

# FINANCIAL EDUCATION - A CHALLENGE TO THE ROMANIAN EDUCATIONAL SYSTEM

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## Abstract

*Society's development by increasing the possibility for young people to successfully cope with extremely diverse circumstances imposed by modern economy makes it necessary to have certain skills that can only be acquired through an adequate education system.*

*Ensuring good quality education, a decisive element in raising young people's chances of succeeding in life, is a national and European priority, as in a dynamic and interdependent world where free movement is no longer just a challenge, people with different education levels are forced to make the most diverse decisions, many of which have pecuniary implications.*

*This paper aims at analyzing the need for a high level of financial knowledge, and also the role that Romania plays globally in terms of financial education. Achieving the paper is based on the quantitative research of specialized literature, of the studies and reports of specialized organizations.*

Key words: *financial education, financial literacy, economy, school population, occupational skills*

JEL Classification: A22, D83

## Introduction

The current society is subject to permanent challenges whose influences are also present in the education system, namely people must have various skills to give them the possibility to make the right decisions. Ensuring elements enabling young people to cope with facts can be reached through "ongoing acquisition of human knowledge and achievements" (Dobrescu, Dumitrescu, 2011). In a dynamic and interdependent world where free movement is no longer just a desiderate, people with different levels of education are put in the position of making the most diverse decisions, many of which have pecuniary implications, which generates the idea that knowledge in the current economic environment requires the existence of financial knowledge and skills that can only be ensured through adequate financial training.

The issue of financial education or training is all the more current as the global financial crisis has highlighted the existence of customers who have used financial products without fully understanding them.

## Stage of the Research

The analysis of specialized literature has emphasized the existence of two concepts regarding financial skills: *financial literacy* and *financial education*.

The term *financial literacy* is used to highlight the level of knowledge and understanding of the financial phenomenon by different categories of people, whereas *financial education* takes into account the existing education programmes both within and outside the education system, through which an increase in the level of financial literacy is generated.

The first survey, "Survey on Financial Literacy Increase among High School Students," which supports the idea of financial literacy, was conducted in 1997 by Jump Start and defines "financial knowledge" as the "the ability to use the necessary knowledge and skills to effectively manage financial resources for life-long financial security." (Hastings et al., 2013).

Financial literacy involves a person's ability to make well-informed judgments and make effective decisions about money usage and management. [...] People with financial ability are able to make informed financial decisions, namely they can build budgets and efficiently manage money, they can manage loans and debts, they can assess insurance and protection needs, they can assess different risks and returns involved in various saving and

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investment options according to their abilities of understanding ethical, social, political and environmental dimensions of finance” (Noctor et al., 1992 apud Kempson et al., 2005). Evaluating the level of financial literacy envisages the answer to three questions that highlight the ability to understand the terms of: compound interest, inflation, risk diversification (Lusardi, Mitchell, 2014).

Financial literacy analysis targets at least two components: a quantitative component that aims at determining the literacy level of different social groups, particularly young people, and a qualitative component that considers the effect of financial literacy upon the economy.

The importance of a high level of financial literacy is demonstrated by Lusardi who shows that a higher level of financial education has generated an increase in saving, especially for those with a low education level (Lusardi, 2004). Moreover, the survey conducted by questioning 114 pupils aged between 13 and 20 years who are beneficiaries of a curriculum called ”*Money Talks*” has raised the literacy level of young people, in terms of their level of financial knowledge and behaviours (Varcoe et al, 2005).

Defining financial literacy as a priority axis of the OECD has made it possible, as of 2009, to attempt to develop a model that would allow the measurement of adult financial literacy. The year 2010 brought forth the pilot study developed in 14 countries: Albania, Armenia, the British Virgin Islands, the Czech Republic, Estonia, Germany, Hungary, Ireland, Malaysia, Norway, Peru, Poland, South Africa and the UK.

The OECD appreciates education as a priority, that is why it has developed a PISA programme that assesses the quality, efficiency and effectiveness of the education system, namely the extent to which 15-year-olds have acquired key knowledge and core skills in order to ensure participation in society life. In 2012, PISA tests also included elements to acquire information on the literacy level of young people worldwide. The PISA test has been applied in 34 OECD member states and 31 partner countries, and involved the questioning of 510,000 students aged 15-16. The results show that countries such as China - Shanghai Province, Belgium, Estonia, Australia, New Zealand and Poland have the highest financial literacy rates, that 1 out of 10 students surveyed have proven the ability to solve financial matters: analyzing financial products by highlighting transaction costs, balance in an account statement, or the ability to understand the defining elements of the financial landscape. It is noted that 15% of the students (participants in the survey) have a low level of performance and the best situations indicate the students’ ability to distinguish between needs and wishes, recognize financial documents, solve simple additions, subtractions, multiplications, they can make the right decisions on daily expenses.

The analysis of financial literacy level (PISA in Focus, OECD, 2017) concerned 15 OECD member states, namely: provinces of China - Beijing, Shanghai, Jiangsu - Gwangdong, Russia, Belgium, provinces of Canada, the Netherlands, Australia, Italy, Poland, the USA, Spain, Lithuania, Slovakia, Chile, Peru, Brazil.

It is noted that the issue of financial literacy has gained importance by including it in the OECD document, the Height-Level Principle on National Strategies for Financial Education conducted by G20 Leaders in 2012.

Financial Literacy around the World conducted by S&P in 2014 by interviewing 150,000 people in 140 countries is a picture of the financial literacy level in the world economy. The survey started from the concept that a person can be regarded as financially literate if they respond correctly to 3 of the 4 financial concepts evaluated: interest rate, interest composition, inflation, and risk diversification. The data collected show a global literacy level of 33%. The highest level of financial literacy (over 65%) was achieved by countries such as Australia, Canada, Denmark, Finland, Germany, Israel, the Netherlands, Norway, Sweden and the United Kingdom, where about 65% of adults have financial knowledge.

It is not surprising that financial literacy rates differ enormously between the major advanced economies and the emerging economies in the world. On average, 55% of adults in major advanced economies - Canada, France, Germany, Italy, Japan, the United Kingdom and the United States – are financially educated. But even in those countries, financial literacy rates vary a lot, from 37% in Italy to 68% in Canada. On the contrary, in the major emerging economies - the so-called BRICS countries (Brazil, the Russian Federation, India, China and South Africa) - on average, 28% of adults are financially educated. There are differences in those countries, too, with rates ranging from 24% in India up to 42% in South Africa.

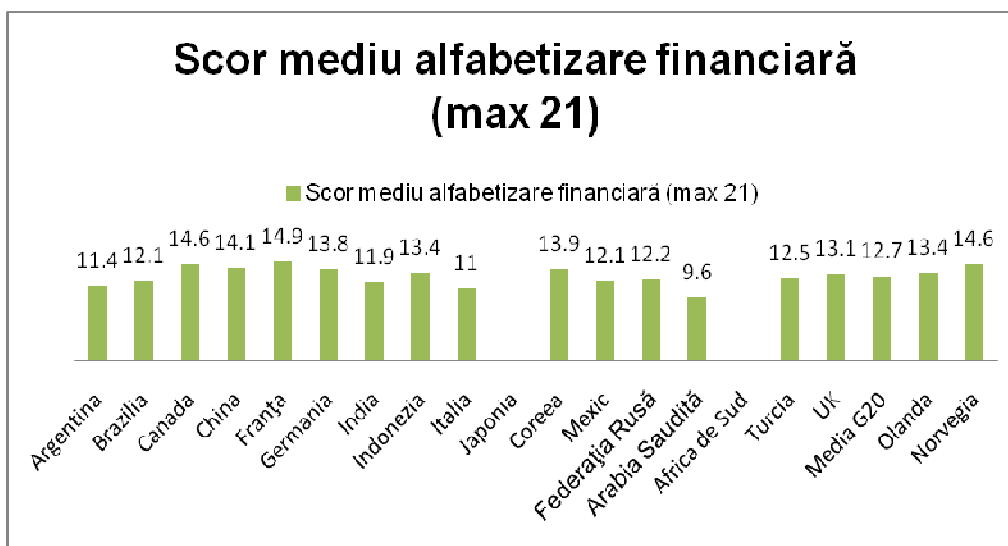
Financial literacy rates vary widely in the European Union, too. On average, 52% of adults are financially educated. Thus, the highest financial literacy rates are reported by Denmark, Germany, the Netherlands and Sweden, where at least 65% of adults have financial knowledge, whereas in Southern Europe there are the lowest rates (Italy - 37%, Portugal 26 %). Financial literacy rates are also low in countries that have joined the EU since 2004, namely Hungary (54%), Bulgaria and Cyprus (35%), Romania (22%). With such a score, Romania ranks last in the European Union and as compared to all its neighbours (non-EU countries): Ukraine (40%), Serbia (38%), the Republic of Moldova (27%).

**Table 1. Financial literacy levels in G20 countries**

Country	Financial knowledge average score (max 7)	Financial behaviour average score (max 9)	Financial attitude average score (max 5)	Financial literacy average score (max 21)
Argentina	4.1	4.4	2.9	11.4
Brazil	4.3	4.6	3.1	12.1
Canada	4.9	6.2	3.5	14.6
China	4.7	6.2	3.1	14.1
France	4.9	6.7	3.2	14.9
Germany	4.8	5.8	3.2	13.8
India	3.7	5.6	2.6	11.9
Indonesia	3.9	5.7	3.7	13.4
Italy	3.5	4.4	3.1	11.0
Japan			3.4	
Korea	4.9	5.8	3.2	13.9
Mexico	4.1	5.0	3.0	12.1
Russian Federation	4.1	5.1	2.9	12.2
Saudi Arabia	3.9	5.6	0.1	9.6
South Africa	6.7		3.1	
Turkey	4.6	4.6	3.1	12.5
UK	4.2	5.6	3.3	13.1
G20 average	4.3	5.4	3.0	12.7
The Netherlands	4.9	5.2	3.3	13.4
Norway	5.2	5.8	3.6	14.6

Source: G20/OECD INFE Report on adult financial literacy in G20 countries, OECD 2017, p.67

A more detailed report was made in 2016 by analyzing the data provided by 30 countries, including 17 oecd member states (oecd, 2017). The survey conducted by questioning 101,596 people pursued three important elements: financial knowledge, financial behaviour and attitude towards long-term financial planning. The answers generated an average score of 12.7 in participating countries providing comparable data on financial literacy, given that the maximum score could be 21. France was evident with an average score of 14.9, followed by canada and norway with 14.6, and china with 14.1. The lowest score was in south africa, with the average financial literacy of 9.6.



As far as the qualitative side of the analyzed phenomenon is concerned, namely the influences of financial literacy and the factors generating financial literacy level, Potrich, Vicrie and Kirch showed in a survey of 1,400 people from Rio Grande do Sol, Brazil, that an individual's level of financial literacy can be explained by a series of demographic or socio-economic variables such as gender, education level, individual income and family income. Those are factors with a direct influence on a family's level of financial literacy. The survey highlights that men who do not have financial dependents, with a high level of education and with certain individual or family incomes are those who have a high level of financial literacy.

The existence of a high level of financial literacy can ensure a high level of financial education. World Bank data show that globally, 55% of the surveyed subjects have proven that they understand what a compound interest means, 61% have provided correct answers regarding the effect of inflation on economies along time, whereas only 49% have given the right answers on the notions of risk and risk diversification.

Published data show that the best results were obtained in Iceland, the Czech Republic and Estonia. Financial education has been the subject of many papers, analyses, research in terms of impacts on concrete issues. Research shows that financial education can ensure financial inclusion, for example the results of the Global Financial Barometer of 2015 indicate a cause-effect relationship between financial education and financial inclusion, with 32% of respondents thinking that financial inclusion can be generated by proper financial education.

Financial education can be a solution to provide a connection between school and economy while the time children spend in a store is two to three times higher than the time they devote to reading, playing or individual activities. (McCormick M., 2009).

The potential effects of financial education are interesting and important from a policy perspective. Thus, national policies should take account of both young people through education programmes, and employers through training programmes that can be carried out by them. Walstad, w.b., rebeck, k. And macdonald, r.a. (2010) conducted a survey of 800 people analyzing the effects of introducing financial education programmes for young people by assessing them both before and after the introduction of a programme. In essence, the survey involved dividing the young people into two groups, having approximately the same level of financial education before the start of the experiment, a group of 673 people who participated in financial education programmes and a control group of 127 people who did not benefit from such programmes. The results indicated an increase in the financial knowledge

of the people who had been involved in education programmes, but raised questions about the relationship between teacher training and young people's understanding of financial concepts. The same results were highlighted by Mitchell and Lusardi who showed that education, in terms of the level of training that a person accumulates, is not enough to have a financial culture. The research conducted by analyzing the answers to the three questions that define the level of financial literacy in four developed countries showed that there are well-educated people who are not very skilled in terms of money (Mitchell, and Lusardi, 2015).

Regarding the influence of financial education on savings or pension plans, surveys show that the level of financial education influences the level of savings or private pensions (Miller et al., 2014). Starting from the perception according to which personal savings are too low and the effectiveness of pension systems and other fiscal policies is controversial, US politicians focused on training programmes implemented by employers on topics related to financial issues. In 1995, the US Department of Labour announced its intention to launch a "national pension education programme designed to draw US workers' attention to the importance of taking personal responsibility for their pension security" (Berg, 1995, p. 2). Additionally, the survey of 2,055 respondents aged between 30 and 48 showed that there is a higher level of accumulation, and also a higher rate of participation in retirement plans, to the extent to which an employer ensures a proper level of financial education (Fernandes et al., 2013).

#### **Financial Education Issue in Romania**

Implementing some programmes aimed at ensuring financial skills in Romanian schools is in support of the priorities that the European Union also considers, thinking that the assurance of quality education is decisive for increasing the young people's chances to succeed in life (COM, 2017). The main areas where the European Union is taking action envisage (COM 2017):

- Developing better and more favourable to inclusion schools;
- Supporting teachers and school headmasters in order to achieve excellent quality of teaching and learning;
- Achieving better, fairer and more effective governance of education systems.

Including financial education subjects in school curricula can help achieve the first goal, as young people and adults with financial literacy can make the right decisions in everyday life.

Moreover, at European level, some basic principles have been identified that can provide quality financial education services (COM; 2007):

- Ensuring lifelong financial education programmes;
- Developing programmes tailored to citizens' needs;
- Developing economic and financial skills for school age young people;
- Including certain tools meant to improve financial knowledge in financial education programmes;
- Achieving balanced, transparent and objective education by financial service providers in compliance with consumer interests;
- Providing resources by financial trainers in order to generate effective and reliable financial education programmes;
- Clearly defining the roles of all parties involved in the implementation of financial training programmes;
- Providing financial education programmes to allow for the exchange of best practices.

Romania's financial literacy status means 123 out of 143 countries analyzed by S&P (in terms of financial literacy) or a high level of Beckmann disparity (2013). The results are also generated by the fact that Romania has not yet implemented a financial education strategy, as

ensues from the OECD survey. Published data indicate the existence of 59 countries that defined national strategies taking over the principles of financial education (OECD; 2015).

**Table 2. Implementing national strategies for financial education at world level**

Strategy status	Number of countries	Countries and regions
First strategy is revised or second strategy bis being implemented	11	Australia; the Czech Republic; Japan; Malaysia; the Netherlands; New Zealand; Singapore; Slovakia; Spain; the UK; the USA
First strategy is implemented	23	Armenia; Belgium; Brazil; Canada; Croatia; Denmark; Estonia; Ghana; Hong Kong, China, India; Indonesia; Ireland; Israel; Korea; Latvia; Morocco; Nigeria; Portugal; the Russian Federation; Slovenia; South Africa; Sweden; Turkey
First strategy design has been created	25	Argentina; Chile; the People’s Republic of China Columbia; Costa Rica; El Salvador; France; Guatemala, Kenya; Kyrgyzstan; Lebanon; Malawi; Mexico; Pakistan; Paraguay; Peru; Poland; Romania; Saudi Arabia; Serbia; Tanzania; Thailand; Uganda; Uruguay; Zambia
A strategy is being planned	3	Austria; The Former Yugoslav Republic of Macedonia; Philippines; Ukraine; Zimbabwe

Source: National Strategies for financial education, OECD/INFE Policy Handbook, 2015, p.11

One can notice that we are still far from many countries, but it is worthwhile to mention the introduction as of the school year 2017-2018 of a new module called financial-economic and entrepreneurial education in Romania’s pre-university education system curriculum (European Commission, 2016). Thus, in the 8<sup>th</sup> grade, the Social Education - Economic and Financial Education subject is oriented on the economic-financial and entrepreneurial dimension of exerting citizenship (Annex No.2 to Order of the Minister of National Education No. 3393/28 February 2017, Ministry of National Education).

At the level of financial service providers, there are steps to improve literacy level, that is to provide adequate financial education for young people. Thus, the NBR in partnership with the Ministry of National Education have been running several financial education support projects ever since 2009, regarding:

- Pupils – ”Let’s Talk about Money and Banks”;
- Students - Open Day for Economics Students;
- Academic teachers - Academica.

Asf has conducted events that aimed at promoting the importance of financial education and inclusion among young people within the global money week (gmk). Asf has also created the [asfmania.ro/edu](http://asfmania.ro/edu) platform with financial training sessions for young people and parents in areas such as capital market, insurance and pensions.

Financial education programmes are also provided by junior achievement with the support of institutions that provide financial products or services such as: metropolitan life, metlife foundation, raiffeisen bank, visa, google, payu, aursf or state institutions such as: the ministry of national education, the national authority for consumer protection.

Romania’s ranking close to countries with at least an average level in the field of financial education requires the reformation of the educational system, not only the modification of a curricular area, and pupils must access the type of information that will train their skills and abilities adapted and appropriate to the environment they belong to. Assimilating it largely depends on the way of conveyance as modern pupils perform in environments where they are less restricted in terms of learning, working or thinking. The success of the finnish educational model is based on a structured and clear school curriculum,

and also on a certain freedom of schools in choosing their approaching methods, creativity development, major investments in teachers' professional training and development (Robinson, 2015).

### Conclusions

Developing quality educational services, adequate to the new requirements of globalized economy imposes new approaches of teaching systems, new contents that can only be ensured by promoting students' creativity, innovation and involvement in the training - education process.

The generation of young people (born between 1990 and 2000) defined as the millenias generation is regarded as a paradoxical population namely: an educated generation with exposure to diverse and complex financial services but faced with rather difficult career development prospects.

Equally, developing financial skills of young people means opening educational units to the practical world, to the real world, improving the relevance of curricula by creating and developing partnerships with employers, by increasing young people's creativity in identifying solutions to real problems.

Young people need certain skills, abilities and knowledge to generate creative ideas and the initiative to turn ideas into actions.

### REFERENCES

1. Beckmann Elisabeth (2013) *Financial Literacy and Household Savings in Romania*, Numeracy: Vol. 6.,Iss. 2,Article 9. DOI: <http://dx.doi.org/10.5038/1936-4660.6.2.9> Available at: [<http://scholarcommons.usf.edu/numeracy/vol6/iss2/art9>.]
2. Bernheim B. Douglas, Garrett Daniel M.(2003), *The effects of financial education in the workplace: evidence from a survey of households*, in Journal of Public Economics 87 (2003) 1487–1519, Available at [ [www.elsevier.com/locate/econbase](http://www.elsevier.com/locate/econbase)]
3. BNR, <http://www.bnro.ro/Proiecte-educationale-7872.aspx>
4. Dobrescu E.M., Dumitrescu C. (2011), *Spre un nou model educațional (Towards a new educational model)*, published in the Romanian Sociology Review no.1-2, Bucarest, 2011, p.45-59
5. European Committee, 2017, Committee release to the European Parliament, European Council, European Economic and Social Committee, and Region Committee, “*Dezvoltarea școlilor și calitatea excelentă a predării pentru un început bun în viață*” (*Development of schools and excellent teaching quality for a good start in one's life*), COM (2017), Bruxelles, 30.05. 2017 accessed on [[https://www.edu.ro/sites/default/files/COM\\_release\\_on\\_development\\_of\\_schools\\_in\\_2017.pdf](https://www.edu.ro/sites/default/files/COM_release_on_development_of_schools_in_2017.pdf)]
6. European Community Committee, 2007, *Financial education*, European Commission Release, Brussels, 18.12.2007, European Commission 2016, Education and Training Monitor, Romania 2016, available at [https://ec.europa.eu/education/sites/education/files/monitor2016-ro\\_en.pdf](https://ec.europa.eu/education/sites/education/files/monitor2016-ro_en.pdf)
7. Fernandes Daniel, Lynch John G, Jr, Richard G. Netemeyer (2013), *Financial Literacy, Financial Education and Downstream Financial Behaviours*, Management Science, Available at [[https://www.researchgate.net/profile/Daniel\\_Fernandes6/publication/259763070\\_Financial\\_Literacy\\_Financial\\_Education\\_and\\_Downstream\\_Financial\\_Behaviors/links/54ad6dc30cf2213c5fe3f890/Financial-Literacy-Financial-Education-and-Downstream-Financial-Behaviors.pdf](https://www.researchgate.net/profile/Daniel_Fernandes6/publication/259763070_Financial_Literacy_Financial_Education_and_Downstream_Financial_Behaviors/links/54ad6dc30cf2213c5fe3f890/Financial-Literacy-Financial-Education-and-Downstream-Financial-Behaviors.pdf)]

8. HASTINGS J., MADRIAN C.B., SKIMMYHORN L.W., (2013), *FINANCIAL LITERACY, FINANCIAL EDUCATION AND ECONOMIC OUTCOMES*, ANNU REV ECONOM. 2013 MAY 1; 5: 347–373. AVAILABLE AT [HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC3753821/]
9. JA Romania, <https://www.jaromania.org/programe/educatie-financiara>
10. Lusardi A., (2004), *Saving and the effectiveness of financial education*, available at [http://www.dartmouth.edu/~alusardi/Papers/Financial\_Education\_2004.pdf]
11. McCormick, Martha Henu, (2009), *The Effectiveness of Youth Financial Education: A review of the Literature*. Journal of Financial Counselling And Planning, vol. 20, nr.01, Available at [SSRN [http://ssrn.com/abstract\\_2225339](http://ssrn.com/abstract_2225339)]
12. MITCHELL, OLIVIA S. AND LUSARDI, ANNAMARIA, (2015), *FINANCIAL LITERACY AND ECONOMIC OUTCOMES: EVIDENCE AND POLICY IMPLICATIONS (JANUARY 7, 2015)*. AVAILABLE AT SSRN: [HTTPS://SSRN.COM/ABSTRACT=2568732 OR HTTP://DX.DOI.ORG/10.2139/SSRN.2568732]
13. Miller, Margaret; Reichelstein, Julia; Salas, Christian; Zia, Bilal. (2014). *Can you help someone become financially capable? A meta-analysis of the literature*. Policy Research working paper ; no. WPS 6745. Washington, DC: World Bank Group, Available at [http://documents.worldbank.org/curated/en/297931468327387954/Can-you-help-someone-become-financially-capable-a-meta-analysis-of-the-literature]
14. Ministry of National Education, Order of the Minister of National Education no.3393 / 28 February 2017
15. OECD 2017, <http://www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-report-adult-financial-literacy-in-G20-countries.pdf>
16. Potrich A. C.G., Kelmara Mendes Vieira, Guilherme Kirch (2015), *Determinants of Financial Literacy: Analysis of the Influence of Socioeconomic and Demographic Variables*, [Revista Contabilidade & Finanças](#), vol.26 no.69 São Paulo Sept./Dec. 2015, Available at [http://www.scielo.br/pdf/rcf/v26n69/en\_1808-057x-rcf-26-69-00362.pdf]
17. Raiffeisen Bank, <https://www.raiffeisen.ro/despre-noi/responsabilitate-corporativa/educatie-financiara/>
18. Varcoe Karen, P Martin Allen, a Devitto Zan, (2005), *Charles Go Using A Financial Education Curriculum For Teens* , Financial Counseling and Planning, Volume 16 (1), Available at [http://afcpe.org/assets/pdf/vol1617.pdf]
19. Walstad, W. B., Rebeck, K. and MacDonald, R. A. (2010), *The Effects of Financial Education on the Financial Knowledge of High School Students*. Journal of Consumer Affairs, 44: 336–357. doi:10.1111/j.1745-6606.2010.01172.x
20. World Bank. 2014. *Global Financial Development Report 2014: Financial Inclusion*. Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/16238> License: CC BY 3.0 IGO.)