





FINANCIALISATION, ECONOMY, SOCIETY AND SUSTAINABLE DEVELOPMENT

Studies in Financial Systems

No 31

Financialisation and the Financial and Economic

Crises: The Case of Hungary

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ISSN: 2052-8027





FINANCIALISATION AND THE FINANCIAL AND ECONOMIC CRISES: THE CASE OF

HUNGARY

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Abstract: In this study we investigate the impact of Financialisation on the real economy in Hungary. We first provide a descriptive analysis and an overview of the empirical evidence concerning the main channels of Financialisation. Then we investigate the role of Financialisation in the recession in Hungary following the financial crisis.

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Acknowledgments:

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 266800.

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Introduction

In this study we investigate the impact of Financialisation on the real economy in Hungary. In the first chapter, we discuss long-run macroeconomic developments, such as economic growth and its components. In this part we show that, although the whole era of financialisation in the Hungarian development path is not easy to grasp using the usual concepts of macroeconomic regimes (see: Hein 2012), the relatively eventless nearly 10 years long period preceding the financial crisis can be best classified as a domestic demand-led growth regime. In the second part, we discuss the evolution of income inequality in Hungary. We establish that, owing to the economic transformation and the protracted financial crisis, inequalities increased. Nevertheless, there was a short period prior to the crisis, in which inequalities decreased because of the shocks caused by wage policy. In chapter three we show that in the era of financialisation, the capital structure of non-financial corporations changed. The share of external sources increased among liabilities and the ratio of financial assets of non-financial corporations to GDP increased significantly. In chapter four, we demonstrate that, although the era of financialisation resulted in increasing both income inequality and household debt, the main driving force behind the latter was not the consumption smoothing behaviour of households, but their desire to attain the long craved western standard of living. We also argue that while poverty trends in Hungary give some cause for alarm, this process does not affect the variables of financialisation because of the lower penetration of banking services. Finally, in the last two chapters we overview the evolution of the current account balance and the influence of the financial crisis on the Hungarian economy, respectively. We show that the long-lasting recession was not caused by problems in the financial sector; instead, it was the result of the extreme foreign exchange exposure, the large external public and private debt as well as other structural and regulatory problems in the real sector.





1 Long Term Growth Potential and its Determinants

In this part we deal with the main determinants of economic growth in Hungary during the post transition period. Using descriptive statistics, we seek to determine the main demand aggregates and their contributions to real GDP in order to identify which macroeconomic regime describes best the Hungarian economy during the period in question.

The transition from a centrally planned to a market based economy in the early 1990s caused trade with neighbouring socialist countries to collapse and output to decrease drastically. Between 1990 and 1993 entire branches of industries went bankrupt, the most painful of which was the collapse of heavy industry, mining, agriculture and food processing. As a result, the unemployment rate peaked in 1993 and the centre of gravity of the economic structure began to shift towards the service sector, but growth did not get under way until the consolidation measures of the so called Bokros package, named after Minister of Finance, Lajos Bokros. Between 1993 and 1995, although the technological modernization of the economy was already advancing, exports did not yet increase significantly and both public finances and the balance of payments were characterized by significant imbalances. This situation was only resolved by the aforementioned financial consolidation package on March 12, 1995. The package was a series of austerity measures that decreased, among others, social expenditures and real wages in the public sector, devaluated the exchange rate, and introduced the crawling peg exchange rate system. Following the shock therapy, output began to grow in 1997 (see: Figure 3), the main driving force being the growth of exports and foreign direct investment. By the mid-1990s the consolidation of the banking system had come to an end and foreign banks started to finance the corporate sector. Figure 14, 16 and 37 show the evolution of the credit stock in the non-financial corporate sector. This turnaround also accelerated the modernization of production and stabilized the growth rate at about 4 per cent on average (see Figure 3) until 2006, when growth came to a halt. By the end of the 1990s, foreign banks turned to





households in an effort to dismantle the monopoly of OTP¹ and enhance competition in this segment. This latter development, together with the introduction of subsidized housing loans, boosted household consumption and loan-financed housing expenditures (see Figure 6, 23 and 24), which also contributed significantly to growth.² Therefore, we can conclude that the development of the Hungarian economy between 1995 and 2006 is an example for the consumption enhancing effect of financial liberalization. The main reason for the end to growth in 2006 was the far too optimistic wage arrangements in both the competitive and the public sector, which hurt the competitiveness of the corporate sector.

During this period international organizations issued warnings that the wage increase in Hungary was faster than justified by the increase in productivity (see: OECD (2004)), thus reducing competitiveness. The increase in wages at the beginning of the 2000s was fuelled by the increase in the statutory minimum wage in 2000 and 2001³ and the 50 percent wage increase in the public sector at the end of 2002. The fast wage increase at this time is often mentioned as the main reason behind the slowdown in economic growth well before the financial crisis. The decline in competitiveness is demonstrated by the steep increase in real-effective exchange rate, as can be seen in Figure 2. According to this chart, the realeffective exchange rate increased by 34.6 per cent in Hungary between 1999 and 2004, while the same numbers were 28.7 and 16.7 in the Czech Republic and Slovakia, respectively, and negative in Poland. The main reason behind this deterioration in competitiveness was wage increase. As Figure 1 shows, the increase in real wages in the same period was 5.9 per cent on average, while GDP growth/worker was 3.7 per cent on average. Moreover, in the three years before 2003 the growth of wages was 9.7 (!) on average. As for the whole period between 1997 and 2006, the increase in real wages exceeded the increase of per worker GDP by 2 per cent on average (see Figures 1 and 3).

¹ OTP is the largest bank by assets in Hungary, and has dominated the household segment up to the present day (Szikszai, 2012).

² By 2005 loan interest subsidies were repealed but the private sector's appetite for loans continued to be satisfied by the newly introduced foreign exchange denominated loans as well as by intense risk based competition among banks.

³ While the gross earnings of full-time minimum wage earners were 28 per cent of average earnings in Hungary in 2000, the same number was 42 percent in 2002. The OECD averages were 36 and 37 per cent in 2000 and 2002, respectively.





By 2006, the sources of growth, that is, privatization and capital inflow, had depleted, and the severe imbalances in the public sector had rendered correction unavoidable, which also contributed to a further slowdown of growth well before the onset of the financial crisis. After the government's repealing of subsidized housing loans, banks embarked on a risk based competition, which increased further the external financing need of the economy. The deterioration of the financial savings of households and the government (see Figure 6) caused the country to be vulnerable to exchange rate shocks, which, through the increase of risk premiums and long term rates of return set back the economy prior to the financial crisis⁴.

In sum, having investigated the sources of growth in the last two and a half decades, the main driving forces behind growth in the short and intensive growth period between 1996 and 2006 were a massive inflow of foreign direct investment, household consumption and residential investment. It seems difficult to squeeze the development path of the Hungarian economy over the entire period into any of the usual macroeconomic regime categories, but the category that best describes the growth path between 1997 and 2006 is consumption-and, partly, investment-led growth regime coupled with increasing external indebtedness and a current account deficit. However, since households' financial savings stayed positive for most of the period (see Figure 6) and the contribution of the foreign sector to growth was positive after 2004 (see Figure 5) the long-run development pattern fits neither the concept of debt-led consumption nor that of the domestic demand-led macroeconomic regime perfectly. Notwithstanding, if we confine our investigation to the pre-2004 period, the regime can be best characterized by domestic demand-led growth.

Finally, growth slowed drastically in Hungary not because of the problems of the financial sector. The reason, among others, was the deteriorating competitiveness of the corporate

⁴ By 2009, the household and the corporate sector together had accumulated an open foreign exchange position that amounted to 43.5 per cent of GDP (MNB, 2014), but prior to 2008 this was concealed by the stability of the Forint exchange rate.





sector as a consequence of the far too optimistic wage policy in both the private and the public sector as well as other structural and regulatory problems in the real sector.









Source:



Figure 2: Change of real effective exchange rates for selected countries (percent)

Source: Eurostat









Source: AMECO





Source: Eurostat







Figure 5: Contributions of demand aggregates to GDP growth

Source: AMECO



Figure 6: Net financial saving by sector (percentage of GDP)

Source: MNB





2 The evolution of income distribution in Hungary

In this part we investigate whether and to what extent the process of Financialisation affected income distribution in Hungary. In the last two decades there has been intensive research on the increase in inequality in the developed world. This research established that income inequality has increased since the second half of the 1970s in the US and UK and moderately in most of the OECD countries (OECD, 2008). It has also been shown that one of the consequences of Financialisation has been the increase in income inequality, which, according to the theory of Financialisation, may cause the financial system to become fragile and may slow down economic growth. Although, income concentration can be thought of as one of the channels of Financialisation, it is important to note that the debate about income inequality is not directly linked with the literature of Financialisation. There exists another pool of literature which, instead of emphasizing the role of financial developments, considers income concentration to be a fundamental and primary phenomenon. These theories state that enhanced income concentration has an adverse effect on growth through financial, economic and political channels and leads to macroeconomic instability, which, of course, does not contradict the findings of the literature of Financialisation (see, e.g., Rajan, 2010; Vandemoortele, 2009; Kumhof-Rancière, 2010 and 2011; Pinkasz, 2012). In this study, we provide a descriptive analysis and an overview of the empirical evidence concerning the main channels of Financialisation. Furthermore, we investigate the role of Financialisation in the economic decline in Hungary following the financial crisis.

2.1. Personal Income Distribution

In this section we investigate the evolution of personal income distribution in Hungary. Before the transition, like most socialist economies, Hungary had been characterized by a relatively low level of inequality. In Hungary, TÁRKI and KSH (Central Statistical Office) have





been collecting data on household incomes since the second half of the 1960s.⁵ Research into the topic of income inequality started at the beginning of the 1990s (see, e.g., Kovács, 2011; Éltető-Havasi, 2009; Kopasz et al., 2013; Szívós-Tóth, 2013). Szívós-Tóth (2013) and Tóth (2003) point out that income inequality began to increase in 1982 and continued to do so up to 1996. Then it stagnated between 1996 and 2003, and later decreased in the period of 2003-2007. Before discussing the reasons behind the evolution of income inequality let us first recap the evolution of the main indicators.

The most frequently applied indicator of income equality is the Gini index. Figure 7 shows the evolution of the Gini index in Hungary with respect to post-tax and post-transfers disposable income. As can be seen, there has been only a slight growth in inequality according to this measure. In our view, the lack of a clear tendency may be explained by the small size of the sample, which, therefore, can be biased in the tails.

Figure 8 tells a bit more about the reasons behind the evolution of inequality. While, at the beginning of the transition period, the P90/P50⁶ and P50/P10 ratios increased at about the same pace, the P90/P10 ratio increased a bit faster. The reason being that previous P90/P50 and P50/P10 ratios increased as a consequence of the enrichment of winners of the transition and the impoverishment of the low-income groups, respectively. The increase of the P90/P10 was, in turn, caused by the simultaneous effect of these two processes. The decrease of the P90/P10 ratio at the beginning of the 2000s was the result of the optimistic wage policy which characterized both the private and the public sector during this period and the main beneficiaries of which were medium and lower income groups. Finally, Szívós-Tóth (2013) suggest that while the upper income decile has succeeded to increase its share in total income in recent years, the financial crisis and the 'Great Recession' affected mainly the bottom of the income distribution ladder. The share

⁵ The household statistics of KSH covers about 0.26 per cent of the total sample.

⁶ The P90/P50 ratio is the ratio of the upper bound value of the ninth decile to that of the fifth decile (median income).





of the bottom decile in total income decreased from 3.1 per cent in 2009 to 2.5 per cent in 2012 (Szívós-Tóth, 2013).

The main reasons for the increase in income inequality following the financial crisis were the tax and wage policies of the new government after 2010. Both the introduction of the flat tax system and the absence of nominal pay raises following the financial crisis hit lower income groups hard. At the same time, the introduction of the flat tax system increased the nominal income of the income groups above average income.

In sum, the Gini-index, the P90/P10, the P90/P50 and the P50/P10 ratios all show only a slight increase in inequality in the entire observed period. On the other hand, except for the unusual and unfounded wage increase in the beginning of the 2000s, the evolution of inequality in Hungary seemingly supports the theory of the Financialisation. However, in our view, structural transformation and the accommodation of the economy to external shocks also give a sufficient explanation for the increase in inequality both during the last decade of the socialist era and in the post transition period. As for the decade before the transition, the appearance of different forms of market based economic activity gave way to the emergence of a wealthy social group, thus increasing income inequality significantly. Later, in the prolonged depression periods such as the transformation crisis and the permanent slowdown and stagnation following the financial crisis, inequality increased further, in accordance with the experience of other countries and the theory. However, in the short period between 2000 and 2007, which was relatively undisturbed by such shocks, the unusually optimistic wage policy of the first half of 2000s resulted in a decrease in income inequality, which appears to contradict the theory of Financialisation.

It should be noted that, due to the relatively small sample, the presented data contain strong biases in the tails. In order to get rid of these biases, it is worth investigating inequality through tax returns. Since income tax returns are not publicly available, we can





only rely on Kovács (2011), which discusses developments in the period of 1996-2009.⁷ Figure 9 Shows the Gini coefficient and P90/P10 ratio based on tax returns. As can be seen, the measures of income inequality are twice as high based on income tax returns as based on the household statistics, but they depict roughly the same pattern.

⁷ Of course, the estimation of inequality through tax returns also contains bias. Since it does not take pensions into account, it biases upwards. Secondly, because the informal economy is obviously neglected, and because incomes in the informal economy are much more uneven than in the formal economy, it also contains a downward bias. Although the share of the grey economy has been decreasing recently it still remains high, similarly to other post socialist and South European countries. According to a recent study (Schneider, 2014), it amounts to 22% of total GDP, which is about twice as much as it is in developed countries.





Figure 7: Gini Index in Hungary



Source: OECD, * Szívós-Tóth (2013).



Figure 8: The P90/P10, P90/P50 and P50/P10 ratios

Source: OECD, * Szívós-Tóth (2013).







Figure 9: Gini Index and P90/P10 ratio based on tax returns in Hungary

Source: Kovács (2011).

2.2. Poverty Trends in Hungary

As seen in the previous section, income inequality has increased in recent years in Hungary, which is demonstrated best by the impoverishment of lower income groups. The increase in poverty in Hungary is the topic of an intensive research area of sociology in Hungary, and even according to international organizations, the evolution of poverty in Hungary is among the worst amongst OECD countries. According to OECD (2014a), the disposable income of the bottom 10 percent income group declined by 5.2 percent between 2007 and 2011, which is the fourth worst number among OECD countries, while that of the top 10 percent income group decreased only by 1.6 percent (see Figure 10). OECD (2014a) also notes that relative poverty increased from 6.4 per cent to 10.4 per cent in Hungary between 2007 and 2011, which is the largest among the OECD countries in this period⁸ (on poverty trends in Hungary see Szívós-Tóth (2013)).

⁸ Relative income poverty is defined as the share of people living in households with less than 50% of median disposable income in their country.





This poverty trend process itself, however, because of the lack of banking relationships, does not affect the credit stock of the household sector. The recent evolution of poverty trends is, in part, due to the mentioned tax and wage policy followed from 2010 onwards, which can be characterised by significant income redistribution from low to high income groups.



Figure 10: Relative income poverty rates in the OECD countries in 2007 and 2011.

Source: OECD (2014b)

Functional Income Distribution

According to the theory of Financialisation, one of the main dimensions of growing income inequality is the growth of functional income inequality. A number of empirical studies point out that the share of labour income continuously declined during the era of Financialisation. Some authors argue that the main reason for this was the proliferation of the neoliberal social structure of accumulation, the unfolding of which slightly preceded that of Financialisation (see Kotz (2008)), while others emphasize the role of technological





change. On the other hand, according to the theory of Financialisation, the enhanced role of the financial sector, and, consequently, the sectoral change of the economy also contributed to the declining share of labour income.

One of possible measures of functional income distribution is the so called adjusted wage share. Figure 11 shows that the share of labour income has been decreasing since the beginning of the transition period, in line with the formation of the new economic elite of corporate and business owners. The steep decrease before 1999 may be attributable to the increase in the capital intensity of production, which characterised the years of privatization, and to the decrease in real wages between 1992 and 1996⁹. The decreasing tendency continued further on, but with smaller oscillations, which contributed to the increase of income inequality as capital incomes are much more uneven than labour incomes. It must be noted, however, that the adjusted labour income share was essentially stagnating between 1999 and 2005, and a marked decrease began only at around the time of the onset of the financial crisis.

In the first chapter, we mentioned that real wages rose much faster than GDP per worker between 1997 and 2003 (see Figure 1), which seemingly contradicts the stagnation of the labour income share in the period of 1999-2004. The discrepancy between the two findings can be accounted for partly by the discrepancies between the GDP deflator and the consumer price index. The adjusted wage share, by definition, contains the GDP deflator in its denominator, and the real wage in Figure 1 is based on the consumption price index. Although in the long run there is no essential difference between the trend of the two variables, however, between 1999 and 2003 the GDP deflator increased by 39.6 per cent while the CPI increased only by 32 per cent. The other reason for the discrepancy is that the adjusted wage share takes the labour cost into account at factor prices, whereas Figure 1 shows the evolution of the gross real wage obtained by the employees.

⁹ To be more precise, between 1992 and 1996 the real-wages continuously decreased, except from the election year in 1994.





We can also establish that the property income of households decreased during the era of financialisation (see Figure 12), which can be explained only partly by the upswing in consumer optimism at the beginning of the 2000s. The other part of the explanation is that households had been liquidity constrained before 2000 and the housing subsidy system allowed the rich to get up to the level of regulatory arbitrage income, which reduced the overall amount of savings. Furthermore, property income decreased in spite of the decrease of labour income because the former is based on GDP while the latter is based on GNI. To understand the difference, it is worth to point out that the ratio of GNI/GDP has decreased form 97 per cent in 1995 to 90 per cent in 2008.

Hungary has a moderate unemployment rate, a relatively low participation rate and flexible labour market institutions. The Hungarian labour market is flexible, which is the result of low and declining union coverage, relatively low hiring and firing costs, easy adjustment of wages and an employment protection index which is the lowest in the region (EEAG, 2012). The Hungarian unemployment rate was around 7.5% between 1995 and 2008, which is relatively low in Europe. The Czech unemployment rate remained below 9% between 1993 and 2010. In Poland and Slovakia, on the other hand, unemployment increased drastically in the late 1990s, remained above 15% for several years and only dropped after 2005, after which it increased again due to the impact of the financial crisis of 2008. On the other hand, labour force participation is significantly lower in Hungary than in other Visegrád countries. Hungary's participation rate fell from 65% in 1993 to 58% in 1997 and increased back only to 62% by 2010, which is 8% lower than in the Czech Republic and in Slovakia (EEAG, 2012).

One reason for the decline in Hungary's participation rate is the transitory impact of the privatization process on labour demand. As described in Chapter 1, privatization in Hungary mostly meant the sale of corporate assets to foreign strategic investors. This led to increased competition among firms seeking higher efficiency and, consequently, a massive loss of low-skilled jobs in the economy. Between 1990 and 1995 employment in Hungary fell by 10% and 4% in the agricultural and the industrial sector, respectively. At the same





time, labour demand shifted towards skilled workers as new shareholders invested in modern technology, which required employees to obtain new skills (EEAG, 2012). In our view, this shift in labour demand could contribute to the decrease in the labour income share.







Figure 11: Adjusted Wage Share in Hungary and Selected Countries

Source: AMECO

Figure 12: Compensation of employees and net property incomes





Source: AMECO





Structural changes in income inequality

Besides the usual channel of financialisation, there may be other channels through which the increase in inequality among certain groups of the population as well as income polarization could possibly affect net financial wealth and debt. One such channel is the structural change of income distribution. First, we examine the structural change in income distribution in Hungary between the period of 1996-2001. This is the very period, in which the above indices do not show a clear tendency in the evolution of inequality on the aggregate level. Toth (2003) seeks to explain the contradiction between inequality perceived by individuals and that captured by the aggregate indices (see also Niehues (2014) and Keller et. al. (2010)). The most important structural change in this period was related to the change in the wage advantage of skilled labour. Tóth (2003) found that, while in 1987 education explained only 8 per cent of total inequality, this number increased to 27 per cent in 2001. The other change is related to the wage advantage of the young and highly educated segment of the active population. (On the common effect of education and age see Köllő (2000), Kézdi-Köllő (2000) and Tóth (2002).) Although relative average income in the income deciles did not change between 1996 and 2001, income differences increased in favour of qualified young employees and at the expense of low educated workers and old qualified employees. At the same time, income inequality between lower educated workers and older graduates decreased. As a result, inequality on the aggregate level did not change and, thus, the aggregate indices do not reflect the above changes.

To conclude, as income inequality increased in the decade before the transition and increased further during the years of the transition, the evolution of income inequality in Hungary shows a pattern similar to that of the developed countries. Income inequality in Hungary has been increasing in the era of financialization. This increase was due partly to the appearance of market forms of economic activity in the pre transformation period. Later, it was a necessary consequence of the prolonged depression periods such as the transformation crisis and the permanent slowdown and stagnation following the financial





crisis. Nevertheless, the unusually optimistic wage policy of the first half of the 2000s resulted in a decrease in income inequality in the short period of 2000-2007, which contradicts the theory of financialisation.





3 The Effect of Financialisation on Investments

The process of indebtedness of the corporate sector started in the mid-1990s when the debt stock of the corporate sector was still relatively small as compared to other developed countries. By that time, the financial stabilization of the economy coupled with stable economic growth and a lower risk level allowed for a higher level of corporate leverage. The only break in the build-up of the debt stock during the period preceding the financial crisis occurred in 2002 when the global recession decreased the need for financing (see Figure 6). One reason behind the surge in corporate lending is the relatively underdeveloped state of the domestic capital market, which forces firms to meet their financing needs mainly by taking out loans provided by local banks and their foreign owners.

As Némethné–Sinkovics (2007) points out, the capital structure of Hungarian non-financial corporations underwent significant changes between 1995 and 2003 (see Table 1). Among long term liabilities the share of equity decreased significantly while the share of external sources increased. At the same time, the share of short term liabilities, especially that of bank loans, increased markedly within liabilities (see Figure 14). As for the assets of non-financial companies, their financial assets increased considerably during the era of financilisation. In 1989 it only amounted to 40 percent of GDP, and, following a period of moderate decrease, it rose to 60 per cent until the financial crisis and climbed further upwards after the crisis to above 70 per cent (see Figures 13 and 15). Regarding the investment of the non-financial corporations we cannot see a clear tendency. There was a moderate decrease up to 2002, followed by a moderate increase afterwards. The increase in the share of non-financial corporations within overall investments was a straight consequence of the increasing tax burden of the domestic financial sector caused by the bank levy introduced after the crisis.





	Small corporations ¹⁰		Large corporations		Total	
Sources						
Own equity	41.0	33.5	60.2	37.4	54.0	36.1
Long term liabilities	16.3	23.1	9.7	16.1	11.9	18.5
Long term sources	57.3	56.7	69.9	53.5	65.9	54.6
Short term liabilities	42.7	43.3	30.1	46.5	34.1	45.4
Total sources	100.0	100.0	100.0	100.0	100.0	100.0

Table 1: The distribution of the sources of Hungarian corporations

Source: Némethné-Sinkovics (2007)





Source: MNB

 $^{^{\}rm 10}$ Firms with annual revenues of less than 500 million HUF.



sector



25,000.0 0.9 0.8 20,000.0 0.7 0.6 15,000.0 0.5 0.4 10,000.0 0.3 0.2 5,000.0 0.10.0 0 2012 2013 1995 1998 1999 2000 1996 2001 2003 2005 2006 2008 2009 2010 1994 1997 2002 2004 1993 2011 989 2007 992 ğ ŝ loans (billion HUF) (lhs)

Figure 14: Loans and loan-to-equity ratios in the Hungarian non-financial corporate

Source: MNB

Figure 15: Equities and mutual fund shares owned by non-financial corporations in ...



Source: MNB







Figure 16: Indebtedness of non-financial corporations as a percentage of GDP

Source: MNB



Figure 17: Investments of non-financial corporations in Hungary (per cent)

Source: KSH





4 Financialisation and consumption

As we stated in the introduction, consumption played a decisive role in the period of growth leading up to the financial crisis. In this subsection we investigate the evolution and the motives of consumption and saving as well as the role played by consumption in the onset of the financial crisis. As seen earlier, the increase in income inequality was not considerable before the crisis and was due to income redistribution on the two ends of the income scale. This process only had a small effect on consumption due to the small marginal propensity to save of the rich and to the lack of banking relations of low income groups. Notwithstanding, the contribution of consumption to growth was high and consumption had increased faster than median income in the pre-crisis period.

At the same time, the net saving of the household sector fell drastically after the transition, with the most spectacular drop taking place between 1991 and 2003. During this latter period, the net saving of the household sector decreased from 15 per cent to 1.7 percent of GDP (see Bethlendi (2007) Mosolygó (2002) and Figure 26). Obviously, much of the drop in the saving rate in the second half of the 1990s can be explained by the usual permanent income hypothesis, or by the life cycle theories of saving. That is to say, the sudden and abrupt drop was triggered mainly by the optimistic outlook of households due to high economic growth in the period of modernization following macroeconomic stabilization.

The fast decrease in saving after 1991 seemingly contradicts the classical consumption theories. However, it can also be regarded as part of the adjustment process following the extremely high saving rates of the early 1990s, which was known as the 'saving miracle' (see Bethlendi (2007), Mosolygó (2002) and Vadas (2009)). In the socialist era, households preferred real estate to financial wealth for many reasons including their underdeveloped financial culture, the lack of financial investment forms other than bank deposit, bad memories of the inflation of financial wealth, negative real interest rates and their utmost confidence in houses' preserving their value. Inflation had indeed been rising steeply in the





last years of socialism, peaking at 35 per cent in 1991. Simply put, hyperinflation-averse households staged a flight to real estate assets. This portfolio rearrangement led to a housing price bubble by the end of the 1980s, which burst in the first half of 1992. Although this real estate price bubble is mentioned in several publications (Bethlendi (2007), Vadas (2009), Zsoldos (1997)), we cannot validate this as statistical data on house prices before 1998 are unavailable. Therefore, as Zsoldos (1997) stresses, estimations of total housing wealth, which we also used in this study (see Figure 20), are inaccurate¹¹. Accurate housing data are available only from 2001 (Horváth-Körmendi (2009)). It is interesting to note that Hungarian households' preference for real estate wealth remained a characteristic feature of households' investment behaviour after the transition, and is relatively high in a cross-country comparison¹² (see Figure 19).

Several authors discuss the impact of real interest rates on the household wealth portfolio between 1970 and 1990 (see, e.g., Ábel-Siklós-Székely (1998)). Some authors (Zsoldos (1997) and Vadas (2009)) argue that the peak in the saving rate was the result of a portfolio adjustment following the turning point in inflation expectations in the second half of 1991. Bethlendi (2007) also notes that later in the 1990s the household saving market suffered a number of supply shocks, such as the devaluation of panel houses following the increase in energy costs, the sell-out of municipal houses, the liberalization of the saving market, the appearance of corporate investment assets, the end to cheap housing loans and the process of privatization. These all had an impact on the saving behaviour of households. In the meantime, the value of households' financial wealth continued to increase, with the currency and bank deposit remaining the most popular forms of saving, indicating an underdeveloped financial culture (see Figure 25).

Bethlendi (2007) and Menczel (1999) emphasize the role of households' liquidity constraints - instead of portfolio rearrangement - in the extremely high saving rates in the first half of

¹¹ These data are based on the author's own data collection and on data on the prices of municipal houses, which, argues the author, could be thought of as lower estimates.

¹² This is underpinned by the present day popularity of real estate investment funds, which accounted for 30 per cent of the total investment fund portfolio in 2006 (Bethlendi (2007)).





the 1990s. They argue that liquidity constraints can explain why the level of consumption is lower than the level suggested by the life cycle income theory. After the state withdrew from the housing loan market, the supply of housing loans virtually ceased to exist. Entry into the household necessitated much more investment capital, whereas foreign banks were lending only to firms at the time (Bethlendi (2007) and Szikszai (2013)). The reason behind the liquidity constraint was not solely the low level of credit supply arising from the underdeveloped financial system and the state's exit from the loan market, but also the high level of inflation, and, therefore, that of nominal interest rates (Bethlendi (2007)). Menczel (1999) found that the ratio of liquidity constrained households was 83 per cent in the period of 1970-1998, while the same ratio for the period subsequent to 1998 was only 20 per cent (see also Benk et. al. (2006)). (On the role of liquidity constraints in determining the saving rate and on cross country differences in the saving rates see Menczel (1999) and Zsoldos (1997), while, for a theoretical approach see Japelliagano (1994)).

In the early 2000s the saving rate decreased further (see Figure 6). By 1999 the corporate loan market had become saturated and foreign-owned banks began to open to the household segment. As a consequence, households could increase their consumption at the expense of increasing indebtedness, which was enhanced by the appearance of mortgage banks, the introduction of the preferential interest rate for housing loans and the optimistic communication of the government. At this time, even high income households took advantage of the generous housing subsidies to exploit the regulatory arbitrage possibility. The soaring house prices (see Figure 21) also affected the volume of residential investment and discouraged households from saving. This process, therefore, can also be thought of as an adjustment in wealth portfolio and is known as the 'saving disaster' - just the opposite of the saving miracle (Vadas (2009)).

Following the change of government in 2002 the situation changed fundamentally, which is shown by a break in the saving rate in 2003. The previously optimistic communication of the former ruling party swung in the opposite direction and the forced policy adjustments





further emphasized this break with the previous pattern of generous housing subsidies. These developments resulted in the increase of the saving rate in 2003. At the end of 2003, the increase in market interest rates and the tightening of the terms of the state subsidy scheme led households to replace state subsidized loans by housing loans denominated in foreign currency. This period saw an increasingly intensive risk-based competition among banks, which was reflected by the deterioration of creditworthiness standards, such as an increase in the loan-to-value ratio (Szikszai (2013)), and the relaxation of other lending conditions. Several authors voiced their concerns about the dangers of the expansion of household lending already well before the onset of the crisis (Bethlendi (2007) and Dobák-Sági (2005), among others). It is noteworthy, however, that the conservative bank management practice in Hungary prevented Hungarian banks from applying the originate and distribute model, which precluded the US-type meltdown of the real estate market during the financial crisis (Király-Nagy-Varga. (2008) and Király-Nagy-Szabó (2008)). The increase in the saving rate between 2003 and 2006 (see Figure 6) was triggered by the 50 per cent pay raise in the public sector in the autumn of 2002, which the rise of consumption was not able to keep pace with.

Although 2007 saw some real growth in Hungary, disposable income decreased (see Figure 18). In our view, the drop in the saving rate in 2007 was triggered by the consumption smoothing behaviour of households, which suggests that households deemed this income setback temporary. Most households also deemed the spread of the financial crisis to Hungary to be avoidable. As seen in the introduction, GDP dropped by almost 7 per cent in 2009 and growth remained low for years after the crisis, which caused the saving rate to increase from 3.7 in 2009 to 6.9 in 2011. It is tempting to think that in the face of an income decrease of that large scale households would rather be tempted to decrease their saving rate in order to smooth consumption. However, it was likely that households expected the recession to last for a long period and, thus, responded to the income drop by increasing their saving rate.





As seen earlier, the debt stock of Hungarian household began to increase in the first half of the 2000s. Inequality, however - apart from the period before the transformation of the banking sector -, either stagnated (1996-2001) or decreased (2003-2007) during this period. Therefore, we cannot conclude that the increase in income inequality increased household debt. From this perspective, Hungarian data are in contradiction with the empirical literature of financialisation. However, even if inequality had increased during this period, the consequence of this change would be questionable because of the presence of liquidity constraints. In this sense, the main motive for going into debt was to 'keep up with western countries' rather than to smooth consumption.

Although relative average incomes in the income deciles did not change between 1996 and 2001, income differences within the young groups increased in favour of qualified young employees and at the expense of low educated workers and old qualified employees. At the same time, the income inequalities within lower educated workers and as well as older graduates decreased. As a result, inequality on the macro level did not change, explaining why the aggregate indices do not reflect these changes. The eventual effect of this structural change, however, is unclear and requires further research. Because the young have a higher propensity to take loans than the old, and since most households faced liquidity constraints at this time, this redistribution of income may as well result in an increase in the debt stock. Therefore, the presence of heavy liquidity constraints in Hungary meant that not only the increase of inequality but also the increase of the income of certain groups could cause overall household debt to increase. In fact, the fast wage increase, the overly optimistic government communication, the loosening of lending standards in the beginning of the 2000s created a situation in which increasing indebtedness served not the smoothing of consumption, but the speedy acquisition of goods creating the illusion of having reached the long desired western standard of living. Later, the tightening of lending requirements and the pessimistic expectations triggered by the financial crisis even prevented low income households from smoothing their consumption. In short, the liquidity





constraints in the era of financialisation in Hungary make it impossible to capture the classical channel from inequality to debt in any of the investigated periods.

We emphasize, therefore, that it was not the increase in inequality and the resulting consumption smoothing behaviour of households but the fast modernization of the banking system, banks' increasing activity in the household segment at the very beginning of the 2000s that caused the households' debt stock to increase in Hungary. Furthermore, the sudden surge in consumer optimism driven by the modernization of the economy and the society, together with a substantial decrease of the inflation rate, which decreased the liquidity constraint, also contributed to the indebtedness of the household sector. Having investigated the main driving forces behind the evolution of consumption in Hungary, and considering that income inequality did not change fundamentally following the transition of the bank sector, we can establish that the main reason behind the enhanced consumption expenditure was obviously a drive to keep up with the standard of living of western countries. Therefore, while the development of consumer behaviour in Hungary is in accordance with the theory of Duesenberry's relative income hypothesis, it does not underpin the theories concerning the financial effects of income distribution, because of the lack of significant change in inequality. It is also noteworthy that the slide of the middle class is already observable following the financial crisis but consumption remained low due to the increase of precautionary saving.

We can also establish that the Hungarian economy is unsuitable to investigate the effect of financialization. The history of the Hungarian financial system can be regarded as a long and gradual transition from the one-tier banking system to the modern European style financial system. During this modernization period, however, the main driving force behind transformation was not solely the gradual liberalization of financial and labour markets. Instead, this period was characterized by successive governmental interventions into the operation of financial markets and by sudden changes in the direction of wage and tax policy. Therefore, the development of the Hungarian financial system can instead be





regarded as a continuous and forced process of adjustment to the permanently changing economic policy and regulatory environment. Although the underlying processes of the Hungarian financial market are akin to those of developed economies, this similarity can partly be attributable to Hungary's accession to the EU, the intensive presence of foreign owned financial corporations and the adaptation of some consumption behaviour patterns and regulations from developed countries.

Finally, we conclude that although both income inequality and household indebtedness increased in the era of financialisation, the main motive behind the latter was not the consumption smoothing behaviour of households, but their desire to reach the long desired western standard of living. Furthermore, while poverty trends in Hungary give cause for alarm, this process of impoverishment does not affect the variables of financialisation because of the lack of extensive banking relations.







Figure 18: The evolution of real disposable income in Hungary

Source: AMECO.

Figure 19: Ratio of financial and real estate wealth in households' portfolio in 2003 (percent).



Source: Vadas (2007)





Figure 20: Evolution of the real housing wealth with base year 1997. (All the houses and houses owned by the population)



Source: Vadas (2007)

Figure 21: FHB house price index (2000=100)



Source: FHB






Figure 22: GDP per capita at PPP in the Visegrád Group (index: EU-15=100)

Source: Conference Board, own calculation.



Figure 23: Use of household income as a ratio of disposable income (per cent)

Source: MNB





Figure 24: Household loans



Source: MNB



Figure 25: Household's financial assets (billion forints)

Source: MNB





Figure 26: Net saving of the household sector (per cent of net disposable income and GDP)



Source: AMECO, *Mosolygó (2002)





5 Financialisation and the current account

Owing to the transition, and, as a consequence, the breaking up of the trading relations with the former socialist countries the balance of payment of Hungary showed a significant deficit (see: Figure 27), and become near to insolvency by 1994, therefore a fiscal stabilisation package became unavoidable. The aforementioned Bokros package, in March of 1995, as mentioned in the introduction, beside the curb of a number of social expenditures and wages in the public sector, inaugurated the crawling peg exchange rate system, and devaluated the Forint by 9 per cent. Due to these measures the current account has begun to improve rapidly, and the net export become positive by 1996. The second half of the 1990's was characterised by only a moderate wage increase, and by a GDP growth of around 4 percent. As Figure 30 shows it, during this period the unit labour cost of the economy was decreasing, indicating the improvement of the competitiveness of the Hungarian economy. Later, from 1998 to 2008, the net export was negative, but during these years the foreign capital inflow counterbalanced its effect.

As for the public budget, however, the imbalances continued to remain, and the rein in state debt was mainly due to the privatisation revenues. At the very beginning of the 2000's, however, these revenues depleted, so, around 2003 the public debt stock had begun to increase. This process, in turn, along with the indebtedness of the household sector having gone on since 1999 (see Figure 28), caused the Hungarian economy to be vulnerable to external shocks.

As seen earlier, the saving rate was outstandingly low in the last one and a half decade, which brought about the need for foreign financing. Because the foreign sources was increasingly spent on consumption, the extremely low saving rate led to the halt of the growth and current account imbalances in the years preceding the financial crisis, which, in turn, through the drying up of the foreign funding, pushed the Hungarian economy into a deep and long-lasting recession.

During the years after the financial crisis, the current account improved remarkably, and currently it shows a salient surplus, which can be accounted for by the much more risk





averse behaviour of the households, which resulted in a significant decrease in consumption. It should be mentioned, that in the first year of the crisis, the export also decreased by 11.5 per cent, and only in 2011 exceeded again the pre-crisis level, which tell a lot about what extent the import must be decreased (see: Figure 27). The tax and wage policy of the new government also contributed to the increase of savings and therefore the improvement of the balance of payment too. Both the introduction of the flat tax system and the absence of nominal pay raises following the financial crisis hit hard the lower income groups, having a smaller marginal propensity to save, which caused the consumption to decrease at these income groups. At the same time, the introduction of the flat tax system increased the nominal income of the income groups having income above average. Owing to the higher marginal propensity to save, this change increased the savings of the total household sector, which improved the balance of payment. The deterioration of the Forint exchange rate both through the disposable income channel and through the real exchange rate channel also led to an increase in net export.





Figure 27: Current account in Hungary



Source: AMECO

Figure 28:Net external debt of Hungary (per cent)



Source: MNB







Figure 29. Average monthly exchange rate of the Hungarian currency

Source: MNB.

Figure 30: Real unit labour costs in Hungary and its most important trading partners (2005=100)



Source: Eurostat





6 Financialisation and financial crisis

Hungary was hit especially hard by the financial crisis of 2008, which are made clear by the fact, that Hungary requested IMF assistance in late October 2008 because of its high private and public external debt. The external debt of the private sector can be considered as a contingent liability of the public sector as historical records show that governments have repeatedly bailed out private debtors in times of financial crises to maintain the stability of the financial system. However, when the government is also heavily indebted the risk of financial systemic instability rises as the state needs new external sources to bail out private debtors. Figure 34 plots the net external debt of a number of emerging countries including Hungary against their public debt. It shows that at the end of 2007 most emerging economies either had high external debt or high government debt whereas in Hungary both external and government debt were at elevated levels (see: EEAG (2012). Worth to mention, that Hungary has been subject to the Excess Deficit Procedure of the European Union ever since it joined the EU in 2004. The general government deficit never fell below 5% of GDP between 2002 and 2007, a period that saw a rapid accumulation of public sector debt (see: Szikszai (2012)). The vulnerability of the Country can also be indicated by the evolution of the CDS prices and yield premium of the debt securities of the government (see: Figure 36).

The failure of the Hungarian government to successfully tackle the problem of excessive budget deficit can also be traced back to the inefficient structure of government spending which preserved the high level of government expenditure as well as the implied overall tax burden. To illustrate the relatively large size of the Hungarian government sector, figure 31 plots the government expenditure-to-GDP ratio against the log of per capita GDP for EU countries between 2000 and 2008. The size of the Hungarian public sector is larger than would be implied by its income level and only five EU countries had public sectors larger than Hungary's (EEAG, 2012).

While in the Czech Republic and Slovakia, where foreign currency loans went mostly to corporates, it did not exceed 10% of GDP, the same ratio was 30% in Hungary, with half of





the credit to the private sector denominated in foreign currency. Moreover, as for the households, almost 70 percent of total Hungarian household debt was denominated in foreign currency at the end of 2008 (EEAG, 2012).

The reason why external debt accumulated in Hungary after 2000, was that newly privatized, large domestic banks received external funds at low costs from their parent banks to offer low-cost mortgage loans to Hungarian households denominated in foreign currencies, primarily in Swiss Francs. In a period of a relatively stable Forint exchange rate, high Forint interest rates and accommodative financial regulation, households and businesses alike were eager to borrow in foreign currency, underestimating exchange rate risk. Consequently, households, which lacked foreign currency revenues, had by 2008 accumulated a massive unhedged foreign currency position (see: Figure 32 and 33).

One consequence of the huge foreign currency exposure was that the Hungarian private sector became increasingly exposed to exchange rate risk, increasing the vulnerability of the financial system. Figure 29 charts the depreciation of the domestic currency vis-à-vis the Euro and the Swiss Franc after September 2008 and shows that the depreciation of the Forint vis-à-vis the Swiss Franc between September 2008 and November 2011 reached 66%, significantly increasing monthly loan and interest instalments and, consequently, the number of non-performing loans (EEAG, 2012).

Another consequence of increasing foreign indebtedness was the appearance of rollover risk in the banking sector. Banks, which received external funds in Euros, primarily lent in Swiss Franc because of the higher demand for Swiss Franc loans due to the lower interest rate. They made typically short term contracts in the swap market in which they swapped their Euros for Swiss Francs and extended typically long term mortgage loans in Swiss franc. This maturity mismatch of assets and liabilities created the need for the regular rollover of these swap contracts. However, in late 2008 the maturity of swap contracts available in a decreasingly liquid money market suddenly fell, requiring more frequent rollovers and increasing the rollover risk of the banking sector. This was further exacerbated by the rising rollover risk of the Hungarian government, which found it more difficult after September 2008 to issue new bonds to refinance the repayment of





outstanding ones. All these processes eventually prompted the Hungarian government to turn to the IMF, which together with the EU Commission provided a 20 billion Euro bail-out to prevent a run on Hungarian assets and the collapse of the Hungarian financial system (EEAG (2012)), Király– Nagy– Szabó (2008), Király– Nagy– Varga (2008), and also Szikszai (2012) and Banai—Király—Nagy (2008)).

To sum it up, although the banking system in Hungary did not spread the toxic securities as in the USA and in the United Kingdom, the outbreak of the crisis touched severely the Hungarian economy causing serious financing problems mainly in the government budget, and caused the consumption to decrease owing to the revaluation of the households' debt, which caused a chronic recession. Although the crisis caused some liquidity problems in the bank system, too, it did not necessitate a serious bank rescue operation as in some EU members. It is worth mentioning, that while in the whole of the EU, the measure of the undertakings related to the bank sector amounted to 31% of its GDP, in Hungary, the measure of the total undertakings was only 7.1% of its GDP (see Várhegyi, 2010) and the balance-sheet total of the bank sector decreased only by 0.5 percent.





Figure 31: General government expenditure (percentage of GDP) and real GDP per capita (log international dollars) (average of 2000–2008)



Source: Eurostat, OECD, own calculation.

Figure 32: Foreign currency loans of the private sector





Source: National central banks, own calculation.







Figure 33. Foreign currency loans of households in percentage of household debt (2002–2008)

Source: National central banks, own calculation.

Figure 34. Net external debt* (percentage of GDP) and gross general government debt (percentage of GDP) in emerging markets (2007)



^{*}Net external debt = gross external debt – international reserves excluding gold. Source: World Bank, own calculation.









Source: MNB





Source: MNB





Figure 37: Annual growth rate of loans provided to non-financial corporations by domestic banks (per cent)



Source: MNB





Regulatory responses to the crisis

Response from the central bank

In an effort to manage the liquidity crisis in the Hungarian money market, the central bank took several important steps. During and after the financial crisis of 2008 MNB considered maintaining financial stability as its most important task, second to maintaining price stability. Most of its efforts centered around maintaining liquidity in foreign currency lending by assuming the role of 'FX lender of last resort'. In order to restore the foreign currency liquidity of the banking sector MNB introduced bilateral FX swap tenders. Through this, the central bank played a mediating role by pairing partner banks: banks that possessed excess Euro (or Forint) but could not sell it in the market due to their partner limit could place it with MNB. The central bank also introduced a one-day FX swap facility to increase Euro liquidity, aided by a credit facility of 5 million Euros secured by the European Central Bank (ECB). These measures helped solve the foreign exchange liquidity problems of the banking sector.

To ensure the liquidity of the domestic money market immediately after the Lehman fallout in October 2008, the MNB introduced two measures. It decreased banks' reserve ratio from 5% to 2%, the level applied by the ECB, and narrowed the interest rate corridor around the key (base) rate from ± 100 to ± 50 basis points. This latter measure was reversed in November 2009 when liquidity in the domestic money market was restored.

But stabilizing the situation was impossible without the intervention of parent banks, which did not decrease but increased their exposure towards the country during the most intense period of the crisis. At the same time, their daughter banks undertook large-scale adjustments. In the initial period of the crisis in 2009, banks responded to mounting liquidity problems primarily by cutting back corporate lending. This was justified by several factors. As the average residual maturity of the corporate loan portfolio is significantly shorter than that of loans to households, in the short run it allows more robust adjustments on the part of banks. Since competition is much stronger in the corporate





segment in the Hungarian banking system, margins are tighter and banks' profits are smaller on these loans. Finally, corporate loans usually have higher capital requirements than the mortgage loans constituting the bulk of the household portfolio. Therefore, the corporate loan portfolio began to shrink, followed by a contraction in household lending. Thanks to the adjustments and the assistance received from parent banks, the banking system weathered the brunt of the first few months of the crisis. Confidence in the country gradually improved in 2009.

Nonetheless, the underlying risks of the loan portfolio materialized as a consequence of the economic recession. Amid a continuous deterioration in the quality of the loan portfolio, banks suffered increasing loan losses in 2010 and 2011. Consequently, even as banks' liquidity position recovered gradually, their capital positions became a crucial issue on account of deteriorating profitability. While banks' capital positions remained safe from a stability perspective, lending did not resume after 2010 and the banking system has failed to support economic growth.

In an effort to boost the domestic supply of loans, in February 2012, MNB introduced three new measures to increase Forint liquidity. In the first step, it introduced a new, two-year lending facility at variable interest rate tied to the base rate. The second and third measures were intended both to provide more Forint liquidity to participating banks and to enhance the domestic Forint denominated mortgage bond market and, thus, promote longterm, Forint denominated saving instruments. On the one hand, the MNB introduced a new regulation allowing for new types of assets, like mortgage and other types of bonds, to be accepted – besides government bonds – as collateral behind loan transactions including the central bank. The minimum criteria for eligibility was modified from an A to a BBB credit rating. Included in these securities were, e.g., Forint, Euro and Swiss Francdenominated local bonds issued by municipalities. At the same time, the MNB launched a mortgage bond purchase program with the intention of purchasing mortgage bonds in the primary and secondary markets at a maximum value of 100 billion Forints. However ambitious they were, it seems that, so far, these steps have done little to improve lending activity.





Response from the Government

After 2008, several CESEE governments introduced laws to improve borrowers' situation vis-à-vis their banks and to shift the burden of the crisis to the banks. Drawing from the experience of the crisis, several regulatory initiatives have been announced and implemented with an impact on lending to households. In light of the problems presented above, these initiatives had two objectives. One was to ensure the formation of a sounder lending structure as lending recovers. Forint-denominated loans came into the forefront with a simultaneous, drastic cutback on foreign currency loans, while authorities strive to pressure banks to assume less risk even in the case of Forint loans. The other main objective was to provide better protection to borrowers. Indeed, banks used to have an option to raise interest rates on loans at will, and as a consequence, changes in the installment amounts were not predictable for the customers. On occasion, this mechanism may have contributed to the deterioration of the portfolio.

Below we examine the regulatory initiatives that have been implemented in Hungary since the onset of the crisis. In some cases we also present their short-term impacts.

1) Transparent pricing (step 1): Ever since the gradual expansion in household lending, the fact that banks could unilaterally modify the terms of retail loan agreements had been an unresolved problem. After several proposals, the first step was taken by Parliament in 2009. Banks were required by law to provide a cause-and-effect list in their loan agreements as to what entitles them to raise interest rates, fees, or charges. At the same time, the law entitled debtors to prepay their loans free of charge during 60 days from the date of an unfavorable, unilateral contract amendment (either by refinancing their loan or by taking out a new loan from a different provider). Market players—who denounced the legislation change and tended to stick to the regulation to the letter while they essentially evaded its spirit—inserted tediously long lists into their terms and conditions, which entitled the institutions, for instance, to raise their interest rates even on the grounds of rising marketing expenses. In addition, the long lists did not specify the extent to which transaction rates were to be modified if the listed reasons materialized (for example, the percentage point by which interest rates were to be raised in case of a specific increase in





marketing expenses). This counteracted the legislative intent pertaining to transparent pricing.

2) Transparent pricing (step 2): In light of the failure of the previous attempt, with the coordination of PSzÁF, the banks finally worked out a Code of Conduct, effective January 1, 2010, under which they committed themselves to exercise moderation regarding their unilateral pricing range. In essence, this translated into a moderate shortening of the cause-and-effect lists. The Government adopted the Code of Conduct and even passed a legislative amendment to incorporate it into the legislation. According to the amendment, creditors have to define their pricing principles in writing, providing an exhaustive list of all the factors on the basis of which they are entitled to unilaterally modify interest rates, fees, or charges at the expense of the customer. Fees or charges may be raised annually by the rate of inflation at most (even though these fees are typically expressed in percentage), and the Code of Conduct includes a consensual —sample of the cause-and-effect list defined in the pricing principles legitimizing interest rate raises. Based on this, lenders can pass, at nearly any time, three types of risks on to their customers by unilateral contract modification: changes in the regulatory environment (changes affecting business activity, that is, changes to legislation, taxes, reserve ratios, and deposit insurance fees); increased cost of funding; and an increase in customer risk. Since this continues to leave ample room for banks to modify interest rates on loans, the criterion of transparency barely improved.

3) Activity of brokers: The activity of brokers also played an important role in the upswing in lending. During the years of the crisis it became clear that the rapid deterioration of the portfolio was partly attributable to the activity of brokers, as they enabled riskier customers to enter the lending process. It thus became important to tighten the previously loose regulations related to their activity. One of the objectives of the regulation was to define the various types of lending intermediaries. The classification is based on the entity on whose behalf they act. Further objectives were reducing the intermediation chains, tightening brokers' working criteria (e.g. license), preventing a conflict of interest (e.g. regulation of remuneration).





4) Prudent lending: The central element of Act CLXII of 2009 on Loans to Customers and Government Decree 361/2009 (XII. 30.) on Prudent Lending to Households, effective from March 2010, was that they defined differentiated loan to value (LTV) limits for retail mortgages, vehicle financing loans, and home leases. In the case of mortgage loans, the LTV limit is 75 percent for Forint-denominated loans; 60 percent for Euro-denominated loans, and 45 percent for loans denominated in other currencies (for example, Swiss franc). As regards vehicle financing loans and home leases, the regulation is less strict; their limits are 80 percent, 65 percent, and 50 percent, respectively. Another important element of the regulation required banks to set up creditworthiness limits based on the assessment of the creditworthiness of individual loan applicants in proportion to monthly income. As a result of the regulation, the ratio of foreign currency loans to new mortgage loans fell below 10 percent and the domestic market for mortgage bonds virtually froze. Nevertheless, the total gross credit flow, which had already been extremely low because of the crisis, did not change significantly. The regulation appeared to provide sufficient restrictions in the event of an upsurge in lending.

5) Ban on foreign currency mortgage lending¹³: Despite the success of the regulation aimed at facilitating prudent lending, Act XC of 2010 on the Creation and Modification of Certain Economic and Financial Laws of August 2010 prohibited registering a mortgage on real estate in the Land Register if it is based on a mortgage loan contract in foreign currency by natural persons. The effect of this act was rather negligible, given that foreign currency mortgage loans had practically disappeared already on the back of the act on prudent lending.

6) Bank tax: The modification in 2010 of Act LIX of 2006 on the Extra Levies Improving the Balance of the State Budget introduced the so called "bank tax". Examples of such windfall tax can be found in other countries but the extent of the Hungarian one far exceeds the levies applied or planned in other countries. Although the tax was levied not only on banks but also on insurance companies and other companies in the financial sector, the bulk was

¹³ The three countries that totally banned certain forms of foreign currency lending include Hungary, Moldova and Ukraine. Ukraine banned foreign currency lending to households, while Hungary prohibited the registration of foreign currency mortgages.





applied to credit institutions, calculated based on their modified total assets for 2009. The levy was determined as 0.15 per cent of the tax base under 50 billion Forints and 0.5 per cent of the tax base above that. The higher tax rate was modified to 0.53% in 2011. As a result, in 2010 and 2011, the profitability of the Hungarian banking sector was lower than in the countries of the parent banks and other countries of the region (except for the Baltic countries). Initially, the bank tax was to stay in effect until 2012 and half in 2013 but recent policy decisions reversed its exit and it is expected to stay in the long term. If this low profitability of banks caused by the tax remains for a longer period, in addition to banks' weakening ability to accumulate internal capital, Hungarian banks may suffer a competitive disadvantage in the allocation of parent banks' funds and capital (see more on profitability in Chapter 5).

7) A package aimed at reducing banks' abuse of dominant economic position for the protection of distressed customers: Act XCVI of 2010 on the Modification of Certain Financial Laws to Help Distressed Mortgage Loan Borrowing Customers increased the rights of borrowers in certain aspects while it strived to improve the transparency of pricing; however, it failed to achieve real changes.

8) Early repayment scheme and exchange rate fixing of foreign currency denominated household loans: A series of laws in 2011 called the National Protection package introduced new measures to fine tune banks' lending practices in the household segment along with providing solutions to the problems of servicing households' foreign currency denominated mortgage loans caused by the depreciation of the Forint. The most important element of this package was creating the possibility for certain households to repay their existing loans denominated in foreign currency at fixed preferential exchange rates¹⁴. It required a highly concerted effort from the side of both legislators and regulators. Act CXXI of 2011 on the Amendment of Certain Laws Related to Home Protection, enacted in September 2011 and in force until March 31, 2012, contained the modification of 7 existing laws, which made it possible for households to initiate the final repayment of foreign-currency denominated loans at preferential exchange rates. A modification of Act XCIII of

¹⁴ Only households who borrowed at or below the preferential fixed exchange rates could participate in the scheme.





1990 made the process of lump sum repayment free of any other further charges. The aim of the amendment of Act CXVII of 1995 was to ensure the tax-exemption of those participating in the final repayment scheme and the modification of Act LXXXV of 1996 made sure that no extra charge related to land registry would be incurred in case of repayment. Finally, a modification to Act CXII of 1996 defined the preferential exchange rates to be applied in case of early lump sum repayment of foreign currency denominated loans secured by a mortgage: Swiss Franc=180 Forints, Euro=250 Forints and Japanese yen=2 Forints. Between Sept. 29, 2011 and Jan. 30, 2012, circa 20% of the total 800 thousand foreign exchange denominated (96% in Swiss Franc) housing loan debtors repaid their loans, increasing the already huge loss of the banking sector in 2011. Interestingly, only 26%(!) of the participating households borrowed in Forint – mostly from other banks – to repay their foreign exchange loans, the rest spent their own family savings on repayment.

Fiscal responses to the crisis and recovery from the crisis

Owing to the high external indebtedness of the public sector, contrary to other developed countries, Hungary was forced to decrease its deficit by decreasing its expenditures. Among the governmental measures in 2008 and 2009 were the curb of the end-of-year bonuses and the retrieve of the thirteenth month salaries and retirement pensions in the public sector, the salaries and daily subsistence of state leaders and ministers, the halt of purchases certain types of equipment in the whole public sector. Further, they delayed the adjustment of the wages and pensions to the inflation. The government also curbed welfare expenditures and narrowed the circle of their beneficiaries. Besides it halt the gas price subsidy system and decreased the subsidy of public transport, the mediae and the agriculture. Besides, in order to improve the state budget they also increased some types of taxes. The VAT rate for example increased from 20 per cent to 25 per cent with the exception of some fundamental food products but at the same time they decreased the average income tax rate and the social security contributions and some employer





contributions to encourage the employment and growth. Among other economic encouraging measures was the simplification of the access to EU subsidies for firms in the underdeveloped regions of the country.

Owing to the aforementioned forced expenditure decreasing measures, and the increase of monthly instalments of households indebted in foreign exchange, the households' disposable income has decreased remarkably. These changes, in line with the heavy increase of precautionary savings of the households set back the consumption for a long time. Owing to the deterioration of the growing outlook, the investments of the corporate sector also decreased, which led to an almost 7 percent drop in real GDP in 2009 (see: Figure 3).

As for the investments of the corporate sector, they decreased in 2009 by 30 per cent as compared to the previous years, and due to the pessimistic outlook of the firms the investments stabilized at a very low level for a long time (see: Figure 4). As figure 37 shows it the new loans provided to the firms has been decreasing from 2009 on, and the investments of the firms are well below the pre-crisis level, notwithstanding that the Hungarian Central Bank introduced a new interest subsidy scheme to subsidize the banks' providing loans to the corporate sector in 2012. The reason behind the inefficiency of this Central Bank policy is that the extremely low investment rates are caused by the bad growth and profit outlooks, instead of the liquidity problems of the bank system. Therefore firms mainly used the subsidized loan to relieve their debt burden and to replace their former loans.

It is worth to mention, that one of the first measures of the new government inaugurated in 2010, were the introduction the flat tax system, which left about 500 billion Forints at the household sector. This measure hit hard the low income groups and benefited the rich. According to the communication of the government, the aim of this tax reform was to encourage consumption saying that 'everybody come off well' with the tax change. This income redistribution, however, instead of raising it decreased the consumption, and set back the growth.





As for the responses of the banking system and the government to the crisis, we can establish, that both of them behaved procyclically during and following the crisis, which led to an increase in precautionary saving of the households and affected negatively the future growth outlook of the country.

Due to the government effort to decrease the government debt and the low inflationary circumstancies, the CDS premium of the government debt decreased considerably (see: Figure 36), which, in line with the debt reduction of the private sector contributed to the ease of the debt burden of the country. Owing to the cautious consumption behaviour of the households the deposits of the households approached the level of 11.000 billion HUF, so the consumption was expected to grow sooner or later. At last, in 2013 and in specially 2014 the consumption has begun to grow, improving the profit prospects of the corporate sector. At present, according to the most of the analysts, in spite of the fact that the medium-term growth potential of the country remains constrained, due to the high level of export and the start up of the consumption and investments, the growth rate of the country in the following three years will be around 2.5 per cent, which still below the growth rate of the 3 per cent rate of regional peers in Central and Eastern Europe. The reason behind the low level of grow potential they mention the low level of participation rate in the labour market and the high government debt which approach 80 per cent of the GDP which well exceeds that of similar peers. Among the structural problems they also mention the relatively high level of state redistribution (see: Figure 31).





Figure 38: GDP growth and its main components (annual growth rate) (per cent)



Source: MNB





Source: MNB





7 Conclusion

In the first part, overviewed the sources and growth in Hungary, and established, that although for the whole period the classification of the development path of the Hungarian economy into any of the usual macroeconomic regimes is not possible, the best description of the growth path in the short 1997—2006 period is the consumption and partly investment led growth that was accompanied by external indebtedness, and current account deficit. However, because the households' financial balance was positive in most of the time, and the external sector contribution to the growth was positive from 2004 on the long-run development pattern, neither fit into the concept of debt-led consumption boost nor the domestic demand-led macroeconomic regime conserning the whole period investigated. However, up to 2004 we can characterise it as a debt-lead consumption regime.

In the second part, we analysed the evolution of the income inequalities. We established that the income inequalities increased only slightly. Further, we conclude that, in Hungary, the data do not underpin the prediction of the theory of Financialisation, namely, that the development of the financial sector is related to the inequality of income. Although, income inequality in Hungary has been increasing in the era of Financialisation, this increase is mainly can attributable to unique factors. Among others, it is due to the appearance of market forms of economic activity in the pre transformation period and, on the other hand, is a necessary consequence of the prolonged depression periods such as the transformation crisis and the permanent slowdown and stagnation following the financial crisis. Furthermore, in the short period of 2000-2007, which is exempt from such disturbances in economic activity, the unusual optimistic wage policy of the first half of the 2000s resulted in a decrease in income inequality, which contradicts the theory of Financialisation.

In the third part, we have seen that the capital structure of the Hungarian non-financial corporations had undergone significant changes at the turn of the century. Among the long term liabilities the share of own equity decreased significantly, and increased the share of

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outside sources. Further, inside the liabilities the share of short term liabilities, especially the bank loans, has increased notably.

In part four, we conclude that, although in the era of Financialisation both the income inequality and the debt of households have been increasing, the main motive behind the latter was not the consumption smoothing behaviour of households, but their desire to reach the long waited western standard of living. Besides, the poverty trends in Hungary also give cause for alarm, this process, however, because of the lack of banking relationships, does not affect the variables of Financialisation.

In part five, we have seen, that the saving rate was outstandingly low in the last two decades, which brought about a chronic current account imbalances in the years preceding the financial crisis, which, in turn, resulted in the drying up of the foreign funding. During the years after the financial crisis, the current account improved remarkably, and currently it shows a salient surplus, which can be accounted for by the much more risk averse behaviour of the households.

In part six, we examined the effect of the financial crisis on the Hungarian economy. We established, that in the Hungarian financial system there were neither toxic securities nor any significant bail-outs. The most severe problems stemmed from the drying up of the foreign sources, and from the devaluation of the national currency. These developments led to the halt of the productive investment and housing investment, and, through the revaluation of the households' foreign exchange debt, to the drastic decrease of the consumption.

To sum, in the last three decades the Hungarian economy can be characterised by increasing indebtedness and consumption rate peculiar to most of the catching-up countries. This process, however, was affected by a few unique factors of short duration during the era of Financialisation. Among these unique effects were the pessimistic expectation the years before the transition, the chronic loan scarcity in the household segment in the 1990's, and the introduction of preferential interest rates and its extension to used flats in 2001, the increase in the Forint real interest rates and the simultaneous appearance of foreign exchange loans, and finally the financial crisis rendering the





households more risk averse. However, it should be noted, that the halt of the growth in Hungary, had taken place well before the financial crisis, and it was not caused by the problems of the financial sector. Instead, it can be explained by, among others, large scale state redistribution, the deteriorating of the competitiveness in the corporate sector as a consequence of the far too optimist wage policy of the private and the public sector and by other structural and regulatory problems in the real sector. As for the responses of the banking system and the government to the crisis, we can establish, that both of them behaved procyclically during and following the crisis, which led to an increase in precautionary saving of the households and affected negatively the future growth outlook of the country. Finally, although, it seems that the growth turn already has taken place, the growth potential of the country fall short of that of the Central East European countries.





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Financialisation, Economy, Society and Sustainable Development (FESSUD) is a 10 million euro project largely funded by a near 8 million euro grant from the European Commission under Framework Programme 7 (contract number : 266800). The University of Leeds is the lead co-ordinator for the research project with a budget of over 2 million euros.

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Published in Leeds, U.K. on behalf of the FESSUD project.