

The Status and Development of Financial Literacy in Hungary*

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This essay provides an overview of the measures implemented in the last ten years to improve financial literacy and awareness, presenting the steps taken by institutions, civil organisations and the government to promote and develop financial literacy and awareness, the specific topics addressed and the degree of success. Comparative international surveys indicate an improvement in the public's financial awareness, mainly in terms of financial knowledge, but further progress is needed in the area of financial attitudes and the application of skills.

Journal of Economic Literature (JEL) codes: A13, D12, G51, G53, I2

Keywords: financial literacy development programmes, financial education, financial awareness, Hungary

1. Introduction

After the financial crisis erupted in 2008, most countries realised that the development and financing of financial literacy must be implemented through coordinated, transparent, quality-assured measures enacted by the state and the central bank (Jakovác – Németh 2017; Csiszárík-Kocsir et al. 2021; Bárczi – Zéman 2015). Numerous domestic studies also made it clear that financial awareness cannot be developed without the participation of the public sector. As the development of financial literacy is in the common interest of all economic and civil actors, it requires the cooperation of the state, credit institutions, businesses and civil organisations. This essay reviews the changes in the status and development of domestic financial literacy over the last ten years, together with the measures taken at the level of government and law, institutions and civil organisations. The strategy for developing the public's financial awareness and the first accredited

* The papers in this issue contain the views of the authors which are not necessarily the same as the official views of the Magyar Nemzeti Bank.

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The authors wish to express their gratitude to Julianna Bernáth and Zsuzsanna Bukucs for their thorough and professional revision of the study and for their comments.

The first version of the Hungarian manuscript was received on 18 December 2023.

DOI: <https://doi.org/10.33893/FER.23.1.5>

textbook in financial literacy were published in 2017 and were followed by many subsequent textbooks, workbooks and electronic learning materials. The National Core Curriculum has designated economic and financial education among the key competencies to be developed in school; however, as an independent subject, financial and economic skills are not typically present in the curricula of public education institutions. The results of research on the overview of financial literacy programmes show that while the volume of training, the number of training programmes and the number of participants had increased by about threefold by 2020 compared to 2016, most of these programmes were aimed at the school-age group. PÉNZ7 (Money Week) is a programme of outstanding importance for the development of financial literacy, which supports the development of financial awareness in schools in the context of extracurricular lessons and other playful, interactive events.

2. An overview of the literature

2.1. The concept of financial literacy – knowledge, skill, attitude and behaviour

The term ‘financial literacy’ was coined in the early 1900s (Kovács *et al.* 2014). Several definitions of financial literacy are used in the literature, depending on the interpretation (Pál 2018; Kovács – Terták 2019). Among other things, the focus can be on understanding financial processes or the ability to make financial decisions. The literature does not have a uniform definition of financial literacy. Used as a synonym for financial awareness, the term ‘*financial literacy*’ can be traced to the English-language sources, which it was adopted from.

Several studies define financial literacy primarily on the basis of financial knowledge and skills. According to Dutch researchers, financial literacy is connected to having knowledge and understanding of complex financial products. Mak – Braspenning (2012) and Suganya *et al.* (2013) write that financial literacy is the set of knowledge and skills that can be used to achieve balance in a person’s finances, with the purpose of ensuring financial prosperity. The concept of financial literacy includes financial knowledge, know-how, skills and experience (Béres – Huzdik 2012). According to Plakalovic (2012), in addition to the ability to make decisions, it also includes the ability to communicate and react. After reviewing hundreds of studies, Remund (2010) stated that financial literacy includes the ability and confidence with which individuals can manage their own personal finances. The author summarised the common points of several definitions applied to financial literacy. Each of the definitions he examined contains elements that can be classified into five main categories – a good grasp of financial services, the ability to manage money, the ability to communicate, the ability to make decisions and the management of personal finances.

In her research, *Huston (2010)* examined 71 studies, of which more than 50 failed to provide a definition for the concept of financial literacy. The survey also draws attention to the fact that, in the remaining cases, eight different definitions were formulated, while about half of the studies did not separate financial knowledge from financial literacy.

Other studies and analyses point out that it is necessary to examine not only the financial knowledge and skills of individuals, but also their attitudes, behaviour and traits, i.e. the financial literacy and awareness of consumers.

Most experts, as well as the strategy adopted in 2017 to develop the public's financial awareness, use the definition provided by OECD¹ (*Atkinson – Messy 2012*), which states: “financial awareness is a skill that enables the efficient growth, monitoring and use of financial resources in a way that contributes to the strengthening of the well-being and economic security of individuals, their family and their business.”

According to the Magyar Nemzeti Bank (central bank of Hungary, MNB) and its partners, financial literacy “(...) is a level of financial knowledge and skills that enables individuals to identify the basic financial information necessary for making conscious and prudent decisions, obtain and interpret this information, and then, before making decisions, use it for assessing the potential financial and other consequences of their decisions.”²

According to *Amagir et al. (2020)*, the main characteristics of financial literacy are insight, knowledge and behaviour, as well as attitude and confidence. In their opinion, all of these have an impact on financial decisions. As such, the development of financial knowledge and awareness can influence macroeconomic, monetary and budgetary processes, as well as the proper functioning of financial markets, i.e. the effectiveness and competitiveness of the financial system as a whole.

Financial literacy is thus a complex phenomenon without a uniform definition. However, most definitions make reference to a level of competency that allows for the use of sources of financial information, the acquisition, organisation and comparison of such information, as well as the ability to make individual decisions. In addition, financial literacy includes knowledge, attitude and calculation skills. It is easy to see that a complex model is required for analysing financial literacy.

¹ OECD = Organisation for Economic Co-operation and Development

² A pénzügyi tudatosság fejlesztése segíti a családok anyagi biztonságát is (The development of financial awareness also helps the financial security of families). Press release, Magyar Nemzeti Bank. <https://www.mnb.hu/sajtoszoba/sajtokozolemenyek/2020-evi-sajtokozolemenyek/a-penzugyi-tudatossag-fejlesztese-segiti-a-csaladok-anyagi-biztonsagat-is>. Downloaded: 12 December 2023.

2.2. Assessing and evaluating the transfer of knowledge

A significant part of the domestic research has studied financial literacy in relation to various social and occupational groups. For example, *Győri (2018)* examined the financial vulnerability of Hungarian small and medium-sized enterprises; *Garai-Fodor (2023)* examined the financial awareness of consumers; *Kovács et al. (2021)* examined the financial literacy of high school students; *Sági et al. (2020)* examined the financial awareness of households; and *Kálmán et al. (2021)* explored the impact of the pandemic on the financial security of higher education students in economics. These key studies are also important for providing the scientific background of programmes aimed at developing financial literacy. Furthermore, domestic studies examining financial behaviour related to personality, attitude or culture are of particular interest as well. *Németh et al. (2016)* studied financial personality types based on a financial personality test that they created, while *Pintér et al. (2021)* examined the impact of digitalisation and fintech on the financial decisions of young people. In their investigation of correlations between financial attitude and external and internal control, *Mihály et al. (2014)* identified the internal control attitude as a protective factor. In their latest study, *Hegedűs and Lentner (2024)* examined the cultural dimensions of Geert Hofstede and the correlations of financial literacy.

In respect of the overview and evaluation of the development of financial literacy in Hungary, the most informative studies are those that evaluate the objectives, participants, quality assurance, methodology and, last but not least, the effectiveness of programmes aimed at the development of financial literacy.

Some of the fundamental questions in studies examining training courses organised with the purpose of developing financial literacy are whether they are effective, whether they have a meaningful impact on the financial literacy and behaviour of individuals and groups, whether it is formal education or demographic and social indicators that have a defining role in this respect, and whether, based on the findings, it is worth investing significant social resources in financial literacy training.

Kovács – Pásztor (2022) examined the situation of financial literacy in Europe compared to other regions of the world, and the kind of associated development programmes individual European Union countries are launching or have launched. The findings of international and domestic studies vary widely. Results show that increasing financial literacy may translate into growth potential. Numerous studies have found a significant correlation between the level of financial knowledge, previous participation in financial development, and financial behaviour and attitude, establishing that those receiving financial training are more frugal, have plans for their retirement years and are less prone to accumulate debt (*Bernheim et al. 2001; Lusardi – Mitchell 2014; Hilgert et al. 2003; Stango – Zinman 2007; Van Rooij et al. 2011*).

In their study, *Czeglédi et al. (2016)* examined the transfer of business knowledge to students in Hungarian higher education. Their analysis found one hundred and one subjects that touched upon business knowledge, but without making use of interactive methods, such as role playing, case studies or simulations. Also, they found that entrepreneurial experiences are barely integrated into higher education. All of this is different from, for example, the methodology of business courses offered in the USA.

An internationally cited Hungarian study (*Béres et al. 2013; and Luksander et al. 2014*) examined, among other things, the factors determining the level of financial knowledge of students in Hungarian higher education. Their findings shed light on the fact that the financial knowledge of those who had received financial and economic training in secondary school was not significantly higher than that of those who had not received such education. At the same time, the study revealed that the examined socio-demographic factors, such as age, gender, the level and field of education, knowledge, life situation and ability to lead an independent lifestyle significantly influenced the level of financial awareness.

The important study by *Amagir et al. (2018)* compared the results of research exploring the relationship between financial training and financial behaviour. The authors found a positive correlation between financial education at school and the financial knowledge and attitudes of students.

Carlson (2020) examined the correlations between real financial knowledge and financial knowledge that can be obtained in public education among Americans aged 18–24. According to the findings, certain demographic factors, such as ethnicity or gender, are more important from the point of view of financial literacy than high school education. *Van Rooi et al. (2011)* also emphasised the correlations between financial knowledge and social background variables. According to them, most research results seem to support that the level of financial knowledge correlates with gender, age and education. In other words, the studies shed light on the fact that financial education is effective only if it takes into account the needs of individual groups.

These studies also clearly emphasise that financial training does not always have a positive result, and that the examination of the variables behind its effectiveness or failure is, therefore, the key to the success. It is necessary to examine, among other things, the purpose, target group, duration, topics and teaching materials, the availability, quality and quality assurance of the teaching materials, the training and preparation of the instructors, the adequacy of the teaching methods, and whether the organisers of the programme believe that the developments were indeed effective.

3. State involvement in the development of financial literacy

3.1. Creating the strategic foundations

In order to mitigate the risks arising from the lack of skills and knowledge necessary for financial decisions, many organisations have launched programmes aimed at developing financial literacy, executed – often in cooperation – by both state and non-state actors, typically operating in the financial market. These programmes include training courses, studies, surveys, competitions, consulting, documents and applications available on the Internet, etc. Important state actors are playing an increasingly active role in the development and spreading of financial knowledge and literacy, such as the Magyar Nemzeti Bank, the Ministry of Human Resources (EMMI), the Ministry of National Economy (NGM), the State Audit Office (SAO), the Ministry of Finance (PM), ministerial background institutions and educational institutions.

In respect of improving financial literacy at the level of society, one major step forward came in 2017 when the Government adopted a strategy for developing the financial awareness of the population (*Ministry of Finance 2017*); additionally, the first accredited financial culture textbook – initially for secondary school students, and then for 7th and 8th-grade students – was published in the same year.

The strategy defined an action plan, specific tasks and deadlines for the period between 2017 and 2023. It also assigned index numbers to the objectives and prescribed periodic assessments to measure achievement.

The strategy laid out the following seven main objectives:

- I. creating and implementing the framework of real financial education within the public education system;
- II. strengthening the foundations of conscious financial behaviour and the financial stress tolerance of households;
- III. creating an approach that promotes prudent financial decisions, as well as establishing and promoting institutions that support conscious financial consumer behaviour;
- IV. strengthening the public's approach to saving for retirement;
- V. increasing access to financial products and basic services, and increasing financial integration;
- VI. encouraging the use of modern, cash-saving payment instruments;
- VII. supporting prudent borrowing.

The measures were selected based on the findings of OECD's 2015 questionnaire-based survey (*OECD 2016*). On the way towards achieving the objectives laid out in the strategy, it was an important milestone when, in the autumn of 2017, the instruction of financial and entrepreneurial skills as separate subjects began in secondary-level vocational schools (now known as technical schools).

3.1.1. Establishing the legal framework

Even before 2016, the Hungarian state had established certain legal frameworks to ensure the organisation and transparency of the development of financial literacy and awareness.

- a) In order to enforce consumer rights related to financial service activities, it is possible to initiate a free financial consumer protection procedure at the Magyar Nemzeti Bank, and the complainant can also request the intervention of the Financial Arbitration Board in order to settle the dispute.
- b) Based on the law defining its operation and activities, the MNB has been involved in strengthening and spreading financial literacy since 2013, being bound by law to use part of its income for this purpose, as well as for developing financial awareness and promoting related objectives, in particular the development of the associated educational and research infrastructure.
- c) A priority area of the State Audit Office's social responsibility commitment was the development of financial literacy, which was recognised and supported by Parliament in a resolution in 2014. In November 2022, the SAO transferred its responsibilities in the field of financial awareness and literacy to the Money Compass Foundation.³
- d) A Financial Rights Commissioner has been appointed since 2012 in order to enforce consumer rights related to financial service activities.⁴

Since 2017, the government policy aimed at strengthening financial awareness has been managed by the State Secretary of the Ministry of Finance responsible for financial affairs. In 2022, after the elections, the task was transferred to the work organisation of the Minister of Economic Development, and subsequently, on 1 January 2023, to the independent Ministry of Economic Development.

As the 2013 Government Decree on the National Core Curriculum⁵ states, "*New generations must have useful knowledge about the economic and financial institutions and processes that define the world economy, the national economy,*

³ https://www.asz.hu/files/ASZ_orzaggyulesi_beszamolo_2023.pdf

⁴ Based on Section 41 of Act CLV of 1997 on Consumer Protection.

⁵ Government Decree 110/2010 (VI. 4.) on the issuance, introduction and implementation of the National Core Curriculum

businesses and the life of households.” The law specifies economic and financial education as one of the development areas, educational objectives and key competences to be developed, in order for “(...) students to recognise their responsibility related to value-creating work, the rational management of assets, as well as the world of money and consumption.” However, while stressing the importance of teaching the subject, the law fell short of integrating economic and financial education horizontally and comprehensively at the level of the subjects in relation to individual areas of literacy or the compulsory core curricula, and discussed it separately for certain areas of literacy and subjects.

The government decision on the adoption of the strategy (December 2017)⁶ requested the Minister of Human Resources to take into account the contents of the strategy aimed at developing financial awareness for the purpose of developing professional proposals for the renewal of the National Core Curriculum. In addition, it required that the implementation and promotion of training that takes into account the age and previous experience of the students and stipulates that practical economic and financial competences be included in the curricula. However, the amendments to the government decree⁷ did not affect economic and financial education until as late as February 2020. The regulation that was finally completed⁸ gave the green light for incorporating the transfer of financial and business knowledge into academic learning time allotted for custom subjects. This part of academic time is available to primary school students between 1st and 8th grade and secondary school students between 9th to 10th grade at two hours per week, to 11th-grade students at four hours per week and to 12th-grade students at five hours per week. In spite of the fact that, according to the action plan of the strategy, financial awareness needs to be established in public education at the primary school level, financial education is only taught as a compulsory subject in technical schools.

With regard to the development of education, the existence and availability of teaching materials is a key issue. Significant progress has been made in this area. In respect of curriculum development, the work of the Financial Compass Foundation is of major importance. Students can now study using textbooks, workbooks and electronic study materials published by the Foundation starting from the 3rd grade of primary school until the graduation exam.⁹ With the support of the Magyar Nemzeti Bank, secondary schools received 385,000 copies of the workbook entitled “Történelem és pénzügyek” (History and Finances) and the exercise book

⁶ The provision is contained in Section 2 of Government Decree 1919/2017. (XII. 8.) on the adoption of a strategy aimed at the development of the financial awareness of the population.

⁷ The government decree was amended four times prior to 2020, last time with effect from 1 January 2018.

⁸ Government Decree 5/2020 (I. 31.) on the amendment of Government Decree 110/2012 (VI. 4.) on the issuance, introduction and implementation of the National Core Curriculum

⁹ <https://penziranytu.hu/ingyenes-tankonyvvel-segiti-penzugyi-nevelest-az-iskolakban-penziranytu-alapitvany-0>

entitled “Számoljunk a befektetésekkel” (Calculating Investments). In September 2020, all students starting the 9th grade received the mathematics exercise book free of charge, while those preparing for secondary school graduation and their teachers received the History and Finances workbook. Also free of charge, the textbook and workbook entitled “Küldetések a pénz világában” (Missions in the World of Money) were provided to primary school students, and the book entitled “Íránytű a pénzügyekhez” (A Compass for Finances) was provided to secondary school students. In the 2020/2021 academic year, schools ordered 220,000 copies of the environmental studies and mathematics workbooks that also include financial knowledge. In the three years that have passed since then, the number of textbooks and workbooks containing financial knowledge has increased by 50 per cent, and the number of members in the Financial Compass School Network has doubled. Supporting the development of financial awareness, the workbook entitled “Állampolgárok pénzügyei” (Citizens’ Finances) was disseminated in 162,000 copies to Hungarian schools, intended for 8th and 12th-grade students. In addition, schools ordered nearly 545,000 copies of textbooks containing basic financial and management knowledge and workbooks including financial chapters. Thus, up to 700,000 copies of publications will be available to support the financial education of students in the 2023/2024 academic year.

4. The role of civil society in the development of financial literacy

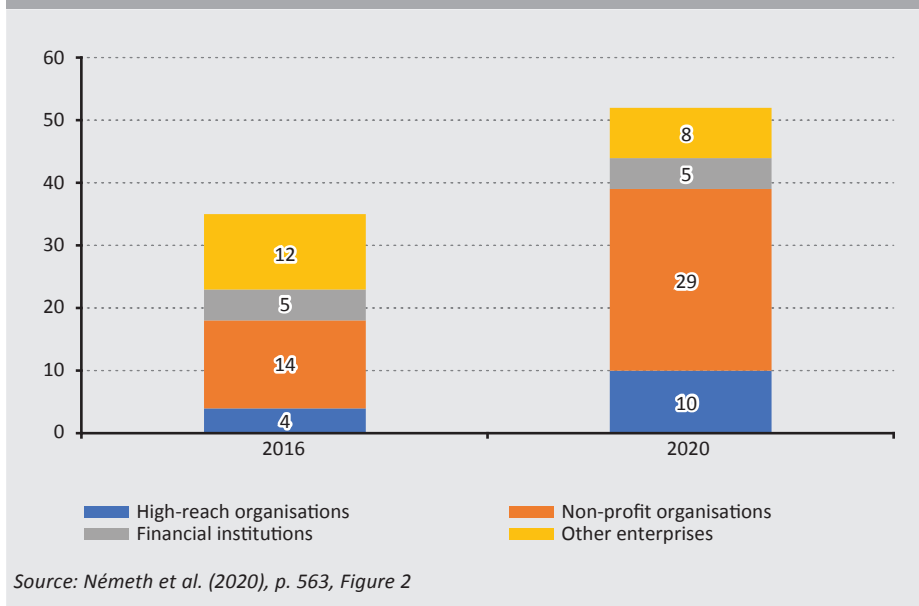
In 2016 and again in 2020, the State Audit Office evaluated the situation of the development of financial literacy in Hungary (Németh 2017; Németh et al. 2020). In the following, we present the main results of the research, with a focus on the history of the participation of civil society during the period reviewed. In addition, we look at the most important actors and discuss in detail the events and findings associated with the most influential event, the PÉNZ7 – Pénzügyi és Vállalkozói Témahét (Financial and Entrepreneurial Theme Week).

4.1. Organisations, trainings and programmes

The studies were intended to comprehensively map those involved in the development of financial literacy. In the context of the 2016 study, 35 organisations offering training programmes filled out the questionnaire. In the 2020 survey, 52 similar respondents were involved, representing an increase of almost 50 per cent.

Based on their general characteristics, the respondents can be classified into four combined categories. Of the 52 respondents offering training, 10 can be classified as high-reach organisations, 5 as financial institutions, 29 as non-profit organisations and 8 as other enterprises. Compared to 2016, 15 more foundations, associations or non-profit organisations, as well as 6 more organisations with a reach above 10,000 people (so-called high-reach organisations) were involved (Figure 1).

Figure 1
Number of respondents offering training programmes by category (2016, 2020)

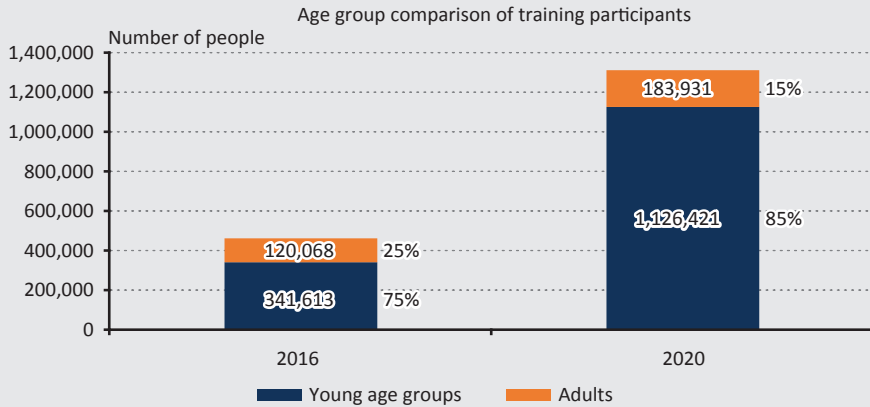


4.1.1. Participation in training

According to the findings of the 2020 study, financial literacy training courses were held for a total of 1,310,352 people between 2016 and 2020. This is a very significant improvement, as the number of people participating in the development of financial literacy almost tripled compared to the last similar survey, when a total of 461,681 participants had attended training courses in the four years prior. The results of the 2016 study indicated that the majority (75 per cent) of the groups targeted by the programmes consist of young people (students in public and higher education aged 6–25). In 2020, the proportion of those reached with the programmes was similar to the 2016 data, while the share of young people had increased to 85 per cent (Figure 2).

In addition, the study also showed that relatively few of the training courses organised for adults were aimed at groups that are financially vulnerable or that require special training, such as entrepreneurs, retired people or the unemployed.

Figure 2
Number of people and share of age groups reached by the courses (2016, 2020)

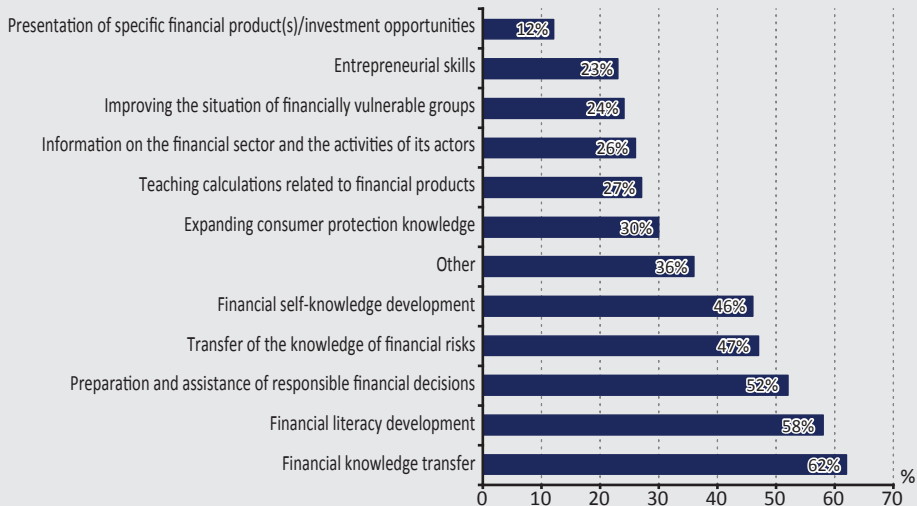


Source: Németh et al. (2020), p. 567, Figure 8

4.2. Objectives and major topics of the training courses

The order of training objectives was similar in case of both the 2016 and the 2020 surveys. In 2020, the most frequently cited objectives were general goals, such as “transferring financial knowledge” or “developing financial literacy” (Figure 3). It was a step forward that, compared to 2016, the share of the target indicated as “improving the situation of financially vulnerable groups” increased.

Figure 3
Objectives of training programmes (2020)

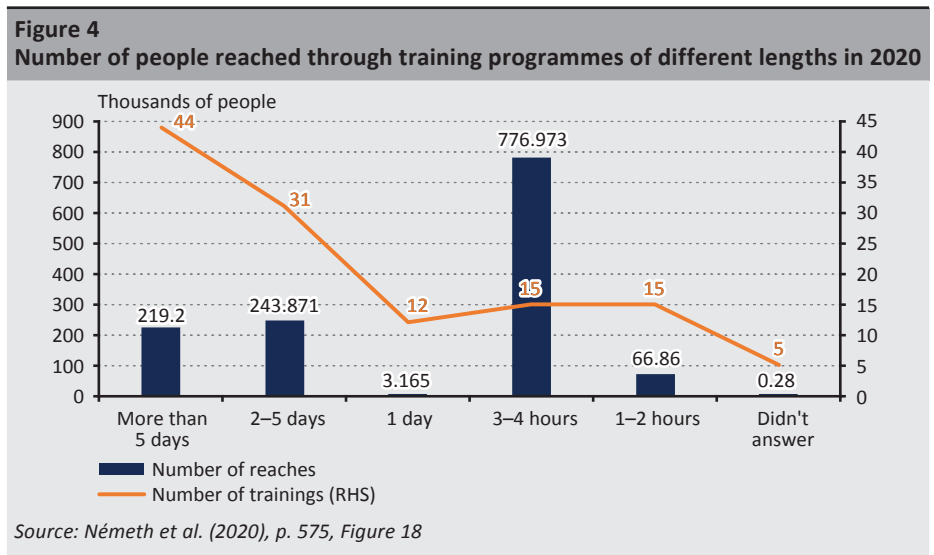


Source: Based on data by Németh et al. (2020)

Literature sources point out that the transfer of knowledge is effective if the training is tailored to the needs of the target groups (Cude 2010; Czeglédi et al. 2016). While in 2020 more programmes were aimed at financially vulnerable groups than before, most of the training courses offered for adults still failed to take into account the income situation and social background of the target groups. The programmes focused on developing financial awareness and frugality, and less on generating income. This shows that the training organisations realised that strengthening the public’s culture of financial self-sufficiency and transferring the associated knowledge are important goals.

4.3. Duration and quality assurance of training courses

Compared to the 2016 survey, the number of training programmes lasting 2 to 5 days or longer, and those lasting more than 5 days, increased significantly, while the proportion of short, 1- or 2-hour training programmes decreased. Researchers also examined the number of participants attracted by training programmes of different lengths (Figure 4).



Although the number of longer training courses increased significantly, around 60 per cent of the participants continued to participate in shorter, 3- or 4-hour programmes (Figure 4), and only 35 per cent of the participants were involved in longer training courses. Thus, the majority took part in training programmes with smaller group sizes. Most of the courses intended for students in public schools were shorter (1 to 4 hours). While short training courses may be suitable for attracting attention and imparting certain knowledge, the financial behaviour and attitudes cannot be efficiently shaped under such conditions.

The research findings indicate that the availability of training topics and teaching materials and the use of accredited educational materials did not improve significantly from 2016 to 2020. This is particularly worrisome in light of the fact that while accredited teaching materials were not widely available in 2016, this had changed by 2020 when a significant number of educational aids and textbooks were readily available. The results highlight the need to measure effectiveness and strengthen the professional quality guarantees offered for training courses.

5. PÉNZ7, the Hungarian programme with the highest reach

In 2015, the European Banking Federation (EBF) announced the first European Money Week at the initiative of Queen Maxima of the Netherlands (then only a princess), a former investment banker and OECD ambassador for financial literacy. The members of the EBF, that is, the European national banking associations, immediately joined this initiative, allowing it to debut as a pan-European event in its first year.

In Hungary, PÉNZ7 (Money Week) was launched in 2015 in cooperation with the Hungarian Banking Association (MBSZ) and the Money Compass Foundation. Later, the Ministry of Human Resources also joined in by initiating the integration of Money Week as a theme week into the academic year. Given the educational cooperation of commercial banks, the central bank and the government, Hungary's PÉNZ7 has become the most significant national financial theme week in Europe in terms of volume and proportions since its launch. In 2019, out of 170 countries, Hungary's theme week was the only one from Europe to be nominated for the "Excellence Award" at the Global Money Week event series. The organiser, Child and Youth Finance, intended the nomination and award as a way of acknowledging the work of those countries and organisations that represent a novel approach to the experience-oriented financial and entrepreneurial education of young people (*Pintér 2020*). The unwavering success of the theme week served as a further incentive for continued efforts to include both the financial part (from 2017) and the entrepreneurial part in the schedule of school years. By providing voluntary lecturers and preparing quality-assured teaching materials, the professional organisations support the schools in implementing their programmes at a high professional level.

The thematic PÉNZ7 is organised annually within the framework of a joint project. From 2017, EMMI, acting as the project manager, included the curriculum in the official schedule of academic years in the form of a theme week. As a result of PÉNZ7 becoming a public programme and the increasing recognition of the importance and necessity of financial literacy and strong government commitment, the circle of supporters has continuously expanded ever since. Starting from the 2022/2023 academic year, the programme has been implemented as a cooperation of six organisations. In addition to the initial coordinators, i.e. the Hungarian Banking Association and the Money Compass Foundation, the State Secretariat for Public Education of the Ministry of the Interior (formerly EMMI), the Ministry of Finance in charge of developing the government strategy for the development of financial

literacy,¹⁰ the Ministry of Economic Development and Junior Achievement Hungary Foundation are now included as project managers.¹¹

PÉNZ7 is aimed at primary and secondary school students. In the first year, 2015, nearly 90,000 students in about 650 schools took part in PÉNZ7 events. Strong, continuous growth was subsequently observed until the outbreak of the pandemic (*Table 1*).

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Schools	650	788	1,117	1,249	1,235	1,208	1,100	1,029	1,118
Students (in thousands)	90	110	160	202	205	217	171.5	170	145
Teachers	1,000	1,278	1,376	1,645	1,737	1,725	1,974	1,688	1,664
Volunteers	200	256	405	438	694	901	700	459	510

Source: MBSZ data

The curriculum of theme weeks is determined by the joint decision of the organisers on the basis of current social challenges and along the lines of a well-defined educational strategy. *Table 2* summarises the topics of the series of programmes up to the present.

Summary table	
Financial topics (2015–2024)	Entrepreneurial topics (2017–2024)
2015	Family budget planning
2016	Savings and financial planning
2017	Smart banking & modern money management
2018	Smart loaning strategies
2019	Smart investments
2020	Financial security
2021	Conscious money management in the family – family budget planning
2022	Savings and financial planning
2023	Modern money management and financial security in cyberspace
2024	Financial life lessons

Source: MBSZ data

¹⁰ In 2017, the government adopted a comprehensive, 7-year national strategy for developing the public's financial awareness, the aim of which is to increase the financial knowledge of the citizens of Hungary and to offer them a chance to acquire practical experience in managing their everyday finances.

¹¹ The entrepreneurial theme is coordinated by the State Secretariat for Economic Development and National Financial Services, in cooperation with the Junior Achievement Hungary Foundation. Thus, the theme week covers, among other things, everything from establishing a business to facing the challenges and making use of the opportunities that arise during its operation.

5.1. Regular events of PÉNZ7

Course organisers and the institutions dedicated to the development of financial literacy also provide a variety of additional programmes. Offering playful competitions and challenges, these programmes are intended to promote, among other things, financial inclusion, awareness of banking providers and services, the efficient and safe use of investment and savings opportunities, as well as key areas of insurance and cybersecurity (see *Annex* for details).

In the context of PÉNZ7, additional events and competitions are organised with the purpose of activating the creative energy and entrepreneurship of young people in the process of teaching them important knowledge and skills, such as solving business problems, developing entrepreneurial, financial and economic awareness, and promoting sustainability (*Table 3*).

	Events and topics	Goals and content
2023	<i>Innovation Challenge: Junior Achievement Hungary</i>	In online or traditional 2-day competitions, teams of secondary school students are invited to propose a solution to a real social or business problem.
2020	<i>Művészet és pénz (Art and Money)</i>	Művészet és pénz is an accompanying event initiated and organised by the Hungarian National Gallery.
2019	<i>MeseTÁRca (Purse of Fables)</i>	A video competition for young primary school students.
2019	<i>KÉPBEN VAGY? (ARE YOU GETTING IT?)</i>	The purpose of the competition, organised in connection with the Pénzügyi és Vállalkozói Témahét (Finance and Entrepreneurship Week), is to provide an opportunity for young people to demonstrate their understanding of what it means to be an entrepreneur.
2019	<i>Pénzügyi Adatvizuális Verseny (Financial Data Visualisation Competition)</i>	Intended for those who want to further develop their knowledge in the field of data analysis and visual data discovery.
2019	<i>Cetelem Quiz at Money Week!</i>	The objective is to draw the attention of young people to everyday financial and entrepreneurial awareness with professional programmes, special events and playful competitions.
2018	<i>„Ki a vállalkozó?” (Who Is an Entrepreneur?)</i>	The competition is intended to give an idea of what young people think about entrepreneurs and entrepreneurial life.
2017	<i>PÉNZ7 – Mondd magyarul! (Money Week – Say It in Hungarian!)</i>	Financial competition for finding a name.
2017	<i>Superhero Comic Drawing and Video Contest</i>	Superheroes were invited to protect the pocket money of students. Participants in the programme were expected to submit comics and videos.
2017	<i>„A Molnár család pénzügyei” (The Finances of the Molnár Family) video competition</i>	Its objective is to strengthen the conscious financial thinking of secondary school students by digitising the teaching materials of the Money Compass.
2016	<i>K&H Színezz, Kész, Pénz! (K&H Colour, Set, Money!)</i>	Drawing competition for creative primary school students.
2016	<i>Financial escape game</i>	Unlike in the case of general escape games, the game developed by the Junior Achievement Hungary Foundation contained only puzzles and codes of a financial nature.
2016	<i>Cetelem Zöldsulí (Cetelem Green School)</i>	Focusing on financial awareness.

6. Other significant programmes aimed at developing financial awareness

6.1. OTP Fáy András Foundation

The activity of the *OTP Fáy András Foundation* stands out among the permanent events organised by other bodies than the banking association. The Foundation provides training for developing young people's financial competences and strengthening their financial awareness. Every year, approximately 30,000 students take part in its free, practice-oriented awareness-raising courses. Its educational programmes have received numerous national and international awards.

6.2. Financial literacy and consumer protection – the guiding role and activity of the MNB

As stipulated in the Central Bank Act, it is the duty of the Magyar Nemzeti Bank to ensure the protection of financial consumers, in particular by way of developing financial literacy, increasing consumer awareness, reducing damages and risks resulting from disadvantageous consumer decisions and facilitating product selection. In order to spread financial knowledge and shape attitudes, the MNB carries out complex activities. It has developed a unified information system, established a national network of consulting offices and closely cooperates with partner institutions and civil organisations. The MNB is the key institution for the development of financial literacy and financial consumer protection (*Hergár – Sz. Pap 2019*).

The task of the Hungarian Money Museum and Visitors Center, established by the MNB and opened on 16 March 2022, is to promote the development of financial awareness among the population and younger generations, and to develop the everyday use of different means of payment. This purpose is served by the Museum's permanent exhibition, complemented by high-quality financial-themed training courses in museum pedagogy offered for groups of school students.¹²

One of the most important flagships in the development of the financial awareness of the adult population is the *MNB's Financial Navigator* programme.¹³ Aimed at transferring practical financial knowledge and consumer protection information in an accessible format, it provides support in a number of typical financial decisions, such as opening a bank account, electronic payment opportunities, savings, borrowing, etc. The complex knowledge base of the programme consists of a website, search and comparison applications that facilitate product selection, a mobile application, a series of information booklets, as well as a number of one-minute or longer educational film clips. A part of the programme content deals with issues related to financial products and services, while another part responds to current events of great interest that shape the market. In addition to using

¹² Money Museum: <https://www.penzmuzeum.hu/muzeum/>

¹³ Financial Navigator: <https://www.mnb.hu/fogyasztovedelem>

various means to inform the public, the programme includes several other types of activities as well, such as communication campaigns related to consumer protection, collaborations or workplace training courses and seminars.

In addition to producing content, the MNB proactively provides information and offers personalised assistance. To this end, in addition to contacting the MNB's customer service by phone, in writing or in person, customers can turn to the MNB's Financial Navigator Advisory Office Network. Established on the basis of effective collaborations with *non-governmental organisations*, the network offers service that is unique in Europe, independent of market players and available free of charge for customers throughout the country. The office network was gradually built up by 2018 and is now available in every county of Hungary.

Money Compass Foundation was established in September 2008 by the Student Loan Centre, the Hungarian Banking Association and the MNB. It was founded with the purpose of developing and implementing financial awareness programmes in cooperation with the authorities, civil organisations and market players. The mission of the organisation is to provide instrumental programmes aimed at supporting the responsible, well-informed financial decision-making of individuals and families, and improving the public's financial awareness. As part of its financial and economic educational activities carried out in the context of public education, the organisation develops textbooks and content, offers advanced studies for teachers in its network of secondary and primary schools, and organises financial educational programmes and playful educational activities. Since 2015, the Foundation has been a permanent co-organiser of PÉNZ7 in Hungary.

In addition to the textbook development activities noted above, the Foundation is also a key player in the continuing education of teachers on financial and economic topics. With all of this, it significantly contributes to the quality and quality assurance of school and extracurricular training aimed at developing financial literacy. Money Compass Foundation regularly measures the effectiveness of programmes aimed at developing financial literacy. The relevant research has clearly demonstrated the effectiveness of advanced studies offered to teachers (*Németh – Deák-Zsótér 2023*). The early findings of the research conducted among secondary school students and 8th graders indicate that extracurricular school activities facilitated as independent subjects or integrated into other subjects (e.g. PÉNZ7 or different competitions), have a positive effect on students' financial knowledge, abilities and attitudes.

7. Moving up in international rankings

As a result of the efforts and commitment, the financial knowledge and literacy of the Hungarian population – which is the basis for responsible financial decisions and the appreciation of financial institutions – is constantly increasing. The OECD

regularly measures the development of the financial literacy in different countries in an international comparison, based on the individual components of knowledge, attitude and behaviour. The research shows that Hungary has made significant progress in the last decade. According to the survey published on 25 June 2020 (OECD 2020), Hungary ranked 9th among European countries and 14th worldwide. Based on the answers to the summary questions of the survey and the “seven financial knowledge questions” of the OECD, Hungary scored slightly lower (12.3) than the OECD average (13.0). In respect of the answers to OECD’s seven questions, Hungary ranks 8th among European countries and 11th out of all the countries examined. Compared to the OECD average, Hungarian respondents performed above average in most questions. Published in 2023, OECD’s latest international comparative analysis clearly indicates that the results of efforts made at improving financial awareness have already yielded results in the country. Hungary achieved an outstanding result in the financial knowledge category, even compared to its previous results, finishing in 4th place out of 39 countries. In addition to the improving results, the targeted efforts to an incentivise a conscious approach to finances must continue in order to achieve similar results in the field of the practical application of knowledge (PÉNZ7.hu 2024).

In recognition of the outstanding participation numbers in Hungary, the Hungarian PÉNZ7 programme was listed among the best of the Global Money Week event series for the third time in 2019. In the same year, PÉNZ7 won the “Pro Bono Initiative of 2019” award of the Voluntary Centre Foundation. In 2021, the European Finance Quiz organised in the context of the European Money Week won first place with a flawless performance by Zsófia Strasszer, a student at Keleti Károly Secondary School of Economics in Budapest. The results confirm the efficiency of accomplished work carried out for the development of financial literacy.

8. Summary and conclusions

Financial education is essential for the public to be able to connect to international financial networks, to manage loans and savings, and to understand the functioning and inherent risks of the financial system. The development of financial literacy is the joint duty of governments, educational institutions, financial actors and civil society. Over the past ten years or so, the development of the financial literacy and knowledge of society in general has become more and more important for the public sector, civil society and economic actors alike, and is regarded as an activity that ultimately leads to an increase in the overall performance of economy.

Financial and economic education was introduced in public education. One of the important milestones in this respect was that the teaching of economic and financial knowledge was listed among the objectives, competences and areas in the National Core Curriculum. At the same time, financial, economic or entrepreneurial skills

are not educated as compulsory subjects outside of technical schools. The Strategy for the Development of Financial Awareness, created in 2016 and then adopted in 2017, was another important milestone in the development of financial literacy. The accredited textbooks and other teaching materials published every year since 2017, which promote the founding and development of students' financial awareness starting from the 3rd grade of primary school until secondary school graduation, are key resources in this respect.

In Hungary, the financial and entrepreneurial theme week, PÉNZ7 (Money Week) is the financial literacy development programme that attracts the most participants. The cooperating professional partners of the programme consider it their mission to shape economic and financial attitudes, as well as to provide assistance with everyday financial situations and conscious adulthood. Taking into account the characteristics of each age group, the special classes of PÉNZ7 convey the knowledge necessary for responsible decision-making in a playful, multifaceted and practical manner. The theme week also serves as an opportunity to bring everyday practice closer to young people by involving financial professionals and entrepreneurs on a voluntary basis.

Research aimed at reviewing non-school financial literacy programmes revealed that the volume of training, the number of training programmes and the number of participants increased almost threefold between 2016 and 2020, meaning that, according to the 2020 figures, the examined programmes involved more than 1.3 million participants. The fact that the duration of the training programmes and the number of multi-day training events organised for adults also increased between 2016 and 2020 is another sign of progress. Students in public education continued to represent the vast majority of those participating in the training programmes in 2020. In addition, the studies also drew attention to the fact that only a small portion of the training programmes were aimed at financially vulnerable adults, and that the income situation and social background of the target groups were given less consideration. In this respect, MNB's Financial Navigator programme is of particular importance, since it is aimed at promoting and developing financial awareness among the adult population, in particular among financially vulnerable social groups, and it is available to adults in need not only by providing knowledge and training, but also by offering advice. In the aforementioned studies, while evaluating the increase in the number of programmes aimed at developing financial literacy and the number of participants, the authors highlight the fact that the quality assurance of training courses has not improved and that measuring effectiveness was not customary. The use of the accredited textbooks and teaching materials issued by the Money Compass Foundation, as well as the wider spread of their culture of measurement, could represent a significant step forward in the quality, purposefulness and effectiveness of Hungarian financial literacy development programmes.

As this article demonstrates, very significant progress has been made in the field of financial literacy and the development of financial awareness over the last ten years. Studies, particularly the findings of the OECD's longitudinal surveys, show that it is now possible to measure the development of financial awareness, especially in terms of financial knowledge and know-how and calculation skills. At the same time, further progress is needed in respect of financial attitudes and behaviour, as well as the practical application of financial knowledge.

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Annex

Regular events of the PÉNZ7

Digitális Szimat Kihívás (Digital Detective Challenge) is an educational game related to the use of bank cards, online payments, password protection, prevention of data theft and digital security, in the form of an online quiz provided by the Hungarian Banking Association and their partners. The purpose of games provided in the context of *Kahoot* (knowledge test and prize game) is to draw attention to the ever-increasing frequency of data thefts.

The *PéznOkos Kupa (Smart Money Cup)* is a national competition in financial knowledge for secondary school students, organised annually within the framework of PÉNZ7. The competition is intended for teams of three, with the assistance of a coaching teacher.

As part of the *PéznFutam (Money Race)* outdoor adventure game, the organisers, i.e. Pézniránytű (Money Compass) in cooperation with PéznOkos Kupa, BankCode in cooperation with Money Museum and Részvényfutam (Stock Race) in cooperation with the Budapest Stock Exchange, offer financial and mathematical puzzles for students in grades 4 to 14. Covering more than 2,000 locations in the country, the team game invites students to solve interesting financial puzzles by going from checkpoint to checkpoint.

Organised by the Money Compass Foundation and the Money Museum, *BankCode* is a four-round national financial team competition for secondary school students.

Részvényfutam (Stock Race) is a free online stock market game provided by the Budapest Stock Exchange (BÉT) and the Money Compass Foundation. Accessible on BÉT's website, the game invites players to test their investment skills by using virtual capital and real shares.

The *Nagy Diák Péznügyes Teszt (Big Student Finance Test) programme* is organised every year by the Ministry of Economic Development, with the cooperation of supporting partner organisations. The programme covers the topics of savings, investment, insurance and cybersecurity.

ZsetON – Gear up for finances! The Ministry of Finance announced a competition for young people as part of its *Okosan a pénzzel! (Budget Wisely)* programme. Participants are required to provide answers to 16 financial questions in an online test. Since 2023, the competition has been organised by the Ministry of Economic Development under the title 'Nagy Diák Péznügyes Teszt' (Big Student Finance Test).

FINTELLIGENCE conferences: Since 2017, PÉNZ7 has been organised in higher education as well, dealing with the development of financial literacy and entrepreneurial culture within the framework of the University of Miskolc's Scientific Career Day. The FINTELLIGENCE Financial Literacy Centre was opened at the University of Miskolc in 2018. Since then, additional units have been opened at the University of Pécs, the University of Debrecen and the Budapest University of Economics. The development of financial literacy is facilitated by educational materials and textbooks focusing on particular age groups.