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FINANCIAL EXCLUSION FROM THE PERSPECTIVE OF FINANCIAL LITERACY IN THE DIGITAL WORLD OF THE 21ST CENTURY THROUGH THE EXAMPLE OF HUNGARY[1]

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ABSTRACT*. *The turbulent changes of the 21st century have affected all aspects of our lives. The digital revolution, driven by the fourth industrial revolution, has created new platforms for economic players to work, interact socially and administer. However, preparedness for digitalisation and thriving in the digital space is not a basic skill for all sectors, and there are significant differences between generations. All of this feeds into another key problem of the 21st century, which is called financial exclusion. Access to the digital space varies significantly across countries, regions within countries and generations. The objective of this paper is to examine the phenomenon of financial exclusion and the problems that arise from it, paving the way towards possible solutions.

KEYWORDS: financial exclusion, digitalization, financial literacy, Hungary.

JEL classification: A20, I22, G53.

Introduction

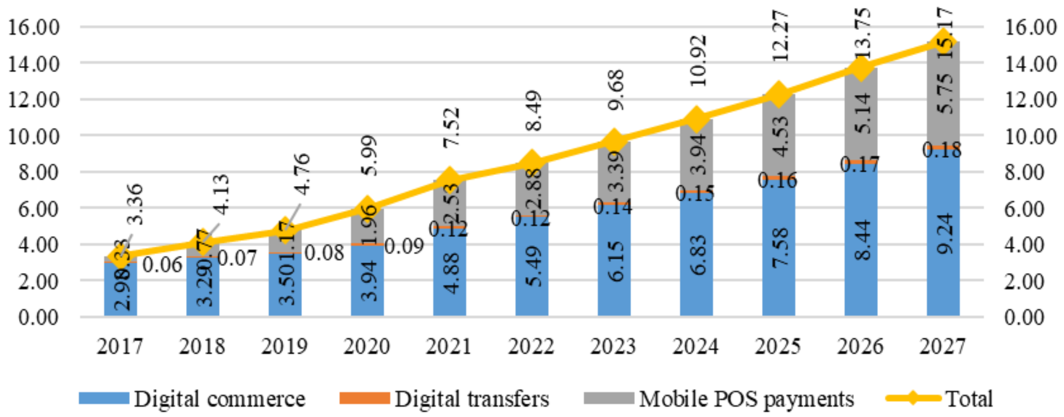
The digitalisation efforts and achievements of the 21st century have significantly changed financial interactions, the types of financial transactions and the arenas of financial management. In addition to the physical space for transactions in today's economy, the digital space is of paramount importance, providing a complementary, and in many cases, unique solution for all aspects of life. The emergence of the digital space has also been given a new impetus by the coronavirus pandemic, where we were forced to move from the physical space to the digital world. The fear of infection gave a new momentum to the already powerful advance of digitalisation and robotisation. This was reflected at all levels of the organisation, from payment solutions to the management of day-to-day work, and banks were no exception, either. Fear of cash has led to a significant increase in card transactions and the pandemic has given rise to new cryptocurrencies. All of these developments have provided further evidence that the widespread use of electronic payment systems contributes to economic growth, leading to significant cost savings on both the demand and supply side, if all these parties can take advantage of its benefits (Peric, 2015; Turján *et al*, 2011). This is where the concept of digital exclusion comes up again, which is a major obstacle to these positive effects. Digital payment solutions, internet-based money transfer systems through digital platforms and the possibilities offered by mobile phones have made almost the entire range of banking services more convenient and accessible. The online space has led to much greater freedom in managing finances. Internet-based solutions, available every minute of the day, have made it much easier for households and businesses to manage their finances from anywhere. It is also a fact that the world is increasingly moving towards digital payment solutions because of their convenience, speed and simplicity (Muneeza *et al.*, 2018). Numerous studies have examined the positive and negative effects of the digitalisation of finance. Many authors agree that financial digitalisation and the resulting flow of information and improved access to information can contribute to poverty reduction and ensure a more financially inclusive society (Sassi - Goailed, 2013). Financially excluded individuals and households are able to increase their savings, invest in family education, start businesses, empower women in the family (Bruhn - Love, 2014).

1. Literature Review

The actual development of a financial culture is also a very important accelerating factor. However, the digital space of cryptocurrencies, which at first glance may seem attractive, also poses a number of dangers. The players in the online space exist in the virtual space. The only guarantee for users is trust when they entrust their money to these players. In the event of a hacker attack or the disappearance of the service provider from one moment to the next, users are not protected by any guarantee net for their money and their investments (Zeranski - Sancak, 2020). Culture is a feature of society, which has evolved over decades and generations. A general definition of culture is the sum of material and spiritual values created by a society, which is inherited, developed and transformed from generation to generation. The incorporation of learned values into culture is a time span that takes several generations. In this context, it is difficult to talk about financial literacy yet, as the importance of financial awareness has only come into focus after the 2008 crisis. Today, however, financial literacy is an explicitly important factor on the road to financial culture, without which it is impossible to cope effectively in the digital world of finance (Vida *et al*., 2020). Financial culture and financial literacy still do not have an established, uniform definition. The concept, as defined by the Hungarian National Bank and the then State Supervisory Authority of the Hungarian Financial Supervisory Authority (2008), refers to a set of knowledge and skills that enable individual decision-makers to identify and interpret the basic financial information necessary for their decisions and to make responsible financial decisions based on this information. Financial literacy is defined by prominent researchers such as Atkinson and Messy (2012) as the set of knowledge, skills, abilities, attitudes and behaviours that are essential for making sound financial decisions. In this regard, Kholiah and Iramani (2013) argue that it is the individual's behavioural patterns that are important, i.e. how the individual plans, budgets, uses his or her money and saves. Amagir *et al*. (2018) interpret financial literacy as a triad of three factors; knowledge, behavioural patterns and attitudes.

Individuals and households need more knowledge today than they did a few years ago. This is no different in the field of finance (Lusardi - Mitchell, 2011a). In the fast-paced world of the 21st century, it is necessary to have a solid basis for making sound financial decisions that was unimaginable just a few decades ago. In addition to its many benefits, the digital space also brings risks, for which a solid foundation of previous education is particularly important. Such knowledge has become indispensable for individuals who understand and are able to adapt to changes in modern financial processes, but it has also been shown that a good financial foundation does not in itself lead to good financial decisions, as it requires an individual's attitude (Borden *et al.*, 2008; Johnson - Serraden, 2007). An important part of financial knowledge and awareness is the understanding and perception of risk, which is particularly important for service providers operating in the digital space. In order to effectively judge the benefits and drawbacks of these offerings, we need to learn to interpret them, which, in many cases, is based on inherited patterns, which raises the issue of financial socialisation (Sági *et al*., 2020). The lack of financial literacy leads to poor financial decisions that are detrimental to the well-being of the individual and therefore to society as a whole (Braunstein - Welch, 2002; Vasa, 2002). It implies that the financial literacy of citizens of a country or region is important at the national level, as it determines the overall well-being of individuals and households, along with the quality of life (Henager - Cude, 2016).

The literature on financial exclusion and the related concept of financial literacy is widely discussed, but relatively few studies touch upon the digital aspects of it, especially its drivers and challenges (Wang - He, 2020). The most fundamental elements of digital finance are payment systems. They are the most widespread and commonly used solutions, whose location in the digital space, in addition to providing significant convenience, has enormous practicality and utility value. Digital payment technologies, together with the ubiquity of mobile phone technology, have brought about changes in financial systems that are so prevalent all over the world. The various card payments, mobile wallets, mobile banking and phone payments have become part of our lives. We have evolved to the point where cash is increasingly being replaced by various digital means of payment. The digital payments segment is estimated by Statista to be worth $8.49 billion in transactions worldwide, more than two and a half times the value in 2017. This value is expected to continue to rise sharply in the forthcoming years, as shown in *Figure 1*. The volume of digital payments adoption is global and is set to continue to grow. It is estimated that in 5 years' time (2027) it could be double the current value in 2022.



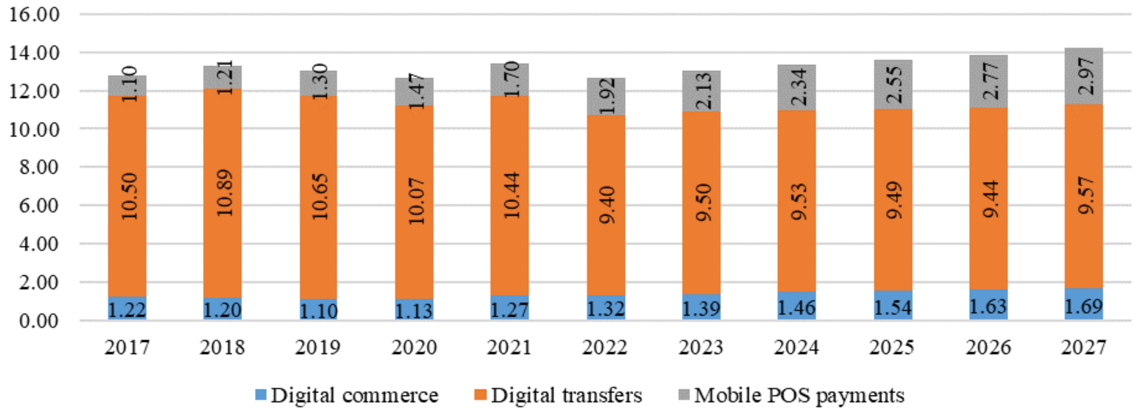
Source: Statista (2022).

Figure 1. **Digital Payment Solutions Worldwide (billion USD)**

The changes are also relevant at the individual, customer level. As can be seen, mobile POS payments are gaining ground in terms of digital payment solutions, as the per capita figure shows. This is expected to grow significantly in the future. The same can be said for the volume of digital commerce solutions. However, digital transfers via mobile banking will decline, as already shown in the 2022 value, as illustrated in *Figure 2*.

Digital payment instruments can be official, government-issued, but digital currencies are also becoming more common, due to various financial innovations. Innovations by fintech companies are dominant. These companies have long been seen as competitors by banks but are now seen more as facilitators and partners by financial institutions. All these developments are accelerating the process of full digitalisation of the banking sector. In the midst of these effects, it is essential that the changes these processes bring about are managed and accepted by the economic agents, households and businesses that use them. It is in the context of these changes that the concept and practice of financial inclusion has come increasingly into the spotlight. Financial inclusion and financial exclusion are processes and concepts that go hand in hand, but in opposite directions. Ozili (2020) identifies four reasons for the importance and justification of financial inclusion:

- It is an integral part of a sustainable development strategy,
- it is also essential for social inclusion,
- it helps to reduce poverty levels, and
- it leads to social and economic benefits.



Source: Statista (2022).

Figure 2. **Per Capita Value of Digital Payment Solutions Worldwide (thousand USD)**

The concept of financial exclusion was first attempted to be defined in the early 1990s, when it was interpreted as limited access to banking services due to bank closures (Leyshon - Thrift, 1993). The concept thus became a focal point and was complemented by other elements such as education, financial knowledge, and the examination of exclusion due to financial background. The concept of financial exclusion includes not only the lack of physical access to banking services, but also limited access to credit and modern means of payment.

There is no single definition of financial exclusion. A 2008 study by the European Commission attempts to capture the essence of the concept by referring to the difficulty of accessing and using financial products and services, which can result in disadvantages in their daily lives (poverty, vulnerability) (EC, 2008). The same report captures the essence of financial exclusion in four key areas defined by the World Bank: transactions, savings, credit and insurance. These 'early' sources did not yet deal in depth with the phenomenon of digitalisation, which has the potential to reduce financial exclusion on the one hand, and to deepen it on the other, in terms of the applicability of new innovations and new features. As long as mixed payment systems remain, exclusion from digital payment systems does not seem to be a problem. However, given the speed of the process, this will not be the case for long. The emergence of cryptocurrencies and the cheaper nature of electronic payment solutions will undoubtedly push the process in this direction. Physical shopping is being replaced by online shops, which offer cheaper products in every part of the country and, slowly, the world. However, access to these providers requires both knowledge and use of electronic payment systems. The first step in the fight against financial exclusion is to have a bank account with a credit card (Sarma, 2015). Those who do not have or cannot use these means are forced to opt for more expensive solutions (using intermediaries, travelling to distant cities, etc.). This is usually a problem for the poorer classes, who are excluded from the process either voluntarily (lack of knowledge) or because of their social situation (lack of creditworthiness, unreliable customers from a banking perspective) (Kempson *et al*, 2000).

As can be seen, there is no single definition of financial exclusion and financial inclusion in the literature, nor is there a single definition of financial culture or literacy. However, experts agree that it should certainly include the possibility of accessing and benefiting from financial products. Every member of society is an economic agent and therefore participates on the supply or demand side of the market and transacts with money. It is therefore in everyone's vital interest to be able to access financial services as and when they need them, at an affordable price and in the place of their choice. The digital space helps to meet these interests by bringing users' needs closer to service providers through mobile communication devices. Digital inclusion is also a concept closely related to financial inclusion, which can be understood in the context of the items discussed above (Xiao *et al*, 2022). With regard to digital inclusion, it is important to mention the availability of the infrastructure itself, which is not sufficient to make the phenomenon itself feasible. Closely linked to digital inclusion is the notion of the digital divide, the digital gap. In this respect, it is not enough to make digital solutions, technologies, tools and the digital space itself available, but we also have to be able to use them, i.e., to take into account the differences in use between different groups and generations with regard to the different tools (Bucy, 2000). It is not enough to have full coverage of the Internet; it is also necessary to look at what and how potential users are able to use it. Kling (1998) has already examined this problem, distinguishing between technical access (physical availability of technologies) and social access (knowledge and skills needed to use them). The concepts of access and use and the distinction between them have also been examined by Selwyn (2004). All these differences perpetuate the exclusion of certain groups of people, which in turn leads to the phenomenon of financial exclusion. In examining digital exclusion, experts would mention several factors. Dijk (2005), for example, highlights inequalities due to personal situation (age, gender, etc.), inequalities due to position (job, education, etc.). In the case of digital inclusion, it is very important to clarify three factors such as accessibility, affordability and the existence of digital skills and capabilities (Helsper, 2008).

DiMaggio and Hargittai (2001) proposed five dimensions along which the divide can be understood:

- technical means (software, hardware, network connectivity),
- conditions of use (location of access, freedom of use),
- usage patterns (what and when users use the digital space),
- social connectivity (availability of others, size of networks),
- readiness and ability to use.

All these are further influenced by the social situation of the individual. There are social groups that, depending on where they live, the size of their family or their religious beliefs, are excluded from digitalisation, which also leads to a widening of the gap (*Table 1*). All these factors mean that we must expect a loss of access to information, with the consequences already listed above. The extent to which individuals and groups are financially excluded is generally measured in three dimensions: frequency of use, barriers to use and access.

Table 1. The relationship between social and digital exclusion along different social groups

Basic users	have adequate access at their workplace, high level of basic practical use (correspondence, banking, shopping, etc.), a well-trained workforce
Mid-age low users	adequate access, home internet availability, own computer, willingness to use, low internet usage, preference for traditional channels,
Intermediate users	high level of access, broadband internet and portable devices, wide range of users, young people and their parents, interactive TV sets
Economically disadvantaged users	limited access, young people with limited assets (no car, no home), low propensity to communicate
Social users	group of young people and students, social and recreational use (chatting, listening to music, etc.)
Elderly socially isolated	digitally limited, simple mobile phones, non-interactive TV sets, no internet use, low propensity to use electronic communications
Multiple/deep exclusions	very limited technological background (no devices), no use, lack of IT skills, low willingness to use, economic exclusion, social isolation

Source: authors' own editing based on Helsper (2008).

However, it is also worth considering the dimension of financial literacy as a fourth item, as it is not enough to have the means available, there must be the willingness, ability and will to use them (Grohmann *et al*., 2018; Xu *et al*., 2019; Gavurova *et al*., 2019). Morgan and Trinh (2019) also found a positive relationship between financial literacy and financial inclusion and savings by individuals. Klapper and colleagues (2013) also demonstrated the link between financial literacy and effective participation in financial markets through the problem of rational borrowing, which also supports the positive effect of financial inclusion.

2. Material and methods

The results presented in this paper are based on a questionnaire survey conducted in spring 2022, using a pre-tested standardised questionnaire. The design of the questionnaire was preceded by several qualitative and quantitative rounds, and the experience gained from these was used to design the current questionnaire. The questions addressed in the questionnaire focused on financial awareness, the impact of digitalisation and changes in consumer behaviour in the aftermath of the pandemic, in the context of increasing digitalisation pressures. The survey was conducted online, ensuring full anonymity of respondents. No filtering or narrowing conditions were applied in order to obtain the largest possible sample, but in the process of cleaning the sample, inappropriate and incomplete responses were filtered out. In the present study, respondents were grouped by their place of residence, current location, age (generational) and previous participation in financial education. The survey resulted in 3,515 assessable questionnaires (*Table 3* shows the composition of the sample). We wanted to find out their views on each of the questions on financial exclusion and whether their views could be statistically evaluated (you can see the statements in *Table 2*). We asked them to rate each statement on a four-point scale, with a score of 1 indicating total disagreement and a score of 4 indicating total agreement. The tests were conducted using SPSS 22.0 software and ANOVA tables are used in this study to present the results. The following aspects were considered in terms of the practical manifestation of financial exclusion.

Table 2. Statements on financial exclusion in the research

1	I am not interested in financial products.
2	I was not taught anything about financial products in school.
3	My parents are not familiar with a wide range of financial products.
4	We do not talk about financial products at home.
5	We do not talk about finance among friends.
6	We do not talk about financial products at school.
7	I cannot ask my parents for financial advice.
8	I cannot ask my teachers for financial advice.
9	I cannot ask my family for financial advice.
10	I cannot ask friends for financial advice.
11	My parents have not made me aware of the importance of financial education.
12	My friends have not made me aware of the importance of financial literacy.
13	My family has not made me aware of the importance of financial literacy.
14	My teachers have not made me aware of the importance of financial literacy.

Source: authors' own research, 2022, N = 3515.

Table 3. The composition of sample based on certain clustering features

	Group	no.	%
Permanent residence	Capital	1567	44.6
	Rural metropolitan area	682	19.4
	Small town	778	22.1
	Village	488	13.9
Generational affiliation	BB gen.	154	4.4
	X gen.	639	18.2
	Y gen.	713	20.3
	Z gen.	2009	57.2
Current residence	Capital	1612	45.9
	City/town	1387	39.5
	Village	516	14.7
Participation in previous financial education	Yes	1775	50.5
	No	1740	49.5

Source: authors' own research, 2022, N = 3515.

The following hypotheses are formulated in the course of the work.

1. Belonging to the younger generation significantly reduces the phenomenon of financial exclusion.

2. The permanent and current residence of individuals affects the extent of exclusion.

3. Participation in previous financial education can significantly reduce the risk of financial exclusion despite all other conditions.

The composition of the sample is shown in *Table 3*.

3. Results

First, the sample was analysed by the respondents‘ permanent, registered residence (*Table 4*). Of the 14 statements on financial exclusion, only two showed a statistical correlation at the significance level. For the two statements, a statistically provable correlation was found for the statement on dealing with financial matters in a circle of friends. In this case, the highest mean value, i.e., the highest level of agreement, was shown by respondents with a permanent residence in a rural metropolitan area, and the lowest value was shown by respondents with a permanent residence in a small town. The overall sample mean of 2.43 strongly suggests that dealing with financial issues is not an issue in private conversations. A number of studies have shown that there is an educational effect of being able to get good tips and practices from friends for individuals facing financial decisions. Another finding that also showed a significant relationship was related to education. We measured the extent to which responding individuals could seek advice from the education system, more specifically from teachers. The sample mean in this case was 2.52, and here again the highest mean value towards disagreement came from individuals residing in rural metropolitan areas, and the lowest value, which was below the sample mean, came from respondents in small towns. This suggests that the two dominant arenas for financial socialisation, school and socialising with friends, are not significant in the perception of respondents. In other words, financial exclusion is reinforced by these two factors, which is supported by the significance values.

Table 4. Financial exclusion in practice by respondents' place of residence

		Mean	Std. Dev.	F	Sig.
We do not talk about finance among friends.	Capital	2.3861	1.01942	3.772	0.010
	Rural metropolitan area	**2.5205**	1.01401		
	Small town	*2.3843*	1.01094		
	Village	2.4857	1.01518		
	Total	2.4256	1.01711		
I cannot ask friends for financial advice.	Capital	2.5399	1.12025	3.914	0.008
	Rural metropolitan area	**2.6173**	1.08326		
	Small town	*2.4396*	1.11481		
	Village	2.4488	1.13803		
	Total	2.5201	1.11585		

Source: authors' own research, 2022, N = 3515.

The issue of financial exclusion was further analysed by the generational characteristics of the respondents (*Table 5*). For thirteen of the fourteen characteristics surveyed, a significant relationship was found between the age of the respondents and the statements. Overall, it was found that the highest mean scores for the statements were given by respondents belonging to Generation BB and the lowest mean scores were given by respondents belonging to Generation Z. All indicate that the most excluded are the older respondents and the least excluded are the respondents belonging to the youngest generation. Individuals in the latter group receive the support they need to make financial decisions from the education system, teachers, family and parents, and the support of friends in making their decisions. The next group with high average scores was made up of Generation X respondents, and the Generation Y group of respondents also showed scores close to Generation Z. All this shows that older people, mainly individuals belonging to the BB generation, need to be prioritised in terms of financial exclusion. It is their financial decisions that need to be supported by the family, as this group is also disadvantaged in terms of digital issues, lacking the digital competences needed to make effective financial decisions. The picture is a little more nuanced for Generation X in terms of the views of Hungarian respondents, but the top Generation X respondents are also considered a priority age group in this case. Generation Z, often referred to as the "always online" generation, is in a much better position. Thanks to their digital skills and abilities, they can access a wealth of information in a very short time thanks to ICT tools, which broadens their horizons and expands their knowledge. Because of the targeted focus of attention and the possibility of accessing an immense amount of information, they are the age group that is very well placed to be financially excluded. In addition to Generation Z, Generation Y is also well placed in terms of the exam question, as the averages above show. Due to the close proximity of the two generations, these two age groups can be said to be the least financially excluded.

Table 5. Financial exclusion in practice by respondents' age (generation)

		Mean	Std. Dev.	F	Sig.
I was not taught anything about financial products in school.	BB gen.	**2.7662**	1.19253	4.354	0.005
	X gen.	2.7653	1.13562		
	Y gen.	2.6816	1.08406		
	Z gen.	*2.6033*	1.07090		
	Total	2.6558	1.09267		
My parents are not familiar with a wide range of financial products.	BB gen.	2.7143	1.12438	44.388	0.000
	X gen.	**2.7277**	1.06572		
	Y gen.	2.5007	1.01135		
	Z gen.	*2.2499*	0.98357		
	Total	2.4080	1.02958		
We do not talk about financial products at home.	BB gen.	**2.5844**	1.08285	4.810	0.002
	X gen.	2.4366	1.06024		
	Y gen.	2.4390	0.99549		
	Z gen.	*2.3335*	1.02376		
	Total	2.3846	1.02917		
We do not talk about finance among friends.	BB gen.	**2.6753**	0.99596	9.279	0.000
	X gen.	2.5665	1.04666		
	Y gen.	2.3941	1.00578		
	Z gen.	*2.3728*	1.00689		
	Total	2.4256	1.01711		
We do not talk about financial products at school.	BB gen.	**2.8247**	1.04245	12.406	0.000
	X gen.	2.6682	1.12235		
	Y gen.	2.5750	1.07201		
	Z gen.	*2.4385*	1.07920		
	Total	2.5249	1.08942		
I cannot ask my parents for financial advice. .	BB gen.	**2.9091**	1.15676	90.362	0.000
	X gen.	2.6682	1.14857		
	Y gen.	2.3773	1.07677		
	Z gen.	*2.0050*	1.03474		
	Total	2.2407	1.11036		
I cannot ask my teachers for financial advice.	BB gen.	**2.8831**	1.19338	26.260	0.000
	X gen.	2.7606	1.12841		
	Y gen.	2.5961	1.11405		
	Z gen.	*2.3888*	1.08535		
	Total	2.5201	1.11585		
I cannot ask my family for financial advice.	BB gen.	**2.4481**	1.04188	22.906	0.000
	X gen.	2.2692	1.05470		
	Y gen.	2.2300	1.02379		
	Z gen.	*1.9935*	1.00321		
	Total	2.1115	1.02810		

Table 5 (*continuation*). Financial exclusion in practice by respondents' place of residence

		Mean	Std. Dev.	F	Sig.
I cannot ask friends for financial advice.	BB gen.	**2.4221**	1.11310	6.308	0.000
	X gen.	2.2864	1.02216		
	Y gen.	2.1935	0.99528		
	Z gen.	*2.1414*	0.98844		
	Total	2.1906	1.00402		
My parents have not made me aware of the importance of financial education.	BB gen.	**2.6104**	1.13938	51.318	0.000
	X gen.	2.4726	1.13319		
	Y gen.	2.2917	1.03406		
	Z gen.	*1.9856*	1.00610		
	Total	2.1636	1.06410		
My friends have not made me aware of the importance of financial literacy.	BB gen.	**2.6234**	1.06076	7.320	0.000
	X gen.	2.4632	1.04813		
	Y gen.	2.4488	1.04019		
	Z gen.	*2.3201*	1.04653		
	Total	2.3855	1.04898		
My family has not made me aware of the importance of financial literacy.	BB gen.	**2.4416**	1.02891	27.352	0.000
	X gen.	2.3599	1.06469		
	Y gen.	2.2889	1.02118		
	Z gen.	*2.0254*	1.01082		
	Total	2.1579	1.03515		
My teachers have not made me aware of the importance of financial literacy.	BB gen.	**2.6429**	1.12998	15.791	0.000
	X gen.	2,5806	1,10542		
	Y gen.	2,4376	1,06494		
	Z gen.	*2,2902*	1,06320		
	Total	2,3883	1,08108		

Source: authors’ own editing, 2022, N = 3515.

Table 6. Practical manifestations of financial exclusion by respondents’ current residence

		Mean	Std. Dev.	F	Sig.
We do not talk about financial products at home.	Capital	2.4113	1.05065	3.453	0.032
	City/town	*2.3302*	1.00459		
	Village	**2.4477**	1.02169		
	Total	2.3846	1.02917		
I cannot ask my parents for financial advice.	Capital	**2.2860**	1.11509	3.082	0.046
	City/town	*2.1853*	1.09022		
	Village	2.2481	1.14421		
	Total	2.2407	1.11036		
I cannot ask my family for financial advice.	Capital	**2.1619**	1.05431	3.652	0.026
	City/town	*2.0634*	0.99871		
	Village	2.0833	1.01772		
	Total	2.1115	1.02810		

Source: authors’ own editing, 2022, N = 3515.

We also looked at the results by the respondents’ current residence (*Table 6*). In this case, we asked them to classify themselves into three categories. We wanted to know whether individuals living in the capital, cities or villages were the most affected by the phenomenon of financial exclusion. For only three of the 14 statements examined was there a significant association with current place of residence, for all other statements this was not the case. The three statements showing a relationship focused on counselling and financial discussions at home. Surprisingly, the highest mean scores for discussions about home finance were found for respondents living in villages. This implies that for individuals living in villages, financial thinking is not a topic, they do not discuss their decisions at home, and thus we cannot talk about financial socialisation at home, with family or even with friends. In the present case, it can therefore be said that people living in villages are the most financially excluded. The next two statements were related to the request for financial advice. Surprisingly, respondents living in the capital are unable to seek advice from their parents and family. This may be due to physical distance, as the respondent lives in the capital and his/her family lives outside the capital, possibly in the countryside. Another reason is the fast-paced lifestyle of today. In this respect, however, it can be said that people living in the capital are left to their own devices when it comes to financial decisions and are therefore, to a limited extent, excluded from this aspect. Here too, surprisingly, respondents living in the city showed the lowest average score, which may be due to their proximity to family and parents.

Table 7. Practical manifestations of financial exclusion based on previous participation in financial education

		Mean	Std. Dev.	F	Sig.
I am not interested in financial products.	Studied	*2.1499*	0.96563	63.460	0.000
	Did not study	**2.4080**	0.95568		
	Total	2.2777	0.96922		
I was not taught anything about financial products in school.	Studied	*2.3577*	1.08745	288.556	0.000
	Did not study	**2.9598**	1.01149		
	Total	2.6558	1.09267		
My parents are not familiar with a wide range of financial products.	Studied	*2.3144*	1.01082	29.878	0.000
	Did not study	**2.5034**	1.04002		
	Total	2.4080	1.02958		
We do not talk about financial products at home.	Studied	*2.2676*	1.01951	46.974	0.000
	Did not study	**2.5040**	1.02554		
	Total	2.3846	1.02917		
We do not talk about finance among friends.	Studied	*2.2873*	1.01050	67.531	0.000
	Did not study	**2.5667**	1.00467		
	Total	2.4256	1.01711		
We do not talk about financial products at school.	Studied	*2.2975*	1.08046	163.494	0.000
	Did not study	**2.7569**	1.04916		
	Total	2.5249	1.08942		
I cannot ask my parents for financial advice.	Studied	*2.1301*	1.09187	35.892	0.000
	Did not study	**2.3534**	1.11800		
	Total	2.2407	1.11036		
I cannot ask my teachers for financial advice.	Studied	*2.3549*	1.10405	80.296	0.000
	Did not study	**2.6885**	1.10287		
	Total	2.5201	1.11585		
I cannot ask my family for financial advice.	Studied	*2.0276*	1.01000	24.046	0.000
	Did not study	**2.1971**	1.03958		
	Total	2.1115	1.02810		
I cannot ask friends for financial advice.	Studied	*2.0879*	0.99102	37.930	0.000
	Did not study	**2.2954**	1.00664		
	Total	2.1906	1.00402		
My parents have not made me aware of the importance of financial education.	Studied	*2.0501*	1.03994	41.220	0.000
	Did not study	**2.2793**	1.07624		
	Total	2.1636	1.06410		
My friends have not made me aware of the importance of financial education.	Studied	*2.2930*	1.04133	28.117	0.000
	Did not study	**2.4799**	1.04864		
	Total	2.3855	1.04898		
My family has not made me aware of the importance of financial education.	Studied	*2.0372*	1.00885	49.432	0.000
	Did not study	**2.2810**	1.04735		
	Total	2.1579	1.03515		
My teachers have not made me aware of the importance of financial education.	Studied	*2.2141*	1.05343	95.666	0.000
	Did not study	**2.5661**	1.08027		
	Total	2.3883	1.08108		

Source: authors' own editing, 2022, N = 3515.

Finally, we also wanted to know to what extent previous participation in financial education influences financial exclusion (*Table 7*). Overall, a significant relationship was found in all cases between previous financial education and the statements tested. It was also clear that the highest mean scores for the statements examined were in all cases for respondents who had not previously studied finance. This confirms that the absence of financial education is a clear factor towards financial exclusion. There is clear evidence of the anti-exclusionary nature of having previous financial education, which further confirms the findings of previous research that education is a key factor in the development of financial literacy and financial literacy education.

Conclusions and Recommendations

Based on the above research findings, it can be said that financial exclusion is present at many points in society, whether it is generational or even residential. The research has demonstrated that generational affiliation and participation in financial education significantly reduce the risk of financial exclusion, as evidenced by the significance values, and thus Hypotheses 1 and 3 are considered to be accepted. However, the research results show that neither current nor permanent residence has a significant effect on the degree of financial exclusion, and thus we reject Hypothesis 2. However, it should be pointed out that the mean scores for each question, which are overwhelmingly above two integers, indicate that the issue is worthy of special attention. If the phenomenon of financial exclusion did not exist, these average values would also be much lower for the sample as a whole. Thus, the case for a greater role for education in financial education, which is the best weapon against financial exclusion, remains. It is also very important to develop and strengthen digital skills. This is particularly necessary for individuals from older generations. Here, once again, education must be given a greater role, which does not necessarily have to take place in the classroom; various information campaigns and educational initiatives can be very useful in this area. The unprecedented digitalisation process must be tackled in such a way that it does not lead to further deprivation but serves the interests of individuals and households in order to improve money management and to develop a proper attitude to money.

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FINANSINĖ ATSKIRTIS IŠ FINANSINIO RAŠTINGUMO PERSPEKTYVOS XXI A. SKAITMENINIAME PASAULYJE REMIANTIS VENGRIJOS PAVYZDŽIU

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SANTRAUKA

Audringi XXI amžiaus pokyčiai paveikė visas mūsų gyvenimo sritis. Skaitmeninė revoliucija, kurią paskatino ketvirtoji pramonės revoliucija, sukūrė naujas platformas ekonomikos dalyviams dirbti, socialiai bendrauti ir administruoti. Tačiau pasirengimas skaitmeninimui ir klestėjimas skaitmeninėje erdvėje nėra pagrindinis įgūdis visuose sektoriuose, be to, esama didelių skirtumų tarp kartų. Visa tai prisideda prie kitos svarbios XXI a. problemos, kuri vadinama finansine atskirtimi. Galimybės naudotis skaitmenine erdve labai skiriasi įvairiose šalyse, šalių regionuose ir kartose. Šio straipsnio tikslas – išnagrinėti finansinės atskirties reiškinį ir dėl jo kylančias problemas atveriant kelią galimiems sprendimo būdams.

REIKŠMINIAI ŽODŽIAI: finansinė atskirtis; skaitmeninimas; finansinis raštingumas; Vengrija.

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