THE HISTORY OF LENDING AND FACTORS THAT CAN AFFECT LENDING BUT ARE DIFFICULT TO MEASURE

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Abstract
I set two goals when preparing this study. First, I wanted to examine the historical processes characteristic of lending, how people in different historical periods viewed borrowing, and what was characteristic of this area. I conducted a historical review from Hammurabi to the present day, focusing on events that I considered important. I then examined the factors that can be linked to lending and loan defaults, but which are difficult to measure and for which there is no generally accepted method. Within this area, I focused on financial culture, inclusion, and resilience, drawing on OECD research in this field. Overall, I concluded that these factors play an important role and that it may be advisable to take some of them into account in lending and credit assessment.

Keywords: *lending, non-payment, OECD*

1. Introduction, short history of lending

Lending has been part of human culture for thousands of years. The first rules can be traced back to Hammurabi, who recorded the rules for lenders and borrowers on stone tablets. (Fekete-Tatay, 2012)

In ancient Babylon, Phoenicia, and Greece, finance flourished, accompanied by high interest rates, and even then the concept of usury existed. If someone failed to repay a loan, they could face serious consequences, such as death or slavery.

In the Middle Ages, the main purpose of borrowing was to satisfy consumer needs. The Council of Nicaea clearly defined the attitude towards interest, as it declared interest to be forbidden. In the 12th century, those who charged interest were punished with excommunication. This resistance began to ease during the Reformation. In Hungary, lending transactions began again in the 14th century, but this was mainly done by the rulers. In the 15th century, the idea arose that money should be circulated for the sake of the economy after all. This was also true in Hungary, where the Thurzó family had connections with the Fugger and Medici families, who were considered banking dynasties at the time. In the 1600s and 1800s, loans were mainly provided by wealthy landowners and citizens.

In continental countries, lending has been around since the 19th century. In Hungary, the basic idea can be traced back to István Széchenyi. Several significant events took place during this period. The first Hungarian bank was founded in 1830. Furthermore, the concept of modern credit can also be linked to this period. (Vértesy, 2008)

By the 1940s, the impersonal nature of this business was becoming noticeable, but one question stayed the same: whether the bank would give the borrower a loan or not. The National Savings Bank, founded in 1949, was the institution that mainly dealt with retail customers. The former monopoly of banks was broken by the two-tier banking system that came into effect in 1987. After the change of regime, the domestic banking sector experienced difficulties, such as the bank failures of 1992. The following factors were behind the bank failures:

- granting of internal loans
- lack of document discipline
- disregard for banking rules.

However, the banking system did not become stable until the mid-1990s. (Vértesy, 2008)

For a long time, lending focused mainly on large corporations, with significant changes only occurring in the late 1990s. By 2004, millions of Hungarians had taken out loans, and banks were competing for borrowers, which led to a continuous easing of lending conditions. This rapid growth is supported by the fact that between 2000 and 2004, there was a significant increase in the debt stock of credit institutions' real estate-backed and consumer loans, as well as non-credit institution loans. In contrast, savings declined, which could lead to a debt trap for some customers. Even before the crisis, there were signs that the Hungarian population's financial awareness and financial literacy were poor, which is a dangerous factor in lending, and this lack of knowledge can also lead to a debt trap.

This was confirmed by the fact that in 2004, the number of non-performing loans increased dramatically, by 50%. However, there were institutions for which previous non-performance was not a disqualifying factor; they specifically targeted customers on the BAR list, pushing them into even greater debt. (Dobák-Sági, 2005)

The value of foreign currency loans taken out grew rapidly between 2003 and 2009. The above, combined with the growing stock of foreign currency loans, provided fertile ground for another "disaster". Due to the 2008 crisis, the Swiss franc exchange rate rose significantly, which led to such an increase in repayment installments that borrowers were no longer able to meet their obligations. The government sought to help debtors in distress and introduced the following measures:

- Final repayment at a given franc or euro exchange rate,
- Exchange rate cap: preferential repayment installments for 5 years for customers in arrears,
- Collective account,
- NET program (National Asset Management Program).

Finally, foreign currency-based loans were phased out in 2014.

As can be seen in *Figure 1*, there was a decline in new household loans for a few years after 2009, but since 2014, there has been a fundamental increase.

In 2015, a new product was added to the range of credit institutions, namely the CSOK. Non-repayable subsidies and preferential loans are still available to customers and married couples with children or planning to have children. However, from 2024, CSOK has changed and is now available under the name CSOK Plusz, with a partially modified structure. Under the program, a maximum of HUF 50 million in low-interest loans can be applied for, and HUF 10 million per child will be waived for the second and each additional child born. The interest rate on the loan is fixed at 3%, and there is no property acquisition tax payable on the property purchased with the loan. Unlike CSOK, CSOK Plusz is only available to married couples for children they have committed to having, provided that the wife is under 41 years of age. Over the age of 41, this is possible if a 12-week pregnancy is confirmed, which is possible until the end of 2025. (Bank360)

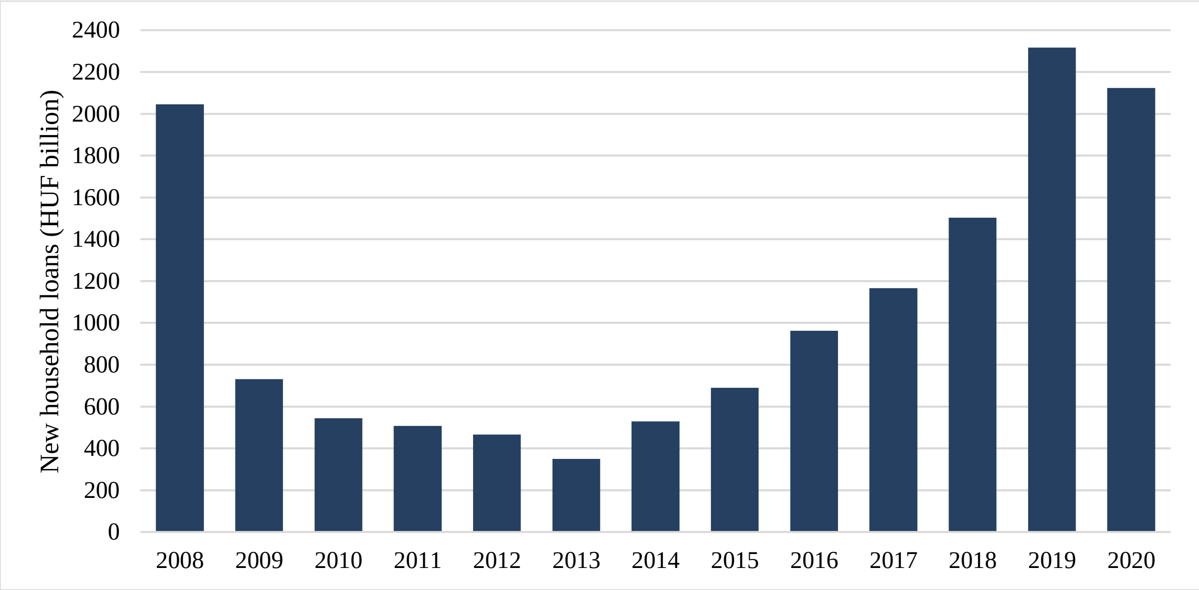

Figure 1. *New household loans in the entire credit institution sector between 2008 and 2020 (HUF billion)*
Source: Own editing based on MNB (2021)

In mid-2019, the range of preferential loans was expanded with the addition of the "Babaváró", which can be applied for by married couples planning to have children. The loan can be used freely, and the amount that can be requested is HUF 11 million from 2024, which becomes interest-free after the birth of the first child, and it is also possible to pause repayments. After the birth of the second child, 30% of the outstanding principal will be waived, and after the birth of the third child, the entire outstanding debt will be waived. However, if the conditions are not met, the loan will become subject to market interest rates. (Bank360)

The introduction of these loans has also contributed to the steady growth in domestic lending in recent years.

In the case of both CSOK Plusz and Babaváró, there are factors that may influence lending, but are difficult to measure and predict. Without completeness, these may include, for example:

- unexpected family events (divorce, death),
- unsuccessful attempts to have children,
- unsuccessful reproductive procedures, or the parties being unsuitable for reproductive procedures,
- proven contraindications to having children.

These are unexpected events that cannot be predicted in advance.

However, the coronavirus pandemic that broke out at the end of 2019 opened a new chapter. Among the measures taken, I would highlight the repayment moratorium, which may have an impact on non-payment. The moratorium was introduced in March 2020, and initially anyone could take advantage of it, but over time the conditions became increasingly stringent. More than 1.5 million customers in Hungary took advantage of this opportunity.

In the last quarter of 2022, there was a significant decline in retail lending. In the last quarter of 2022, 18% fewer personal loans were issued than in the same period of the previous year, representing a decrease of more than HUF 20 billion. In the case of housing loans, more than HUF 175 billion less was lent in the last quarter of 2022 than in the same period of the previous year, which corresponds to a 54% decrease. (MNB, 2023a)

2. Other factorts related to lending that are difficult to measure

In this chapter, I examine financial literacy, financial inclusion, and financial resilience. According to the OECD approach, financial literacy is part of financial inclusion, so I will discuss this first.

2.1. Financial inclusion

Financial inclusion is a process that ensures access to financial products and services for socially disadvantaged people in an affordable, fair and transparent manner. A previous survey in 2009 revealed a number of interesting and thought-provoking findings:

- More than half of the world's adult population does not use financial services for either savings or credit purposes.
- nearly 90% of these people live in Africa, Latin America, Asia, or the Middle East,
- two-thirds of adults who use financial services live on less than $5 a day in Africa, Asia, and the Middle East. (Chaia et al., 2009)

In 2021, a new survey was conducted on this topic under the supervision of the World Bank, which painted a more favorable picture than the previous one. The proportion of people with bank accounts increased by 50%, meaning that in 2021, 76% of the adult population had a bank account, with the proportion in developing countries standing at 71%. The proportions for each country are shown in *Figure 2*. (World Bank, 2021)

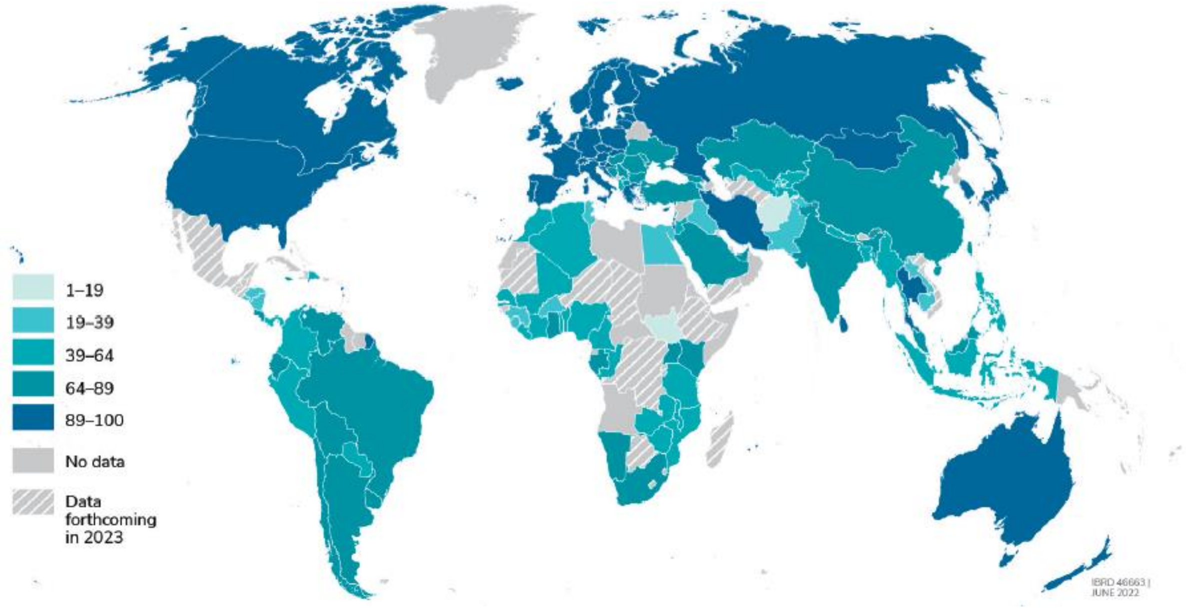

Figure 2. *Percentage of adults with a bank account in 2021*
Source: The Global Findex Database 2021

2.2. Financial literacy

Béres-Huzdik stated that lending is an important driver of the economy, which must function well in order for the economy to perform adequately. However, lending alone is not enough; it is also important that borrowers make informed financial decisions. Decisions related to lending can be influenced by the customer's financial knowledge and various subconscious patterns. Financial literacy can be a useful tool for assessing financial knowledge, and it is also important to understand consumer habits, because nearly half of our decisions are unconscious. (Béres-Huzdik, 2022)

I fully agree with the authors' opinion; I believe that better financial knowledge leads to better decisions.

However, today's financial market offers a wide and complex range of products, and in order to navigate the wealth of information with confidence, adequate financial knowledge is necessary. (Kovács et al., 2014) A single ill-considered decision is enough to create an unexpected situation that can affect people's lives for many years to come. Just think of the recent currency crisis.

However, financial literacy is difficult to define because there is no generally accepted concept. This is perhaps due to the fact that researchers only began to study this field at the beginning of the 20th century, but it has now become a popular and important area of research. According to the MNB, financial literacy is "the level of financial knowledge and skills that enables individuals to identify the basic financial information necessary for making informed and prudent decisions, to interpret that information once they have acquired it, and to make decisions based on that information, assessing the possible future financial and other consequences of their decisions". (MNB-PSZÁF, 2008)

Below, I have summarized the key findings of several studies.

In his study, Remund classified the various elements of financial literacy into five categories:

1. Knowledge of financial services: knowledge improves an individual's financial well-being
2. Ability to communicate about finances
3. Ability to manage personal finances
4. Ability to make appropriate financial decisions
5. Confidence in making effective financial plans for the future. (Remund, 2010)

Botos et al. stated that, in the case of lending, financial literacy can be manifested in how well consumers assess their ability to repay loans and the risks associated with borrowing. Their research focused on the Central Great Plain region and concluded that a significant proportion of consumers were unaware of the risks inherent in exchange rates when taking out foreign currency loans. (Botos et al., 2012)

Béres and his co-authors believed that financial personality consists of two parts and that financial personality can be used to "draw conclusions about the debtor's personality, behavior patterns, and, most importantly from the bank's point of view, whether someone will be able to repay the loan". (Béres et al., 2015: 27.) Attitudes acquired in childhood have an important influence on adult behavior in terms of borrowing and repaying loans. However, these behavioral patterns formed in childhood are slow and difficult to change. (Nagy-Tóth, 2012)

Kovács-Révész-Ország conducted a survey to assess the financial literacy of secondary school students. They concluded that the level of financial literacy among secondary school students is not satisfactory and that they are unable to apply their knowledge in practice. Several areas were found to be critical, including knowledge of credit. (Kovács et al., 2014)

Econventio has been researching financial literacy among several age groups for years. Since the same test was completed for different age groups, the comparison highlights the problem areas experienced by each group. Interest rate calculation proved problematic for all age groups, with university students achieving the best results: half of them were able to apply interest rate calculation. University students achieved similar results in terms of maturity. However, it is surprising that nearly one-third of the adults participating in the survey were unaware of the meaning of maturity. This raises the question of whether it is possible to make an informed decision without this knowledge. (Econventio, 2015)

Based on Potóczki's paper, it can be said that the level of financial literacy in Hungary can be considered below average overall. He drew this conclusion based on international research initiated by the OECD. Hungary ranked 22nd out of the 30 countries that participated in the research. In the OECD survey, Hungary scored 12.4 points out of a possible 21, falling 0.8 points short of the average. The overall result was composed of three sub-results. The result in the area of financial attitude was above average, financial knowledge was rated as average, while financial behavior was below average. (Potóczki, 2017)

Following the 2016 survey, the OECD examined the financial literacy of adults in 2017 and 2020 as well. In 2020, Hungary ranked 14th, placing it in the middle of the pack with a score of 12.3 points. However, the average rating of survey participants decreased significantly compared to 2016, and Hungary's score was only 0.5 points below the average. Above-average results were achieved in terms of financial attitudes and financial knowledge, but performance in the area of financial behavior remained below average. (OECD, 2016; OECD, 2017; OECD 2020)

Another international study conducted by S&P found that 46% of the Hungarian population is financially illiterate. Hungary is also in the middle of the pack in Europe. *Figure 3* shows that the level of financial literacy varies across European countries. Romania had the worst results. (Lusardi et al., 2015)

In their article entitled "The emergence of financial culture at the macroeconomic level", Béres and Huzdik compiled the demographic characteristics of financial culture, based on which the following groups have a higher level of financial culture:

- men,
- those with a university degree,
- those with higher incomes and greater savings,
- those with more work experience,
- childless married couples. (Béres-Huzdik, 2015)

The Pénziránytű Foundation also conducted research in this area. The survey revealed that the biggest problem among participants was related to compound interest and simple interest calculations. The survey was conducted in 2010 and 2015. There were some significant changes between the two dates. "There was a significant decrease in the proportion of people who strongly agreed with the following statements:

- Before I buy something, I carefully consider whether I can afford it.
- I pay my bills on time.
- I set long-term goals and strive to achieve them.

Fewer people rejected the statement that "I live for today, tomorrow will take care of itself". Furthermore, the proportion of those who agreed that "Money is meant to be spent" increased". (Pénziránytű Alapítvány, 2015)

In 2015, Sumit and his co-authors examined whether financial literacy has an impact on mortgage default rates. Their research was based on data from a US subprime lender. Based on their analysis, they concluded that better financial literacy reduces loan default rates.

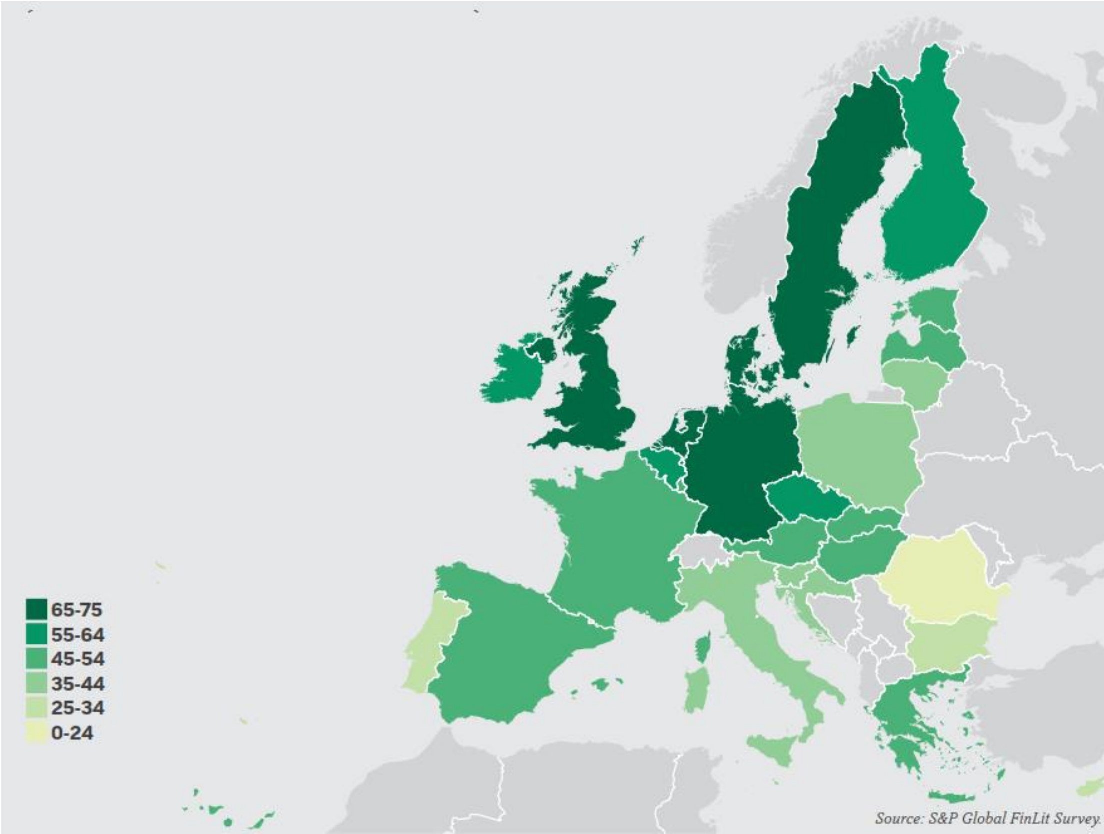

Figure 3. *Levels of financial literacy in European countries*
Source: Financial literacy around the World, Klapper et al., 7., 2015

Overall, it can be said that financial literacy is a very important factor, and its absence can cause problems such as excessive indebtedness and foreign exchange issues. The level of financial literacy among the Hungarian population is unsatisfactory, which can pose a significant risk. (Mit jelent a pénzügyi kultúra?, 2014)

2.3. Financial resilience

Financial resilience refers to the ability of an individual or household to withstand and recover from a negative financial shock, which could be anything from job loss to health problems or a major unexpected expense. I believe that this factor can also have an impact on non-payment, as the better prepared we are and the more flexibly we can respond, the easier it may be to recover from an unexpected financial shock. According to the OECD's approach, financial resilience consists of six elements:

Tracking cash flows: this includes, among other things, planning and recording expenses and the relationship between expenses and income. Unfortunately, Hungary did not perform well in this area, ranking last among the countries surveyed. Only 46.6% of Hungarian respondents track their finances, which is more than 20 percentage points below the average. This behavior is most common among people living in Thailand (86.3%), Slovenia (84.1%), and Austria (83.2%).

Thoughtful spending: this includes weighing up needs and meeting financial obligations on time. The survey examined what percentage of respondents think carefully about their purchases. Hungary achieved a value close to the average in this area, falling only about 5 percentage points short of it, ranking 18th out of the 25 countries surveyed. Thailand (94.8%) also had the most outstanding result in this area. They also examined the percentage of adults who pay their bills on time, in which case Hungarian respondents (81.5%) achieved an above-average score, ranking 11th among the countries surveyed. Estonians (95.1%) pay their bills on time at the highest rate, while Germans (50.4%) pay them on time at the lowest rate.

Financial reserves: the survey examined how long reserves would last if the main source of income ceased to exist.

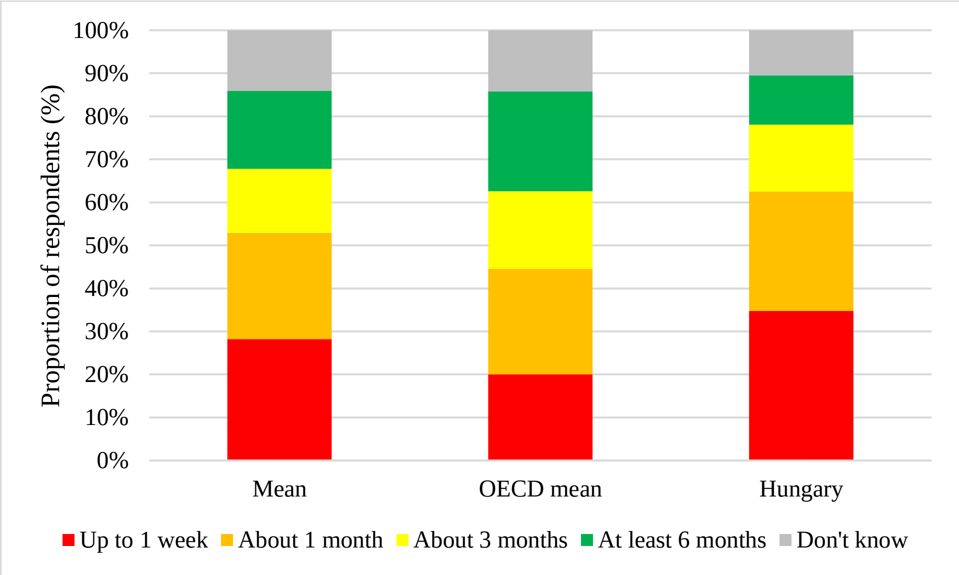

Figure 4. *Distribution of financial reserves over time in 2020*
Source: *Own editing based on OECD (2020)*

As *Figure 4* shows, the proportion of those whose savings are sufficient for a maximum of one week is high, while the proportion of those who have savings sufficient for at least six months is below average. Having savings can help you get through unexpected financial problems more easily, avoiding the risk of becoming unable to pay your bills.

Financial stress: they looked at what percentage of respondents had expenses that consistently exceeded their income. This statement was true for one in five Hungarian respondents, which is significantly better than the average. Peruvians are most likely to have their income not cover their expenses (62.4%), while Koreans are least likely (11.8%).

Financial planning: saving for difficult times and longer-term financial goals. Like financial reserves, this can also play an important role in avoiding becoming a non-paying debtor in the event of an unexpected situation. 51.3% of Hungarian respondents have active savings, but this figure is significantly below the average (70.4%). Furthermore, one in three Hungarian respondents has a long-term financial plan for which they are saving.

Fraud awareness: knowledge of possible financial fraud, thereby avoiding becoming a victim. (OECD, 2020; OECD, 2021)

Overall, financial resilience includes several elements that can play an important role in becoming non-performing, and this role is not limited to financial shocks.

3. Summary, conclusions

I set two goals for my research. First, I examined the history of lending, where it was observed that people's attitudes toward lending varied throughout history, including extreme cases where this activity was expressly prohibited. It took many years for lending to be able to operate within the framework we know today.

Second, I examined factors that can be linked to lending and loan defaults, but for which there is no generally accepted method of measurement, so they can be considered fundamentally difficult to measure. First, I looked at financial inclusion, where I found that the proportion of adults with bank accounts has increased significantly in recent years, reaching 76% in 2021. I then examined financial culture, as I believe that better financial knowledge leads to better decisions, and lending can essentially be considered a long-term decision. Finally, I turned to financial resilience. In the latter case, I found that more than half of the Hungarian population does not keep track of their financial transactions, and the proportion of those who make financial plans is significantly below the average for the countries surveyed.

The study contributed to the theoretical foundations of a longer research project in which I examined whether non-payment can be predicted in the case of retail loans and what factors determine this. However, in addition to measurable factors, I also considered it important to examine factors that are difficult or impossible to measure. Overall, there are several elements of financial resilience that can play an important role in becoming non-performing, and this role is not limited to financial shocks.

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