IMPLICATIONS OF FINANCIAL LITERACY ON THE FINANCIAL RESILIENCE OF HOUSEHOLDS AND ECONOMIC GROWTH

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Abstract: *A population with a high level of financial education is more resilient, capable of making efficient and balanced financial decisions, thereby contributing to the sustainability of financial markets and the country's economic growth. Based on this premise, the aim of this study is to analyze the interdependence between the level of financial literacy, resilience, and the financial well-being of households.*
The applied methodology combines qualitative and quantitative methods. The method of logical abstraction facilitated the systematization of key concepts. Analytical tools such as correlation analysis were used to evaluate the strength of the relationships between the analyzed variables, identifying the most relevant factors influencing economic growth and the financial resilience of households.
The results obtained include the systematization and generalization of the determinants of financial behavior and financial literacy levels. The analysis of the main patterns of household financial behavior confirmed the hypothesis that choosing financial strategies requires a certain level of financial competence. Undoubtedly, financial education is one of the most important factors for both national economic growth and the increase of household incomes. Moreover, financial education is an essential tool in combating poverty and ensuring sustainable well-being.

Keywords: *financial literacy, financial resilience, financial well-being, households*

JEL Classification: *O12; D14; O16; D31*

INTRODUCTION

Financial literacy is one of the fundamental determinants of the financial stability of households. The international community, represented by the Organisation for Economic Co-operation and Development (OECD, 2021), the Leaders of the G20 countries, the World Bank, the European Union, BRICS, and other international organizations, recognizes financial education as a necessary condition for ensuring household well-being and resilience, as well as for encouraging inclusive and sustainable economic growth. The current socio-economic conditions highlight the importance of increasing the level of financial literacy among the population, as the quality of financial decisions directly depends on individuals' knowledge and skills in this field.

Today's reality raises justified concerns, particularly among those who lack the necessary knowledge and competencies to manage their personal or family finances effectively. Increasing financial literacy is not only a matter of personal security but also a key factor for the stability of the entire economy. Irrational decisions in saving and investment are not always immediately apparent but can severely impact the long-term financial security of a significant portion of the population. The lack of financial literacy is particularly prevalent among large segments of society. Individuals with a low level of financial knowledge are more prone to making unconscious mistakes and are less likely to adopt recommended financial strategies. Moreover, they face difficulties in adapting to unexpected economic shocks, making them even more vulnerable to financial instability.

Research in behavioral finance indicates that many households fail to make optimal financial decisions, thereby increasing the risk of a lower standard of living in the future. The responsibility for financial decisions increasingly falls on individuals themselves, while the complexity of choices grows along with their significance. Observations regarding major financial decision-making without adequate knowledge and tools reveal that: a) financial mismanagement is a widespread phenomenon, b) such errors often accumulate subtly and become evident only during major crises, and c) the consequences of these mistakes can have systemic effects, leading to significant costs for household stability and citizens' well-being.

Numerous studies emphasize the importance of financial knowledge and the use of analytical tools in making informed investment decisions and minimizing individual financial risks. The decision-making process requires in-depth knowledge and a broad set of analytical tools to prevent errors in managing personal finances (Maillet et al., 2020; Kamath & Vishwanath, 2022; Sharpe, 2018; Jurczenko & Teiletche, 2022; Lewis & Riley, 2020).

Research conducted in various countries indicates that different population groups exhibit varying levels of financial literacy, highlighting disparities in financial competence among demographic categories. Demographic patterns of financial literacy have been analyzed by B. Parag, who identified significant differences between various population groups, noting that financial literacy levels are considerably lower among certain groups, such as young adults, individuals with lower levels of formal education, and low-income households (Parag, 2023). Researchers Xu and Zia examined differences in adult financial literacy across countries by considering individual characteristics and institutional factors, revealing substantial variations in financial literacy levels between nations (Xu & Zia, 2021). In a comparative study, J. Smith and R. Johnson analyzed how demographic and socio-economic factors influence financial literacy and the impact of financial literacy disparities on various demographic subgroups, providing recommendations for tailored strategies to improve financial literacy (Smith & Johnson, 2022).

Significant differences in financial literacy levels may disadvantage economically vulnerable groups (such as low-income individuals, those with insufficient education, and certain ethnic minorities). These disparities are associated with suboptimal financial behaviors. "Individuals with higher financial knowledge are more likely to adopt a wide range of recommended financial practices" (Hilgert, Hogarth & Beverly, 2003). At the same time, A. Lusardi and O. Mitchell found that "older individuals who demonstrated better financial knowledge were more likely to plan, succeed in planning, and invest in complex assets" (Lusardi & Mitchell, 2007). However, other researchers argue that "financial literacy is a secondary issue in decision-making, partly because data on financial education programs are ambiguous" (Rothwell & Wu, 2019).

A review of the specialized literature has identified key disagreements and divergent perspectives, primarily linked to several factors: the lack of understanding regarding the interdependencies between financial literacy, general education levels, and behavioral patterns; gaps mainly caused by insufficient qualitative and representative data needed for rigorous research; and a deficit of scholarly work wherein authors have successfully developed sufficiently detailed indicators to establish causal links between financial education, financial literacy levels, and actual changes in financial behavior within society, as well as economic growth.

Thus, the necessity of deepening research in this field is evident and remains a priority, particularly concerning how financial education influences the well-being, resilience, and financial security of households.

The scientific hypothesis derived from this literature review posits that financial literacy is a determinant of citizens' standard of living, thus their well-being, as reflected in the GDP per capita adjusted for purchasing power parity (GDP (PPP) per capita), expressed in conventional currency units that eliminate the effects of price level differences between countries. In turn, financial literacy depends on financial education and facilitates the financial resilience of households to various shocks, while financial resilience is a prerequisite for financial well-being, and when maintained and strengthened, financial well-being supports the financial security of citizens.

METHODOLOGY FOR ASSESSING THE LEVEL OF FINANCIAL LITERACY

The documentation process for defining the conceptual and methodological framework of financial literacy and resilience among citizens involves analyzing scientific literature, relevant reports and studies, the methodological tools of the OECD/INFE (International Network on Financial Education, 2022), reports on financial well-being and financial literacy in Romania (Nițoi, 2022), the United States (Board of Governors of the Federal Reserve System, 2023), as well as other reference works and databases.

The European Union's common framework of financial competencies for children and youth, as well as the common framework of financial competencies for adults, aims to enhance financial literacy among EU citizens, equipping them with the necessary knowledge to make informed financial decisions, are based on the OECD/INFE core competencies framework for financial literacy.

The EU/OECD-INFE common framework of financial competencies categorizes competencies into four content areas:1) money and transactions; 2) financial planning and management; 3) risks and rewards; 4) the financial landscape. Each competency is assessed across three dimensions: (i) awareness/knowledge/understanding, (ii) skills/behavior, and (iii) confidence/motivation/attitudes. The total financial literacy score, calculated using the 2022 OECD/INFE tool, is a composite measure ranging from 1 to 21. This score is derived from the sum of three key components: the financial knowledge score, the financial behavior score, and the financial attitude score. A maximum score indicates that an individual has an adequate understanding of financial concepts and applies rational principles in managing financial operations. Each of the three components is calculated based on responses to a set of questions designed to comprehensively assess financial literacy, which results from the three dimensions: knowledge, behavior, and attitudes toward personal finance management.

Financial knowledge is an essential component of financial literacy, aiding individuals to compare financial products and services and make well-informed financial decisions. Understanding fundamental financial concepts and applying arithmetic skills in financial contexts provide consumers with greater confidence in managing financial matters and a better comprehension of economic and financial events that may impact their financial well-being. Financial knowledge is assessed based on responses to seven questions that evaluate understanding of common financial products and services, simple and compound interest, inflation, risk, and return.

According to the OECD/INFE 2022 methodology, financial behavior is evaluated through three thematic blocks (nine questions) that reflect possible patterns of rational financial behavior (OECD, 2022):

I. *Saving and long-term planning.* This block includes three questions aimed at identifying whether respondents: a) actively save money, b) borrow money in times of financial difficulty or avoid loans, c) set long-term financial goals.

II. *Discerning purchasing decisions.* The questions in this block assess whether respondents: a) seek independent sources of information or advice before purchasing financial products or services, b) consider multiple available options before making decisions, c) research the market to make well-founded decisions before purchasing a financial product or service.

III. *Financial management.* This block evaluates the extent to which respondents: a) manage their finances effectively, b) pay their bills on time, c) adhere to payment deadlines.

The questions designed to assess financial behavior provide insights into the actions of financial service consumers across different countries. Additionally, these behavioral components are integrated into financial stability indicators. By aggregating the results from the nine questions/items, a score is obtained that characterizes an individual's financial behavior in relation to their finances. There are studies that indicate that even individuals with sufficient knowledge and the ability to act rationally may have their financial decisions influenced by their attitudes toward various financial matters.

To assess attitudes toward money and personal financial planning, the OECD/INFE 2022 methodology includes three key blocks of statements. Respondents who exhibit a positive attitude toward saving and long-term financial planning receive a higher attitude score. Financial attitude evaluation is based on respondents' agreement or disagreement with statements related to saving and future planning, using a rating scale from 1 to 5, where 1 represents total agreement with the statement and 5 represents total disagreement.

According to the OECD (2022) methodology, financial well-being is presumed for respondents who disagree with statements that indicate financial instability, meaning those who scored 1 or 2 points. Assessing citizens' financial attitudes allows for the identification of financial preferences and motivations, measurement of their inclination toward saving and setting long-term financial goals, and the correlation of their attitude toward money with other aspects of financial literacy, such as knowledge and financial behavior.

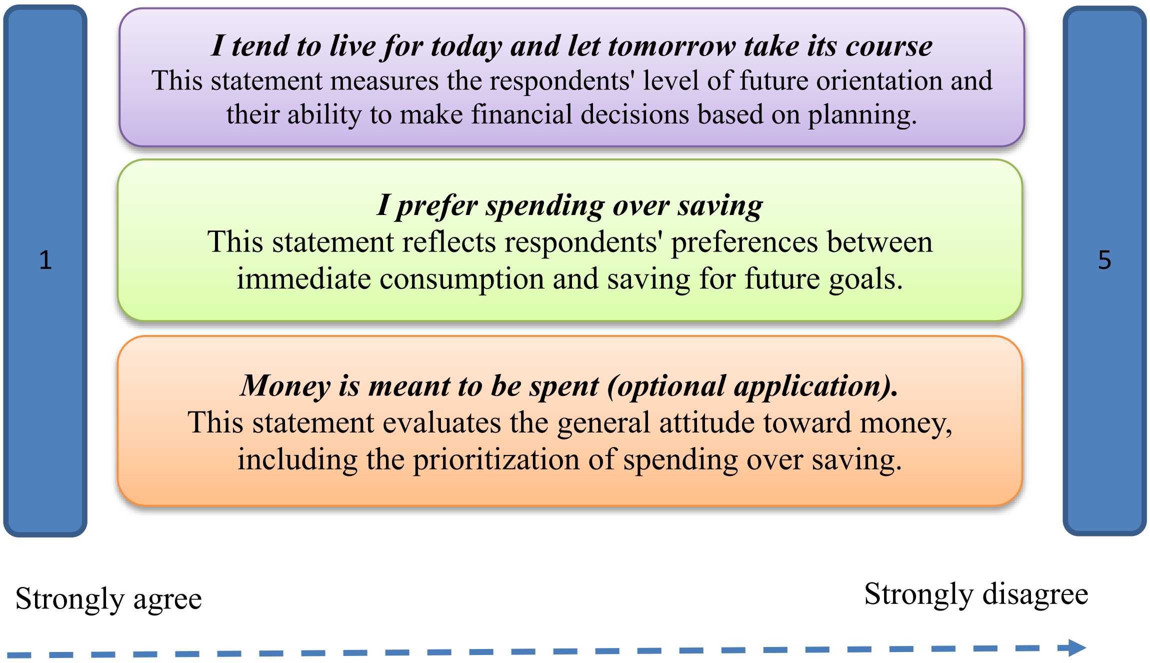

Figure 1. Statements for Assessing Financial Attitudes (Block 1)
Source: Developed by the authors based on the OECD/INFE Methodology (2022)

These statements (Figure 1) have objective of evaluation of objective or measurable financial well-being. At the same time, the subjective aspect of financial attitudes is considered equally important in analyzing perceptions of financial well-being, reflecting respondents' attitudes toward how their financial situation controls their lives. The statements used to evaluate the subjective dimension of financial attitudes are categorized into two blocks (Figure 2). The first block includes three statements, in relation to which respondents express their agreement or disagreement by assigning a score between 1 and 5. According to the OECD methodology, individuals who assign 1-2 points for each of the three statements in the first block—thus agreeing with the respective statements—are considered to have a certain level of financial well-being. The second block of statements includes statements 4 and 5. By expressing their agreement or disagreement with these statements, a comprehensive assessment of financial well-being and the emotional impact of the economic situation on citizens and their households can be conducted. Disagreement with statements 4-5 from Figure 2 indicates a state of financial well-being.

It should be noted that researchers in their studies utilize both the assessment tools developed by the OECD/INFE, which are continuously refined, as well as other research methods that allow for a deeper analysis of influencing factors and the development of necessary strategies and actions. The OECD methodology itself is continuously improved and expanded. Among the digital financial competencies added in 2023 are skills related to digital currencies, digital payment instruments and methods, crypto-assets, personal data and its protection, digital financial products and services, automated financial advising, online scams and fraud, as well as cybersecurity risks.

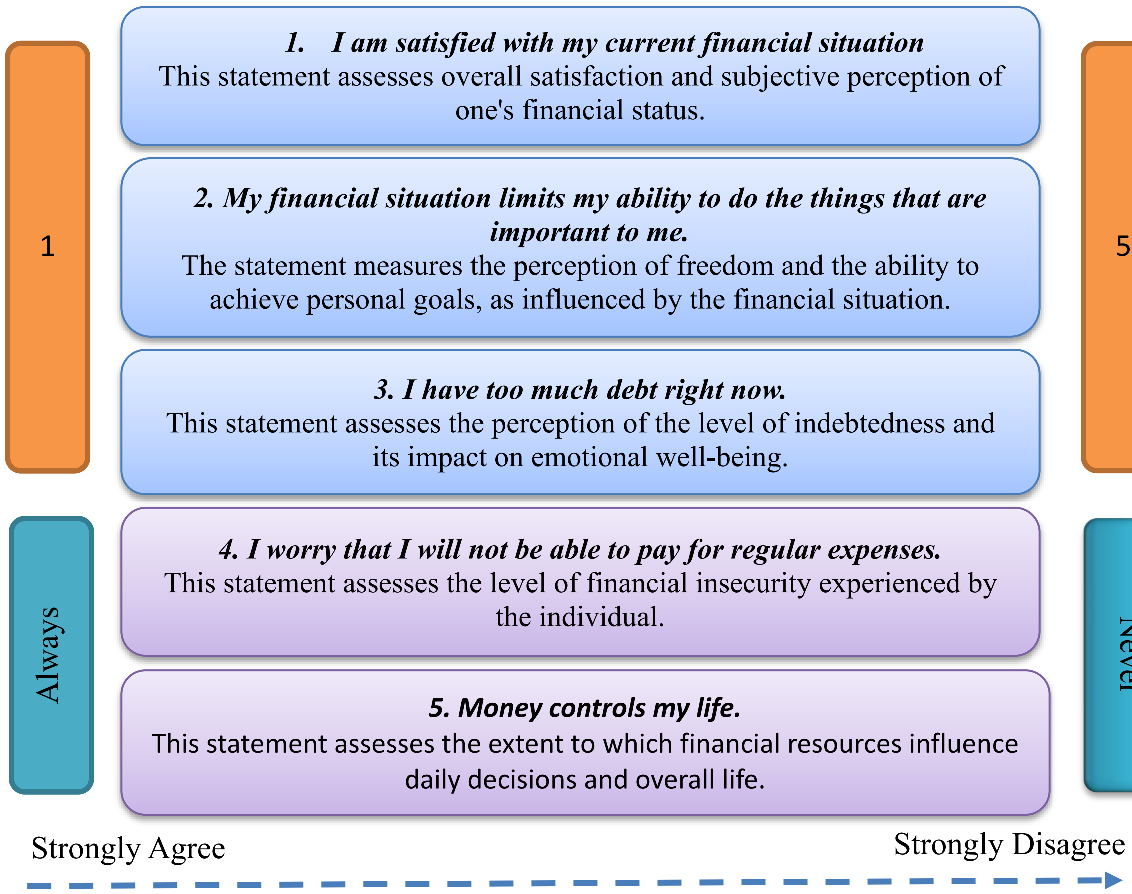

Figure 2. List of Statements for Assessing Financial Well-Being

Source: developed by the authors based on the OECD/INFE Methodology (2022)

The presented analysis suggests that a deeper examination can be conducted by considering the correlation between different concepts and approaches related to financial literacy and the financial well-being of citizens and households. In this study, the authors utilized the financial literacy scores for 2023 published by the OECD for a sample of 37 countries. To test the proposed hypothesis, data from the World Bank database on GDP (PPP) per capita for the year 2023 (EuroStat, 2024) was systematized for the same sample of countries (World Bank, 2024). The statistical correlation method was selected to highlight the existing dependency between these variables.

RESULTS AND DISCUSSION

Financial crises that have had impact on the economies over time highlight the fragility of economic systems. At the same time, their effects underscore the importance of adopting responsible and sustainable economic behavior at both the household and business levels, as reckless financial behavior contributed to the creation of the mortgage bubble and the onset of the 2008 crisis.

The importance of financial education is globally recognized, including at the EU level, as reflected in the Common financial competence framework for children and youth and the Common financial competence framework for adults, which aim to improve financial literacy among young people, ensuring that they are prepared to make informed personal financial decisions.

The results of the Eurobarometer 2023 survey (European Union, 2023) on financial literacy confirmed that overall financial literacy levels in the EU remain alarmingly low. It is well established that strong financial education contributes to sound financial decision-making. The saving process for households can be considered an important mechanism for smoothing income volatility and mitigating economic shocks. Furthermore, in the context of an underdeveloped capital market, deposits remain one of the few financial instruments used for asset accumulation. In many countries, consumption growth has been financed through borrowing, and for numerous households, these loans became non-performing during economic crises. To prevent such situations and promote economic well-being, financial culture and literacy should be widely encouraged at the household level. Household financial decisions regarding saving and spending are also of interest to financial institutions, which should provide households with appropriate financial services. According to data from the National Bank of Moldova (BNM), in 2023, only 8% of Moldovans saved in the form of investments, while 6% did not hold any bank account.

The issue of increasing the financial literacy level among citizens of the Republic of Moldova remains highly relevant.

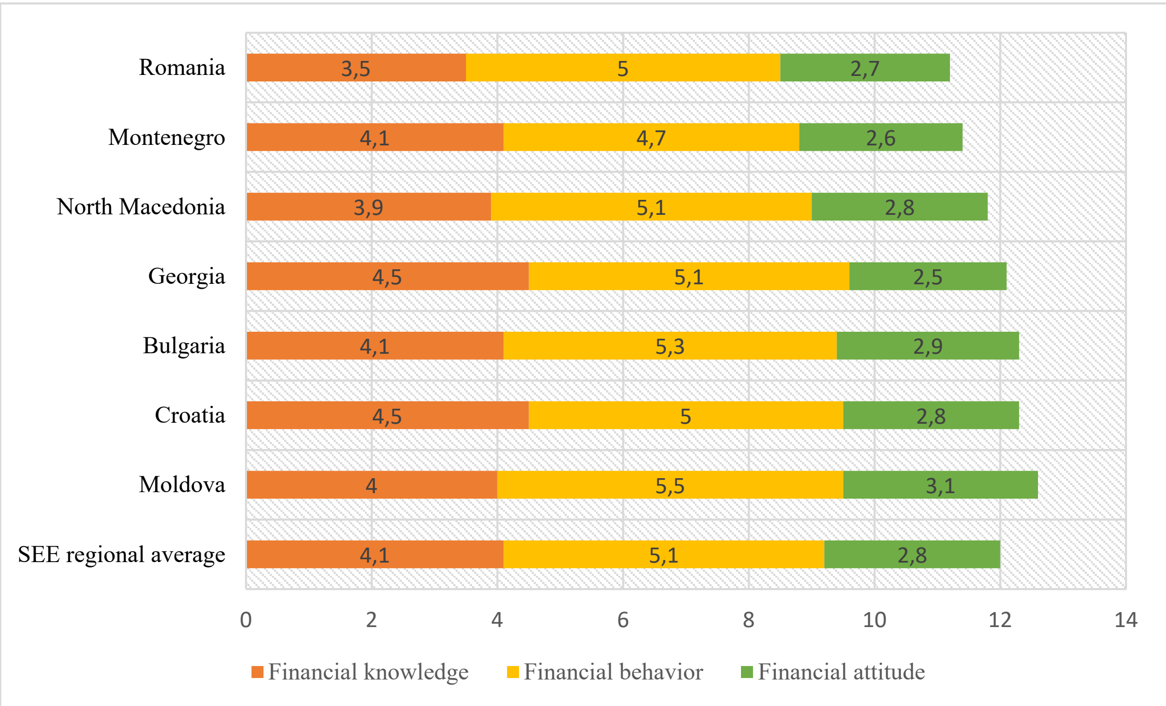

Figure 3. Financial Literacy Scores for 2023 in Southeast European Countries
Source: OECD (2020), pag. 13

According to the OECD research conducted in 2020 on Southeast European countries (OECD, 2020, p. 14), citizens of the Republic of Moldova demonstrated high performance compared to other countries in the region in terms of financial behavior (61%) and financial attitude (61%), while scoring lower in financial knowledge (57%). However, Moldova recorded the highest overall financial literacy score in the region—12.6 points, which is 0.6 points higher than the regional average and 1.4 points higher than the lowest score, recorded in Romania. Despite this, Moldovan citizens do not actively invest in insurance products, savings products, investment funds, or pension funds. Only 9.8% of respondents in the OECD study reported holding savings accounts, investment financial products, while 7.2% reported having placements in life insurance products (OECD, 2020, p. 48).

In the context of enhancing financial literacy and development of rational financial behavior among households and citizens of Republic of Moldova, it is recommended to promote positive financial behavior models and encourage responsible financial attitudes. Specifically, two action directions are proposed: a) Encouraging saving habits and wealth accumulation; b) Promoting the development of long-term financial plans.

Understanding the factors underlying saving and borrowing decisions is essential for designing new financial products and renegotiating lending terms for clients affected by crises. Individual decisions regarding saving or spending money impact the entire economy, as household savings serve as the primary source of investment financing. A country's economy may stagnate if the population has low confidence in the economy, leading to delayed or reduced spending. Conversely, long-term prosperity can only be achieved under conditions of economic confidence and responsible consumption.

The connection between financial education, financial literacy, financial resilience, financial well-being, and financial security of individuals and households is complex, forming an interdependent chain that contributes to the development of a sustainable personal financial system. These concepts can be integrated into a logical framework (Figure 4).

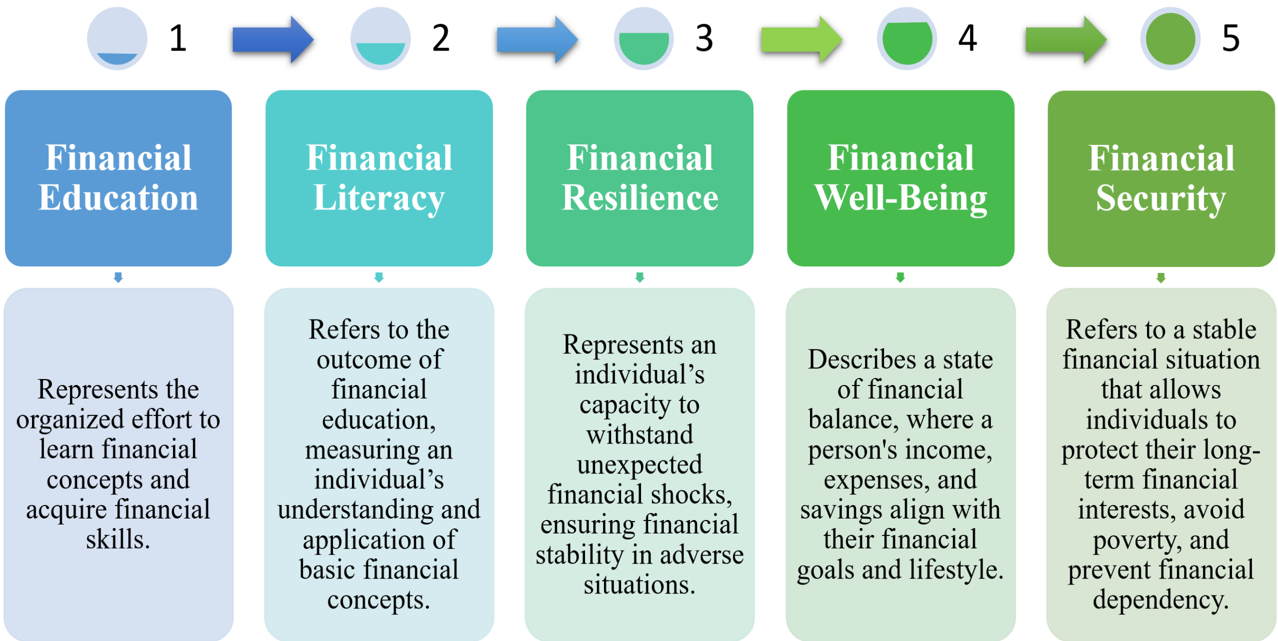

Figure 4. The connection between financial education, financial literacy, financial resilience, financial well-being, and financial security
Source: developed by the authors

This connection illustrates a gradual development process, in which each element plays a vital role in shaping an individual's financial behavior. Investments in financial education, both at the individual and societal levels, are essential for creating a more resilient, prosperous, and financially secure population.

The data presented in Figure 4 suggest that *financial education* serves as the foundation for all other components. Through financial education, individuals acquire knowledge about saving, investing, budgeting, debt management, and other critical aspects of personal finance. With proper financial education, individuals develop competencies that manifest as a certain level of *financial literacy*. A financially literate person is capable of making informed decisions about resource allocation, which serves as the basis for developing other financial aspects. Adequate financial literacy enhances *resilience* to unexpected financial shocks (such as job loss or a medical emergency), as informed individuals are more likely to save and protect themselves against risks through insurance and financial planning. Strong financial literacy and resilience contribute directly to achieving a level of *financial well-being* that aligns with an individual's goals and lifestyle, reducing financial stress and improving quality of life. *Financial security* is the outcome of stable financial well-being and well-developed resilience.

In support of the hypothesis formulated in the introduction, the following conclusions have been established:

- ❒ **Financial education** → develops financial literacy.
- ❒ **Financial literacy** → improves financial resilience.
- ❒ **Financial resilience** → supports the achievement of financial well-being.
- ❒ **Financial well-being** → ensures financial security.

To highlight the relationship between financial literacy (FL) – represented by the overall financial literacy score for a sample of 37 countries, the population's perception of financial well-being (FW) – measured by the financial well-being score, preferences and attitudes towards saving and investing (INV) – represented by the proportion of the population that prefers to invest or save, and the indicator reflecting the real well-being of households – GDP (PPP) per capita in 2023, a correlation method was applied to emphasize the dependencies among these independent variables. The reference period for the analysis is the year 2023 (OECD/INFE 2023, pp. 14, 34).

Table 1. Correlation matrix of financial literacy and financial well-being indicators

	INV	*FL*	*FW*	**GDP (PPP)**
INV	1	0,685057	0,600231	0,50771
FL	0,685057	1	0,838921	0,691304
FW	0,600231	0,838921	1	0,696382
GDP (PPP)	0,50771	0,691304	0,696382	1

Source: authors' calculations based on systematized data from the OECD and World Bank databases for the year 2023

The data presented in the correlation matrix suggest that there is a moderate positive relationship among these factors, and, a very strong correlation (approximately 84%) has been identified between financial well-being and financial literacy. Furthermore, the hypothesis that household well-being - expressed as GDP (PPP) per capita - is strongly correlated with the level of financial literacy has been confirmed, with a positive correlation of approximately 70%.

CONCLUSIONS

Current studies indicate that various segments of the population face deficits in financial skills of different types. For some individuals, the primary challenges are related to basic competencies, such as calculating compound interest or managing a personal budget. Conversely, others lack more advanced skills, such as investment planning, risk management, and understanding the principles of asset diversification. This disparity in financial literacy levels underscores the necessity of developing personalized educational approaches that address the specific needs and characteristics of different population groups.

An important aspect that requires further research and development is shaping household financial behavior through appropriate financial education. In the Republic of Moldova, influencing the financial behavior of the population is a complex task, deeply rooted in structural challenges that demand a systematic and integrated approach. Over the past three decades, amid the shift of financial responsibility from the state to individuals, the financial systems of countries that were formerly part of the USSR have experienced rapid growth and development.

This transition occurred significantly faster than in countries with established market economies. Consequently, the population had to adapt swiftly to new economic conditions, learning the principles of financial management, income allocation, and savings strategies. The emerging financial and economic environment has placed significant pressure on the citizens of the Republic of Moldova, compelling them to make complex financial decisions under conditions of limited financial competencies, risk, and uncertainty.

In this context, a responsible public policy focused on improving the financial literacy of the population plays a critical role. Such a policy must be consistent, long-term, and sustainable, aiding citizens to navigate current economic realities with confidence.

The effective implementation of such measures will contribute to raising the level of financial literacy among the population. This, in turn, will increase citizen engagement in various segments of the financial market, positively influencing their economic activities. Ultimately, this process will become a key factor in strengthening and ensuring the efficient functioning of the economy in the Republic of Moldova.

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