ima Pahorjev »žegen«. *Finance*. Retrieved from <https://www.finance.si/8835583/Finan%C4%8Dno-opismenjevanje-otrok-ima-Pahorjev-%C2%BB%C5%BEegen%C2%AB>
- Ministrstvo za finance. (2009, 18. september). Ministrstvo za finance podpira finančno izobraževanje potrošnikov – spletni portal DOLC-

- ETA. Retrieved from http://www.mf.gov.si/nc/si/medijsko_sredisce/novica/article/43/84/
- Ministrstvo za izobraževanje, znanost in šport. (2015, 15. julij). Novinarska konferenca in predstavitev pilotnega projekta »Davčno opismenjevanje mladih«. Retrieved from http://www.mizs.gov.si/nc/si/medijsko_sredisce/novica/article/12058/9187/
- Moje finance*. (2013). *Finančno opismenjevanje mladih* (study materials). *Moje finance*, Ljubljana.
- Moje finance*. (2015, 15. september). Pahor podprl finančno opismenjevanje mladih revije *Moje finance*. Retrieved from <http://mojefinance.finance.si/8835620/Pahor-podprl-finan%C4%8Dno-opismenjevanje-mladih-revije-Moje-finance>
- Nova ljubljanska banka. (2010). *Priročnik za osebno finančno svetovanje* (Unpublished material). Nova ljubljanska banka, Ljubljana, Slovenia.
- Nova ljubljanska banka. (2015). *NLB center inovativnega podjetništva* (Unpublished material). Nova ljubljanska banka, Ljubljana, Slovenia.
- Shirley, P. (2015, 12 March). Nova KBM ob evropskem tednu denarja predstavila aktivnosti za finančno opismenjevanje. *Pressclipping*. Retrieved from <http://www.pressclipping.si/pr-news.php?newsid=933>
- Združenje bank Slovenije. (2013, 28 October). Finančna kriza je marsikomu odprla oči. Retrieved from <http://www.zbs-giz.si/news.asp?structureid=1117&contentid=6168>
- Združenje bank Slovenije. (2015). *Finančno opismenjevanje: informacija o aktivnostih ZBS v Evropskem tednu denarja* (Unpublished material). Združenje bank Slovenije, Ljubljana, Slovenia.

Chapter Six

Financial Literacy and Consumer Protection in the European Union

Irena Zagajšek

When looking at statistics on financial literacy, we often notice that there are many problems in this field. Although, for example, we are facing lack of resources, low revenues are not always the real cause of the problem. Knowing financial mechanisms, consumer protection mechanisms, personality traits of an individual, and an imparted attitude towards money can help to improve the situation, but our financial performance also depends on the structure and organisation of the society we live in. The reasons why money accumulates in the hands of the minority and does not circulate, are structural. Financial literacy or performance in the material field is therefore linked to the knowledge of political and social mechanisms and development trends as well as personal needs and habits. One of the most important policies in the EU is the consumer protection policy, because the ability of prudent and responsible decision-making can make a significant contribution to improving the quality of life.

‘Financial literacy is the knowledge of how money works, how it is earned and managed, invested or given, and all that in order to help’ (Wikipedia, 2016). According to modern theories, based primarily on discoveries in the field of quantum physics, money is a form of energy. At the personal level, therefore, our mental, spiritual and physical condition determines our attitude towards money and also its quantity. The more ‘healthy’ you are in all three areas, the higher the flow rate and, consequently, the more material resources you can gain, if you want it, of course. This is the basis of these theories. Money, which is an end in itself, does not bring happiness, because part of our energy is transferred to it.

‘Money is frozen energy,’ anthropologist Joseph Campbell wrote (2001, p. 34). The purpose of making money is our selfless acting for our own good and for the good of the community. So, let’s not deal with how to get rich, but better think about what and how we can

contribute to others, and what the community we live in really needs (Ducey, 2016, p. 4).

Behavioural Disorders Related to Money

The relationship with money has a pronounced emotional component and is related to our emotional intelligence, which changes over the years, but it is already formed in childhood. In relation to money, a child is inspired by the parents. A media-imposed image of what welfare is and how to reach it often brings children to ask questions about how rich someone is. In Slovenia, this can be a significant problem, because the fact that someone does not have enough resources for life leads to stigmatization. According to the Statistical Office of the Republic of Slovenia in September 2015 (population income from 2013), 14.5 or about 290,000 people live below the at-risk-of-poverty threshold. If social transfers (family and social benefits) were not considered as income, the at-risk-of-poverty rate would be 25.1.

In raising children, it is important to emphasise that money is not an end in itself and that it does not make people happy as such. Fair work and the joy of being able to make a living for ourselves and the others are more valuable than money kept in hidden accounts. The children are supposed to understand that we can already be happy just because we have a home, food and clothes. Many are not so lucky. 'Have wings not things' is a popular saying that will make tolerating the pressure of a consumer society and the needs imposed by it easier.

In the report on financial literacy in Slovenia (Ministrstvo za finance, 2010), the National Institute of the RS concluded that the most frequent problems of financial literacy are the lack of information and the accurate assessment of the financial situation:

- Most individuals overestimate their financial power.
- The most common problems arise because individuals often misjudge their financial situation. Such individuals are particularly vulnerable, as for example they overestimate their ability to repay the loan, pay monthly premiums for saving, etc.
- Many individuals do not have long-term financial plans, or they choose financial products that do not meet their needs. These individuals are much more prone to borrowing and find them-

selves in difficulty if their financial situation changes. This is also the reason why it is difficult for individuals to ensure a satisfactory standard of living when they are in retirement.

- According to a survey carried out in the United Kingdom, 70 respondents have no savings to cover an unexpected income loss. As life expectancy is prolonged, decisions related to saving for retirement age are particularly important.
- Knowing the basics of financial decision making is not enough to make good financial decisions.
- If an individual does not know the specificities of the financial markets, financial products and services, etc., well enough, it is difficult to make financial decisions that would bring benefits in the future (for example, how much and by using which tool one has to save for pension monthly, a comparison of two mortgage loans).
- Financial education, directed to individual types of financial products and services, has a time-limited value because they change very rapidly.
- The result of education can often be excessive self-esteem, leading to hasty and wrong decisions.

In managing money, we often observe pathologies that are related to the personality structure or its disorders. Non-rational spending of money or various money dependencies are a reflection of behavioural and personality disorders. That refers to excessive spending or meanness (depression mentality), financial infidelity (hiding from spouse or lying about money), multiple successive borrowing, workaholism, financial incest (lending money to relatives in order to get to control them), financial support (giving large sums to children who are thus not motivated for making their own living, for example), accumulation of money and feelings of guilt and/or shame because of poverty or wealth. This category also includes gambling and worshipping money, and especially its accumulation, according to Klontz (2010). Klontz (2010) points out that such disturbance, if not connected with other deeper causes, can be eliminated by controlling and organising financial resources, which may emotionally enrich us.

When things do not go well and we find ourselves in trouble, it is best to try to change ourselves or our attitude toward work. The essence of change, according to the theories of motivational trainers

is to add more value to our work – not hard work, but an increase of our work value for the community, which brings us more money (Ducey, 2016).

Social Pathology Related to Money

We are more and more aware that there appear more and more anomalies that affect the welfare of society as a whole at the social level. The fact that 62 richest people have as much wealth as a half of the world's population is significant.

The solution to reduce inequality should be increased control over tax collection, increased public service investments and reduced wage differences (Larry, 2016). Certainly, a more consistent implementation of control and the increase in public funds would have positive effects, but the causes of such anomalies are structural, and often there is no political will for structural changes. The partial interests and non-ethics of political players are among the main reasons for maintaining such a situation.

Another key problem is the banking system. The collapse of the Lehman Brothers bank in September 2008 and its consequences have almost destroyed the global banking system. A lot of taxpayers' money came to banks (including the Slovene), but the consequences were still not fully resolved, which we all still feel. Greed and a wrong assumption that the stability of the economic system can be built on the increase of debt has caused individuals to get loans at the micro level, which they were not able to pay off in the time of decreasing economic growth.

The banking system has recovered more or less, but despite the breakdown, money is still accumulating in financial institutions, which do not pass it on to those who could enrich it. As a result, the assets in the society are unequally and irreparably distributed and/or are leaking abroad, to tax havens where they are just kept or are being used for non-transparent financial transactions. Funds that should be enriched and increased in value often do not come in hand of those able to do it. Funds are usually collected in the hands of individual groups or corporations that run past national regulations and are already placed above state authorities in many countries. Corporations enter into agreements with high-ranking state or EU officials who can even limit human rights or affect the increase of profits on one hand and poverty on the other.

According to the blackest scenarios, we as a human race have already become enslaved to the point that we are ready to work from 9.00 to 17.00 or even longer in a depressing environment, and only for survival without the possibility of creative and stimulating life. The circle of non-freedom is completed when the money earned is spent in shops and companies of large corporations. Economic crime and corruption are more a consequence of the structure and regulation that allows or tolerate such practices. Since corruption is also linked to the ethical criteria of individuals, social and personality factors are strongly intertwined and cause great harm, both at the personal and social level.

Money and New Technologies

Just because of holding back the energy and accumulating money in the hands of those who do not increase general prosperity, some countries are already considering introducing the so-called mechanisms for encouragement of the money flow in order to determine the expiry of the money value on the basis of a progressive scale. This means that the longer the money does not circulate, or it's stored somewhere, the more its value is reduced. Sweden and the United States are most active in this area, but there have been no concrete solutions yet.

Banks that have disappointed us a number of times before are losing some of the earlier traditional areas of operations due to new technologies. New technologies and globalisation have enabled social interactions without intermediaries. Purchases, investments and other financial transactions can already be made without intermediaries or banks.

American Pay Pal is the first service able to avoid long-term and often expensive banking services in money transactions. It allows implementing the so-called 'micro-transactions' with lower costs, which put banks and their higher cost in this area to a subordinate position.

The non-interest-bearing monetary system is one of the alternative proposals, which should have beneficial effects on the stability of the financial and economic system. For the whole society, upwards-oriented capital redistribution is advantageous, especially for those who borrow money. 'This eliminates the gap between those who lend money and those who borrow it,' says Štefančič (2014), and continues: 'The non-interest-bearing monetary system is transparent, ele-

gant, comprehensible and easy to implement. It does not work pathologically, but sustainable. It does not work against community, but towards community. It is no longer an instrument of power, since it benefits all, not only the financial elite, who does everything to keep the monetary and interest-bearing status quo, and which at the same time convinces us that the money is something neutral. No, it's not. Money does not work – money is really only redistributed?

Alternative currencies, such as bitcoins, which are designated as virtual currencies because they are not placed under any territory or state, are one of the possible solutions to the financial global crisis. It is the first form of a currency that is not centralized. The first news on the introduction of bitcoins was published on the Internet in November 2008. In 2009, the acquisition of goods took place for the first time, marking the connection between the virtual and the real currency. After initial enthusiasm, especially in America, the currency is in decline after 2013, because the so-called 'mining' or finding a virtual currency involves more and more people.

One of the basic problems of the monetary system is that due to market anomalies it has caused disproportionality in determining the value of goods and services on the market. Ideas about introducing local currencies or exchange of goods based on local and real value emerged. Such example is the Mondragon cooperative of the Basque community, founded in 1941. In Mondragón, in 1956, large unemployment, poverty and poor education were resolved by re-organising of the society and changing the basic values to be more human, more adapted to human needs.

The movement was started by a group of young men under the auspices of a priest José María Arizmendiarieta, who saw a solution in education. In 1941, he founded an adult education school, where he taught technical skills and encouraged the inhabitants to perform activities that helped to build the community. The priest was a great advocate of Catholic values and criticism of the economy of capitalism and its business practices. He acted towards less hierarchy and he emphasised the cooperation and development of human resources. With an innovative approach in the field of education and a new model of corporate governance, the banking and social systems, he has reduced inequality and introduced an evaluation system on a human scale. Governance and management, therefore, worked just the opposite to the Western model. Today, the Mondragon organisa-

tion connects 109 cooperatives that successfully adapt to new needs in the global market.

EU Consumer Protection and Education in the EU

Due to the unfinished European integration and the pressure of globalisation, the EU is not yet able to introduce structural changes that would fundamentally change the functioning of the monetary market, but they are only incremental. Some analysts even question whether an entity other than the state (legally the EU is still an international organisation) can effectively manage its monetary currency.

The market does not need a national state, but it needs working regulations and consumers. At the same time, through operational consumers and their protection, the EU is building a common European market and policy. The definition of a consumer in the EU is rather vague, but the fact is that in the financial perspective 2014–2020, this policy is even more emphasised. The regulation, which should have as many as 90 directives, is rather inconsistent (Valant, 2015, p. 5), but it is necessary to take into account differences in implementation in national legislation as well as changing the habits and behaviour of consumers. In the area of protection, areas such as food, transport, electronic communications and financial services are particularly exposed. Financial literacy thus occupies an important place.

The ‘Consumer Classroom’ is a project implemented by the European Agency (CHAFEA) together with the European Commission and the national partners. It is aimed at educating teachers in upper grades of primary and secondary schools and offers assistance in the preparation of teaching materials on consumer protection for the population aged 12 to 18 years. The project involves 26 national partners and is led by four umbrella organisations. The website or Internet content delivery is developed to facilitate teachers to familiarize themselves with consumer topics, creating lessons or choosing among those who are already pre-prepared. The platform also establishes a network of teachers and classrooms from the EU. At the local level, it is involved in various events and actions by which it expands the related knowledge.

There are many private and state organisations and individuals on the market that offer various financial advices and consulting. The decision who to contact in order to get advice is certainly not easy. It

is better to consult oneself first and the institutions and organisations that provide this assistance second. It should be determined what really makes one happy in managing one's money and not fall for the media images about false needs. Knowing precise and quality information in the field of social events can only help. After all, the beginnings of all institutions are in the needs of people and not in the forced lifestyle that the financial elite want to 'sell'.

References

- Campbell, J. (2001). *Moć mita: razgovor s Bill Moyersom*. Zagreb, Croatia: Misl.
- Ducey, J. (2016). *Profit from happiness: The unity of wealth, work, and personal fulfillment*. New York, NY: TarcherPerigee.
- Larry, E. (2016, 18 January). Richest 62 people as wealthy as half of world's population, says Oxfam. *The Guardian*. Retrieved from <https://www.theguardian.com/business/2016/jan/18/richest-62-billionaires-wealthy-half-world-population-combined>
- Klontz, B. (2010, 30 January). Do you have a money disorder? *Psychology Today*. Retrieved from <https://www.psychologytoday.com/blog/mind-over-money/201001/do-you-have-money-disorder>
- Ministrstvo za finance. (2010). *Nacionalni program finančnega izobraževanja*. Retrieved from <http://www.mf.gov.si/fileadmin/mf.gov.si/pageuploads/sporocila/oecd/NPFI.pdf>
- Štefančič Jr., M. (2014, 10 January). Zavzemimo denar. *Mladina*. Retrieved from <http://www.mladina.si/152709/zavzemimo-denar/>
- Valant, J. 2015. *Consumer protection in the EU: Policy overview*. Retrieved from [http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/565904/EPRS_IDA\(2015\)565904_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/565904/EPRS_IDA(2015)565904_EN.pdf)
- Wikipedia. (2016). Financial literacy. Retrieved from https://en.wikipedia.org/wiki/Financial_literacy

Chapter Seven

Digital Currencies and Bitcoin

Aleš Trunk and Jure Trunk

Today we know a number of digital currencies, the origin of which dates back to 2008. Bitcoin is a digital asset and payment system invented by a person known under the pseudonym Satoshi Nakamoto. Nakamoto introduced the initial idea in October 2008 and published the bitcoin in the form of open source software in January 2009. Many people claimed to be Satoshi Nakamoto, but his true identity remains unconfirmed.

The bitcoin system is the so-called peer-to-peer system (P2P) where transactions are conducted directly between users without an intermediary. Because the system operates without a central manager and records, bitcoin is a decentralized virtual currency. Bitcoin is often called the first cryptocurrency, although similar systems existed earlier. It would be more appropriate to describe it as the first decentralized digital currency. Today, there is already a huge variety of cryptocurrencies, but bitcoin remains the largest.

Schwartz (2016) believes that virtual or digital currencies, also known as cryptocurrencies, are difficult to categorise and is wondering whether it is money, property, or just a few lines of computer code. It notes that digital currencies have common features with money: both have a certain value, they can both be exchanged for other currencies and both can be used to buy goods or services. However, on the other hand, he notes that digital currencies are not the official means of payment in any country and are not issued and controlled by any central authority.

How do the Bitcoins Come About?

Bitcoins are created as a reward for users who offer their computer power to process and verify transactions in the Bitcoin network. Users do this by installing the Bitcoin software on their computer. This activity is called mining and miners are rewarded with transaction fees and newly created bitcoins for their computer power. The number of

bitcoins that the miner gets depends on the number of miners in the past period. If there are a lot of them, an individual miner gets few bitcoins for his computer power. If the miners are few, the prize is increased to attract new ones. This ensures a steady supply of miners who handle transactions on the network.

In order to ensure a lasting bitcoin value, the mathematical algorithm has a limit, according to which the total amount of generated bitcoins will never exceed 21 million bitcoins. One bitcoin can be divided into 100 million units (as the euro into 100 cents), the smallest possible unit (0.00000001 bitcoin) is called one satoshi. Once (around 2140), the number of generated bitcoins will reach this limit, miners will only be rewarded with commission fees.

In the beginning, when the miners were still few, they received a couple of bitcoins as the award for the processed transaction, but as the market was not yet developed, they were not worth much. Over time, the value of Bitcoin has grown, which has attracted many new miners. The difficulty of acquiring Bitcoins has increased for the miners. Ingram (2015) thinks that because Bitcoins are being created with a predictable level, there is a lesser chance of sudden inflation that hit many countries with traditional currencies, but points out that Bitcoin is a currency that exists only as a computer code and can be an easy target for hackers as such.

Buying and Selling Bitcoin

Bitcoins can be purchased and sold online or offline. Online exchange offices offer the purchase and sale of bitcoins for other currencies. It is worth mentioning that there are many exchange offices that try to defraud users, so caution is necessary when using currency exchange offices. Without the Internet, bitcoins can be purchased directly from an individual or at bitcoin ATMs, which are devices connected to the Internet, and enable the exchange of cash for bitcoins. Commissions for such transactions can be up to 7, and exchange rates are much higher than elsewhere.

In 2015, the number of merchants accepting Bitcoin exceeded the 100,000 limit. Many online stores with a wide variety of goods accept bitcoins as one of the payment methods, and there are more and more classic shops and restaurants where it is possible to pay with bitcoins. The major companies that accept bitcoin as a means of payment are PayPal, Microsoft, Dell, Newegg and Overstock.com.

Jonathan Johnson, the vice president of the Overstock.com board of directors, says that when Bitcoin was introduced as a payment facility in their online store, between \$ 3 million and \$ 5 million in bitcoin transactions were estimated for the first year, but in fact, transactions in the first year were close to USD 15 million (Palmer, 2014). The reason why merchants like bitcoin is simple: it lowers transaction costs, since instead of using an intermediary (such as credit cards), transactions are carried out directly between computers. Many non-profit organisations also accept Bitcoin donations: Greenpeace, The Electronic Frontier Foundation, The Mozilla Foundation and The Wikimedia Foundation. The number of transactions and sites that offer Bitcoin payments is increasing every year. Bitcoin's value varies daily and depends on supply and demand on the market. During its short period of existence, Bitcoin has already experienced quite a few reversals, when the value of the currency has increased dramatically over a short period of time and then fell sharply. Bitcoin is considered to be a very unstable currency, which makes it a non-appropriate form of investment.

Blodget (2013) believes that bitcoin is subject to sudden growth and fall in value, since its value is conditioned solely by supply and demand. Since the number of bitcoins is limited, their value is rapidly increasing when there are many people who want it. And such rapid growth is triggered by even greater demand, which can give rise to a new price increase, at least temporarily. The biggest jump in bitcoin value dates back to November 2013, when the value of one bitcoin increased from less than \$ 200 to almost \$ 1,000 in just a few weeks.

Digital Currencies in the Future

The number of users and places where payment with bitcoins is possible increases every year. There are a lot of scams on the Internet, so it's important to be careful when dealing with bitcoins. However, it is worth pointing out the necessity to be very careful in any form of the Internet payment, so bitcoin is no exception. Due to its decentralized and deregulated nature, bitcoin is also a means of payment for criminals and in various black markets, especially Internet ones, which, however, does not have an impact on an ordinary user using bitcoins to pay small amounts.

Campbell Harvey (2015), a professor of economics at Duke University in Durham, North Carolina, believes that bitcoin can not be

judged by its initial and inevitable problems, but we must look at how, like other successful innovations, it addresses important problems. There is no need to provide personal data for transactions with bitcoin, anyone can conduct transactions with a mobile phone or internet connection, international transactions can be carried out with negligible fees, merchant fees are minimal and there is no risk of sudden inflation, as the inflow of new and final numbers of bitcoins are limited.

Bitcoin brings tremendous advantages over traditional payment methods and time will show whether these benefits will play a key role in its survival. Bitcoin also triggered a flood of other cryptocurrencies, more than 500 existing today; many have collapsed shortly after the creation, many of which have become bitcoin's competition and it seems that cryptocurrencies, even if not bitcoin, will become one of the means of payment for the future.

References

- Blodget, H. (2013, 7 November). Reminder: Bitcoin is the perfect asset bubble – prices could go vastly higher from here. *Business Insider*. Retrieved from <http://www.businessinsider.com/bitcoin-bubble-2013-11>
- Harvey, C. R. (2015, 1 March). Do cryptocurrencies such as Bitcoin have a future? *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/do-cryptocurrencies-such-as-bitcoin-have-a-future-1425269375>
- Ingram, M. (2015, 15 July). Bitcoin virtual currency may be worst of both worlds. *Gigaom*. Retrieved from <https://gigaom.com/2011/06/15/bitcoin-virtual-currency-may-be-the-worst-of-both-worlds>
- Palmer, M. (2014, 25 March). Bitcoin: Retailers adopt virtual currency. *Financial Times*. Retrieved from <https://www.ft.com/content/90b9c5c0-adb5-11e3-9ddc-00144feab7de>
- Schwartz, M. L. (2016, 26 August). What the heck is Bitcoin? The law struggles for an answer. *Forbes*. Retrieved from <http://www.forbes.com/sites/danielfisher/2016/08/26/what-the-heck-is-bitcoin-the-law-struggles/#15bf14be44ba>

Part Two

Various Aspects of Financial Literacy

Chapter Eight

Financial Literacy of the Young: PISA International Research

Eva Klemencič

As early as 2005, the OECD defined financial education as a ‘process in which individuals improve their understanding of financial products and concepts and, through available data, teaching and/or objective advice, develop skills and self-confidence in order to become more aware of financial risks and opportunities, to be able to decide on the basis of the data available, to know who they should turn to for assistance and to be able to take action in order to improve their financial situation and protection’ (OECD, 2005).

PISA Project

PISA is a long-term project of comparing pupils’ and students’ knowledge and skills in OECD member and partner states (Pedagoški inštitut, 2014). Every three years, states determine the levels of reading, mathematics and natural science literacy of pupils and students aged 15 years, but they can also check other areas of literacy. Each cycle of the research focuses in one of the three areas by two thirds of the tasks: reading in 2000, mathematics in 2003 and science in 2006 – the accents follow cyclically. In 2009, a second round of data collection started and in 2012, mathematical literacy was the main field of measurement. The research was carried out in the international space in 2000 for the first time, in 2006 in Slovenia.

In addition to identifying these competences in 2012, Slovenia also participated in some additional international opportunities, among which is the determination of financial literacy (Šterman Ivančič, 2013). In the last few years, developed countries, as well as developing countries, are increasingly concerned about the level of financial literacy of their citizens. The reasons for this are the shrinking of public and private support systems, changing demographic profiles, such as the aging of the population, and the rapid development of financial markets. Concerns have further increased with the financial

crisis and the realization that a low level of financial literacy is one of the factors contributing to poor financial decisions of individuals and that these decisions can have serious negative consequences (OECD, 2009; p. 21). Therefore, financial literacy is now recognised as an important element of economic and financial stability and development throughout the world (Šterman Ivančič, 2013, p. 21).

According to the Pedagogical Institute (Pedagoški inštitut, 2014), the PISA researcher in Slovenia, 18 countries participated in the financial literacy survey, of which 13 were OECD countries. In Slovenia, all general upper secondary schools, 327 secondary schools, 24 primary schools and one adult education institution joined. Altogether, 1312 Slovenian 15-year-olds participated in the verification of financial literacy.

In the following, let's first look at how financial literacy is defined in the PISA survey, and then some key results (both for financial literacy, as well as for checking mathematical, reading and natural literacy).

According to the OECD definition, financial literacy is an individual's knowledge and understanding of financial terms and skills, and includes motivation and self-confidence to use this knowledge and understanding in making effective decisions in various financial contexts to improve the financial situation of individuals and society and to participate in economic decisions (Šterman Ivančič, 2013, p. 31).

Below we will look at some parts of this definition in a bit more detail (Šterman Ivančič, 2013, pp. 32-33):

- *Knowledge and understanding of financial terms.* It would be hard to expect that 15-year-olds will have in-depth financial knowledge or understand the complexity of personal finance. However, they are probably at least aware of the financial environment in which they and their families live. Everyone was probably already buying items for household or personal use; some have participated in family talks about money and about whether they really need what they want; and a significant proportion of adolescents have already begun to earn money and save money. Some students already have experience in financial products, such as a bank account or a mobile phone contract. Understanding concepts such as interest rates, inflation and favourable purchases will soon, if not already, be important

for their financial well-being. Although simple knowledge transfer is not the most important part of the PISA survey, financial literacy depends on the knowledge of the fundamental elements of the financial world, including financial products, such as insurance policies and pensions.

- *Knowledge and understanding of skills.* These skills include general cognitive processes, such as accessing data, and comparing and evaluating – in a financial context. They include basic skills in mathematical literacy (like the ability to calculate percentages or convert amounts from one currency to another) and language skills (reading ability and ability to interpret advertising and contractual texts). In addition, financial literacy also includes the skill of coping with emotional and psychological factors that influence financial decisions.
- *Motivation and self-confidence.* Financial literacy involves not only the knowledge, understanding and ability to deal with financial issues, but also the motivation for finding information, advice and tackling financial activities, as well as self-confidence. These qualities are supposed to be the goal of financial education, but they are also crucial in acquiring financial knowledge and skills.
- *Use of understanding and knowledge in making effective decisions.* It is the ability to use what an individual has learned about personal finances in effective decision-making.
- *Use in various financial contexts.* Effective financial decisions relate to different financial contexts that young people face today in their daily lives and experiences, as well as to the steps they will take in the near future as adults. Probably they currently make relatively simple decisions, such as how they should spend their pocket money, or even (already) what kind of contract they should sign with the mobile operator, but soon they will have to make important education and work decisions bringing about long-lasting financial consequences.
- *Improving the financial well-being of individuals and society.* Financial literacy in the frame of the PISA international comparative research is initially conceived as personal financial literacy, which differs from economic literacy, including broader concepts (such as supply and demand theories, market structures,

etc.). Financial literacy deals with how individuals understand manage and plan personal financial matters and financial matters of their household or family. It is understood that the individual's good understanding, management and planning also have a certain impact on the wider society – by contributing to national or even global stability, productivity and development.

- *Participation in economic decisions* shows the importance of the role of an individual as a thoughtful and fully cooperative member of the society. Individuals with a high level of financial literacy are better equipped to make decisions that directly benefit them, and also to constructively support and evaluate the economic world they live in.

The organisation of the field is regulated by the plan for determining financial literacy as well as the assigning of tasks, and in particular the collecting and reporting on the achievements of the level of financial literacy of students. Financial literacy in the PISA 2012 study thus defines three fundamental dimensions (Šterman Ivančič, 2013, p. 33) contained in each individual task that checks financial literacy:

- *the content* covers the areas of knowledge and understanding necessary for the field of literacy,
- *the process* describes the cognitive strategies and approaches that we use when we start to 'deal with' the given material,
- *the context* refers to situations (which can be personal and global) in which knowledge, skills and understanding of a given field are used. The situations can be both personal and global.

In the framework of the assessment of financial literacy in the PISA 2012 study, the experts decided to identify four non-cognitive factors, which are important in understanding the level of financial literacy achieved by the 15-year-olds, through additional questions at the end of their workbooks. These relate to their attitude towards financial matters and behaviour in before-mentioned situations and are the following (Šterman Ivančič, 2013, p. 52):

- access to information and financial education,
- access to money and financial products and services,
- attitude to financial matters and self-confidence in these situations, and

- behavioural patterns of spending and saving.

Research Results

On average, our 15-year-olds reached 485 in financial literacy, which is lower than the OECD average of 500 points. In ranking, the achievement of Slovenia is between the ninth and the fourteenth place. The top score, 603 points, was reached by 15-year-olds in China. Above average results were also achieved by 15-year-olds from Belgium, the Czech Republic, Poland, Estonia, Australia and New Zealand. Latvia and the United States had a performance at the level of the OECD average. In addition to Slovenia, under-average achievements in the area of financial literacy also occur in France, Spain, Italy, Croatia and Slovakia, and in Russia, Israel and Colombia (Pedagoški inštitut, 2014).

According to the results of the survey, 82 15-year-olds in Slovenia reached the basic level of financial literacy, while the average in OECD countries is 85. The third level of financial literacy in Slovenia was reached by 55 and in the OECD by 62 pupils. The fourth level by 24, 32 in OECD, the fifth and the highest level of financial literacy in Slovenia was reached by 6 and in the OECD by 10 15-year-olds (Pedagoški inštitut, 2014).

The achievements in financial literacy can be compared with the achievements in mathematical and literary literacy by comparing the achievements of financial literacy of groups of 15-year-olds who have similar achievements in mathematics and reading. For Slovenia, the achievements in financial literacy are considered to be lower than the expected achievements of 15-year-olds with similar mathematical and reading results from all participating countries. There is no gender difference in the performance of financial literacy in most countries, except for Italy, where male pupils are more successful. If we compare achievements among 15-year-olds who are equally successful in mathematics and reading, students are more successful in financial literacy. This also applies to Slovenia (Pedagoški inštitut, 2014).

The Pedagogical Institute (Pedagoški inštitut, 2014) also states that, in the survey, 90 Slovenian 15-year-olds answered that they already have an open bank account, which is the highest share among 18 countries. Slovenia is followed by New Zealand with 89. On average, only 58 15-year-olds in the 13 OECD countries reported that

they already have an open bank account. As a key source of money, 15-year-olds in all participating countries listed cash gifts from relatives and friends. They also confirmed that they need to save in order to fulfil their wishes. Such a response was given by most fifteen years in nine countries. On average, in the seven OECD countries, 63 15-year-olds would be saving in this case. Nevertheless, this percentage in Slovenia is the lowest among nine countries (57), the highest being in Croatia (75). In Slovenia, about 23 15-year-olds would prefer to borrow money from a family member. A similar percentage of 15-year-olds chose this same answer in Italy and Israel.

Results and Findings of PISA Research

In the PISA report, based on the PISA 2012 survey, the achievements of Slovene pupils and pupils in the area of mathematical literacy in recent years are stable (Pedagoški inštitut, 2013):

- In Slovenia, the basic level of mathematical literacy (second level on the international scale) is achieved by 80 15-year olds, which is the same as in 2009. With this knowledge, 15-year-olds successfully continue their education and work effectively in their everyday life. On average, the share of 15-year-olds in the OECD countries showing the basic competencies is 77, while in 2009 it was 78.
- 48 of Slovene 15-year-olds reach levels 2 or 3 in mathematical literacy. The highest levels (level 5 and level 6) are reached by 14 15-year-olds in Slovenia. On OECD countries average, 46 15-year-olds reach level 2 or 3 and 12 reach the highest level of mathematical achievements.
- Slovenian 15-year-olds reached 501 on average, which is the same as in 2009. The achievement is significantly higher than the OECD average (494 points). The highest achievements were recorded in China (613 points), which is comparable to about three years of schooling – above the OECD average. The Slovenian achievement does not differ statistically from the achievements of Austria, Ireland, Denmark, the Czech Republic, Australia and New Zealand.
- There is no difference between the total mathematical achievements of male and female pupils and students. In Slovenia, female pupils reached 501 on average, while male pupils reached

502 points. The difference is not statistically significant. In the OECD and the EU, the average gender gap is 12 points higher thus being statistically significant.

- On average, male pupils or students are more successful in mathematical literacy in the OECD countries. This also applies to 37 of the 65 participating countries, while 15-year-old girls are more successful than 15-year-olds boys in five countries. Only in six countries this difference is more than about half of the year of schooling.

In the PISA report, based on the PISA 2012 survey, the achievements of Slovenian 15-year-olds in reading literacy compared to the previous PISA survey are stable (Pedagoški inštitut, 2013):

- In Slovenia, 79 15-year-olds achieve basic reading competence (level 2 in reading literacy), the OECD countries average being 82. 56 Slovenian 15-year-olds achieve level 2 or 3 in reading competences. The highest reading competences (level 5 or 6) are reached by 5 Slovenian 15-year-olds and 8 in the OECD countries.
- On average, Slovenian 15-year-olds reached 481 points, which is less than in the OECD countries (496 points). The Slovenian achievement does not statistically differ from the achievements of Portugal, Croatia, Sweden, Iceland, Lithuania, Greece, Turkey, Israel and the Russian Federation.
- In all OECD countries, reading literacy is higher at female pupils and students. On average, female pupils and students in Slovenia achieved more points (510 points) than male pupils and students (454 points). The gender difference in Slovenia (56 points) is higher than in the OECD countries (38 points) and similar to that in Sweden. The basic reading competences are presented by 89 Slovene female pupils and students and by 70 male pupils and students.

In the PISA report, based on the PISA 2012 survey, the achievements of Slovenian 15-year-olds in the field of natural literacy compared to the previous PISA survey are stable (Pedagoški inštitut, 2013):

- In Slovenia, 87 15-year-olds achieve basic natural sciences competences (level 2), 82 in the OECD countries. The highest natural

science competences (level 5 and 6) in Slovenia are reached by 10 15-year-olds, while by 8 in the OECD countries.

- Slovenian 15-year-olds averaged 514 points, which is more than in the OECD countries (501 points). The Slovenian achievement does not differ significantly from the achievements of New Zealand, Switzerland, Great Britain and the Czech Republic.
- In Slovenia, female pupils or students averaged 519 points and male pupils or students averaged 510.

In the PISA report based on the PISA 2012 study, Slovenian pupils, compared to the average of the OECD countries, achieve lower internal and external motivation for learning mathematics, express more negative beliefs about their own mathematical skills and want to work less with mathematics in the future (Pedagoški inštitut, 2013):

- A gender comparison showed that lower motivation is reflected by female pupils and students, which is also the case for other OECD countries.
- Slovene 15-year-olds, compared to their peers from the OECD countries, on average see themselves less affiliated to school (especially male pupils and students). They also express a lower level of belief that additional investment in school work will help them to find a better job in the future or enrol in college (male pupils and students).
- Compared to the average of the OECD countries, Slovenian 15-year-olds report more positive attitudes towards the school as an institution. They estimate that the school will give them knowledge they need for adult life (female pupils and students show more positive attitudes than male pupils and students).
- Compared with peers from the OECD countries, they are more persistent in learning, more open to solving problems (especially males), they attribute reasons for failing in mathematics more to themselves and not to external factors (both male and female pupils and students), they perceive themselves as more effective in solving various mathematical tasks (males more likely than females), on average they participate in mathematical activities more (especially males), and they are also more concerned about mathematics and related activities (especially females).
- In Slovenia, Slovakia, Croatia and Japan, the share of 15-year-

olds reporting internal motivation for mathematics learning is lower than in other OECD countries. In addition to Germany, Chile, Austria, France, Argentina and Peru, Slovenia is one of the countries where 15-year-olds link their responsiveness to mathematics with mathematical achievements, and this has proved to be particularly important. At the same time, in Slovenia, as in Germany, Austria, the Czech Republic, Japan, Canada, the Netherlands and France, the connection between anxiety about mathematics and achievements is among the most powerful.

References

- OECD. (2005). *Recommendation on principles and good practices for financial education and awareness* (Recommendation of the Council). Retrieved from <http://www.oecd.org/daf/fin/financial-education/35108560.pdf>
- OECD. (2009). *Financial literacy and consumer protection: Overlooked aspects of the crisis; OECD recommendation on good practices on financial education and awareness relating to credit*. Retrieved from <http://www.oecd.org/finance/financial-markets/43138294.pdf>
- Pedagoški inštitut. (2013). *OECD PISA 2012: program mednarodne primerjave dosežkov učencev*. Retrieved from http://www.pei.si/UserFilesUpload/file/raziskovalna_dejavnost/PISA/PISA2012/PISA%202012%20Povzetek%20rezultatov%20SLO.pdf
- Pedagoški inštitut. (2014). *Rezultati preverjanja finančne pismenosti in reševanja problemsko zasnovanih nalog v okviru mednarodne raziskave PISA 2012*. Retrieved from <http://www.pei.si/UserFilesUpload/izjava%20za%20medije.pdf>
- Šterman Ivančič, K. (Ed.). (2013). *Izhodišča merjenja finančne pismenosti v raziskavi PISA 2012 s primeri nalog*. Ljubljana, Slovenia: Pedagoški inštitut. Retrieved from http://www.pei.si/UserFilesUpload/file/digitalna_knjiznica/Documenta_8_ISBN_978-961-270-196-3_PDF/978-961-270-196-3.pdf

Chapter Nine

Financial Literacy among Adults in Slovenia

Sergeja Kočar and Aleš Trunk

International and domestic research on the level of financial literacy has shown that the level of financial literacy in both the EU and Slovenia is at a relatively low level. Aware of this, Slovenia has also carried out some research in this area, performed in the period from 2011 to 2015.

Financial Literacy of Slovenes 2011

The research on the financial literacy of Slovenes was carried out in 2011 in cooperation with the magazine *Moje finance* and the market research company Ipsos. Data were collected through online surveys. The sample covered 508 respondents aged between 18 and 65 years and was representative in terms of sex, age and region (Mihajlović, 2011). Researchers believe that a more educated population was included, as it was an online survey.

According to Mihajlović (2011), the content of the questionnaire was based on international research on financial literacy and on questions, specially designed for the Slovenian market. A school scale of assessments was used, with a percentage of correct answers being calculated for each respondent, and then an individual's knowledge assessment was determined. The total school assessment of the financial literacy of Slovenes is the average of school assessments of all respondents in the sample. The result of the survey showed that the knowledge of Slovenes in the field of financial literacy is sufficient, or, expressed in terms of the school grades, a 2 (Mihajlović, 2011). 50 correct answers had to be collected for a sufficient score, for a score good – 64 to 76 correct answers, for very good – 77 to 89, and those who answered more than 90 questions correctly, were graded as excellent. Generally, men were better than women, who, on average, did not achieve positive grades. The worst results were reached by young people between the ages of eighteen and twenty-nine, where half of

them received grade insufficient. Most of the knowledge was shown among the 30 and 55-years-old. Respondents with a higher or university education level reached an average grade of 2.2, while those with elementary or vocational education level achieved only grade 1.6. It also turned out that the level of monthly income influences the level of financial knowledge. In the group with a personal monthly net income of over EUR 1,400, 8 achieved an excellent score, while their average score was 2.6. In the group with income up to 600 EUR, the respondents achieved only an average score of 1.6. The region of respondents also affected their financial literacy. Respondents from the Central Slovenia region received the best average score (2.1), while the lowest (1.7) was of respondents from the Carinthia, Central Sava and Savinja regions (Mihajlović, 2011).

Based on the results of the survey, financial advisors identified the causes of poor financial knowledge. They think that they are a result of wrong education, an inadequate school system, and the indifference of individuals. Researchers and Slovenian financial experts believe that education on personal finance should be introduced into schools and a fund should be created to finance programmes for improvement of financial literacy, which would provide education for employees in all sectors. Education must be carried out by suitably qualified organisations, and a special working group should monitor education in primary and secondary schools. They also believe that financial education should also be available to students before receiving a scholarship or student assistance, as well as to newlyweds. Journalists should inform public on the importance of pension and life insurance more. They also emphasise the self-initiative of individuals in education or self-study by means of financial literature.

Survey on Financial and Insurance Literacy of Slovenes 2013

In November 2013, the Slovenian Insurance Association (SIA) conducted a survey on the financial and insurance literacy of Slovenes with an emphasis on insurance literacy. An electronic questionnaire was available for the collection of data and information, which was available on the SIA web pages, on the MedOverNet portal, as well as through the Facebook profiles of individual members of the association. The survey was anonymous and voluntary. The survey was answered by 906 respondents (Slovensko zavarovalno združenje, 2013).

According to the researcher, the survey questionnaire consisted of

three sets. The first covered general demographic issues, the second involved 16 statements in the field of financial and insurance literacy, and the third involved a question related to obtaining additional insurance related information.

Key findings of the survey, as summarised by the researcher:

- Women are more financial and insurance-informed than men.
- The young are not familiar with insurance and the importance of security.
- Respondents do not know how to compare credit, life and accident insurance.

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- Respondents are able to manage family budgets, daily purchases and can give preference to important purchases before unnecessary purchases.
- Respondents are able to determine when they need professional advice in the field of insurance and know where to find it.
- Respondents know for which damage and events they are insured themselves and what kind of insurance their family has.
- Respondents do not have much calculating skills and are not able to react appropriately to changes that affect their financial situation (rising unemployment, inflation, the collapse of financial markets, and so on).
- Respondents want to obtain insurance information on the websites of individual insurance companies, with insurance agents and brokers, and elsewhere on the Internet.
- The lowest level of financial literacy is in the Central Sava region.

Financial Literacy of Slovenian Athletes 2014

In November 2014, the Olympic Committee of Slovenia (OCS) and Play Smart conducted the first survey on the level of financial literacy of Slovenian top athletes. The survey involved 135 professional athletes aged 20 and over (Play Smart, 2014), mostly men who were ranked in the international class after the categorization of the OCS. The average assessment of the survey is sufficient. In the age group below 20 years, the most respondents – 45.2, received the grade good,

while 23.7 received the grade insufficient. None of the respondents answered correctly to all the questions asked.

Questions were divided into three sections. In the first part, knowledge of basic and advanced financial products (shares, loans) and documents (payment slip) was identified, followed by issues related to basic and advanced financial operations (compounded interest calculation) and risk diversification. The issues of the last section related to real estate in connection with investment risks. The results are directly comparable to already performed research. Slovenian athletes showed most knowledge in computing and mathematics issues, and least in issues related to risk diversification. In answering a real estate issue-related question, only a third of athletes knew that it was not wise to direct all the savings in real estate investments.

The ocs and researchers emphasise the importance and the need to educate athletes in the field of personal finance management. Many athletes face financial difficulties after completing their careers, many are bankrupt or late to know that financial education after the end of a career is very important for their successful financial future.

We can conclude from the research that Slovenian professional athletes achieve enviable success in their sports career, while they have less knowledge in the area of personal finance management. The grade sufficient, as a result of the research on financial literacy among athletes, is comparable to the estimate of the entire Slovenian population in the 2011 financial literacy survey. It is also evident from the research that it is urgent to invest in the financial knowledge of Slovenian top athletes in time, as their career is short and yet the time when they earn the most money in their entire lives.

According to financial experts, top athletes are aware of the need for financial knowledge and they recognise their own ignorance. Primož Kozmus has no financial background. At the round table on the financial problems of top sportsmen, he said that success also brings a growing number of quasi-friends who just want to use you. If you are not educated and cautious, you go into financial adventures, which usually do not have a happy ending. The sailor Vasilij Žbogar, however, believes that as a top sportsman you have to master the financial field if you do not want to invest your money wrong. Žbogar has a degree in economics and therefore devotes more time and knowledge to managing money. Triathlete Mateja Šimic is aware that knowledge and hard work lead to success. She believes that after

the completion of her career, she will find a project where she will combine her acquired experience and by learning also achieve results from her own financial investments. She expects return on her investment (Maljevac, 2014).

Researches on Financial Literacy 2014 and 2015 within the I Know That I Do Not Know Project

Based on the findings of the 2011 *Moje finance* survey and the PISA 2012 international research, Vezovišek and Partners company have carried out their own research on the financial literacy of Slovenes in 2014 and 2015. It took place in the framework of the project I Know That I Do Not Know (slov. *Vem, da ne vem*), which, besides the research, also includes the Financial school for adults. Through workshops within the school, they want to raise the level of financial literacy of the entire population (*Vem, da ne vem*, 2016).

According to the authors of the survey, by researching financial literacy in the frame of the I Know That I Do Not Know project in 2014, they checked the level of general financial literacy of Slovenes. The questionnaire covered the field of personal finance management. In November 2014, the recipients of electronic news and Slovene users of the Facebook social network in the age group between 25 and 60 years were invited to participate. The survey involved 3,618 respondents. The average grade on a scale of 1 to 10 was 6, which means grade sufficient. The authors of the research find (*Vem, da ne vem*, 2016) that more than a third of the respondents showed a very inadequate knowledge, only one out of seven respondents answered all the questions correctly. This reveals that the financial literacy of Slovenes is still poor three years after the first survey. To summarise the findings of the survey, 34 Slovenes are unable to manage their own money; only 23 of them understand the fundamentals of finance, but they do not know about saving and insurance; 29 Slovenes know the financial structures superficially, and they are unaware of legal traps, and 14 Slovenes have family finances under partial control. It was also a worrying conclusion that all Slovenes are convinced that they control their family finances.

The authors of the study of financial literacy within the I Know That I Do Not Know project upgraded and deepened it in 2015. They designed it as a research with four online surveys based on the basic themes – family budget, protection, investment and savings. All

four online surveys were published on the website of the Institute I Know That I Do Not Know. According to the authors, in 2015, the same group of respondents were invited to the survey, which are the recipients of newsletters and Facebook users between the ages of 25 and 60. The survey involved 25,911 respondents. 2,219 responses were representative, meaning that they were identified by submitting a valid electronic address. The average grade on a scale from 1 to 10 was 6, or grade sufficient. According to the authors of the survey (Vem, da ne vem, 2016), on the basis of the results of the 2015 study, we can summarise that only 2 Slovenes are able to independently manage the family budget; only 4 know the importance of protection and the four pillars of social security; 3 Slovenes know the basics of investment and only 6 know the fundamentals of saving.

According to researchers, the results of 2015 suggest even more insufficient knowledge in all four financial sets, compared to that from the 2014 general survey (I know I do not know, 2016). It turned out that adult Slovenes know very little about personal finances; they know the most about saving, and the least about the family budget. Also, on the basis of the results of these two studies on financial literacy, we can summarise that Slovenians lack knowledge in the sound management of personal finances.

References

- Maljevac, S. (2014, 11 December). Kozmus: »Mislil sem, da obvladam finance«. *Zurnal24*. Retrieved from <http://www.zurnal24.si/kozmus-mislil-sem-da-se-spoznaj-na-finance-clanek-241507>
- Mihajlović, S. (2011, 19 January). Alarm! Finančna pismenost Slovencev: zd (2). *Moje finance*. Retrieved from <http://mojefinance.finance.si/300361/Alarm-Finan%C4%8Dna-pismenost-Slovencev-zd%282%29>
- Play Smart. (2014). Finančno opismenjevanje profesionalnih športnikov. Retrieved from <http://www.play-smart.eu/kruta-realnost>
- Slovensko zavarovalno združenje. (2013, 28 January). Finančna in zavarovalniška pismenost Slovencev. Retrieved from <http://www.zav-zdruzenje.si/financna-in-zavarovalniska-pismenost-slovencev-rezultati-raziskave/>
- Vem, da ne vem. (2016). O raziskavi finančne pismenosti 2015. Retrieved from <http://www.vemdanevem.si/raziskava-financne-pismenosti-2015/>

Chapter Ten

Financial Literacy: The Insurance Example

Melita Moretti

Financial Literacy in the Field of Insurance

Financial literacy is an important factor in the economic and financial stability of both the individual and the society. Individual governments and employers are rapidly transferring responsibility for saving and investing on individuals – the reduction of public (public pension scheme) and private (occupational pension schemes, personal retirement plans) support systems. Demographic trends of the population are also changing (lower fertility rate, aging population, socio-economic mobility of the population, longer life expectancy of an individual). It is also worth to mention the rapid development of individual financial markets (new financial products in the field of loans, investments and insurance, for example) and the rapid development of information technology, but the choice of individual financial products and services depends on the individual's financial literacy (knowledge and ability to use this knowledge), that means on the ability to assess and select the appropriate financial product and service. Thus, an individual must be sufficiently financially literate in order to protect himself and his family and to provide himself and his family adequate financial security.

Financial literacy is a multi-dimensional concept; therefore there are also several definitions of financial literacy, some of which have been summarised in Table 10.1. To sum them up, we find that they all involve the ability of the individual to achieve the basic knowledge and skills by which he will take individual financial decisions, and the ability to manage money in acceptable circumstances. Financial literacy is thus an integral part of human capital. The conditions for financial literacy of the individual are mathematical and literary literacy (Betal, 2004).

Financial literacy in the field of insurance is understood as an in-

TABLE 10.1 Definitions of Financial Literacy by Individual Authors

Applied Research & Consulting (2003)	Financial literacy is the understanding that investors have with regard to market principles, instruments, organisations and regulation.
Anthes (2004)	Financial literacy is the ability to read, analyse, manage and communicate personal financial conditions that affect material well-being.
Danes and Haberman (2007)	Financial literacy is the ability to identify, communicate, calculate and develop independent assessments and take various measures arising from these processes for the successful development of our complex financial world.
Lusardi (2008)	Financial literacy is an individual's knowledge of basic financial terms, such as: understanding interest rates, the difference between nominal and real values, and the basis for risk diversification.
PISA 2012 (Šterman Ivančič, 2013)	Financial literacy is an individual's knowledge and understanding of financial terms and skills, and it also includes motivation and self-confidence to use this knowledge and understanding in making effective decisions in various financial contexts to improve the financial situation of individuals and society and to participate in economic decisions.

dividual's ability (Slovensko zavarovalno združenje, 2014; Moretti, 2015) to:

- find professional advice on insurance products,
- know the importance of individual basic insurance terms (deductible, loss event, insurance case report, insurer, agent, liability of the insured),
- know how to compare individual car, accident and life insurance,
- know which loss events and damage are covered by his insurance,
- know how to act in case of an accident, a car accident, a flood in the apartment, etc.
- know basic rights and duties as an insured person and to have other knowledge.

Research on the financial literacy of individuals at the state level has not yet been available in Slovenia until 2012; financial literacy in the field of insurance was also not determined. In 2013, in the frame-

work of the Slovenian Insurance Association, we decided to examine the state of financial literacy (with emphasis on insurance literacy) among the general public in Slovenia; the results of the research are shown below.

Research Methodology and Characteristics of the Sample

As a method of data collection an online survey was used (www.ika.si). The questionnaire, which we used as a research tool, consisted of three parts, namely:

- the first part contained a question with sixteen assertions related to the field of financial and insurance literacy (Anthes, 2004; they were translated into Slovene and adapted to the situation in Slovenia);
- the second part contained questions related to obtaining additional information on insurance;
- the third part contained questions about the general demographic data of the respondent (gender, age, education, region, status).

The comprehensibility of the questionnaire was verified by conducting a pilot study. The questions or arguments in the first part of the questionnaire were presented in the form of a 5-level Likert scale (from 1 – strongly disagree to 5 – strongly agree).

In the random sample we included natural persons who, at the time of the survey (from 4 November 2013 to 29 November 2013), accessed the electronic version of the questionnaire through the website of the Slovenian Insurance Association (www.zav-zdruzenje.si), the website of the Mutual Health Insurance Company (www.vzajemna.si), the portal MedOverNet and Facebook profiles of individual members of the Slovenian Insurance Association ...

We received 906 fully completed questionnaires. According to the Statistical Office of the Republic of Slovenia, the sample was big enough to provide generalisation of results to the entire population with sufficient reliability – by gender (in the year 2011 there were 2,052,496 inhabitants in Slovenia, of which 1,037,066 women and 1,015,430 men) and by age (the average age in Slovenia is 40–41 years), which means that we were working with the most typical population.

TABLE 10.2 Description of the Sample

Category		<i>f</i>	<i>f</i> %
Gender	Female	529	58.4
	Male	377	41.6
Age	Up to 20 years	40	4.4
	From 21 to 30 years	192	21.2
	From 31 to 40 years	290	32.0
	From 41 to 50 years	198	21.9
	From 51 to 60 years	116	12.8
	More than 60 years	70	7.7
Education	Primary education	10	1.1
	Secondary school education	278	30.7
	Higher education	94	10.4
	Higher education (professional)	128	14.1
	University education	257	28.4
	Specialist/Master's degree	60	6.6
	M.Sc., doctorate	79	8.7
Region	Mura Region	29	3.2
	Drava Region	171	18.9
	Carinthia	39	4.3
	Savinja Region	61	6.7
	Central Sava Region	20	2.2
	Lower Sava Region	35	3.9
	Southeast Slovenia	45	5.0
	Central Slovenia	311	34.3
	Upper Carniola	66	7.3
	Inner Carniola-Karst Region	28	3.1
	Gorizia Region	29	3.2
Coastal-Karst Region	72	7.9	
Status	Secondary school student, university student	96	10.6
	Employed	635	70.1
	Unemployed	104	11.5
	Pensioner	71	7.8

Table 10.2 presents the characteristics of the sample. Women filled out 529 (58.4) questionnaires, men 377 (41.6) questionnaires. The highest number of interviewed persons is aged 31 to 40 (290, 32.0), with completed secondary education (278; 30.7), with the status of

an employed person (635; 70.1) and with a residence in the Central Slovenia region (311; 34.3).

For the purpose of checking statistically significant differences, we divided the respondents by age into two groups, namely younger respondents (interviewed being up to 30 years old – 232 respondents) and older respondents (interviewed being over the age of 31 years – 674 respondents).

Research Results

Below we present the results of the research. The characteristics of measuring individual variables were presented with descriptive statistics and statistical analyses (frequencies, proportions, arithmetic mean, standard deviation, *t*-test), for which we used the SPSS 23 software package.

Descriptive Statistical Analysis

Below we analyse financial literacy in the field of insurance. The measurement reliability of the part of the questionnaire, which was related to the field of financial literacy in the field of insurance (16 variables), we verified with the Cronbach index α (Cronbach, 1951), which amounted to 0.939, which confirms the reliability of this part of the questionnaire (Field, 2013).

On average, the respondents mostly agree that they are able to manage the family budget, to make daily purchases and to give priority to essential purchases before unnecessary ($\bar{x} = 4.32$), and they also agree that they are able to judge when they need expert advice in the field insurance, and know where to find it ($\bar{x} = 4.09$), they know how to prepare their budget plan in advance – budget ($\bar{x} = 4.08$), know for which loss events and accidents they and their families are insured for ($\bar{x} = 4.07$) and know the importance of basic insurance terms (such as deductible, damage loss event, declaration of contingency, insurer, producer, liability of the insured person), used in contracts, documents, etc. ($\bar{x} = 3.97$). On average, respondents agree that they are least able to compare loan insurances ($\bar{x} = 3.27$). Standard deviations range from 0.886 to 1.179.

When asked about where and how the respondents would like to get more information about insurance in the future (they could choose more responses), we received the following answers:

- on the websites of individual insurance companies (523 respondents),
- with insurance agents and insurance brokers (490 respondents),
- elsewhere on the Internet (351 respondents),
- from friends and colleagues (259 respondents),
- from family members (141 respondents),
- in advertising messages from insurance companies (51 respondents).

Respondents seek individual relevant information in the field of insurance products online, with insurance agents and insurance brokers, but, given their financial literacy in the field of insurance, these are insufficient.

t-Test

In the following, we examined whether there is a statistically significant difference between the individual independent patterns (in our case, between the younger and the older respondents) regarding the individual variable of financial literacy in the insurance sector – we used a *t*-test for independent samples. The normal distribution of the values of individual variables was verified by the skewness coefficient – the asymmetry of the individual variables does not exceed the critical value ± 1 , indicating the normal distribution of values.

Table 10.3 shows that there are statistically significant differences between the groups (in our case between the younger ones – up to 30 years old and the elderly – over the age of 31; the significance level is less than 0.05). In twelve out of sixteen variables of financial literacy in the field of insurance, younger respondents (up to 30 years) averagely assess their financial literacy skills in the field of insurance as poorer compared to older respondents (above 31 years), except for the comparison of car, accident and life insurance, as well as asking and forming questions and understanding the answers about financial and insurance cases, where these variables are evaluated statistically similar for both groups (the significance level is greater than 0.05).

The highest statistically significant difference between the groups is with the variable ‘I understand why I pay taxes and basic health insurance and how it affects salary’ (difference in $\bar{x} = -0.629$; $p = 0.000$), and the smallest in the variable ‘I can judge when I need to

TABLE 10.3 Descriptive Statistics and *t*-Test of the Differences between Younger and Older Respondents Regarding Financial Literacy in the Field of Insurance

Argument		(1)	(2)	(3)
I can formulate questions and I understand the answers concerning financial/insurance matters.	(a)	232	3.69	0.149
	(b)	674	3.81	
I can determine when I need professional advice in the insurance field and I know where to find it.	(a)	232	3.97	0.031
	(b)	674	4.13	
I know the role of various financial organisations (banks, pension funds, insurance companies, mutual funds).	(a)	232	3.60	0.002
	(b)	674	3.86	
I can compare various life insurances.	(a)	232	3.38	0.173
	(b)	674	3.51	
I can compare various accident insurances.	(a)	232	3.53	0.304
	(b)	674	3.63	
I can compare various loan insurances.	(a)	232	3.02	0.000
	(b)	674	3.36	
I can compare various car insurances.	(a)	232	3.69	0.202
	(b)	674	3.80	
I know the meaning of basic insurance terms (such as: the loss event, reporting of the contingency case).	(a)	232	3.69	0.000
	(b)	674	4.06	
I understand why I pay taxes and basic health insurance and how it affects my salary.	(a)	232	3.46	0.000
	(b)	674	4.09	
I know my basic rights and duties as an insured person.	(a)	232	3.51	0.000
	(b)	674	3.95	
I am able to manage the family budget, make daily purchases and I can give priority to basic, essential purchases before the unnecessary ones.	(a)	232	3.91	0.000
	(b)	674	4.46	
I can make my own budget plan in advance.	(a)	232	3.78	0.000
	(b)	674	4.18	
I know the financial risks to which I am exposed as an individual and I can protect myself from them.	(a)	232	3.49	0.000
	(b)	674	3.92	
I am arithmetically skilled and able to appropriately respond to changes affecting my financial situation.	(a)	232	3.54	0.021
	(b)	674	3.71	
I know how to act when something happens to me (an accident, a car accident, flooding in my home).	(a)	232	3.68	0.000
	(b)	674	4.06	
I know what kind of loss cases and events me and my family are insured for.	(a)	232	3.69	0.000
	(b)	674	4.20	

NOTES (1) number, (2) arithmetic mean, (3) significance level, (a) younger – to 30 years, (b) older – over 31 years.

professional advice in the field of insurance, and I know where to find it' (difference in $\bar{x} = -0.167$, $p = 0.031$).

Conclusion and Recommendations for Improving Financial Literacy

The purpose of the research was to determine the state of financial literacy in the field of insurance of individuals in Slovenia. The survey shows that individuals in Slovenia are on average able to manage the family budget, make daily purchases, and give priority to basic, essential purchases before unnecessary. They also know how to evaluate when they need professional advice in the field of insurance, know where to find it, know how to make their financial plan or budget in advance, know for which damage and events they and their families are insured against and know the importance of basic insurance terms (such as loss event, declaration of contingency, liability of an insured person), which are used in contracts, documents, etc. The survey also shows that individuals in Slovenia are on average the worst in comparing loan, life and accident insurances, as well as that they averagely have less computer skills and lesser ability to respond appropriately to changes that affect their financial situation. The survey also shows that younger respondents (up to 30 years) are on average less likely to assess their financial literacy skills in the field of insurance than older respondents (over 31 years), except when comparing car, accident and life insurances, and setting and forming questions and understanding the answers on financial and insurance issues, where these variables are statistically significantly comparable by both groups. This is particularly worrying, since young people are one of the most active consumer groups.

Based on the results of the research we suggest the following recommendations for practice:

- public information on individual loan, life and accident insurance should be improved (by increasing cooperation with public and private institutions in this field, producing short e-manuals on individual loan, life and accident insurance, increasing cooperation with mass media such as the radio, the television and the Internet);
- creation of a website with information on individual loan, life and accident insurance (advantages and disadvantages of individual insurance, explanation of individual insurance terms, description and analysis of insurance policy cases for each type of insurance, possibility to ask questions);

- when concluding individual insurance, individuals should be better informed;
- in damage procedure following the contingency, the insured individual should be better informed;
- special emphasis should be given to younger individuals, as they, on average, rate almost all claims from the field of financial literacy in insurance the lowest.

References

- Anthes, W. L. (2004). Financial literacy in America: A perfect storm, a perfect opportunity. *Journal of Financial Service Professionals*, 58(6), 49–56.
- Betal, D. (2004). *Getting a life: Helping homeless people get back on their feet*. London, England: St Mungo's.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(1), 297–334.
- Danes, S., & Haberman, H. (2007). Teen financial knowledge, self-efficacy, and behavior: A gender view. *Journal of Financial Counseling and Planning*, 18(1), 48–60.
- Field, A. (2013). *Discovering statistics using SPSS*. London, England: Sage.
- Applied Research & Consulting. (2003). *NASD investor literacy research: Executive summary*. Retrieved from <http://www.finrafoundation.org/web/groups/foundation/@foundation/documents/foundation/p118411.pdf>
- Lusardi, A. (2008). *Financial literacy: An essential tool for informed consumer choice?* Retrieved from https://www.dartmouth.edu/~alusardi/Papers/Lusardi_Informed_Consumer.pdf
- Moretti, M. (2015). Finančna pismenost na področju zavarovalništva v Sloveniji. In *Kako zagotoviti rast zavarovalne premije v Sloveniji* (pp. 223–235). Ljubljana, Slovenia: Slovensko zavarovalno združenje.
- Slovensko zavarovalno združenje. (2014, 28 January). Finančna in zavarovalniška pismenost Slovencev: rezultati raziskave. Retrieved from <http://www.zav-zdruzenje.si/financna-in-zavarovalniska-pismenost-slovencev-rezultati-raziskave/>
- Šterman Ivančič, K. (Ed.). (2013). *Izhodišča merjenja finančne pismenosti v raziskavi PISA 2012 s primeri nalog*. Ljubljana, Slovenia: Pedagoški inštitut.

Chapter Eleven

Financial Literacy of Secondary School Students

Gregor Jagodič and Valerij Dermol

Definition of the Problem

Current economic conditions require knowledge, as well as resourcefulness in the use and use of financial resources. Older generations in Slovenia may still be ‘afraid of money because they are aware that they cannot handle it well.’ The problem they face comes from their youth. In the past, they were confronted with a very high rate of inflation and therefore had to replace the domestic currency with a foreign, more stable currency (most often with German mark). Thus, most of our parents kept the value of their income and savings. However, such system of approaching the management of one’s own finances broke down with the independence of Slovenia, as the introduction of its own currency reduced the inflation dramatically. Nevertheless, some of the habits of managing money have been preserved.

The problem that today’s youth cannot manage money and their own finances is definitely multifaceted, resulting mainly from the knowledge within the family and, to a large extent, from the way of education in schools. In the past, not much attention was given to the financial literacy of young people. In this way, an important contribution was made to the poor knowledge of financial instruments by the use of which finances could be managed better in order to ensure a more financially independent future.

In order to improve the situation, we should put much more effort into various ways of education and training in financial literacy, especially for generations aged 20 to 40, as this would also have the greatest impact on the transfer of knowledge to younger members of families and thus ensuring the whole generation a much more clear financial future.

Therefore, to be financially literate, it is not enough just to know

the ways in which financial markets, institutions and the supply of financial products, services and related mechanisms operate, but also individual desires and goals, as well as master the planning in order to achieve the set goals.

This article is organized in such a way as to first define the financial literacy and the importance of learning about finances, followed by a chapter in which we define the attitude towards money, the function of money and the importance of taxes. The content is upgraded with the performed empirical research and the results of the research.

Finance, financial Literacy, Learning about Finances

The concept of finance covers everything in connection with property and the management of property from the point of view of an individual or a family (Lubej & Stanonik, 2009). The financial situation of an individual defines the lifestyle, so money is very important nowadays, since it enables an individual fulfilling wishes. It is very important for every individual to know how to successfully manage the money earned, which certainly has several important aspects (Glavnik, 2005), namely, activities related to the ability to earn money, the attitude to oneself, the influence of the environment, the understanding of internal value of money and the efficiency of investing surpluses. Groznic (2001) also thinks that financial decisions are matter of an individual, the environment which one lives in and one's personal character. Most of the above-mentioned authors dispel the standard individual perception about finances. They argue that, in order to manage finances well, it is necessary to learn and understand why and how to manage them and what kind of personal attitude to develop towards them, as individual's wishes, interests, knowledge and understanding of the finances are quite different and largely derive from the living environment. Therefore, each individual should make a financial plan for the successful management of finances in order to ensure financial security in terms of an ever-available liquid amount (preferably in cash form) (Balkovec, 2000).

Financial illiteracy can therefore be defined as a lack of knowledge in the field of planning and targeted management of personal finances from the perspective of an individual who does not master nor has any basic knowledge of managing his assets. The most common causes of financial illiteracy are inadequate education, ab-

sence of financial content in school programmes, consumer orientation, relatively low standard of living, indebtedness and complexity of understanding of various contemporary financial products and services. The biggest mistake in education systems lies in the fact that it does not offer financial education to young people, while today's society is saturated with many other information (Kiyosaki, 2011).

The level of financial illiteracy is increasing due to various causes, especially in non-developed countries. This is mainly due to the aging of the population (Košir & Jagodič, 2015), rapid changes in the economic environment and, due to the modern information and communication technology in particular, in the rapid development of various financial services. To a considerable extent, the causes can be attributed to the crisis, often also to the wrong decisions of individuals who did not have the proper knowledge in the field of managing their own finances. Worldwide, financial illiteracy has become a measure of economic and financial stability and development (International Network on Financial Education, 2009b; OECD, 2009).

The OECD Survey (2008) shows that individuals are not even aware of the risk of not having the appropriate skills and knowledge in the field of managing their own finances, which often results in over-indebtedness. For this reason, in 2003, the OECD started a project aimed at improving the financial literacy of the population, focusing on financial education programmes in schools. According to the OECD Research Group (2005), financial education of young people should begin as early as possible, this being one of the vital skills of every individual. The most important arguments leading in this direction are, above all: (a) the confrontation of young people with increasingly complex financial products and services and, in doing so, also taking significant financial risks (planning savings for health care, retirement ...); and (b) the labour market and the changes in the pension system bring more and more uncertainty, so young people will no longer be able to learn from past experience of their parents, but will have to rely primarily on their own knowledge or professional financial advisers. Besides all of the above-mentioned, financial education of young people in schools at all levels brings a better understanding of the current information environment and the integration or combination of various possible products and services that could provide them with adequate financial security. We must be aware that the majority of young people is already confronted with

facts related to financial literacy before even finishing their schooling, namely, the purchase of a car, adequate car insurance, bank limits and payment cards, saving, perhaps buying an apartment, or even the birth of a child.

Financial education has been defined by the OECD (2005) as a process in which individuals improve their understanding of financial products and services, and develop their own skills and knowledge through acquired data, case studies and counselling. This makes them better aware of the financial opportunities and risks, they decide on the basis of the data they have obtained, but they also know where to get help in order to be able to decide and improve their financial status or protect it properly. Financial literacy can be defined as the ability of a person to use one's knowledge and skills in key areas, and be able to break down, substantiate and communicate a financial product effectively (OECD, 2010). Financial literacy could be defined as an individual's understanding and knowledge of financial skills and products for the timely and correct adoption of financial decisions in various situations that will strengthen one's financial position and improve the economic situation.

Based on the data analysis (International Network on Financial Education, 2009a; Watson, 2009), it was determined that the content of financial education in schools, irrespective of other cultural differences, is quite similar and encompasses quite similar topics for improving financial literacy. So we can conclude that a very important set of topics is related to spending money, payment cards, bank and savings accounts, knowledge of different currencies and understanding of exchange rates, as well as the management and understanding of daily payments and cash transactions. It is perhaps most important for young people to understand how money is earned, how to spend your earnings wisely and rationally, and how to plan their future (understanding payroll, various forms of loans and instalment payments, investment and appreciation in value of their money). In addition, a very important element of financial literacy is also related to parents, their way of managing money and transferring knowledge about managing money to their children. The task of parents is to take care of their children and to transfer as much knowledge on finance as possible, which particularly refers to the allocation of family budgets, purchase planning and spending money for everyday purchases of goods that facilitate the family survival. Already

in the family, young people have to learn how to set priorities in managing financial resources, as there are very few families whose budget exceeds the fulfilment of all the family members' wishes and at the same time includes enough surplus income for saving. At the same time, we must be aware that young people also have their own needs and a different view of priorities in spending. Therefore, they need to learn how to deal with financial resources, since their future and performance depend on their relationship to money and understanding of different financial instruments. Since we live in a society of rapid and often unpredictable changes facilitated by globalisation, interdependencies are often created, with the activities of individuals linked to their perception of economic impacts and consequences on the community they live and work in. The core of financial literacy focuses primarily on successful and healthy personal finances, but unfortunately we cannot distinguish the financial performance of the individual from the financial performance of the society in which these same individuals live and participate.

On this basis, the Slovenian government, in the National Financial Education Programme (NFEP) suggested that more systematic integration of financial content into the framework of the general education curriculum (Ministrstvo za finance, 2010) should be considered. This programme also states that financially illiterate individuals have difficulty choosing the right financial services, developing a financial strategy and self-control, as well as that financial illiteracy has negative consequences for the entire society. Financial illiteracy has a negative impact on society and the economy, which can lead to collapse of the system (Kavčič, 2011).

One of the few financial literacy researches was carried out by *Moje finance* in cooperation with Ipsos d.o.o.; a representative sample (according to gender, age and region) included 508 respondents in 2010 (Mihajlovič, 2011). It is clear from the results that only 1 respondent proved to have excellent financial literacy, 4 respondents very good and 21 good, which together represented 26 of all respondents. 33 respondents proved sufficient financial literacy, and 39 insufficient, according to the survey.

It is expected that young people with more personal experience in managing financial resources also manage their money better, understand the value of money completely differently and know more about money management in general (understand the instrument of

a bank or credit card and activities related to the use of the banking system, finance products and services. Based on the research, this higher level of financial literacy with adolescents affects the risk-taking factors (the possibility of losing the invested in order to achieve greater benefit) and willingness to wait for a greater benefit instead of immediate satisfaction (Holt & Laury, 2002), allows better control of the individual's activities associated with it (Rotter, 1966) and increases their confidence in having sufficient knowledge and understanding in the field of finance, and related successfully executed financial transactions.

Huston (2010) thinks that, in order to be financially literate, one must also have excellent knowledge in the field of computing, or that young people must be adequately mathematically literate. He notes that individuals often replace this disadvantage by the knowledge of using a pocket calculator or some other tools (computers and mobile phones with different applications). Lusardi, Mitchell, and Curto (2010) also got similar results in their study; they found that mathematical literacy and the knowledge of using basic computational operations are of key importance for achieving financial literacy.

Financial literacy and related competencies are becoming increasingly important due to global, rapidly developing and dynamic financial markets. The responsibility for correct financial decisions with long-term consequences for the whole of society and for individuals is increasingly transmitted to individuals and to the associated risk of a better future for the individual. Accepting such responsibility and appropriate decisions is becoming increasingly difficult due to the large amount of information and complexity of decision-making. Therefore, tax literacy should also be taught parallelly with the financial literacy of young people. It should inform young people about taxes, the importance of paying taxes, types of tax liabilities and knowledge of tax concepts. The integrity of knowledge acquired through education in the financial field can help to increase social responsibility and fulfilling tax obligations (Finančna uprava Republike Slovenije, 2015).

Relation to Money, Money Function and the Importance of Taxes

The belief that money can make one happy is not true (Kahneman, Krueger, Schkade, Schwarz, & Stone 2006), but often comes from childhood when the relationship with money and its value is shaped.

Family has an important role in this, as well as the society which adolescents grow up in. We are definitely all aware of the fact that everyday goods are paid with money and that money needs to be earned, although the money earned can bring neither happiness nor happy life to anyone. It is important to know, that being rich does not equal having a lot of money, but being satisfied with life, as money can not buy everything (happiness, pleasure, love, etc.). Dunn, Gilbert, and Wilson (2011) prove in their study that satisfaction is far more important than money.

With the help of money, people (such a way of thinking should mostly be emphasised with young people) build their identity or external image, as seen by others, which is achieved by various material goods (often the ones that we wanted in the past) that we buy with the money earned. But one cannot live in the past – the focus should be on the future. Instead of trying to please others and thus integrate in society, one buys material goods that are important in the opinion of others and does things that others do, instead of focusing on meeting own needs and buying goods that will bring pleasure to one personally.

The latter clearly indicates that we must focus on realising ourselves rather than money in order to be happy. This is primarily about our internal understanding of the value of money, and therefore we need to change our way of thinking about it, the most important change that young people should definitely be aware of in order to find work which they will enjoy and thereby positively influence the desire to have enough money for a decent life (Vene, 2005). Although it is true that it is difficult to find work and employment in this crisis situation, it primarily depends on each individual whether he will actively engage in finding a job that will make him happy and thus affect his personal satisfaction, which is a condition for sufficient income and consequently a decent life. At the same time, this also means that such an income also enables one to save and manage earnings well, in order to be provided at the time when the active work period will be completed.

Money is a modern means of payment for the products and services we need or offer. In the past, within terms of payment method or money, various forms of appearance were noticed, from exchange of products, coins and precious metals, to today's banknotes and book money. Money definitely has several functions, and it can ap-



FIGURE 11.1 Gender Division of the Sample

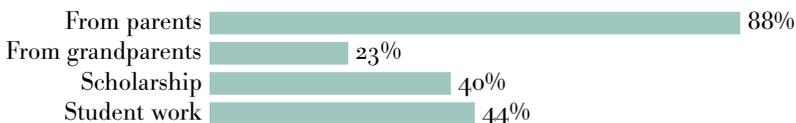


FIGURE 11.2 Sources of Secondary School Students' Income



FIGURE 11.3 Ways of Operating Money

pear as (a) a measure of value and facilitates the exchange of products/services by acting as an intermediary; (b) a means of payment, in the event of a delay between the receipt of the product/service and payment, (c) the intermediary of exchange in the transfer of ownership of the product/service; and (d) the value-keeper in the form of cash (reserve/savings). Money allows investment in activities that will bring higher value in the future than the amount invested, and allows the definition of mutual values of different currencies.

Financial resources are divided into three main areas: (a) personal finance, (b) business finance, and (c) public finances, which are inextricably linked and interdependent. Personal finance include individual income, savings, capital gains and investments, while business finance mainly includes finances owned by legal entities that offer products/services on the market and also pay tax on their sales. The tax is the basic source of public finances. An individual can manage his personal finances completely independently, while in business finance one is much more limited by the legislative principles of spending and using the financial resources, and in public finances his impact on spending is extremely small.

Research and Presentation of Results

We conducted the survey in 2013 with the help of a questionnaire, which was distributed in general upper secondary schools in the Savinjska region (Celje, Velenje, Slovenske Konjice, and Rogaska Slatina). 760 questionnaires were distributed altogether and of the



FIGURE 11.4 What Students Do with the Money They Save

returned, 457 were properly completed. 265 (58) female students and 192 (42) male students were included in the sample.

First of all, we asked them which sources of cash receipts they had, finding out that the most of them, namely 88, received money from their parents. 40 respondents answered that they receive a scholarship and we were surprised by the proportion of those who worked through the student work service and earned money by themselves – 44 of them. Otherwise, students also received money from their grandparents (23).

Interesting were the answers to the question of the ways in which the students operated their money; 69 of them were using both cash and current account, while 31 were dealing with cash only.

A very important survey question was from whom they learned how to handle money. 56 students surveyed said that they learned money management from parents; 28 said that they learned it themselves by using the Internet, from financial advisors, reading e-books and participating in various workshops related to money management. It should be noted here that this answer was selected by a lot more male than female students, while the female students were more likely to choose the possibility that money management was learned from parents. 16 of the surveyed students pointed out that they could not manage money, and there were no major differences between male and female students in the proportion of the selected answer.

Regarding the consumption of monthly income, 41 students said that they were spending it entirely, while 36 spent all of it only occasionally, and 33 did not fully spend it and partly intended it for saving. On the question of saving, 67 respondents answered that they were saving, but only a half of them saved each month. The difference between male and female students was again demonstrated here, as male students more often spent their total monthly income than female students, while the proportion of those who saved each month was roughly the same among male and female students

The important question was what students do with saved money. 49 of them answered that they had money with them or on the



FIGURE 11.5 Students Thinking about the Investment of Their Savings

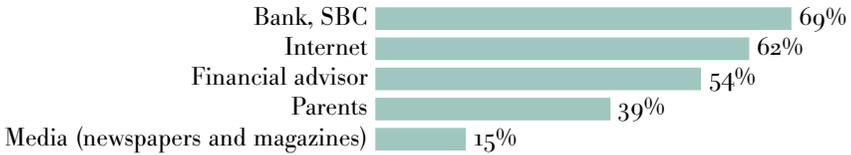


FIGURE 11.6 Where Would Secondary School Students First Look for Information Related to Financial Investments?

current account, 29 were purposely investing in various investment forms, while in the case of 22 respondents, parents took care of the investment of saved money. With planned investment, the answer was chosen by a larger number of male students, while with response that the parents are taking care of the money saved, more answers were chosen by female students.

96 respondents knew about bank savings, 68 said that they know securities, 53 selected the option of life savings, and 41 selected investment funds and various forms of optional stock exchange transactions. Interestingly, only 23 respondents chose investment opportunities through various trading and start-up platforms. Complex forms of investment were exposed by male students, while most of the female students chose the option of bank savings.

Students knew the various forms of securities relatively well, as 83 answered that they know what the shares are and the same proportion declared that they have already heard about mutual funds; 68 respondents had already heard of the bonds, while only 24 surveyed students had already heard about the treasury bills and 10 of surveyed students chose the option of not knowing or even hearing about any of the options offered. In this part, it was again the male students that were better acquainted with different types of securities.

Asked whether they were thinking where to invest their savings best, 42 respondents answered that they did not think about it, while 24 were already investing, and 34 thought about where it would be best to invest the saved funds. Also with this question, the difference between male and female students should be pointed out, since the

female students mostly chose the option of not thinking about where to invest the money saved.

Most students, as many as 93 respondents, have already heard of a financial adviser, but the respondents would first search for financial information in banks and brokerage companies (69), over the Internet (62), 54 of them would contact the financial advisor, 39 would turn to parents, while 15 would find information in the media, newspapers and magazines.

Discussion of Results and Findings

As can be seen from the survey, most students still receive money from their parents, as only 40 receive a scholarship. It is particularly interesting to know that 44 of them work through the student work service to earn money.

Quite logical is the result of money operation, since most students spend money on products and services of a lower value, where it is mostly pointless or even difficult to pay with cards. But it is true that the banks are working hard to bring their services closer to the wishes and needs of adolescents.

It could be said that the share of those who learned about managing money from parents was surprising (only 56), since it is lower than expected, but at the same time the modern information media, such as the Internet, e-books, workshops and financial advisors' activities surprised as well, as more than a quarter of pupils use them to obtain information on money management (28).

Otherwise, the result related to the use of earned or acquired money must be understood in a slightly wider context, as 41 surveyed students pointed out that they spend their income entirely. Many do not have a scholarship, the salaries of most parents are not high either and due to high living costs, parents are not able to give them higher amounts of money; mostly just for a daily snack or for going to the cinema or hanging out with friends at weekends – therefore many of them really spend all the money they get. Nevertheless, it is interesting that as many as two thirds of them have said they are saving. And right here the biggest problems with financial illiteracy appear.

Most of them keep money at home and in cash. Only 29 of them plan to invest money on their own, while the remaining 22 trust their parents. It would be appropriate for parents to introduce them the

ways of investing money and forms of financial investment, as most of them are already familiar with bank savings, two-thirds have already heard about securities, over 50 have mentioned life savings and 41 investment funds. This leads us to thinking that various financial institutions should devote much more time and effort to their prospective clients and to teach them about the possibilities and ways of improving their earnings and savings.

A very important piece of information resulting from the research is that many students were still considering investing their savings, that 93 of them would seek advice from a bank employee or a stock broking company, and that more than 50 would turn to a financial adviser. So there are quite a few opportunities on the market to develop a service offer from financial advisors, as the need for such knowledge is high; the question that arises in this regard is whether, in view of the increasing cost of living, young people would like to acquire these skills even before they get into financial problems due to misunderstanding of financial operations, or whether the circumstances, resulting from their lack of knowledge will force them to seek the expert help. For these reasons, however, preparation of regulations that would limit the work range of financial advisers and give them certain licenses in order to demonstrate appropriate skills and knowledge should be considered, similarly to the practice in the field of brokerage activities, where the broker needs to carry out an appropriate exam.

It can be noted that the survey showed that as a society we are increasingly aware of the financial illiteracy of young people, as well as the elderly. The transfer of knowledge from generation to generation in today's modern information society is no longer sufficient for the successful management of personal finances. Most parents should receive some kind of training in terms of managing personal finance. Thus, at least part of this knowledge could be transferred to adolescents, but they should be given a little more extensive knowledge and skills in the management of personal finances through the school system.

It is positive that young people are aware of saving, that many of them already work through the student work service and thus earn money themselves, but they still lack the skills in the field of personal finance management. The Financial Administration of the Republic of Slovenia indeed undertook a project of tax and financial training

of interested public, but they should approach the implementation of these activities more systematically. It would be much better to use modern information media that are very close to the young and widely used in their daily for this purpose.

In addition, financial institutions, such as banks, insurance companies and stock broking companies should do more for financial literacy of young people, as they should be aware they are their future clients. Accordingly, we see quite a lot of possibilities for the development of the service activity of financial advisers, but it should be determined very clearly who and under what conditions can perform such an activity, and what is the responsibility of the financial adviser if he does not perform his work in accordance with the rules.

We suggest conducting a broader survey among the students of the final years of all secondary schools in Slovenia and, on this basis, determining the actual situation more accurately. This would enable the preparation of an appropriate strategy and proposals for measures to carry out activities in order to improve financial literacy among young people. They could later transfer part of their new skills to their parents, and at the same time such an improvement in financial literacy would have a positive impact on economic activity.

References

- Balkovec, J. (2000). *Skrb za osebno premoženje*. Ljubljana, Slovenia: Gospodarski vestnik.
- Dunn, E. W., Gilbert, D. T., & Wilson, T. D. (2011). If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology*, 21(2), 115-125.
- Finančna uprava Republike Slovenije. (2015). *Davčno opismenjevanje mladih*. Retrieved from http://www.fu.gov.si/fileadmin/Internet/O_financni_upravi/Projekti/Davcno_opismenjevanje_mladih/Podrobnejši_opis_1_izdaja_Davcno_opismenjevanje_mladih.pdf
- Glavnik, M. (2005). *Pošten denarni priročnik*. Ljubljana, Slovenia: Consilium IAM.
- Groznik, P. (2001). Kaj so osebne finance? In *Moje finance: vodnik za upravljanje osebnega premoženja* (pp. 9-20). Ljubljana, Slovenia: Finance.
- Holt, C., & Laury, S. (2002). Risk aversion and incentive effects. *American Economic Review*, 95, 1644-1655.
- Huston, S. J. (2010). Measuring financial literacy. *The Journal of Consumer Affairs*, 44(2), 296-316.

- International Network on Financial Education. (2009a). *Financial education programmes in schools: Draft comparative analysis of selected financial education learning frameworks*. Paris, France: OECD.
- International Network on Financial Education. (2009b). *Global message on financial education and the crisis: Draft comparative analysis of selected financial education learning frameworks*. Paris, France: OECD.
- Kahneman, D., Krueger, A. B., Schkade, D., Schwarz, N., & Stone, A. A. (2006). Would You be happier if you were richer? A focusing illusion. *Science*, 312, 1908–1910.
- Kavčič, K. (2011, 24 August). Finančna pismenost otrok in Slovencev. Retrieved from <http://blog.i-svetovanje.com/2011/08/24/financna-pismenost-otrok-in-slovencev/>
- Kiyosaki, R. T. (2011). *Povečajte svoj finančni IQ*. Varaždin, Croatia: Katarina Zrinski.
- Košir, S., & Jagodič, G. (2015, 10–12 November). *The aging population and their impact on sustainable development in tourism*. Paper presented at the TAD Conference, Čatež ob Savi, Slovenia.
- Lubej, S., & Stanonik, A. (2009). *Urejene osebne finance za vsakogar*. Maribor, Slovenia: Kapital.
- Lusardi, A., Mitchell, O. S., & Curto, V. 2010. Financial literacy among the young. *The Journal of Consumer Affairs*, 44(2), 358–380.
- Mihajlovič, S. (2011, 19 January). Alarm! Finančna pismenost Slovencev: zd (2). *Moje finance*. Retrieved from <http://mojefinance.finance.si/300361/Alarm-Finan%C4%8Dna-pismenost-Slovencev-zd%0282%029>
- Ministrstvo za finance. (2010). *Nacionalni program finančnega izobraževanja*. Retrieved from <http://www.mf.gov.si/fileadmin/mf.gov.si/pageuploads/sporocila/oecd/NPFI.pdf>
- OECD. (2005). *Recommendation on principles and good practices for financial education and awareness* (Recommendation of the Council). Retrieved from <http://www.oecd.org/daf/fin/financial-education/35108560.pdf>
- OECD. (2008). *Improving financial education and awareness on insurance and private pensions*. Paris, France: Author.
- OECD. (2009). *Financial literacy and consumer protection: Overlooked aspects of the crisis; OECD recommendation on good practices on financial education and awareness relating to credit*. Retrieved from <http://www.oecd.org/finance/financial-markets/43138294.pdf>

- OECD. (2010). *PISA 2009 framework: Key competencies in reading, mathematics and science*. Paris, France: Author.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1). Retrieved from <http://www.soc.iastate.edu/sapp/soc512Rotter.pdf>
- Vene, B. (2005). *Uživaj življenje ... in postal boš bogat*. Bled, Slovenia: Phantom.
- Watson, S. (2009). *Financial education programmes in schools: Comparative analysis of selected financial education learning frameworks* (INFE(2009)19). Paris, France: OECD.

Chapter Twelve

The Influence of Parents, School and the Society on the Financial Literacy of Secondary School Students

Metka Pirš Zupin, Nada Trunk Širca, and Aleš Trunk

Financial literacy researchers conducted extensive research in America and Bangkok to explore the impact of parents, school and society on the financial literacy of secondary school and university students. Grohmann, Kouwenberg, and Menkhoff (2015) state that, based on the factor analysis, researchers determined that the financial literacy of students is influenced by five factors and the financial behaviour by two. Figure 12.1 shows that financial behaviour is influenced by financial literacy and computing skills. The financial literacy of students is influenced by the following factors:

The Influence of Parents on the Financial Literacy of Students

The strongest and most direct influence on the financial behaviour of secondary school and university students comes from the family background and income as well as from the education level of their parents. A survey in Bangkok revealed that children of more educated parents with higher incomes are more financially literate and make better financial decisions. Researchers have defined better financial decisions in terms of diversification of assets and attitude towards risk-taking. Financially literate students are more tolerant to financial risk and they can assess risk or manage financial risk better, which is reflected in greater diversification of students' financial assets and in a higher level of saving and lower debt levels (Carneiro, Meghir, & Parey, 2013).

Grohmann, Kouwenberg, and Menkhoff (2015) state that financial teaching of children and communication between parents and children regarding financial concepts is of utmost importance for the

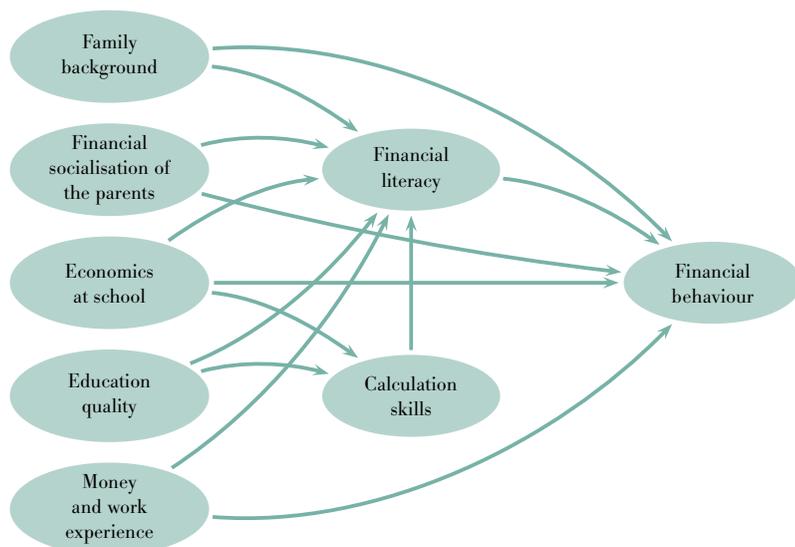


FIGURE 12.1 The Influence of the Parents, the School and the Society on Financial Behaviour (adapted from Grohmann, Kouwenberg, & Menkhoff, 2015)

financial literacy of students and students. Teaching children about financial concepts, encouraging children to saving and managing personal finances, and the good example from parents have a positive impact on the financial behaviour of their offspring from 18 to 32 years of age. Learning practices of parents, e.g. shopping with children, discussing finances or teaching in a certain form, have a positive impact on the savings of their children between the age of 18 and 80. In addition to a survey in Bangkok, Hira, Sabri, and Loibl (2013) found in their study that financial socialisation of children has a statistically significant effect on the residential net worth of children in their adult life, their savings and regular investments in financial products with relatively high returns, when they reach adulthood.

If someone has an inadequate relationship to an activity, area, person or thing, this will surely be passed on to his child, so education is not a negligible factor in achieving financial knowledge or ignorance, since the values set by it are internalized. According to Kavčič (2011), parents are responsible for first ensure their financial literacy as much as possible, because this is the only way they can be an example to the child and raise it properly. However, they do not have

the patience to maintain the continuous learning process. Similarly, Shim, Barber, and Lyons (2009) and Shim, Barber, and Card (2010) find that parents have the greatest influence on financial knowledge among all financial socialisation channels (parents, school and work). Parents have a positive impact on the financial literacy of their children, as their children learn from them how to handle money and thus saving is encouraged.

Clarke, Heaton, Israelsen, and Eggett (2005) find that parents teach children how to handle money by referring to their own values, beliefs and knowledge, thus enabling children to create a relationship towards finances. In the same study, they determine the frequency of the phenomenon that students whose parents had financial problems, followed the financial pattern of their parents. Parents play a key role in the lives of their children. Positive or negative financial knowledge, attitudes and behaviour affect the financial socialisation of children.

Danes (1994), already speaks of financial socialisation as a process of acquiring and developing values, attitudes, standards, norms, knowledge and behaviour that contribute to the financial fitness and the well-being of the individual. According to the theory of social learning, children receive financial experience through observation, positive and negative practice, cooperation and deliberate parenting with instructions (Danes, 1994; Clarke et al., 2005).

Pinto, Parente, and Mansfield (2005) note that in families where discussion of financial matters was avoided, the likelihood of problematic use of debit cards is much greater than in families where they do not avoid this topic. Danes and Haberman (2007) state that the family is not only a filter for information from the outside world in connection with the development of reliable information retrieval strategies. Moreover, they consider the parents having the main role in obtaining information sources in the financial search process.

The Influence of the School on the Financial Literacy of Students

The third factor that influences the financial literacy of secondary school and university students is the subject of economics in schools and universities. American researchers Bernheim and Garrett (2003) determined that students having economics in the school curriculum collected more financial resources over the adult period compared to those who did not listen to the subject at school or university. Sim-

ilar conclusions were also made in Bangkok, where students with economic knowledge had more diversified assets in their adult period, compared to students who did not have economics at school (Grohmann et al., 2015).

Psacharopolus and Patrinos (2004) investigated the impact of the quality of education on financial literacy in developing countries. They found that the quality of mathematics teachers and the number of mathematics lessons in the school curriculum have a statistically significant effect on financial literacy and the effectiveness of financial decisions of secondary school and university students, and that this link is indirect. The survey revealed that students with good or excellent knowledge of mathematical methods or the ones mastering mathematical skills also have a better control of personal finance; this was especially evident in students on the university level.

The Influence of the Society on the Financial Literacy of Students

The fifth factor, which directly affects the financial behaviour of secondary school and university students in their adult life, is their working experience in youth and experience with the management of personal finances in their childhood. This was proved by Shim et al. (2009) in his study, in which it turned out that individuals without work experience in their youth and with no contact with money in their childhood, more often use debt as a source of financing their current consumption in their adult period and are ready to save less compared to adults who worked and managed money independently already in their youth.

Financial security is also affected by the social security system. Bucher-Koenen and Lamla (2014) looked for differences in financial literacy among adolescents from the former West and East Germany and found that young people in West Germany were more financially literate than those from East Germany, even twenty years after the reunification of both countries. The Jappelli (2010) study on financial literacy also revealed that young people are more financially literate in countries with less social security than in countries where people have more social rights. This shows that financial literacy and financial behaviour are deeply rooted in personal and social circumstances.

The general fact is that parents have a big influence on children.

Jorgensen and Savla (2010) were also aware of this when making a survey on a sample of 420 US students, including 58 women and 42 men, 87 of them whites, 4 Asians, 3 Americans of the African descent, 2 Spanish speaking, 1 of mixed origin and 3 others. The respondents were divided into two age groups; in the age group from 18 to 22, there were 84 respondents, and from 23 to 29, 16 respondents. Of all surveyed students, 32 were in the first year of study, 19 in the second, 17 in the third and 32 in the last year of study. They asked the students about their parents' income and got the following results: 13 parents had an annual income lower than 35,000, 11 had annual income between 35,000 and 50,000, a quarter of parents had annual income between 50,000 and 80,000, 41 parents had annual income over 80,000, while 11 students did not know the annual income of their parents. The survey also included the question of who financed studies for students. 22 responded that they financed their studies themselves, for 28 the study was financed exclusively by parents, while half of the students replied that they financed part of the study themselves, and partly with the help of their parents. The above-mentioned researchers managed to develop a model of factors that influence the financial behaviour of young people. Parental income has a statistically significant effect on whether they will actively educate or actively participate in the financial literacy education of their children. The researchers discovered that 94 young people first turn to their parents for financial advice. They found that parents influence consumer habits, financial practices and the financial behaviour of their children. Children learn financial literacy primarily on the basis of their parents' example of how they manage family assets and personal finances. Financial knowledge, attitudes and behaviour of parents statistically significantly influence the financial literacy and behaviour of their children. Researchers pointed to the problem that parents are often unaware of being co-responsible for the financial behaviour of their children when they become adults, as children learn financial behaviour through social interactions and the influence of adults. Parents with higher personal income and higher education are more aware of their responsibility for literacy of their children, and discuss financial terms with their children more often, while parents with low income or a low level of education leave the financial education of their children to the school system and are very reluctant to discuss money and other financial terms with them.

Jorgensen and Savla (2010) have managed to prove that gender also influences the financial literacy of young people, since the probability that men answered all the questions about interest rates, inflation, financial risk and diversification of property was 30 times higher than for women. A statistically significant influence on the financial literacy of young people also has the year of study, as higher-year students have answered correctly to more questions about finances compared to younger peers. The two researchers have shown that parents have a significant impact on financial literacy and on the relationship that children have towards finances, and that financial literacy of young people and their attitude to finances have a statistically significant effect on the financial behaviour of young people.

Tang, Baker, and Peter (2015) came to similar conclusions as Jorgensen and Saul, when working on a study of the financial behaviour of young people among 2712 American students. Students were asked three sets of questions: cash flow management, debt management, and savings management. The above mentioned researchers concluded that there is only a weak correlation between the financial knowledge and the financial behaviour of young people. They argue that financial knowledge is useful, but not a sufficient condition for responsible financial behaviour of young people. In this study, young people confirmed that their financial behaviour is most influenced by their parents and self-discipline. The survey also revealed that the influence of parents is stronger on the financial literacy of girls, as girls listen to parents' advice in financial decisions more often, while boys often take financial decisions under the influence of successful peers. The financial literacy of young people is influenced by cognitive factors that impact financial behaviour of young people through financial knowledge; social factors impact the influence of parents on children, which impacts the financial behaviour of young people, that also depends on psychological factors, self-discipline in particular. The financial behaviour of young people is also affected by gender; the authors explain that girls, when compared to boys, give greater importance to financial literacy because they are aware that in the period of their active work-life they usually earn less than men, because they know that on average they live longer than men and also because of the fact that women carry a greater deal of the family burden, compared to men.

The authors came to the conclusion that the financial behaviour

of young people is mostly influenced by cognitive-psychosocial factors, which were not the subject of their research; therefore, in the conclusion of the research, they recommended that further research on financial literacy and financial behaviour of young people should be carried out in the direction of investigating psychosocial factors.

Financial issues are an important part of everyday life of individuals and families. The recession that has hit us offers many examples of how a lack of financial ability can affect family life. A negative economic trend, such as an increase in unemployment and an increase in consumer debt, demonstrate the importance of sufficient knowledge.

References

- Bernheim, D. B., & Garrett, D. M. (2003). The effects of financial education in the workplace: Evidence from a survey of households. *Journal of Public Economics*, 87(7), 1487–1519.
- Bucher-Koenen, T., & Lamla, B. (2014). *The long shadow of socialism: On East-West German differences in financial literacy* (MEA Discussion Paper 05-2014). Munich Center for the Economics of Aging, Munich, Germany.
- Carneiro, P., Meghir, C., & Parey, M. (2013). Maternal education, home environments, and the development of children and adolescents. *Journal of the European Economic Association*, 11(1): 123–160.
- Clarke, M. C., Heaton, B. M., Israelsen, L. C., & Eggett, L. D. (2005). The acquisition of family financial roles and responsibilities. *Family and Consumer Sciences Research Journal*, 33(4), 321–340.
- Danes, S., & Haberman, H. (2007). Teen financial knowledge, self-efficacy, and behavior: A gender view. *Journal of Financial Counseling and Planning*, 18(1): 48–60.
- Danes, S. M. (1994). Parental perceptions of children's financial socialization. *Journal of Financial Counseling and Planning*, 5(1), 127–146.
- Grohmann, A., Kouwenberg, R., & Menkhoff, L. (2015). Childhood roots of financial literacy. *Journal of Economic Psychology*, 51, 114–133.
- Hira, T. K., Sabri, M. F., & Loibl, C. (2013). Financial socialization's impact on investment orientation and household net worth. *International Journal of Consumer Studies*, 37(1), 29–35.
- Jappelli, T. (2010). Economic literacy: An international comparison. *Economic Journal*, 120(548), 429–451.

- Jorgensen, B., & Savla, J. (2010). Financial literacy of young adults: The importance of parental socialization. *Family Relations*, 59(4), 465-478.
- Kavčič, K. (2011, 24. avgust). Finančna pismenost otrok in Slovencev. Retrieved from <http://blog.i-svetovanje.com/2011/08/24/financna-pismenost-otrok-in-slovencev/>
- Pinto, M. B., Parente, D. H., & Mansfield, P. M. (2005). Information learned from socialization agents: Its relationship to credit card use. *Family and Consumer Sciences Research Journal*, 33(4), 357-367.
- Psacharopolus, G., & Patrinos, H. A. (2004). Returns to investment in education: A further update. *Education Economics*, 12(2), 111-134.
- Shim, S., Barber, B. L., & Lyons, A. C. (2009). Pathway to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, 30(6), 208-723.
- Shim, S., Barber, B. L., & Card, N. A. 2010. Financial socialization of first-year college students: The roles of parents, work and education. *Journal of Youth and Adolescence*, 39(12): 1457-1470.
- Tang, N., Baker, A., & Peter, P. 2015. Investigating the disconnect between financial knowledge and behaviour: The role of parental influence and psychological characteristics in responsible financial behaviors among young adults. *The Journal of Consumer Affairs*, 49(2), 376-406.

Chapter Thirteen

Financial Literacy and Entrepreneurship

Aleš Trunk and Valerij Dermol

Financial literacy and entrepreneurship are extremely important for the EU, not only today but also in the future. The debate on EU integration, including financial literacy and entrepreneurship, is crucial in the current financial crisis both in the EU and in the candidate countries. As never before, researchers, public authorities, social groups, industry associations and international organisations are developing financial education and entrepreneurial initiatives as key elements in creating informed and responsible EU citizens.

In today's world, it is important to increase citizens' awareness of financial education and make it even more accessible. Financial education is not only necessary for financial experts and investors. It is equally, if not more, important for average individuals and families who balance their budget and save for their children's school fees or the retirement of their parents. In addition, we should better understand the needs of consumers in financial education at different stages in their lives and find out how financial education can be designed to best suit these needs. It should be important to understand how individuals can become financially literate, or, in other words, to gain knowledge, understanding and skills in dealing with everyday financial matters and to make the right decisions according to their needs.

Entrepreneurial competences are a special group of competences that are important for successful entrepreneurship (Mitchelmore & Rowley, 2010). They are related to the development of small and new companies, as well as to internal business initiatives, which gives them the potential to influence the economic performance of organisations and the economy as a whole. Financial literacy, which includes an understanding of financial products and services, the risks arising from business initiatives, as well as the management of money and financial liabilities, is closely linked to entrepreneurial compe-

tencies. Research confirms the great importance of entrepreneurship education in creating an entrepreneurial spirit and developing entrepreneurial competencies. Also, research recognises important influences on the phenomenon of entrepreneurial intents, as well as the quality of entrepreneurship and entrepreneurial initiatives (Lans, Hulsink, Baert, & Mulder, 2008).

We examined the link between financial literacy as one of the entrepreneurial competences and entrepreneurial intents among students and graduates of postgraduate studies at one of the higher education institutions in Slovenia.

In the following, we will first define the concepts of financial literacy and entrepreneurial intents, while in the second part we will explain the findings of empirical research among students.

Financial Literacy and Entrepreneurial Intent

Financial Literacy

European youth is essential for the future dynamics and prosperity of Europe and has enormous potential for a European integration project. However, 57 young Europeans feel that they have been marginalised and excluded (European Parliament, 2014), which is why they are worried about their well-being. In addition, the OECD research (2014) shows that financial literacy is low in many countries, which also puts the future of young people at risk. There is no systematic financial education in elementary and secondary school curricula, or in higher education institutions (studies other than business/economics) throughout the EU. Therefore, it is essential to ensure that all children and adolescents, especially those who are vulnerable and marginalised, are aware of the financial issues and their impact on their daily lives in order to create a responsible and informed new generation of EU citizens.

Lusardi (2013) notes that individuals around the world are expected to assume greater responsibility for their financial well-being. This refers to different periods of people's lives – the educational period, the period of service and the retirement period. In particular, due to changes in the pension system and the shift from fixed pensions to pensions that depend on paid contributions, individuals need to determine how much to save for retirement, and also how to allocate these retirement savings. This responsibility brings along financial instruments that are increasingly complex. The rules

and conditions for credit cards, mortgages, loans and other borrowing methods have changed greatly, often with increased exposure to risk.

Financial literacy includes basic literacy, reading and mathematical literacy, and at the same time it is an upgrade, since it requires more knowledge and skills, especially in the financial field (Mason & Wilson, 2000). Financial literacy is one of the components of financial ability – it is expressed as the ability to understand information about finances and financial trends, or it is knowledge of financial products and services, concepts and risks. Financially literate persons are those who are mathematically literate, can effectively manage money and know how to manage loans and debts. They are able to assess the need for insurance and protection. They know how to evaluate different types of risks and reimbursements associated with different money

saving options and deposits. They also understand the dimension of ethical, social, political and environmental dimensions of finances (Starček & Trunk, 2013).

Entrepreneurial Intent

In recent decades, entrepreneurship has become an important economic and social theme as well as a well-known topic of research in the world. Entrepreneurship is becoming a very important instrument for stimulating economic growth and development in different national economies. An entrepreneurial intent can be defined as the will to try to do something, or the effort that an individual is prepared to use for a certain way of behaviour (Ajzen, 1991). The intent is defined as the cognitive representation of the readiness of the individual to show certain behaviour (Fayolle, Gailly, & Lassas-Clerc, 2006).

Ajzen (1991) notes that the intent is defined by positions and that they are shaped by external factors. The intent to exercise certain behaviour depends on the attitude of people to certain behaviours (Ajzen, 1991). It is essential that the intent is actually carried out. A specific behavioural intent is a function of two cognitive factors, a relationship to behaviour and expectations. Two fundamental psychological theories related to the purposes are the rational theory of operation and the concept of mutual determinism. Fishbein and Ajzen (1997) in their rational theory of operation assume that indi-

TABLE 13.1 The Link between Financial Literacy and Entrepreneurial Intent

Entrepreneurial intent	(1)	(2)	(3)	(4)	(5)
No entrepreneurial intent	0	0	4	10	0
Weak entrepreneurial intent	2	0	2	28	1
Strong entrepreneurial intent	0	0	15	41	3
Very strong entrepreneurial intent	2	0	14	25	1
Extremely strong entrepreneurial intent	0	1	8	21	5

NOTES (1) insufficient, (2) sufficient, (3) good, (4) very good, (5) excellent.

viduals generally behave rationally and in interaction with the environment. According to this theory, factors that influence the motivation for behaviour are: (i) the relationship between the desirability and the availability of the goal, (ii) the expectations and pressures of the reference group, (iii) the effects of previous behaviours, and (iv) behavioural control. The key components of this theory are the tendencies and subjective norms that affect behavioural intents and our behaviour. The tendencies reflect our affection or reluctance to something and are strongly influenced by subjective norms that contain the social component of behaviour (Radovan, 2001). In addition, motivation for performance also depends on an individual's perception of performance (Bandura, 1997).

The Link between Financial Literacy and Entrepreneurial Intent

We have investigated whether there is a link between financial literacy and entrepreneurial intent. We even believe that there is a causal relationship between the two constructs. In addition, we checked the gender and age differences in terms of financial literacy and entrepreneurial intent.

For the purpose of the research we produced a questionnaire sent to students of business studies at the higher education institution (approximately 600). The operationalisation of the measurement variables reflects the confirmed operationalisations used in past research with minor changes (Dermol & Rožman, 2014; Starček & Trunk, 2013). The questionnaire was prepared with the help of 1kA (an open source application that provides support for online survey service) and consisted of 21 closed-type questions.

The questionnaire was sent in January 2015. We received 225 completed questionnaires, of which 183 were eligible for analysis. The analysis and interpretation of responses is presented below.

63 questionnaires were completed by women, 28 survey respondents were employed and 3 self-employed, 61 had some sort of part-time or contractual work, while 24 samples were completed by unemployed persons. The average age of respondents was about 40 years. Non-response bias was evaluated by comparing early respondents and late respondents using the chi-square test of independence (Armstrong & Overton, 1977). The test did not show any significant difference between the two groups of respondents.

We were interested in the level of entrepreneurial intent of students in terms of their level of financial literacy (financial point of view, financial behaviour, and financial knowledge).

From Table 13.1, we can see that most students have a very high level of financial literacy – 68 students (125 out of 183). Most students also have a strong (59 out of 183; 32) or very strong (42 out of 183, 23) entrepreneurial intent.

50 (5 out of 10) students with an excellent level of financial literacy have an extremely strong entrepreneurial intent, and no student with an extremely strong entrepreneurial intent has an inadequate financial literacy level. Students with a very high level of financial literacy have a very varying degree of entrepreneurial intent: 17 (21 out of 125) have an extremely strong business intent, 20 (25 out of 125) have a very strong entrepreneurial intent, 33 (41 out of 25) have a strong entrepreneurial intent, 22 (28 out of 125) have a weak corporate intent and 8 (10 out of 125) do not have an entrepreneurial intent.

On the basis of this, we cannot conclude that students with a higher degree of financial literacy have a higher level of entrepreneurial intent and vice versa. For a more in-depth analysis of the link between financial literacy and entrepreneurial intent, we used a correlation analysis and a *t*-test.

The factor analysis used on both constructs confirmed the one-dimensionality of the entrepreneurial intent (*INTENT*), but on the other hand it indicates that financial literacy should be subdivided into 3 sub-structures – control over the use (*CONTR*), the propensity for investing money (*INVEST*) and information on financial matters (*INFO*).

The correlation analysis shows that *CONTR* and *INVEST* are not related to each other. The result of the correlation analysis shows that there is a weak negative correlation between *INFO* and *CONTR*

on one side ($r(183) = 0.146, p < 0.05$) and a weak positive correlation between INFO and INVEST on the other side ($r(183) = 0.18, p < 0.05$). Individuals who have full control over their spending appear to not even be trying getting informed about prices, interest rates, and the like, and on the other hand, individuals who are thinking of investments try to reduce spending by obtaining information about prices, their consumption, etc. It is clear from the data that there is no correlation between financial literacy constructs (INFO, CONTR, INVEST) and entrepreneurial intent (INTENT).

The *t*-test showed that there is no difference between men and women respondents regarding the INTENT construct, but when examining the INVEST construct, the survey confirms the gender differences. Male respondents ($M = 4.1, SD = 0.54$) show statistically significantly higher propensity for collecting financial information than women ($M = 3.78, SD = 0.65, t(51) = 2.94, p = 0.005$). We also checked whether there is any kind of dependence on the family business tradition; *t*-test shows that individuals with entrepreneurs in their family have higher INTENT ($M = 3.66, SD = 1.14$), as individuals who do not have such links with entrepreneurship ($M = 3.2, SD = 1.14, t(70) = 2.28, p = 0.026$), otherwise there are no differences in financial literacy.

Discussion of Results and Findings

Any person who manages and is responsible for his own business can be called an entrepreneur. However, we cannot say that all entrepreneurs are also financially literate. Financial literacy goes beyond just knowing what is happening in the financial world; it is about understanding finance in such a way that effective business decisions can be made (SMB CEO, 2010).

Entrepreneurs must acquire skills such as financial literacy, which makes them more effective and productive in life and in their finances. Financial literate individuals are better prepared to take more effective measures for improvement of their economic well-being. Basic financial knowledge, such as reading balance sheets, credits, budgets, etc., is essential for the growth of their businesses, or simply for not failing.

In the research work, we presented a correlation between financial literacy and entrepreneurial intent, based on a sample of business studies students at a higher education institution. We can conclude

that our data show a correlation between financial literacy constructs and entrepreneurial intents. On the other hand, we have found that family tradition affects entrepreneurship; *t*-test shows that individuals having entrepreneurs in their families have a higher level of entrepreneurial intent compared to individuals not having such links with entrepreneurship.

Overcoming the lack of global awareness and emerging doubt about EU funds will probably become more demanding in the present times of the systemic crisis. The difficult economic situation hit Europeans (especially young people) with an extremely high unemployment rate and the risk of social exclusion and poverty. It seems that young people (aged 18 to 29) are losing their confidence in the European project. Young Europeans believe they have been pushed to the edge and excluded. For all these reasons, it is important that young people (including students, young unemployed graduates, vulnerable groups, etc.) are aware of the importance of financial literacy and entrepreneurship in order to become successful EU citizens and contribute to the development and integration of the EU.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396–402.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Dermol, V., & Rožman, L. (2014). Moving forward: Entrepreneurship education for sustainable economy. In V. Dermal, M. Smrkolj in G. Đaković (Eds.), *Human capital without borders: Knowledge and learning for quality of life; Proceedings of the Management, Knowledge and Learning International Conference* (pp. 605–614). Celje: ToKnowPress.
- European Parliament. (2014). *European youth in 2014: Analytical synthesis*. Retrieved from http://www.europarl.europa.eu/pdf/eurobarometre/2014/youth/eb_395_synthesis_youth_en.pdf
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Effect and counter-effect of entrepreneurship education and social context on student's intentions. *Estudios de Economía Aplicada*, 4(2), 509–523.
- Fishbein, M., & Ajzen, I. (1997). Attitudes and opinions. *Annual Review of Psychology*, 23, 488–543.

- Lans, T., Hulsink, W., Baert, H., & Mulder, M. (2008). Entrepreneurship education and training in a small business context: Insights from the competence-based approach. *Journal of Enterprising Culture*, 16(4), 363–383.
- Lusardi, A. (2013). *Financial literacy around the world* (Insights: Financial capability, april). Retrieved from <http://www.finafoundation.org/web/groups/foundation/@foundation/documents/foundation/p240590.pdf>
- Mason, C., & Wilson, R. (2000). *Conceptualizing financial literacy* (Business School Research Paper 2000:7). Loughborough, England: Loughborough University.
- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behaviour & Research*, 16(2), 92–111.
- OECD. (2014, 9 July). First OECD PISA financial literacy test finds many young people confused by money matters. Retrieved from <http://www.oecd.org/newsroom/first-oecd-pisa-financial-literacy-test-finds-many-young-people-confused-by-money-matters.htm>
- Radovan, M. (2001). What determines our behavior. *Horizons of Psychology*, 10(2), 101–112.
- SMB CEO. (2010, 13 September). Financial literacy among entrepreneurs. Retrieved from <http://www.smbceo.com/2010/09/13/financial-literacy-entrepreneurs/>
- Starček, S., & Trunk, A. (2013). The meaning and concept of financial education in the society of economic changes. In V. Dermol, N. Trunk Širca in G. Đaković (Eds.), *Active citizenship by knowledge management & innovation: Proceedings of the Management, Knowledge and Learning International Conference 2013* (pp. 1443–1452). Celje: ToKnowPress.

Chapter Fourteen

Youth Unemployment As an Incentive for Self-Employment

Valerij Dermol and Gregor Jagodič

This chapter deals with the self-employment of unemployed individuals in Slovenia and their inclusion in the programme, which through subsidies and introductory training enables the unemployed to start their own business easier and insist on self-employment longer.¹ In the case of self-employment, knowledge of financial management is of particular importance since the entrepreneur must first provide financial resources, and is only able to manage them later.

There are many programmes for the promotion of self-employment in the world, but opinions on their performance are quite contradictory. Many consider that those programmes contribute to reducing unemployment of individuals involved, and in the short term also to increasing their income, but at the macroeconomic level the effects are not recognised – neither in terms of reducing unemployment, nor in terms of increasing productivity and economic growth.

The aim is to outline the population of the unemployed who start their own entrepreneurial career with the support of the subsidy for self-employment. Self-employed persons from unemployment will be outlined in terms of key demographic characteristics, experience, knowledge, attitudes to learning and performance in business. With the help of empirical research, we will check which factors influence their performance the most, the extent of employment of others, and operating revenues.

The first part of the chapter provides a theoretical overview of the contents of self-employment, the characteristics of self-employed,

¹ Most of the text of this chapter has already been published in the monograph *Spodbude podjetništvu in podjetnosti v Sloveniji* under the title 'Brezposelnost kot spodbuda za samozaposlitev' (Berdavs & Dermol, 2014).

their success in entrepreneurship and the role of subsidies for self-employment. The second part describes the methodological approach to empirical research, its findings, and the orientations and guidance to various stakeholders in the system of entrepreneurial support. The third part provides a critical view of such programmes and practical orientations.

Self-Employment of the Unemployed

Self-employment from unemployment is quite common in the developed world and is a desirable phenomenon for the state. We can give Germany as an example, as in 2006, one-third of the founders of enterprises there were previously unemployed.

Quentier (2012), based on the findings of some studies, notes that unemployment among individuals increases the likelihood of self-employment. Blanchflower (2004) emphasises the importance of the family; individuals coming from families with sufficient financial resources prefer to be self-employed rather than employed. Surveys mostly show that the unemployed starting self-employment face the problem of financing their business (Blanchflower, 2004; Quentier, 2012). They do not have their own savings and they also face obstacles in obtaining commercial credits. Despite the fact that the absence of funding may have a negative impact on the transition from unemployment to self-employment, the level of such entry into self-employment is twice as high as the entry level from employment. According to some studies, self-employment and unemployment are positively correlated variables – in the US, for example, it is confirmed that a 5% reduction in unemployment leads to a 1% reduction in self-employment. Contrary to that, Blanchflower (2004) in his study notes that there is a negative correlation between the self-employment rate and the unemployment rate.

Quentier (2012) points out that self-employment from unemployment most often leads to the formation of enterprises that have fewer employees and need less start-up capital, and these self-employed people are mostly engaged in activities characterised by low entry barriers. This makes their business more difficult. Self-employment from unemployment can also lead to closing of companies already existing on the market. In the case of self-employed from unemployment, the weak tendency towards investment can be attributed to financial constraints and low entrepreneurial aspirations.

Characteristics of Unemployed Shifting into Self-Employment

According to the findings of a research carried out in Germany, the UK, Canada, Hungary and Poland, individuals who participate in self-employment from unemployment promotion programmes are often highly educated, young, male and unemployed for only a short time (Quentier, 2012). It seems that the scope of self-employment grows with age, and more often occurs among men. The characteristics of the unemployed entering self-employment should be closer to the those of other self-employed and less to the unemployed, and it should particularly be true that the self-employed from unemployment are higher educated than the rest of the unemployed. Similarly, researches, as noted by Quentier (2012), do not confirm the difference in the level of education among the unemployed getting self-employed due to the need and those doing so because of a good opportunity, but it is possible to recognise a greater degree of coherence between the work they do and education with those entering self-employment for opportunity reasons.

According to Quentier (2012), the level of education has a positive impact on the transition to self-employment. Educated individuals are better informed and therefore more effective in evaluating opportunities for self-employment. However, according to some, the profitability of human capital in self-employment from unemployment is lower than that of employees. Nevertheless, the unemployed, often unwanted by employers achieve a higher return on their human capital in self-employment than in employment, which is why the level of formal education is important for the unemployed getting self-employed. It can replace the lack of work experience. Research, however, confirms that a higher level of education positively affects the likelihood that someone, whether employed or unemployed, becomes an 'emerging' entrepreneur (Quentier, 2012). However, in terms of education, there are differences between Europe and the United States. Entrepreneurs having a lower level of education are much more likely to be found in Europe, while the situation in the US is just the opposite (Blanchflower, 2004).

Unemployed people most often enter self-employment in business services, but in Germany, previously employed self-employed most often enter the activities of personal services, while the unemployed enter the production activities (Quentier, 2012). Blanchflower (2004) notes that unemployed self-employed in the US are most frequently

present in construction, repair services, personal services and agriculture.

Blanchflower (2004) notes that self-employment is more common among men, but the gender gap is decreasing. It also notes that older people are more likely to get self-employed, although it is mostly the younger ones who say they prefer self-employment. It seems that individuals simply transit to self-employment with age.

Interestingly, self-employed people express greater satisfaction with work and life than the employed ones (Baumgartner & Caliendo, 2007), as well as with the salary (Blanchflower, 2004). Women are more satisfied with self-employment in the US, but there are no gender differences in Europe. Higher educated individuals show greater satisfaction (Blanchflower, 2004), while in age, an inverse U form of satisfaction with a peak at 61 years is observed.

The entrepreneurial processes are also influenced by the personal characteristics of individuals (Caliendo, Fossen, & Kritikos, 2011). Among them, it is especially important to highlight the openness to experience and extraversion, both increasing the likelihood of starting self-employment. The same applies to emotional stability. Communicability reduces the possibility of leaving. The control locus also strongly influences its development – the external control locus has a negative impact on the survival of the self-employed entrepreneur. The dependency between the performance and the acceptance of risk is shown in the form of the inverse U. With trusted individuals, the likelihood of entering entrepreneurship is greater.

Dilemmas Regarding the Success of Self-Employment

Blanchflower (2004) notes that the extent of self-employment in OECD countries decreases. According to literature, negative trends in self-employment are not reflected in economic growth. Self-employment does not appear to increase real economic growth; some findings in the literature even suggest the reverse – a decrease in economic growth (Blanchflower, 2004). According to some, the ‘conventional wisdom’ that small businesses create new jobs, is based on statistical errors and misleading interpretations (Blanchflower, 2004). Nevertheless, many governments still see the way out of poverty in self-employment.

The expected income of the unemployed transitioning to self-employment is lower than the expected income of other self-employed

workers (Quentier, 2012). Since their family income is lower as well, this also contributes to the fact that their businesses remain smaller. Self-employed, coming from unemployment, unlike self-employed, coming from employment, most often remain the only employees in their companies. The same goes for self-employed who participated in self-employment subsidies schemes in Germany (Baumgartner & Caliendo, 2007). Research (Quentier, 2012) also shows that companies whose owners were previously unemployed are only growing feebly. Concerning the duration of self-employment, the findings of the research are somewhat more vague. The German experience shows that the unemployed insist in self-employment for about the same time period as the self-employed from employment, while the French experience suggests that previous unemployment is a statistically significant feature of the founders of companies that wind up their business. Others note that self-employed from unemployment skip from self-employment back to unemployment more often than those who have entered self-employment from employment.

Besides that, in Germany, they identify important differences between the eastern and western parts of the country (Baumgartner & Caliendo, 2007). In the eastern part of Germany, enterprises of self-employed from unemployment seem to have a 6 times lower survival rate after the first business year than those owned by self-employed from employment, while in the western part of the country such differences cannot be seen. There are no statistically significant differences concerning the growth of businesses. In addition, Baumgartner and Caliendo (2007) note that in Germany the possibility of being unemployed is lower among self-employed than among the employed.

Quentier (2012) notes that self-employed people from unemployment are generally less successful for several reasons. One of the reasons is (i) motivation for self-employment, which in the case of the unemployed is most often an escape from unemployment and less the need for independence or a good idea. Of course, this is followed by lower opportunity costs, which also cause (ii) the unemployed to deal with opportunities that may not be that at all. In addition, (iii) it is more difficult for the self-employed from unemployment to establish networks of suppliers and customers, as they do not usually have pre-established contacts as the employed do. Another important reason is (iv) financial constraints that increase the risk of business failure of self-employed from unemployment.

The Effectiveness of Self-Employment Promotion Programmes

In the world, there are numerous programmes enabling individuals to become self-employed – in Australia, the United Kingdom and France, for example, they offer subsidies to start a business, and many countries, including the United States and the United Kingdom, offer loans (Blanchflower, 2004). The main purpose of subsidies for promotion of self-employment is to increase the level of employment by helping and enabling the unemployed to create their own workplace. Some consider that such subsidies only shorten the duration of unemployment of individuals, but do not reduce the unemployment in general. Also, most people question whether such measures affect economic growth and technological development or encourage structural change (Quentier, 2012). De Mel, McKenzie, and Woodruff (2013) for instance find that capital injections in micro-enterprises lead to higher profits, but not to growth and creation of new jobs. In addition, these measures mostly have short-term effects and even that not with high-capacity companies (de Mel et al., 2013).

Research on the effectiveness of self-employment subsidy programmes and other active employment programmes is quite unclear. As noted by Baumgartner and Caliendo in their survey (2007), it is determined in the United Kingdom, that participation in such programmes does not have a significant impact on the employment or individual earnings potential. In New Zealand they recognise the statistically significant effects on participants in the programme, with the expected outcome ‘not registered as unemployed.’ In Spain, they find that the survival of companies created on the basis of such programmes reached 93 in two years, and 76 in five years.

In the United States, the unemployed, involved in such programmes, are four times more likely to persist in self-employment or employment than those who did not participate in the programme, but the impact of such measures on macroeconomic performance is not recognised. In a survey carried out by participants in two German programmes for encouraging unemployed people to self-employment, Baumgartner and Caliendo (2007) note that both programmes are successful, since the unemployment rate among the average participants in the programme after two years is 17 points lower compared to non-participants (by 18 points for women and by 29 points for men), as well as their income is significantly higher. In this way the programme accomplishes its mission, since it (i) reduces

the risk of the return of self-employed persons to unemployment, (ii) integrate programme participants into stable employment, and (iii) have a positive impact on personal income.

Empirical Research

Research Methodology

The survey among the unemployed entering self-employment was carried out in the period from June 2012 to June 2013. The survey was conducted using an electronic questionnaire and the use of SurveyMonkey programme.

The first survey, which took place when starting self-employment in June 2012, included 515 individuals, while the second survey, which was carried out approximately after one year of active business of the self-employed, 73 out of 515 participated again. In the first round of the survey, 56 men and 44 women completed it. The average age of men was 37.8 years, while slightly lower with women – 36.9 years. On average, men had 14.3 years of working experience and women 12.5 years. Primary school was completed by 3.4 respondents, vocational secondary school by 15.6 respondents, secondary professional and higher education 37.2, higher education or more as many as 43.8 respondents. 57.6 respondents had little or no working experience abroad. 33.7 were trained abroad, but only 12.5 stated that they were also employed abroad. Among the unemployed involved in the survey, 4.2 were self-employed in manufacturing, 7.0 in trade, and 88.7 in service activities.

Analysis of the Characteristics of the Self-Employed

As evident from the written data, there are surprisingly many women among the individuals who have decided on self-employment. This is somewhat contrary to data on similar programmes from abroad, and a large proportion of women is surprising when compared with otherwise very low participation of women in Slovenian entrepreneurship (Rebernik, Tominc, Crnogaj, Širec, & Bradač Hojnik, 2013). The age structure of the unemployed entering self-employment is in line with the average age structure of entrepreneurs in Slovenia, but the relatively high level of their education is somewhat surprising. The high level of education of Slovene individuals entering self-employment from unemployment is not in line with European, but rather with American experience. The unemployed participating in the survey



FIGURE 14.1 Self-Assessment by Types of Entrepreneurial Knowledge

TABLE 14.1 Correlations between the Characteristics of the Self-Employed from Unemployment

Characteristic	(1)	(2)	(3)	(4)	(5)	(6)
(1)	1					
(2)	-0.087	1				
(3)	0.878**	-0.203**	1			
(4)	0.136**	0.116*	0.146**	1		
(5)	0.120**	-0.062	0.158**	0.330**	1	
(6)	-0.028	0.136**	0.003	0.115*	0.416**	1

NOTES (1) age, (2) education, (3) experience at home, (4) experience abroad, (5) evaluation of entrepreneurial knowledge, (6) evaluation of the development of an entrepreneurial idea, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

also show quite rich work experience, which in combination with a relatively high level of education according to the findings of the research indicates the possibility of greater self-employment performance.

When entering self-employment, the surveyed unemployed evaluated their entrepreneurial knowledge on a scale from 1 (poorly) to 5 (excellent). The mean value of the self-assessment is relatively high ($M = 3.25$, $SD = 0.90$). We also asked their opinion on the lack of knowledge. It was also rated on a scale from 1 (minimum deficiency) to 5 (maximum deficiency). The unemployed experienced the greatest knowledge deficit in finance ($M = 3.70$, $SD = 1.27$) and accounting ($M = 3.67$, $SD = 1.28$). The smallest deficit was marked in the area of human resources management ($M = 2.67$, $SD = 1.28$), and somewhat larger in the field of marketing and sales ($M = 2.80$, $SD = 1.20$). After one year, the same self-employed persons were questioned about their knowledge once more, this time in a bit more detail. As shown in Table 14.1, the estimates are largely in line with the assessment of

the shortages of knowledge when entering self-employment. The average value of knowledge self-assessment ($M = 3.11$, $SD = 0.77$), which is relatively high, is approximately the same as the one from the period of entering self-employment. The mean value of self-assessment of the entrepreneurial idea ($M = 4.12$, $SD = 0.89$), which was also evaluated by a five-point scale from 1 (poorly) to 5 (excellent), is still slightly higher than self-assessment of the knowledge.

When analysing the data, we were interested in whether gender, age and work experience at home and abroad are interdependent or dependent on other important characteristics of the self-employed – self-assessment of entrepreneurial knowledge and the self-evaluation of development of the entrepreneurial idea. Both assessments were given by individuals when entering self-employment. As shown in Table 14.1, age is strongly positively correlated with work experience in domestic environment ($r = 0.88$, $p < 0.01$), somewhat weaker but positive with work experience abroad ($r = 0.13$, $p < 0.01$) and positive but slightly weaker with self-assessment of entrepreneurial knowledge as well ($r = 0.12$, $p < 0.01$). These interdependencies seem to be rather logical, but the relatively high self-evaluation of entrepreneurial knowledge that even grows with the age of individuals can cast some doubt. The table also shows that the higher the level of education, the more individuals have working experience in the domestic environment ($r = 0.116$, $p < 0.05$) and less abroad ($r = -0.203$, $p < 0.01$). This is an interesting finding that points to the fact that less educated individuals seek work abroad slightly more often. The data also show that the higher the education level of an individual, the more developed the entrepreneurial idea ($r = 0.136$, $p < 0.01$) in his opinion. Tominc and Rebernik (2006) suggest that average Slovenian entrepreneurs often overestimate the potential for growth of their companies, which may also result from overestimation of entrepreneurial knowledge and the quality of the entrepreneurial idea. The data confirms the positive correlation between working experience in the domestic environment and abroad ($r = 0.146$, $p < 0.01$), the correlation between experience at home and self-assessment of entrepreneurial knowledge ($r = 0.158$, $p < 0.01$), as well as a relatively strong correlation between self-assessment of entrepreneurial knowledge and self-evaluation of the entrepreneurial idea development ($r = 0.416$, $p < 0.01$).

The analysis also determined the difference in the researched



FIGURE 14.2 Share of Self-Employed by the Number of Employed

characteristics between self-employed women and men. The statistically significant difference between men ($M = 2.49$, $SD = 1.39$) and women ($M = 2.18$, $SD = 1.40$) comes from experience abroad ($t(445) = 2.37$, $p = 0.02$). It seems that men outperform women in having experience abroad. Differences were also verified among individuals with at least higher education and those with lower education. Statistically significant differences among individuals with at least higher education ($M = 10.97$, $SD = 7.99$) and individuals with lower education ($M = 15.65$, $SD = 9.04$) appear in years of work experience ($t(440) = 5.83$, $p < 0.001$), and also in self-assessment of the entrepreneurial idea ($t(494) = 2.19$, $p = 0.03$). Those with at least higher education ($M = 4.22$, $SD = 0.80$), surpass lower educated individuals in the self-assessment of their entrepreneurial idea, ($M = 4.05$, $SD = 0.93$), but averagely have one third of working experience less.

Self-Employed Performance Factors

Performance of the self-employed in the survey is checked by the number of employees within one year of operation and by the income generated during this period. As Figure 14.2 shows, most companies (93) remain with zero or one employee within one year of operation. The maximum number of employees among the self-employed in the survey is 20.

Also, in terms of revenues generated by the self-employed within one year of operation, their performance is rather weak. As shown in Figure 14.3, only 14 businesses generated more than EUR 100,000 of revenue in the first year, while 40 of them reached EUR 10,000 only.

The correlation analysis, the results of which are shown in Table 14.2, shows the interdependence between the characteristics of self-employed (measured at beginning self-employment) and the performance indicators after one year of operation (revenues and number of employees). It should be pointed out that self-assessment of per-

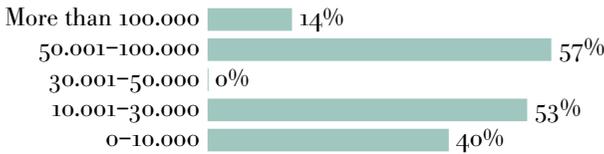


FIGURE 14.3 Effectiveness of Self-Employed in Terms of Revenue (in EUR)

TABLE 14.2 Correlations between the Characteristics of Self-Employed from Unemployment and Performance

Characteristic	(1)	(2)
Age	0.23	0.19
Education	0.04	-0.23
Experience at home	0.09	0.06
Experience abroad	0.38**	0.06
Evaluation of entrepreneurial knowledge	0.14	0.12
Evaluation of the development of an entrepreneurial idea	0.004	-0.40**

NOTES (1) revenue in one year of operation, (2) increase in the number of employees. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

formance and the extent of the realisation of internationalisation, etc. are not considered to be performance indicators, since these variables are not correlated with any of the selected personal characteristics, as analyses show. According to the results of the correlation analysis, we can conclude that the income of self-employed persons in the first year of operation is statistically significant, positively co-dependent only on self-assessment of work experience abroad. The medium strong positive interdependence between this type of experience and the income of the self-employed confirms the relatively high importance of work experience abroad acquired by the unemployed before self-employment. On the other hand, the number of employees after one year of operation is negative and moderately interdependent with the self-assessment of development of the business idea, which again raises doubts about the reality of self-assessment of entrepreneurial ideas or even of the self-employed ambitions for growth of their businesses. The regression analysis indicated the cause and effect relationship between the work experience abroad and the income of the self-employed. Work experience abroad statistically significantly characterise the self-employed income ($b = 0.24$, $t(62) = 3.18$, $p < 0.01$).

Discussion of Results and Findings

Unemployment is one of the more frequent incentives for individuals to consider possible self-employment. Many countries deliberately direct the unemployed towards self-employment by using different measures. These measures are often based on the use of subsidies that the unemployed receive in order to get self-employed and stay so for some time. Among expectations that countries have when implementing such measures, the most important are: increasing employment or reducing unemployment, increasing productivity in the country and encouraging economic growth.

Research indicates that state expectations towards self-employment and measures to promote self-employment may be exaggerated. Due to such measures, unemployed really become entrepreneurs in larger numbers, but often in activities where the level of competition is high and entry barriers are low. In such activities, the entry of a new entrepreneur often means the exit of an existing one. The effects of self-employment of the unemployed seem to be short-lived and mostly visible only at the individual level – their personal income increase and their labour status change, while there are no lasting effects at the macro level.

With the survey among the unemployed in Slovenia, entering entrepreneurship on the basis of subsidies for self-employment, we wanted to check their personal characteristics, what results they achieve within one year of self-employment, and which factors strengthen their performance. We have found that Slovenian sample of self-employed from unemployment is slightly different from foreign research. It seems that it mostly contains individuals with above-average education who have considerable working experience in the home environment and slightly less abroad, and which assess the level of their knowledge and the quality of the entrepreneurial idea relatively highly. Among them, women and men are almost equally represented, while the average age is equal to the average age of other Slovenian entrepreneurs.

Based on a high level of education and work experience, Slovene self-employed persons should be given greater opportunities for business success and growth. Nevertheless, data on revenues achieved in one year of self-employment and the number of employees within that time do not confirm such expectations. The key findings of our research are, (i) that the unemployed entering self-employment

might slightly overestimate their entrepreneurial knowledge and (ii) even more likely also the possible success of their business idea. We also find (iii) that one of the key factors that could distinguish successful from less successful self-employed persons is the extent of their work experience abroad. Of course, these findings should be applied to possible changes in approaches within the programmes of subsidizing self-employment of the unemployed. Further research should be aimed at identifying possible other factors that determine the performance of the self-employed and their contribution to productivity and economic growth at the national level.

References

- Baumgartner, H. J., & Caliendo, M. (2007). *Turning unemployment into self-employment: Effectiveness and efficiency of two start-up programmes* (Discussion Papers No. 671). Berlin, Germany: German Institute for Economic Research.
- Berdavs, J., & V. Dermol. (2014). Brezposelnost kot spodbuda za samozaposlitev. In V. Dermol (Eds.), *Spodbude podjetništvu in podjetnosti v Sloveniji* (pp. 61–71). Celje: Mednarodna fakulteta za družbene in poslovne študije.
- Blanchflower, D. G. (2004). *Self-employment: More may not be better* (Working Paper No. 10286). Cambridge, MA: National Bureau of Economic Research.
- Caliendo, M., Fossen, F. M., & Kritikos, A. S. (2011). *Personality characteristics and the decision to become and stay self-employed* (Discussion Papers No. 1113). Berlin: German Institute for Economic Research.
- De Mel, S., McKenzie, D., & Woodruff, C. (2013). What generates growth in microenterprises? Experimental evidence on capital, labor and training. Retrieved from <http://economics.mit.edu/files/8666>
- Quentier, J.-M. (2012). Self-employment start-ups and value creation: An empirical analysis of German micro data. *Advances in Competitiveness Research*, 20(1/2), 37–57.
- Rebernik, M., Tominc, P., Crnogaj, K., Širec, K., & Bradač Hojnik, B. (2013). *Nezaznane priložnosti: GEM Slovenija 2012*. Maribor, Slovenia: Univerza v Mariboru.
- Tominc, P., & Rebernik, M. (2006). Zgodnja podjetniška aktivnost: pričakovanja o rasti podjetmov. *Naše gospodarstvo*, 52(5/6), 11–19.

Part Three

Education for Financial Literacy and the Role of Banks

Chapter Fifteen

Survey on the Role of Banks in Raising Financial Literacy

Sergeja Kočar and Nada Trunk Širca

The National Strategy for the Development of Literacy (hereinafter referred to as the NSDL) defines literacy as the ability of an individual to use agreed systems for accepting, understanding and forming, as well as the socially agreed rules for living in a society close and at large. It is a continually evolving individual's ability that enables successful and creative personal growth and responsive action in professional and social life (Ministrstvo za šolstvo in šport, 2005, p. 6). The national strategic document on literacy in Slovenia that determines the benefits and goals of educational policy is called the National Strategy for the Development of Literacy. The Commission for the Development of Literacy, which was formulated within the Ministry of Education, Science and Sport (MESS), approved it in 2006.

By decision of the Government of the Republic of Slovenia, the inter-service working group for the preparation of the National Financial Education Programme (NFEP) prepared a national programme in October 2010. By using this approach it followed the orientations of the Organisation for Economic Co-Operation and Development (OECD) of 2005 and of the European Commission (EC), which published the eight basic principles for the provision of quality financial schemes in the field of financial education in 2007. NFEP is a programme for a systematic and coordinated increase in the individual's financial fitness. It also identifies problems that would allow an individual to separate important information about financial products and services from market advice, used by consultants exclusively for profit-making purposes. NFEP proposes solutions that will ensure individuals the access to impartial, fair, concrete and understandable information for sound and responsible decision making (Ministrstvo za finance, 2010).

Financial education is a process in which users upgrade their own understanding of financial products and services, related risks and

market opportunities. On the basis of the above, they can consciously make decisions about their finances. Financial literacy brings benefits to society as a whole, reducing the risk of financial exclusion and raising awareness of users to plan and save money in advance. All in all it helps people to avoid getting heavily indebted (European Economic and Social Committee, 2011, p. 5). Individuals have insufficient financial education since it is not in the curriculum. The Ministry of Education and Sport (Ministrstvo za šolstvo in šport, 2005, p. 9) defines the need for education and training of financial literacy in all age groups – from pre-school to adulthood. The lifelong approach to literacy derives from the fact that individuals have different needs in different periods, and the society faces them with different demands. It should be included in kindergartens, schools, faculties as well as in home and work environment. Only this way an entire population can be reached.

Financial institutions are also responsible for financial literacy, for example, the Bank of Slovenia (hereinafter referred to as the BS) and the Bank Association of Slovenia (hereinafter BAS). The survey will also provide a detailed insight at the role of banks in the area of education and training for financial literacy.

European and Slovenian banking face major financial and moral ethical crisis nowadays. In addition to fulfilling its basic mission, the key guide of the banking sector is the optimisation of processes, lowering costs, investing in the development and education of employees, and literacy of users of banking services. Arhar (2014, p. 5) is convinced that both the banks and the BAS, by their approach to raising financial literacy contribute to reducing various risks, to a better understanding of money and banks, and to building confidence that is the best form of motivation for each of us and the basis for understanding the different monetary relationships.

International and domestic research (OECD, 2014; Pedagoški inštitut, 2014; European Parliamentary Research Service, 2015) show that the level of financial literacy in both the EU and Slovenia is at a relatively low level. The banking sector also detected the said deficit and a couple of years ago began to intensively develop various forms of financial education, for employees and users of banking services.

Methodological Approach

By using the questionnaire, we examined the financial literacy of Slovenes, their perception of the activities of Slovenian banks in rais-

ing the financial literacy of clients and their financial knowledge (in terms of knowledge and use of banking products). The research is quantitative by its nature, and its goal is to determine whether the Slovenian banks, through the activities they perform, influence the increase in financial literacy. We will also investigate the claim that financially literate users of banking services know and use more financial products and services.

Toš and Hafner-Fink (1998, p. 2) define empirical research as a part of human recognition being the outcome of the direct sensory perception (observation) of the real world. On the basis of the conducted survey research, we got answers to both hypotheses raised. In order to collect data and information, the questionnaire Financial Literacy of Slovenians 2011 was used (Mihajlović, 2011), supplemented with additional questions related to the activities carried out by Slovenian banks in order to raise the literacy of their clients. The claim that the activities performed by banks in Slovenia in order to improve the financial knowledge of clients influence the increase in financial literacy was determined by the method of regression analysis. Financial literacy is the dependent variable, while the various activities of banks represent independent variables. The claim that financially literate users of banking services know and use more financial products and services were determined by the *t*-test method. From the financial literacy variable, we have formed two groups – financially literates and financially illiterates – and compared their knowledge and use of financial products and services.

The survey was carried out on a random sample of respondents – users of Slovenian banks banking services. The questionnaire was physically distributed or accessible in five selected bank branches of three selected Slovenian banks, as well as passed (we used the 1ka tool) to various users of banking services in electronic form. Consent for the use of the questionnaire Financial literacy of Slovenes 2011 was received from IPSOS company and *Moje finance* magazine. The survey was carried out according to the principle of a snowball. Altogether, 340 questionnaires were returned and completed appropriately, which represents 61 of the sample. The data analysis was carried out with the SPSS 21.0 programme.

A questionnaire for users of banking services consists of an introductory address, a cut-off question and three sets of content-related questions. The first set consisting of 23 questions related to financial literacy was taken from the IPSOS questionnaire and *Moje finance*

magazine. The second and third set include questions that we have designed ourselves. The second set consists of five questions related to banking activities, where we asked respondents about the sources of acquiring financial knowledge, the activities of banks to improve the financial knowledge of their clients, the knowledge and use of banking products, and the like. The third section consists of five general questions.

The research is based on the following assumptions:

- Respondents will be ready to complete a questionnaire.
- Respondents will answer the questions honestly and responsibly.
- Banks are one of the driving forces of changing existing financial literacy.
- The banks own mistakes were a motive for introducing changes and innovations in the field of financial literacy of employees and bank users.
- The users of bank services are an indicator of improved financial literacy.

The survey is based on the following restrictions:

- The survey research represents a cross-sectional view of users of banking services in terms of financial literacy in Slovenia and may change.
- The condition for participating in the survey was that the respondent performed a banking service at least once in the survey year.
- The questionnaire on education and training for financial literacy was very comprehensive, which was the reason of losing a certain number of respondents.
- Despite careful examination, the selection of domestic and foreign professional literature can still be subjective and limited.

Characteristics of Respondents

In the survey on education and training on financial literacy and the role of banks, 340 respondents participated. The analysis also takes into account 12 partially completed questionnaires, while the majority of the sample is represented by fully completed questionnaires. The sample is represented by respondents who performed at least one banking service this year.



FIGURE 15.1 Structure of Respondents by Gender

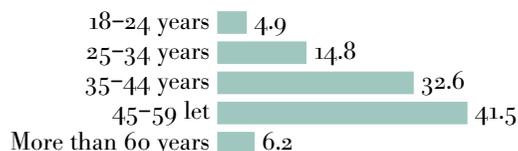


FIGURE 15.2 Age of Respondents

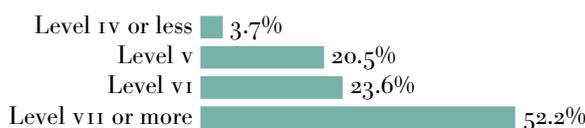


FIGURE 15.3 Highest Level of Education Completed

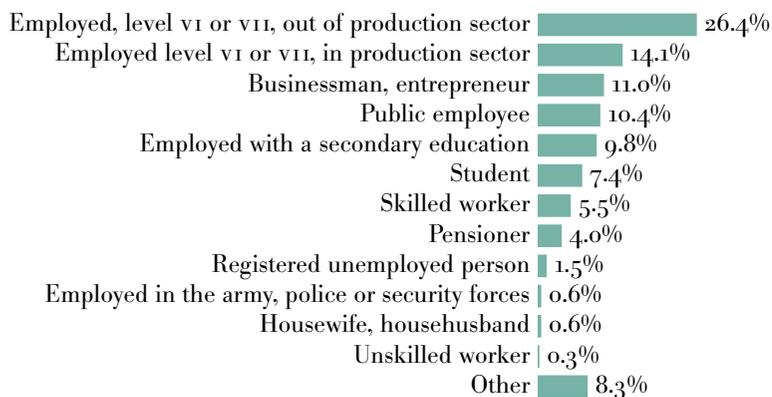


FIGURE 15.4 Group of Employed According to Current Employment

According to gender, women account for two thirds of the sample and one third is accounted for by men (Figure 15.1). The most represented is the age group of 45-59 years (41.5), followed by the age group 35-44 years (32.6) and 25-34 years (14.8) (Figure 15.2). The youngest and oldest age group are represented to a lesser degree – the age group of 18-24 years (4.9) and the age group of 60 years and older (6.2).

A good half of the sample (52.2) is represented by the most educated respondents, that is level of education VII or more (Figure 15.3).

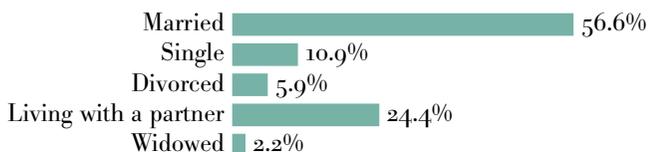


FIGURE 15.5 Marital Status

Following are the respondents with level v₁ (23.6) and a similar proportion of respondents with level v (20.5). The least represented are the respondents with level iv or less (3.7). Among employees, mostly individuals with high or higher education outside the production sector – science, culture and education (26.4), followed by employees with high or higher education in the production sector (14.1) and businessmen, entrepreneurs (11.0) and public servants (10.4) (Figure 15.4).

The majority of the sample is represented by respondents who live in a couple, namely 56.6 married and 24.4 of those living with their partner. They are followed by single (10.9), divorced (5.9) and widowed (2.2) (Figure 15.5).

References

- Arhar, F. (2014). Nagovor direktorja ZBS. In A. Žibrat & M. L. Novosel (Eds.), *Vse o banki* (p. 5). Ljubljana, Slovenia: Združenje bank Slovenije.
- Ministrstvo za šolstvo in šport. (2005). *Nacionalna strategija za razvoj pismenosti: osnutek*. Retrieved from <http://pismenost.acs.si/datoteke/komisija/strategija.pdf>
- European Economic and Social Committee. (2011). *Financial education for all: Financial education strategies and best practices within the European Union*. Retrieved from <http://www.eesc.europa.eu/resources/docs/qe-30-12-894-en.pdf>
- European Parliamentary Research Service. (2015). *Improving the financial literacy of European consumers*. Retrieved from [http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/557020/EPRS_BRI\(2015\)557020_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/557020/EPRS_BRI(2015)557020_EN.pdf)
- Mihajlović, S. (2011, 19 January). Alarm! Finančna pismenost Slovencev: zd (2). *Moje finance*. Retrieved from <http://mojefinance.finance.si/300361/Alarm-Finan%C4%8Dna-pismenost-Slovencev-zd%0282%029>
- OECD. (2014). *PISA 2012 results in focus: What 15-year-olds know and*

- what they can do with what they know*. Retrieved from <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>
- Pedagoški inštitut. (2014). *Rezultati preverjanja finančne pismenosti in reševanja problemsko zasnovanih nalog v okviru mednarodne raziskave PISA 2012*. Retrieved from <http://www.pei.si/UserFilesUpload/izjava%20za%20medije.pdf>
- Toš, N., & M. Hafner-Fink. (1998). *Metode družboslovnega raziskovanja*. Ljubljana, Slovenia: Fakulteta za družbene vede.
- Ministrstvo za finance. (2010). *Nacionalni program finančnega izobraževanja*. Retrieved from <http://www.mf.gov.si/fileadmin/mf.gov.si/pageuploads/sporocila/oecd/NPFI.pdf>

Chapter Sixteen

Results: Financial Literacy and Bank Activities

Sergeja Kočar and Nada Trunk Širca

On the basis of the theoretical starting points and the issues discussed, two hypotheses were developed, which were checked on the basis of the analysis of secondary data and the questionnaire:

- H1 *The activities carried out by banks in order to improve the financial knowledge of clients influence the increase in the financial literacy of Slovenes.*
- H2 *Financial literate users of banking services know and use several financial products and services.*

Bank Activities

Since most of the banking activities are statistically significantly related to each other – which we have verified with Pearson's correlation coefficient – the use of activities as individual variables in the regression analysis would result in a violation of the assumption of multicollinearity. When checking the first hypothesis (the activities, carried out by the banks in order to improve the financial knowledge of the clients, influence the increase in the financial literacy of the Slovenes), we used factor analysis and formed components from banking activities. We checked their validity and reliability before using them.

Verifying the Validity

With Bartlett's sphericity test, we verify the relevance of the variables for further factorial analysis (Snedecor & Cochran, 1989). If the test shows statistically significant differences in the characteristic level of 0.000, it means that the variables are not independent of each other and the subsequent impact analysis is a reasonable choice. In our case, the significance level is 0.000, so the factor analysis is appropriate.

TABLE 16.1 Communalities

The bank keeps me informed via printed media regularly.	0.609
At the window, a bank worker always advises me kindly.	0.635
A bank advisor often calls me on the phone and presents me with updates.	0.511
Everything that interests me about my finances is available on the website of the bank.	0.495
I am upgrading my financial knowledge through free financial workshops organized by the bank.	0.792
I participate in open days. advertised by the bank.	0.805

NOTES Exclusion method: method of main components.

TABLE 16.2 Complete Clarified Variance

(1)	Initial inherent values			Abstract of the sum of the squares		
	(2)	(3)	(4)	(2)	(3)	(4)
1	2.455	40.909	40.909	2.455	40.909	40.909
2	1.392	23.196	64.105	1.392	23.196	64.105
3	0.749	12.477	76.582			
4	0.588	9.808	86.389			
5	0.526	8.770	95.159			
6	0.290	4.841	100.000			

NOTES (1) components, (2) total, (3) share of variance (percentage), (4) cumulative share of variance (percentage). Exclusion method: method of main components.

With Kaiser Meyer Olkin's measure of sampling adequacy (MSA), we check the power of cohesion between variables (Cureton & D'Agostino, 1983). In order to be able to talk about good cohesion, the MSA value should be 0.80 or more, but in the social sciences data, the lower cohesion level (at least 0.50) is still acceptable. In our case, the MSA value is 0.683 and, therefore, the factor analysis is still justified.

It is evident from Table 16.1 that the values of all communalities are higher than 0.20, therefore all variables explain a sufficiently large proportion of variability of the dependent variable; therefore, on the basis of this criterion, none of them had to be excluded.

Table 16.2 shows that banking activities are divided into two components, which together explain 64.1 of the total variability of banking activities. By this proportion we satisfy the criterion of good com-

TABLE 16.3 Factor Weights of the Components: Rotated

Argument	(1)	(2)
The bank keeps me informed via printed media regularly.	0.167	0.724
At the window, the bank worker always advises me kindly.	-0.002	0.797
A bank advisor often calls me on the phone and presents me with updates.	0.572	0.315
Everything that interests me about my finances is available on the website of the bank.	-0.121	0.722
I am upgrading my financial knowledge through free financial workshops organized by the bank.	0.905	-0.076
I participate in open days, advertised by the bank.	0.912	-0.078

NOTES (1) Info Bank, (2) Advisory Bank. Exclusion method: method of main components. Rotation method: Oblimin with Kaiser normalisation, rotation converged in 6 iterations.

ponents, which should explain at least 60 of variance, so the components are accepted in this form.

In the following, the factor weights are presented, the height of which represents the importance of each individual variable in the component; the higher the weight, the more important the variable for the component. As the composition of both components was not 'pure' or 'clear enough,' we rotated the data with an oblique Oblimin rotation.

The first component was named Info Bank, because the involved claims deal with customer information. This component explains 40.9 variability of financial literacy. It is represented by three banking activities:

- I am upgrading financial knowledge through free financial workshops organized by the bank.
- I attend open days, advertised by the bank.
- A bank advisor often calls me on the phone and presents me with updates.

The second component was called the Advisory Bank, because the included claims deal with customer advising. This component explains 23.2 variability of financial literacy. It is represented by the remaining three banking activities:

- A bank employee at the counter always provides advice nicely.

TABLE 16.4 Full Statistics of all Variables Included

Argument	(1)	(2)	(3)	(4)
The bank keeps me informed via printed media regularly.	13.01	11.300	0.490	0.647
At the window, the bank worker always advises me kindly.	12.63	12.227	0.411	0.672
A bank advisor often calls me on the phone and presents me with updates.	13.99	10.945	0.496	0.644
Everything that interests me about my finances is available on the website of the bank.	12.77	13.175	0.276	0.711
I am upgrading my financial knowledge through free financial workshops organized by the bank.	14.42	11.605	0.461	0.656
I participate in open days. advertised by the bank.	14.67	12.143	0.485	0.652

NOTES (1) Average of the scale if the variable is deleted. (2) Variance of the scale, if the variable is deleted. (3) Corrected connectedness of all variables. (4) Cronbach alpha if the variable is deleted.

- The Bank regularly informs me of all the news through the printed media.
- All I want to know about my finances is available on the Bank's website.

Checking the Reliability of the Components

The Cronbach's alpha value (Table 16.4) is acceptable, so the components are also acceptably reliable for further use (Ritter, 2010). The overall average of the components is 2.72 (claims are on average rated with 'neither - nor' grade) with a standard deviation of 0.67. The so-formed components of banking activities will further be used as independent variables in checking the impact of banking activities on the financial literacy of Slovenes.

Table 16.5 explains the financial literacy of our survey respondents. We designed a financial literacy variable by checking the correct answers to the 21 questions given to respondents. Each correct answer represented 1 point, the sum of the correct answers represented the level of financial literacy, which we created in the school grades scale form (from insufficient to excellent). The average financial literacy of Slovenes is good ($M = 2.85$).

TABLE 16.5 Financial Literacy

Argument	(1)	(2)	(3)	(4)
Insufficient	63	18.5	18.5	18.5
Sufficient	70	20.6	20.6	39.1
Good	102	30.0	30.0	69.1
Very good	64	18.8	18.8	87.9
Excellent	41	12.1	12.1	100.0
Total	340	100.0	100.0	

NOTES (1) Frequency. (2) Share (percentage). (3) Valid share (percentage). (4) Total share (percentage).

TABLE 16.6 Summary of the Regression Model

R	R square	Adjusted R square	Standard estimate error	Durbin-Watson
0.205	0.042	0.036	1.23688	1.975

NOTES Predictors: (Constant), FAC1_ba bank activities - Advisory Bank, FAC2_ba bank activities - Info bank. Dependent variable: financial_literacy.

TABLE 16.7 ANOVA of the Regression Model

Item	(1)	(2)	(3)	F	p
Regression	20.465	2	10.232	6.688	0.001b
Remainder	466.613	305	1.530		
Total	487.078	307			

NOTES (1) Sum of squares. (2) Degrees of freedom. (3) Square of the average. Predictors: (Constant), FAC1_ba bank activities - Advisory Bank, FAC2_ba bank activities - Info Bank. Dependent variable: financial_literacy.

The influence was checked by a linear regression analysis, the result of which is presented below. First, we checked the quality of the formed regression model and in the following the statistical significance of the influence. In Table 16.6, the adjusted R square indicates that the included independent variables explain the 3.6 variability of the dependent variable - the financial literacy. A low value reflects that financial literacy is influenced by many other factors, not only banking activities, which are not included in this regression model and research.

It is evident from Table 16.7 that the regression model is of sufficient quality for predicting (the characteristic rate of F statistics is less than 0.05).

TABLE 16.8 Regression Coefficients

Variable	(1)	(2)	(3)	<i>t</i>	<i>p</i>
Constant	2.903	0.070		41.184	0.000
FAC1_ba bank activities – Advisory Bank	0.077	0.073	0.061	1.060	0.290
FAC2_ba bank activities – Info Bank	0.229	0.073	0.182	3.154	0.002

NOTES Unstandardized coefficients: (1) *B*, (2) standard error. Standardized coefficient: (3) β . Dependent variable: financial_literacy.



FIGURE 16.1 Two Groups of Financial Literacy

From Table 16.8 it can be seen that of the two components of banking activities only the second component – the Advisory Bank ($p = 0.002$) statistically significantly affects the financial literacy. The influence is positive and weak ($\beta = 0.182$). Better the financial literacy, more banking activities are performed.

Based on the presented result, H_1 hypothesis (the activities carried out by the banks in order to improve the financial situation of clients affect the increase in the financial literacy of Slovenes) can be confirmed, since banking activities indeed influence the increase in financial literacy.

Financial Literacy and the Use of Financial Products and Services

In order to verify the second hypothesis (financially literate users of banking services know and use several financial products and services), we initially divided the five groups dealing with financial literacy into two groups: those with insufficient and sufficient financial literacy represent the financially illiterate, while others are financially literate.

As shown in Figure 16.1, a group of financial literates accounts for 60.9 and a group of financially illiterates for 39.1 respondents.

Knowledge of Banking Products and Services

The knowledge of bank products and services was measured by question 28. Since the data is abnormally distributed (as we verified with

TABLE 16.9 Average Knowledge Ranking of Bank Products and Services According to the Two Groups

Products and services	(1)	(2)
Personal account	146.3	173.2
Payment cards	142.3	172.0
Credit cards (e.g. MasterCard, Visa ...)	132.2	176.5
Savings account	127.6	173.8
Annuity saving	110.7	182.2
Fixed-term deposits	113.5	183.9
Investment deposits	114.5	181.0
Investment funds	112.2	183.8
Electronic banking	130.1	176.1
Housing/mortgage loan	125.1	177.5
Car loan	131.9	169.3
Student loan	127.0	170.9
Short-term loan	127.3	176.1
Bridging loan	115.6	178.0
Limit on personal account	142.3	170.4

NOTES (1) Financially literates. (2) Financially illiterates.

Kolmogorov-Smirnov and Shapiro-Wilk tests and histograms verification), we used the non-parametric Mann-Whitney U test to check the differences between the two groups. It is clear from Table 16.9 that in all cases of banking products and services, the group of financially literates is averagely better acquainted with banking products and services than a group of financially illiterates. Financially literates (8) know the most of the banking products and services well, have experience with them ($Me = 4$) and are familiar with the others ($Me = 3$). Although the group of financially illiterates know the majority of banking products and services ($Me = 3$), they are well familiar with five products only (personal account, payment cards, credit cards, electronic banking, personal account limit).

Table 16.10 shows that differences between groups in the case of familiarity with all banking products and services are statistically significantly different at the significance level of 0.001.

The Use of bank Products and Services

The use of bank products and services was measured by question 29. Since the data is abnormally distributed (which we verified with

TABLE 16.10 Mann-Whitney U Test of Differences between Groups in Knowledge of Bank Products and Services

Products and services	Mann-Whitney U	<i>p</i>
Personal account	10363.000	0.000
Payment cards	9794.500	0.000
Credit cards (e.g. MasterCard, Visa ...)	8596.500	0.000
Savings account	7991.000	0.000
Annuity saving	6068.500	0.000
Fixed-term deposits	6382.500	0.000
Investment deposits	6500.000	0.000
Investment funds	6220.500	0.000
Electronic banking	8331.000	0.000
Housing/mortgage loan	7730.000	0.000
Car loan	8477.000	0.000
Student loan	7931.500	0.000
Short-term loan	7996.500	0.000
Bridging loan	6624.500	0.000
Limit on personal account	9772.500	0.001

Kolmogorov-Smirnov and Shapiro-Wilk tests and histogram examination), we used nonparametric Mann-Whitney U test to check the differences between the two groups.

It is evident from all cases of bank products and services that, on average, the group of financially literates is currently more likely to use banking products and services than the group of financially illiterates (Table 16.11).

The financially literates do not know most (7) banking products and services ($Me = 3$), the greater proportion (6) is currently used ($Me = 1$), two have been used in the past two years ($Me = 2$) (fixed-term deposit, housing/mortgage loan). While the group of financially illiterates (9) does not know the most of banking products and services ($Me = 3$), the remaining six currently use them ($Me = 1$) (these are the same six products and services that are also used by a group of financially literates).

It is evident from Table 16.12 that the differences between groups in the use of the majority of (nine) banking products and services are statistically significantly different at the significance level of 0.05.

Based on the results presented, the hypothesis H_2 (financially literate users of bank services know and use several financial products

TABLE 16.11 Average Ranking of Use of Bank Products and Services According to the Two Groups

Products and services	(1)	(2)
Personal account	160.9	155.4
Payment cards	163.7	149.8
Credit cards (e.g. MasterCard, Visa ...)	169.1	141.1
Savings account	170.0	139.2
Annuity saving	148.8	138.2
Fixed-term deposits	167.7	132.9
Investment deposits	147.9	134.7
Investment funds	167.8	131.5
Electronic banking	176.0	136.8
Housing/mortgage loan	161.9	135.2
Car loan	142.8	143.9
Student loan	143.1	139.0
Short-term loan	150.3	144.3
Bridging loan	146.0	135.0
Limit on personal account	155.5	143.5

NOTES (1) Financially literates. (2) Financially illiterates.

TABLE 16.12 Mann-Whitney U Test of Differences between Groups in the Use of Bank Products and Services

Products and services	Mann-Whitney U	<i>p</i>
Personal account	11235.500	0.187
Payment cards	10151.000	0.015
Credit cards (e.g. MasterCard, Visa ...)	8666.000	0.000
Savings account	8306.500	0.000
Annuity saving	8541.000	0.213
Fixed-term deposits	7378.500	0.000
Investment deposits	8092.000	0.048
Investment funds	7126.000	0.000
Electronic banking	7908.500	0.000
Housing/mortgage loan	7907.000	0.004
Car loan	9431.000	0.899
Student loan	8845.500	0.304
Short-term loan	9486.500	0.496
Bridging loan	8184.500	0.051
Limit on personal account	9351.000	0.177

and services) can only be partially confirmed, since financially literate users do know the banking products better, but both groups use the same number (six) of financial products and services.

The Summary of Findings

In the customer surveying based survey, we confirmed that the activities carried out by banks in order to improve the financial position of clients affect the increase in the financial literacy of Slovenes. We also note that in addition to bank activities, other activities (which were not the subject of this survey) also influence the increase in financial literacy, and we therefore feel that it would be good to explore other 'cause triggers,' such as the environment, family education and the media, and to estimate their influence. The survey also determines that financially literate users of bank services are better acquainted with bank products and services, which are equally used by both groups – financially literates and financially illiterates. We estimate that this finding confirms that banks are not sufficiently engaged in client segmentation. We believe too little is done in the field of the market research, specifically concerning the regions and age groups. The offer is also not adapted to the requirements of the regional market and population groups. Consequently, banking products and services are not sufficiently differentiated, and tariffs are generally the same for all customer segments.

References

- Cureton, E. E., & D'Agostino, R. B. (1983). *Factor analysis: An applied approach*. Hillside, NJ: Lawrence Erlbaum.
- Ritter, N. (2010, 17–20 February). *Understanding a widely misunderstood statistic: Cronbach's alpha*. Paper presented at the Southwestern Educational Research Association Conference, New Orleans, LA.
- Snedecor, G. W., & Cochran, W. G. (1989). *Statistical methods* (8. izd.). Ames, IA: Iowa State University Press.

Part Four

Conclusions and Recommendations

Chapter Seventeen

Financial Literacy and Social Development

**Aleš Trunk, Sergeja Kočar, Nada Trunk Širca,
and Valerij Dermol**

In the theoretical part of the monograph we explained the basic theoretical and historical starting points, related to the concept of money and its adaptation to individuals and banks. The theoretical part of the research has clarified the role of money through history and its transformation. It can be concluded that, historically, the concept of money has changed over time and adapted to society. Nowadays, money is closely linked to financial literacy. Understanding money equals understanding of finances, and understanding of finances affects the level of financial literacy.

In the surveys we describe in the monograph, we examined and summarised the financial literacy analyses carried out in Slovenia, examined the general regulation of financial education and training in the EU, and we recognised good practices of some Slovenian institutions and selected European countries in these material scopes. We have determined that very good bases for raising financial literacy are set at the EU level, but educational and training practices in individual countries might vary. Furthermore, we found out that changes in interinstitutional relations and between the state and private sectors are necessary in Slovenia. In our reflections, we mainly address the shortage of communication-collaborative competences, which consequently inhibits the development of financial literacy and transfer and dissemination of good practices and creativity in this field. Also, on the basis of Slovene research, we have determined that changes or unification of methodological and content part of the research are necessary, and the headline institution of financial literacy needs to be determined. Based on these findings, we concluded that systematic approach should be taken to raise the financial knowledge of children and adolescents as well as disadvantaged and socially deprived population groups. The systematics of work in this area should

be reflected in clear target groups with a previously measured level of financial knowledge and tailor-made education and training programmes that take into account the specificities of individual Slovenian regions.

By means of the research, we were looking for differences in financial literacy between Slovenia and some European countries. We focused our research on the comparison between years, by considering certain indicators of financial literacy. We also researched the financial literacy of Slovenes, what is their perception of the activities of Slovenian banks aimed at raising the financial literacy of their clients, as well as their financial knowledge in terms of knowing and using the bank products and services.

The research on the financial literacy of Slovenes performed in the period from 2011 to 2015 confirms it being at a relatively low level. If we generalize the findings of the research studied, the average level of knowledge of Slovenes in the field of financial literacy in terms of a school grade is sufficient (OECD, 2014; Pedagoški inštitut, 2014). As research on financial literacy in the EU has shown poor results or low awareness as well, we have examined the organisation of financial education in the EU. The EU has declared financial education a key content for the development of a single European market in the 21st century. The European Commission has laid the foundation for further development of education and financial literacy. It has been designed by development of various tools, such as the Dolceta website, as well as a variety of educational tools from booklets and brochures, such as Europe Dairy – to organising various conferences. As a key area of ensuring the financial security of the European population, it is important to emphasise the introduction of basic principles for the provision of quality financial education schemes. One of the findings of our research shows that good foundations for upgrading financial literacy in the EU as well as in Slovenia have been created.

On the other hand, the secondary data from the comparative analysis of the EU countries financial literacy show that Slovenia did not have the lowest financial literacy in 2006 and 2012. In that period, Slovenia has already transposed the EU guidelines and prepared the bases for raising financial literacy and raising population awareness. However, we estimate that in the following period there was no systematic developmental approach and cooperation between state and private institutions, as well as no officially appointed development

actor for financial literacy (Pedagoški inštitut, 2013). For this reason, financial institutions approached the financial literacy of the population in different ways. Some, especially those in the private sector, immediately detected the market gap and are mainly active in terms of their own profitability, which has positive results on the population. Similarly, the banks, each according to its own concept, directed the development of the area and implemented the education and training of their clients. With our own research on the role of banks in education and training for financial literacy, we have come to a conclusion that the influence of the banks is recognised and positive. The findings of the research have confirmed that other, research-worthy factors influence financial literacy as well. We also determined that financially literate users use the same number of banking products and services as financially illiterate users, which means that banks still have room for rationalisation and growth in the segmentation of clients treated accordingly to the regional principle. To put it differently, changes are recommended in service sales channels.

Based on the research summaries and the above findings, we find that Slovenia does not have a clearly determined headline institution of financial literacy, which, in addition to the coordination role in Slovenia and the EU, would also perform a supervisory function. It should also be responsible for research activities in this specific field and conduct a survey on the level of financial literacy of Slovenes at least every second year. It would be necessary to give an even more important role to the BAS as a representative of the banks in this area. The role of the association should be recognizable in a strong coordination and communication role and more active in the school sector (primary and secondary schools). Research activities should also be considered.

The results of the research also confirm that the development of financial literacy should start with children, youth and the elderly. According to research by various countries, the financial literacy of the elderly is worrying, as it linearly decreases with increasing age. It also turned out that the decline of knowledge raises the belief that they are financially well-educated and competent. Considering this fact, the elderly are the risk group most prone to fraud and scam. Special attention should also be given to raising awareness of the socially vulnerable population.

Furthermore, in the monograph, we were interested in how finan-

cial literacy is implemented in European countries. To this end, we examined good practices in financial education of six EU countries and four good practices of Slovenian institutions. The findings of the theoretical part of the macro-view on the development of the financial literacy of the EU countries, with an emphasis on the activities of the bank associations, provide interesting results. The results of the survey show that in most European countries, banks are facilitators of the financial education, as well as the state or public institutions, but the latter to a lesser extent. This confirms that banks are very aware of their mission and social responsibility. We also note that the bank associations in European countries that were subject to the research approached the subject of financial literacy education differently. Some countries were active in this field even before the EU began active planned development of this area, while others established a strong link with the state institutions and systematically raise people's awareness. We discovered that in most of the cases studied, bank associations are closely linked to the school system and offer education to both teachers and pupils. It can definitely be summarised that these European associations formed relevant websites, issued various publications, carried out a series of educational programmes for various target groups, quizzes and competitions. One of the most important findings is that some bank associations have developed a strong research activity, which is unfortunately not the case with the Bank Association of Slovenia.

Further in the research of good practices of the Slovenian institutions in the area of education and training for financial literacy, we have found that financial institutions approach financial literacy in different ways. The BAS tries to combine public and state institutions by using different approaches in order to achieve joint operation and implementation of the financial literacy strategy performance. We also conclude that the bank association is currently under-staffed and not capable of making radical changes in this field. In any case, there is no common approach and clearly defined activity coordinator in the Slovenian environment. Banks are aware of the importance of corporate social responsibility, they follow the European guidelines for the development of financial literacy and, in their sole discretion, have access to the education and training of users of banking services. We can point out an example of good practice of the largest Slovene bank, which approaches the increase of the awareness of its

clients by a project – it first focused on awareness of natural and then legal persons. Other major Slovenian banks also introduced financial literacy of potential and existing users of banking services. The satisfaction of the clients is facilitated by competent and professional bank advisors, consequently banks and financial institutions invest in the development of their employees.

In the field of promoting financial literacy, some other good practices can be identified in the Slovene environment, for example that of *Moje finance* magazine. It conducted a survey on the financial literacy of Slovenes and has carefully been planning to rise the awareness and the knowledge level of the entire population. It also tries to connect with state institutions. In order to raise tax culture and awareness of the importance of fulfilling tax obligations, the Financial Administration of the Republic of Slovenia also actively approached the education and training of the children in the field of financial literacy. We found out that the project Fiscal Literacy of Youth further confirmed the findings that young people are eager for this kind of knowledge, and that only work with young people can raise the financial literacy and financial culture of Slovenes in the long run.

The EU considers that Member States are responsible for financial education of their population, but much can be done by non-profit organisations and other financial service providers as well, mainly by providing practical assistance. It is necessary to establish a network of providers of financial education and to promote networking, learning from experience and exchange and promotion of best practices in the field of financial education. Such a group of experts can assist the EC to identify problems in providing education, advising on the implementation of the principles of education, monitoring performance and implementing of financial education as well as contribute to the evaluation of measures. Such a form of cooperation can also contribute to transparent provision of sponsorship to Member States and non-profit organisations in the organisation of national conferences and forums and the presentation of good practices, initiatives and studies on financial education.

Efforts to increase financial literacy will have positive results if different stakeholders advocate a more systematic approach to raising awareness of the population in the field of financial literacy and seek synergies in training and education and research.

In the area of financial literacy research, it would be reasonable

to consider and investigate: (i) the metrics of foreign and domestic research surveys in the area of financial literacy, the preparation of a single questionnaire for Slovenia and the harmonisation of a single questionnaire with the state and private sectors; (ii) the impact of the media, family education and the environment on the level of financial literacy; (iii) the financial literacy of the elderly and their views on it; (iv) the structure, financial basis and activities of European bank associations in general and in the field of financial literacy, to compare them with the activities of the Bank Association of Slovenia, and to propose possible joint projects and other system solutions.

Synergies in the field of education and training could also be achieved through the following measures: (i) preparing e-education for primary and secondary school students on the topic of the bank operating and the importance of financial literacy; (ii) upgrading the development of financial literacy in the Slovenian banking sector by a joint website; (iii) examining the existing financial literacy materials for teachers and preparing proposals for uniform materials for primary and secondary school teachers.

For a systematic approach to raising the awareness of the population in the area of financial literacy, it should also be clearly defined what is the role of individual stakeholders – the family, the school, as well as financial institutions – in raising financial literacy.

References

- OECD. (2014). *PISA 2012 results in focus: What 15-year-olds know and what they can do with what they know*. Retrieved from <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>
- Pedagoški inštitut. (2013). *OECD PISA 2012: program mednarodne primerjave dosežkov učencev*. Retrieved from http://www.pei.si/UserFilesUpload/file/raziskovalna_dejavnost/PISA/PISA2012/PISA%202012%20Povzetek%20rezultatov%20SLO.pdf
- Pedagoški inštitut. (2014). *Rezultati preverjanja finančne pismenosti in reševanja problemsko zasnovanih nalog v okviru mednarodne raziskave PISA 2012*. Retrieved from <http://www.pei.si/UserFilesUpload/izjava%20za%20medije.pdf>

Reviews

The monograph consists of 17 chapters, appropriately rounded up in three content units and followed by a conclusion. In the first unit, the monograph deals with the connectivity between money, society and the individual. To this end, the authors first present the historical development of money and the role of money in today's economies and society. Thoroughly reviewing literature in this field, they continue to define concepts such as financial and economic literacy, financial fitness or ability for financial education. In this part, the monograph also offers an explanation of the importance and role of financial education in a modern society and presents the principles that enable an effective system of financial education. The authors summarise examples of good practices of some European countries in the field of financial training. Examples and findings of the financial education projects for young people in Slovenia are also presented, such as the Tax literacy for young people project, implemented by the Financial Administration of the Republic of Slovenia, the project of the Bank Association of Slovenia and the Personal Financial Advice project implemented by Nova Ljubljanska Banka. In the second unit, the authors mainly deal with financial literacy among young people. Thus, the monograph comprehensively and systematically summarises and interprets the findings of the PISA international research on financial literacy of young people, as well as some other studies on the financial literacy of Slovenes. In the following, the authors present three studies, all of them referring to the study of financial literacy in Slovenia. The first one is a study of financial literacy among students in the final year; the second one deals with the study of the link between financial literacy and entrepreneurial intention, while the third one belongs to the field of youth unemployment and the success factors of self-employment. The third unit of the monograph relates to the role of banking institutions in education and training for financial literacy. The methodological framework of the research is presented, the analysis is based on hypotheses and the conclusions of the research indicate that banking institutions and their activities have a recognisable and positive influence on financial literacy of the population. The fourth unit is the concluding part of the monograph

in which the authors summarise the fundamental findings and discuss some of the orientations in the field of financial literacy among young people.

The subject of the monograph is highly topical. Financial literacy is of extreme importance for the EU, not only today, but also in the future. The debate on financial literacy, EU integration and entrepreneurship is crucial in the current crisis in the EU and candidate countries. As never before, researchers, public authorities, social groups, industry associations and international organizations are developing financial education and entrepreneurial initiatives as key elements in creating informed and responsible EU citizens. In doing so, schools can play an extremely important role.

The field of financial literacy only appears in Slovenia in the last few years; therefore, the monograph has an important role in the development of scientific and professional terminology. In Slovene literature, except for a few individual articles, not much is written on financial literacy. This is probably the first monograph in the Slovenian language which systematically deals with the field of financial literacy by defining it, defining its significance in society and skilfully interpreting and summarising the empirical results of research in this field. This enables the authors to present the concept of financial literacy and financial education from various selected aspects, i.e. from the point of view of the individual, from the point of view of companies and from the point of view of the society. This multi-level approach also enables deriving recommendations to policy makers in the society. The importance of this monograph is reflected in the argument that financial literacy is important not only for the well-being of every individual, but it can also be key to the well-being of the society as a whole.

Although the empirical studies presented in the monograph relate to the Slovenian environment, the topics discussed are important for the whole of the EU and beyond. Such work can raise people's – including the young – awareness of the importance of financial literacy and entrepreneurship in order to become successful EU citizens and contribute to the development and integration of the EU.

Nina Ponikvar

The main theme of the monograph is financial literacy. In addition to the foreword, the monograph consists of four units, three of them being content units. The first unit refers to the definition of financial literacy and financial education, as well as its importance in the modern society. Examples of practices in selected European countries are shown and so are a few examples of efforts to raise financial literacy in Slovenia. The second unit summarises the results of financial literacy within the PISA program, presents financial literacy among students, in the field of entrepreneurship and among the unemployed. The third unit is a survey on the role of banking institutions in raising financial literacy; case study Slovenia.

In addition to the main research, the monograph includes several smaller-scale researches, which undoubtedly influence the development of the scientific field. Based on the research and findings in the monograph, it is evident that there is no uniquely appointed headline institution in the field of financial literacy in Slovenia, which, in addition to the coordination role within Slovenia and the EU, would also perform a supervisory function in cooperation with various pre-appointed state and private institutions. The authors conclude that the Bank Association of Slovenia as a bank representative could have an even greater role in this field. Also, the research findings confirm that development of financial literacy should be built on children, youth and the elderly.

The monograph highlights and addresses the importance of financial literacy for the individual, an increasingly important topic nowadays; the authors point out, for example: (i) The economic and social environment in which individuals accept financial and finance related decisions has been rapidly changing in recent years. (ii) Responsibilities for future financial decisions and security are being transferred from the state and from the employer to an individual, consequently also taking on the risks associated with his own decisions. The extent of the information that individuals need to accept and evaluate is increasing. Due to the growing size and complexity of the matter, this is especially evident in the field of financial and tax system that affects the life of an individual at all stages of his life.

The field of financial literacy and education research is relatively new in Slovenia; therefore the present monograph contributes to the development of professional and scientific terminology.

In the financial literacy field in Slovenia, we come across several

articles, individual chapters; the present monograph, according to my knowledge of the field, is the first trying to present this field more comprehensively. It is also original in the sense that financial literacy and education are not merely associated with school, but also with entrepreneurship and society (especially the EU). From this point of view, the monograph is important in the context of national as well as international science.

Jaka Vadnjal



This monograph focuses on various aspects of financial literacy and its importance for all generations, especially for the younger generation. Literacy, financial or any other is the permanently evolving ability of individuals to use socially agreed systems of symbols for receiving, understanding, creating and using texts in order to live within the family, school, workplace and society. Reading, writing and computing, i.e. skills, without which effective functioning in modern developed societies is virtually unimaginable, are considered basic literacy skills. Financial literacy is therefore essential knowledge and skill, and a prerequisite for successful and creative personal growth and responsible work in professional and social life. Internet, modern technology and digitalization have significantly changed the nature and importance of literacy. For the successful functioning in a society that is confronted with global, economic, technological, social and cultural changes, the development of different forms of literacy, such as information, digital, media and, ultimately, financial literacy, is necessary. Financial literacy thus encompasses basic literacy, reading and mathematical literacy, being their upgrade at the same time, as it requires more knowledge and skills in a specific, financial field. All principles of general literacy apply, but also and above all, the understanding and the ability to use financial information in decision-making.

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