Институт за икономическа политика
economic policy institute

Hanns Seidel Stiftung

Private Indebtedness in Bulgaria – Trends and Comparisons with Central and South East European Countries

Sofia
2014

1463 Sofia, 2 Khan Asparouh Str., Fl.3

Responsible Editor: Yasen Georgiev

Assisting Editor: Dragomir Belchev

Body Design, Prepress: ID Team

Print: Simolini 94

This publication contains a volume of papers in the field of private indebtedness, some of which were presented within a conference on «The Private Debt in Bulgaria – Trends and Comparisons with the EU Member Countries», organized by the Economic Policy Institute (EPI) with the support of the Hanns Seidel Foundation, Bulgaria on April 29, 2014 in Sofia.

The current issue is made possible thanks to the kind financial support of the Hanns Seidel Foundation, Bulgaria. The findings, interpretations and conclusions expressed here are those of the authors and do not necessary reflect the views of the institutions they represent, neither the positions of the Economic Policy Institute nor the Hanns Seidel Foundation, Bulgaria. Reproduction is authorised provided the source is acknowledged.

The publication is disseminated electronically and on a hard copy free of charge. For more information, please visit the website of the Economic Policy Institute at www.epi-bg.org.

All comments regarding this publication are welcome at:

Economic Policy Institute
2, Khan Asparouh Str., Fl. 3
1463 Sofia
Tel.: +359 2 952 29 47, +359 2 952 26 93
Fax: +359 2 952 08 47
E-mail: epi@epi-bg.org
www.epi-bg.org

ISBN 978-954-9359-55-8

Contents

Introduction

Yasen Georgiev

Executive Director, Economic Policy Institute, Sofia

In comparison to the low public debt figures Bulgaria has been registering in the last years, the private indebtedness, which is comprised of both households' and non-financial corporations' debt levels, enjoys a considerable public interest, proved by the attention always paid by media and society to any newly released data. Despite the certain grade of uncertainty when it comes to statistical data on households' and companies' indebtedness, the trends that could be outlined in the countries from Central and South East Europe show not only some similarities but also different paths countries embarked on after the collapse of their planned economies. Whereas news on indebtedness on non-financial corporations' level (towards other companies; towards banks, state authorities or employees) seems not to affect people directly, the individual indebtedness is a much more sensitive issue. What is a general feature of all economies in the above-mentioned region is the fast financial deepening which led to a rapid retail credit boom that occurred in a situation where insufficient financial literacy has been still a common drawback for societies alongside with a growing demand for new products and services exceeding personal financial capabilities of majority of people. In this regard, a main difference among economies in Central and South East Europe is the housing credit which was facilitated in many of them by state-subsidised financing schemes, denominated in some cases in foreign currencies.

This is only an excerpt of all the topics revealed and analysed in the current publication, which is prepared after a conference on "The Private Debt in Bulgaria – Trends and Comparisons with the EU Member Countries" held on April 29, 2014 in Sofia. The event was organised by the Economic Policy Institute (EPI) with the support of the Hanns Seidel Foundation, Bulgaria. The follow-up publication consists of detailed analyses on private indebtedness in Bulgaria, as well as papers summarising the current state of private debt in Croatia, Hungary and Poland.

The present volume of papers includes also results from a survey on the private indebtedness in Bulgaria conducted by the Economic Policy

Institute in March-April 2014. It sought to present a snapshot of the households' indebtedness towards banks and other credit institutions. Its value added is ensured by the comparability of its outcomes with these of a previous survey carried out by EPI in October 2010.

Last but not least, by holding the above-mentioned conference and preparing this publication the Economic Policy Institute continues its long-term efforts to draw the public attention to topics of considerable importance for Bulgaria's economy. Thus, EPI provides a platform for constructive discussions and free exchange of views among experts and stakeholders on up-to-date topics as well as on the long-term perspectives in front of country's economy.

CHAPTER I
Private Indebtedness in Bulgaria

Survey Results: Indebtedness of Bulgarian Households towards Banking and Other Financial Institutions

Dragomir Belchev
Economic Policy Institute
JEL Codes: H31, D14

Until 2009 the banking services in Bulgaria experienced an extremely rapid development. The expansion period was followed by a significant consolidation of the banking sector and its adjustment to the new economic realities. The process was accompanied by several key changes: banks reduced their operational costs (for example the branch network was optimized); granting loan conditions were reviewed and the risk was optimized; credit financing switched from funds provided by the mother companies[1] to own resources (due to the increasing deposits of the population).

As a result of the dynamic economic development there are few tendencies between November 2010 and March 2014 which are worth stressing[2]:

- Decrease in households and non-profit institutions serving households (NPISHs) loans as percent of GDP from 28.2% to 23.3%. But this is not a one-sided process. As the banks rethought their credit policy the households also returned to their more typical conservative thinking. Now the loans are an instrument for financing and achieving long-term goals, but only in absence of other type of funding
- According to the monthly statistics of Bulgarian National Bank there is an increase of the share of bad and restructured loans in banks' portfolio (from 10.3% in 2009 to 18.1%) due to the deteriorating labour market and rising unemployment.

1 The market share of Bulgarian owned banks in May 2014 is about 30% but before the crisis the percentage was much lower.

2 This period is chosen as a reference due to time framework for conducting two surveys by the Economic Policy Institute on private indebtedness, to be mentioned later in the text.

The dynamic change in the above mentioned indicators was the reason behind the Economic Policy Institute's decision to conduct its second survey on the topic of household indebtedness in Bulgaria. The goal is to create a profile of the borrowers based on several key features and in the same time to make a comparison with the EPI's previous findings back in 2010. The key features are as follows:

- Extent of the household indebtedness (how households' budgets are affected, patterns of behavior if there are payment difficulties, etc.);
- Future attitudes and expectations;
- Financial literacy and savings.

Every online survey faces certain restrictions based on the quality of answers by respondents. In order to overcome the limitations and improve the representativeness, especially within the categories "age" and "education", the questionnaire was distributed through multiple channels. A total of 515 people took part in the online survey. The age breakdown shows that the group of 20-29 aged is the largest, followed by those at the age between 30-39 years and decreasing number of participants in other age groups (Figure 1). On the other hand Figure 2 presents the distribution of answers concerning the type of education – 75% of all respondents indicated that they have obtained at least a bachelor's degree. The higher educational background allows two important assumptions to be made: first, the people who took part in the survey have higher than the average country income or a at least a lower risk to be unemployed and second, they are better informed and with higher level of financial literacy, although the latter is not always true. Regarding comparison made by the location of residence it can be said that the vast majority of the study group is concentrated in the capital and the cities, which are county centers.

Figure 1. Age structure of respondents, %

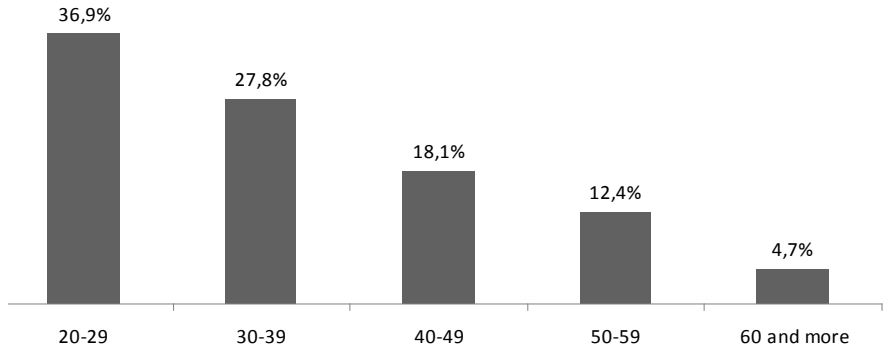


Figure 2. Education, %

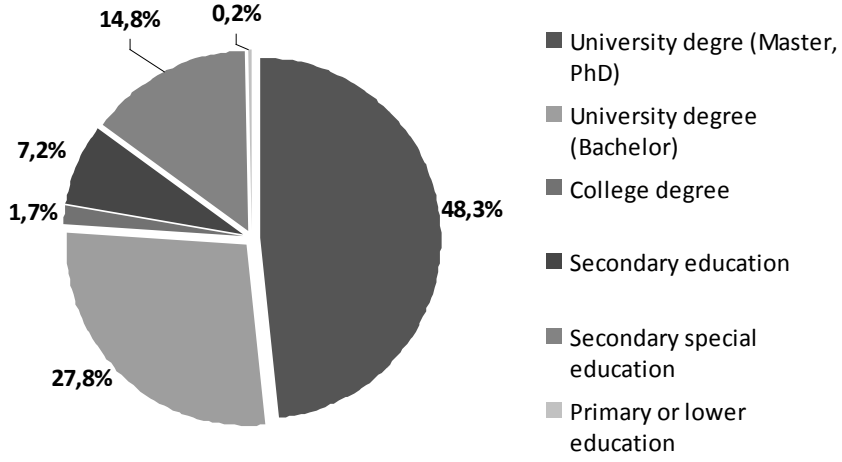
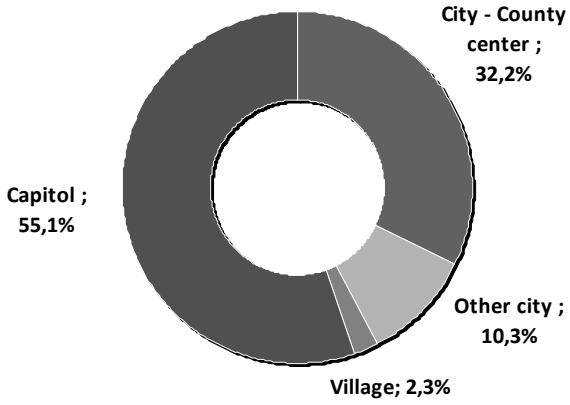
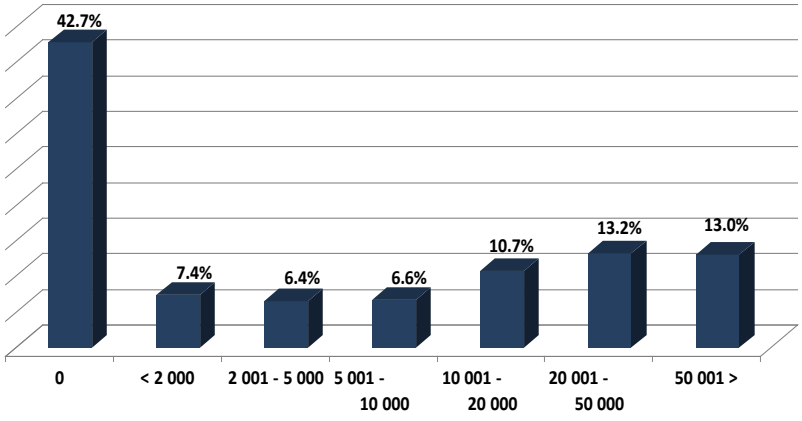


Figure 3. Residence (location type), %



Having in mind the differences between the current survey and the previous one conducted in 2010 (especially the difference between the two study groups) we can make a comparison and say what is the development over the time of some key elements. On the first place we can spot the difference in the number of households, which do not have debts to credit institutions. Their share in the end of 2010 was approximately 20%, while in the end of March 2014 the data shows a significant increase to 43%.

Figure 4. What is the total amount of loans of your household?

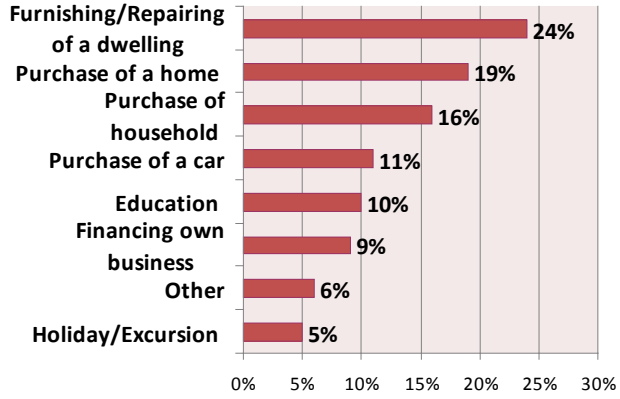


For a detailed examination of the obtained data it could be created a profile of the indebted persons by type, size and purpose of the loan.

1. Almost half of all indebted respondents (46%) have loans over BGN 20 000[3];
2. The three most frequently used bank loan products are: consumer credit (32%), credit card (24%) and mortgage loan (16%);
3. The most common use of loans are as follows: furniture or repair of dwellings (24%), buying a home (19%) and purchase of an equipment (16%).

Considering these three focal points there is a curious observation. Despite the fact that 10% of all respondents have used a loan for educational purposes, only 2% have used a bank student loan. Clearly the product is still not popular or it is offered at less attractive terms. This should be a sign for all banks for a niche which can be exploited in a more efficient way.

Figure 5. Loans by type and use, %



One of the main points of the data analysis is to determine how the household expenses are allocated. As a result, the expenses will be separated in two groups: expenses for household's loan servicing and expenses for life-minimum provision. Table 1 in the bottom right corner (in dark gray outlines) presents those households whose budget for both categories exceeds 100%. As a result they maintain a permanent budget deficit, which places them in a precarious position. In light-gray color are outlined all the other households whose expenses

3 1 EUR = 1.95583 BGN

are very close to the threshold of 100%. The total percentage of the respondents in the "grey zone" is 44%, which is almost 10% less than 2010 survey results. Most probably this is another indicator for the ongoing stabilization processes of the Bulgarian economy since 2010. The data is additionally confirmed by the direct question: "Do you have debt servicing difficulties?", where 41% have a positive answer.

Table 1. Structure of households' expenses

		Expenses for household's loan servicing (% of the income)					
		N/A	Under 10%	10%-20%	20%-35%	35%-50%	Over 50%
Subsistence minimum of the household (% of the income)	Less than 1/4	1.7%	2.9%	5.9%	3.3%	1.3%	3.8%
	Around 1/3	0.8%	4.2%	5.9%	7.1%	5.9%	**4.6%**
	Half	2.5%	3.3%	6.7%	8.8%	**8.4%**	**3.8%**
	Around 2/3	2.9%	1.3%	7.9%	**3.8%**	**4.6%**	**3.3%**
	Over 2/3	2.1%	1.7%	**2.5%**	**4.2%**	**4.6%**	**3.8%**

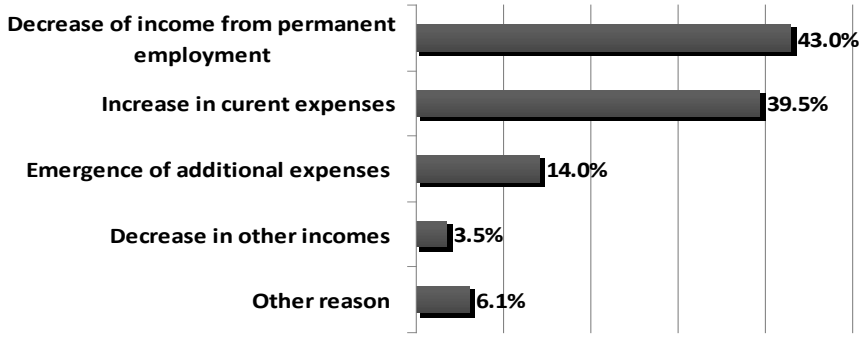
Having already examined the structure of the expenses it is important to see the development of the household budgets and especially in the last year (Table 2). On the right darker side of the table are shown the percentage of the households whose living standard has deteriorated (for example their incomes are as much as a year ago but with an increase on the expenditure side). The accumulated percentage is 46.6%, but on the other side to this group can be added also those who received and spent as much as a year ago (15.9%) as their income has not been indexed with the inflation. From all of the mentioned above it is evident that in the last year the majority of the respondents are forced to cope with already reduced family budgets.

Table 2. Respondents' income and expenditures dynamic in the last year

		At the moment I earn...?					
		Don't know	Much more	Slightly more	The same as last year	Slightly less	Much less
At the moment I spend...?	Much more	0.6%	2.3%	4.3%	5.0%	1.2%	2.7%
	Slightly more	0.4%	3.1%	13.8%	13.2%	4.5%	2.1%
	The same as last year	1.2%	0.6%	4.5%	15.9%	1.9%	1.7%
	Slightly less	0.0%	0.0%	0.8%	2.7%	4.7%	1.6%
	Much less	0.0%	0.2%	0.4%	0.8%	1.6%	6.4%
	Don't know	1.4%	0.2%	0.0%	0.2%	0.0%	0.2%

The budget deterioration is the main reason which stays behind the households' irregular repayment of their debt. 43% of all affected identified as a main reason the decrease of income from a permanent employment, which remained virtually unchanged compared to 2010 results (Figure 6). On the other hand, the increased cost of living is the second major reason with 40% (with approximately 10% more compared to 2010). However, a large part of the existing difficulties have been unforeseen for the borrowers (22% of the cases) which means the bank risk management system has been relatively well functioning.

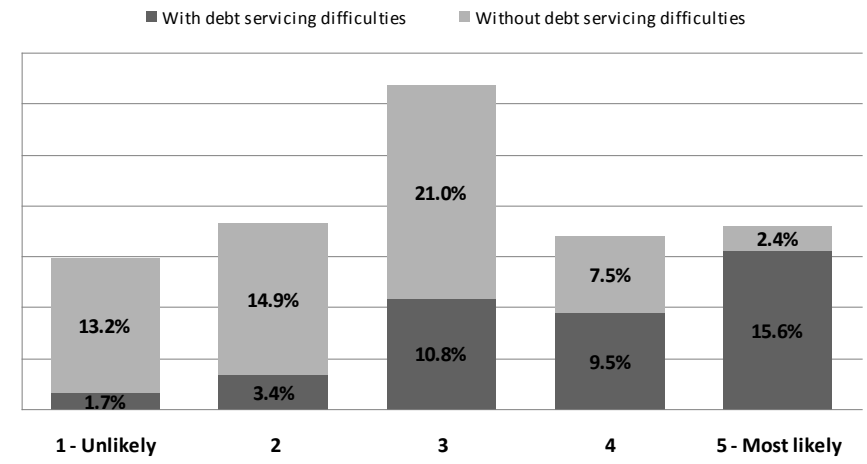
Figure 6. Nature of debt servicing difficulties



The arising question is how households manage to fill families' budget gap and to overcome the hindrances. Firstly, it can be observed that majority of the households have combined several measures. The first steps are to manage the expenditures: to cut (35%) or delay them (23%). An important source for overcoming the difficulties is the support from the family (10%). However, in the majority of the cases this step is not taken individually but rather in combination with other actions like the already mentioned. Another significant remaining option is the renegotiation of the loans. One third of all respondents facing loan repayment difficulties stated that such measures have not been required yet, but another 28% have initiated a process of reaching new agreement with the bank, but unsuccessfully. One obstacle is the rescheduling period. When the debt is rescheduled for a period more than 2 years the charged provision will lead to a bank loss. Therefore the banks tend to approach every customer individually. It is indicative that the remaining 39% have already renegotiated their loans. Moreover, a third of them have done it even more than once.

An important part of the respondents' profile is their future expectations about the family budget. For this purpose they had to evaluate using a scale from 1 to 5 what is the possibility of future debt serving difficulties. The respondents were sorted into two groups according to their current debt serving difficulties: those who already have and those who have not. Logically the first group has much more negative expectations for the future but the overall picture is rather neutral (Figure 7). These sentiments are significantly more positive than the 2010 results, where more than two-thirds expressed a negative attitude towards their future.

Figure 7. How do you evaluate the possibility of future debt serving difficulties (new or additional)?



In addition, the borrowers who took part in the survey were asked how they asses the chances for compensation of expected occurrence of difficulties on the scale of 1 ot 5 in one of the following ways:

- Additional employment;
- Expenditure cuts;
- Sales of property;
- Renegotiation of credit conditions.

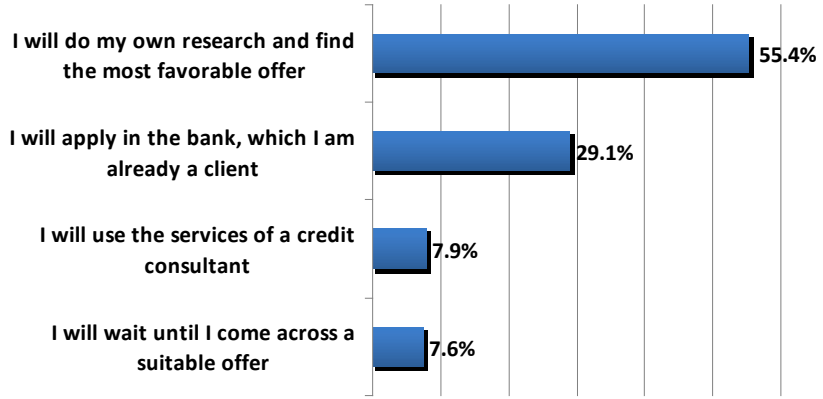
Apparently, the respondents assess two options with higher potential: ensuring additional employment (30% of the answers were 5) and expenditure cuts (32% of all gave the highest probability). The most difficult to assess was the option for renegotiation of the credit conditions. The results are too divergent, which is rather a consequence of customers' unfamiliarity with the loan contract and the lack of financial literacy. As an evidence, an additional question shows that 31% of the borrowers said they did not know whether there are conditions in their contract which can vary over time. The most extreme and unpopular measure to address possible future difficulties is the property sale (62% all rated it with 1).

The future attitudes also include customers' sentiments towards the credit financing in the next year. The majority of the respondents are

pessimistic as just 14% of all responses are positive and 46% responded with a firm no. It can be concluded that the Bulgarian credit market has returned to its typical conservative thinking. The external financing is tend to be used as a last resort measure and major purchases are tend to be made or co-financed mainly with pre-savings.

One of the objectives of the current survey was to find some direct and indirect indicators for respondents' financial literacy. One of them is what are the usual steps taken by people who are plan to take a loan within a year (54% of the respondents). The highest percentage (55.4%) believes that they are sufficiently prepared to do the necessary research and find the most favorable loan conditions. Other 29,1% will apply to the bank, which they are already clients and only 7,9% will trust credit advisor. The reason is mainly the distrust in credit consultants and attempt to cut costs in the process of searching for the best loan conditions. The answer distribution almost fully coincides with the 2010 survey results, thus it can be said that this is one of the persistent characteristics of the Bulgarian households.

Figure 8. What are the usual steps taken by the people who are tend to take a loan within a year?



As a second indicator for financial literacy used is the way in which households control their budgets. On the Figure 9 below it can be seen that the largest group of people is well informed how much they spend (food, overheads and free time) but they do not follow strictly their expenditures (45%). The second largest group (27.8%) is of those who have a budget and follow every expenditure. For the purpose of the

research there will be made a further breakdown by the person who have debt servicing difficulties. There are two main conclusions:

- First and not very surprising is the fact that the combination between borrowing and lack of financial discipline (there is no monitoring of overheads, nor of the total monthly expenses) leads far more often to debt servicing difficulties.
- Second, examining the group of respondents with a strict family budget reveals that the percentage of these who have debt servicing difficulties is larger than those who have not. There is a simple explanation. The households start keeping their budget under control when they face financial problems. The same tendency applies to households with a cosntrained available budget. In reverse, the higher disposable income, the less control of the expenditures is reported. Very often both mentioned characteristics have been overlapped. Therefore, there should be set a goal of increasing the overall level of financial literacy as a guarantee for a more wisely use of loans. This objective could be achieved by additional clarification of the terms of the credit contracts from the financial institutions and by introducing of financial education even at the elementary school level (the survey results do not show a difference in how households control their budgets by educational level).

The savings are another challenge in front of the families' budgets. 47% of all respondents do not have any savings at all (Figure 10). Only 35.8% of all who have savings said that they add sums to the amount regularly (every month), while in the rest of the cases it happens rather occasionally. Certainly, it is a negative trend but it is not entirely a result of a behavior model (lack of financial literacy and long-term planning), but also the overall low level of incomes in the country. The lack of savings leads to lack of buffers, which are suppose to compensate an unexpected loss of income or extra costs of living. The data confirms that the absence of savings is a reason for arising of debt servicing difficulties. Apart from the said above there is another observation: 76% of people who do not have loans have been able to set some money aside. Again, here can be noticed the more conservative approach of Bulgarians towards the credit market and their inclination of financing longer-term assets with own funds.

Figure 9. Which of these statements best describes how households control their expenditures?

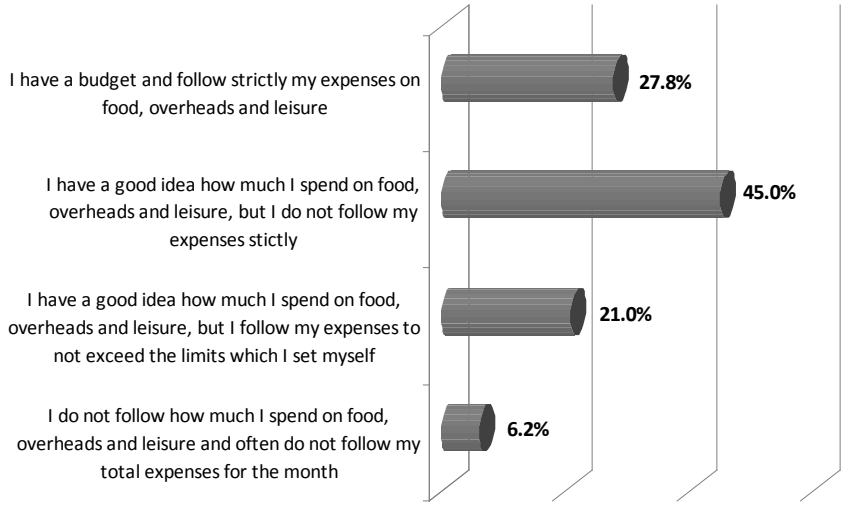
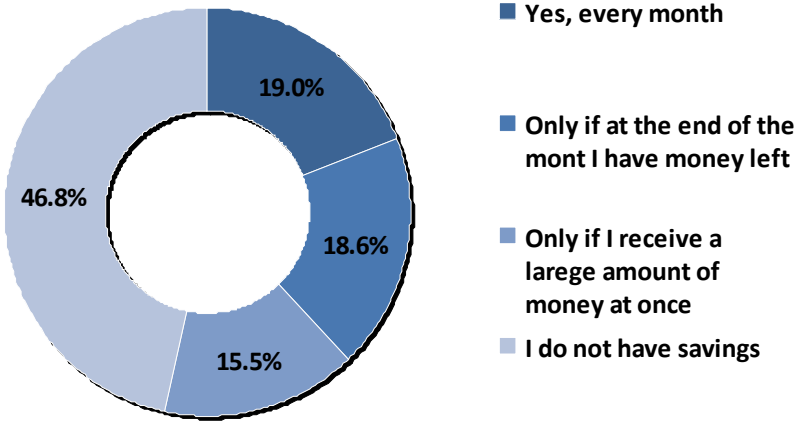


Figure 10. Do you have savings and are you able to save money every month?



Conclusions

- In last few years a consolidation on the Bulgarian credit market is observed, which resulted in reducing the number of indebted households as well as the number of creditors on one household. Due to the slightly improved economic conditions and the reducing tendency of households for taking loans the number of households experiencing debt servicing difficulties also decreased.
- Both, the households and the credit institutions are more cautious and assess the risk in a more detailed manner.
- Within a period of a year the majority of the respondents registered worsening in their available budgets.
- In terms of budget planning, there is a lack of financial literacy in controlling the expenditure side of the budget. In most of the cases people who are strict in managing their budget are already experiencing debt servicing difficulties.
- In spite of the increasing amount of deposits in the Bulgarian banking system, the households are characterized with low level of savings. Even more, they are formed only occasionally and sporadically and are not in result of a long-term strategy. As a consequence, there are no buffers which can absorb external shocks and this results in an overall uncertainty about the future.

What Happened in the Household Crediting Sector in Bulgaria? Past Dynamics and Current Tendencies

Boris Gurov Ph.D.

Assistant Professor at the Economic Research Institute at the Bulgarian Academy of Sciences

The problem of household indebtedness[1] was brought to the fore and acquired transnational actuality mainly because of its role in triggering the world financial and economic crisis (Krugman 2010; Lemieux 2010). The massive mortgage "excessive lending" to in reality not financially sound households in the USA, Spain, Ireland and a number of other developed countries was one of the main factors behind the eruption of the crisis and the following painful recession. One additional factor draws the attention of analysts of the world financial and economic crisis to indebtedness: in conditions of generalized recession and restrained levels of overall demand and consumption the unprecedented level of indebtedness and over-indebtedness could pose a serious obstacle to economic recovery and growth due to the heavily shrunk consumption resources of households and their durable orientation toward deleveraging (Kriesler 2008; Chmelar 2013).

Household debt is a relatively new phenomenon for Bulgarians brought about by the combination of high economic growth and emergence of mass-consumption society and the fast liberalization of market related activities. The main actors in the phenomenon under investigation are credit institutions (mainly commercial banks), on the one hand, and Bulgarian citizens trying to finance more and more actively different aspects of their life strategies and consumer needs on the other. It is imperative to emphasize that Bulgarians have no experience in dealing with and using financial products in a liberalized market and that access to credit modified their economic

1 The present analysis is strictly restricted to credit indebtedness of Bulgarians towards banks and other credit institutions. Debt generated towards the state (tax-payer debt) or other providers of public utilities and community services falls beyond the scope of this work.

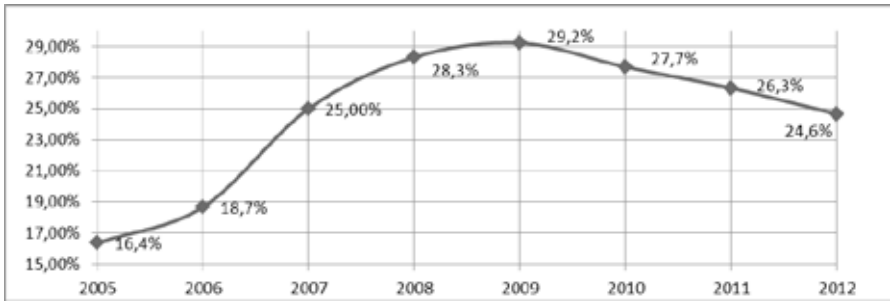
practices and aspirations. Mass penetration of crediting during the last decade represents their first encounter with this aspect of financial practices and economic life within the household. The relative growth of debt among the population is clearly illustrated in Fig.1. Despite the shortcomings of GDP as an indicator, the constant increase of crediting of Bulgarian households in the period 2005-2009 is apparent (especially in light of the continuous approximate 4-5% annual GDP growth for the considered period). Furthermore, in the light of the fact that the peak of lending activities to households and the sustained growth of Bulgarian GDP coincided in time, it is plausible to consider that mass lending and the increased consumption played favorable role for economic growth[2].

Fig.1. also gives the possibility to clearly establish the two main time periods in the dynamics of lending to households in the country which deserve special sattention: 1) **the moment of accelerated credit expansion in the period 2006-2008**; 2) **the period of slowing down and freezing of lending after 2009**. It is important to emphasize that the events in the Bulgarian crediting system are not unprecedented and such deceleration and slowing-down of lending coupled with a decrease of the levels of household debt to GDP ratio after a period of abrupt expansion, took place in number of European countries. Such tendencies are particularly distinct in the "peripheral"[3] countries of the EU and in countries of the "New Europe" who joined the EU in 2004 and 2007. Similar events took place in Estonia, Hungary, Lithuania, Latvia, Romania and Slovenia. It is fact that the Bulgarian household debt/GDP ratio does not strike as really problematic but is there a Bulgarian specificity beyond those macro-indicators and what is it?

2 According to the National Statistical Institute GDP growth for the period 2000-2008 is 57,2%. The effect of acceleration of loaning activities to households is often analyzed as a factor favoring GDP growth, (especially in the short term) but it must be emphasized that the relation is much less straightforward and problematic to establish compared to increased loans to firms. Nevertheless there is a consensus concerning the positive effects of increased lending to households on GDP growth in countries with low income which undeniably is the case of Bulgaria (Cf. Beck et al.:, 2012).

3 In his analysis of the post-crisis effects on household lending in the EU Ales Chmelar (2013) uses the terms "core" (countries in which the growth of household lending did not slowed down substantially or even accelerated after the crisis but where there wasn't a clear cut credit expansion before it) and "periphery" of the EU to designate the two very distinctive trends observable among EU countries.

Fig. 1. Dynamics of household debt as a relative part of GDP 2005-2012



Source: Bulgarian National Bank (BNB)

The processes of credit expansion in Bulgaria took place in the wider context of fast penetration of household credit in the countries of Central and Eastern Europe (CEECs) after 2000. Lending and indebtedness are an inextricable part of contemporary developed economies and the commercial banks play, or at least are supposed to play the role of an efficient coordination mechanism between bank depositors and the investment necessities of firms and the consumption needs of households. Even before the problems in the banking systems of those countries became apparent, a number of researches raised concerns (Arcalean et al., 2007, Enoch 2007, Zdzienicka 2009) whether credit expansion in the region was not to explosive and whether there wasn't a clear credit "overshooting" (over-crediting)[4], both to businesses and households, which may prove ill adapted to the degree of development both of their real and financial sectors.[5] The main argument of those authors is that in normal conditions of integration with the developed

4 The term over-crediting does not really exist in the specialized literature and since we introduce a term we will make the effort to define it. Overshooting refers to the mechanical releasing of more credit that can be provoked by a bad-judgment or inertia during the build-up phase of an economic boom. Over-crediting in contrast refers to "conscious overshooting" from lenders being sure to be able to recollect their debts.

5 Enoch (2007) is the more explicit in his qualifications and he labels the excessive growth of lending to households in the CEECs as "one of the most pervasive developments" in lending over the last couple of decades (p.3). It is an established fact that during the period 2000-2007 bank credit growth to the private sector in the CEECs was very intensive and constitutes a rather exceptional credit boom even on a world scale. Bank credit growth to the private sector as a percent growth in real terms (credit deflated by the CPI based inflation) over the 2000-2007 period is approximately 20% per year for the CEECs on average and Bulgaria is among the leading countries with 30,3% growth per year (closely behind Latvia, Lithuania and Romania) (Cf. Zdzienicka 2009)

countries of Western Europe such abrupt credit expansion could fit in a long-term equilibrium of the process of catching-up with them and that even it is somewhat desirable in such an endeavor. However, in the case of a crisis and exogenous shocks, such an explosive credit expansion favors the deepening of the existing macroeconomic imbalances and becomes a generator of financial instability. In the economic research on the topic there isn't a real consensus or what is the "good" or optimal pace of credit expansion. For the time being it is considered impossible to define a concrete universally applicable threshold beyond which credit growth could be labeled excessive.[6] The approach of most authors working on the topic is to advise against very explosive credit growth which can lead to the pervasive fast booms and fast unwindings (the inescapable post-crisis excessive credit contraction within the following recession) which are well studied by the theory of the financial acceleration and some behavioral models. Both this methods explain those phenomena by the procyclical nature of crediting activities. Roughly stated, explanations based on the theory of the financial acceleration account for the credit expansion as a result of an unjustified optimism about future income and gains (both on the creditor and debtor side) which tend to increase the collateral value both of secured debts and the credit limits available to borrowers. As for the behavioral models, the excessive crediting is also explained with the procyclical nature of yet another element: the widespread underestimation of risk during the build-up and booming cycle and the reverse overestimation of risk and general apprehension during the subsequent recession. Events in the Bulgarian crediting system are not an exception to those general trends.

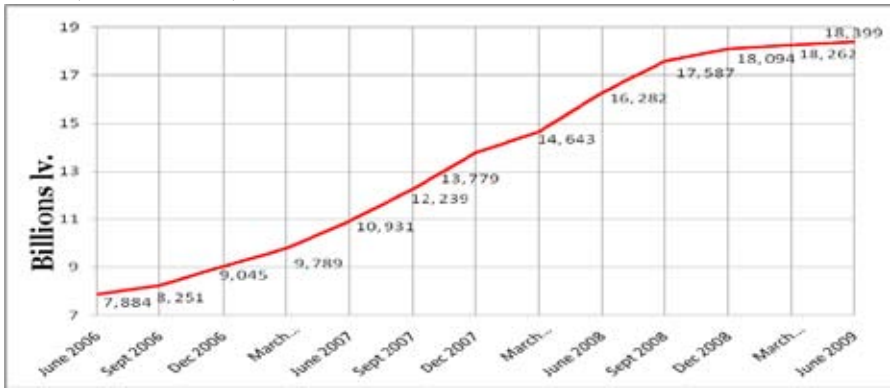
Jump-starting, dynamics and expansion of the Bulgarian crediting market (2000-2009)

This is the period which determines the development and the actual manifestation of the phenomenon in Bulgaria and which hides the causes for the indebtedness of the households in the country. It is also during this period, when the mines for the subsequent problems in the Bulgarian crediting system were laid. During the first decade of 21st century Bulgarians became more and more active in terms of consumption and use of credit products, a process that affected both the economic relations and interactions in the country as well

6 This is true both for theoretical and empiric research.

as consumption habits and aspirations of the population.[7] In less than four years, the debt of Bulgarian households towards financial institutions rose almost 3 times from less than 7 billion BGN (Dec 2005 – 6,927,834,000 BGN) to more than 18 billion (June 2009 – 18,399,415,000BGN),[8] (1 Euro ≈ 1,95 BGN/ lv.). The peak of crediting is clearly noticeable between December 2006 and December 2008 when Bulgarian households generated almost 8.5 billion BGN of debt (from commercial banks alone).

Fig. 2. Evolution (by trimesters) of the cumulated debt of Bulgarian households towards commercial banks for the period June 2006 - June 2009 (billion BGN)



Source: BNB

Despite explicit warnings by the Bulgarian National Bank (March 2008) for signs of "cracking in crediting standards" and "commercial banks' overrating of household solvability and the true capacity of individuals for servicing debt," the combination of strenuous competition for market shares (remuneration of bank's management being often linked to the amount of allocated credits) and frantic demand for crediting on behalf of the households, brought about the allowance of another 3,200,000,000 BGN just in the following 9 months (more than 20% of additional indebtedness). This fact should not be viewed

7 The evolution of the accrued negative trade balance coincides almost perfectly with an increase in the volume of the borrowing of households – a clear indication of the increased consumption of imported foreign goods.

8 These figures refer to financial obligations of households exclusively towards banking institutions. Debt towards non-banking crediting companies or leasing companies is not accounted for.

as inertia or lack of rational assessment of the situation, but rather as a consequence of rational short-term decisions of creditors (searching for higher profits at a time when the Bulgarian credit market generated much higher profits from crediting activity than the European average)[9] and debtors (jumping at the last opportunity for receiving relatively cheap and easily obtainable credits). The conditions of the Bulgarian credit system during 2008 clearly point to the presence of endogenous risk (Gurov 2010), generated primarily by the aggregation of individual rational actions. While credit institutions were facing a collective action problem (dilemma)[10] as no one could afford to stop crediting activities without facing serious relative short-term losses, credit consumers were increasingly relying on loans to finance not only their consumption and life projects but basic needs of their everyday life.[11]

The mechanism of accumulation of endogenous risks in the conditions of crediting overshooting is marvelously explained by Borio (2001, стр. 8) in his analysis of fast credit expansion from the commercial banks' decision-makers point of view. Their incentive structure is such that it is rational to continue over-crediting during a lending boom (bubble) because a commercial bank cannot afford to stop unilaterally its crediting activities - where the dilemma comes from:

„… risk measurement is only part of the story. Another important aspect has to do with incentives. The key problem here is the wedge between individual rationality and aggregate desirable outcomes … Notions as "prisoner's dilemma", "coordination failures" and "herding" spring to mind. Just a few specific examples: would it be reasonable to expect a bank manager to trade off a sure loss of market share in a boom

9 According to Garabed Minassian (2009), "The net profits of commercial banks in Bulgaria (after tax deduction) for 2002-2008 increased from 267 million lv. to 1,387 million lv. or, in other words, by nearly a third annually for six consecutive years." In such a conjuncture creditors would hardly be motivated to reassess their activities.

10 The term "collective dilemma" is generally reserved for paradoxes of collective action, a problematic most commonly associated with Mancur Olson (1971). The first and probably most relevant for our analysis formulation, however, is given by Pareto, "…if all individuals refrained from doing ***A***, every individual as a member of the community would derive a certain advantage. But now if all individuals ***less one*** refrain from doing ***A***, the loss to the community would be very slight, whereas the one individual not refraining from ***A*** would make a personal gain far greater than the loss he would incur as a member of the community." Cf. (1935)

11 This is one of the main empirical findings which would be discussed further.

against the distant hope of regaining it in a future potential slump? Or to adopt less procyclical measures of risk on the grounds that if others adopted them as well a crisis might be less likely? Or to fail to tighten credit standards or liquidate positions only because, if everyone else did the same, the depth of a recession could be mitigated? "

The aggregation of stereotyped individual choices of credit institutions contributed to the acceleration of the process of indebtedness and the increase of the credit bubble. Credit institutions, generating profit on the Bulgarian market almost exclusively from crediting activities, continued to release large amounts of credit disregarding warnings by the central bank of the limited capabilities of households to service addition debt. Their lax crediting practices were not hampered by restrictive measures taken by BNB which increased the minimum required reserves ratio from 8 to 12 % (enforced from 01.09.2007 to 01.12.2008, when the ratio was reduced to 10 %). On the contrary, following the introduction of the restrictive measures, credit institutions further intensified crediting to households. Only for the period Dec 2007 – Dec 2008, creditors allocated almost another 5 billion BGN to Bulgarian households (almost 40% of all funds allocated to household crediting at the time and an increase of over 30% in a year).

Another strong incentive for persisting in the easy distribution of new loans was the strong asymmetry of credit agreements in Bulgaria, allowing credit institutions to unilaterally renegotiate the terms of servicing the credit and thus transferring the enormous part of the financial risks to the debtors (Yankov 2009). The combination of power asymmetry between creditors and debtors and the overall relatively high level of creditor protection (6/10)[12] in the Bulgarian credit system discouraged additionally credit institutions (subject to the already mentioned collective dilemma) from restricting their crediting practices.[13]

12 In a ranking of 129 countries, Bulgaria is assigned 6/10 on the index of protection of creditor's rights. For an explanation of the indexing system, Cf. Safavian and Sharma, 2007.

13 It should be mentioned that contracts between creditors and debtors in Bulgaria are heavily oriented towards protection of the creditor's rights. Credit institutions in Bulgaria during that period were imposing unilateral changes on virtually any financial parameter of the agreement, and this is a clear difference with other European countries where there are legal obstacles to such self-serving behavior, without even holding a formal meeting with the debtor.

A bunch of other factors also weighted heavily in shaping the incentive structures of both creditors and debtors towards further increase in the credit expansion:

<u>Banking sector:</u>

1. emergence and jump-start of a credit market after severe financial crisis and a period of hyperinflation and bank bankruptcies;
2. almost entirely private capital with a strongly prevailing foreign participation;
3. lack of any experience in a wide-scale crediting of households;
4. lack of official system for accumulation and sharing of information on the loan seekers (in place only since 2009);
5. lack of capacity for risk management and assessment in the household area and impossibility for specific individualized credit-scoring of potential customers;
6. impossibility for real intervention of the Bulgarian National Bank due to its functioning under a currency board;
7. a chronological overlapping of the emergence of Bulgarian credit market with the massive credit expansion of a number of large European banks (especially since the introduction of the Euro) in all of the new and potential members of the EU with all the credit risks inherent in such a process;

<u>Household Sector:</u>

1. first historical experience with a liberalized market of goods and services in the conditions of mass consumption society;
2. lack of basic skills in managing financial assets, products and services;
3. empirically established extremely high consumption aspirations and desires;
4. empirically established extremely low level of financial literacy and culture of Bulgarian citizens;
5. empirically established high level of unjustified optimism about future earnings and income;
6. life experience of the population with the devaluation of liabilities of debtors during the programs for access to property during the 1980's and the 1990's and the financial mismanagement of banks

during the 1996-97 bank run and financial crisis which permitted the unpunished enrichment of more than 3000 "credit millionaires" which repaid only a fraction of their debts via the hyper-inflation.

Additional specificities:

1. lack of specific jurisprudence managing the creditor-debtor interaction and its regulation only in the area of civil law (debts are lifelong and inheritable - the only way to avoid inheriting debt is to give up rights to inheritance altogether);
2. highly privileged status of commercial banks in front of public authorities due to their undeniably positive role for the reconstruction of the Bulgarian economy after the crisis of 96-97.

For long years the capacity of households to optimize the use of their income in their life cycle was a canonical model for the analysis of their decisions on the credit market (Ando & Modigliani 1963). The events of the last decade however, coupled with the highly heterogeneous landscape in the different countries (Chmelar 2013), revealed the need of a more detailed study of their financial practices and decisions through the implementation of sociological surveys.[14] Within the current paper we will include simultaneously the main findings of the two consecutive national representative sociological surveys on the problem of credit debt of Bulgarian households conducted as a first wave in 2009 and as a second wave in 2013.[15] The collected data gives a valuable comparative perspective on the two principal periods we already mentioned: the credit expansion till 2009 and the credit stagnation since that year.

14 Such type of research is gaining popularity and these surveys often have longitudinal character and are carried out every 3-5 years. Such are „Survey of Consumer Finances", „Household debt and Credit Report" in the US and „The Eurosystem Household Finance and Consumption Survey", which was carried out simultaneously in 2013 in 15 countries members of the Eurozone. The main attraction of such an approach is that it gives the possibility the better comprehension of monetary and regulation policies and the economic shocks on specific subgroups among the households. In such a manner one is capable of monitoring the different strata in the highly heterogeneous household sector and also observe the processes taking place in the different income groups, among the over- indebted households etc.

15 The 2009 survey was headed by Professor D. Dimitrov at the Institute of Sociology at the Bulgarian Academy of sciences and the 2013 survey by Assistant Professor Boris Gurov at the Economic Research Institute at the Bulgarian Academy of Sciences.

Main findings and conclusions 2009

As we already demonstrated, the Bulgarian crediting system was characterized by strong endogenous risk which was additionally amplified by the following factors:

- Lack of real means of control and intervention by the central bank due to its strongly limited role under a regime of currency board;
- Over-crediting of financially insolvent parts of the population;
- Transferring the consequences of generated financial risk from creditors to debtors (not only on the insolvent but on good debtors as well once troubles became apparent);
- Extremely low financial culture of the Bulgarian population and distinct information deficit regarding the use of financial products;
- A combination of strong consumer-oriented attitudes in the backdrop of low income and forced indebtedness;
- Lack of individualized approach by creditors in their selection of borrowers and inertial relying on their strong power position both in the legal framework as for the collection of their debts and on the possibility of post-transactional opportunism (Williamson 1975, 1983; Miller 1997) by altering the terms of already concluded agreements for the purpose of transferring risk on borrowers;

The end of the period of the credit expansion in the country perfectly coincides with the start of the accelerated increase of the share of bad loans in banks portfolios. At the beginning of 2009 they account for about 3% and in less than 6 months they doubled in volume to 6%. Till the beginning of 2010 they reached 10% and in the next 12 months the alarming 20% of all the contracted loans. Since then their level oscillates around this figure.

Fig. 3. Cumulative credit obligations of Bulgarian households towards commercial banks and the share of bad credits for the period 2005-2013. (million BGN)

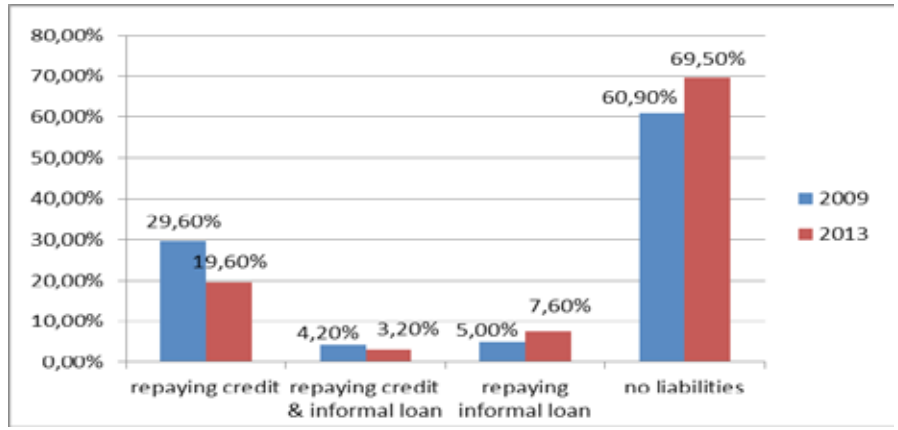
Source: BNB

First problems in the crediting system: increase of bad loans and stagnation of credit activities (2009-2014)

Besides the dynamic changes illustrated by the macro-data, this period is characterized by the fact that the interaction between lenders and credit consumers grew from hot to cold and both the offer and the demand of credit shrank considerably. The 2013 survey clearly revealed the very negative attitude of Bulgarians towards the use of credit under the current conditions offered in the country: 75.9% of respondents considered that the terms of borrowing in the country are too harsh; almost 4 out of 5 "totally agree" that the interest rates and especially the annual percentage rate of charge are too high to venture into contracting a loan, 3 out of 4 declared themselves in favor of state intervention in the household lending market and in the bank polices for crediting, 2/3 declared the procedures for obtaining and servicing credit as lacking any transparency and the same proportion declared that creditors are not upright in communicating information about the loans they offer. Almost half of the interviewees consider that creditors and debtors are not equal in rights and that banks dictate unilaterally the terms of the interaction.

In comparison with 2009 it is possible to affirm some degree of financial maturation and improvement in the financial literacy of Bulgarians: if the unreasonable demands are significantly shrinking (for example the demands for high deposit interest rates and low loans interest rates), the criticism towards the imbalance in the creditor-debtor interaction and the lack of transparency and responsible crediting are intensifying. Moreover, the overall attitude toward loan consumption is very negative: 58.5% of respondents declare that they will resort to credit under no circumstances, except for extreme urgent necessity. Compared to 2009, the level of suspicion and disapproval of the crediting system has significantly increased – another indicator is the reversal of the preference of consumers as to their possible source of financing: if in 2009 respondents were more prone to apply for a loan from crediting institutions than search for loans from friends and family, in 2013 it is the other way around. The evolution of the attitudes towards loan consumption enables us to consider that we are witnessing the development of a real phobia of the consequences of being caught in a debt dependency. Bulgarian households are experiencing real *creditophobia* which seems logical after years of post-transactional opportunism and unilateral contract modification practiced by crediting institutions. Correspondingly, there is also a notable change in the course of action of crediting institutions, which undeniably managed to tighten their procedures of investigation and selection of their potential clients: 7% of respondents were denied a loan and in additional 4,1% of the cases another household member was not approved for credit. In 2009 the corresponding values were 1.4% and 0.9%. In this regard it is not a surprise that the share of households repaying credits decreased in comparison to 2009, while the demand for informal credits from relatives and friends increased which is shown on Fig. 4 below.

Fig 4. Distribution of households according to their debt status 2009 and 2013



Main findings and conclusions 2013

- The established share of households servicing credit in the two surveys has decreased from 33.8% of all households in 2009 to 22.8% in 2013. In 2013 a smaller number of indebted households are servicing quasi-identical total volume of debt of a little over of 18 bln BGN and are having much more problems and trouble in doing so. In the meantime, the level of "bad credits" increased more than 3 times rising from 5-6 to 19-20%. Those tendencies are clearly exemplified by Fig. 4, which also gives insight that during this period almost 9% of households exited from the crediting system.
- The large part of the users of loans are households who don't declare high disposable income (about 1/3 of households dispose with 600 – 1000 BGN and another 1/3 are in the range 1000 – 1500 BGN total monthly income for the household after payment of their loan installment, tax payment, communal services etc. and the large part of them are 3 or 4 members households including children or adolescents) and this is the pool that generates the major part of bad loans.
- At this stage, (especially since the stabilization of the level of "bad loans" at around 20% in 2011 and the lack of true dynamics ever since) it seems that the boom of household insolvencies stopped its progression and goes in a steady flow but that there is a smaller group of households which are considerably more indebted than those in 2009 (the mean amount of debt per household increased with more than 1/3 over the period).
- There is a clear trend of increase in the number of months (arrears) that households in difficulty are late toward their creditors.
- Around 30% of irregularly serviced loans are originating from Sofia and 42% of them originate from the regional centers. The data shows that as a whole, compared to 2009 crediting is stagnating and even retreating in the capital and is increasing in the regional centers and small towns.
- The reasons for late payments and not servicing debt that respondents pointed out in 2013 are almost exclusively financial and could be divided in two main categories – 2/3 of them emphasize low income and chronicle lack of financial means to service debt and respond to their household financial needs (half of them were subject to a unilateral change by the creditor of the terms of their debt service) and 1/3 have reported a negative accidental decrease in the formation of their budgets – loss of job, late salary payments, unexpected medical charges, death of the principal breadwinner in the household etc..

Fig. 5 Indicators of over-indebtedness[16]

Category	Indicator
Price of servicing debt	Households allocating more than 30% of their monthly income to servicing their debt (19.8% of the households with debt in 2013)
Arrears	Households with more than 2 months of arrears on their loan (8.5% of credit indebted households)
Subjective perception of indebtedness	Only 46.7% of households declare managing to integrate their loan installments in their monthly budget; 39.6% report experiencing problems, and 13.7% declare that their monthly income is not adapted to their loan payments and they experience great trouble servicing it

- One of the main findings of the survey was the strongly negative attitudes of loan consumers toward bank loans in their current form. The fact that 58.5% of respondents declare that under no circumstances, except for extreme urgent necessity, they will resort to credit is a clear indication of the suspicious attitude of Bulgarians toward crediting institutions, which clearly have a serious reputation problem among consumers.
- Despite the fact that lenders improved considerably the indi-

16 The above 3 indicators are among those which can be considered widely accepted and are often used in the research on the topic of over-indebtedness (Cf. BIS 2010, Keese 2009). Studying over-indebtedness is gaining popularity because on top of being a pressing and acute social problem the level of over-indebtedness could be considered a precious indicator even in regard to the stability of the financial system.

vidualization and estimation of risk and decreased significantly the unilateral changes of the terms of credit agreements in comparison with 2013, such acts still occur and are still a factor for generating higher risk of insolvencies for households. In 2013, 18.6% of respondents reported that they endured a unilateral change in the terms of their loan agreement. In 2009, while this was an extremely widespread course of action for alarmed lenders, the corresponding value was 45.9%.

- In the last 18 months there is an obvious lack of dynamics in the Bulgarian crediting system. The tendencies in the banking sector are towards increased savings of households (between 2009 and 2013 the credit to deposit ratio fell from 82% to 48% with increasing deposits and constant amount of credit) due to widespread postponement of consumption. In the loan sector the trend is of repayment off old liabilities and decreasing volume of the newly contracted loans.
- We are witnessing signs of a slowing down of the pace of crediting of households and a market contraction. Coupled with the negative attitudes, the cautiousness of consumers and the declining demand are the hardened criteria for loan allocation from the part of crediting institutions. All this elements point to the fact that the loan sector to households is in a standstill and considering the serious steady increase in the savings of the population we can assert that crediting is less and less a factor for economic growth and a source for jump-starting the economy. From the point of view of rationality, the situation is identical to that of the credit boom of 2009 – both sides have rational strategies, but their mutual outcome is suboptimal.

Credit contraction in Bulgaria could be analyzed as a classic case of a credit crunch after a long period of inertial and easy release of loose credit which terminated with everybody worse-off for all parties in the system. In general, after such a phenomenon there is a reduction in the availability of loans and tightening of the conditions for obtaining loans and the events in the Bulgarian crediting system are not an exception. According to Rumelt (2011) in the last 50 years there were 28 house price boom bust cycles in 21 OECD countries which could trigger such events in the crediting system (the data of

the Bulgarian Statistical Institute shows that housing prices increased 3,5 times within only six years in the period 2003-2008). But the current research clearly demonstrates that after regaining some control on the acute effects from the careless credit expansion to households, banks have great trouble finding new clients to lend to. There is also a clear decrease in the demand for credit. The phobia of Bulgarians to find themselves in debt dependency is a certain factor for the small number of new loan agreements and in that point in time it is more the decreased demand which is causing stagnation. The worsened reputation of credit institutions could prove a hard obstacle for restoring the loaning business in the country. The devastating effect of post-transactional opportunism and post-contract breach on the development of markets and the risk of market failure that it generates is a well-established fact (Williamson 1975, 1983; Miller 1997). Therefore, there is a real risk that the recovery of the household lending industry might prove much more problematic than expected for macroeconomic standpoint. The lack of *credible commitments* (Williamson 1983) and the uncertainty in loan contracts, giving options for unilateral changes of terms, played a detrimental role for the withdrawal of potential credit-seekers from possible contracting with lenders. According to all game theoretical models this break of reciprocity (Axelrod 1984) will have long-lasting effects before co-operation and mutually beneficial exchange between creditors and borrowers could be reestablished. Such a process will demand great efforts both from commercial banks and the public authorities but it is the sole path if crediting in Bulgaria is to become source of meaningful life strategies for Bulgarian citizens and a generator of economic growth.

Bibliography

ANDO A. & MODIGLIANI F., (1963) "The 'life cycle' hypothesis of saving: Aggregate implications and tests", The American Economic Review, 53 (1), 55-84.

ARCELAN C., O. Calvo-Gonzalez, C.More, A. van Rixtel, A.Winkler and T.Zumer, 2007, "The Causes and Nature of the Rapid Credit Growth of Bank Credit in the Central, Eastern and South-eastern European Countries" in Enoch Ch., Ötker-Robe I.(dir.) "Rapid Credit Growth in Central and Eastern Europe: Endless Boom or Early Warning?", Palgrave Macmillan eds.

AXELROD R., (1984), *The Evolution of Cooperation*, Basic Books.

BORIO C., (2003), "Towards a macroprudential framework for financial supervision and regulation?", CESifo Economic Studies, vol. 49, No. 2/2003, pp. 181–216. Also available as BIS Working Papers, No. 128, February.

CHMELAR Ales, "Household Debt and the European Crisis" (July 8, 2013). ECRI Research Report No. 13, June 2013. Available at SSRN: http://ssrn.com/abstract=2307854

ENOCH Ch., Ötker-Robe I.(dir.), 2007, "Rapid Credit Growth in Central and Eastern Europe: Endless Boom or Early Warning?", Palgrave Macmillan eds.

KESSE M, (2009) Triggers and Determinants of Severe Household Indebtedness in Germany, SOEP Papers 239, DIW Berlin, The German Socio-Economic Panel, (SOEP)

KRIESLER P, (2008) „The Current Financial Crisis: Causes and Policy", *The Economic and Labour Relations Review*, Vol. 19, No 2, pp. 17-26.

KRUGMAN Paul, "Block those metaphors", NYT, December 13, p. 25.

LEMIEUX P., (2010) *Une crise peut en cacher une autre*, "Les belles lettres", Paris.

MILLER G. (1997) "The Impact of Economics on Contemporary Political Science: *Journal of Economic Literature*, Vol. 35, No. 3 (Sep., 1997), pp. 1173-1204.

RUMELT, R. (2011). *Good Strategy / Bad Strategy*, Crown Business

SAFIAVAN M, and SHARMA S. "When do creditor rights work?", Policy Research Working Paper 4296 (The World Bank)

WILLIAMSON, OLIVER E., (1975) *Markets and hierarchies*, New York: Free Press, 1975.

WILLIAMSON, OLIVER E., (1983), "Credible Commitments," American Economic Review, Sept. 1983, 73(4), pp. 519-540.

ZDZIENICKA A. (2009) "Vulnerabilities in Central and Eastern Europe: Credit Growth", W.P. 09-12, May 2009.

ГЮРОВ (2010) „Ендогенен риск в системата за кредитиране в България" In *Финансовата криза и задлъжнялостта на българина*, изд. Шанс, 163-179.

МИНАСЯН Г., (2010) „Задлъжняването на домакинствата и регулация на банковия сектор", In *Финансовата криза и задлъжнялостта на българина*, изд. Шанс, 11-19.

ЯНКОВ И, (2010)„Отношенията на банките с клиентите като генератор на кредитна задлъжнялост" In. *Финансовата криза и задлъжнялостта на българина*, изд. Шанс. София, стр. 180-201.

Payables and Receivables of Non-Financial Enterprises ип Bulgaria

Ivaylo Yankov[1], PhD

Head Assistant Professor at the Economic Research Institute at the Bulgarian Academy of Sciences

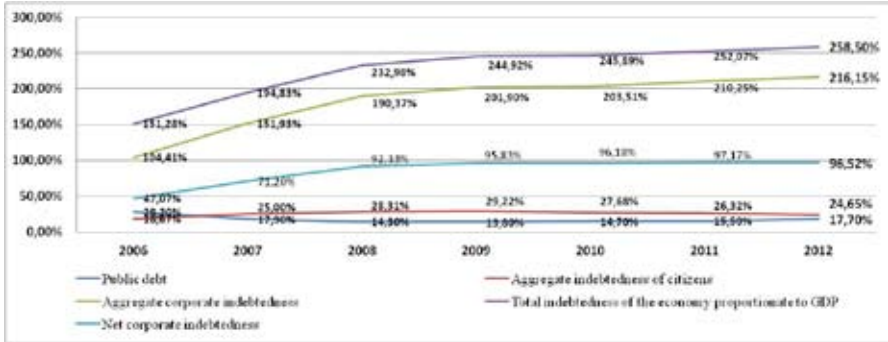
There is no unanimity in the economic literature as to whether financial indebtedness of companies is something harmful or useful. However, authors *are* unanimous about how indebtedness should be calculated: always by comparing its size with indicators like the GDP, the aggregate income of companies, their long-term material assets and capital base. The values for these parameters indicate the current state of the company in an aggregate way. What is often overlooked when analyzing indebtedness is to consider corporate receivables, an oversight that misses the true causes and factors of indebtedness. The main *aim* of this article is to reveal the current state of the balance of payables and receivables in non-financial enterprises in Bulgaria. To achieve this aim, the following *tasks* are set here. First, to review the structure and aggregate amounts of companies' payables. Second, to determine the structure and amounts of aggregate receivables of non-financial enterprises. Third, to analyze the basic component of this dynamically changing balance between receivables and payables of non-financial enterprises.

* * * * *

It is a generally accepted practice to assess indebtedness of the economy by calculating it as the sum of the indebtedness of the state, of the citizens and of the companies, in proportion to the gross domestic product. In this respect, the Bulgarian state has low levels of indebtedness, amounting to approximately 17-18% of the GDP (Figure 1).

1 The author is the advisor to the Deputy Prime Minister for Economic Development

Fig. 1.Indebtedness by components of the economy in Bulgaria



Source: NSI, MF, BNB, author's calculations.

The indebtedness of citizens is also comparatively low, being 24.65% of the GDP. This includes primarily debts to banks and other financial institutions[2].

The most important part of the aggregate indebtedness of the economy is that of non-financial enterprises. The gross payables of Bulgarian companies amounted to 216% of the GDP in 2012. Conceptually considered, this is a very high level of indebtedness, if we trace the aggregate corporate debt in proportion to the GDP. In the methodological aspect, however, it would be more appropriate to trace the size of the net corporate debt in proportion to the GDP - specifically, the difference between the aggregate receivables and the aggregate payables forming *the net corporate indebtedness, which, calculated in this way, amounted to 96.53% of the GDP in 2012.* This is a considerably more accurate value, which corresponds to the level of the country's economic growth. In the economic literature (Cecchetti et al., 2011) it has been pointed out that, at levels of corporate debt above 90% of the GDP, the indebtedness can become an obstacle to economic growth. In the Bulgarian case, the low levels of indebtedness of citizens are compensated by high values of corporate debt, as a result of which the economy can only grow at weak, unsatisfactory rates.

The above-mentioned findings lead to an evaluation of the *aggregate indebtedness of the Bulgarian economy amounting to 138.87%*

2 The results of the representative sociological survey conducted by the Economic Research Institute of BAS in 2013 have made it clear that the tendency to provide credit for citizens is moving toward a decreasing number of credit users and an increasing size of credit obligations (Gurov 20014).

of the GDP[3] *in 2012.* These levels suggest a good performance of the economy in a comparative perspective, as well as good prospects for development and growth in the coming years, when a new wave of global investment demand and dynamic economic activity is expected to set in. The growth of aggregate corporate indebtedness is basically linked to these dynamics.

Other frequently observed indicators related to companies' indebtedness are the size of this indebtedness in proportion to income from sales, capital base and long-term material assets.

Payables in proportion to income from sales. The total income *for 2012* for non-financial enterprises in Bulgaria amounted to 240,5[4] billion BGN (NSI). This is more by 4.7% than in 2011. In 2012, for every 1 lev of income there was 0.71 lev of payables, which means a nominal increase by 0,017 BGN. Compared with 2008, the increase was sustained, and reached a total of 0,085 BGN during the years until 2012. This trend is characteristic for the indebted economies, for which a large part of the sales are with deferred payments.

The capital base of enterprises amounts to 61% of the payables of companies (BCC 2012). This indicator is not a very precise and stable analysis tool in this case, due to the large shares of grey economy and the existence of doubtful accountancy practices in enterprises. According to some studies, the size of the grey economy attains levels ranging from 32%[5] to 45%, which presents the indicator in a different light. Great challenges to the registering of this indicator are the practice of "black", or double, accounting, the discrepancy between real stock-in-trade and what is registered, etc.

Long-term material assets of firms amount to 76.1% of the aggregate company indebtedness. In 2012 the capacity of enterprises to insure

3 Chek Republik 118,4%, Romania 112.40%, Hungary 211,1%, Poland 129,4% for 2012 – Eurostat.

4 The largest income growth is registered in the sector Trade, Repair of Motorcycles and Automobiles (2,4%) and in sector Processing Industry (0,8%). These two sectors together have a share of 62,8% of the income of non-financial enterprises. There is a minimal decrease of income only in three sectors: Construction -0,1%), Real Estate Transactions (-0,01%) and Water Supply (-0,01%). These data indicate stabilized income of companies, which is a condition for revival of the market for credit resources.

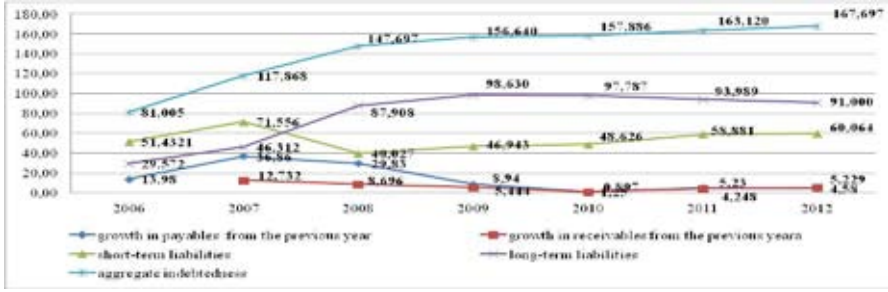
5 A study by Friedrich Schneider, a lecturer in Johannes Kepler University in Linz, Austria and the consultancy firm AT Kearney; a study of the Bulgarian Industrial Capital Association.

their payables with assets decreased. Compared with 2011, the long-term material assets, in proportion to payables, amounted to 73.12%, while in 2008 this proportion was 66.35%. This trend indicates dwindling capacity of companies to attract external funding for increasing their stock and raw material resources and stimulating demand through deferred payment sales.

Volume and structure of corporate payables

The volume of the ***aggregate indebtedness*** of the non-financial enterprises in 2012 reached 167.697 million BGN, compared with 163.120 million BGN in 2011 (NSI). A smaller growth of this measure was registered in 2012 - 4.580 million (an increase by 0.027%) compared with 5.23 million (an increase by 0.032%) for 2011 (Figure 2).

Fig. 2. Dynamics of the size of aggregate indebtedness and the deadlines of payables



Source: NSI, Information on payables and receivables of non-financial enterprises.

The amount of indebtedness per se does not present a problem when it is accompanied by a growing GDP and growing amounts of aggregate corporate income[6]. There is a continuing tendency of shrinking distance between aggregate long-term and short-term payables[7], of which the amounts of the short-term ones predominated before 2008. This ratio is a clear indicator of slow recovery of the companies' capacity to service their debts in short terms and to restore the monetary resources turnover rate they had before the advent of the financial crisis.

6 For instance, according to data from Deutsche Bank, the indebtedness of non-financial enterprises in Germany attained 1 400 billion Euros for 2012.

7 In the German economy, which we already gave as an example, this ratio has remained constant, the same as it was before the crisis in 2007. The reason for this is the timely decision of the authorities in Germany to construct special funds for corporate financing, which have met the demand for cheap financial resource.

The total amount of *payables to suppliers* increased by 2.016 billion BGN (0.04%). In 2012 the amount reached 52.186 billion BGN, whereas it was 50.170 billion in 2011. As for the structure of indebtedness, the aggregate *indebtedness between companies* remained at a level of 52.21% in 2012, having been 53.59% in 2011. It may be said that the demand for funds from this source has passed its peak. This is partially due to the action of the state, which began to restore debts to business at an intense rate.

Payables under commercial loans display a minimum growth by 285 million BGN. In the structure of aggregate payables they had a share of 11,85% in 2012, when they declined from 14,32% in 2011. Inasmuch as drawing commercial loans is usually a practice of large companies, this implies large-size deals, which are often concluded between connected associations. The dynamics of the volume and size of these deals within the general structure of indebtedness can be considered an indirect indicator of the dynamics of money circulation between large businesses.

Tax obligations to the state grew by an additional 280 million BGN (0.08%) and reached 3.628 billion BGN in 2012, from 3.348 billion BGN in 2011. This trend is the result of an increased volume of commercial deals in the economy. In structural terms, they attained 2.16% in 2012, compared with 2.05% in 2011. In a longer perspective, the general trend has been toward decline of their share in the overall structure of indebtedness. In 2008 the share of tax obligations to the state was 2.46%. The explanation of this is the desire of companies to take part in the EU structural funds, where one of the requirements is that tax obligations are discharged on time. Similar is the situation of obligations to municipalities, the share of which is only 0.12%. Falling under the same category are obligations for social insurance, for which there has been a minimum decrease by 70 million BGN (0.64% of the total structure of indebtedness).

Payables to the staff have grown at a negligible rate of 43 million BGN (0.02%) and reached a volume of 1.981 billion BGN in 2012. In structural terms, they have remained at stable levels of about 1.15 – 1.19% in the last 4 years.

Financial leasing displayed a minimal growth by 11 million BGN, due primarily to the end of contract relationships between the givers

and users of leasing and the appearance of new bank products at more attractive interest rates.

Non-resident entities – foreign citizens and companies show the largest change in amount within the general structure of corporate indebtedness. In 2012 payables to foreign companies and citizens amounted to a share of 11.15% in the structure of aggregate indebtedness, while they were 8.17% in 2011 and only 4.31% in 2008. In terms of volume, however, their values remained relatively low, at about 18 billion BGN.

Payables to financial institutions decreased by 1.125 billion BGN in 2012**.** Under this category, banks decreased their total volume of credits to non-financial enterprises by 1.181 billion BGN. (-0.03%), going down to a total of 40.174 billion BGN, whereas the amount had been 41.335 billion BGN in the previous year. The participation of investment companies and insurance companies under this rubric is almost negligible.

The distribution of indebtedness by sectors shows that the sectors with the largest share of the income of non-financial enterprises are also the ones to generate the largest share of debt both in proportion to the GDP and as a share of the aggregate payables. The Bulgarian Industrial Association (BIA) provides the information that the largest increase in the percentage of payables in 2012 compared with 2011 occurred in the sectors of energy industry, pharmaceutical industry and agriculture. A decrease of payables compared with 2011 occurred in the sectors of metallurgy, mining, machine building, communications and chemical industry. The large enterprises are the ones that are mainly in debt. 38% of all payables of non-financial enterprises are those of small and medium companies (BIA 2012).

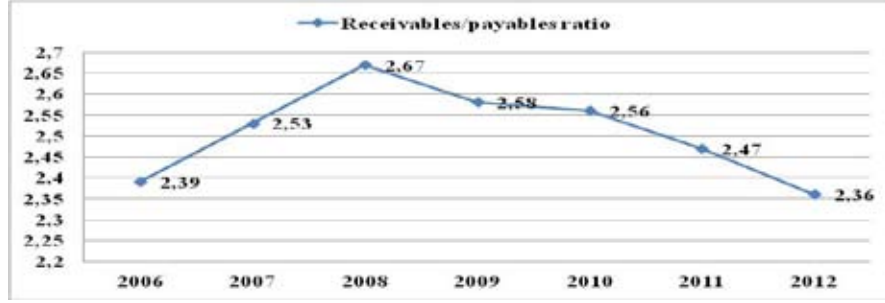
Volume and structures of corporate receivables

The company's indebtedness is an element of its financial structure; the assessment of indebtedness involves a comparative characterization with respect to the condition of aggregate corporate receivables.

The data on the changing growth rates of companies' receivables suggest a positive tendency. In 2012 receivables attained 71.181 billion BGN (+0.07%), and in that year, for the first time, the growth rate of receivables was higher (5.229 billion BGN) than that of payables (4.580 billion BGN).

It can be said that, given a synchronous growth of the volumes of receivables and payables, the aggregated indebtedness is for the most part a function of the economy's growth and of the financial flows in companies. As a result of this, in 2012, for the first time, there was an evident ***decrease of net indebtedness*** of Bulgarian non-financial enterprises by 1 billion BGN. This fact indicates the attainment of equilibrium between payables and receivables of companies. In 2012, for every 1 BGN of payables, 0,48 BGN of receivables were obtained. In 2011 the receivables were 0,447, and in 2008 they reached the bottom at 0,375 BGN. In other words, in 2012 the payables of companies exceeded the receivables 2.36 times, but the peak of this ratio was in 2008, when they were 2.67 times more (Figure 3). We can say that after 2008 there has been a stable tendency of recovery of corporate finances.

Fig. 3. Dynamics of the receivables/payables ratio



Source: NSI, Information on payables and receivables of non-financial enterprises. Author's calculations.

As could be expected, the largest share of *receivables* is that of *receivables from clients and suppliers without financial leasing* – 54.6%, or 38,83 billion BGN. 90% of the receivables in this category are from non-financial enterprises, 3% are from non-resident entities, and 1.1% are from the population. Compared with 2011, there is a very small structural change, amounting to 0.03%, only in the group of non-resident entities, which represents an increase by 60 million BGN in the total volume.

Receivables from provided commercial loans decreased by 3.48 billion BGN in 2012 compared with 2011. The structural change was also a decrease from 19.45% to 18.7% in the aggregate structure of receivables (in 2008 it was 18.53%).

Tax refund decreased by 20,303 million BGN in 2012, as a result of the increased refunding of the state's debts to business. In the structure of receivables, tax receivables amounted to duties to 2.66% in 2011 and 2.44% in 2012. The cause of this decrease was the gradual refunding of state debts to business. By December 2013 the total backlog of outstanding payments amounted to 277 million BGN, including payments to the central government, which were 107,686 million BGN, and to local government, 169,355 million BGN. Despite the more diligent payment of state debts compared with 2009, there is a sustained tendency for delayed payment by the state of tax credits and of obligations under public procurement contracts. The timely payment of state debts to companies is an important factor of impaired solvency. These delays can easily be identified as a result of "tax crises" in the sense in which O'Connor uses this term (O'Connor 1973)[8]. Under conditions of financial turbulence caused by the state, companies easily tend to enhance the demand for credit and fail to make payments between each other on time. The most important economic effect, however, is the broken movement between goods and money.

„Other" corporate receivables

22.9% of all receivables of non-financial enterprises are defined under the category "others of this kind". This group comprises 16,273 billion BGN, concentrated mainly under non-financial enterprises; this amounts to 82.19% of the total volume of this category. Also included here are receivables from the population (1.4%) and non-resident entities, which amounted to 1.2% in 2012 and 1.63% in 2011. Basically, these are the same categories taken separately, but with some specificity in the definition of the commercial transaction.

A comparison between the structures of receivables and payables, shown in Table 1, is informative about the balance of corporate finances.

8 The American economist James O'Connor uses the term "tax crisis" to designate the inability of the government to collect tax obligations (O'Connor 1973).

Table 1. Comparison of structures of corporate receivables and payables in %

2012	Receivables	Payables
1. Clients and suppliers (without financial leasing)	**54.6**	**52.21**
incl. Non-financial enterprises	**49.2**	**26.2**
2. Provided commercial loans	18.7	17.4
Non-financial enterprises	**17.5**	11.8
Financial enterprises	0.03	**25.7**
incl. Commercial banks		24
3. Taxes from national budget (incl. excise taxes)	2.4	2.2
4. Taxes to be restored by municipalities	0.1	0.1
5. Staff	0.02	1.2
7. Financial leasing	0.9	1.4
8. Others	22.9	19

The comparison between receivables and payables of companies indicates that the balance of company finances has its main support in bank crediting. This fact highlights the capacity of the banking sector to exert pressure on business. The equilibrium of corporate finances and the ratio between receivables and payables is supported by other factors as well. These are the market prices and the stock on hand, the raw material security, ready cash of the associations, bank deposits, the kinds of property, etc. Achieving balance also depends on the predominant feelings, attitudes and expectations of decision makers in the companies.

Conclusion

The overview of the current balance between corporate payables and receivables enables us to draw the following conclusions regarding the indebtedness of the non-financial enterprises in Bulgaria. First, corporate indebtedness continues to grow in pace with the GDP, the receivables and the aggregate income of companies. This indicates the positive aspects of debt, which are mostly related to investment activity or the companies' market strategies for expanding their market shares by deferred payment. Second, the structure of indebtedness is not undergoing any significant changes, which indicates sustainability

and predictability. Third, the tendency, revealed through analysis, to declining capacity of enterprises to attract external resources insured with long-term material assets limits the possibilities of the banking sector to realize the attracted financial resources by giving loans to the companies; this is an important challenge to crediting and, subsequently, to economic growth. Basically, this tendency is accompanied by *a process of deleveraging*, and the latter is also a process of *financial exclusion* of those companies that do not have at their disposal sufficient assets to guarantee their credits. This situation is a factor of increasing *market inequalities* and *concentration of a considerable market power* within a small number of companies. Fourth, the unbalanced relationships between companies and banks continue to get even more unbalanced and spill over into the relationships between suppliers, which stimulates the *feeling of moral hazard.* Fifth, the lack of adequate laws that might direct, guide and solve issues related to corporate indebtedness is an important obstacle to the reduction of these problems. This, in turn, is a hurdle to the improvement of the investment climate, to the growth of the companies and to the state of the macro economic imbalances.

Indebtedness, as an indicator of negative tendencies, always raises justified concern. Although the levels of indebtedness of non-financial enterprises remain high, there is reason to believe that the basic trends move towards mastering and guiding this indebtedness.

Literature

O'Connor 1973, The Fiscal Crisis of the State. New York: St. Martin's Press, 1973.

Cecchetti Stephen, Mohanty M S and Zampolli Fabrizio (2011) The real effects of debt http://www.bis.org/publ/work352.pdf

Gurov B. 2014, "Credit indebtedness of Bulgarian households: dynamics, causes, policies impact" part of Annual Report 2014 "Economic Development and Policy in Bulgaria: Evaluations and Expectations. Focus Topic: Inequality and Poverty – Dynamics and Policies for Their Limitation" from Economic Research Institute at BAS.

НСИ, Справка за задълженията и вземанията на нефинансовите предприятия. [NSI. Information on Receivables and Payables in Non-financial enterprises (in Bulgarian)].

БСК 2014 Доклад за задлъжнялостта на нефинансовите предприятия в България [BCC 2014 Report on Indebtedness of Non-financial enterprises in Bulgaria (in Bulg.)]

CHAPTER II
Private Indebtedness in Central and South-East Europe

Private Indebtedness in Central and South-East Europe – an Attempt for an Overview

Yasen Georgiev
Executive Director, Economic Policy Institute, Bulgaria
Marian Zagorski
JEL Codes: D14, D22, H31, H32

Introduction

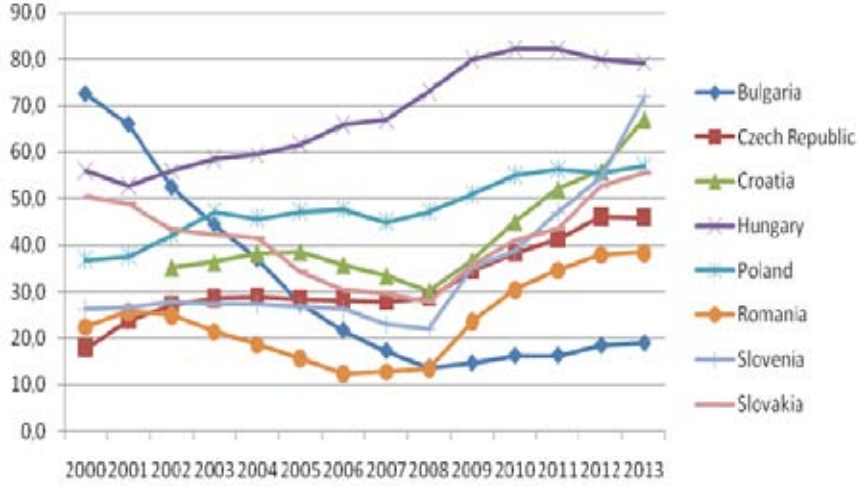
Public debt or gross government debt is considered an indisputable indicator measuring performance of countries' economies, which gained a considerable importance in the recent years as a consequence to the implications of the financial and economic crisis worldwide. No matter which position is defended – running up a debt for the sake of fostering growth or maintaining a strict financial discipline as a precondition for a sustainable growth in the future, indebtedness in general defines the maneuvering room for countries in a long-term perspective. Similarly, private indebtedness impacts considerably on households' and companies' behavior. Whereas the financial deepening in the majority of old member states of the European Union (EU) is based on a long experience on behalf of financial institutions and consumers of their services as well, in the new EU members this process exceeds the average financial literacy in most of the countries where consumers' demand for new products and services often outpaces the financial resources available and disregards the expected incomes. This calls for a closer look at the indebtedness as a phenomenon at households and non-financial corporations' level in Central and South-East European (CSEE) countries which increases very intensively since the collapse of their planned economies in late 80s and early 90s.

In an attempt to summarize at least a part of the processes of running-up of debts in Central and South-Eastern Europe, the current paper aims at providing a comparison on private debt data in Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia. The comparability of the comparisons below is ensured though applying EUROSTAT data for all the eight countries where possible.

Indebtedness in Central and South-East European countries

A brief look at the public debt figures as a percentage of the gross domestic product (GDP) in the CSEE countries in the period 2000-2013 allows the following observations: 1) expecting Hungary, all other countries in the reference group maintain sustainable levels of public debt or even reduce it in the years preceding the crisis (2007-2008); 2) as a crisis implication gross government debt in all eight countries is on the increase, though at different pace, exceptions are Hungary (where the public debt declines in the last years) and Bulgaria (its debt remains under 19% of country's GDP till the end of 2013); 3) if the end of the period is considered, public indebtedness in all the countries scores below the EU average – 87.1% in 2013 (Fig. 1) .

Fig. 1 Gross government debt as % of the GDP in Central and South-East European countries

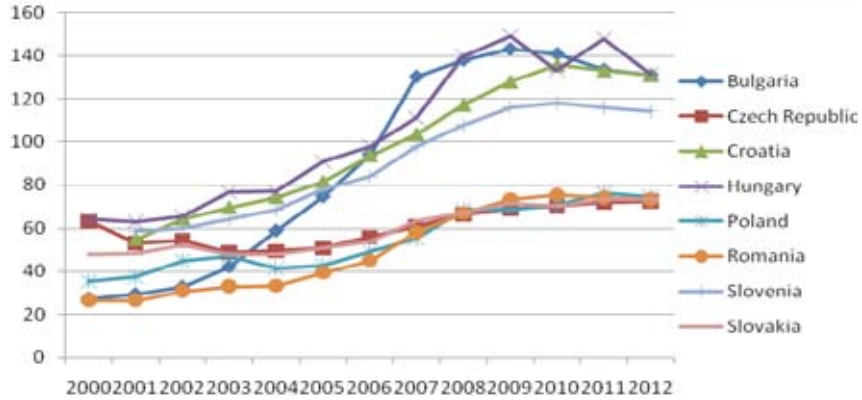


Source: EUROSTAT
(Data on Croatia is available after 2012)

In contrast to the public debt performance, the debt ratios of households and non-financial corporations in CSEE countries reveal a considerably more homogeneous picture in terms of the trends despite the different dynamics in the crisis years. A significant distinction can be seen if the countries are separated in two groups – the first one consisting of Romania, Poland, Slovakia and the Czech Republic and a second one formed by Bulgaria, Croatia, Hungary and Slovenia. While

the private debt curve of the first group countries is relatively flat in 2000-2012, it is obviously steeper in the second group. A tipping point for all eight countries is the period right after the beginning of the crisis (Fig. 2). The picture in old member states looks even more dispersed – private indebtedness in Luxembourg reaches 320% of country's GDP, while in Lithuania it accounts to app. 60%. However, this data can be justified with differences when it comes to debt composition as well as to specificities in the behavior of credit-takers (households and companies), consumption patterns, etc. Some of these particularities are quite specific (of ethno-cultural or historic background, or future expectations, etc.), while others are related to the economic situation in a given country (average wages, purchasing power, inflation, existing banking and other regulations in the field of lending) and last but not least, the monetary and economic policy the country follows.

Fig. 2 Private debt as % of the GDP in Central and South-East European countries (consolidated annual data)



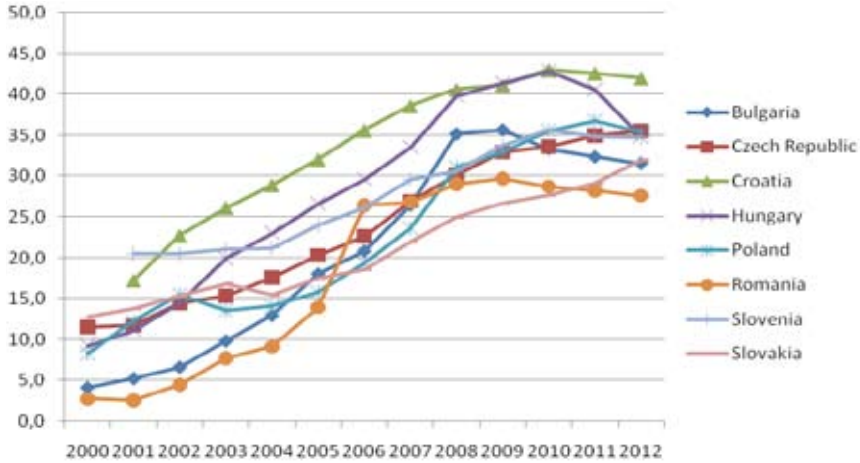
Source: EUROSTAT
(Data on Croatia is available after 2012)

Households' indebtedness

The private indebtedness figures provided by EUROSTAT include debts of non-financial corporations on the one hand side and of households and of non-profit institutions serving households on the other. From fig. 3 it becomes clear that all the countries reveal low levels of household debt in the beginning of the 21st century – between 2.7 and 12.8% which can be explained by the financial deepening process that started comparatively later in this part of Europe. The overall

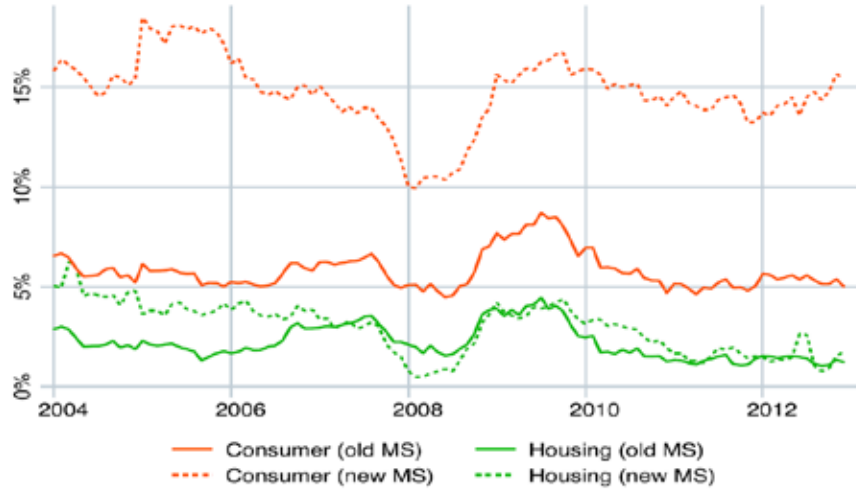
household indebtedness in the 90s was similar to the levels evident in Western Europe in the post-World War II years. The stable household debt increase in the following years occurred as a result of the harmonization of national legislation systems within the EU accession process, the single market development and the parallel market entry of foreign companies in the financial sector in CSEE. Understandably enough, this upstream process was also due to the low base effect, rapidly growing consumer demands and at the same time a purchasing power still lagging behind, as well as the availability of more expensive credits in comparison to the old member states (Fig.4). The difference, as seen in the interest rates of consumer and housing credits, can be attributed partially to the higher risk levels in New Europe (Chmelar 2013), but also to the introducing of the euro as a new single currency (which reduced interest rates in eurozone members), the rise in real estate prices, the expectations for future growth and low unemployment rates, etc. (European Parliament, 2010).

Fig. 3 Households' indebtedness in Central and South-East European countries as % of the GDP (consolidated annual data)



Source: EUROSTAT (Data on Croatia and Slovenia is not available for 2000)

Fig. 4 New and old member states real interest rates of consumer and housing credits



Source: Chmelar, Ales. 2013.
ECRI Conference / Lending to Households after the crisis How should the lessons from the past be reflected in regulation / Ales Chmelar – 16th May 2013, Brussels

The favourable economic conditions in the years before the crisis, combined with wide-spread expectations for rising incomes and optimistic considerations about meeting future debts impacted directly on the behavior and propensity of households to count on borrowed resources in all countries observed. Fig. 3 shows that along with the financial crisis in the years after 2009, the debt curve in the majority of the countries began to turn down or the rates of increase started to slow down at least, excepting the Czech republic and Slovakia. Households became more conservative when it comes to borrowed money and focused on paying their debts back and/or negotiating the conditions of the credits they are servicing in case of arrears.

A snapshot from 2011 with data on indebtedness and financial difficulties among EU households in general allows grouping households in CSEE in two sections according to the level of household arrears (very high, high, moderate and low). Croatia is not included since it was not an EU member then. The first section consists of Romania, Hungary and Bulgaria followed by Slovenia and Poland in the sec-

ond section and the Czech Republic and Slovakia in the third one. It is the first section where the share of households with difficulties to meet their financial demands is the highest (Table 1). If data from the European Central Bank (ECB) on the loans to disposable income ratio is considered, the Czech Republic, Hungary and Poland ranked first in 2012, followed by Slovenia, Slovakia and Bulgaria (Table 2). What is worth mentioning here is that while in the case of Bulgaria and Hungary the household debt declines compared to the disposable income in the recent years, in all other countries the trend is rather the opposite.

Table 1. Overview of indicators for indebtedness and financial difficulty of households in 2011

Level of household arrears *very high:* above 21% *high:* over EU average - 11% *moderate:* below EU average *low:* под 6%	**Household's inability to make ends meet** *very high:* above 36 % *high*: over EU average - 26% *moderate:* below EU average *low:* под 16%	**Country**
very high	very high	Romania
very high	very high	Hungary
very high	very high	Bulgaria
high	high	Slovenia
high	high	Poland
moderate	high	Czech Republic
moderate	high	Slovakia

Source: Civic Consulting of the Consumer Policy Evaluation Consortium

(CPEC), Directorate General Health and Consumers 17.01.2013

Table 2: Loans to disposable income ratio

	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovenia	Slovakia
31.12.2012	40.29	57.22	53.98	53.76	-	47.13	45.06
31.12.2011	42.07	55.83	63.40	57.82	36.87	46.83	42.50
31.12.2010	45.68	53.17	67.25	52.23	37.33	47.31	39.31
31.12.2009	46.78	51.98	62.92	48.04	36.88	44.71	37.08
31.12.2008	43.57	49.84	62.24	48.03	33.42	42.38	35.37
31.12.2007	40.14	45.29	50.33	35.10	31.12	40.37	30.58

Source: European Central Bank

Table 3. Composition of household debt (2013)

Country	**Consumption Credit**	**Housing Credit**	**Other Credits**
Bulgaria	46%	48%	6%
Croatia	17%	72%	11%
Czech Republic	12%	48%	40%
Hungary	48%	48%	3%
Poland	22%	60%	18%
Romania	55%	36%	9%
Slovakia	19%	73%	8%
Slovenia	27%	57%	16%

Source: European Central Bank

The breakdown of household debt data according to the purpose of the credit, places Bulgaria and Hungary in a common group together since households in both countries reveal similar features that are also comparable to these in Romania (Table 3). In these three countries the share of consumption credits either outpaces the share of housing ones or they are comparatively equal. What is more, ff the dynamics of household debt between 2007 and 2012 is considered, countries can be grouped in the following four groups (Table 4):

First group: decrease in consumption and other credits, increase in housing credits;

Second group: no change;

Third group: increase in consumption and housing credits;

Fourth group: increase in consumption credits and decrease in housing and other credits.

Table 4. Grouping Central and South-East European countries according to the retail credit dynamics (2007 – 2012)

Country	Consumption Credit	Housing Credit	Other Credits
First group: decrease in consumption and other credits, increase in housing credits			
Bulgaria	from 52% to 46%	from 38% to 48%	from 10% to 6%
Czech Republic	from 20% to 17%	from 69% to 72%	11%
Poland	from 32% to 22%	from 42% to 60%	from 26% to 18%
Romania	from 79% to 55%	from 20% to 36%	from 2% to 9%
Slovenia	from 42% to 27%	from 37% to 57%	from 21% to 16%
Second group: no change			
Croatia	from 13% to 12%	48%	from 39% to 40%
Third group: increase in consumption and housing credits			
Slovakia	from 15% to 19%	from 66% to 73%	from 19% to 9%
Fourth group: increase in consumption credits and decrease in housing and other credits			
Hungary	from 37% to 48%	from 56% to 48%	from 7% to 3%

Source: European Central Bank

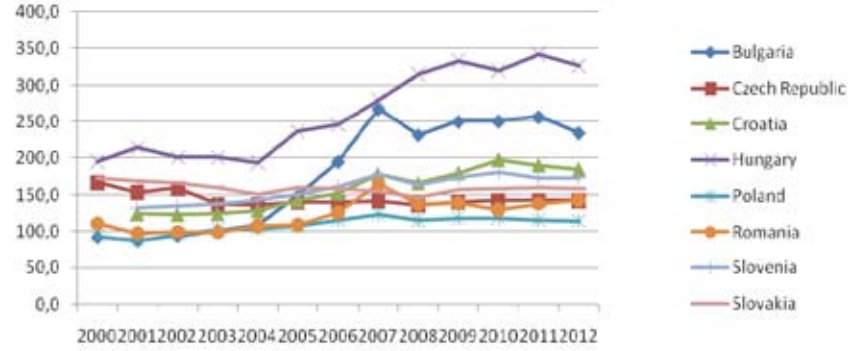
Finally, it can be concluded that despite the different factors determining indebtedness at household level and households' behavior in the countries observed, it is obvious that the household debt is on the

decrease or maintains relatively stable levels in last few years. In addition, it is in the CSEE countries with the most indebted households where the share of housing credits is the highest.

Indebtedness at non-financial corporations' level

Statistical data on the level of indebtedness in the sector of non-financial corporations in the countries from Central and South-East Europe reveals similar tendencies to these in the sector of households – an overall increase. For example, in 2001 companies' debt in all the examined CSEE countries accounted to 133% of GDP on average, while in 2012 it was 185%. Though, there is a different dynamics and spread behind these figures. In 2001 non-financial corporations' debt reached from 87% in Bulgaria to 214% in Hungary, while in 2012 it was between 114% in Poland and 326% in Hungary. Interestingly, it is in 2004-2005 when the group of reference countries witnessed a significant change due to the increase in the debt figures of Bulgarian companies. What is an overall feature for all the countries is the debt peak in 2006-2007 followed by stabilization processes or even a gradual debt decline in some of the countries (Fig. 5).

Fig. 5 Indebtedness on non-financial corporations' level in Central and South-East European countries



Source: EUROSTAT

(Data on Croatia and Slovenia are not available for 2000)

Understandably, the dynamics of the processes mentioned above and the crisis effects differ from country to country. Nevertheless, a more careful look at the period preceding the crisis and in the following years (2007-2012) allows grouping countries like this: 1) Croatia,

Hungary and Romania where the debt increased; 2) Slovakia and the Czech Republic where no change was witnessed and 3) Bulgaria, Slovenia, Poland where companies deleveraged. Although, the current paper does not seek to examine the sources of companies' indebtedness, it is worth mentioning that in some of the countries the accumulated debt is not towards other corporations but towards their parent companies. The process of deleveraging towards headquarters in these countries started when local subsidiaries in CSEE had already settled and expanded their operations. This coincided with the first crisis years and the increased overall demand for liquidity.

When comparing debt statistics between companies in EU members from CSEE with EU old member countries one could conclude that the latter reveal higher indebtedness levels, smaller fluctuations and even a growth in the crisis years. For sure, it is the membership in the eurozone and the role of the European Central Bank that maintains lower interest rates. From all eight countries examined, Slovakia and Slovenia are the only eurozone countries, thus they are directly affected by the ECB policy although companies' indebtedness in both countries did not grow as it is the case in other eurozone countries.

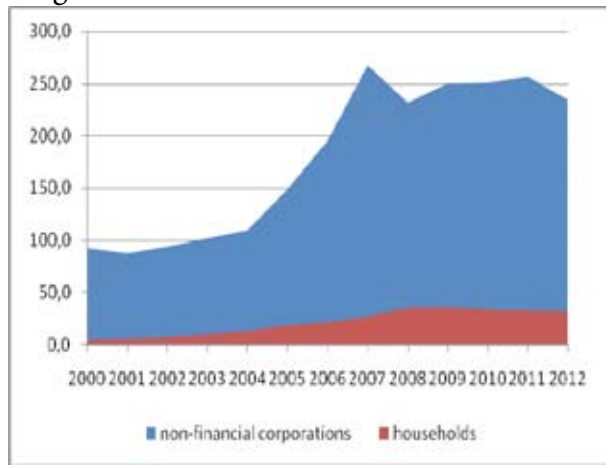
Conclusion

In an attempt to summarize the data above, Fig. 6 puts together information on household debt and non-financial corporations indebtedness expressed as a percentage of GDP of each of the countries of the group observed. In most countries the increase in household debt since 2000 goes together with an increase in companies' debt, however, with the exception of the Czech Republic where debt figures show a decrease at companies' level and an increase in the household sector. What contributed considerably to the above-mentioned processes in New Europe are the years of economic upturn and the related positive future expectations as well as the EU accession/integration path the CSEE countries were following. An important incentive for facilitating the access to credit products was provided by the development of the Single market in the field of financial services. Additionally, the increased competitiveness among financial institutions triggered lending activities in the EU and facilitated conditions for consumers of borrowed resources as a whole (Chmelar 2013). As a consequence, within a relative short period of time and starting from a low basis,

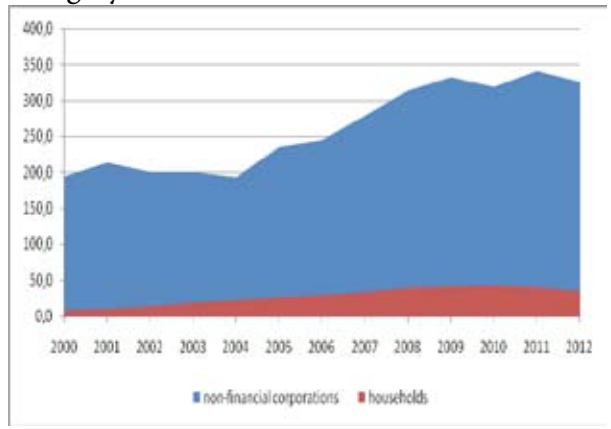
households and companies in Central and South-East Europe started considerably leveraging and thus accumulated considerable debt levels whose sustainability and implications cannot yet be exactly examined and therefore will be evaluated in a long-term perspective.

Fig. 6 Indebtedness of households and non-financial corporations in Central and South-East European countries (Source: EUROSTAT, Data for Croatia and Slovenia are not available for 2000)

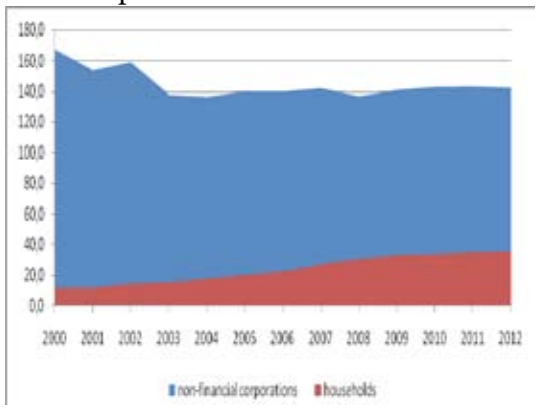
Bulgaria



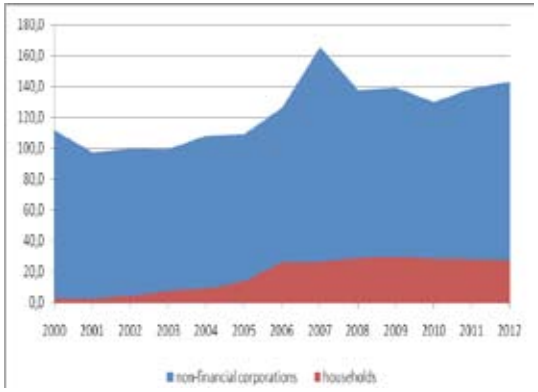
Hungary



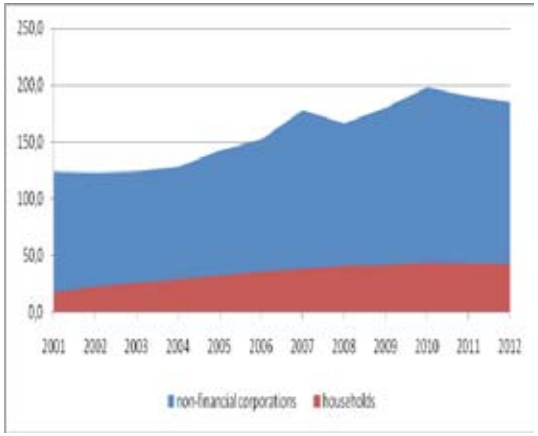
Czech Republic



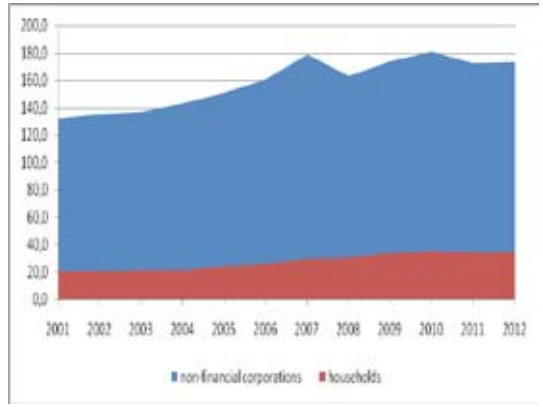
Romania



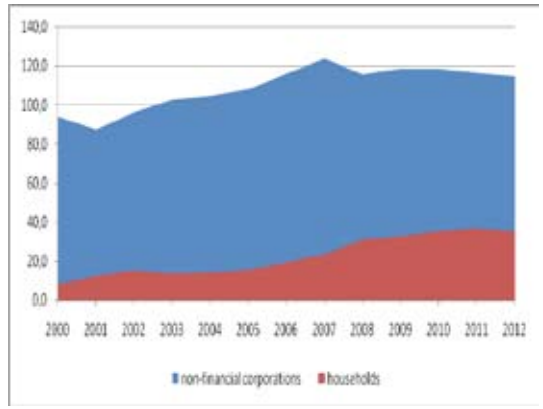
Croatia



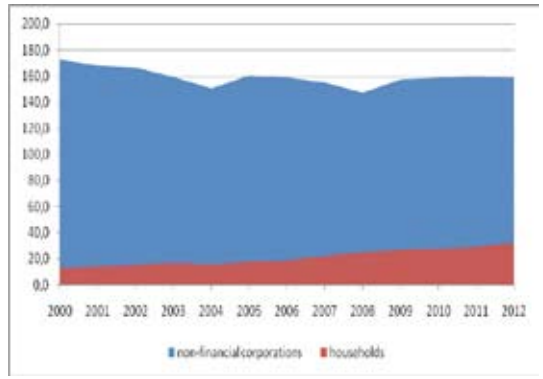
Slovenia



Poland



Slovakia



Literature

Chmelar, Ales. 2013. Household Debt and the European Crisis. Paper presented at the ECRI Conference. European Credit Research Institute (ECRI): Brussels

EUROSTAT

EU-Parliament. 2010. Household Indebtedness in the EU. Policy Department A. Economic and Scientific Policy.

Ahearne, Alan/ Wolff, Guntram. 2012. The Debt Challenge in Europe. Working Paper: Bruegel.

The Over-Indebtedness of European Households: Updated Mapping of the Situation, Nature and Causes, Effects and Initiatives for Alleviating its Impact, Summary document for stakeholder workshop, prepared by Civic Consulting of the Consumer Policy Evaluation Consortium (CPEC), conducted for Directorate General Health and Consumers, 2013

Private Indebtedness in Hungary: Special Developments, Difficult Outcomes[1]

Tamas Novak, Ph.D.

2013/2014 Austrian Marshall Plan Foundation Fellow at the Center for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University; Associate professor at the Budapest Business School

Financial deepening in periods of stable economic growth and increasing real incomes is generally a natural phenomenon and it is normally indicative of strengthening confidence in improving economic prospects.[2] Loans are essential instruments in financing investment or consumption and their balanced and non-overheated growth is an important factor behind economic growth. Beside positive expectations for the future, the price of lending may also influence the growth of private indebtedness at an even greater extent. Cheap loans are a very important driving force behind increasing private demand for loan financing.

Interest rates had already been very low before the economic crisis in a number of EU countries; real interest rates in the Eurozone countries were sometimes even negative given the low ECB key rate and the relatively high inflation rate in some countries. In the "new" member states interest rates varied considerably, but in Hungary it was one of the highest in comparison in the whole Central European region. This cost factor is the key reason behind the specific structure of the private indebtedness that unfolded in a number of Central European countries. The high cost of domestic loans explains the shift towards inexpensive foreign currency denominated (FX) loans in Hungary. High domestic (forint) interest rates pushed private demand to turn towards foreign currency denominated loans. These FX loans started to become the major drivers behind the rapid credit expansion of households and the corporate sector alike from around 2004 and they soon became the most important instruments in financing investment

1 This research was prepared partly in the framework of OTKA K 84293
2 Várhegyi (2003)

and household consumption. The subsequent risks associated with the exchange rate movements became apparent as early as the outbreak of the financial crisis and the Hungarian forint – given its vulnerability due to the external financing needs that affected public and private debt too – started to devaluate rapidly. The now much weakened exchange rate became permanent making financing private debt increasingly difficult. Foreign currency denominated loans started to play a pivotal role in shaping Hungarian household and corporate indebtedness as a unique feature in comparison with several countries in the region. As a result of the changing domestic and external economic environment, FX lending became one of the core reasons behind Hungary's macro-financial vulnerability, which manifested itself in the rising volume of nonperforming loans once the crisis unfolded and prolonged its negative impact on economic growth and the income position of households and the corporate sector.

From a macroeconomic perspective, the loans drawn directly from abroad by the private sector (in most cases by large firms which more likely hedged their exchange rate risks) are also important as they may also be affected by exchange rate changes. While the external indebtedness of the corporate sector obviously bears certain risks from a macroeconomic perspective, this is not the most problematic factor when it comes to indebtedness in Hungary, particularly since large firms had more or less managed to ward off the negative effects of the falling exchange rate. The greatest problems are associated with the indebtedness of households and small and medium sized firms that typically took HUF or FX denominated loans from the domestic banking sector. Due to both supply and demand side factors, these loans moved into focus after the unfavourable economic implications of the economic crisis caused increasingly worsening loan portfolios for the banks.

Loans to households and the nonfinancial corporate sectors and the trends of their indebtedness and repayment ability are very important in assessing the financial stability of a country and have significant consequences on economic growth and development. During the nineties, the conditions for household and corporate lending were unfavourable in Hungary and in most of the countries of the region. There was very little difference in this respect between the countries concerned. Unemployment was on the rise, inflation and interest rates

were high and the banking system faced difficulties because of the large volume of non-performing loans – a result of the collapse of the domestic economy and the spiralling trend of bankruptcies in the corporate sector. After the consolidation of the banking system and the privatisation of the major banks, rapid changes begin to take place. When measured by bank lending as a share of GDP, the financial deepening witnessed significant changes at the end of the nineties. Before this period, the ratio of household and corporate debt to GDP was very small. The macroeconomic stabilisation which was coupled with decreasing inflation, together with the recapitalisation of the banking system and the changes in government regulations had contributed to the increasing loan activity especially in the household sector.[3]

After the millennium indebtedness on all sides became typical in Hungary. The state, commercial banks, households and local governments were all severely indebted.[4] Due to the simultaneous emergence of several types of indebtedness, risks did not simply add up but multiplied. According to several analyses, the "balance sheet recession could be even more severe in an emerging economy that is greatly dependent on external financing because if foreign capital is withdrawn as a result of risk appetite, this increases deleveraging in the private sector and also narrows the opportunities for state borrowing." [5] In Hungary, the indebtedness of all sectors was the most important characteristic making the country's prospects widely different from other countries in the region prior to the economic crisis of 2008.

Macroeconomic changes and challenges

Since 1997-98 the strengthening institutional and legal conditions had set the scene for the normal operation of a credit and mortgage market. In addition to this, the supply side also experienced favourable stabilisation after privatisation of most of the financial institutions and the emergence of well-capitalised foreign owned affiliates. Increasing credit demand was also associated with improving economic environment and better income position of the population, which significantly contributed to the increasing need to satisfy their pent up demands.

3 The most important issues to be regulated after international financial turmoil are analysed here: Bánfi–Kürthy–Bánfi (2011).

4 Giday (2013): p. 288. From a wider perspective see Landesmann–Gligorov (2010) and from another aspect Celasun–Harms (2011)

5 Giday (2013): p. 287.

This was also an important factor in increasing demand for household loans.

All these factors however were insufficient to boost mortgage backed financing. A real breakthrough in the household sector came in 2001 with the introduction of a very generous state-subsidised housing loan scheme. In fact, these state-subsidised loans had almost entirely crowded out market based housing loans by 2003. In that year – due to the unsustainability of the system[6] – the terms and conditions of lending had been tightened and because of the high domestic interest rates (the key interest rate of the Central Bank of Hungary (MNB) was raised to 12.5% at the end of 2003), forint loans became very expensive again. This was the moment that gave rise to FX based loans. The surge of demand was not only driven by housing loans but it started to spread over all loan products in the household and corporate sector alike. Because of the extremely large price difference between FX and domestic currency denominated loans the demand dramatically shifted in favour of FX based loans.

As a result, a credit boom started, which also intensified the inherent risks in the system soon after the millennium, but the process speeded up dramatically after 2003-2004 when FX loans started to become increasingly popular. Cyclical credit booms are often followed by busts which negatively influence the developments in the real economy too. Credit booms are also oftentimes coupled with increased lending to a more risky set of clientele because of the fierce competition between the financial institutions. The precautionary measures displayed not only by the government and the players of the private sector but also by the central bank proved to be insufficient and ineffective. In addition to the factors that motivated the expansion of lending, the very low savings rate of the private sector must also be mentioned together with deposits, which had failed to expand at the rate of loans. By September 2008, total FX loans to households soared from HUF 380 billion in late 2004 to an incredible HUF 5500 billion, amounting to a surge in ratio from 10 to 60 percent.

The boom in FX loans can also be explained by the problems in economic and monetary policy. The rapid rise in the budget deficit increased the forint's risk premium, creating a growing gap between the interest rates of the forint and those of the euro and the Swiss franc.[7] Secondly, the policy of the central bank combining inflation with exchange-rate targeting also exacerbated the exceptionally high forint interest rate. The ratio of FX loans only surged in countries where the risk premium – raised by equilibrium problems – had significantly separated the interest rate of the national currency from the interest rates of currencies in the developed world.[8] Falling far behind the growth rate of loans, the low level of willingness to save affected the asset-liability structure of the banking sector and contributed further to the vulnerability of the Hungarian economy. As early as 2008 the banking sector had one and a half forints in loans for every single forint in deposits, which left Hungarian banks needing more and more resources from foreign money markets. As the crisis of confidence intensified, the renewal of loans necessary to fund state debts became uncertain and likewise, financing the banking sector became difficult.

It must be pointed out, however, that the Hungarian credit expansion was far slower than in several other countries of the region, and the problem was primarily put down to the low savings rate, which triggered the increasing reliance of the banking sector on foreign funds, and secondarily to the high interest rates, which prompted financial institutions, households and the corporate sector to turn towards FX denominated loans.[9] In 2006, due to the unsustainability of the budget position, austerity measures were introduced which in turn slowed immediately down the credit growth. The macroeconomic implications, which were felt almost immediately and included slower GDP growth and smaller real wage increase in the presence of higher inflation, impacted on the quality of the loan portfolio too albeit to a small extent. The slowing down of the loan expansion however was not in line with the worsening economic and income perspectives. The retail and the corporate sector considered the problems temporary thus they continued to finance their consumptions from loans.

The overspending of prior years/decades led to high public or private debt and fears concerning their repayment mounted gradually after 2008. The level of household indebtedness had played an im-

6 The central budget subsidised the interest rate of these loans. Because the subsidised interest rates were much lower than the market rates, demand for these loans increased exponentially.

7 On the context of budget deficit and the bank lending see more details in: Moinescu (2013)

8 Brown–Kirschenmann–Ongena (2010b)

9 Varhegyi (2009)

portant role in the investment activity in the years prior to the crisis. Mortgage loans which were available at low interest rates resulted in a rapid growth in housing investment. The tightening of credit conditions, the deterioration in the income position resulted in a substantial drop in the output of the construction industry and investment shrank to a fraction of its former levels. Although no real estate market bubble developed in Hungary, a rapid increase in mortgage-backed household indebtedness mostly denominated in foreign currency was typically evident. Faster adjustment needs were observed in the countries where the debt-to-GDP ratio was higher (such as in Hungary) and thus the decline in investment was more significant. The magnitude of indebtedness presented a less significant problem in the corporate sector: compared to the household sector, the balance sheet adjustment requirement was lower in connection with the reduction of debts. The lending capacity of banks and other credit institutions weakened as the losses suffered on their loan portfolios and the negative revaluation of the remaining portfolio significantly worsened the balance sheets of banks. The contraction of funding sources and banks' falling risk tolerance still represented severe constraints to private sector entities, which had, in turn, cut back on their investment.

In principle, two major instruments are available for managing or preventing over indebtedness of the private sector. First, the ex-ante instruments aimed at preventing the building up of unbearable risks into the system must be mentioned while the second set of instruments are the ex-post ones, which are aimed at easing the burdens of the indebted households and SMEs in order to maintain their ability to repay earlier loans. The best system tries to strike a balance between the two groups of instruments in order to prevent much deeper problems. In addition, the proper control and supervision of the financial institutions may function as an additional safety measure within the system.

Only one year before the crisis, the indebtedness indicators of the private sector started to deteriorate, debt service in relation to disposable income increased while the GDP virtually stagnated causing profit prospects for firms to worsen. The flagging income position was coupled with a high demand for loans because of the high competition on the supply side and the adamant belief that

the implications of the austerity measures will only be temporary.[10] This had led to rapidly falling savings and increasing debts to finance consumption. Adding to this, banks had eased credit conditions to tap the segment of the population that had previously proved uncreditworthy. These changes and the altered conditions triggered an increased demand for borrowing by the less wealthy exposing the banking system to increased dependence on hopes of positive changes in economic processes. In the meantime in 2007-2008, about 75-80% of the new loans were denominated in FX, mainly in Swiss franc.

When the crisis in the fall of 2008 broke out, the loan portfolio suddenly started to deteriorate because of higher instalments that needed to be made due to a devaluating domestic currency, which exacerbated the already vulnerable credit portfolio. The population became more cautious in the second half of 2008 but it was then too late; the perfect combination of much deeper problems with the debt in the coming years with weaker domestic currency, falling or stagnating GDP and increasing unemployment was already in place.

Since 2008 two very important trends have been observed regarding the behaviour of the private sector in the loans market. The first one was related to demand, which kept declining throughout the entire period from the onset of the economic crisis and led to the development of a unique situation in Hungary in Central European comparison. The negative implications of the economic processes in Hungary and the second wave of the recession in 2011 resulted in very weak lending activities to the corporate sector.[11] This was quite different from other countries in the region, where corporate lending started to pick up in 2010-2011 despite the unfavourable growth implications of the renewed recession. This negative trend, similarly to the household sector, was caused by events and changes on the demand and supply sides alike. In addition, in 2011-2012 the still quite high interest rates also curbed the demand for loans.

10 Budget consolidation was thought to be the most important precondition for rapid recovery of economic activity during the first years of the crisis. Based on evidence, in recent years this approach is increasingly viewed as a factor that contributed significantly to the postponement of the crisis in several countries. See for example Gros (2012)

11 Problems of the Hungarian economy that are peculiar in the new member states are dealt with in several recent papers, see for example: Magas (2012)

On the supply side, the banking sector was hard hit by different corporate taxes the government introduced in order to implement its structural change objective in taxation with the aim of decreasing the share of labour related burdens and increasing the share of consumption and corporate taxation.[12] Banks reacted to the crisis by weakening financial activity which is not unprecedented in Central Europe given the deteriorating business environment, but in Hungary this was further burdened by the taxes.[13]

In 2013 the Central Bank launched its cheap loan program for the corporate sector, which was mostly used for swapping FX loans in order to eliminate the exchange rate risk but later it started to finance investment too. Low interest rates and the Central Banks program is expected to support the domestic corporate credit demand although the improving growth figures may play a more important role. On the other hand it must be noted that because of the less favourable business environment, corporate investments can only produce slow growth figures. Probably the most important long-term problem is related to the discouraging performance of business investments (household investments also weak in Central European comparison).[14] The issue of business investments is increasingly important, which was pointed out, for example, by Tibor Erdos already a decade ago.[15] Unfavourable trends in business investments imply long-term growth problems, which are underlined by negative FDI trends. (Although after 2010 there were periods when favourable FDI inflow was evidenced – at least on the level of statistics – still a large share of that was related to the recapitalization of subsidiaries of foreign financial institutions instead of the creation of additional jobs or new production facilities.) As a result, the volume of gross fixed capital formation barely amounted to 81% of the 2005 level in 2013 – a very poor performance relative to any of the other Visegrad countries.

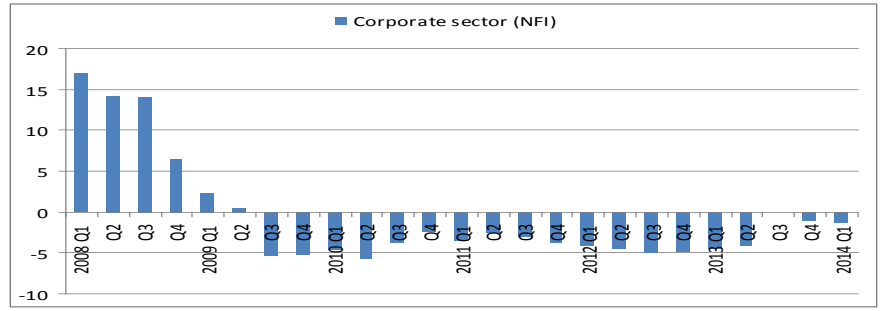
12 The government introduced quite heavy sectoral taxes on different services sectors including the financial institutions. Later the so called transaction tax was levied on banks. The financial institutions could only partially transfer these burdens on the consumers thus their profitability worsened, which required large additional capital transfers from the foreign parent banks.

13 More on that: De Haas, R. –Van Lelyveld, I. (2011)

14 Martonosi (2013)

15 Erdős (2004)

Graph 1. Annual growth rate of lending to the corporate and SME sectors (% - non-financial institutions)



Source: Based on data of the Central Bank of Hungary

What is particularly interesting and clearly different in Hungary compared to other countries is that the corporate lending in Hungary has been declining (net lending remained negative since the third quarter of 2009) while in the vast majority of other countries in the region, corporate loans have started to pick up in recent years.[16] This implies that economic growth in Hungary was either very sluggish or the growth of 2013 was not based on credit growth (discussed later) that fuelled investments but on several different factors.[17] In Central European comparison the data confirms that in Hungary the new corporate loan placements are still sluggish with only Romania delivering poorer results.

In 2013 the Central Bank introduced a new instrument to improve lending to the corporate sector in addition to steadily cutting the key interest rate. As a result the key interest rate fell to a record low in Hungarian economic history. A significantly lower interest rate was supposed to be the most important tool for improving the financing environment for both the corporate and the household sectors. The new instrument – aimed at improving the conditions for financing the corporate sector – was the launch of the "funding for growth" scheme with the clear aim of supporting small and medium-sized enterprises in accessing forint-denominated loans and to strengthen financial stability. The accessibility of credit to companies operating in Hungary has sig-

16 Fábián–Hudecz–Szigel (2010)

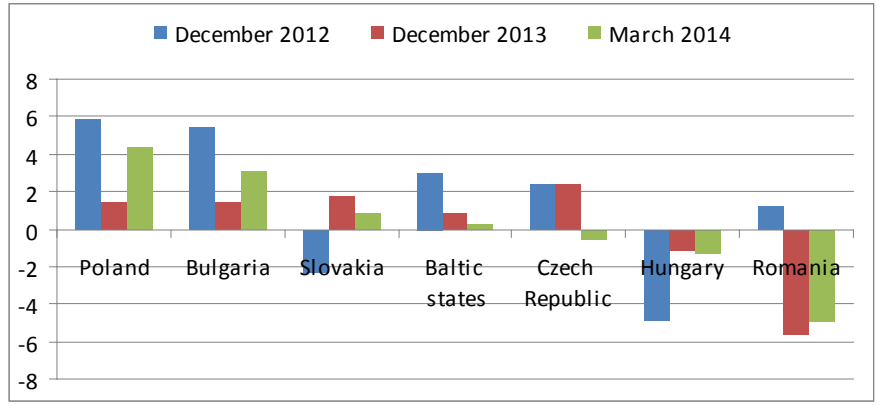
17 GDP growth in Hungary has recently been fuelled by state related investments financed mostly from EU transfers while private demand including household consumption and corporate investments played a negligible role.

nificantly tightened since the onset of the financial and economic crisis; particularly hard-hit were small and medium-sized enterprises which also face greater difficulties in finding alternative sources of financing. Following the announcement of the scheme (which in principle was based on a similar British model) enterprises showed considerable interest in loans provided within the new framework. The volume of the program reached HUF 750 billion (EUR 2.5 billion). The Central Bank provided refinancing loans with 0 per cent interest to the participating credit institutions, which were to offer these loans to SMEs with an interest margin capped at 2.5 per cent; these loans were designed to be used exclusively for investment, working capital financing, pre-financing EU funds, or for the redemptions of existing forint loans. SME customers could also use loans received under the scheme for the redemption of foreign currency loans. On the one hand, even this program proved unable to stop the further contraction of the corporate credit stock, but it was instrumental in easing the exchange rate exposure of SMEs as significant part of the very cheap resources was used for replacing FX loans with domestic currency denominated loans. On the other hand, however, the unceasingly declining stock is very much associated with the still difficult situation of commercial project credits which are mostly responsible for the large non-performing loans in the corporate sector. A further problem is caused by the inactivity of large banks due to the lack of profitability and the still sluggish domestic market demand.[18]

With the stabilization of the external economic environment and the decreasing international financial risk, which has recently been coupled with steps by the Central Bank, interest rates on forint loans for the corporate sector have decreased significantly. By today the interest rate difference between EUR and HUF loans is insignificant. As far as interest rates are concerned, the conditions of taking out corporate loans have improved significantly and the low deposit and loan interest rates should – in theory – result in increasing demand for corporate loans.

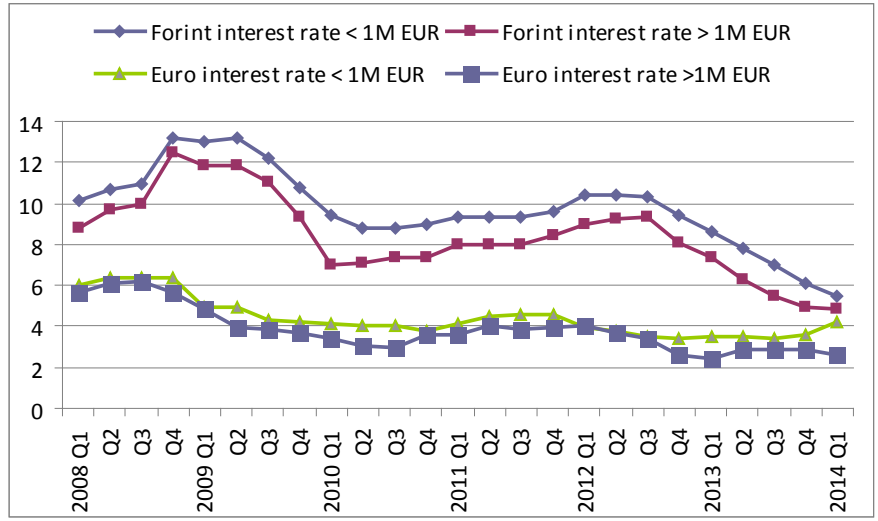
18 Details of the program can be found at MNB 2013/May, p. 13., on the first result at MNB 2013/November p. 39, and about the prospects and dilemmas in MNB 2014/May, p. 34

Graph 2. Annual transaction-based growth rate of corporate loans in international comparison



Source: Based on data of the Central Bank of Hungary

Graph 3. Interest rates on new corporate loans



Source: Based on data of the Central Bank of Hungary

These instruments create a favourable environment for financing, but less favourable conditions for saving money in financial institutions. Given the current conditions and income position of the society

however, it is doubtful that they can contribute to a dynamically rising overall demand. What is more, it cannot be ruled out that a kind of liquidity trap develops: despite the very low interest rates, cheap loans would not have significant impact on investments (because of the unfavourable business environment), but would rather motivate domestic savings to be put into investment funds. These investment funds most probably invest in foreign securities and instruments because of the weakness and low yield of the domestic capital market. The same crowding out effect may be associated with the debt financing strategy of the state. It aims to replace foreign financing with domestic savings in order to reduce the external vulnerability caused by exposure to exchange rate volatility. As a result, government securities offer favourable alternatives and higher yields compared to investment. In addition, the need for new loan placements may increase the volume of bad quality loans especially if state owned or influential financial institutions gain more importance in the banking system – an objective which was declared earlier by government officials.

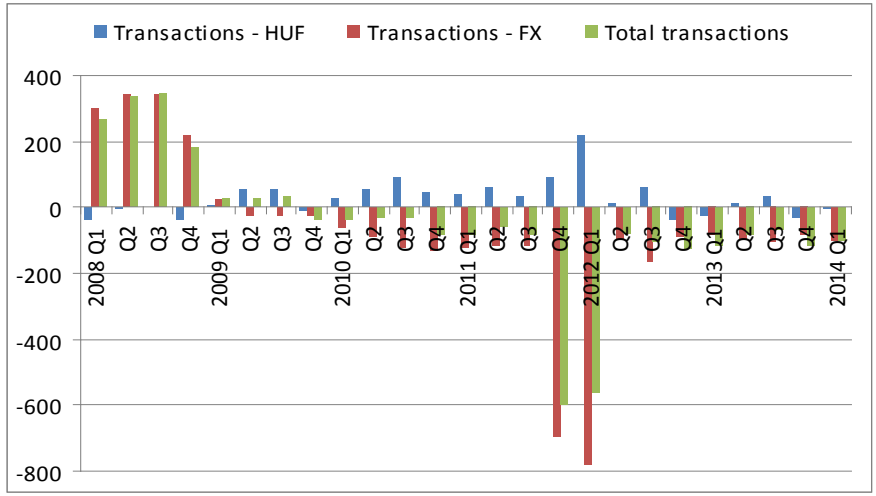
As regards household loans, several trends can be identified that are similar to those of corporate loans. On the whole the household sector has been repaying more debts than drawing new loans since the fourth quarter of 2010. Not surprisingly, as the FX loans became unavailable[19] they have been on the decrease since the second quarter of 2009. HUF loans have also been shrinking almost continuously and some minor increases in net terms were only experienced in a few random quarters. These hikes were partly explained by credit swaps related to the changing regulations of FX loans or the temporarily improving economic environment.

The volume of new household loans is still only a fraction of the volumes prior to or around the economic crisis. The overall low level has been coupled with unclear trends in recent years as temporary improvement is followed by worsening periods. All these demonstrate the instability of future prospects even tough interest rates have fallen considerable. On the other hand it is increasingly probable that – unless an economic depression occurs – the very low interest rates will sooner or later trigger increasing household demand for loans as yields

19 The government banned the placement of new FX loans in 2010. Later the complete ban was replaced by a regulation that made excessively difficult for customers to apply for these products.

on bank deposits are bottoming out. In addition, the government is very decided on resolving the problems associated with household FX loans and this will happen during the second half of 2014. This would create better conditions for household demand. Although its impact on the demand side would probably be feeble, even this small improvement is expected to stabilise the demand side when coupled with many other minor improvements in the near future.

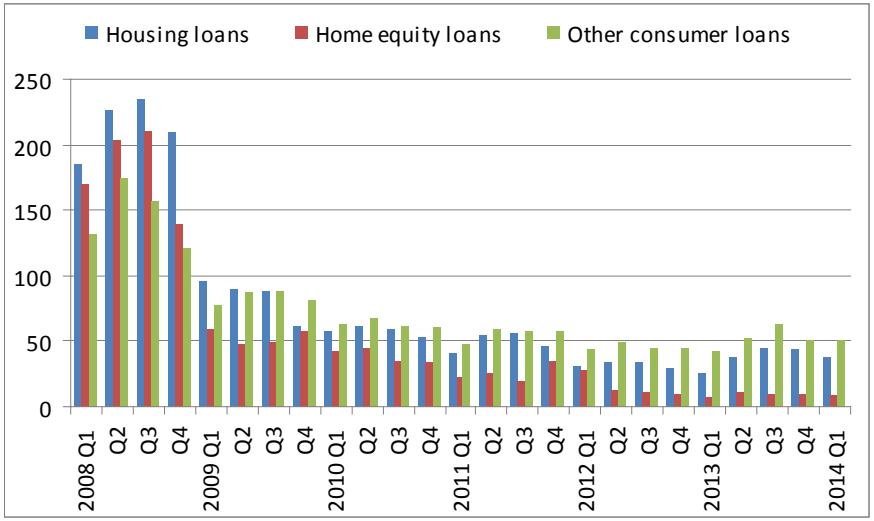
Graph 4. Net quarterly change in outstanding household loans in the credit institution sector as a whole



Source: Based on data of the Central Bank of Hungary

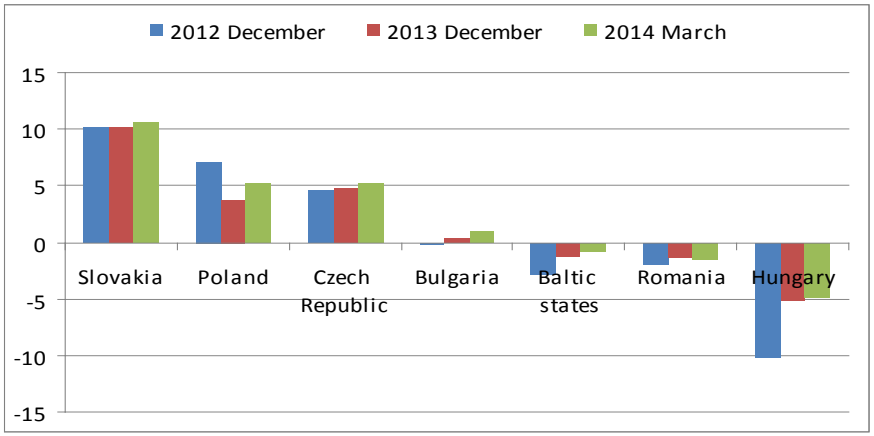
The problems with loan demand of the household sector are even more obvious than in the case of the corporate sector. In Central European comparison household loan demand has been the most sluggish in Hungary. While the other countries in the region have been experiencing significant loan increases, Hungary is still delivering a declining trend. It is certainly related to the large share of the non-performing loans that excludes several people from the demand side and, at the same time, impairs the supply side as banks are apparently still reluctant to offer loans. The much poorer Hungarian data in regional comparison are the result of the several negative factors referred to earlier (new taxes, FX loans, generally unfavourable business environment).

Graph 5. New household loans in the overall credit institution sector (HUF billion)



Source: Based on data of the Central Bank of Hungary

Graph 6. Annual transaction-based growth rate of household loans in international comparison



Source: Based on data of the Central Bank of Hungary

As a result of the continuous decline of net placements, by today the shrinking of the amount of credit has become really significant. In 2013 corporate credits fell to the 2004 level when expressed in the ratio

of the GDP, while in the household sector the rate did not surpass the level of 2006. We may say that in the short-term the decline of lending is expected to continue even if the financing conditions improve further and the demand for credit both in the household and corporate sector increases due to the large stock of non-performing loans. If that happens and the business environment improves considerably, then the better loan conditions may lead to increased lending activities but it will be a very slow process.

Structural changes in lending

In the same period, two significant trends could be observed. The first change relates to the decreasing share of FX denominated household loans in total loans. The reasons behind this are manifold. First of all, continuous repayment – in theory – decreases the volume of FX loans, but its positive impact has been largely eliminated by the weakening domestic currency. The government enforced programs of prepayment with favourable conditions made possible for several debtors to pay off their FX debt completely.[20] Large parts of these prepayments were financed from forint denominated housing loans. The significant rise of this type of loan within total household debt is partly explained by this phenomenon and partly by banning of new FX loans from the system. At the same time, FX personal loans almost disappeared largely because they had much shorter maturity than housing loans and the loan volume was much smaller. Similar shrinking, although at a slower pace, was observed in the case of FX car loans but the problem here manifests in the very high level of non-performing loans, which makes it very difficult to clean out the portfolio. The slow decrease of FX loan shares was coupled with slowly increasing forint denominated loans particularly in 2012-2013 when in spite of the very weak credit demand, the significant cuts in the key interest rate made domestic loans more attractive and this started to support household credit growth – albeit at a very low pace.

20 It became clear that the FX loans were becoming increasingly difficult to be financed and they became one of the crucial brakes on economic growth and catalysts to financial vulnerability. The government started to introduce instruments in order to decrease these risks by either making the repayment of these loans easier or provided exchange rate protection for groups of debtors. The government regulated that for a limited period household FX loans could be paid back at a 180Ft/CHF rate (exchange rate at that time was about 250 HUF/CHF) and the losses were to be borne by the banking sector. A lot of debtors tried to get forint loans in order to refinance their FX loans or tried to get resources from their relatives and friends in order to utilise this short-term opportunity to get rid of the exchange rate risk.

Table 1. Structure of household loans after the onset of the economic crisis (% of total stock of loans)

	2009.12.	2010.12.	2011.12.	2012.12.	2013.12.
Total household loans	100	100	100	100	100
FX housing loans	33.23	34.63	32.79	28.04	27.30
FX mortgage loans without specific purpose	27.65	28.51	28.55	26.20	25.18
State supported housing loans	16.84	14.07	12.80	13.67	13.33
Overdraft	5.38	5.47	4.80	5.94	6.21
FX car loans	3.56	3.12	3.40	2.87	2.99
FX personal loans	2.97	2.24	1.72	1.21	0.68
Forint personal loans	3.52	3.29	3.53	3.82	3.92
Market based forint loans	1.71	3.06	5.54	8.74	9.76
Consumer loans	1.13	0.83	0.57	0.53	0.50
Forint (non-housing) mortgage loans	0.39	1.82	3.36	5.90	6.51
Forint car loans	0.31	0.44	0.69	0.99	1.50

Source: Based on data of the Central Bank of Hungary

Table 2. Stock of different loan types compared to the end 2008 data (%)

	2009.12.	2010.12.	2011.12.	2012.12.	2013.12.
Total household loans	91.79	100.87	99.65	83.75	79.48
FX housing loans	89.87	102.92	96.28	69.20	63.95
FX mortgage loans without specific purpose	88.48	100.24	99.17	76.51	69.78
State supported housing loans	97.31	89.35	80.26	72.08	66.70
Overdraft	109.78	122.68	106.18	110.48	109.70
FX car loans	78.13	75.29	81.10	57.38	56.74
FX personal loans	69.59	57.68	43.62	25.90	13.82
Forint personal loans	109.44	112.43	119.18	108.47	105.57
Market based forint loans	109.09	215.24	384.85	509.96	540.54
Consumer loans	129.33	104.48	70.59	55.13	49.71
Forint (non-housing) mortgage loans	159.81	828.51	1515.06	2235.35	2339.57
Forint car loans	135.18	208.92	322.35	391.04	563.21

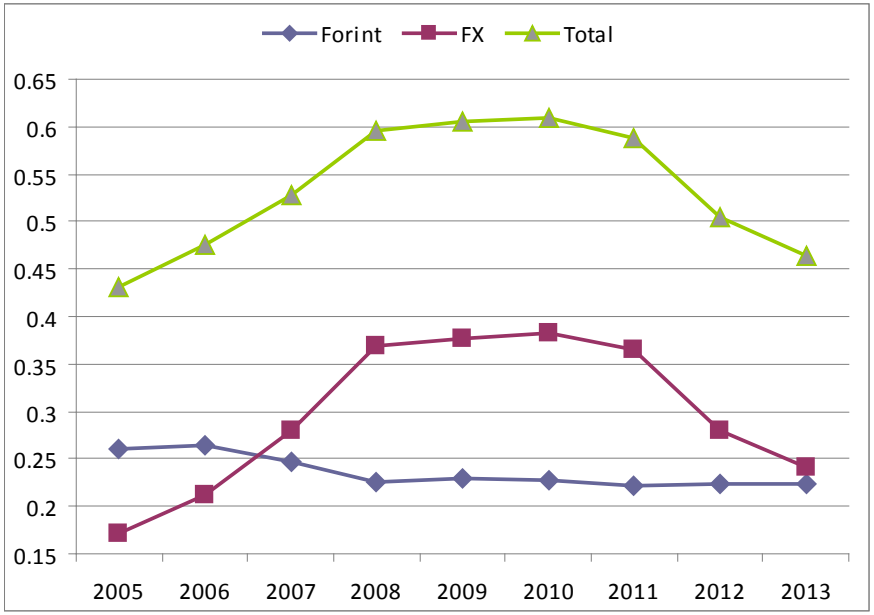
Source: Based on data of the Central Bank of Hungary

Similar patterns can be observed as regards the loan structure and individual loan types. Altogether lending activity remained sluggish and the volume of household loans was around 80% of the end 2008 levels, which clearly indicates the difficulties households are facing. The volume of FX loans declined significantly while forint loans generally increased with the exception of consumer loans. The volume of

consumer loans declined because new placements were rare due to the worsening income position of the retail sector. When evaluating the size of FX loans, the impacts of exchange rate changes have to be taken into account too. The significant jump of FX loans in 2012 was strongly linked to the drastically weakening forint at the time.

As a result, loan to GDP ratio fell significantly, but larger movement and changes have been experienced in the case of the household sector which – for obvious reasons – faced much greater volatility than the corporate sector.

Graph 7. Household and corporate loans as a share of the GDP

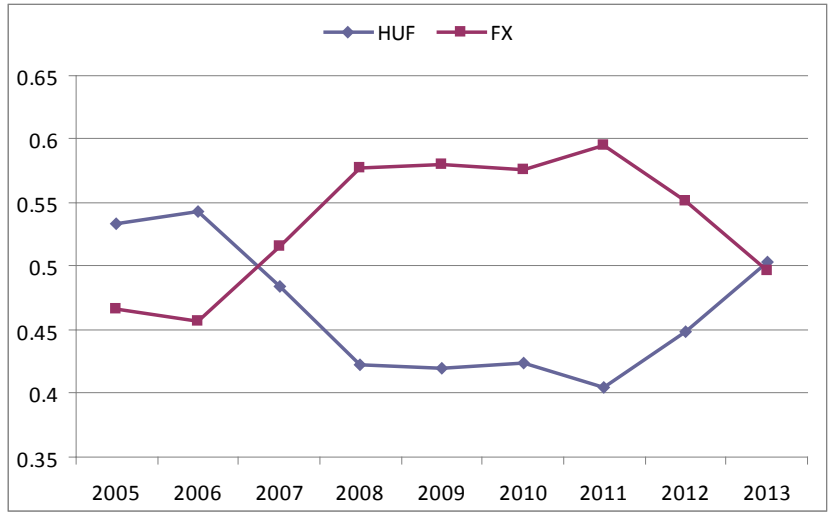


Source: Based on data of the Central Bank of Hungary

Because of the strong need to overcome the burden and risks associated with FX loans, there has been a continuous restructuring in the ratio of FX and HUF loans. This has certainly eased somehow the risks inherent in the FX loans exposure to exchange rate volatility but the overall problem remained unchanged, especially because of the substantial depreciation of the domestic currency that continues to maintain indebtedness level despite the repayment of a large share of FX loans in recent years. Although the share of FX loans declined, the

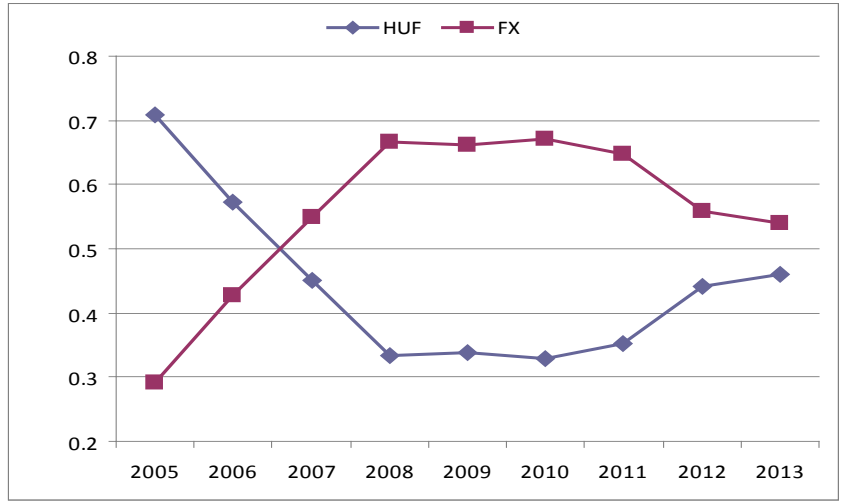
affected participants – households and corporations – are still facing big difficulties.

Graph 8. Structure of corporate lending



Source: Based on data of the Central Bank of Hungary

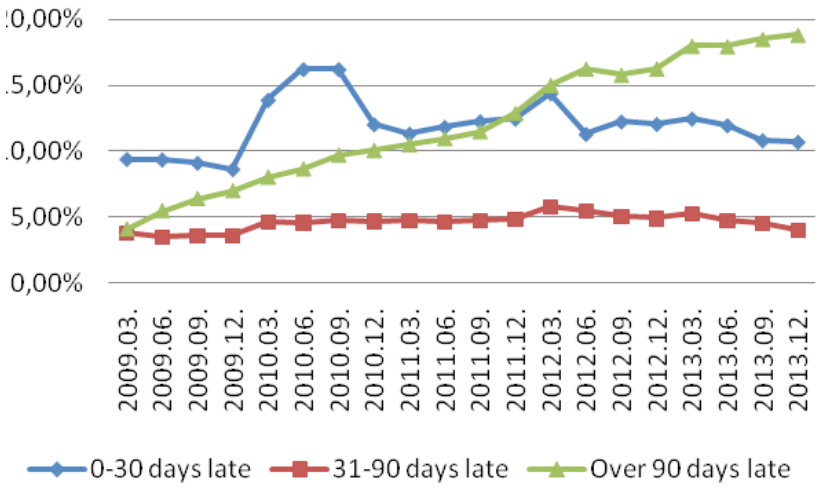
Graph 9. Structure of retail lending



Source: Based on data of the Central Bank of Hungary

In the meantime, the quality of household loans worsened significantly and the share of non-performing loans – in arrears over 90 days – has been increasing in spite of the different programs introduced in recent years to help household FX loan repayments. It clearly indicates that an increasing share of households in arrears is unable (or unwilling)[21] to meet their obligations. It also demonstrates that the problems associated with household loans increasingly slow down household consumption and thus make the conditions for economic growth even worse. It has to be noted however that apparently not only FX loans show big arrears but so do HUF loan debtors, who are also facing great difficulties, which is indicative of a deeper and more general problem undermining the economy.

Graph 10. Household loans in arrears (as % of total household loans, volume)



Source: Based on data of the Central Bank of Hungary

In the new environment unfolding in recent years, banks have been paying greater attention to rebalancing their loan-to-deposits ratio and putting more focus on domestic funding sources. The unbalanced funding position of several CEE countries coupled with the generalized tightening of liquidity conditions contributed to the rising fears

21 The unwillingness is partly related to the continuous expectation of the FX loan debtors for comprehensive government programs aimed at eliminating all FX-loans.

that capital needs and funding pressures, faced by Western European banks, may heighten pressure to deleverage in the CEE region.[22] As a result of increasing demand for domestic funding and the weak domestic credit demand, the loan to deposit ratio has improved significantly in the Hungarian bank sector.

Given the negative trends regarding loan placement in Hungary compared to most of the Central European economies, the question of financing growth is becoming increasingly important. As confirmed by literature, creditless recoveries are not that rare at all. According to the findings of a recent ECB paper, based on a sample of low and middle income countries, economic recovery may take place and growth may accelerate even without significant expansion of credit activity. Evidence also suggests that creditless recoveries are typically preceded by large declines in economic activity and financial stress, in particular when private sector indebtedness is high and the country is reliant on foreign capital inflows.[23] In the Hungarian economy creditless growth is also supported by the very dynamic inflow of EU funds, which finance large segments of investments in the economy and have been able to substitute, at least partially, the weak loan demand of the private sector.[24]

If we compare the data with eurozone information, we can also arrive at an interesting conclusion. Due to the government's actions and the falling demand, household loans per GDP today amount to only half of the Eurozone average while at the same time the debt repayment obligation per income ratio fell to 10 percent, which is again not very significant. On the other hand, there are significant differences between the households. Within the group of households with credits in the lowest income groups, the problems are continuing to

22 See more on that in detail: Vienna Initiative (2014)

23 Bijsterbosch–Dahlhaus (2011).

24 It is important to note that in 2013-2014 the inflow of EU transfers has been exceptionally strong (5-6% of the GDP) partly owing to the fact that this money was badly needed and partly because the 2007-2013 financial perspective is now winding down. At the beginning of the new financial perspective of the European Union (2014-2020), the inflow is reasonably expected to fall since the new programs need some time to take shape. We can be certain however that in order to maintain the growth impetus related to EU resources, strong efforts will be made to immediately channel as much money into the Hungarian economy as possible. This will be very important in counterbalancing the continued poor activity of private investments (these investments in net terms – after deducting amortization – are close to 0% of the GDP).

be significant. In this group the average debt obligation is about 30% of the income, while for about 14 percent this burden is over 50% of the household's income, which is definitely over the critical level. For many in this group the situation is dramatic. [25]

Conclusions

Prior to the financial and economic crisis, Hungary was a country where each sector was highly indebted, which was not true for any of the other Central European countries. In addition, the role of foreign financing was significant, which made the country excessively vulnerable to the liquidity of the international financial markets and the exchange rate movements. In comparison with the Eurozone countries, none of the debts of the sectors (government, household, corporate) was high as a percentage of the GDP, but the problem was with the structure of the debt. In addition to relatively high public debts, the structure of private indebtedness, in particular, the very large share of FX denominated loans created serious risks for the macroeconomic balance. These risks created a trap for the macroeconomic policy: strict budgetary policy was required because of the high public debt, which curbed domestic demand and worsened the profit prospects for the enterprise sector. At the same time, the weakening domestic currency led to increasing arrears in the repayment of household FX loans. FX loans, which offered much more favourable conditions compared to the high interest rate forint loans, became dominant both in the retail and the corporate sectors. Because of the large financial vulnerability and the subsequent devaluation of the domestic currency, the implications went far further than simple financial stability issues, but the domestic demand and the growth perspectives were also hit hard along with the banks' ability and willingness to place new loans.[26] Besides cyclical developments and the economic policy measures, FX indebtedness of the private sector limited the possibility of new loan placements.

In recent years one of the main objectives of the economic policy has been to manage and keep the FX loan problems under control. This need triggered several waves of programs but they all proved unable to solve the problems. Parallel to this, lending to the private sector (both households and non-financial corporations) decreased continuously

25 Balás (2013)
26 Gém (2011)

reflecting problems on both the demand and the supply sides. This is a characteristic that is completely different from the experiences of other central European countries at least in terms of the length and perseverance of this trend. The recent significant monetary easing of the Hungarian Central Bank, i.e. the cuts in the key interest rate along with the favourable loan programs have improved the conditions of getting loans for the enterprise sector. The continuously decreasing interest rate and the subsidised credit programmes all contributed to the replacement of former riskier and more expensive loans.

To sum up, the structure of the increasing private debt and the growing importance of FX loans deepened the problems of private indebtedness, but not affected the absolute level of debt. As a result of all the above and the other problems with the economic environment in Hungary, I expect to see creditless growth and the very slow and balanced increase of private indebtedness in the future.[27] In the longer run this would lead to a more secure and solid financial system and a more cautious and balanced financial deepening.

Bibliography

Balás, Tamás: A háztartások eladósodottsága és jövedelemarányos törlesztési terhe. (Household indebtedness and debt burden on income.) MNB-SZEMLE (MNB-review) October 2013. pp. 23–27.

Bánfi, Tamás – Kürthy, Gábor – Bánfi, Attila (2011): Szabályozás a pénzügyi válságo(k) után (között): kényszer és lehetőség. (Regulation following (between) financial crisis (crises): Compulsion and opportunity.) *Public Finance Quarterly.* 2011/2

Bijsterbosch, Martin – Dahlhaus, Tatjana (2011): *Determinants of credit-less recoveries*. ECB Working Paper No. 1358

Brown, Martin – Kirschenmann, Karolin – Ongena, Steven. (2010b): *Foreign Currency Loans–Demand or Supply Driven?* CEPR Discussion Paper, No. 7952

Celasun, Oya – Harms, Philipp (2011): Boon or burden? The effect of private sector debt on the risk of sovereign default in developing countries**.** *Economic Inquiry* (ISSN 0095-2583)

Vol. 49, No. 1, January 2011, pp. 70–88.

De Haas, Ralf –Van Lelyveld, Iman (2011): *Multinational banks and the global financial crisis. Weathering the perfect storm?* EBRD Working Paper No. 135, European Bank for Reconstruction and Development, London.

27 The new government program on eliminating household FX loans by converting them into forint may somehow change the situation, but the final results remain to be seen after the execution of the program at the end of 2014.

Fábián, Gergely – Hudecz, András – Szigel, Gábor (2010): A válság hatása a vállalati hitelállományokra

Magyarországon és más kelet-közép-európai országokban. (Impacts of the crisis on corporate loan stocks in Hungary and in other eastern central European countries.) *Hitelintézeti Szemle*,

Vol. IX., No. V. pp. 445–462.

Gém, Erzsébet. (2011): A belső kereslet és a banki hitelezés alakulása. (Domestic demand and bank credit.) *Pénzügyi Szemle,* Vol. LVI. No. 2011/3. pp. 337–351.

Giday, András (2013): Indebtedness in Central and Eastern Europe. Eight years of new EU members. *Public Finance Quarterly*, 2013, vol. 58, issue 3, pp. 271–292.

Gros, Daniel (2012): Can Austerity Be Self-defeating? *The Center for European Policy.* Vol.47 No. 3. pp. 175–177.

Magas, István (2012): External shocks and limited absorption in a small open economy: the case of Hungary. *Post-Communist Economies*, Vol. 24, No. 1, March 2012, pp. 1–14.

Martonosi, Ádám (2013): *Factors underlying low investment in Hungary.*

MNB Bulletin , January 2013

Moinescu, Bogdan-Gabriel (2013): The lending channel and budget balance: empirical evidences from Central and Eastern European economies. *Theoretical and Applied Economics,* Volume XX (2013), No. 3 (580), pp. 17–30.

Vienna Initiative (2014): CESEE deleveraging and credit monitor.

February 14, 2014

Landesmann, Michael A. – Gligorov, Vladimir (2010): *Three debts: A view from emerging Europe.* VOX, 26 June 2010

Erdős, Tibor (2004): Growth Potential and the Hungarian Economy. *Fejlesztés és Finanszírozás/Development and Finance*, 2004/3.

The Central Bank of Hungary (MNB) (2013a): Financial stability report. May 2013

The Central Bank of Hungary (MNB) (2013b): Financial stability report. November 2013

The Central Bank of Hungary (MNB) (2014): Financial stability report. May 2014

Várhegyi, Éva (2009): The Credit Crunch and the Hungarian Banking System.

Fejlesztés és Finanszírozás/Development and Finance, 2009/1, pp. 14–24.

Várhegyi, Éva (2003): Bank Credit and Corporate Financing in the Context of EU Accession. *Fejlesztés és Finanszírozás/Development and Finance*, 2003/3, pp. 24–33.

Household Indebtedness in Poland in post-crisis perspective*

Emil Ślązak, PhD

Warsaw School of Economics

1. Overview of household credit market

The objective of the research is to analyze bank loans supply related prerequisites for the indebtedness trends of Polish consumer finance market in order to show he impact the world financial crisis 2007-2009.

Despite dynamic economic growth since the Polish accession to the European Union in 2004, at the end 2013 the indebtedness level of Polish households remains relatively low from the EU27 perspective as it accounted for approximately 37% of GDP whereas the average ratio for the EU27 was as high as 57% o f GDP. Nevertheless, merely ten years ago Polish household credit market entered into the period of significant changes with progressing development. As consequence, both consumer and mortgage loans have been growing steadily at fast rates in the period of 2004-2008 (i.e. approx. 45% and 26% AAGR for mortgage and consumer loans respectively). Towards the end of 2008 there was a strong halt to the fast growing household indebtedness in Poland as the worldwide financial crisis resulted in a sharp increase of risk aversion among banks. However, contrary to the post-crisis deleveraging process in most EU countries, the total amount of outstanding household debt in real terms at end-2013 grew in Poland by 3.7% annually (82% higher than in 2007) as compared to -1.1% in the EU27 (Bouyon, Boeri 2014).

In 2003-2014 Polish mortgage debt market increased almost six times i.e. from 4% to 23% of GDP. This growth was due to a very large demand potential among Polish households matched with growing credit risk appetite of banks in Poland (Њl№zak 2008). It is not a coincidence that before 2009 flourishing mortgages loan market was denominated by foreign currencies with the Swiss franc at the top. Lower

* This paper is revised by Prof. Rossitsa Rangelova, Professor at the Economic Research Institute, Bulgarian Academy of Sciences, Department "International Economics".

credit costs and constant appreciation of the zloty enabled a number of average affluent households in 2004-2008 to take a loan in a bank with appropriate creditworthiness. Towards the end of 2008 the annual average growth rate in new mortgage loans dropped from 45% to 10% because of the world financial crisis and thus resulted in very stringent approach of Polish Financial Supervisory Authority in terms of currency loan (i.e. foreign currency ban) and revised creditworthiness methodology guidelines for all banks (i.e. maximum LtV ratio as high as 90%).

As far as Polish consumer debt market is concerned, it doubled i.e. from 8% to 16% of GDP in the period 2003-2014 as a result of fierce competition among banks especially in terms of short-term loans and skyrocketing credit cards market. The worldwide financial crisis has very negative influence on consumer loans risk in banks which was aggravated by worsening Polish labour market and jobless total growth.

The impact on the debt possession in Polish households came both on the demand and supply sides of the personal finance market. Under demand prerequisites Polish households are increasingly willing to acquire debt to finance their needs, which is due to large consumption growth potential (especially in real estates) together with rising income level and new social patterns. In 2003, an average Polish household was using debts to finance on average 1,8 objectives but in following years, the number of objectives has been constantly declining to less than 1,5 in 2013. This data give evidence that using debt to finance current needs is getting less popular as a sign of rising affluence of Polish society with decreasing importance of credit to attain important personal goals. The share of households covering current consumption expenditures and fixed costs with debt decreased significantly (from 22.7% and 15.3% in 2003 to 16.3 and 7.2% in 2013 respectively) with the shift to long-term priorities (such as purchase of durables and restorations works – 39% and 33% respectively in 2013). Between 2003 and 2013 bank loans became increasingly popular in order to finance households' needs in real estate market (i.e. purchase of house or flat from 13.7% to 18.8%). Furthermore, increased households affluence has brought about a decline in the share of households that are financing the repayment of their previous debts with a new loan (from 10.2% in 2003 to 7.5% in 2013) (Biaiowolski 2014).

Large demand for debt is matched with constant development of consumer finance services as rapidly growing number of banks was extending their offer from companies to households after 2004. As a matter of the fact, the total credit portfolio of Polish banks is distinguished in European Union with one of the largest exposure towards households with the 55% share. Polish debt market is strongly bank-oriented. Since 2003 the share of households with bank loan has been constantly in the upturn trends and the importance of other financial institutions and private credit companies has been dropping. More precisely, in 2003 loans' share from non-bank resources played relatively important role in the debt-market (i.e. 29.75%). Due to very intensive bank credit competition, the accessibility of bank loans grew rapidly assuring steady growth from 80.8% to 90.6% in the share of households indebted towards banks in the short period between 2005 and 2009. At the same time, a number of households indebted towards other financial institutions declined below 10% after 2010 and the share of households paying off debt to private credit companies dropped from almost 12% in 2005 to less than 4.5% in 2013. The growing dominance of banks in the households' debt in Poland brought a reduction of debt resources diversification. In 2003 the average household in debt signed a debt contract with 1.2 sources compared to 1 source in 2013, which shows tightened relationships with the main bank (Biaiowolski 2014).

In terms of debt growth potential, the individual indebtedness ratio of Polish households (i.e. debt to income) reflects the growing debt popularity. In 2003, the share of households with debt exceeding their average annual income accounted for 10.7% of all indebted households, whereas in 2013 this figure grew to 24.3%. On the other hand, the share of moderately indebted households (as high as their semi-annual income) dropped from 53% in 2003 to 41% in 2013. As a matter of fact, the excessive debt reliance of Polish households in not widespread and there are no crucial social problems in this field as there are annually approximately only 40 cases of filing for personal bankruptcy. This situation is partly due to very limited period of bank loan expansion (i.e. 2003-2008) with a sharp abrupt in 2009 under the influence of world financial crisis followed by slow recovery until nowadays.

2. Research objective and metodology

This research includes the comparative analysis of both consumer and mortgage bank loans supply and demand trends in ten-year period of 2004-2014. The impact of world financial crisis has given the evidence of considerable shift in credit policy of Polish banks with strong expansion in 2004-mid 2008 and distinct symptoms of deleveraging process in 2008-2010. This research has been conducted on the basis of Polish National Bank data with cyclical senior loan officer opinion surveys on bank lending practices and credit conditions from 26 banks that covers 84% in clams on enterprises and households credit portfolio of banks in Poland. Due to their nature, the consumer and mortgage loans have been analyzed separately with cross observations.

The results of surveys are presented in the form of structures, i.e. the percentages of banks, which have chosen a given option in response to particular questions. Banks' responses are weighted with the share of the given bank in the market segment to which a given question relates. The so-called net percentage was calculated for each response that is the difference between the percentages of responses showing opposing directions of changes. This magnitude indicates a general tendency in the specific market segment within the range of -100% and +100%. A negative index indicates a tendency of tightening the credit standards or drop in demand for bank loan, whereas a positive index indicates a tendency of easing the credit standards or an increase in demand.

For the needs of the first part of research, triggers for bank credit policy have been divided into two separated groups i.e. internal ones such as the outcome of own credit policy standards and procedures in a given bank and external ones such as the result of fluctuation of credit policy triggers in micro- and macroeconomics perspective.

The internal determinants of credit policy are as follows:

- current or expected capital position of the bank,
- changes in the share of impaired loans in the housing loan portfolio,
- risk on the collateral demanded.

The external determinants of credit policy are as follows:

- Polish National Bank monetary policy,
- risk related to the expected general economic situation,
- changes in the competitive pressure,
- changes in the bank loan demand,
- housing market prospects (in terms of mortgage loans).

For the purposes of an in-depth analysis the determinants of credit policy have been classified into two groups with average median value as a trigger for easing (above 0) and tightening of banks' lending policy towards households.

The second part of the research is the analysis of lending policy i.e. credit standards and terms. The standards of granting loans are understood as the minimum standards of creditworthiness, set by banks, that the borrower is required to meet in order to obtain a loan. The terms of granting loans are the features of the loan agreement agreed between the bank and the borrower, including spread, non-interest loan costs, maximum loan size, collateral requirements and maximum loan maturity.

The price-related terms of granting loans are as follows:

- spread on average loans,
- spread on riskier loans,
- non-interest loan costs.

The non-price-related terms of granting loans are as follows:

- security / collateral requirements,
- maximum loan-to-value (LTV) ratio,
- maximum loan maturity,
- maximum size of the loan.

Correspondingly to the in-depth analysis the determinants of credit policy, also the terms of granting loans have been classified into two groups with average median value as a trigger for easing (above 0) and tightening of banks' lending policy towards households (below 0).

3. Credit policy of banks in Poland towards households – research results

Over the past ten years it should be noticed that the first wave of the world financial crisis had particularly adverse impact on credit accessibility for Polish households at the beginning of 2008. The sign of unprecedented shift in banks' lending policies manifested in a significant increase in the risk aversion in terms of credit exposures towards consumer loans after a relatively stable increase in credit supply over 2004-2008.

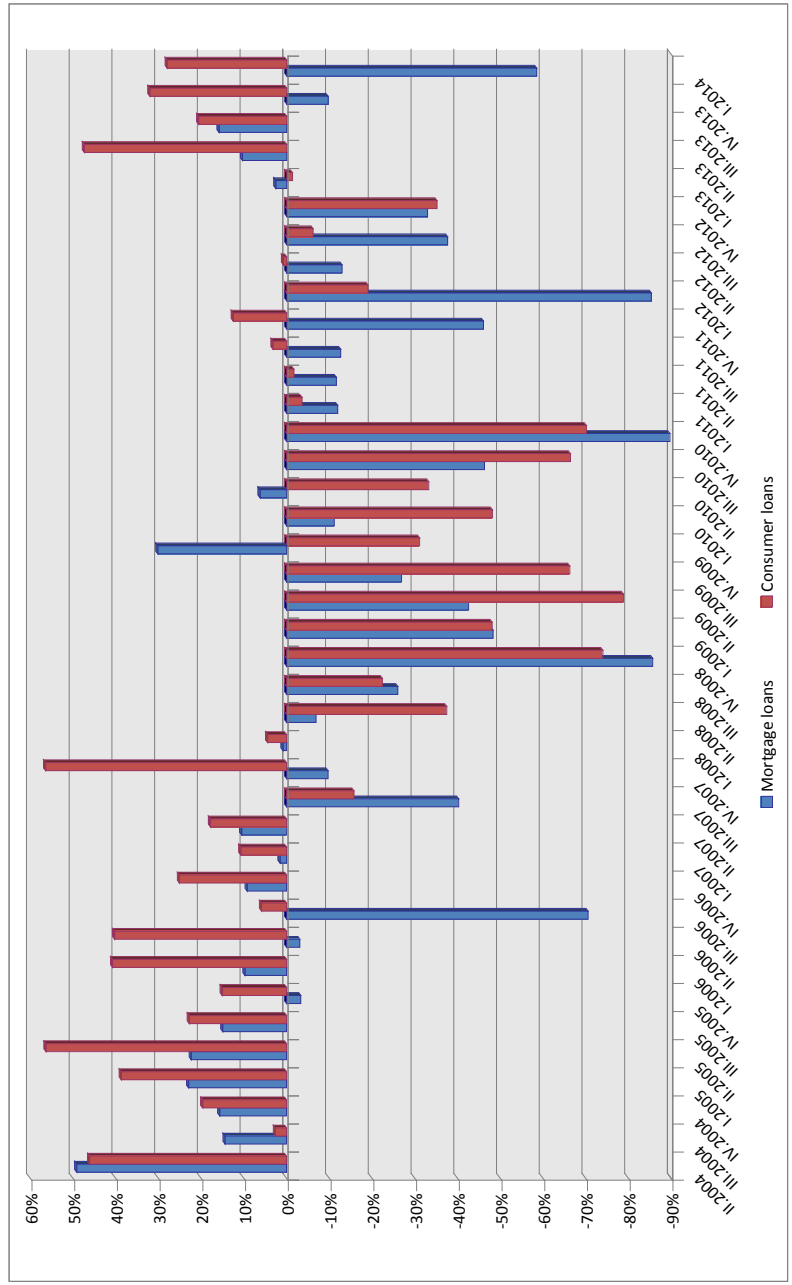
Credit availability cuts, both mortgage and consumer bank loans, caused disequilibrium in Polish market with permanent nature, thus the process of credit rationing occurred this time with varying intensity depending on the form of bank financing. As a whole, a large majority of banks started to withdraw from consumer finance market reducing their credit risk exposure.

In terms of mortgage loans, the high growth in restrictive lending policy of banks took place towards the end of 2008, thus slightly later than in the case of consumer loans. Then over 90 net percent of banks reduced the market supply of mortgages. It is specific for this type of loan agreements that bank maintained high risk aversion in consecutive quarters and the scope of the restrictive lending policy was highly durable with its end no later than 2011. Such a halt in mortgage loans development had not been observable before 2008. On the contrary, before 2008 banks in Poland had been demonstrating very aggressive credit policy and credit supply grew.

As a consequence of the world financial crisis, the housing loans market in Poland permanently demonstrates low credit availability. Beside the crisis, the decrease in the supply volume has been brought about by restrictive external prudential standards adopted by the Polish Financial Supervision Authority to limit banks' exposure to credit risk in the portfolio of mortgage loans. It was particularly true in terms of mortgage loans in foreign currency which eventually ended in the mass withdrawal of such bank loan offers in Poland.

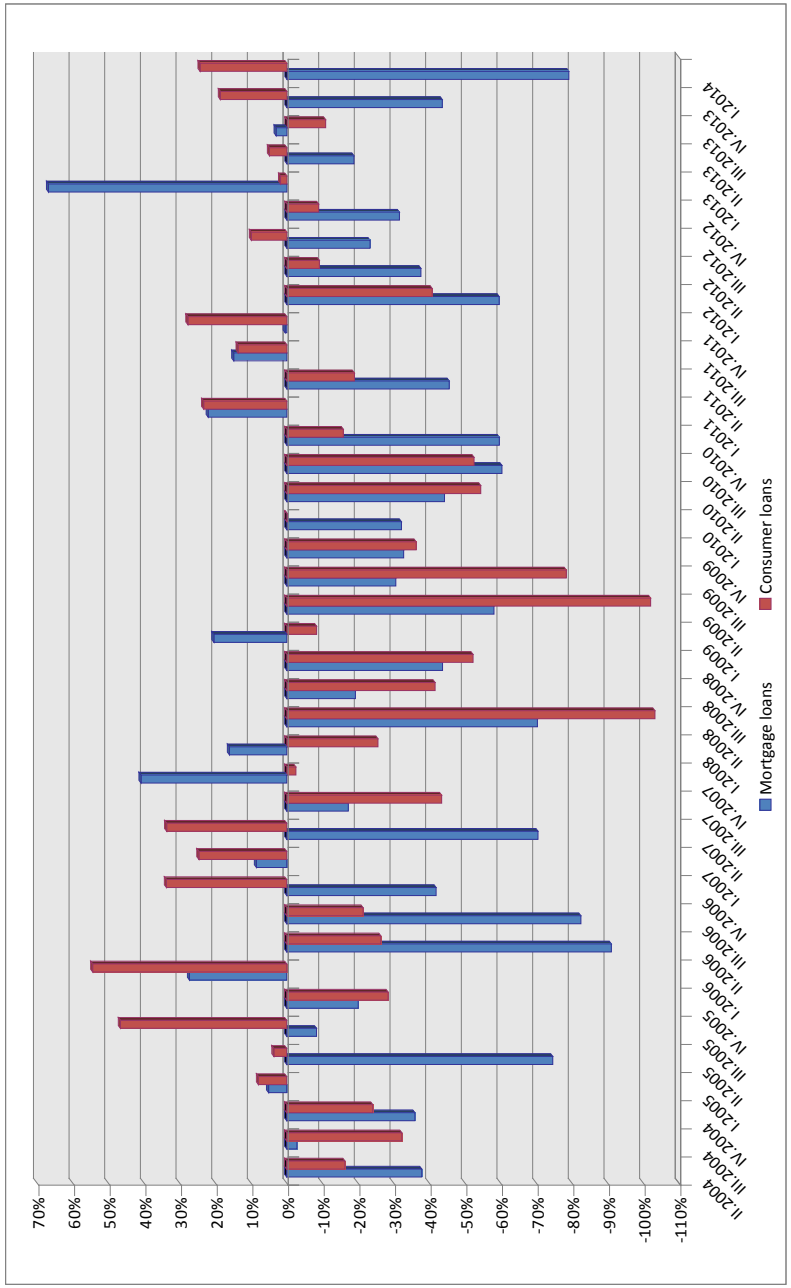
In the case of consumer loans, most banks have maintained highly restrictive credit policies since 2008. Over 2008-2011 there has been a realignment of risk exposure evidenced by high impairment losses on the loan portfolio (i.e. in mortgage loans 16.7 billion in 2011 com-

Figure 1. Households credit availability shifts change in 2004-2014.



Source: Narodowy Bank Polski, Senior loan officer opinion survey-on bank lending practices and credit conditions

Figure 2. Supply gap of household's credit in 2004-2014



Source: Narodowy Bank Polski, Senior loan officer opinion survey-on bank lending practices and credit conditions

pared to to 3.2 billion PLN in 2008). Against such a background, it is notable that before 2008 in almost all quarters banks tended to ease lending standards in terms of consumer loans to a greater extent than in the case of housing loans.

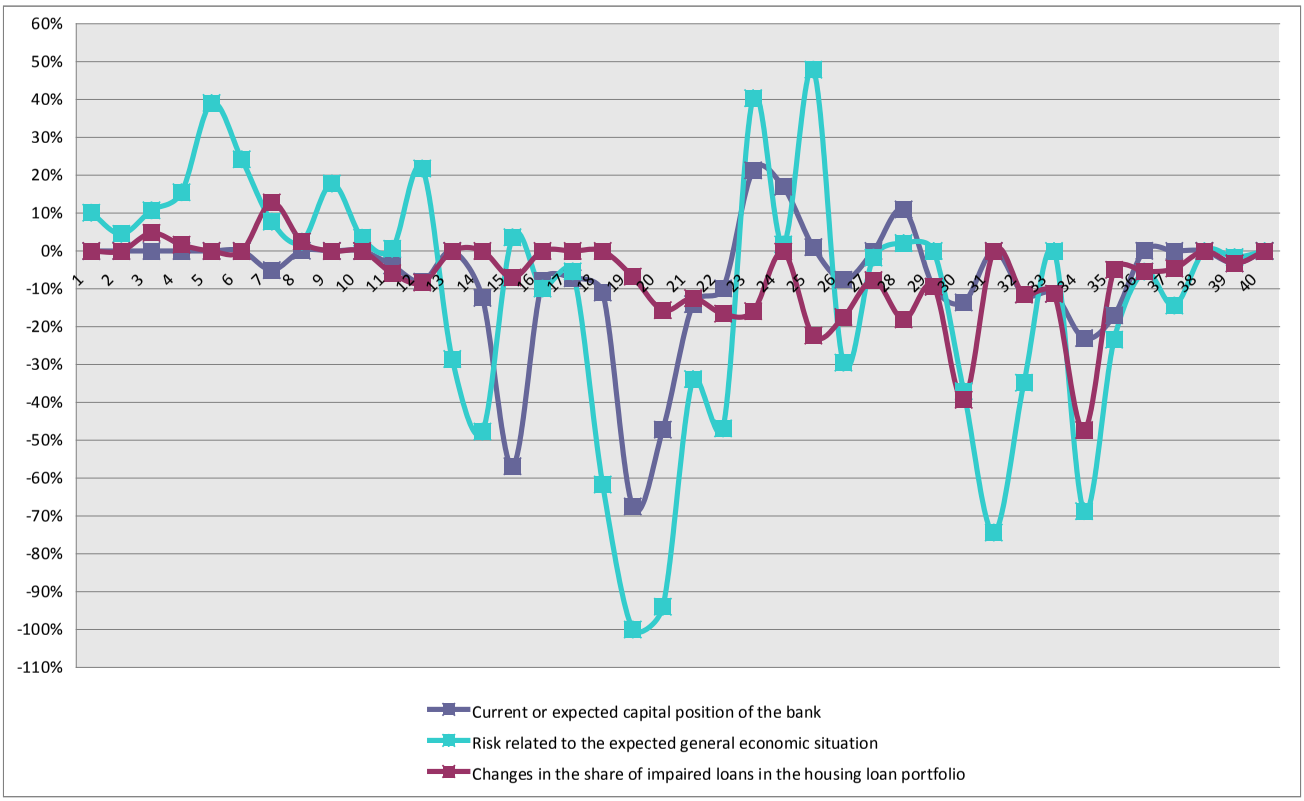
After 2012, whereas the restrictive approach to the availability of consumer loans has been changed in most banks, the housing loans market remains in permanent and high pressure limit supply. The availability cut in the housing loan market has been developed in spite of the relatively low level of Polish household indebtedness as compared to European Union member states and far lower ratio of outstanding loans against consumer loans portfolio.

The analysis of the credit supply gap in both the mortgage market and consumer loans (calculated as the difference in credit supply and credit demand shifts) gives grounds for the conclusions that after 2008 credit rationing with credit availability collapse has become permanent in all segments of households bank loans.

In the case of housing loans, the negative supply gap was maintained over the whole period covered by analysis, despite the gradual increase in supply starting from 2012, with high overall median -20 net percent as result of a much larger volume of household demand for credit than credit availability in Polish banks. After 2008 the negative output gap increased only by 10 percentage points. However, it was primarily due to a significant decrease in customer demand for mortgage loans observed by most banks. The decrease in demand stemmed not from vanishing high consumer needs in the real estate market, but it was the result of the effect of postponing credit-taking decisions by large group of potential borrowers as a result of more restrictive credit standards adopted by the banks that time.

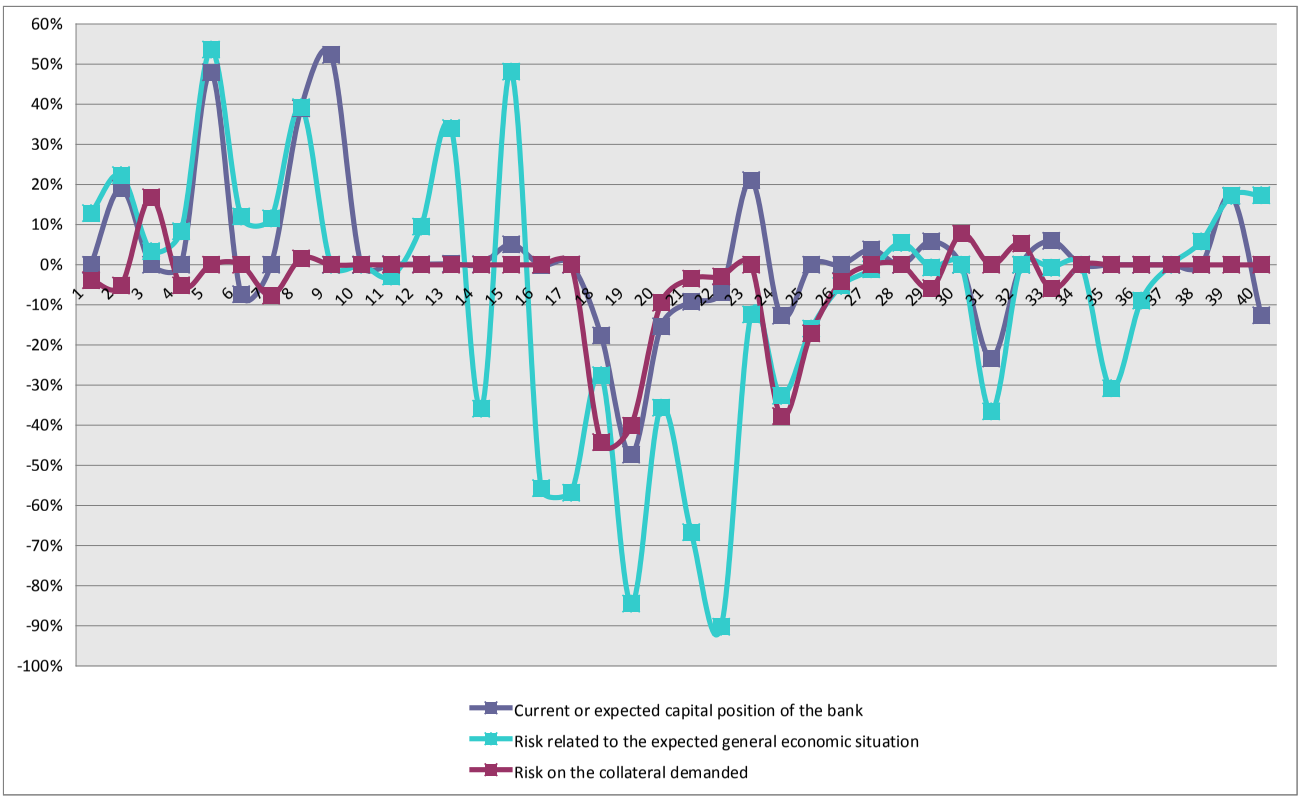
Analysis of the credit supply gap in the consumer loans brings less definite conclusions than in the case of housing loans. The negative output gap occurred in most quarters and it is characterized by a high value fluctuations. As a consequence, the supply gap is more than three times less elevated (median value -9.97 net percent) against the mortgage loans market (median value -31.83 net percent). Similarly to mortgage loans the output gap in the period 2009-2014 was influenced primarily by a decrease in the demand. However, in contrast to the mortgage loans, tightening of bank credit policies shows a downward

Figure 3. High impact triggers for tightening mortgage loans supply in 2004-2014



Source: Narodowy Bank Polski, Senior loan officer opinion survey-on bank lending practices and credit conditions

Figure 4. High impact triggers for tightening consumer loans supply in 2004-2014



Source: Narodowy Bank Polski, Senior loan officer opinion survey-on bank lending practices and credit conditions

trend. Thus, starting from 2013 reduced credit availability has a greater impact on the mortgage market than the consumer loans.

4. Prerequisites for tightened credit accessibility – research results

Among the bank credit policy prerequisites with greatest impact on the reduced availability of households mortgage loans, the specific importance should be attributed to exogenous factors. In times of the world financial crisis, anticipated macroeconomic situation had an overall limited negative impact on the availability of mortgage loans in all banks. Macroeconomic determinants are also characterized by a very high volatility impact on banks' credit policies (standard deviation 0.34). After 2009 over half of the banks reduced two times the availability of mortgage loans due to the risk associated with the expected macroeconomic situation.

In contrast to the factors connected with the macroeconomic situation, endogenous factors like current and future situation of the capital bank standing contributed to a reduced credit availability to a lesser extent. Additionally, a permanent negative impact of impaired loans in banks credit portfolio of banks for the availability of mortgage loans can be evidenced by the fact that during the whole period of analysis only in three quarters a change in the share of impaired loans in the credit portfolio favored easing access to mortgage loans.

Among the factors that mostly influenced the tightening process of bank credit policy in terms of consumer lending, the specific attention should be attached to the risk associated with expected macroeconomic situation. As an important trigger for restrictive credit policy, this factor was under consideration in more than 80 net percent of banks with two peaks occurrence during the world financial crisis (i.e. first quarter and the fourth quarter of 2009). In the same period nearly half of the banks also pointed at the risk associated with the internal capital standing as an important factor of limited credit accessibility, even though before 2008 this factor had had a generally positive on the availability of consumer loans in banks.

Moreover, it is noteworthy that the impact of the risk of declining in the macroeconomic outlook with negative impact on the availability of consumer loans has become apparent during the international

financial crisis. Until 2008 most banks recognized this factor as favoring easing lending standards (nearly 50 percent in the second quarter of 2005 and the fourth quarter of 2007). Reduced accessibility of consumer loans is closely related to the materialization of credit risk in terms of higher collateral requirements.

5. Impact of lending standards on credit accessibility – research results

Among the terms of credit agreements with greatest influence on reduced availability of mortgage loans, there can be distinguished four credit standards, two of which are the price-related (i.e. spread on average loans and spread on riskier loans) and two other non-price -related (i.e. maximum loan-to-value (LTV) ratio and collateral requirements).

It should be emphasized that towards the end of 2008 bank decisions to increase spreads and non-price lending standards elements was very common in Polish banking system, as such actions declared approximately 90 net percent of banks. It was a considerable shift in the bank credit policy since in previous years lending standards had in general positively influenced the availability of mortgage loans with much more attractive for customers maximum loan-to-value (LTV) ratio in most banks. However, soon (i.e. end of 2009) the influence of lending standards on mortgage loans availability of home loans returned to the pre-crisis state. At that time strong tightening of bank prudential regulations lending standards became unfavorable to mortgage loans availability. The noteworthy example is the decrease maximum loan-to-value (LTV) ratio at the beginning of 2014 in case of 60 net percent of banks.

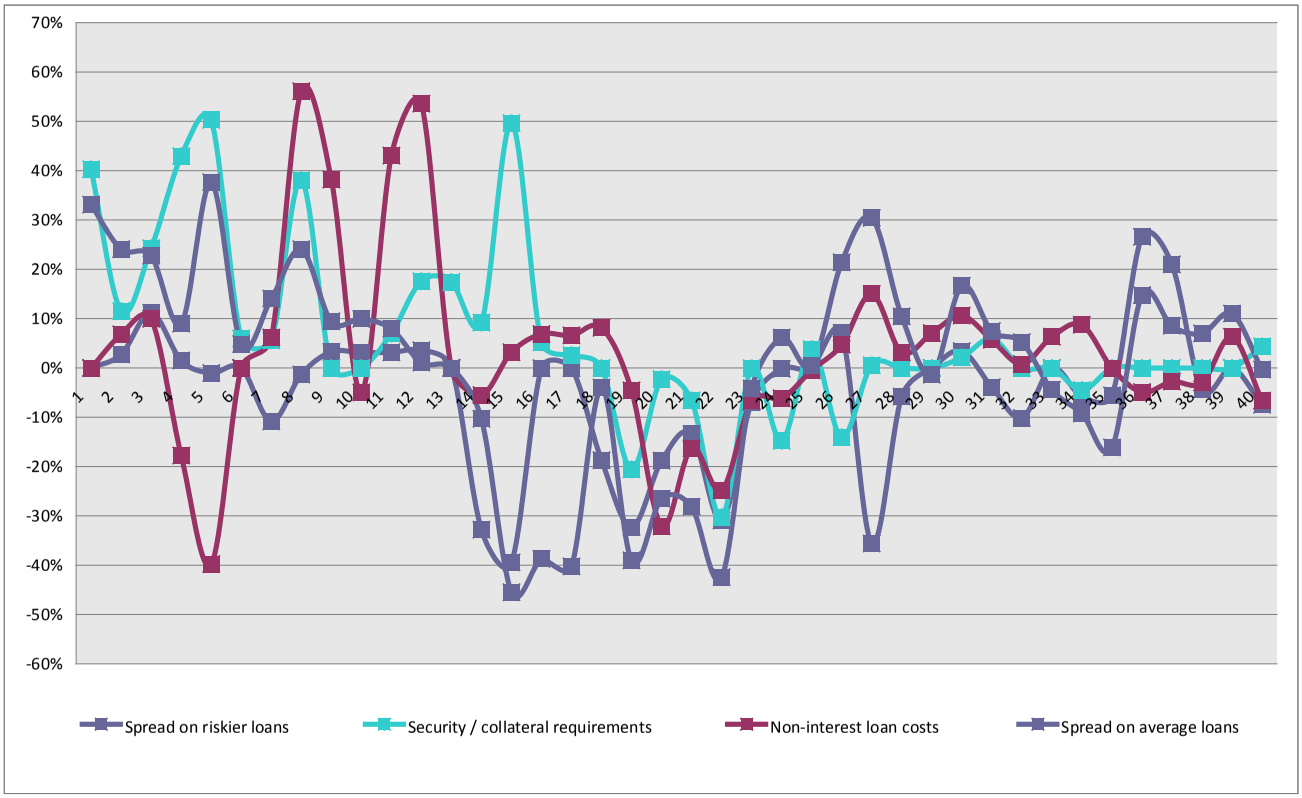
On the basis of the above-mentioned observations, it can be concluded that the banks in Poland firstly tightened price-related lending standards, and then facing an increasing macroeconomic risk and continuing decline in real estate prices, banks decided to increase collateral requirements on mortgage loans to avoid rising share of impaired loans.

The closer analysis of the extent of the shifts lending standards in consumer loans over last years shows apparently different nature of these loans as compared to mortgage loans. In the period before the

Figure 5. Terms of granting loans with a high impact for tightening mortgage loans supply in 2004-2014

Source: Narodowy Bank Polski, Senior loan officer opinion survey-on bank lending practices and credit conditions

Figure 6. Terms of granting loans with a high impact for tightening consumer loans supply in 2004-2014



Source: Narodowy Bank Polski, Senior loan officer opinion survey-on bank lending practices and credit conditions

world financial crisis, the spread on average loans had been raised much earlier (i.e. late 2007) and it was a permanent element of a restrictive credit policy in case of most of banks. However, when world banking markets collapsed under the financial crisis, unlike other types of credit, lending standards in consumer loans did not entailed the significant increase in spreads as part of tightened credit policy.

The trends above can be explained by the different nature of the risk profile of consumer and mortgage loans. In the case latter, market was rapidly growing before the crisis time with a fast increase in banks' exposure to credit risk (it was especially true for banks specialized in consumer finance markets). It is worth stressing that before 2007 banks in Poland had significantly eased the access to consumer loans by lowering the lending spreads and collateral requirements.

The relatively early signals for risk of deterioration in the quality of the consumer loan portfolio are further evidenced by the rapid increase in banks spread on riskier loans. Such steps the banks in Poland had taken much earlier than in the case of mortgage loans (i.e. the end of 2007). It serves as evidence showing that the problem of rising credit risk exposure was recognized by banks earlier than credit crunch symptoms developed to the full extent.

It is worth stressing that the availability of consumer loans after 2009 was heavily tightened by non-interest loan agreements with particular focus on riskier loans. On the other hand, over the overall period of analysis there has been no significant reduction of access barriers to consumer loans. Thus, unlike other forms of credit, in the case of consumer loans, credit availability has been maintained by highly tightened lending standards and currently there is no strong signals easing lending standards.

6. Conclusions

The analysis of the credit availability in Polish household market through the prism of the basic attributes of the credit policy indicates predominate role of credit risk in impeding rising household indebtedness.

The rapid growth in risk-aversion credit policy in the world financial crisis period has become the most apparent in case of mortgage loans, the market of which had been increasing the most in pre-crisis

period, It is worth empathizing that before the crisis, the credit policy of Polish banks was much more lenient in case of mortgage than consumer loans. As the consequence, the world crisis has brought about the dramatic shift in the mortgage loan market with the large credit supply gap.

However, large and rapid growth in importance of tightening credit policies of banks in Poland towards the end of 2008 has not brought about any significant decline in the indebtedness ratio of households in post-crisis period (i.e. the Polish household bank loan value has not decreased in any single quarter after 2009). Credit momentum has slowed very significantly under the impact of a large depreciation of the zloty, but generally bank have carried on lending on a much smaller scale and the large adjustments to credit policy under regulatory measures (e.g. the mass withdrawal from foreign currency loans, new stringent guidelines for calculating creditworthiness).

Among the most important triggers for tightening bank loan standards, the utmost importance should be attributed to exogenous prerequisites, particularly related to macroeconomic risk. The banks' fears of expected recession in Polish economy affected especially the availability of mortgage loans, and to a lesser extent consumer loans.

The significant triggers, which caused a rapid tightening lending policy from the late 2008 to 2011, were connected with internal determinants of banks' regulatory capital. Higher risk of inadequate capital position of banks as compared to the projected development of the macroeconomic aggregates was of a unprecedented nature in the banking sector in Poland. In this context, unfavorable macroeconomic conditions and internal factors stampeded the credit availability growth ratio at the unprecedented scale. The vast majority of the triggers for the rapid tightening of credit policies were decreasing after 2011. With some delay the consumer bank loans have been reoriented due to the risk of rapid deterioration of the bank loan portfolio.

It is worth stressing that monetary policy of National Bank of Poland had very limited impact on the determinants of the credit market in Poland. The triggers for decreasing household credit availability in Poland are to be seen primarily in the rapid growth of the macroeconomic risk and not into credit market itself. Such a situation differs positively the credit market in Poland to phenomena in the United

States, where an oversupply of credits (among others stimulated by low market interest rates and refinancing activities of Fannie Mae and Freddie Mac) created a huge demand for credit to a disproportional level.

The intense but short-time nature of the credit crunch in Poland can be illustrated by the fact that the main triggers for tightening credit supply were primarily of price-related nature and thus relatively easily and quickly modified (i.e. lending spreads and fees and commissions). Non-price-related factors were used to reduce lending afterwards and to the lesser extent.

The research results show the supply of household credit has been considerably reduced in Poland after 2008 but both mortgage and consumer loans have been growing contrary to majority of the EU27 countries with further but moderate rise in the indebtedness ratio contrary to initial projections of long lasting deleveraging process. On the whole, the credit crunch in Poland had fairly a short-term nature but since the world financial crisis the apparent slowdown in credit market demonstrates the long-lasting nature.

References

Białowolski, Piotr. „Patterns of debt possession among households in Poland-a multi-group latent class approach." Bank i Kredyt 45(2), 2014

Bouyon Sylvain, and Filippo Boeri Another contraction in European household credit markets, European Credit Research Institute (ECRI) at the Centre for European Policy Studies

Dynan, Karen, and Donald Kohn. "The rise in US household indebtedness: Causes and consequences." (2007).

Lepczyński, B., et al. „Biznes i ryzyko na rynku consumer finance w Polsce." Biblioteka Consumer Finance, raport opracowany na zlecenie Konferencji Przedsiębiorstw Finansowych, Wydawnictwo Cedewu, Warszawa. 2006.

Lepczyński, Błażej, and Eugeniusz Gostomski. „Wpływ czynników społeczno-demograficznych na perspektywy rozwoju rynku consumer finance w Polsce." Transformacja i Rozwój 115 (2009): 88-114.

Ślązak, Emil. „Analiza nominalnych stóp procentowych na rynku consumer finance w Polsce." Bezpieczny Bank (2008)

Ślązak, Emil. „Bankowość detaliczna w Polsce." Bank i Kredyt 2 (2005).

Over-Indebtedness in Croatia: Situation, Problems and Possible Solutions[1]

Predrag Bejaković, PhD

Institute of Public Finance, Croatia

Introduction

In a relatively short time span of less than 25 years, Croatia has undergone a 'triple transition' from a single party system to a pluralist democracy, from a planned to a free market economy and from war to peace. Thus, the Government of Croatia faces a wider range of social challenges than those of most other post-socialist states. Like most of Eastern Europe, it has to cope with the consequences of the so-called transition recession, with economic restructuring and privatisation. Due to the mentioned factors, including the insufficient financial literacy and consumers' hunger for various goods and services that is inadequate to the national economic development and personal income capacity, a significant number of Croatian citizens is in an unfavourable social position because they have significant over-indebtedness problems.

Over-indebtedness has serious consequences on the health of people affected because it endangers their psychological stability and causes the feeling of crisis, anxiousness, fear, frustration and stress. Over-indebted persons often have worse health conditions; they suffer from continuous feelings of exhaustion, and endure more physical pain in comparison to the total population. Because of the aggravated health condition of individuals affected, significant social costs arise which can be classified in direct terms (the medical treatment, recuperating in hospital, medicines etc.) and indirect costs (reduction of productivity, absence because of the sick leave, the costs of long-lasting medical treatment, rehabilitation and the early retirement of affected individuals). There are also other social costs, such as increased probabilities of criminal behaviours, or children dropping-out of education. Thus, because of over-indebtedness and low levels of education poverty can

1 This work has been supported by the Croatian Science Foundation under the project 6558 Business and Personal Insolvency – the Ways to Overcome Excessive Indebtedness.

be transferred to new generations. Finally, there are also important social costs linked with the legal proceedings related to compulsory collections, losses of tax yields, the provisions of consultation services for the affected population and increased social welfare expenditures.

Because of the economic recession, increased unemployment and budget problems, there has been a further deterioration of over-indebtedness, which causes further problems with social exclusion and marginalisation. The mentioned factors have an adverse impact on the social welfare and wellbeing of Croatian citizens. Following this short introduction, a section dedicated to the situation of over-indebtedness is included. The third part comprises of a discussion surrounding the problems with over-indebtedness, their causes and the realised activities for improvement. The final section comprises of conclusions and recommendations.

Situation with over-indebtedness

There is a based assumption that over-indebtedness of the population is one of the most important determinants of social exclusion. In this part of the text the trends of over-indebtedness and its consequences in approximately the last 10 years are explained. According to the Croatian Central Bank estimation, the credit indebtedness of the population in Croatia increased from 32.1% of GDP at the end of 2004 to 35.9% at the end of 2005 and around 40.6% at the end of 2006. In doing so around 96% percent of citizens used commercial bank loans. The ratio of household debt to the estimated annual net wage bill went up from 105.2% at end-2005 to 117.3% at end-2006. In the first 11 months of 2007, the amount of credit by commercial banks to the citizens increased by HRK 24.0 billion, from HRK 187.8 at the end of 2006 to HRK 211.8 billion at the end of November 2007. Almost one third of the mentioned increase is caused by mortgages whose amount increased from HRK 7.6 billion to HRK 44.2 billion. In Croatia it may be assumed that young, educated persons are the most indebted, because they represent the most creditworthy segment of the population but also the one with the least assets. In 2007, the average total debt service burden of Croatian households totalled 6% of their disposable income.

Debt to banks remained the most dominant debt category, accounting for about 95% of total household debt for several years. In

2006 and 2007, this was supported by the continued surge in supply of increasingly cheaper bank loans, particularly those denominated in Swiss francs. At the same time, as household savings held with banks grew slower, the ratio of debt to time deposits with banks rose to about 129% at end-2006 and 154% at the end of 2007. Still, one should bear in mind that household investments in investment funds and directly on the financial market recorded a strong upturn in 2006 and 2007 so that the household debt-to-financial assets ratio is lower.

However, in the case of currency crises – as happened in 2008 - the majority of borrowers with below-average income have debt payment problems. As expected, debt-service burdens continued to plague lower-income families disproportionately. The evidence suggests that the income of the poor does not allow them to save (only 4% of the poor report positive savings during the recall period). Only 13% of the poor have had access to borrowing (from either the banking system or intermediaries other than relatives) during the last 12 months. The poor do not save much and barely borrow in formal credit markets – which exposes them more to loan-sharking and high income rates. The combination of low capacity to save with limited access to borrowing suggests that the poor are also vulnerable to shocks and hence to income fluctuations. Particularly from the point of social exclusion and revenue security of citizens it is useful to analyse indicators according to deciles of available revenues. The biggest loan burden is present from the sixth to the eight decile of gross available income.

The slowdown in household debt growth put a stop to the increase in the household debt level in late 2008 and during the whole 2009. At the same time, the currency and interest rate exposure of households increased further. Also, unfavourable labour market trends seriously eroded households' capacity to service their credit obligations regularly. The annual growth rate of household debt, which stayed relatively high in 2008 due to the base effect of its mid-year increase, dropped to 7.3% in March 2009, a quarter less than at end-2008. The interruption of household loan growth was due to several supply side factors - primarily the banks' desire (at the time when liquidity conditions are tight and foreign assets are used to finance domestic lending) to maintain established relationships with the business sector and particularly to provide funds to the government, as a more reliable borrower in the period of the economic downturn. Household loan demand itself

dropped due to increased insecurity regarding the future dynamics of employment and wages, which recorded negative trends early in 2009, pessimism regarding future developments in the residential property market, which induced some households to postpone a decision to purchase a dwelling, and the recently emerging risks resulting from the upward tendency of interest rates.

In such circumstances, banks and housing savings banks, which account for the bulk of household debt, significantly slowed down lending to households. The growth of all types of bank loans slackened; credit card and car loans, which grew slower even in the preceding period, decreased in the first quarter of 2009, while housing loans continued to grow at a slower pace even in the preceding period. In the last quarter of 2008, banks relied more heavily on external foreign currency funding and redirected household savings in the domestic currency (kuna) to foreign currency deposits, which reversed the upward trend in the share of the domestic currency loans in total loans. However, slower lending to households early in the year also slowed down the substitution of kuna loans for loans denominated in or indexed to foreign currencies. According to data by the Croatian National Bank, in March 2009, 68.3% of total household loans were denominated in foreign currencies, which is still less than in previous years. Nearly 97% of total household loans were issued at interest rates variable within a year, which shows that the interest rate risk exposure of the household sector is significant. In terms of maturity, most household loans are long-term. However, since most of these loans are also indexed to foreign currencies and contracted at variable interest rates, the currency and interest rate risk exposure of households stayed rather high in 2008 and with a tendency to increase.

The slower growth in total household debt in 2008 largely stopped the deterioration of household debt and debt burden indicators, which was particularly evident in the first quarter of 2009. The ratio of household debt to estimated disposable income, which slightly worsened in 2008, improved early in 2009 despite lower growth in household disposable income. The household debt-to-deposit ratio, which was relatively lower than in some Central and Eastern European countries in 2008, also improved slightly at the beginning of 2009. However, the stagnation of this ratio from early 2008 was somewhat affected by the transfer of household assets from the capital market to bank deposits,

which resulted in a continued deterioration of the ratio of household debt to total liquid financial assets. The mild recovery of the domestic capital market in early 2009 and the stagnant household debt slowed down this indicator's deterioration in the first quarter of 2009. The interest burden considerably increased due to the upward trend in interest rates that prevailed in 2008 and the first quarter of 2009.

Weaker household demand for loans was largely due to negative trends in the domestic labour market in the year 2008 and particularly 2009. In the first three quarters of 2009, employment decreased by 2.4% from the same period of 2008 under the impact of the private sector's adjustment to recession, while the average real wage held steady. These adverse trends in the labour market and increased tax burden in the second half of 2009 led to stagnation in real disposable income on a whole-year basis. The rise in the lending rates of banks and the tightening of non-interest credit terms contributed to a reduction in household borrowing in 2009. A revival of lending to households, which slowed down the fall in total household debt in late 2009, is indicated by the rise in the amount of newly-granted long-term loans to households. Households had increasingly relied on short-term borrowing from banks ever since the crisis escalation, which banks encouraged due to uncertainty as regards the stability of sources. Home loans, which were the main generator of household debt growth over the previous years, remained almost unchanged in 2009. However, in late 2009 and early 2010, this trend reversed: while short-term loans held steady, newly-granted long-term loans recorded growth for the first time since mid-2008.

Broken down by purpose, the amount of newly-extended home, car and credit card loans stayed almost the same, while the revival was particularly evident in other long-term loans at end-2009 and in early 2010. As other long-term loans dropped the most when the crisis escalated, their decline has still not been completely offset by the current recovery. Total housing loans continued to grow slowly, while the total of other loans granted steadily declined at the annual rate of 5-6%, notwithstanding the increase in newly-granted loans. In late 2009 and early 2010, banks increasingly continued to index loans to the exchange rate, thereby magnifying household exposure to the risk of exchange rate depreciation. At the end of the first quarter of 2010, household loans indexed to foreign currencies accounted for 71.2% of

total household loans. The rising share of relatively cheaper long-term loans in the total amount of newly-extended loans could reduce the loan repayment burden of households, which is contributed to by extensions of loan maturities. Still, exposure of households to the risk of increased debt burden due to interest rate movements remained high. In spring 2010, nearly 96% of all household loans were made with interest rates variable within a year, the same as a year earlier.

The improvement in most household debt indicators that occurred in 2009 due to the fall in total household debt was of a short duration. The impact of unfavourable labour market developments strengthened in 2010 (reduction in employment possibilities and increased number of unemployed) and the drop in the total net wage bill caused that the ratio of household debt to disposable income deteriorated and returned to the historical high of end-2008. The ratio of interest payments to household disposable income also deteriorated despite stagnation in lending rates in late 2009 and during 2010. Still, the ratios of household debt to total liquid financial assets and deposits improved in the same period. This was due to the continued growth in household bank savings, but at a lower rate than in previous years, while the recovery of the capital market increased the value of household assets invested in securities and investment funds and prompted some investors to return to the market, particularly to its most-liquid and least risky segments. The reduction in the tax burden for most households was only a cushion to the expected steady fall in household disposable income in the second half of 2010, due to the cancelation of *crisis tax*. As interest rates have remained relatively high, debt burden and the burden of servicing existing loans continued to increase. This implies the continued increase in the share of non-performing loans; particularly those granted to households, the growth of whose debt in previous years was not in line with their creditworthiness. This led to an annual decline in all loan categories, with the exception of home loans, which grew at a much slower pace than in the previous year.

Following an improvement of household indebtedness indicators in 2009, the situation grew worse in 2010 as a result of a higher exchange rate of the Swiss Franc and a drop in family income. A slight growth of income might influence the improvement of household indebtedness indicators in 2011, although the number of vulnerable households continued to grow due to the expected continuance of a

reduced employment trend. Households reacted to the financial crisis by a negative revision of expectations concerning future salaries and other incomes, resulting in lower personal consumption and lower needs for indebtedness. Since mid-2009, households have constantly been trying to lower their indebtedness, although their debt in 2010 increased nominally due to higher exchange rate of the Swiss Franc, because one third of all bank loans to households were granted in this currency. So, following a decrease of indebtedness of HRK 3.8 billion (-2.7%) in 2009, the total debt of households at the end of September 2010 reached the level that existed in mid-2009, by annual increase for HRK 1.4 billion (1.0%). But, if the influence of the exchange rate to indexed household loans in HRK is removed, in 2010 households continued to lower their debt, although at a rate slower than in 2009. The described dynamic of the debt was realized mostly due to the drop in demand for household loans under the influence of unfavourable trends on the labour market, which continued in 2010, and due to keeping interest rate at an increased level, with difficult access to new loans due to decreased proneness of the banks to risks. Tax changes implemented at the beginning of the third quarter in 2010, increased net salaries as a single incident, and, in combination with the expected abolishing of the higher rate of special crisis tax at the end of the year, somewhat mitigated the negative influence of growing uncertainty to demand for household loans. According to the data provided by the Croatian National Bank (2010), the slowing down of the dynamics of total household debt reduction can be noticed in an increase of amounts of the newly-approved loans in this sector. During the crisis, the amounts of long-term household loans decreased significantly, but started to increase again at the end of 2009. The higher rate of loan granting was mostly the result of higher amounts of other long-term loans granted (such as money general purpose loans) and credit card loans, which resulted in the growth of their total amount at the end of September 2010, for the first time since the end of 2008. Unfavourable macroeconomic trends in 2010 continued to reduce the ability of households to regularly return their debts, which was reflected in an increase of the share of bad loans granted to this sector.

This is in line with the results of the analysis of household sector immunity (Zagreb: Economic Institute Zagreb and Croatian National Bank 2009). In order to quantify the impact of various unfavourable scenarios of the decreased number of the employed, weakening of the

exchange rate of HRK and growth of active interest rates of banks, as well as their combinations to the dynamics of the banks' exposure to potentially vulnerable households in 2011, a survey of the immunity of households to the said shocks was carried out. The used vulnerability indicator is based on the concept of financial limit, i.e. income left after the payment of loan rate and settling minimum life costs. The simulation of available household vulnerability indicator trends, performed on the basis of data from HBS and evaluated trends of macroeconomic and financial variables for 2010, shows a significant increase in the number of vulnerable households and their debts, following the trend of bad loans to households in this year. The share of vulnerable households among those indebted grew to 22.5%, while bank exposure to such households increased to 18.5% of total loans, 4 percentage points more than in 2009. The employment drop mostly contributed to the increased share of debts of vulnerable households (approximately 2 percentage points), while the impact of a weakened exchange rate of HRK to the Swiss Franc was much smaller (0.4 percentage points). All other factors exercised a much weaker influence.

According to the data from the Croatian National Bank (2011) the debt of the household sector during 2011 stagnated. Mild nominal growth of household debt is mainly a consequence of the depreciation of the HRK exchange rate against CHF and EUR. The amount of household debt was adjusted with regard to the influence of exchange rate changes so it stagnated at the previous year level. At the same time, a mild intensification of new debt was noted, primarily in the segment of newly granted long-term loans, while the amount of newly granted short-term loans continued to decline. This increase in the share of long-term loans in the total amount of newly granted loans was encouraged by the decrease in interest rates on these loans during 2011, as well as the slowing down of negative trends in the labour market. The expected new deterioration of economic prospects in 2012 could have a negative effect on the household debt. The remaining long-term loans (i.e. cash loans) were still the primary form of new household indebtedness during the first half of 2011, because of which the annual growth of the total amount of these loans accelerated. In the third quarter of 2011, a growth in new household housing loans was noted. Thereby, the nominal amount of housing loans had the annual rate of 6% at the end of September. This increase was primarily a consequence of the appreciation of CHF and, to a lesser

extent, EUR in mid-2011. The stagnation of household indebtedness during the first three quarters of 2011 is also indicated by a relatively stable ratio of debt and available household income, while other indicators of household indebtedness show mild improvement. Under the influence of further stable increases in household savings in banks, the tendency of a decrease in the ratio of debt and deposits continued, which lasts from the end of 2008. The growth of bank deposits was higher than the reduction of household assets invested in investment funds, and during the first three quarters of 2011, the ratio of debt and liquid household financial assets also continued to improve. Due to a decrease in interest rates in combination with stagnation of debt in the household sector, the long lasting tendency of deteriorating ratio of interest paid and available household income was turned around. The exposure of households to exchange rate and interest rate risks during the first three quarters of 2011 was kept on a high level with a mild tendency of growth. The movement in exchange rate risk is primarily reflected by the extension of maturity periods for newly granted loans, as long-term loans are mainly granted with currency clauses. This way, the share of loans linked to a foreign currency exchange rate reached almost 76% of the total loans at the end of September, that is, it returned to the level from the beginning of 2007. At the same time, an exposure of households to the risk of an increase in loan repayment increased due to movements in interest rates, so at the end of September 2011, almost 93% of all loans were granted with a possibility of interest rate change within a period of one year.

The process of decreasing indebtedness intensified during 2012, so the household debt until the end of September dropped below the level of 40% GDP (Croatian National Bank, 2013). Reduced indebtedness was primarily reflected in lower exposure towards banks (-0.8% GDP) while the household debt towards other financial operators, which accounts for 4% of the overall debt, was relatively stable. The annual rate of growth of the total household debt in late September 2012 was -2.0%, that is, -1.5% if we exclude the impact of mild appreciation of HRK during the third trimester. The absence of more pronounced new loans supported the trend of declining household debt in 2012. In view of the stagnation of the granting of new loans during the past two years, with an exception of mild seasonal oscillations, while the repayment of the existing loans is still relatively stable, the total household debt is on an effective decline as of mid-2009 at the average an-

Table 1: Household Debt in Croatia, 2003-2013

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Household Debt (Billion HRK)	57.1	67.9	81.6	99.7	118.5	131.5	128.0	131.9	133.2	131.4	129.0
as % of GDP	25.0	27.4	30.6	34.3	37.2	38.3	39.0	40.7	40.5	40.0	39.3
as % of gross disposable income	50.4	56.1	64.3	72.2	79.4	82.4	78.2	81.9	81.3	79.3	78.2
Annual growth (%)	27.7	18.8	20.2	22.2	18.9	10.9	-2.6	3.0	1.0	-1.4	-1.8
Household loans as % of total bank loans	48.4	50.8	50.8	50.6	52.7	51.7	49.2	47.4	45.2	45.6	44.4

Source: Croatian National Bank and HANFA

nual rate of -0.84%. In the structure of newly approved loans, there is a notable tendency of decreasing long-term loans, with a simultaneous growth of household dependency on short-term framework loans. Such movements are mostly the result of lower consumption, especially of durable items, but also partly of the growth of interest rates on longer maturity dates in relation to those of up to one year and easier access to short-term loans, especially the negative balance on checking accounts.

The aforementioned reduction of new household long-term loans, which began in late 2011, is evident in all loan categories. At end-September 2012, the total amount of housing loans dropped for the first time as of the beginning of the crisis in both nominal and effective terms (by 1.4%, that is, by 0.5% at annual level). At the same time, the amount of other long-term loans also dropped, but at a somewhat lower annual rate (0.8%). Declining demand for new loans indicates further absence of long-term household investments and reduced consumption, especially of durable products, in view of the increased risks now prevailing in the labour market and the uncertain situation on the real-estate market. Along with the growth of exposure to macroeconomic risks, households are still highly exposed to the risks of changing exchange rates and interest rates. Exposure to these financial risks remained at the levels of late 2011, so in the structure of total debt at the end of September 2012, 75.5% of all loans were bound to the exchange rate of foreign currency, and 92.4% of loans were granted with an interest rate variable within one year. Intensification of the process of reduced household indebtedness resulted in the improvement of all indicators of their indebtedness and the burdens of debt repayment during the first three trimesters of 2012.

Despite the unfavourable macroeconomic environment, households continued to save in 2012, although the growth of deposits was somewhat lower than in the previous years. By the end of September 2012, there was a growth of private deposits with banks (around 3% per annum, which is slightly less than the average interest rate on private term deposits), which at the same time account for the largest part of the total liquid household financial assets, so the ratio of debt and the said categories of financial assets improved considerably. The simultaneous mild increase of nominal income accompanied by decreasing indebtedness stimulated the improvement of the ratio of debt

and the available household income and supported the tendency of deteriorating ratio of interest paid and available household income, despite the retention of bank interest rates at an elevated level.

In 2013 households continued to decrease their financial liabilities to all creditors in conditions of years-long absence of economic growth, high unemployment and overall uncertainty. During a one-year period households decreased most of their debt to credit institutions, which in 2013 accounted for almost 99% of the total financing of this sector. The annual rate of change of total household debt at the end of the third quarter of 2013 was relatively low and amounted to –0.43%, which is a consequence of the usual seasonal weakening of the kuna exchange rate, and so the rate of decline in debt adjusted by the change in exchange rate was almost three times greater, –1.41%. Households decreased their debt in terms of all types of bank loan. The somewhat lower amounts of newly granted loans contributed to this significantly, especially in the third quarter of 2013, when households were granted the lowest amount of new loans in the four years period 2010-2013. The decrease in new household borrowing was more pronounced in long-term than in short-term bank loans, so a slight rise of those loans recorded in the first half of 2013 was offset.

In the structure of new long-term borrowings, the amounts of newly-granted housing loans decreased the most (by –37.5% at the end of September), which, alongside the increasing deterioration of their quality, was reflected in the increasing decline in the total amount of housing loans granted to households (at the annual level by –2.5% in effective terms). At the same time the amounts of all other types of long-term loans decreased (especially car loans, the already newly-granted amounts of which have been more than halved in the last year and a half). By the end of September 2013 only amounts of newly-granted other long-term loans continued to increase (e.g. cash any-purpose loans, overdrafts etc.) despite a strong tightening of conditions for their approval, which affected the rise of the total amount of other loans at annual level by 1.3%. Extremely weak lending activity in the household financing segment is a consequence of a combined impact of low consumer optimism and tightened lending conditions (price conditions, but also collateral requirements), which discouraged household demand, low already because of the high unemployment and the still declining real income.

Household interest in new loans is not likely to increase considerably in the following period; household demand will be able to trigger a new wave of lending only after a considerable slowdown in the negative trends in the labour market that might bolster consumer confidence and thus also personal consumption and investments, especially if residential property continues to be increasingly financially available. Besides macroeconomic risks in the form of loss of jobs, in 2013 households were especially exposed to the possibility of loan repayments increasing, due to exchange rate changes and/or interest rate changes. At the end of September 2013 the household exposure to currency risk slightly declined (share of loans indexed to a foreign currency accounted for 75% in the total loan structure), while the exposure to interest rate risk continued to increase (almost 99% of all loans were granted with the possibility of interest rate change within one year), partially under the influence of the structure of newly-granted long-term loans.

The amendments to the Consumer Credit Act, which regulate the method of interest rate calculation in household loans so that a fixed margin is added to the selected variable parameter, could have certain positive effects on household financing conditions and their interest cost burden. (The fixed margin is the national reference rate of the average banking sector financing cost, EURIBOR, LIBOR, yield on T-bills of the Ministry of Finance or the average interest rate on household deposits in the underlying currency). Besides implementing a completely clear definition of interest rates and the conditions under which they can be modified, the most significant amendment brought forward by this regulation is the limitation of interest rates in currency-indexed housing loans, in conditions of considerable appreciation of the relevant exchange rate (more than 20%). Those amendments aim at alleviating the possible combined negative impacts of exchange rate and interest rate exposures of households, which in the case of loans indexed to the Swiss franc proved to have a very negative effect on household creditworthiness. The temporary limitation of those interest rates, which makes them actually fixed, will reduce the interest burden to households burdened by those loans, the repayment of which will be facilitated. Alongside desired, positive, effects the amended regulation also leads, especially in the long-term, to certain risks that should not be neglected. These risks are primarily the consequence of the possibility of relating the interest rate changes

to the dynamics of the still extremely low EURIBOR/LIBOR, which fails to reflect the bank financing costs adequately: in conditions of monetary expansion in the Eurozone and the consequent historically low interest rates, it is much more likely that the related variable interest rates of banks will rise than that they will decline. The continuing household deleveraging in the second and the third quarter of 2013 enabled an improvement in the majority of indicators of this sector's debt and debt burden, and a further improvement of those indicators is expected due to the amendments to the Consumer Credit Act.

In 2012 and 2013 households continued to increase their savings in banks and housing savings banks (by average 4.1%), which considerably contributed to the rise in their overall liquid financial assets, so the ratio of debt to these household savings categories, which had been declining for years, additionally improved by the end of September 2013. The gradual slowdown in the growth in nominal household disposable income, which started at the end of 2011, primarily under the impact of rising unemployment, reversed to a drop in the third quarter of 2013, and thus the ratio of debt to household disposable income slightly increased at the end of September. At the same time the coverage of the currently declining amount of interest paid by disposable income slightly improved, and further decrease in the interest paid burden may be seen in first three months of 2014 as well, in view of the interest rate limitations embodied in the Consumer Credit Act.

The halting of the contraction of economic activity at the beginning of 2014 is probably not a sufficiently strong incentive for the recovery of undermined household optimism. Together with the further decline in real income and the obvious change in consumers' habits, caused by the years-long recession that decreased their real assets, this will be a major hurdle in strengthening this sector's demand for new, especially long-term, loans. The deleveraging process is likely to continue, even slight deceleration is possible. Despite that, the potential future bank losses which could arise from lending to this sector have increased, primarily due to a greater exposure of households to interest rate risk. This could considerably hamper the repayment of the majority of both existing and new loans extended to households if the global interest rate level rises.

Since 2003, household debt in Croatia has been rapidly increasing, but it started to decrease in the last few years. As seen in Table 1, by year-end 2006 household debt had risen to represent 35 percent of GDP and 96 percent of gross disposable income. By the end of 2008, loans to households had grown to 53 percent of all bank lending. The mentioned share constantly decreased reaching 44.4% in 2013, while the strong annual growth changed direction and in the last few years stagnation in annual growth of household debt in Croatia was evident.

Problems with over-indebtedness, their causes and realised activities for improvement

Problems: Over-indebtedness as a factor of social exclusion

The robust growth in household debt in the 2002-2007 period coincided with real growth in household disposable income, large economic expansion and a considerable fall in banks' interest rates. However, household debt indicators deteriorated markedly as total household debt grew faster than income. This raised concerns about potential implications of an additional increase in the debt burden on financial stability. An analysis of household debt based exclusively on data aggregated at the sector level is not a best financial vulnerability indicator as it fails to provide insight into the distribution of debt and credit risk by individual household groups. Hence, the macro approach must be complemented by using individual data on indebted households to determine the debt structure and sustainability (micro approach). As expected, analysis of the Household Budged Survey (HBS) data showed that the share of indebted households in the total number of households by decile increases together with the rise in disposable income. Hence, nearly half of total debt in all reference years was generated by 30% of households with the highest disposable income.

Households with the lowest disposable income per household member are usually the most vulnerable among indebted households. The analysis of HBS data shows that the percentage of indebted households in the lowest (and thus most risky) income brackets was relatively small and steadily decreased in the period between 2005 and 2008. The share of total household debt held by households in the three lowest income brackets also decreased. The financial margin, i.e. income available after subtracting the amount of annual loan payments and the at-risk-of-poverty threshold, is another useful instru-

ment to identify potentially vulnerable households. In terms of this concept, 15.9% of all indebted households were vulnerable at the end of 2008. At the same time, the debt held by vulnerable households accounted for 14.3% of this sector's total debt. This was less than in previous years, with the proviso, however, that the tendency for this proportion to reduce visibly slowed down. A decline in banks' exposure to risky households corresponded relatively well with the dynamics of bad household loans in the observed period.

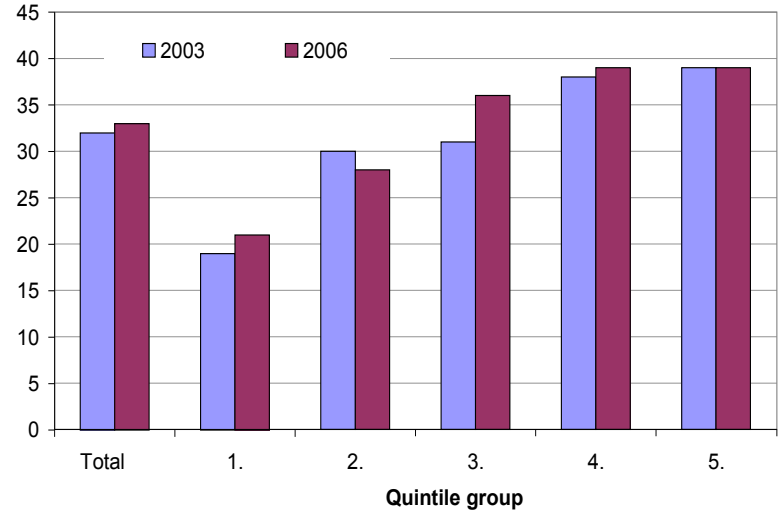
Although the percentage of indebted households in the lowest income groups is relatively small, relative indicators show that their debt and loan repayment burdens are significant. Nevertheless, this does not represent a significant risk for banks as the share of these households in total sector debt is relatively small. Relative indicators of household debt decrease as disposable income increases. The ultimate goal was to identify potential vulnerability sources that could turn into banking sector losses in case of shocks. Potentially vulnerable households were defined by using the concept of financial margin. The financial margin (FMi) is the income reserve available to a household after subtracting from annual household disposable income (HDI) the at-risk-of-poverty threshold (RPT) for a household a positive income reserve have no financial difficulties and regularly service their loans. The analysis showed that all indebted households in the lowest income bracket had a negative financial margin in the observed period. However, as these households, on average, account for less than 3% of total sector debt, banks' credit risk exposure arising from these loans gives no reason for concern. The share of vulnerable households in the total number of households decreases as disposable income per household member increases and is less than 1% in the highest income brackets.

The total percentage of vulnerable households at the sector level held steady at a relatively high level of around 18% in the reference period since 2006. Total debt held by potentially vulnerable households, which could not be regularly serviced in case of certain macroeconomic shocks, presents a potential loss for the banking sector (exposure at default, EAD). The greatest exposure at default arises from loans granted to households in the lowest income brackets while, as expected, it decreases with the rise in disposable income. In the three-year period under observation 2005-2007, on average, 15.3% of total household loans were risky according to this criterion. Notwithstanding a slight downward

trend in the share of risky loans in total loans, banks' exposure to credit risk stayed relatively high. A combination of criteria of the financial margin and the ratio of loan payment to household disposable income shows that on average 6.9% of indebted households were vulnerable in the same mentioned period. At the same time, their debt accounted, on average, for a significant 9.7% of total household debt.

The analysis showed that during the period of a rapid credit growth banks pursued prudent credit policies and granted most loans to young educated individuals whose disposable income had good growth prospects. The 2005-2007 growth in total household debt led to a slight increase in the share of vulnerable households in the total number of indebted households. However, the banks' exposure at default associated with loans granted to vulnerable households slightly decreased during the reference period though its level stayed relatively high. According to the data by HBS more in debt are higher quintile groups (Picture 1).

Picture 1: Household debt according to quintile groups



Source: Bejaković, Mastela Bužan, Urban (2008) using the Household Budget Survey.

Croatian research on household debt is scant and one rare piece is by Bejaković, Mastela Bužan and Urban (2008). According to data by the Household Budget Survey, the authors conclude that one third of households (about 470,000) have debt, and this proportion did not

change between the 2003 and 2006. However, the share of households with mortgage loans increased from 9 to 14% and the share of households with other loans decreased from 27 to 23%. Approximately 3% of households have housing and other loans. The average number of loans per household is 1.4 which has not changed in the observed period. Approximately 3% of households have three or more credits. The average amount of other loans (for households that had such loans) increased by 9%, from HRK 16.7 thousand (€ 2,227) per household in 2003 to HRK 19.5 thousand (€ 2,600) per household in 2006. The average amount of mortgage loans (for households that have had such a loan) is about HRK 30 thousand (€ 4,000) per household. The mentioned share varies from 11% for households with only members older than 64 years to 20% for the first quintile group and the group with the head of household aged 35-44 years. For about 15% of household sthe share of the disposable income is between 25 and 50% and for 3% of households that share exceeds 50% of the disposable income.

Using the Household Budget Survey, Sugawara and Zalduendo (2011) find that very few households in Croatia are at risk as a result of the shocks experienced over the past few years. They state that new vulnerable households represent about 2 percent of all households, 6 percent of households are with debt and 2–3 percent of aggregate banking system assets. The low levels of vulnerable households, as well as the low levels of debt incidence, suggest that household debt is unlikely to become a drag on aggregate economic activity and that financial stability risks remain manageable. The authors state that three findings are worth noting. First, only 1 out of 3 households have debt; i.e., 34 percent of all households have some type of debt, so debt is not as widespread as in advanced economies. Second, debt is more common among upper income quintiles; i.e., 14 percent of households in the lowest quintile have debt compared to 47 percent of households in the highest quintile. Finally, only 4.6 to 7.6 percent of all households are at risk before a shock. One serious problem should be underlined. Some 27–31 percent of households with debt, representing 8–9 of banking system assets, are vulnerable even before being subjected to an economic shock. Since non-performing loans were low before the global financial crisis, it can be argued that banks knew something about some of these households that is not captured by the household budget surveys. The calculations in their survey are primarily focused on the increased vulnerability of households as a result of shocks and

are likely to represent an upper bound to the financial stability risks faced by Croatia on account of households.

According to research carried out by GfK Hrvatska (2013), one in five citizens had financial losses and problems with debt repayment. The pains of debt, of those who felt them, are mostly connected with excessive personal consumption; one in three citizens says that his/her household is over-indebted, that is, has visible problems with debt repayment and timely payments, and that the living standard deteriorated. Around 10% of citizens hold that there is no solution for their over-indebtedness. As mentioned, household deleveraging continued in 2013, and in view of the expected, weak economic recovery, high structural unemployment and low optimism level, this trend is likely to continue in 2014. Although the regulation reduced interest burden in the short-term to make it easier for some households to repay their loans, due to the increased exposure to interest rate changes in the middle term, the vulnerability of this sector has increased additionally.

Regardless of the fact that there is not a clear and unambiguous definition of the concept, it is generally accepted that social exclusion is a multi-dimensional phenomenon which weakens the relationship between the individual and the community. This relationship can have an economic, political, socio-cultural and even spatial dimension. The more the number of dimensions an individual is exposed to, the more vulnerable they become. Exclusion is most commonly spotted in access to the labour market, the most essential social services, the realisation of human rights and the social net. Social exclusion is often linked to unemployment and poverty, but these are not its only causes. The modern concept of social exclusion clearly accepts that over-indebtedness is one of the most important reasons for social exclusion. Thus, it is necessary to analyse possible causes of over-indebtedness.

Causes of over-indebtedness

Several issues might be presented as causes for over-indebtedness, ranging from predatory lending and insufficient and/or weak consumer protection to irresponsible personal finance practices caused by widespread consumerism and/or a lack of financial literacy. Overall the largely privately-owned banking sector has remained generally sound, amid a rapid credit expansion there are still cases of predatory lending. Around 95% of banks are privately owned and the share

of foreign ownership has remained high at 91%. However, the people that are not eligible for credit in the official financial institutions are forced to use predatory lending.

Till relatively recently, Croatian citizens did not have a full supply of goods and services on the market because the former economy was relatively closed and with high tariffs that protected the domestic often obsolete and low quality production. Market economy brought a completely new array of products and services that most citizens have seen directly only for the first time and one should not be surprised that they want to have all benefits of the new age regardless of their available income. Having in mind the relatively easy access to bank loans under relatively favourable repayment period and low interest rate in the circumstances of strong GDP growth in the period 1999-2008 (with average rate of above 4%), it should be understandable that many citizens were taking credits that very soon they were not able to repay because GDP began to fall and unemployment increased.

One should not neglect the importance of financial literacy. It comprises understanding of fundamental elements of the financial world, including key financial concepts as well as the purpose and basic features of financial products. Financial literacy is viewed as an expanding set of knowledge, skills and strategies, which individuals build on throughout their life. It involves more than the reproduction of accumulated knowledge, although measuring prior financial knowledge is an important element in the assessment. This also includes risks that may threaten financial well-being as well as insurance policies and pensions. It can be assumed that Croatian citizens are beginning to acquire this knowledge and gain experience of the financial environment that they and their families inhabit and the main risks they face. It also involves a mobilisation of cognitive and practical skills, and other resources such as attitudes, motivation and values. Financial literacy is a combination of awareness, knowledge, skills, attitude and behaviour needed for making appropriate financial decisions needed for achieving final individual well-being. Financial literacy implicates individual responsibility for the successful management of revenues and expenditure.

It can be assumed that in the past financial literacy was not so important because there was relative economic independence of national states, most of the people had full-time employment usually with a

single employer; there was limited international mobility, there was a stable family unit nucleus with the traditional relationship between a man who earned and a woman who cared within the family obligations. Also, one should not neglect the importance of relatively simple financial products and high confidence in financial institutions. Although there were relatively only a few surveys of financial literacy in Croatia (World Bank, 2010a, 2010b; Vehovec, 2012) one can assess with high probability that it is unsatisfactory. Љkreblin Kirbiљ, Tomiж and Vehovec (2011) analysed pension literacy as a proxy for financial literacy and conclude that 21 percent of interviewed persons were completely pension illiterate while 32% were fully pension literate. Education on financial literacy must include as many residents, especially those younger, through a broad range of information channels. The expected result of financial literacy is to raise awareness and knowledge of the population about the need for individual planning and accountability for the standard of living throughout their lives. Financial literacy develops the consumer self-protection in case of unexpected events, unnecessary risks and financial fraud.

A common explanation focuses on the lack of adequate practices and tools for financial suppliers to obtain information from consumers and to assess their repayment capacity. The need for consumer protection arises from an imbalance of power, information and resources between consumers and their financial service providers, placing consumers at a disadvantage. Financial institutions know their products very well but individual retail consumers may find it difficult or costly to obtain sufficient information on their financial purchases. Information may also be too technical or complex for the average consumer to understand and assess.

Furthermore, there is the issue of the inadequate legal framework, suboptimal organisational structure and inappropriate implementation of regulation. The most common complaints regarding financial services in Croatia relate to both insufficient transparency regarding financial services and weak understanding of financial services by consumers. For the Ministry of Finance, common complaints relate to the ability of banks to unilaterally raise interest rates on consumer loans without the consumer being aware of how the banks set the rates. Among non-bank credit institutions, concerns have been raised over the excessively high interest rates charged by non-bank credit institutions on house-

holds with patchy credit histories. Consumers often complained that, "we didn't know what we signed." Consumers also expressed discomfort that officers of credit institutions had not explained the risk to the consumer of signing a financial contract, particularly if the consumer was a co-signer, or "co-debtor" of another person's credit.

One should not blame only the citizens for their financial recklessness because there is also a significant impact of economic trends and changes in the labour market. After a significant growth of economic activities in the period 1999 – 2007 with the average annual growth of gross domestic product (GDP) over 4 percent, in 2008 economic activity started decelerating as a consequence of the global economic crisis. Real GDP growth slowed to 2.1 percent while GDP growth was even negative in 2009 (-6 percent) and in 2010 (-1.2 percent). 2011 brought with it a zero growth rate of GDP, which points to the economic stagnation trends. Negative trends even accentuated in 2012 (GDP fall for 1.9 percent) with slight improvement in 2013 (GDP fall for 1.0 percent). Non-existence of the GDP growth rate had an adverse effect on the salaries of workers and on the situation in the labour market. In 2010 real net salaries decreased by 0.5 percent when compared to the ones in 2009, and in 2011 they decreased by 0.4 percent when compared to the ones in 2010. The situation did not improve in the following years, so in 2013, the index of change in average monthly paid off real net earnings was 98.5. During the crisis period since 2008 Croatia has lost almost 200 thousand jobs which is a significant number for a small country of 4.3 million inhabitants and 1.1 million persons in paid employment. Due to adverse labour market trends, the number of unemployed increased from 236 thousand in 2008 to 345 thousand in 2013, while according to the Labour Force Survey, the unemployment rate simultaneously increased from 8.3 to 17.1 percent.

Realised activities for improvement

The Review by the World Bank (2010) has found that the quality of consumer protection in financial services in Croatia has improved in recent years. In particular, the approval of the 2007 Consumer Protection Act incorporated many of the EU Directives related to financial consumer protection. In addition, the National Council on Consumer Protection was established in 2008 to advise the Government on its national strategy for consumer protection in the coming years.

One of the important factors that has a direct influence on the level of indebtedness is the existence or lack of the credit registry. In an economy in which the value of the credit information index is null, because a country does not have an adequate and efficient credit bureau, the potential for over-indebtedness is large. Users have the possibility to ask for credit lines from a larger number of creditors who, in the absence of a credit bureau are not able to assess the lending risk. This can lead to an over-indebted population and increase loan defaults. Simovic et al (2011) believe that Croatia is embedded in the mentioned situation because the bureau started effective operations in 2007 by which time the level of indebtedness of the population had reached a high level.

It was in autumn 2003 and in 2004 that twenty Croatian banks signed a contract for the founding of the Croatian Registry of Credit Obligations (HROK). After obtaining approval of the Croatian National Bank in January 2005, HROK was registered as an enterprise for business services. Banks with greater assets own shares of 15 and 11%, while those with lower assets own 6 and 1%. In the summer of 2006 banks signed an agreement on the use of HROK and began sending data to the register. Since May 2007 they began to use the credit reports for approval of new loans. HROK is an economic entity with the purpose of performing activities as a credit bureau. It has a credit bureau's system for collecting, processing and exchange of information on all credit obligations of clients and timeliness of their settlement. The registry data are processed on all borrowing customers of banks and building societies, whether the data are on normal repayment of the loan or disorderly. HROK is a legal term applied to an agency for collection of personal information and thereby identified as a personal data filing system with all the rights and obligations arising from the legal stipulation. Of regulations that define this area three laws are particularly important - the Law on Banks, the Law on Personal Data Protection and the Law on Consumer Protection.

The procedure of use includes strict rules. The basic rule is that the user data from the Register can only be used once they have the written consent of the client. If the client refuses to sign the agreement, no one has the right to make a request to register and get their data. It is important to emphasize that everything related to borrowing money can be included in a credit report. If the client duly meets their con-

tractual obligations, it will be clearly visible. Clearly visible will also be situations where a client, for example, continuously exceeded by its impermissible current account or annuity does not return the loan. Thus, HROK provides an objective review of financial responsibility, and users interpret the data within their business policies.

The Register, along with financial data on cash debits, holds personal information required for client identification and communication (e.g. name, identification number, PIN, address, telephone number). These data can indeed form in the credit report only after the client has given written consent. There are unique rules that are valid for all users of the Registry. The basic rule is that the HROK database can only be entered with information about borrowing money and not about savings accounts. Registry users include banks, housing savings companies, leasing companies in the group of companies, credit card companies and consumer-lending operations, subject to shareholders' relationship with the founders of a HROK. The credit report contains information requested and received on financial commitments, the regularity of repayment, collateral and other credit related to the relationship.

Croatia does not have a separate consumer protection agency, but has the Consumer Protection Department of the Ministry of Economy, Labour and Entrepreneurship (later Ministry of Economy) that prepares the national plan and strategy on consumer protection for all fields, including financial services. The Ministry established the Central Consumer Protection Information System (CISZP), as a central register of complaints related to consumer services and programs. The Ministry also funds four regional Consumer Counselling Centres run by non-government organizations. (Activities on the line bodies for consumer protection are available in Croatian on http://potrosac.mingorp.hr/hr/potrosac/lista.php?id=10210).

With the aim of improving the situation, the magazine World of Insurance (*Svijet Osiguranja*) and the association Living in the Plus (Život u plusu), under the auspices of the Croatian Insurance Office and the Association of Insurers with the Croatian Chamber of Economy, held a round table entitled *Financial Literacy in Croatia* on 7 March 2012 concerning the topic: "How to maintain financial stability of Croatian families." Croatian experts representing the academic community, the Croatian Insurance Office, insurance companies, trade unions, various

civil associations, associations for consumer protection, expressed their views and measures for improving the culture of saving and not spending, and the awareness of the importance of personal finances management. The meeting had a high profile in the public media.

The Croatian Banking Association (HUB) and its member banks have long warned of the current account overdraft as one of the most expensive types of loans. It should only be used for bridging monthly household budget gaps until the salary or another income is paid into the client's account. The financial literacy of citizens seems to be rather poor, as citizens are inadequately informed about the rights and obligations in dealing with banks and other financial institutions. Within its Personal Finance Management project entitled "How to Harmonize Income and Costs?" (free of charge workshops for citizens launched in 2006 and still available on its website www.hub.hr), the HUB and its member banks have informed the participants that it is generally more favourable to take on some other type of credit and to repay a "persistent" overdraft. In other words, the swap of current account overdrafts for credit already exists, but, for the above mentioned reasons, citizens are not inclined to this option.

With a view to improve the indebtedness of citizens, during 2009-2010 within the project *Social Inclusion Partnership* of the Progress Project of the European Commission, the *Analysis of Personal Over-Indebtedness and Manners of its Prevention* was prepared. Multiple workshops for citizens were held on the topic. The activities in the Project related to social exclusion and indebtedness of population are linked with:

- Preparation of analysis of local and international positive experiences particularly on prevention of over-indebtedness according Open Method of Coordination;
- Proposing simple, user-friendly and understandable guides on how to manage personal finances and avoid over-indebtedness;
- Increasing knowledge on financial inclusion by all effective methods – surveys, studies, analysis, data collection, etc.; the aim is to increase and format available data and develop the use of indicators to monitor financial exclusion, provide regular assessment of financial inclusion based on available indicators, identify and evaluate policy measures with a positive impact on financial in-

clusion due to the over-indebtedness and highlight the impact of financial inclusion policies on wider social inclusion;

- Serving as a forum and promoting mutual learning; the aim is to increase mutual learning on financial inclusion policies, strengthen the participation of all key actors in that process and stimulate debate on specific issues which improve the general understanding of the context and the constraints of stakeholders;
- Ensuring knowledge dissemination and financial inclusion promotion; the aim is to increase policymakers' awareness and information on policy measures to promote financial inclusion and to develop and promote national, regional and local strategies;
- Organisation of various workshops, round tables and seminars on indebtedness of households, as well as counselling services on financial planning and financial management.

As an important step *The Guide for Palliating and prevention of over-indebtedness of the population* was prepared and is available on the Project's and Institute of Public Finance web pages. The project partners have had many interviews for daily and weekly newspapers as well as for various TV channels regarding the mentioned issue.

An easily understandable book *Indebtedness: Situation and Problems* (in Croatian "Prezaduženost: stanje i problemi") has been prepared. It was published in 300 copies, given to interested persons from the general audience and put on the Project web page available for download. The book contains explanations that in spite of the increased importance and widespread existence of over-indebtedness, there is still no satisfactory definition of the phenomenon. According to the most accepted definition, an over-indebted person is the one who is late with his or her payments on the structural base or has increased his or her vulnerability and therefore possibility of becoming indebted. Due to the lack of a generally accepted definition of over-indebtedness, it is almost impossible to make any reliably estimates of the real number of indebted persons. Ten years ago, it was estimated that in the EU there were around 25-30 million over-indebted persons, while an additional 70 million were on the brink of over-indebtedness. Section 2 provides a theoretical framework of the determinants of over-indebtedness. The meaning and measures of over-indebtedness are also explained. From the point of economic policy, there are three different levels of concern: the macro level - macroeconomic risks linked with the fall

in consumer demand; the level of the financial sector – the risk of financial instability connected with the impossibility of households to service their debts; and the individual level – the risk of the over-indebted household. From the point of social exclusion the major concern is with the last category. Most usually used in measuring over-indebtedness is the *rate of over-indebtedness*, defined as a percentage of debt against available income. However, there are problems with the definition of income and also with the time period that should be included in the measurement. Additional indices that could be used are, first, the data on the part of household that pay their domestic bills with delay, second, the burden of debt, and third, the number of credits that are repaid. None of the indices are perfect and cannot embrace all aspects and forms of over-indebtedness, but using more indices could lead to a sounder conclusion that an observed household is particularly burdened with and vulnerable to over-indebtedness. In Section 3 the attention is oriented towards the consequences of over-indebtedness on the health of people affected and the costs to the society. The fourth part of the text explains the situation and trends of over-indebtedness. Many countries try to prevent in various ways the incidence of over-indebtedness as well as to aid over-indebted people. A common characteristic of EU member states is the increase of household over-indebtedness. To avoid the situation where everybody loses (creditors their resources, and debtors often their adequate social position followed by social exclusion), Western societies have developed counselling services for solving over-indebtedness and a system of debt redemption which enables heavily indebted persons to gain a *new start* in the society and in the economic life. Section 5 presents mechanisms for the over-indebtedness prevention in the following countries: France (as an example of a corporate country), Ireland (as a neoliberal country) and Sweden (as a Nordic welfare country). The section also explains the situation in the Netherlands. One of the post-transitional countries with positive outcomes is Poland, which has been quite active in improving its situation. Section 6 is dedicated to Croatia. Section 7 includes the activities of social partners; legal changes; the introduction of a Credit Registry in Croatia and programmes of financial counselling, guidance and information. Section 8 is *The Citizen's Guide on How to Avoid and Lessen Over-indebtedness*.

The guide and the book finish with conclusions, where it is underlined that an over-indebted person very soon arrives at a condition

without any material assets and/or psychosocial resources. To preclude adverse consequences in the form of poverty and social exclusion as a key strategy for the prevention of over-indebtedness the need to improve accessibility of financial services and enhance financial education of population is proposed.

During various workshops, round tables and seminars adequate attention is given to the issue of indebtedness of households. For example, over-indebtedness was a part of the agenda on the lecturing *Friday on 5* as well as during discussions with students at two round tables at the Faculty of Economics in Zagreb. Particular attention is given to the topic of over-indebtedness in mass media, daily and weekly journals as well as on Public Television, where various experts and Project partners participated in different discussions and daily shows. One could conclude that due to the mentioned Guide, book and activities of Project stakeholders there should be a significant improvement of knowledge about the personal possibilities and obligation to avoid over-indebtedness.

Despite the mentioned movements of accelerated deleveraging, the Minister of Finance announced the Government's intention to impose a limit on citizens' borrowing in the form of excessive current account overdrafts. He emphasized that these measures would be to the citizens' benefit, as they would have to transform excessive overdrafts to ordinary lower-interest-rate consumer loans within one year. From a prudent point of view, such a proposal makes sense, because an overdraft in the amount of three monthly wages can hardly be considered as overdraft, but rather as a consumer credit at the highest interest rate. A client is gradually lured into a trap of taking overdrafts with an end-of period debt that he/she may not be able to repay. However, this facility is very popular with both banks, which consider it as a profitable product, and consumers, who are accustomed to such simple, although expensive loans, except in cases when their unauthorised overdrafts become so high that they end up on the blacklist.

The current account overdraft is a banking facility offering flexibility in the use of one's own financial resources without unnecessary paperwork. Overdraft users do not have to strictly adjust their current account inflows and outflows in the short run and are spared from lengthy loan obtaining procedures. The problems with loans are not only the complicated, expensive and lengthy granting procedures, but also the fact that

they must be repaid in regular instalments within a determined period. Current account overdrafts represent a relatively simple and the most accessible way of citizen "financing", enabling them to "automatically" borrow a certain amount, which they would probably not do so easily if they had to file a loan application. Moreover, in an environment of economic and labour market recession, the use of payment cards and bank overdraft facilities enables citizens to balance their monthly household budgets, with more or less difficulty and at more or less self-sacrifice. In contrast to overdrafts that can be repaid as early as the next month or at the client's convenience, an early loan repayment involves the filing of an appropriate application and payment of loan prepayment charges, while in a month or two everything may start anew.

Furthermore, lower-interest-rate loans might lead to further deleveraging and reduction of disposable income within the maturity of such loans after a year or two, and to an increase in disposable income at the end of that period. Everything depends on products to be offered by banks, because they would obviously replace the current account overdraft facility by a similar product. The possible mandatory conversion of current account overdrafts into loans will almost certainly cause no material changes, as general-purpose cash loans are also expensive and mean considerably more paper work and costs (notary public and other fees) for clients.

Now, if citizens are obliged to reduce their overdrafts by two monthly salaries within a one-year period, they must somehow provide the necessary funds (which they actually do not have). They probably have three options to do so:

They can take on a general-purpose loan (but only if they are creditworthy) in order to pay back the overdraft, and thus again incur debt. So, there is little benefit for them, except in the form of slightly lower interest rates (by 1-3 percentage points in nominal terms), but more paperwork, as aforementioned;

They will have to repay the overdrafts from regular income, which again means more belt-tightening. This will, of course, result in spending cuts and/or less VAT revenues in the state treasury. Due to reduced bank profits, government revenues from corporate income tax will also shrink.

There are also citizens who are neither capable of repaying their overdrafts nor creditworthy. Banks can reschedule their debt, extend

the debt repayment periods, reduce their monthly instalments or annuities, etc. Another possibility is to attempt to collect debt or seize property. Both models imply higher costs for banks in the form of provisions and value adjustments. These costs affect the banks' income statements by reducing profit and, consequently, influencing budget revenue. Minor banks, balancing on the edge of capital adequacy might get into difficulties, which could trigger a need for recapitalisation, merger or even bankruptcy of such banks (the latter being less likely). Finally, credit-unworthy citizens who are bound to reduce their current account overdrafts would be forced to seek illegal loans on the black financial markets and thus contribute to negative experiences and sad stories of victims of loansharking.

The Ministry of Justice considered several models of the personal bankruptcy, but agreed on the fact that the borrower will not have to pay the costs of bankruptcy. Who would bear the cost, is not yet known. A long-awaited Law on Personal Bankruptcy could be finished by summer 2014. When a citizen would be allowed to declare personal bankruptcy, or to enter into bankruptcy, he or she would have time to pay off the debt and continue to live in a somewhat normal way. The basic idea behind the Law is to assign to a person in a personal bankruptcy a bankruptcy trustee who would have complete control over all of his or her expenses, income and assets. Made to debt repayment plan that would last four to six years (the working group has not yet agreed on a precise term), would be negotiated on a possible amnesty portion of the debt, and when the person passes these years of living with a tightened belt, debts would just have to be forgotten so that the person could continue to live normally.

Conclusions and recommendations

Household indebtedness is a serious private and social problem, especially from the perspective of social exclusion. Should over-indebted households not be able to meet their liabilities due to altered macroeconomic conditions (e.g. an interest rate hike, unemployment growth or diminishing income), this might lead to a financial crisis.

According to the regulations and achieved risk management standards, banks are expected to be able to assess their credit risks. Clients should have the freedom and ability to assess the level of their needs and the ways of financing them. So far, clients have been in the position to determine the amounts of their authorised overdrafts, by requesting the bank to reduce these amounts to a desired level. There are a number of reasons why this banking facility should be regulated. However, reducing the authorised overdraft directly impinges on the freedom of citizens to take economic decisions in a market economy. This only contributes to the already strong paternalism in the Croatian society, where the government "knows what's better for its citizens than the citizens themselves".

If the purpose of the proposed changes is the citizens' welfare, there are no obvious reasons why they should be legally prescribed, as this threatens the clients' freedom to contract and choose banking products, and affects diversity of supply and, consequently, the business policies of banks. In an extreme case, the next move in this direction might be that those who are "in the unauthorised red" for several consecutive months could be deprived of legal capacity on grounds that they are unable to manage their own funds and would be assigned tutors by the state to manage their salaries on their behalf.

Despite the undoubtedly good intentions of the proposer, the said decision is unlikely to bring any substantial benefit, at least in the short run. Indeed, it is more likely to cause harm. In the long run, of course, over-indebtedness should be reduced. To this effect, by improving financial literacy of citizens, stepping up regulation and encouraging market competition among banks, the quality and diversity of credit facilities can be increased and interest rates successfully reduced. This would facilitate the access to and lower the prices of financial services, especially loans, for citizens, enabling them to freely choose a combination of banking services that would be the most favourable, cost-effective and sustainable in the long run.

There is a need to develop and/or improve consumer protection measures. Of particular importance are disclosure guidelines for product terms and pricing. Furthermore, there is a need to promote further financial literacy training so that individuals can make better informed decisions about the products and services they use. Any financial education and literacy program will need to cover three areas: (1) consumer awareness of the risks and rewards of various financial products, including possible financial scams; (2) consumer education in preparing personal and household budgets and making long-term financial decisions; and (3) surveys of financial literacy to understand which parts of the population may be particularly vulnerable to predatory lending, financial scams and weaknesses in budgeting and planning.

A well-designed programme to strengthen consumer protection and financial literacy can help reduce the imbalances of power and information between consumers and financial institutions. There is an obvious need to ensure an efficient flow of information provided by financial suppliers to consumers. In that way clients are empowered to make informed financial decisions that would meet their needs and benefit them in the long run. In Croatia, consumers are not fully aware of all applicable administrative charges and/or were not warned about their responsibilities as co-debtors and ended up having to pay the debt of friends or relatives. Furthermore, there are no consumer bankruptcy procedures which provide for an exemption from residual debt.

Dispute resolution is an area of weakness in Croatia. Consumers can apply to any of nine different institutions and yet none is responsible for finding a solution to the consumers' difficulties. The Croatian Association of Banks plans to use the mediation centre run by the Croatian Employers' Association but it is not clear if this will be an effective solution. Consideration should be given to a comprehensive approach. Financial institutions should be obliged to establish a designated complaints department (or unit) within each institution. Codes of conduct could also provide guidance to financial institutions in dealing with customer complaints.

The Government and its bodies can:

- Help in organising education professionals to provide free of charge, independent and reliable services on financial planning and providing advices to help citizens who have fallen into financial problems and who do not possess enough knowledge to cope with the complex range of financial products;
- Organise and conduct programmes of financial literacy for citizens and a public campaign to raise awareness about the dangers of reckless borrowing;
- Work systematically and/or help with consumer education and enforcement actions to improve public awareness - many debtors manage their financial assets with insufficient attention and easily find themselves again into financial difficulties;
- To organise and/or assist in organising the provision of independent, free and confidential counselling services to target groups that have immediate difficulty repaying a debt;

- Consider the possibility of introducing the subject of personal finances management in the curriculum of primary and secondary schools;
- Assist target groups in developing the knowledge and skills necessary to exit and avoid re-entry into insolvency, as well as knowledge of effective ways of solving debt problems;
- Work in partnership with other stakeholders in organising the provision of integrated support system that will be available to customers in accordance with their needs;
- Encourage the involvement of target groups in the planning and implementation of activities of advisory bodies to ensure effective fulfilment of their needs;
- Ensure that the target groups have equal access to and availability of advisory bodies, regardless of geographic location;

Nobody is pleased to be in an adverse financial situation, but delaying actions will not alleviate the problems. There is no general recipe for solving problems, but there are rules that might improve the situation. The first rule is to live in accordance with one's material resources and possibilities. A careful management of own public finances - like diet for weight loss - works usually only for a limited time. However, financial health - just like physical fitness - requires constant attention, and as with excessive food intake, it is necessary to know and correct personal nutritive and financial habits.

Instead of superfluous contemplation of finding the causes of excessive consumption, power and attention should be directed to exiting from the difficult situation. Indebted people often feel isolated, which can easily lead to depression and disruption of mental health. It is quite obvious that many people do not know what or whom to ask for advice and help because they are not informed. Education and information, and an active attitude in solving this problem are the most important factors that should be taken as early as possible in order to master the knowledge and skills in management of personal finances and avoidance of over-indebtedness.

Bibliography

Bejaković, Predrag; Mastela Bužan, Vesna; Urban, Ivica (2008) *Zaduženost građana hrvatske: stanje, problemi i mjere* (Over-indebtedness of Croatian Citizens: Situation, Problems

and Measures), Zagreb: Ministry of Health and Social Welfare.

Bejaković, Predrag (2013) Can Individual Over-indebtedness Be Prevented by Limiting Current Account Overdrafts in Croatia? *Press Releases Number 48*, Zagreb; Institute of Public Finance.

Croatian National Bank (2010) *Financial stability no.6* Zagreb – Croatian National Bank available at http://www.hnb.hr/publikac/financijskastabilnost/h-fs-6-2011.pdf

Croatian National Bank (2011) *Financial Stability no. 8*, Zagreb: Croatian National Bank. Available at http://www.hnb.hr/publikac/financijska%20stabilnost/h-fs-8-2012.pdf

Croatian National Bank (2013) *Financial Stability*, no. 10 Zagreb: Croatian National Bank. Available at http://www.hnb.hr/publikac/financijska%20stabilnost/h-fs-10-2013.pdf

Economic Institute Zagreb and Croatian National Bank (2009) *Households' Credit Risk Analysis based on the „Survey on household consumption"*. Zagreb: Economic Institute Zagreb and Croatian National Bank.

GfK Croatia (2013) *Novosti/Press/Objave/Objave za medije*, available at http://www.gfk.hr/public_relations/press/press_articles/009799/index.hr.print.html

Republic of Croatia, Ministry of Health and Social Welfare (2011) *Report on the Implementation of the Joint Inclusion Memorandum (JIM) of the Republic of Croatia in 2010,* Zagreb: Ministry of Health and Social Welfare

Republic of Croatia, Ministry of Social Policy and Youth (2012) *Report on the Implementation of the Joint Inclusion Memorandum (JIM) of the Republic of Croatia in 2011*, Zagreb: Ministry of Social Policy and Youth

Simovic; Vladimir; Vaskovic, Vojkan; Rankovic, Marko; Malinic, Slobodan (2011) The impact of the functional characteristics of a credit bureau on the level of indebtedness per capita: Evidence from East European countries, *Baltic Journal of Economics*, 11(2): pp. 101-130.

Sugawara, Naotaka; Zalduendo, Juan (2011) Stress-Testing Croatian Households with Debt - Implications for Financial Stability, *Policy Research Working Paper 5906*, Washington DC. The World Bank Europe and Central Asia Region Office of the Chief Economist, available on http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5906

Škreblin Kirbiš Ivona; Tomić Iva; Vehovec Maja (2011) Mirovinska pismenost i štednja za treću životnu dob (Pension Literacy And Savings For The Third Age), Revija za socijalnu politiku 18 (2), pp. 127-148, available on http://www.rsp.hr/ojs2/index.php/rsp/article/view/1004/1149

Vehovec Maja (2012) Financijska i mirovinska pismenost: međunarodna iskustva i prijedlozi za Hrvatsku (*Financial and Pension Literacy: International Experiences and Proposals for Croatia*), *Privredna kretanja i ekonomska politika*, 21 (129): pp. 65-84.

World Bank (2010a) *Croatia - Diagnostic review of consumer protection and financial literacy*. Vol. 1 of *Croatia - Diagnostic review of consumer protection and financial literacy*. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/2010/02/16376817/croatia-diagnostic-review-consumer-protection-financial-literacy-vol-1-2

World Bank (2010b) *Croatia - Diagnostic review of consumer protection and financial literacy*. Vol. 2 of *Croatia - Diagnostic review of consumer protection and financial literacy*. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/2010/02/16376854/croatia-diagnostic-review-consumer-protection-financial-literacy-vol-2-2