ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>











# TOWARDS FINANCIAL LITERACY: A CASE OF SLOVAKIA\*

Judita Táncošová 1, Marcel Lincényi 2, Michal Fabuš 3

<sup>1, 2</sup> Institute of Economics and Management, University of Economics and Management in Bratislava, Furdekova 16, 851 04, Bratislava 5, Slovak Republic

E-mails: 1 judita.tancosova@vsemba.sk; 2 marcel.lincenyi@vsemba.sk; 3 michal.fabus@vsemba.sk

Received 15 November 2022; accepted 14 March 2023; published 30 March 2023

Abstract. The level of financial literacy in the Slovak Republic has long been below the European Union average, which is confirmed by several surveys in recent years. In practice, this creates several problems. Almost a million Slovaks have at least one foreclosure, resulting from buying necessities on credit and then living in ever-increasing debt. Knowledge of finance and business among employees or budding entrepreneurs is also problematic. Conservative Slovaks also keep most of their money in products with zero interest and are afraid to invest and capitalize on their savings. The National Bank of Slovakia and the Slovak Bank Association have been calling for a change in school curricula for a long time because financially illiterate pupils eventually become poorly literate clients. The contribution's primary purpose was to analyze the state of financial education in secondary schools in the Slovak Republic, including a more effective design of the content and method of teaching financial literacy. More effective financial education could help reduce poverty in Slovakia and more effective financial and business literacy in society.

Keywords: financial education; financial literacy; Slovakia

**Reference** to this paper should be made as follows: Táncošová, J., Lincényi, M., Fabuš, M. 2023. Towards financial literacy: a case of Slovakia. *Entrepreneurship and Sustainability Issues*, 10(3), 288-301. <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

JEL Classifications: A23, C12, G53

#### 1. Introduction

Financial literacy needs to be more precisely and unambiguously defined, as its content is still evolving and changing. We can find the definition in several international and national official documents. According to the study OECD PISA 2012 Financial literacy assessment framework, "Financial literacy is knowledge and understanding of financial concepts and risks, and the skills, motivation, and confidence to apply such knowledge and understanding to make effective decisions across a range of financial contexts, to improve the financial well-

<sup>\*</sup> This research was funded by Cultural and Educational Grant Agency of the Slovak Republic: "Creation of digital didactic aids to the subject Civics Education for the needs of secondary education in distance form", Project registration number Project No. 009 TnUAD-4/2021

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

being of individuals and society, and to enable participation in economic life." (OECD 2012, p. 13) The national standard of financial literacy in the Slovak Republic defines financial literacy as "the ability to use knowledge, skills and experience to effectively manage one's financial resources to ensure lifelong financial security for oneself and one's household." (MoESRaS SR. 2017)

Other interpretations of financial literacy can be found in dozens of articles in databased journals: As stated by Čaplinska and Danileviča (2022), financial literacy, as a totality of knowledge and skills, provides an opportunity for a person to manage finances successfully, and take rational decisions concerning the choice of various financial services, thus facilitating both individual and public welfare and sustainability. The financial markets have changed along with the financial consumers' awareness.

### 2. Theoretical background

There is a unanimous agreement that financial literacy is a precondition of sustainable business (Burchi et al., 2021; Clichici & Moagar-Poladian, 2022; Luo & Cheng, 2022).

According to several surveys conducted in recent years, the level of financial literacy of Slovaks could be higher. There are few surveys on financial literacy in Slovakia. In a 2020 survey conducted by the OVB company, 9 out of 10 Slovaks declared that they understood finances. However, the final survey statistics showed otherwise. The average result for Slovaks was only 62 points out of 100. That the level of financial literacy of Slovak students is below average is confirmed by the PISA study from 2018. In it, Slovakia scored 481 points, while the standard of the other countries was at the level of 505 points. Only Chile achieved a lower performance than Slovakia in the study. (Invest in Slovakia, 2022)

Almost one million people in Slovakia have at least one foreclosure. In the case of many, this results from low income, buying life necessities on credit and then living with ever-increasing debt. For other people, the inability to reconcile expenses with revenue, gambling addiction, or poor financial literacy can play a crucial role. (Nejedlý, 2019)

Poor financial literacy was first noticed in 2007, when the Slovak Banking Association presented the results of a financial literacy survey, which showed that financial literacy is lower than expected. Low ability to process information clients due to a need to understand basic concepts. (SBA 2007, 2022) Subsequently, both financial institutions and state authorities began to address the issue.

In 2008, the Government of the Slovak Republic approved the material "Draft Strategy for Education in the Financial Area and Management of Personal Finances" (Resolution of the Government of the Slovak Republic No. 447 of July 2, 2008), based on which the National Standard of Financial Literacy was developed. The manager of the national standard of financial literacy, as well as financial education and its implementation into practice, was the Ministry of Education, Science, Research and Sport of the Slovak Republic, which closely cooperates with the Interdepartmental Expert Group for Financial Literacy, which also includes the Ministry of Finance of the Slovak Republic. (MF SR 2022)

In the case of determining financial literacy in a company, several factors are assessed that have an impact on its level. Kubak et al. (2021), using data on 447 individuals, revealed that men's financial literacy is more dependent on rationality while women's financial literacy is less determined by their rationality.

Several authors pointed to the fact that the Covid-19 pandemic significantly impacted people's decisions about personal financial management. (Fujiki, 2021; Chhatwani & Mishra, 2021)

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

Financial literacy experts are not yet united on where and how to start increasing financial literacy (Alekam, Salleh & Mokhtar, 2018; Zhu, 2021; Kawamura et al., 2021; Pearson & Korankye, 2022; Wiagustini, Ramantha & Putra, 2023).

The national financial literacy standard in the Slovak Republic proposes financial literacy for three levels: The first level is intended for students in the first grade of elementary school. The second level represents the requirements for students in the second grade of elementary school, the first to the fourth year of a grammar school with eight years of study, the first year of a bilingual grammar school, lower secondary vocational education, and secondary vocational education. The third level is intended for students of fields of study who complete secondary general education (gymnasium) or secondary vocational education (secondary vocational school). (MŠVVaŠ SR. 2017) As the authors, Janáková and Fabová (2017) state, in primary and secondary schools, financial education is provided as such. Still, in universities with a non-economic focus, no attention is paid to this issue. However, our experience with higher education shows that financial education is also essential in non-economic faculties of universities, where financial issues are not part of the study programs but are necessary for the daily life of students. Experts also discuss that the National Standard of Financial Literacy in the Slovak Republic sufficiently addresses the mentioned issue.

# 3. Research objective and methodology

The authors decided on a qualitative research strategy for the research part. The main research goal of the paper was to analyze the state of teaching financial literacy at secondary schools in the education system in the Slovak Republic.

The secondary research goal was to propose the content and methods of teaching financial literacy to students in secondary education in the Slovak Republic.

In case of further development of the proposal of the research part, the authors further identified five research questions (RO):

RQ1: How and when to start teaching students in secondary schools in the Slovak Republic financial literacy?

RQ2: What information should students in secondary education know to understand finances?

RQ3: What teaching aids and didactic games are the most optimal for teaching financial literacy in secondary schools?

RQ4: How should parents teach a child to save money to raise him to be a successful and financially independent person?

RQ5: What is the optimal amount of pocket money parents should give their children?

As part of the processing of the practical part, the method of analysis and synthesis was used as basic general logical methods, as well as discursive analysis.

# 4. Results and discussion

In secondary schools, there is no separate subject about financial literacy. However, financial education is provided cross-sectionally within the Civics subject, where students learn with selected knowledge from the fields of psychology, sociology, political science, law, economics, the world of work and philosophy, which lead them to get to know themselves and others, to understand personal, interpersonal, social and economic relations between individuals and society. According to the framework curricula and educational standards of education for the subject Civics within the State Educational Program in the academic field of Man and Society (ISCED 3A), students have the following thematic units: fundamental economic problems and their solution, market

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

mechanism, labour market, unemployment and its socio-economic impact, the world of work, or the role of money and financial institutions. (Lincényi, 2020)

# Answer to RQ1

For understanding, it is crucial to choose a suitable dictionary for understanding the basic principles of *financial literacy*, or spending and saving money - a skill that can be understood by children aged 3-5 years. The use of simple language and simple examples is essential. For preschoolers, an important aspect is a behaviour in the family and the parents' habits in this regard because children also learn by observation, which means that parents should avoid irresponsibility in managing *finances*. If a child sees that before the end of the month, it is necessary to borrow money to spend the budget on frivolities, he may consider it normal as an adult. If the child sees that you make a monthly *budget*, i.e. you plan your *income and expenses*, the child will take it for granted when managing their own money.

How to manage the family budget:

- save, i.e. try to save at least 10% of your income every month;
- get rid of debts first, get rid of any debts, e.g. refinancing;
- plan regularly, which will help forecast future expenses;
- Household savings are possible, e.g. in the consumption of electricity for all appliances and their use in the home, searching for more favourable alternatives for financial products, and expenses of all kinds by comparing different alternatives; do not pay for a bank account and search in the offer of free accounts.

## **Answer to RQ2**

What you need to know to understand finance:

- understand banks and the banking system,
- loans and deposits in banks,
- the functioning of the labour market to ensure regular income and assets,
- insurance,
- evaluation of savings and investment,
- saving for retirement and the pension system in mutual contexts. (PARTNERS Foundation. 2021)

The *financial decision* affects the standard of living of individuals and households. Therefore it is crucial to how money is used to achieve *financial freedom*, defined as a state when *passive income* (it is income that is not related to wages, but, e.g. income from a rented property, interest or income from investments, etc.) exceeds *total expenses*. With passive income, there is no need to perform any activity.

How to achieve *financial freedom* - we see it as a process that must start as soon as possible; it is necessary to think about the future and expand your knowledge:

- Set a *financial plan*; (Chovancová, 2021)
- if an individual gets a job and receives a *regular income*, it is necessary to create a *financial reserve* and not go into debt in the event of a loss of income;
- you need to secure your income and prepare *for retirement*;
- the income must bring additional income through *regular investment*.

**Financial plan** as a result of **financial planning**, i.e. the process of establishing a course of action to achieve one's goals. A financial plan is a map for achieving short-term and long-term goals. It is necessary to set **concrete** - **realistic financial** goals and a time horizon (short-term goals - vacation, clothes, gifts; medium-term - buying a car; long-term - e.g. housing). It is not a one-time process but needs to be constantly adapted to the new situation and, at the same time, controlled.

It is important to define goals to avoid quick loans through e.g. consumer credit, overdraft on a credit card or a loan from a non-bank entity, which could jeopardize the financial future.

Four steps to a financial plan:

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

- 1. *Financial analysis* (Dluhošová, 2021) helps reveal and realistically consider time, income, expenditure and property options and their changes.
- 2. *Setting goals* from the most important to the least important and setting *priorities*:
  - the basis is the creation of a reserve for unexpected events; this money must be quickly available,
  - protection of income (in case of failure unemployment, illness) and property damage,
  - preparing for the future and housing planning, preparing for retirement or setting aside funds for children.
  - after securing these priorities, we can think about improving income for the future by investing (one-time or regularly.
- 3. *Observance of discipline* during the year so that we monitor the fulfilment of goals.
- 4. Control of the plan regularly check compliance with the financial plan.

Ideal financial measures are based on the optimal setting of four attributes of healthy financial management: the creation of a financial reserve, the result of long-term assets, the number of loans (liabilities) and the amount of household economic consumption.

Assets are everything that directly or indirectly brings profit - most often, it is income from work, i.e. regular income such as salary, profit, annuity, etc. For unexpected money, e.g. reward, sale of real estate, inheritance, winning - suitable for increasing the reserve and only a part for increasing current consumption. Liabilities (the opposite of assets) are everything that produces costs and does not generate profit - payments, e.g. rent, energy, repayment of mortgages, loans and all regular instalments. Liabilities bring other benefits but are associated with recurring expenses.

#### The *ideal income distribution* rule means that:

- 10% goes to the creation of a financial reserve, i.e. regular postponement for unanticipated expenses the optimal size of the reserve should be in the amount of 6 monthly household incomes. When it is minute, it is necessary to supplement it;
- 20% for the creation of long-term assets, intended for protection in case of income loss (unemployment, long-term incapacity for work, etc.) the first way is to set up appropriate insurance that protects the individual and his family. The second way is saving for a pension, which is beyond the scope of mandatory pension insurance and must be chosen while still at a productive age, e.g. also by regular investing;
- 30% for loan repayments is the maximum amount, exceeding which threatens the family's everyday life. These are loans related to housing financing and not consumer loans, non-bank loans and others, which are high-risk and should be zero;
- 40% of the maximum consumption consists of food, clothing, travel, leisure expenses, etc. It is essential to accurately plan your monthly expenses and ensure they are not exceeded in the long term. Reducing current consumption is often the key to better financial health.

Maintaining financial well-being and achieving financial freedom is only possible if finances are constantly under control.

A good financial plan is preceded by a detailed financial analysis, which includes all the finances that come and go in the household. It is a constant cycle of *cash flow*. *Cash flow* is the flow of money that represents the difference between income and expenses over a certain period. It is essential to carefully plan and monitor it to avoid imbalances and financial problems.

Household income is both regular and irregular income. Ordinary, which flow into the household regularly and at recurring intervals. These are income from employment, business and rental. We also include social incomes in this group or benefits intended for the unemployed or residents with meagre incomes, e.g. parental allowance,

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

child benefits, benefits in material need, etc. Irregular income that comes to the household in bursts, at different times and in different amounts. These are rewards at work, income from temporary work, and commission from the mediation of a service or product. This group also includes one-time incomes that arise randomly, e.g. income from inheritance, winnings, income from the sale of property, donations, etc. Income can also be divided into active and passive. Actively arise from vigorous activity, e.g. from employment or business. Passive income is generated without action, e.g. rental income, investments, interest, income from sales, etc.

Household expenses flow out and serve to secure various goods and services. They are divided into, e.g. according to the purpose into current and capital or according to how often they are repeated into fixed and variable. Fixed expenses are regularly repeated, and their amount does not change, e.g. rent, advance payments, loan or mortgage repayment. Variable costs are variable, the amount of which is not precisely determined, it changes, etc. This group also includes one-time expenses, e.g. for buying Christmas presents and holidays that can be planned. There are also one-time expenses that cannot be planned - unexpected, e.g. repair of appliances, cars, etc.

Considering our income, expenses, or cash flow, we can draw up our budget. It is a comparison and summarization of income and expenses, based on which we will determine whether our income is sufficient to cover the costs. Three cases can occur in a *balanced budget* (revenues equal expenditures). A deficit budget can be in surplus (gains are more significant than expenditures) and generate excess revenue that can be used to build reserves. Or a deficit budget if income is lower than expenditure, which can lead to debt. It is necessary to correct expenses and ensure higher revenues to bring the budget into balance.

An overview of *assets and liabilities* is also part of the financial analysis. Property is everything owned by an individual, serves to satisfy needs, and can bring benefits in the future. As a rule, it is considered an asset and can be sold, rented, loaned, etc. We divide it into several groups, e.g. financial (cash, money in accounts, in funds) and non-financial (goods, durable goods, etc.). For tangible (material goods) and intangible (software, copyrights, etc.). For movable (car, furniture) and immovable (buildings, land). Long-term (buildings, apartments, land) and short-term (clothing, food, services). Liabilities are debts incurred in the past that need to be repaid or gradually paid off. Their division, e.g. according to the maturity date, are short-term (maturity within a year), medium-term maturity (up to 5 years) and long-term (maturity over five years). Depending on the form, these are bank credits and loans, financial assistance, etc. To determine the size of the property, the so-called balance sheet compares assets and liabilities, i.e. it compares the asset's market price and the liability's value. This means that in a comprehensive financial analysis, the balance sheet is also considered to determine the household's actual financial status in addition to cash flow.

Salary (Táncošová et al., 2015) as income from employment is often the basis of household income. It is a monetary reward for work done and several forms. The most common form is an economic wage paid in cash or to the employee's account, to which the employer can pay bonuses, commissions, rewards, etc. Wages in kind are delivered in the form of products and services. It can also be a mixed wage created by combining the previous arrangements. We also consider the prices of goods and services for wages, i.e. what we can buy with our salaries. It is the nominal wage, a certain amount of monetary units regardless of what we can buy, and the actual pay, which expresses the number of goods and services we can buy with our nominal salary. It, therefore, represents the purchasing power of money. The wage amount is precisely agreed upon in the employment contract and is part of a permanent employment relationship. When we talk about the number of wages, we are talking about the gross (amount of money specified in the employment contract), and net wages, which are the money paid, net of fees that are delivered to the state (fees to the social security, health insurance, income tax, etc. Mathematically, we can express Net wages = gross wages - income tax - contributions. Contributions are paid by the employee and the employer, who pays contributions to insurance companies and some other insurance companies. These

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

increase his costs and increase the price of the employee's work. We refer to the total work price as super gross salary, i.e. total salary costs for a specific employee.

Payments to the *social insurance* company are, e.g. sickness, old-age, disability, accident or guarantee insurance. The contribution amount is determined as a percentage and calculated from the gross salary. To determine the amount of the net wage, it is necessary to deduct from the gross salary the income tax advance, which is set at 19%.

Taxes and the tax system (Táncošová et al., 2015) are essential for the financial world. The amount of taxes is income to the state budget and affects the development of the economy and individual economic entities. Tax is a mandatory, legally established payment that every natural or legal person must pay at a specified time and amount. It serves the functioning of state departments, e.g. education, healthcare, transport and security, etc. It accounts for up to 90% of all state revenues. We divide them into direct and indirect taxes. Direct taxes are taxes on the income of natural and legal persons, property tax and tax on motor vehicles and local taxes, respectively. Indirect taxes are included in product prices and are not paid directly but indirectly. They are, e.g. value added tax (VAT as the largest source of income for the state budget) and consumption taxes, e.g. from alcohol, tobacco products, electricity, coal and natural gas. A summary of paid income tax is made once a year, i.e. tax return as of March 31 of the following year and annual accounting. In some instances, this period can be extended.

*Financial institutions* are entities that regulate and control the financial market and must have the necessary licenses and permits to perform their activities. The main body of supervision and regulation of the financial world in Slovakia is Národná banka Slovenska (NBS). It is a central bank that supervises the financial market and commercial banks, registers the number of financial institutions, controls financial intermediaries, keeps statistics and is at the top of the banking system.

Insurance (Horáková, Páleš & Slaninka, 2015) is a way of ensuring and protecting income and assets in case of an unexpected event. The main rule of security is the creation of a financial reserve and protecting of property and health. Insurance is a legal relationship implemented based on an insurance contract between the insurer (insurance company) and the insured (policyholder). The essence of this relationship is the assumption of responsibility for damage as a result of an insurance event. The insurance and the insurance premium amount are specified in the insurance contract, based on which the insurance company will pay the insurance benefit as compensation for damage. Insurance aims to mitigate the financial consequences of an unexpected event according to the principle of solidarity.

You can divide the *insurance* according to the legal form (Adamko, 2018):

- voluntary contractual insurance life, accident, accident insurance of motor vehicles, etc.,
- *mandatory contractual insurance* e.g. cars, statutory, contractual liability insurance for the damage caused by the operation of a motor vehicle,
- *statutory insurance*, which has the conditions of social insurance established by law, which is implemented in the Social Insurance Company (SP). *Social insurance* includes health insurance, e.g. maternity and nursing allowances; pension insurance, which can be old-age insurance and the payment of an old-age pension or disability and the provision of a disability pension; accident insurance, i.e. compensation in the event of a work accident, guarantee insurance and unemployment insurance. *Health insurance* (regulated by law) is related to the free provision of health care by health insurance companies (Dôvera, Union, Všeobecná zdravotná poisťovňa).

**Contractual insurance** is implemented based on a contract between the policyholder and the insurance company voluntarily, and it is possible to insure anything, e.g. life, property, children, liability for damage, etc.

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

In general, we divide insurance into life and non-life insurance. *Life insurance* (LI) is associated with personal insurance and covers the risk of death, disability, accident, etc. The sum insured (in case of an event to be paid out), the amount of the insurance premium (as a regular payment) and the insurance term (period of payment of the insurance premium) are determined. The principle of insurance is to cover accidental and unexpected events. There are three basic types of life insurance, namely capital (in case of death or survival and includes a guaranteed income), investment (in a chance of death or survival and is a combination of life insurance and long-term investment in mutual funds), and risk life insurance (in case of death, which when does not occur within the agreed period, the insurance premium will not be paid). All types cover selected insurance risks. In the case of capital and investment, a savings and appreciation component is also included.

In this connection with LI, supplementary insurances are available, e.g. incapacity for work, disability, death, serious illness, permanent consequences, etc. Risks in LI are divided into three groups: accident, disease and combined. Accident insurance covers the results caused by accident, sickness insurance covers the consequences caused by an illness, and combined insurance covers the effects of both an accident and a disease.

*Non-life insurance* (NLI) ensures non-living things, i.e. property, against adverse events, e.g. accidents, natural disasters, thefts, etc. The insurance premium thus covers the costs associated with damage removal and repair. There are several types of NLI concerning real estate, home, car, etc. insurance.

Banks and banking products. There is a two-tier banking system in the Slovak Republic, namely the NBS and commercial banks that provide various financial products, e.g. account management, payment transactions, loans, savings and at the same time, finances are under control. The main product of banks is keeping a current account, i.e. operations such as deposit and withdrawal of money, settlement of payments, direct debits, and payments by payment card, for which a certain fee is paid. Products and conditions are determined by each bank individually. A payment card is part of a current account and can be debit (the owner has his funds) or credit (it involves borrowing the bank's funds). Several operations can be carried out using internet banking, mobile phones or smartwatches.

Credit or loans can finance expenses. A loan is a financial product in which the financial institution provides the client with funds (principal), which the client then repays with a pre-agreed increase - interest. If we take a loan from the bank, we become the debtor, and the bank becomes the creditor. Interest is a reward for the bank for lending funds, expressed as an interest rate, i.e. a percentage of the amount owed. The interest rate is pre-agreed and stated in the loan agreement, which also displays the repayment period and interest periodicity - interest charged by the bank (monthly, quarterly, annually). The NBS determines the interest rate. It can be fixed (fixing the interest for a particular time) or variable depending on the development in the banking market. The risk with loans is the inability to repay one's obligations. Several possible solutions exist, e.g. permission to defer instalments for a particular time. Another option is extending the repayment period, i.e., reducing the repayment amount, refinancing or consolidating loans (combining several loans into one to reduce the interest rate). If the solutions are not sufficient, the bank can confiscate the property in the form of execution. If household indebtedness exceeds tolerable, clients declare personal bankruptcy, which is a borderline solution and will affect the entire future.

A *mortgage loan* is a long-term loan intended for the purchase of the real estate, e.g. house, land, apartment, etc., the maturity of which is from 4 to 30 years. The advantage of this loan is the possibility of obtaining a relatively large amount of funds for housing at relatively low-interest rates. There are conditions associated with the mortgage that must be met, namely:

• establish real estate, which must be insured, and the insurance payment must be in the amount of the unpaid part of the loan and paid to the bank; this is the so-called vinculation;

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

- the maximum indebtedness of the applicant is set at eight times the net annual income, that is, the maximum amount of the loan;
- the amount of the loan depends on the ratio of the amount of the loan to the value of the mortgaged property (the so-called LTV), and the value is determined based on an expert opinion, and the bank provides a loan of up to 80% of the value of the property;
- an important aspect is the amount of the applicant's disposable income, and the sum of all instalments must be at most 60% of this income after deducting the subsistence minimum. 40% of the income must be left for current expenses.

Another way of acquiring funds is a *consumer loan*, i.e. lending funds for various goods and services. It is a type of short-term loan without collateral and can be purposeful or non-purposeful. The *maximum amount* of such a loan or the sum of all individual loans is *EUR 40,000*. Its advantage is quick and easy access to funds, and its disadvantage is the high-interest rate, so you need to consider what the loan is intended for.

A specific way of drawing a loan is a *credit payment card*, on which there are no own funds, but the bank's funds are drawn. The advantage is the interest-free period, i.e. if the funds are returned within the specified period, no interest is paid. It is necessary to be careful because if the maturity date is not met, the interest charged by the bank is high and can lead to indebtedness.

Another option is the *instalment sale*, a type of product when purchasing, e.g. e-shops and many non-bank entities provide it. It is often used when buying consumer goods and belongs to the quick acquisition of money, but also with a high-interest rate. You will pay less once, but overall the original price is reimbursed. These are short-term loans, and their repayment is within two years; they are relatively expensive.

**Leasing** is a type of financing expense most often associated with the purchase of a car or machinery. First, it is necessary to pay the so-called down payment as the initial amount, and the rest of the amount is divided into further instalments and administration fees, increasing the product's price. In leasing, the owner is, e.g. cars during repayment by the leasing company, i.e. it is paid for the rental of the property in question. We distinguish between financial (ownership of the object passes to you after repayment of a specified amount) and operational leasing (the lease of an object with the possibility of purchase after reimbursement).

*Non-bank entities* are financial institutions that provide short-term credits and loans quickly but very expensively. This means the funds are highly repaid and among the most expensive on the financial market.

The *financial market* provides a wide range of options for accessing money and financing our expenses if we do not have enough funds or enough financial reserves. However, the basic rule of economic health is "the best credit is no credit." The most significant risk with loans is insolvency, i.e. inability to pay their obligations and loans. Non-payment can lead to indebtedness, personal bankruptcy, or execution.

The priority in financial planning is *creating and evaluating reserves* in the event of an unexpected event or a budget for the future. Risk, yield and liquidity are related to form*ing resources and appreciation*.

The **return** is the difference between the initial and the value after a certain period. By income, we mean all revenue and profits that investments will bring. It is a reward for the investor influenced by risk and liquidity. **Risk** is the uncertainty of future returns, i.e. the value of assets may decrease and not bring a profit but a loss. The rule is that the greater the risk, the greater the yield and vice versa. It is the possibility of an unfavourable situation or the threat that there will be a loss in connection with the fluctuation of the markets and a reduction in the value of the investment. Liquidity is the ability to turn an investment into money, preferably without a loss. So it is the

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

speed of conversion of investment into money - cash. The most liquid are, e.g. securities and real estate have the lowest.

Valorization in the form of *savings and investments* is most often used (Táncošová et al., 2015). Their difference lies in who takes the risk in the event of a decline in yield or profit from the investment. When saving, the bank guarantees the return amount, which is agreed upon in advance. However, it is usually below inflation and at a relatively low level. When investing, it is a higher return, but the investor assumes the risk in the event of a decrease in the return. It is difficult to predict how the investment will be evaluated. Consumption can be understood as deferred consumption, which we spend anyway. At the same time, the investment brings passive income. Savings and assets can be perceived as creating a financial reserve, and when saving, for example, through a savings account. Investing in the future is a better choice.

A *savings account* is a short-term product for storing and appreciating funds, albeit with low interest. It is a combination of a current account and a term deposit. The advantage is a guaranteed and precisely determined return, quick access to saved funds and protection of deposits. The disadvantage is the currently low rate of appreciation of 0.01 to 0.5% per year.

## **Answer to RQ3**

What does financial literacy mean for children - it is an abstract concept; therefore it is necessary to start gradually and in accordance with the age and form of games. For example, to distinguish between individual banknotes and coins - children can master it relatively early, already in preschool age (various imitations of money can help in games - playing at the store, the market, etc.).

## The trade game helps to understand:

- the principle of "something for something" and that we always have a limited amount of money;
- where the money comes from, i.e. having money means going to work because "without work, there is no cake".

### **Answer to RO4**

The child receives money on various occasions (not only pocket money), so it is necessary to teach the *principle* of saving and saving money. It is essential to explain why it is crucial to saving money, i.e. it is required to show the destination for which the funds will be saved (trip, toy, phone, etc.). He must understand that saving does not mean spending more at once, but creating a *financial reserve* or savings for the purpose of unexpected expenses, i.e. for worse times. It is possible to open a student account and teach him to use a payment card (retain partial control over the budget and expenses). Teach the child that money is first spent on necessary things, and only after basic needs are satisfied can it be spent, e.g. for toys, entertainment, etc. (Fekete, 2022) He must understand the difference between a need and a want.

### **Answer to RO5**

By starting school and mastering the basics of mathematics, children can learn to handle real money in everyday life as *pocket money*. It is the amount of money that you regularly give to the child that is appropriate for the child's age. It is essential to establish clear rules, i.e. how much and when he will receive the money, and explain how he will spend it because it is for the whole month - *expediency*, which implies the *limitation of the amount of money*. He will learn to understand the consequences of his decisions, and in case he misses them earlier, it must lead him to caution and responsibility.

It should be noted that financial literacy is essential not only for households (whole families and their members) but also for business entities - small and medium-sized enterprises (from now on SMEs), which make up more than 90% of all enterprises in every economy. Knowledge and insights from financial literacy and critical economic categories related to business activities can help these subjects precisely under challenging periods. An

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

example can be the development of established and defunct SMEs. According to available statistics, the number of defunct entities was 1,891 in 2017, 1,903 in 2018, 1,312 in 2019, 1,504 in 2020 and 383 in 2021 (OECD Economic Surveys Slovak Republic, 2022). Generally, the number of established and closed SMEs is comparable each year. In addition to other causes of extinction, it is essential to point out, e.g. the liquidity indicator, payment discipline, indebtedness of enterprises, and provision of loans. In this context, it is possible to consider low profitability as the leading cause of their demise. From the point of view of the investigated financial literacy, it is possible that better orientation, even in these associations, could at least reduce the number of defunct entities.

#### **Conclusions**

The paper presents the current state of financial literacy teaching in secondary schools in the education system in the Slovak Republic, including the commercial sector's efforts and state officials' activities. The authors believe that financial literacy is crucial in sustainable business development; therefore, teaching starting from the early stages of life can not be overestimated.

Based on the research results presented above, the authors offer the content and methods of teaching financial literacy to students in secondary education in the Slovak Republic, from which the following insights are the most important:

- Financial literacy is not only a matter of secondary education but the basic principles of financial education should already be observed by children of preschool age.
- Primary school graduates should be responsible in the area of managing finances.
- High school graduates should understand managing finances, including products of the banking and insurance system, the functioning of the labour market, and the evaluation of savings and investments.
- Real coins and banknotes are the most optimal didactic aids for teaching financial literacy.
- Parents can teach their children to handle money correctly in everyday life in the form of a perfectly set pocketbook appropriate for the child's age and by correctly observing habits of managing finances within the family.
- Business entities also need to use knowledge and be financially literate for their activities directly related to this area's content and education methods. Teaching financial literacy and educating primary, secondary and higher school graduates will also be high-quality entrepreneurs.

In conclusion, research does not exhaust the topic of increasing financial literacy. The mentioned topic is so current and necessary that it is essential to continue efforts to increase financial education with the support of representatives of the commercial sector and state officials. The authors plan to continue researching financial literacy in Slovak education. The authors want to extend the research to research financial literacy in small and medium-sized businesses.

### References

Adamko, J. (2018). Poistenie a poistný trh. Michal Vaško - Vydavateľstvo, ISBN 978-80-8198-027-5, 188 p.

Alekam, J.M.E., Salleh, M.S.B.M., & Mokhtar, S.S.B. (2018). The Effect of Family, Peer, Behavior, Saving and Spending Behavior on Financial Literacy among Young Generations. *International Journal of Organizational Leadership*, 3, 309-323. <a href="https://doi.org/10.33844/ijol.2018.60258">https://doi.org/10.33844/ijol.2018.60258</a>

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

Burchi, A., Wlodarczyk, B., Szturo, M., & Martelli, D. (2021). Effects of Financial Literacy on Sustainable Entrepreneurship. *Sustainability*, 13(9), Article Number 5070 <a href="https://doi.org/10.3390/su13095070">https://doi.org/10.3390/su13095070</a>

Chhatwani, M., & Mishra, S.K. (2021). Does financial literacy reduce financial fragility during COVID-19? The moderation effect of psychological, economic and social factors. *International Journal of Bank Marketing*, 39(7), 1114-1133. <a href="http://doi.org/10.1108/IJBM-11-2020-0536">http://doi.org/10.1108/IJBM-11-2020-0536</a>

Chovancová, B. et al. (2021). Investovanie na finančných trhoch. Bratislava: Sprint 2, ISBN: 978-80-8971-053-1

Clichici, D., & Moagar-Poladian, S. (2022). Financial Literacy, Economic Development and Financial Development: A Cross-Country Analysis. *Romanian Journal of European Affairs*, 22(1), 35-49.

Čaplinska, A., & Danileviča, A. (2022). Financial literacy of secondary school leavers: a case of Latgale region in Latvia, *Entrepreneurship and Sustainability Issues*, 10(2), 544-556. <a href="https://doi.org/10.9770/jesi.2022.10.2(34)">https://doi.org/10.9770/jesi.2022.10.2(34)</a>

Dluhošová, D. et al. (2021). Finanční řízení a rozhodování podniku. Analýza, Investování, Oceňování, Riziko, Flexibilita, Interakce. Štvrté vydanie. Praha: Ekopres ISBN 978-80-878-6571-2, 262 p.

Fekete, D. (2022). Finančná gramotnosť a deti. Financer.com. https://financer.com/sk/blog/financna-gramotnost-a-deti/

Fujiki, H. (2021). Household financial services, financial literacy, and COVID-19 pandemic. *Applied Economics Letters*, 29(7), 615-618. http://doi.org/10.1080/13504851.2021.1878092

Horáková, G., Páleš, M., & Slaninka, F. (2015). Teória rizika v pistení. Bratislava: Wolters Kluwer. ISBN 9788081682735, 424 p.

INVEST in Slovakia. (2022). Finančná gramotnosť Slovákov je nízka. Ako ju zlepšiť? https://investinslovakia.eu/sk/financna-gramotnost-slovakov-je-nizka-ako-ju-zlepsit/

ISCED 3A. (2010). Občianska náuka. (Vzdelávacia oblasť: Človek a spoločnosť). Štátny vzdelávací program. Štátny pedagogický ústav. Bratislava.

Janáková, J., & Fabová, Ľ. (2017). Finančná gramotnosť slovenských vysokoškolákov. Journal of knowledge society, 2(5), ISSN 2336-2561.

Kawamura, T., Mori, T., Motonishi, T., & Ogawa, K. (2021). Is financial literacy dangerous? Financial literacy, behavioral factors, and financial choices of households. *Journal of the Japanese and International Economies*, 60, Article Number 101131 <a href="https://doi.org/10.1016/j.jjie.2021.101131">https://doi.org/10.1016/j.jjie.2021.101131</a>

Kubak, M., Gavurova, B., Majcherova, N., & Nemec, J. (2021). Gender differences in rationality and financial literacy. *Transformations in Business & Economics*, Vol. 20, No 2A (53A), pp. 558-571.

Lincényi, M. et. al. (2020). Návrh metodických listov pre učiteľov občianskej náuky na stredných školách v Slovenskej republike. Trenčianska Univerzita Alexandra Dubčeka v Trenčíne, ISBN 978-80-8075-914-8.

Luo, W.Q., & Cheng, J.X. (2022). Transition to sustainable business models for green economic recovery: role of financial literacy, innovation and environmental sustainability. *Economic Change and Restructuring* <a href="https://doi.org/10.1007/s10644-022-09408-1">https://doi.org/10.1007/s10644-022-09408-1</a> Early Access JUN 2022

MF SR. (2022). Finančná gramotnosť a vzdelávanie. Implementácia finančnej gramotnosti. <a href="https://www.mfsr.sk/sk/financie/financny-trh/ochrana-financnych-spotrebitelov/financna-gramotnost-vzdelavanie/">https://www.mfsr.sk/sk/financie/financny-trh/ochrana-financnych-spotrebitelov/financna-gramotnost-vzdelavanie/</a>

MŠVVaŠ SR. (2017). Národný štandard finančnej gramotnosti verzia 1.2. číslo 2017-1053/10961:12-10E0 s účinnosťou od 1. Septembra 2017. <a href="https://www.minedu.sk/data/att/11359.pdf">https://www.minedu.sk/data/att/11359.pdf</a>

Nejedlý, T. (2019). Finančná gramotnosť je problem. Lubyová ponúka čudné riešenie. Týždenník Trend, <a href="https://www.trend.sk/trend-archiv/financna-gramotnost-je-problem-lubyova-ponuka-cudne-riesenie">https://www.trend.sk/trend-archiv/financna-gramotnost-je-problem-lubyova-ponuka-cudne-riesenie</a>

OECD. PISA (2012). Financial literacy assessment framework. https://www.oecd.org/pisa/pisaproducts/46962580.pdf

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

OECD Economic Surveys Slovak Republic. (2022). <a href="https://www.oecd.org/economy/surveys/Slovak-Republic-2022-OECD-economic-survey-overview.pdf">https://www.oecd.org/economy/surveys/Slovak-Republic-2022-OECD-economic-survey-overview.pdf</a>

PARTNERS Foundation. (2021). Finančná gramotnosť v kocke. Učebná pomôcka pre stredoškolákov. <a href="https://www.nadaciapartners.sk/storage/app/media/financna-gramotnost-v-kocke-2021.pdf">https://www.nadaciapartners.sk/storage/app/media/financna-gramotnost-v-kocke-2021.pdf</a>

Pearson, B., & Korankye, T. (2022). The association between financial literacy confidence and financial satisfaction. *Review of Behavioral Finance*, https://doi.org/10.1108/RBF-03-2022-0090 Early Access SEP 2022

SBA. (2007). Finančná gramotnosť na Slovensku – 2007. <a href="https://www.viacakopeniaze.sk/files/vapucebnica/finacnagramotnost-prieskum-2007.pdf">https://www.viacakopeniaze.sk/files/vapucebnica/finacnagramotnost-prieskum-2007.pdf</a>

SBA. (2022). Vznik a zánik malých a stredných podnikov na Slovensku v roku 2021. <a href="https://monitoringmsp.sk/wpcontent/uploads/2022/10/Vznik-a-z%C3%A1nik-mal%C3%BDch-a-stredn%C3%BDch-podnikov-na-Slovensku-v-roku-2021-1.pdf">https://monitoringmsp.sk/wpcontent/uploads/2022/10/Vznik-a-z%C3%A1nik-mal%C3%BDch-a-stredn%C3%BDch-podnikov-na-Slovensku-v-roku-2021-1.pdf</a>

Táncošová, J., Hudáková, M., & Švecová, S. (2015). *Ekonómia*. Druhé vydanie. Bratislava: Wolters Kluwer, ISBN 978-80-8168-294-0, 348 p.

Zhu, A.Y.F. (2021). Financial literacy types and financial behaviors among adolescents: role of financial education. *Journal of Financial Counseling and Planning*, 32(2), 217-230. https://doi.org/10.1891/JFCP-19-00051

Wiagustini, N.L.P., Ramantha, I.W., & Putra. (2023). Financial literacy and financial behavior encouraging business sustainability by mediation of financial performance. *Quality-Access to Success*, 24(192), 226-234. <a href="https://doi.org/10.47750/QAS/24.192.27">https://doi.org/10.47750/QAS/24.192.27</a>

**Funding:** This research was funded by Cultural and Educational Grant Agency of the Slovak Republic: "Creation of digital didactic aids to the subject Civics Education for the needs of secondary education in distance form", Project registration number Project No. 009 TnUAD-4/2021

Data Availability Statement: More data may be obtained from the authors on a reasonable request.

**Author Contributions**: Conceptualization: *Judita Táncošová, Marcel Lincényi*; methodology: *Marcel Lincényi*; data analysis: *Judita Táncošová*, writing—original draft preparation: *Judita Táncošová*, *Marcel Lincényi*, *Michal Fabuš* writing; review and editing: *Judita Táncošová*, *Marcel Lincényi*; *Michal Fabuš* All authors have read and agreed to the published version of the manuscript.

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2023">http://jssidoi.org/jesi/2023</a> Volume 10 Number 3 (March) <a href="http://doi.org/10.9770/jesi.2023.10.3(19)">http://doi.org/10.9770/jesi.2023.10.3(19)</a>

**Prof. Ing. Judita TÁNCOŠOVÁ, PhD.** is a Profesor of Management at the Bratislava University of Economics and Management. Special interest in International Economics Relation and Foreign Direct Investment. Her text book, monographs, scientific paper and article deal with the International business and management, microeconomic and macroeconomic problems.

**ORCID ID:** <a href="https://orcid.org/0000-0001-8963-6280">https://orcid.org/0000-0001-8963-6280</a>

Assoc. prof. PaedDr. PhDr. Marcel LINCÉNYI, PhD. is a vice-rector for doctoral and postgradual studies, and Head of Department of management and marketing of the University of Economics and Management in Bratislava (BUEM), Slovakia. Scientific field: marketing, media communication, financial literacy

**ORCID ID:** https://orcid.org/0000-0002-9076-026X

Assoc. prof. Ing. Michal FABUŠ PhD. is an associated professor of Management and PhD. in International Economics Relations, obtained at University of Economics in Bratislava. Vice-rector for Foreign Affairs, Head of Department of Economics and Finance, Bratislava University of Economics and Management (BUEM). Special interest in International Economics Relations, International business and Foreign Direct Investment.

**ORCID ID:** <a href="https://orcid.org/0000-0002-3792-179X">https://orcid.org/0000-0002-3792-179X</a>

Make your research more visible, join the Twitter account of ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES: @Entrepr69728810

Copyright © 2023 by author(s) and VsI Entrepreneurship and Sustainability Center This work is licensed under the Creative Commons Attribution International License (CC BY). <a href="http://creativecommons.org/licenses/by/4.0/">http://creativecommons.org/licenses/by/4.0/</a>

© Open Access