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## **THE TRANSFORMATION OF RETAIL CREDIT FINANCING IN THE WAKE OF THE CRISES IN HUNGARY**

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### **Abstract**

*The money abundance that preceded the 2008 crisis brought about a number of distortions in the value judgements of economic actors and their attitudes towards money. Unlimited liquidity generated a huge supply of credit, which all economic players exploited beyond their means. The crisis-induced downturn caused huge problems in the repayment of loans. Tens of thousands of families and businesses have faced problems in surviving, caused by increased credit burdens. As a consequence, attitudes towards credit changed significantly after the crisis. For the Hungarian households too, excessive borrowing before the crisis caused huge problems. In Hungary, the problem was not only with the volume of credit, but also with its denomination. The proliferation of foreign currency lending and the exchange rate risk that it entailed was a huge challenge for tens of thousands of families, which they could only overcome with state support. The aim of this study is to examine the borrowing of households in Hungary over a number of years, looking in*

*particular at its composition and the types of credit. In this study, the analysis was based on the household stock data of the Hungarian National Bank. The aim of the work is to show the trends and changes in Hungarian household borrowing in the wake of the crises. The analysis reveals the effects of the crises, which can be reduced by increasing financial awareness. The study provides a good basis for strengthening the financial culture of Hungarian households, which areas limit future irresponsible borrowing and provide a good shield against crises in the financial field.*

**Keywords**

Households, Financing, Debt, Crisis, Financial Literacy

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**1. Introduction**

Nearly 15 years after the economic crisis, the importance of knowing about finance, money and related topics has become increasingly important, almost part of our lives. Before the crisis, finance and financial literacy had not been given enough prominence, as economic actors trusted in the invisible hand that controlled the economy. However, reckless borrowing and contagion from derivatives quickly had a devastating effect, with consequences for all the players in the economy. Banking and lending practices prior to the 2008 crisis showed, contrary to the classical definition of demand, that the willingness to consume was sufficient, since the ability was added by the bank in the form of credit. This practice took advantage of the fact that people were not financially literate and lacked the financial knowledge to make decisions. Until the crisis, financial literacy was never a topic that was emphasised, even in research or education. The concepts of financial literacy and financial education did not exist at international level and were only tangentially addressed by researchers. Hungary, like all countries in the world, was and is still concerned about the issue. Following the 2008 crisis, significant initiatives were launched to develop and improve financial literacy, but it will take many decades before these initiatives are put into practice. The aim of this study is to examine the evolution of borrowing and the trends in borrowing of different types of credit by the Hungarian population, as a function of their financial awareness.

**2. Literature Review**

However, on the margins of financial culture and literacy, it is necessary to note the ethical and moral issues, or rather the complete denial of ethical and moral principles, which have

allowed the exploitation of actors with an otherwise poor financial culture (Csiszárík-Kocsir, 2021; Csiszárík-Kocsir et.al, 2016; 2022; Garai-Fodor et.al, 2022). The crisis and its aftermath have drawn attention to the gaps in financial literacy (Klapper et. al., 2012). The general prosperity and unlimited liquidity before the crisis led to a socialisation of certain age groups that did not learn to manage money, to allocate it, as the message was that the lack of liquidity could be made up for with credit, or even more. The different arenas of financial socialisation were not known, and financial thinking was not a topic in the family, at school, at work or among friends (Grohmann & Menkhoff, 2015).

Prior to the crisis, Johnson and Sherraden (2007) had already drawn attention to the advisability of involving the younger generation in the preparation of financial processes by extending the subjects taught in a financial direction or even by involving them in family financial decision-making. A similar view has been expressed by Osana et. al. (2003), who argue that this would help to develop a greater sense of financial responsibility. Irresponsible borrowing, premature and reckless consumption can be linked, either directly or indirectly, to a lack of financial literacy and financial education. The study of financial literacy has become an increasingly fashionable concept and research area. It has been the subject of numerous articles, research papers, theses and dissertations, but there have been few concretes, tangible steps towards its development. All the major banks mention the development of financial culture as part of their CSR activities, but there are still few tangible results.

A common definition of financial culture has not yet been developed. In a narrower sense, financial literacy is in fact financial literacy and the ability to read and write financially, which requires specific, professional knowledge. According to Atkinson & Messy (2012), financial literacy is defined as the set of knowledge, skills, abilities, attitudes and behaviours that are essential for making sound financial decisions at both individual and societal levels. Financial literacy can raise and improve well-being, not only at the micro but also at the macro level. According to Luksander et. al (2014), financial literacy is nothing more than the ability to process financial information and make sound financial decisions.

Knowledge and understanding of modern financial processes and the ability to adapt to change are essential in today's globalised world. This is why Grifoni & Messy (2012) define the essence of the concept as a skill that is indispensable today. Financial literacy can be broken down into parts, as there are levels of financial literacy that can be developed and levels that cannot be

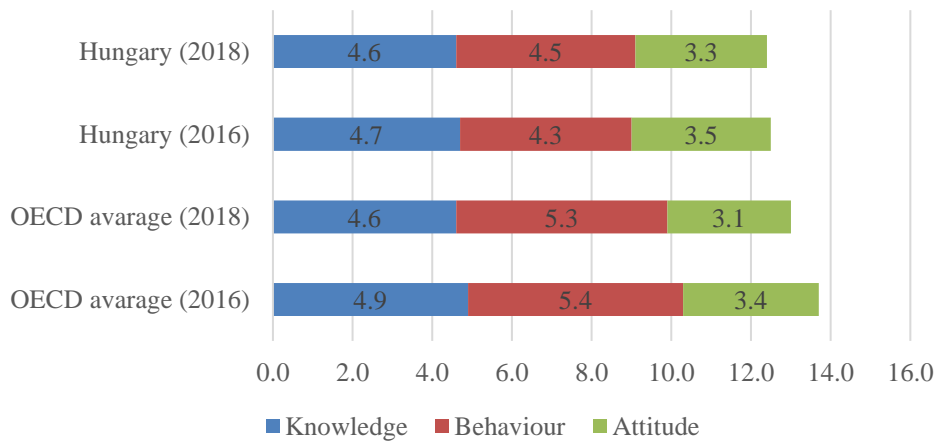
developed. The developable levels include those elements of financial literacy that can be easily and relatively quickly modified through education and training, such as financial knowledge, financial skills and abilities. The difficult to develop parts of financial culture can be captured in traditions, habits, different perceived and learned norms, beliefs and values (Balázsné, 2013). This is none other than financial socialisation, which has several stages. The behaviours and learned ways of coping adopted from parents, family and friends are the most difficult factors to change (Zsótér, 2015), as socialisation makes them part of us, embedded in our character and thus accompany us throughout our lives (Koh & Lee, 2010). The family plays a key role in this process, teaching the principles of money management and use that are crucial to them (Zsótér & Nagy, 2012). This is linked to the earlier discussion of the need to start developing financial awareness at school age, in order to correct any negative habits.

The development of financial literacy is approached in different ways by different disciplines. Economics is based on the assumption that financial literacy can be learned through experience, i.e., it attributes a role to education and positive individual examples and practices (Lusardi & Mitchell, 2014). Psychology is based on the psychological antecedents and behavioural aspects of individuals, including aspects of self-esteem, self-confidence and self-evaluation, although comprehensive research on the latter is still lacking (Antonides et. al., 2011).

In order for individuals to be successful in their financial decisions, they need to possess, first and foremost, the basic knowledge. They need to be familiar with the basic concepts that characterise financial products (maturity, interest rates, interest, securities, investments). It has already been stated by Bandura (1982) that without objective financial knowledge, individuals will not be able to make responsible financial decisions. Of course, how much of this basic knowledge one uses in making decisions is a matter for the individual, but it is necessary to provide the basic knowledge that is essential for making responsible decisions.

Several studies have shown that measurable financial literacy, provided by educational institutions, has a positive effect on responsible financial decisions (Chen & Volpe, 1998; Lusardi & Mitchell, 2007), but it has also been shown that good financial literacy does not in itself lead to good financial decisions, as it requires an individual's attitude (Borden et. al., 2008). The OECD has for many years conducted comprehensive analyses of the financial culture of its member countries, measuring the financial knowledge, behaviour and attitudes of their citizens (OECD, 2016). In the most recent survey, the OECD awarded countries a maximum of 21 points for

financial culture, with 7 points for financial knowledge, 9 points for financial behaviour and the remaining 5 points for attitudes. The low level of financial literacy has been a problem for our country for years. Despite numerous research and initiatives, the surveys do not show any overwhelming success. Data from studies on financial literacy in OECD countries, which have been identified by many researchers, continue to highlight the shortcomings in our country. The 21 points awarded to the three factors examined by the OECD for knowledge (0-7 points), behaviour (0-9 points) and attitude (1-5 points) put Hungary firmly in the lower middle range. In the 2016 measurement, we scored 12.5 points, which, far from increasing for the next measurement in 2018 as a result of the numerous programmes, initiatives and awareness-raising research, has slightly decreased. Countries that can be considered as direct competitors or neighbours, such as Austria, which is almost two points higher than our country (14.2 - 14.4), the Czech Republic, which is at a similar level to us (12.5 - 12.9), Poland, which started from a lower level but has jumped enormously (11.6 - 13.1), or Croatia, which has a lower score than us (12.1 - 12.3), have also improved their ranking in recent years. All this shows that Hungary has room for improvement in terms of financial culture, knowledge, behaviour and attitudes.



**Figure 1:** *Financial Culture In The OECD Survey*

(Source: Own Compilation Based On OECD 2017; 2020)

## 2.1. The Impact of the 2008 Crisis on Financial Awareness from A Lending Perspective

When looking for the causes of the 2008 crisis, many factors come to mind, such as the housing bubble, easy access to credit, loose lending conditions, liberal lending policies, sub-prime lending, regulatory deficiencies, increasing indebtedness, but also the increased loan-to-deposit ratios of banks (Bunikowski, 2015). Even now, almost 15 years later, it is difficult to take a position

on what was responsible for the crisis. The majority of opinions blame the banking side, as they were the ones who were lending irresponsibly in a profit-hungry manner, breaking all ethical and moral norms in order to maximise their financial results. The CSR approach, so often referred to nowadays, focuses on ethical behaviour and operation too (Carroll, 1991), which should be a central element for all economic actors. Numerous experts claim that the crisis was the result of a series of human errors, which manifested themselves as a huge systemic failure, for which the world, the people, had to pay a high price in the form of tax money spent on bailing out the banks and stabilising the financial system. Racelis (2014) states that before the crisis erupted, specific firms and individuals were acting recklessly in their work, and institutions had a responsibility to prevent this careless behaviour and to uphold ethical principles in their operations. Institutions may try in vain to evade this responsibility by delegating it, but they must take into account that responsibility also implies freedom of choice and action, along with accountability and trust (Bass & Bass, 2008).

The focus in discussing the history of the crisis is more on analysing and looking for the causes and the actors behind them. Both the demand side (households, businesses) and the supply side (banks, financial firms) of the financial markets are responsible for the outbreak of the crisis, but central banks, governments and regulators have also played an important role by neglecting regulation (Lentner et. al., 2011). We should not forget the role of central banks either (Lentner et. al., 2015), which have exacerbated the already deep problems by delaying or postponing action. There are opinions that clearly blame the US government and the Federal Reserve as the central bank of the United States, while others blame the unseen risks inherent in financial innovation (Sahlman, 2009). Claessens et. al. (2009) list four reasons behind the outbreak of the crisis: excessive and sudden asset price increases, the credit boom phenomenon generating a severe debt bubble, excessive borrowing activity and the failure of financial supervision by regulators.

While looking for the causes of the crisis, it is always worth reflecting on the behaviour of the actors in the system. Perhaps we can get closer to an ethical assessment of the behaviour of the financial system by looking at its dimensions (Han, 2014):

- The personal dimension of ethical behaviour: personal and business decisions are made by people, by individuals, so if we want to understand the behaviour of the financial system and the path to the crisis, we need to address this dimension of ethics.

- The organizational dimension of ethical behaviour: organizations are made up of people who make decisions on behalf of a company that has legal personality but does not exist in a natural form.
- The social dimension of ethics: individuals and organizations act in the context of the environment around them. If the environment accepts basic moral standards, it can guide individuals and organizations towards ethical behaviour.

As can be seen from the above list, the three dimensions of ethical behaviour are closely interrelated. Individuals work in organizations, whereas organizations have to operate in the socio-economic environment around them. The same applies to banks and financial institutions. If we take Lehman Brothers as an example, all aspects of the three dimensions described above are clearly visible. Unfortunately, it is not only the Lehman example that demonstrates the interconnectedness of the three readings of ethics, but the same can be said of all banks, rating agencies and advisors who were active participants in or instigators of the 2008 series of events.

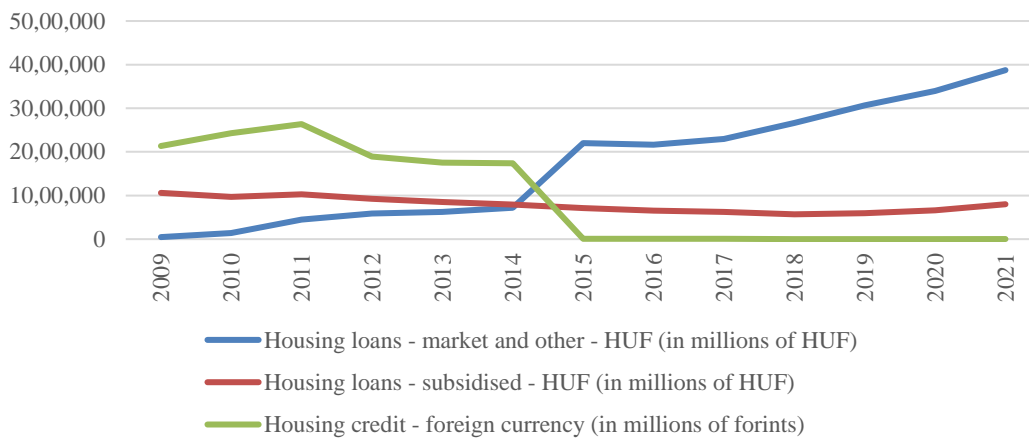
### **3. Material and Method**

The figures presented in this paper are taken from the statistics on households of the Hungarian National Bank. For several years, the Hungarian central bank has been collecting data on the functioning of the national economy on a regular basis by surveying domestic commercial banks, and regularly publishes them on its website. The study presents an analysis of annual data on Hungarian household credit from 2009 to 2021. For the purpose of this work, I have used end-period stock data, which are presented in millions of forints. In the paper, I analyse the topic using stock data, as well as base and chain ratios. In this paper, I examine the three most important types of loans, namely housing loans, personal loans and open-ended mortgages, which account for more than 90% of household loans. Based on the literature review I would like to build up 2 hypotheses:

1. Because of the crisis, Hungarian households are afraid of getting into debt and only take out loans when necessary.
2. Hungarian households' borrowing reflects the impact of the development of financial literacy, especially in terms of foreign currency borrowing.

### **4. Results**

Housing loans are the largest type of credit held by Hungarian households. The Hungarian housing market has undergone a significant transformation. Experts have been expecting the bubble to burst from as early as the mid-2010s due to the huge increase in demand, but this has not happened yet. In Hungary, the housing market is typically made up of privately owned apartments, which means that there are only a few properties available for rent at discounted prices that are owned by the municipality or the state. As a result, rents are also high, forcing households to buy property on credit (with up to 80% leverage), despite the increased prices. Housing loans are mortgage-based, making them safer for banks than other loans, and can even be subsidised because of their importance for the national economy.

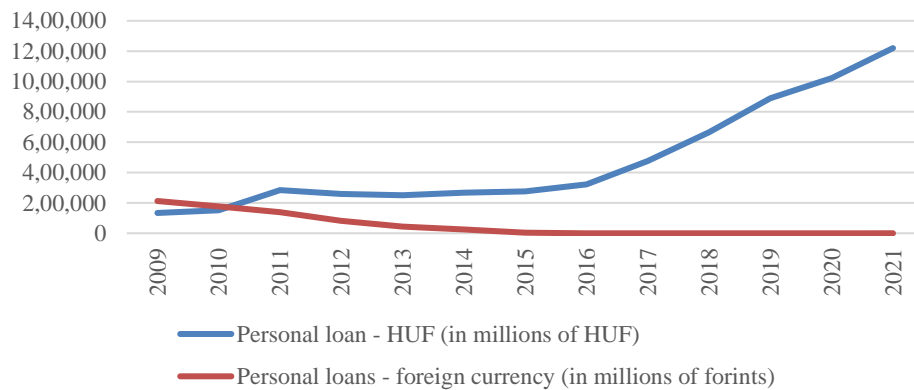


**Figure 2:** *Type and Stock of Housing Loans Taken Out by Hungarian Households*  
 (Source: Own Compilation, Based on MNB Data, 2022)

A detailed look at the housing loan portfolio shows that its structure has changed substantially over the 13 years under review. Foreign currency lending, which was huge in 2009 following the crisis, fell to one per cent of its previous level in 2015, thanks to the conversion and foreignization of loans. Subsequently, potential borrowers turned to other types of credit. Market-rate housing loans increased steadily in the years after the crisis, swelling to three times the previous stock in 2015 due to the conversion of foreign currency loans. Today, the market is clearly dominated by market-rate housing loans. In addition, it can be seen that subsidised housing loans also hold a compelling slice of the total stock of housing loans. If we look at the annual growth, it can be stated that the types of credit, with the exception of foreign currency loans, are growing by between 5 and 10 percentage points on average each year. If we compare the data for 2021 to 2009, we can see that market rate loans have increased by a factor of eight, while subsidised loans have



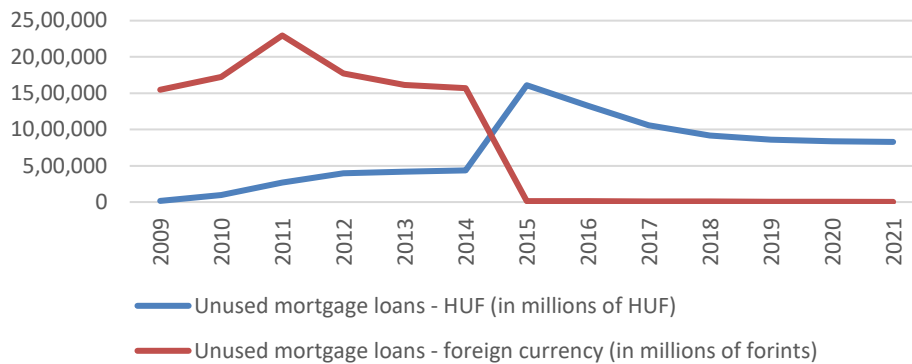
fallen by three quarters. Looking at the stock data, it is apparent that Hungarian households have a huge stock of housing loans relative to their annual income, which is a risk factor in the event of a large-scale crisis. This is why the government introduced the credit moratorium to help households alleviate their day-to-day financing problems, albeit by extending the maturity, which in turn will result in additional interest charges in the future. Market-rate housing loans accounted for 52% of total household loans in 2021, up from just 1% in 2009. In contrast, foreign currency loans stood at 38% in 2009 and have now been reduced to almost 0% (subsidised loans have gone from 19% to 11% over the 13 years under review).



**Figure 3: Stock of Personal Loans Taken Out by Hungarian Households**  
(Source: Own Compilation Based on MNB Data, 2022)

Personal loans are the second largest item in the household loan portfolio. Personal loans are discretionary, are usually not tied to a specific purpose, can range from very small amounts up to HUF 10 million, and typically have a maturity of one year to eight years. Borrowing is based on current income, but in many cases, they are used to cover current expenses, which makes them risky and is reflected in the interest rate of the loans. When looking at personal loans, the same trends are observed as for housing loans. The stock data itself is huge, but if we inspect the data for 2009, we can see that the stock of personal loans denominated in forints has swelled by seven and a half times over the thirteen years under review, with the phasing out of foreign currency loans. Another important trend is that the stock of personal loans has been expanding year on year, with a significant jump every year. In 2017, at the start of the housing credit boom and after the effects of the 2008 crisis had been recovered, the stock swelled by one and a half times, and this growth wave has continued in 2018 and 2019. To date, this type of credit has seen a stable surge of 15-20 percentage points. As shown in the graph, foreign currency loans have virtually

disappeared from personal lending, but now account for 16% of total loans (compared with 2% in 2009).



**Figure 4:** *Stock of Unutilised Mortgage Loans Taken Out by Hungarian Households*  
(Source: Own Compilation Based on MNB Data, 2022)

Open-end mortgages are also a popular product among Hungarian households. This type of loan combines the characteristics of a mortgage and a personal loan, so that if the borrower can offer suitable real estate collateral, he or she has access to a freely available source of funds at a lower interest rate than what would be the case with a personal loan. The stock of open mortgages has increased notably over the 13 years under review. In this occasion, too, loans in forints dominate, while foreign currency loans have basically disappeared from the market, as in the case of housing and personal loans. If we take the 2009 base, loans in forint have more than quintupled by 2021, while loans in foreign currency have shifted by a total of 0.2%. If we examine the year-on-year change, we can see that despite the high stock figures, the stock of open-ended mortgage loans shows a steady downward trend. This is true for loans denominated in forint as well as in foreign currency. The year 2015 was also the turning point for open-ended mortgage loans, where the Hungarian economy swept a considerable amount of risky foreign currency loans out of the banking system. Today, this type of loan accounts for 11% of the household loan portfolio when looking at the HUF-denominated type (compared to 0% in 2009). These days, there are essentially no foreign currency free-use mortgages, compared to 28% in 2009.

## 5. Conclusion and Afterword

Based on the analysis presented above, it is clear that the Hungarian credit market has undergone serious transformations in the nearly one and a half decades since the crisis. Both

households and companies have learned a lot from the 2008 crisis and its consequences. Based on the data examined, I consider the two hypotheses to be accepted. The concept of foreign currency loans has practically become a dirty phrase, as it has pushed countless households and businesses to the brink of default and total bankruptcy. Thousands of people have lost their homes because of recklessly taken out loans. During the unrestricted abundance of liquidity before the crisis, households did not deal with basic concepts such as interest rate risk or exchange rate risk. They did not know what a foreign currency denominated loan meant. They just wanted to make it as cheap as possible, and with favourable exchange rate conditions, this was indeed the better option before 2008. However, they were not aware of the risks and dangers, which is due to a lack of financial culture. But the experience we have gained first-hand has made a difference. Foreign currency lending has now virtually vanished from the Hungarian credit market. Today, 97% of household loans are in domestic currency. The prevalence and dominance of foreign currency loans was grandiose before the 2008 crisis. Households denominated 72% of their loans in some foreign currency. Swiss franc loans were popular, but there were also yen and euro loans. Due to the massive collapse and after the 2014 changeover, foreign currency loans practically disappeared from the Hungarian banking system, removing a huge risk factor. These figures clearly demonstrate the need to improve financial culture. We must be aware of the risks of borrowing, whether in domestic or foreign currency. It is paramount to start looking at credit from a very young age as a means of advancing consumption or even as a way of increasing wealth. It is crucial to take out credit consciously, to plan and consider it carefully, and to be aware of its function and how it works at all times. Therefore, the key players in financial socialisation, including families and households, and the education system, have a very important role to play to ensure that events such as the collapse following the 2008 crisis do not happen in the near or distant future. It is certainly worth exploring this research further in the future, as the post-pandemic period and the war and energy crises will open a new chapter in financial awareness, but also in credit finance. Changed financial conditions, inflation and rising cost of living will lead to a decline in prosperity, which will bring a new turn in lending. A limitation of the research is that we can only work with aggregate data on credit, which prevents a deeper analysis (household income, size, residence, etc.).

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