

DOCTORAL (PhD) THESIS

KAPOSVÁRI UNIVERSITY
FACULTY OF ECONOMIC SCIENCE
Department of Finance and Accounting

Head of Doctoral School:
DR. SÁNDOR KEREKES, DSc
Doctor of the Hungarian Academy of Sciences

Supervisor:
DR. SÁNDOR LIGETI, CSc

EFFECTS OF THE BANKING COMPLETION ON THE RETAIL FORINT AND FOREIGN EXCHANGE MORTGAGE LOAN MARKET IN HUNGARY

Author:
ZOLTÁN BÁNFI

KAPOSVÁR
2013

Tartalom

1	ANTECEDENTS, GOALS AND OBJECTIVES OF THE RESEARCH	3
1.1	RESEARCH ANTECEDENTS	3
1.2	GOALS AND OBJECTIVES	4
2	THE METHODS APPLIED	6
3	RESULTS	7
3.1	Construction program – Bank financing	7
3.3	Financing of micro and small enterprises	10
3.4	On the measure of retail indebtedness	11
4	CONCLUSIONS AND RECOMMENDATIONS	13
5	NEW AND NOVEL SCIENTIFIC RESULTS	14
6	PUBLICATIONS RELATED TO THE THESIS	19

1 ANTECEDENTS, GOALS AND OBJECTIVES OF THE RESEARCH

1.1 RESEARCH ANTECEDENTS

Similarly to the Great Depression in 1929-33 a separate chapter will certainly be devoted to the first decade of the third millennium in future economic history works. Supposedly it is referred to as financial crisis and we do not know as yet how long it will take.

It all began in the United States where the over liquidity of financial institutions was growing steadily, through financial innovations banks created new instruments that limited the conjunctural cycles of the economy but also decreased the possibility of their control. Exceeding their limits of traditional crediting practices bank innovates, its claims are securitized and sold. Buyer is not the end financier but an intermediate market player who purchases at a lower price than he will sell. At the same time, however, in accordance with the desire of end financiers and investors the security packages bought earlier will be broken up and repacked. From this point onwards the original identity and liquidity of the debtor, the quality of the cover are unknown and the risk cannot be assessed. Repacked securities have no or highly limited market turnover, no market price can evolve but pricing is done by computer models. Everybody is satisfied as long as prices are rising. However it lasts only until something starts a negative spiral. As the repacked security packages held by final investors have no market turnover and market price, if an investor is forced to sell, there will be no buyer and

real selling price. Artificial prices will fall, the over liquidity of banks will turn into lack of liquidity and increasing loss of profit.

In the European Union the negative spiral reached the more vulnerable countries first such as Hungary. The weakening of the forint against the euro and the strengthening of the Swiss franc against the euro changed the forint/Swiss franc exchange rate drastically. The increasing lending in Swiss francs around 2005 resulted in a disastrous situation due to the fact that exchange rate risk was not taken into account.

When I applied for the doctoral programme and I chose the topic of retail credit I could not foresee what would be happening in the retail credit market and what governmental and banking decision or steps would be taken after 2010. Therefore I had to thoroughly reconsider my initial draft. Of course the topic of the dissertation has not changed still revolving around retail bank market.

1.2 GOALS AND OBJECTIVES

By choosing the topic of the dissertation and setting its main direction I wanted to describe and analyse the process and also aiming that the causes should be discovered and the conclusions to be drawn – by using professional literature – would be for instructional purposes. On analysing the literature based on the required source criticism I created those hypotheses that I consider necessary and researchable.

Hypothesis 1: It turned out in the short run that the primary supporting instrument of the home buying incentive programme i.e. the interest significantly falling behind market interest levels paid after loans leads to social burden in the long run. Due to the internationally high domestic market

interest level, interest-subsidized loans could only compete with foreign currency loans. The institutional background of the latter was created just after the turn of the millennium. I presume that

- the excessive and increasing demand was brought about by state involvement and also
- desperate competition between financial institutions and the fact that a significant proportion of home buyers had unreal demands for homes (exceeding their real economic position) and leverage by enhancing the negative effects of the crisis led to the problems after 2008.

Hypothesis 2: I assume that the statement, which refers to not specified legal experts' opinions widespread among foreign currency debtors saying that foreign currency mortgages were "bad banking products" and consequently the voidance of loan contracts are legally enforceable, cannot be proven. After 2008 a significant proportion of foreign exchange debtors ignoring exchange rate risk found themselves in a disastrous situation because they were unable to cover their drastically increased repayments from their incomes and savings. I presume that both market players contributed to credit market anomalies. If we want to answer the question "Whose fault it was", we need to investigate causes on the side of creditor (bank) and debtor (bank customer) alike.

Hypothesis 3: I assume that the number of non-paying foreign currency debtors and their claim for support exceed the capacity of state support. The state can intervene only on the principle of social solidarity and by the obligatory demand of minimizing costs and has to strive for excluding moral risks by all means.

Hypothesis 4: It is a widely held opinion that a significant proportion of the population (households) knows little about financial issues, the elimination or at least reducing of which assumes a decrease in bad decisions as in the case of foreign exchange loans and ideally a complete elimination.

Hypothesis 5: The population has a typical saving attitude, however it can be assumed that based on the real economy the credit of the population can also be significantly high.

2 THE METHODS APPLIED

The topic of my dissertation is a special segment of the economy. It touches partly upon macro economy and partly upon micro economy (households, small and medium-sized enterprises) and in both fields I will try to find answers to practical and theoretical questions alike. The four types of approach allowed and required different methodologies.

- On the approval of the dissertation topic I began to compile and process relevant literature sources and then put together the list of references. I was aware that the initial source list should be extended because 3-5 years could pass until the prospectus defense while an indefinite number of articles and books would be released on relevant, practical issues. It turned out later that my initial estimation has considerably fallen behind reality. Nobody expected such a deep and extended financial crisis. It also was not expected in Hungary that the debtors of housing and building loans covered by mortgages denominated in foreign currencies especially Swiss franc ignoring exchange rate risk would be put in danger. The tragedy occurred, which put foreign currency crediting in focus. Relevant literature

sources began to grow and the compilation of data lines demonstrating the process became essential too. The selected list of sources became my starting and constant reference point.

- Owing to the nature of the topic processes must be supported by accessible and available timelines of data. To analyse timelines the application of index calculation was usually sufficient.
- A small part of the dissertation contains pure theoretical reasoning. Here I tried to come up with my critical views based on the principle of logic and besides criticism to share my own opinion.
- The Hungarian public opinion condemns the financial culture of the population. The critical voice became louder after the disaster ensuing foreign currency crediting. With the help of a survey I tried to find an argument or counter-argument for or against this negative judgement. I compiled a questionnaire of 12 questions which were directed at a small segment of financial world i.e. banking relations of the population. The survey cannot be considered representative. The survey was done with the inclusion of a group of university students; I, however, did not want to collect the students' answers and opinions but I asked them to fill in the questionnaire with data relating to the households of their family.

3 RESULTS

3.1 Construction program – Bank financing

As of 2000 government activity determined home policy. State financing meant the financing of home buildings and from 2002 it was extended it to the buying of second-hand homes. Banks attempted to keep hold of financing of both sides (building and buying). Therefore they also made a broker

contract connected to loan contracts with building companies to gain flat-buyers.

3.2 Process of the foreign exchange loan activity and consequences

Foreign currency loans appeared in the beginning of the new millennium and their rate became dominant from around 2005 among housing- and free to use mortgage loans. The main reason of its spreading is the domestic (HUF) and foreign currency interest difference. Taking foreign currency- or foreign currency-based loan is beneficial if there is an interest difference and the extra liabilities to pay principal and pay interest for the whole duration of the loan is lower than the “profit” resulting from the interest difference. The interest difference – regardless of the rate fluctuation’s direction – justifies the indebtedness in foreign currency if the debtor’s return (income) accrues in the specific foreign currency. In this case the client’s open position resulting from taking credit ceases because the payment of principal and interest and his return are in the same currency, therefore the debtor does not face any exchange rate risk. In foreign currency crediting Swiss francs has become primary, euro appeared in a small compass and Japanese yen only at a small rate. The beginning is tied to Swiss francs. Decreasing and later ceasing of loan support in the home market resulted in an intense competition between banks and foreign currency crediting became the main actor in the competition for market sharing. But who is responsible? There is no categorical answer. The parties, based on their real or perceived interests, accepted the foreign currency based credit contracts. Owing to the lower interest cost compared to forint loans the debtor chose it voluntarily, while the bank offered it to acquire market share. The contract was signed, the

debtor, whether he knew it or not, took the exchange rate risk, while the bank gained the client.

At the same time, anxieties can be raised concerning the responsible decision on both sides – creditor bank and debtor alike. The bank rated the potential debtor based on the credit request and was aware of his redemption capacity. If the debtor was not solvent to take the forint credit but was solvent to take the Swiss francs based loan granted at lower Annual Percentage Rate, then the bank is responsible to grant the credit and might be partly responsible for the debtor's later inability to pay. It is an absurdity to declare that the bank was not aware of the exchange rate risk, so if the bank had not approved the client to be solvent to take forint loan, then because of the not impossible exchange rate weakening it could not have rated him to take Swiss francs based loan. In approving solvency, towards the client as well as the bank, lending intermediaries interested in commissions had an essential role. Due to the higher interest rate level the Hungarian forint was strong (overvalued), and through the duration of the granted long-term loans the forint's weakening was expectable. So at the moment of taking the foreign currency based credit seemed to be beneficial, but this was not necessarily true for the whole period of duration. It is questionable who is responsible for increasing debt obligations resulting from increasing interest (APR). Certainly the amount of the interest to be paid was influenced by the weakening Hungarian forint but it is independent of the client how the bank (from where, what term sources) finances its assets (granted loans). If the sources are short-term, the bank has to renew it repeatedly and if the costs of funds rise for any reason, placing them on the debtor is arguable. The debtor committed himself to redeem for the whole duration, the bank could have guaranteed the source for the whole duration. Who are the winners and who are the losers? The winners are solely the lending intermediaries, losers are banks and clients not able to

repay as long as legal regulations supporting clients able and not able to repay are not taken into consideration.

The state attempted to manage the disastrous situation in several ways, most importantly with the exchange rate cap still working now and also in the long run and with the already closed option of early repayment. All the debtors having a foreign currency based loan covered by real estate contract were given the chance of early repayment. Statistical data show that a considerable part of foreign currency loans repaid earlier at reduced exchange rate did not serve the goal to buy a home. To buy a home or residential property in free-to-use mortgage loans were taken at best by buyers having significant self-effort *or* those who could offer an already extant real estate representing proper cover value or who did not possess bankable and sufficient income but possessed a bankable real estate. Placing the burdens of high amount earlier repaid free-to-use mortgage loans is strongly debatable.

3.3 Financing of micro and small enterprises

The problem of currency debtors overrides the difficulties of crediting small- and medium-sized enterprises, though their effacement is not well-founded, because they represent a decidedly important part of real economy. Between 2005 and 2011 the SME-sector had a substantial weigh representing 45-50% of corporate crediting. Before 2005, but after the millennium the finance of this sector was characterized by high-level caution and breaking down obstacles. In 2007 for the group of enterprises rated as retail clients the more beneficial risk weights projected a growth perspective, but the crisis hindered its realization.

Within the SME-sector the credits of micro, small and medium-sized enterprises represent around similar ratios. Even today medium enterprises

are not present in necessary number and sector structure in the Hungarian economy.

Following the crisis, banks finance the small- and medium-enterprises circle with caution and at high costs. Széchenyi Card-credit, other card products and unique transactions under the cash pay warrant of Garantiqa Hitelgarancia Co. Ltd. have come to the front. Earlier the role of mortgage loans was substantial in the case of loans with duration over a year. As a result of real estates' loss of value and uncertainties around value determination this bank product lost its appeal. The ratio of Széchenyi Card-loans collapsed is less than that of self-financed bank loans. The reason is that right after a late payment banks submit their demand for redeeming warrant towards Garantiqa.

3.4 On the measure of retail indebtedness

The dissertation touches upon a theoretical dilemma. How big could be the rate of indebtedness of the population (households)? The possibility of households' excessive indebtedness can be raised at housing and building loans covered by mortgages. Starting point: a general thesis concerning money owners is that while the state and the enterprises are debtors, households are typical savers. Supposing that up to a level the increase of stock of savings is subservient, because as a consequence of the obligate concordance of savings and investments the willingness and possibility to invest both increase, the inability to rate the indebtedness of households can be raised. The indebtedness of households can be excessive if it leads to a low level of stock of savings of households that restricts the possibility to invest through the scarcity of financial sources.

I find an acceptable answer the following. The households' stock of home mortgage loans can be rated as too high, so households' indebtedness can be called excessive, but this position is the result of an earlier decision, and not the consequence of the banks' too active crediting activity towards the households. The earlier decision is explained by the construction industry's inner (maintain and increase jobs) and the state's (government's) social policy interests, together with the GDP-growth constraint resulting from international rules (government deficit and debt level limit in the European Union). The government urges home construction (employment increases, GDP increases), therefore it becomes regular and residential blocks with many flats are being built in the cities. Construction companies finance the building of residential blocks with bank loans and the cover of loans is the purchase price of the homes completed. The source of the latter is partly the savings of the buyer and the bigger part comes from the bank loan taken by the buyer. Once the bank undertook to finance construction of the residential block i.e. decided on granting the loan then it has to undertake to grant loan to home buyers i.e. financing the buying because the cover of the primary loan is the secondary loan. Home building is an investment, excessive home building can be regarded as excessive investment as a result of which savings of households may decrease and their loans will increase, consequently their net savings will definitely decrease. Therefore not the household debts are excessive but the mass of investments aimed at meeting household needs. Home investment can be considered irrationally excessive if the homes completed have no buyers. In this case no cover exists for the banks' putative primary loan granting, the banks' instrument is not the loan granted, but the residence block completed. In several member states of the euro zone (Ireland, Spain, and Portugal) and in some further countries a similar

situation has occurred, which has led to lack of capital in the case of certain banks, in other cases to the obligate intervention of the state.

4 CONCLUSIONS AND RECOMMENDATIONS

In the international literature there is no single definition relating to bank or retail bank within that category. Following the European and Hungarian practices I included active and passive retail banking transactions, circulation of money and banking transactions of micro, small and medium-sized enterprises in retail banking activities. Arguments for the latter: they will be more family-like as their size decreases; financial transactions of households and family enterprises can merge.

When writing the dissertation I tried to highlight fields considered more important so that sufficient space could be devoted to analyses. At this stage I will highlight the proposals and conclusions relating to the most important questions.

- The programme for supporting home building and buying new homes took a critical turn when preferences were extended to include second-hand homes also. This step meant the end of the programme because it involved unacceptable consequences for the budget.
- The development of disastrous retail credit portfolio is the consequence of foreign currency crediting. The credit of Hungarian households significantly grew until 2008. On 30th June 2010 it approached 10 600 billion HUF. Of all credit the amount of foreign currency loan was 7266 billion HUF, more than 90% of which was denominated in Swiss franc, 7% in euro and the remaining part in Japanese yen.

- Credit taken by micro, small and medium-sized enterprises is about the same proportion. This and the gravity of SME sector within corporate crediting does not mean that the financing of micro and small enterprises is sufficient, but it means that the number and sectoral structure of medium-sized enterprises present in the Hungarian economy are not satisfactory.
- Besides debtors with over 90 days late payment those retail groups can also be considered critical whose non-payment lasts temporarily because of the restructuring of credits, and also a part of late payers between 30-90 days can easily find themselves in the group of late payers over 90 days, and finally for those with public utility debt late payment can be an inevitable choice.

5 NEW AND NOVEL SCIENTIFIC RESULTS

The most important findings and results of the dissertation are as follows:

The government programme for supporting new home building and buying took a controversial turn when preferences were extended to include second-hand homes also. This step meant the end of the support of new home buying as the budget could bear no more burden. The programme boosted the population's willingness to buy homes in an unrealistic way and credit institutions were forced to grant state subsidized loans with better conditions than market-driven forint loans. Hypothesis 1 set forth in the goals of the dissertation says that the excessive and increasing demand was brought about by state involvement and the competition between financial institutions and the fact that a significant proportion of home buyers had unreal demands for homes (exceeding their real economic position) and

leverage by enhancing the negative effects of the crisis led to the disastrous situation after 2008, which I consider proven.

Result I. The spreading of foreign currency, especially Swiss franc lending for house financing besides the interest difference was caused by the programme distorting the house market.

- The debtor (bank customer) applied for a short-term loan to buy home or use it freely. In both cases the cover was also real estate, for the former typically the purchased home and for the latter a real estate already owned by the debtor. The interest rate of forint loans was significantly higher than that of the euro and especially Swiss franc therefore the calculated amount of instalment (principal repayment + interest) of foreign currency loan was considerably lower compared to the debtor having taken forint loan, so foreign currency loans were chosen by crowds of people disregarding the underlying exchange rate risk of the loan contract. Their decision was highly influenced by lending intermediaries interested in commissions, who were apparently in a winning position. Debtors were made responsible for disregarding exchange rate risks and misjudging their long-term liquidity both in terms of their expected income and existing savings (resources). Banks are also responsible because they rated the creditworthiness of debtors disregarding exchange rate risks only taking the instalment starting at the time of loan taking into account. Besides there is one more crucial aspect to be highlighted. The debtor applied for and took a long-term loan and it is independent from him how the bank finances its assets (granted loans). If it is a short-term source, especially short-term foreign exchange swap, the bank will need to renew it repeatedly and if source costs grow for any reason, placing the burden on the debtor is disputable. The debtor obliged

himself to repay for the whole duration of the loan, theoretically the bank could have provided the source for the whole duration at the time of transferring the loan. I also have to accept Hypothesis 2 because the responsibility of debtor as well as creditor was proven.

Result II. It is non-acceptable (putting it mildly: disputable) banking practice that in the case of long-term foreign currency mortgage loans the principal and interest repayment obligation of debtors are increased with further cost elements referring to the growing source costs of financing. It is also a non-acceptable statement in defence of the debtors that foreign currency mortgages were bad banking products i.e. they were not connected to foreign currency. **At the time of loan transferring the interest difference could only exist if the interest of foreign exchange source (Swiss franc, euro) granted as the source of foreign exchange loan was lower than the forint interest.**

- At early payment no limit was created in the case of free-to-use mortgage loans covered by real estate, although these presumably financed a second or more properties or consumption or to make profit on interest by exploiting the interest difference of foreign exchange and forint.

Result III. The decision to help foreign currency loan takers by forcing banks to accept early payment is highly disputable because it has not encouraged the loan granting of banks but rather discouraged, and also deteriorated social morale, which I would like to highlight.

- The government promotes home building (the employment grows, the GDP grows) which becomes a large project and means the construction of residential blocks with many flats. Building companies finance the construction of residential blocks using bank

loans and the cover of the loan is the buying price of the ready-made homes. The source of buying price is typically partly the savings of the buyer and the bigger part comes from the bank loan taken by the buyer. Once the bank undertook to finance construction of the residential block i.e. decided on granting the loan then it has to undertake to grant loan to home buyers i.e. financing the buying because the cover of the primary loan is the secondary loan. Home building is an investment, excessive home building can be regarded as excessive investment as a result of which savings of households may decrease and their loans will increase, consequently their net savings will definitely decrease. Therefore not the household debts are excessive but the mass of investments aimed at meeting household needs. Consequently, I consider proven the assumption set forth in Hypothesis 5 saying that although the population (household) has typically a saving attitude, the loan taken by the population is significantly high.

Result IV. The amount of home mortgage loans cannot be rated alone. The number of homes built and sold compared to solvent demand or even earlier the loans granted for project companies specialized in home building can be considered excessive.

- In Hypothesis 4 I shared a widely held opinion concerning the population's level of financial culture. The question was related to foreign currency crediting, the dilemma, however, is not negligible in terms of the future.
- **Result V. Based on my questionnaire no obvious and exact answer can be given. The statement – the ultimate cause of foreign currency based crediting displacing forint loans is the**

inappropriate level of the population's financial culture – cannot be justified clearly but the answers does not support the conclusion that the level would be acceptable. It must be highlighted by all means that in the interest of future generations the improvement of general financial culture is a necessary and inevitable task.

6 PUBLICATIONS RELATED TO THE THESIS

Papers in English

Zoltán Bánfi (2011): Growth of Retail Lending Before the Crisis. pp.: 55-66
In Gáspár-Vér, K. (ed.): *Financial and Economical Problems in the First Decade of the 21st Century*, Sapientia Hungarian University of Transylvania.

T. Bánfi–A. Bánfi-Z. Bánfi (2013): Europe, Time to wake up! Change of monetary policy instruments – reduction of public debt (interest burdens), system of fiscal and monetary objectives – central bank independence, *Public Finance Quarterly* 2., pp.: 219-229.

Papers in Hungarian

Bánfi Zoltán (2009): A gazdasági válság és a származékos strukturált termékek múltja, jelene, jövője. *II. Kaposvári Gazdaságtudományi Konferencia konferenciakötete, április 2-3.*

Bánfi Zoltán (2010): (M)értéketelenül – A lakossági hitelek növekedése. *Hitelintézeti Szemle, IX. évf. 4. szám, 349-360. oldal.*

Bánfi Zoltán (2013): Lehet-e túlzott mértékű a lakossági eladósodottság? *Pénzügyi Szemle Online*, <http://www.penzugyiszemle.hu/vitaforum/lehet-e-tulzott-merteku-a-lakossagi-eladosodottsag>.

Bánfi Zoltán (2013): A pénzügyi válság hatása a magyar devizaalapú hitelpiacra, (Efectul crizei financiare asupra pietei de credit în valută străină din Ungaria). *Pariumi Egyetemi Szemle* 2012/I., 11. évf. 1. szám, pp.: 21-34. oldal.

Bánfi T.–Bánfi A.–Bánfi Z. (2013): Európa, ébresztő! Monetáris politikai eszközváltás – államadósság (kamatteher) csökkenés – fiskális és monetáris politikai célrendszer – jegybanki függetlenség. *Pénzügyi Szemle* 2. szám, 220-229. oldal.