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# "Getting Over" National External Indebtedness – Or Is Baron Munchausen's Story Not a Mere Fairy Tale After All?<sup>2</sup>



#### **Summary**

The question of this article is how it was possible for the Hungarian economy to set on a growth trajectory after a W-shaped crisis despite a continuous and severe withdrawal of external resources. The country's net external debt relative to GDP dropped by nearly 30 percentage points within five years, representing a 5–6 percentage point reduction per year. Why has the economy not suffered an even greater setback as a result of such a rate of "loss" in financing resources? Is growth possible without resources? Obviously not.

This paradox was resolved when sources of financing were re-channelled into the internal supply of sources. The reason is that financing is similar to an electrical network: if connections are weak, power is lost. The country's excessive openness caused a significant loss of power (as tackled in this study), so the closing and reconnection of the money circuits to the internal resource supply (as amply illustrated in this study) increased the "power supply" to the economy.

Numerous actions taken by the national bank and the government took the country in this direction. From the area of financial regulation, the authors have selected the steps of allowing the moderate weakening of the Hungarian forint, the conversion of Swiss franc loans into forint loans, and the Funding for Growth Scheme (FGS). With regard to government measures, the focus is placed on cutting employment taxes, promoting community work, curbing monopoly profits, and channelling retail savings into financing sovereign debt. All this has set the economy on a trajectory

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where self-healing mechanisms have had an opportunity to start. Applicable financial funding of the national economy was an important key in answering the question raised in the article. Nevertheless, our other conclusion is that there is much to be done in the financing of corporations in a similar direction of funding.

### Journal of Economic Literature (JEL) code: F34, H63, H31

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# INTRODUCTION - WAS IT A PARADIGM SHIFT OR ONLY A PRACTICAL APPROACH?

What seemed impossible has become possible: economic growth simultaneously with a significant improvement in our external (non-resident) financial imbalance. Ten years ago, there was a huge debate in Hungary about the reason for the country's simultaneous external and internal indebtedness (the parallel deficit in the current account balance and the government budget balance, also called twin or double deficits). The marked opinion was that the cause was government overspending and the effect was external indebtedness. In this approach, external debt is merely a passive outcome of irresponsible domestic extravagance (on the part of the government, and then after 2004, that of the households). This perspective – it was claimed – only allows a single way out: cutting internal expenditure and paying off the accumulated debt, in other words, by offering a high premium to external lenders, while maintaining a strong forint rate supported by high interest rates.

At this point, let us just note: The events after 2006 proved that high forint interest rates did not improve the country's balance (withholding internal spending); rather the reverse: the rapid introduction of forint convertibility indirectly deteriorated the balance. The reason is that the economic actors increasingly replaced their expensive forint loans with paradoxically "cheap" foreign currency loans. Thus, the country's population became foreign currency purchasers, and contributed significantly to financing the country's external indebtedness. Even more importantly, under unclear conditions, they also assumed the rather high risk involved in foreign currency debt. (The fact that instead of the euro, the majority of the economic players became indebted in Swiss francs, the "golden currency" considered as a base currency, exacerbated the problem. This entailed a high risk ab ovo.)

The doyens of economics thought that the external balance could not improve without a massive cut in incomes. Any effort that emphasised internal resources without deemphasising the need to reduce indebtedness was seen as a fairy tale. In several forums, such efforts were compared to Baron Munchausen's absurd story of pulling himself and his horse from the mire with his own hair. In this approach, only an external force, external resources, can sustain the country amid the trouble caused by debt. In this

article, we endeavour to draw a picture of the critical developments, several years after the debate, and seek an explanation for the "unexpected" development: the way an increase in the national income became possible despite a considerable drop in external resources. Does Baron Munchausen's tale have a hidden message? Does it have more to say beyond its description of the baron's talent for misrepresentation?

In order to understand the developments, we first analysed the resources of the major income holders and their use. In addition to government budget and foreign resources mentioned above, funds are held by households and by businesses (more specifically, the financial sector, to be discussed separately, which is only mentioned here in respect of the above). These sectors manage foreign financial resources, while – in this article the common approach is adopted – credit institutions "only" mediate financial resources. This shows that the net financial assets in this sector are minuscule compared to those in the other sectors; in other words, its creditors (payables) are nearly equal to its debtors (receivables). Returning to the other sectors if one sector's claims against another exceed its debts, then it finances the latter or some of the latter. (As a side note, let us add that the reverse of this correlation is also true: the debtor also finances the lender, as banks for the most part also sell the debtor's debt as a source of income. The debtor's debt represents profitable accounts receivable. This is why banks are not "grateful" for prepayment, as it reduces their assets.)

Thus, if we want to analyse external indebtedness, i.e., the change in external resources, we certainly gain important information from analysis of the financial standing of the major income holders (sectors) in the national economy as a whole (i.e., if they have a debit or a credit balance with regard to the other income holders). This is because raising external (foreign) funds is a method of financing, and presumably a method that is expensive and/or risky for the indebted country. (Anything that involves higher risk is more expensive, as business risk is paid for in the price.)

An investigation of the sources of growth must therefore cover financing methods. The reason is that business financing at present has to be considered as a separate industry. In business plans, financing is not merely a limit to be considered; it is frequently ranked as number one in business or at least it is assigned great priority. This is the case even if it is not obvious from the objects of a company. (This is also manifest in the fact that on corporate balance sheets the weight of financial profits increases in comparison with that of operating profits, i.e., to the income earned from the activities that constitute the objects of the company.) This also suggests that the resources required for financing growth cannot be set as a specific amount, as financing itself can also be the object of business. Based on this, we presumed that in addition to analysing changes in external resource volumes in light of growth, we must also look into its complex interrelationships with the various sectors of the national economy. The ultimate evaluation criterion is whether a specific method of financing has increased income generation or rather the reverse: it has reduced it. In the case of our subject, this question refers to income generation in the national economy and the possibility of its domestic use (e.g., interest payment may require 4 to 5 per cent of GDP, and thus this ratio of the income cannot be used by the nation). This is exactly what financing is about: offsetting resources against generated income. Ultimately, the "benefit or loss" of external financing can be measured in the developments recorded for the income of the national economy (consumption and accumulation). The question "What quantity of resources is required to achieve a given percentage of growth?" follows the logic of passive financing. However, asking this question the other way round – namely, "How do you achieve a given income increase using the least possible resources?" – reflects an active financing logic. These two different considerations can also be followed at the level of the national economy. In this approach, at first sight "cheap" source may prove to be very expensive as we came to realise in the case of FCY loans.

All this also means that in addition to the domestic market, domestic financing resources may also represent significant resources for the domestic economy. In this respect the national economy is similar to a large corporation, for which financing is one of the important, or in the current financialized world, often the most important business lines. (The establishment of the Government Debt Management Agency was based on a similar recognition; however, it is engaged in "only" financing government debt and not the entire national economy as a whole.) Another important consideration is that the financing market is global, and so it develops according to global values. To find the most appropriate forms of financing in this is a real challenge not only from the perspective of public finances, but from that of the entire national economy. Not only individuals and not only individual business organisations require financing, but the entire national economy as a separate unit does as well. Domestic participants also participate in this, but the rest of the world plays a special role in this respect. In the case of long-term external debt, external resources are ultimately secured by the national economy as a whole. This includes a nation's assets, incomes, public funds, and public property (see, e.g., budgetary austerity programmes in permanently indebted countries, forced privatizations at undercut prices, wage outflow stops, pension cuts etc.).

Many people are unaware that within a country the "rest of the world" is a genuine economic sector. During the crisis in Hungary, it was not primarily the central government that was highly indebted to the rest of the world, but the corporate and the banking sectors as well (and through foreign currency loans, the households). Consequently, the assumption that debt requires active financing applies not only to public finances, but to the national economy as a whole. So another question that arises is how to interlink external resources and internal income generation. If domestic ties are inefficient, then just as in a poorly built network, a significant part of the power, external resources, may be lost. If connections are good, power may increase. This is what, generally speaking, financing is about. Thus the fundamental question in the external financing of the national economy is the creation of appropriate domestic connections. In other words, financing should drive domestic income generation and should not trigger financing cycles (with the kind of financing practised in Hungary before the crisis, when "the coat was not cut according to the cloth"). The reason is

that if this is not done, external financing, sooner or later, uses up domestic assets, whether physical or human. For instance, cheap wage labour attracting external funds (capital) also finances external debt service to the detriment of domestic human resources.

In light of this, the question arose whether financing the national economy has improved recently. If yes, this may provide a kind of explanation as to why domestic income generation and its use at home managed to increase despite a reduction in external resources.

Our analyses seem to confirm that economic policy has shifted from the earlier passive financing logic, accepted in certain respects for decades. The active financing approach has gained ground (for example, remember the retail resources included in financing the government budget or the activity of the National Bank of Hungary (MNB) in boosting financing). A change in the financing logic made the flow of funds more favourable in several areas. In other words, financing did its job.

In this study, we analysed the position of the major income holders in the national economy in respect of the flow of funds between them. We presumed that, to put it loosely, the smooth reduction of external funds was facilitated by the activity of domestic financing. This may explain why instead of crashing due to the significant gap in external resources, we saw a development in the opposite direction: despite some unfavourable foreign economic conditions, after a minor downturn, promising numbers have been achieved in recent years. In other words, Baron Munchausen's case is no mere fairy tale, but rather a parable with a lesson: the happy wording of a problem gives the clue to its solution. Consequently, the idea that external financing (indebtedness) is simply a reflection of some kind of extensive domestic consumption had to be left behind.

Thus, if someone is thinking along the previously accepted mathematics of growth and the economic structure characteristic of the period before the crisis, then the favourable process in recent years is difficult to comprehend from the developments in external indebtedness. In addition, an explanation is also required for significant economic growth without raising funds and with a poor external market performance. Moreover, external resources have also decreased. This is the question we tackle in more detail in the article.

In light of the developments seen in corporate financing, we think it is increasingly urgent to "re-discover" non-banking instruments (previously, the majority of lending was conducted on a corporate level). Note that bank lending remains lethargic in the world economy, especially in Hungary. Innovation is not only badly sought in the real economy, but also in financing. The weight of household savings (the net financial assets of the population are nearly equal to the annual GDP) shows that we have a basis to build on. The government budget is not the only area this money may be mobilized to finance. The SME sector may also be funded, and far better and more cheaply than currently. Each tiny step made by the central bank in this direction, say, towards intercompany and household lending to business, would presumably boost domestic financing resources significantly, for example, by providing guarantees for lending between corporations.

# THE REST OF THE WORLD AS AN ECONOMIC SECTOR WITHIN THE NATIONAL ECONOMY

When it comes to the external indebtedness of a country, public thinking, and frequently even the thinking of professionals, considers it identical with sovereign indebtedness. Nevertheless, the period since 2000 has already been characterised by private indebtedness coming into the foreground. Similarly, debt service is thought to be the same as the repayment of a state debt, simply because it is done at the level of the state. This is another faulty approach: the state or government acts as the sovereign institution of the national economy to service the external debt in foreign currency if the national demand for FCY exceeds its supply. The reason also needs to be explained. On the basis of the "debtor has to pay" logic, we identify the debtor with the party that administers debt service. However, instead of the individual debtor, the mirror institution vis-à-vis the rest of the world is the domestic economy, or more accurately, the nation. Consequently, in addition to business partners, the debt owed by those who do business with the rest of the world is secured by a debtor community, that is, the domestic economy. And in a physical form this is represented, "embodied", by the state. For this reason, the ultimate debtor (actually, the guarantor) to the rest of the world is the state, even if the debt is private.

Thus, we will first examine external account holders (the rest of the world) that have registered headquarters in the country and then the other sectors of the national economy.

Financial practice has established a peculiar system of indicators for the analysis of developments in external funds: the balance of payments. It is compiled through an approach that differs from the financial accounts of the national economy, which compares the national economy's financial assets and the external accounts of foreigners with headquarters in Hungary. This is discussed in this article. A country's balance of payments, and more specifically, the current account, is far more widely used than its financial accounts. This current account balance focuses on developments in the country's solvency vis-à-vis the rest of the world. Among other dynamics, it reveals if exports provide coverage for imports at any given moment and for the outflow of income simultaneous with the inflow of foreign direct investment from abroad. It is also important to consider how surplus capital flowing in from abroad can cover a country's foreign currency needs. In a wider sense, a country's external debt is the indicator that shows to what extent the country is able to provide financing in foreign currency for its external debt. This is what the external financing party is interested in and not so much the impact of resources obtained from abroad on the country's financial assets. The country's national bank is supposed to deal with the latter, and the country's government is authorized to do so. If these institutions lack competence and other responsible circles do not assume this task, and then we see the events we experienced in financing in Hungary in the early 2000s. In short, this is characterised by the "too big coat" kind of external financing briefly described below.

#### EXTERNAL DEBT - GETTING OFF THE RAILS

The country's external debt and the balance of payments used to measure it are critical indicators of economic standing. Unfortunately, disregarding the relevant analyses conducted by the National Bank of Hungary, this issue has still not been given sufficient attention in public thinking on economic issues. The debt owed by the national economy as a whole, i.e., the debt to the rest of the world, somehow escapes the field of view. This is no coincidence, as such questions are rarely asked.

In recent years, the country has broken new ground by being able to considerably reduce its external debt, to an extent previously considered inconceivable. Between 2010 and 2016, the (net) external debt fell from 55 to 23 per cent of GDP. This could be considered exemplary even in an international context.

A clear chart shows both the significant reduction in the country's previous outstandingly high debt in recent years and the contributions of the individual sectors to this reduction.

The net external debt and its components are depicted in the figure below.

60.0 55.0 -Government 50.0 45.0 40.0 -Corporate 35.0 30.0 25.0 Credit institution 20.0 15.0 10.0 5.0 ←Net external debt 0.0 2003 2006 2009 2012 2015

Figure 1: Net external national debt relative to GDP and its components broken down by sector "Too big coat" external financing and its correction

Source: The authors' compilation

The figure shows a drastic fall in the net external debt and its sectoral components, considering all economic sectors (in this figure, reduction in household external debt is included in the fall in bank debt). The net external debt dropped to half of its 2009 value. In this regard, the financial sector is ranked first, as it reduced its external resources to the minimum from an extremely high level. Although this is a positive development in terms of reduction in external indebtedness, the positive nature alone fails to show the underlying processes. These include the fact that the massive

and cyclical external financing of the bank system, backed by foreign parent companies, is highly unfavourable for the economy. The upward and downward cycles were equally increased by that sector. Cycle fluctuations were very high. The sudden fall in external financing in the banking sector already shows that foreign-owned banks are capable of a rapid exodus, and this took place in Hungary. They left a gap in the country's financing (while this is the sector that collects the significant funds saved by the households). As shown below, a considerable part of external financing is done with the mediation of institutions other than the Hungarian bank system. (Note that this is an important task for Hungarian financial regulation and, more specifically, for financing regulation.) Another point that must be remembered is that the central bank and the government intervene in these processes. The series under analysis and the illustration of it also conceal the foreign currency lending crisis. The practical collapse of lending to households would have badly destabilized the financial system (primarily including lender banks) if the National Bank of Hungary and the government had not intervened to moderate this crisis. Among other actions, the MNB provided banks with significant amounts of foreign currency for the conversion of foreign currency loans to forint-based loans.

The figure clearly shows the 4–6 years when the external debt left the previous path. Credit institutions' external debt relative to GDP rose to 30 per cent, unprecedented in an international comparison, and jeopardised the financial system. The state's excessive external indebtedness is shown by the charts: it grew to 20 per cent of GDP and only returned to the 2004 level of about 13 per cent by 2015. In the few years to follow 2012, the salient imbalance in external debt was remedied. Note, however, that in the meantime, its structure was distorted: the ratio of external financing bypassing domestic banks grew. Most of the reduction in the external debt is attributable to households (and to a moderate extent, the corporate sector) cutting a significant ratio of their external debt. In contrast, it increased its savings noticeably. This improved the financial balance, but distorted the structure of financing. In order to correct frozen lending, the National Bank of Hungary launched its Funding for Growth Scheme (FGS) to maintain and promote the flow of funds.

# FROM DEFICIT TO SURPLUS - TRENDS AND CAUSES BEHIND THE BALANCE OF PAYMENTS AND THE CAPITAL BALANCE

The country's external indebtedness is analysed through the balance of payments between 2002 and 2015. Showing the trend over time, the chart focuses on the main items. This allows two important correlations to stand out: The balance of a country's current account payments (or the trend in its indebtedness) is predominantly determined by the balance of goods and services, as can be seen from the noticeable similarity in the two relevant curves. However, this previous correlation is corrected by another one. The high and increasing amount of income flowing out of the country has become the other cornerstone of the country's indebtedness. The reason is that ever since 2007, the surplus earned on goods and services represents a cut in con-

sumable income. From another perspective, this means that, for instance, in 2015, disregarding other components, 8 per cent of the income generated in the national economy must be withdrawn from domestic use.

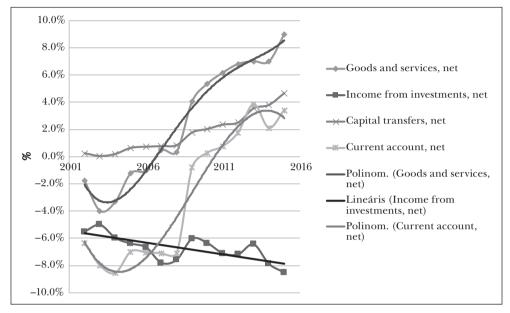


Figure 2: Key items in the balance of payments 2002–2015, % of GDP

Source: The authors' compilation

Details of changes suggest the following turning points. By 2007–2009, from the earlier level close to breakeven, the foreign trade balance had improved to a position of forming a real surplus of about 3 per cent of GDP. However, this was not reflected in the figures, as a (5 per cent) decline in the terms of trade between 2005 and 2008 deteriorated the foreign trade balance to GDP by 3.5 per cent. A significant improvement in the external account was seen from mid-2009, when the official data also showed a surplus of around 3 per cent. The foreign trade surplus slightly increased after 2013. This was facilitated by a drop in oil prices to a level close to a decade earlier. Due to the high outflow of capital gains, the current account deficit was still high at that time. By 2011, the current account had reached parity, as, in addition to an improvement in the foreign trade balance, the outflow of incomes fell, the balance of transfers grew, and remittances sent home by people working abroad had increased.

In addition to debt, some improvement in Hungary's (external) financial balance is shown by the aggregate value of the current and the capital accounts. This figure has been showing a considerable surplus for the last three or four years. Since 2010, the aggregate balance of the two accounts mentioned has been positive, with a surplus amounting to a steady 5–8 per cent of GDP since 2013.

The reader might presume that external debt chopping in recent years was facilitated by the high value of EU funds. The majority of EU projects financed massive infrastructure, environmental protection etc. developments; moreover, to a significant extent, they created a market for western companies (e.g., STRABAG). This meant that only a small proportion of the EU funds could be used for debt reduction.

The effects of EU funds granted to facilitate the convergence of the Visegrád countries were analysed by Polish researchers on the basis of questionnaire surveys. According to their conclusions (regarding the whole chain of effects), the EU-15 countries' exports to the Visegrád countries is rising by a value that amounts to 61.5 per cent of the EU funds spent in the Visegrád countries.<sup>7</sup>

A detailed analysis of non-debt liabilities is beyond the scope of this article. It must be noted, however, that their net amounts have fallen moderately since 2009. There are two impacts underlying this decline. One is a slight increase in foreign direct investment. (Its effect relative to GDP is 4 per cent.) The other is the 15 per cent reduction in the value of FDI due to revaluation and other effects. Another important correlation seems to be important in explaining the shrinking credit financing, namely, that the corporate sector financed itself from internal funds at a ratio higher than previously. Their ratio has grown by 10 per cent in the balance sheet total, mainly from arise in the equity ratio.

In order to go further in evaluating the achievements in growing assets within the balance of payments and in cutting external debt, it is worth inquiring to what extent the changes in the individual economic players' behaviour can explain all this. In the rest of this article, the various sectors of the national economy (corporate, household, government, credit institutions and the central banking sector) will be analysed only broadly.

### THE CORPORATE SECTOR AND ITS DIVERGENT FINANCING

Changes in loans reduced the pace of GDP growth by 1 per cent between 2009 and 2013, and then this effect halved as a result of FGS loans.<sup>8</sup> According to the central bank's experts, in 2015 it was precisely corporate sector loans that remained 6–7 per cent below the trend value. The central bank's experts also claim that nearly half of the total economic growth achieved between 2013 and 2015 was generated by projects financed from FGS loans.

Due to the preceding lending boom, a sharp decline in lending aggravated corporate financing problems. The following figure shows lending cycles.

The figure clearly illustrates the sharp decline in corporate borrowing (Gém, 2011:348). The total quantity of loans dropped to levels before the crisis. Domestic borrowing fell even more sharply: in 2015, it was even below the 2001 level. The ratio of domestic loans to GDP fell from 39 to 25 per cent. The domestic corporate loan portfolio shrank by 25 per cent in nominal terms and 35 per cent at real value. Two-thirds of this loan reduction resulted from the drastic cutback in loans on offer. The net value of proprietary loans also fell.<sup>9</sup>

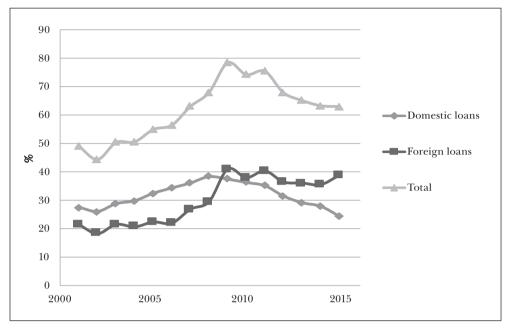


Figure 3: Up- and downturn in corporate loan portfolios (peak and low in corporate lending)

Source: The authors' compilation

The decrease in the loan portfolio was due to a considerable extent to the fact that the European parent banks withdrew significant amounts from the subsidiary banks operating in the new Member States in two waves (in 2009 and then in 2011), and as a consequence they cut their loans allocated among the new Member States. (This cut was so drastic that even the IMF proposed negotiations to remedy the situation – cf. First Vienna Initiative.)

The drop in lending affected particular economic sectors differently. Slightly more than half of the domestic loans are allocated to SME businesses. In Hungary, the place of borrowing depends primarily on company size. Some 60–80 per cent of large corporations' loans are obtained abroad (even if the owners are Hungarians). On the other hand, small companies take out 80 per cent of their loans from domestic banks (even in the case of non-resident ownership). It follows that the drop in domestic lending primarily affected the SME sector.

Tightening in lending resulted in a peculiar distortion in the corporate sector's structure. It limited both start-ups and the service sector. The reason is that, due to the crisis, banks prefer not to lend to companies with a short history or with insufficient collateral (and most services fit this description). Note that in terms of added value, the ratio of services, a less loan-intensive sector, has increased in comparison with 2009.

In the case of SMEs, the 14 per cent ratio of liquid assets in their balance sheet total exceeds the average (at 10 per cent). Although this helps them to borrow less, it is insufficient for implementing capital investment projects.

# CENTRAL BANK AND GOVERNMENT STRATEGIES TO MITIGATE THE DOWNTURN

The downturn was moderated by state (government + central bank) measures. Overall, these are estimated to have improved the corporate sector's income position by about 3 per cent of GDP. Approximately half of this, i.e., 1.5 per cent, was due to the effect of the currency devaluation in real terms. Export businesses benefited from this in particular as well some producers working for the domestic market. The other half was attributed to income-improving measures taken by the government. These included the following:

- excessive energy prices were cut,
- telecommunication fees were halved,
- the preferential 10 per cent corporate income tax rate is now applicable to a wider circle than previously,
- the sector's net interest expenditure is currently HUF 250 billion less than it was during the crisis,
  - a significant cut in employment taxes has also improved profitability.

The position of the corporate sector was further stabilized by a reduction in wage costs, although a slight one, with a parallel increase in the gross operating profit ratio. The situation is similar in expenditures on capital formation. Despite a decline in this ratio relative to GDP in comparison with 2005, the current level is similar to the average of Hungary's neighbours. At 13 per cent of GDP, the corporate sector's investment ratio is around the average of the Visegrád countries (Giday, 2015:184).

### EU funds

The use of EU funds increasingly introduces cycles in projects within the individual branches of the competitive sectors. In the years preceding a tender, companies gather strength and collect money (to provide as a contribution), and after tendering, they are engaged in the repayment of loans and in boosting capacity rather than taking out additional significant loans. <sup>10</sup> The past 2–3 years was a period of gathering strength: this is why corporate deposit portfolios have grown.

In 2009–2011, approximately HUF 600 billion in EU funds was available for the development of non-agricultural businesses. In comparison with the value of total investment projects implemented in seven years, this represented an additional source of about 6 per cent. Between 2014 and 2020, approximately HUF 2.5–3 trillion is available for projects to develop the core activities of non-agricultural companies. <sup>11</sup> This amount is already more significant, as the total projects would amount to some HUF 10 trillion implemented by these areas during the seven-year period. For this reason, EU funds may even replace borrowing, especially in respect of the developments foreseen in the next 2–3 years. <sup>12</sup> However, companies must prepare for this financially, as they are required to make significant contributions.

# ROCKETING HOUSEHOLD DEBT AND LATER ASSET GROWTH; THE ROLE OF HOUSEHOLD ASSETS IN FUNDING

The term "getting over" in the title is primarily intended to convey the fact that in the past 4–5 years the nation and its actors have made enormous efforts at significantly reducing external indebtedness. We thus wanted to call attention to the heavy price to be paid for external indebtedness not only by the contracting parties, but by the entire national economy, including all its sectors. The "debtor has to pay" approach is insufficient when it comes to indebtedness, as it disregards the fact that in addition to the debtor, his, her or its community (family, village, town or nation) is also involved in the debt community.

In some way or another, the debate that remains open to this day on the heavy price paid for household foreign currency lending concerns this very problem. In any case, it is certain that household foreign currency lending shook the very foundations of the national economy. This is manifest in the high prices the country had to pay to be able to gain access again to non-resident lenders, that is, to the money market. Unfortunately, all of the domestic economic actors should pay this price for a long time to come – although to different extents and through different intermediary systems. The first part of this article described this correlation in macro-economic terms, analysing the external indebtedness of the national economy and its sectors on the basis of their financial positions.

Our analysis of households proceeds from our previous assumption that the increase in household savings has contributed significantly to the reduction of the national economy's indebtedness. In the next section details are provided – primarily in relation to reduction in the external debt – of the specific developments in this sector (as the household also constitutes part of the economy).

### Household lending

Household borrowing dropped drastically after the crisis. Up to the early 2000s, borrowing in forints was considerably limited by high interest rates and low household incomes. In other words, there were major checks on the financing of household investment projects. This is also manifest in the fact that household lending was extremely low even in an international comparison. Consequently, a kind of "thirst for loans" evolved. This was further aggravated by the increasing outflow of incomes in the early 2000s. On top of this, banks turned aggressively to retail lending. Competitiveness on this market led to a strong credit boom. Foreign-owned subsidiaries encouraged lending to households so impetuously that they even pushed into the background their banking risk and the foreign exchange risk undertaken by the population. Household credit demand was further augmented by the contradictory introduction of forint convertibility and the practically unlimited opening up of the foreign credit market without consideration for the indebtedness of the national economy. This situation was exacerbated by the fact that forint loans allocated at artificially raised interest

rates drove households to foreign currency credits. This kind of lending failed to properly price in external risks (e.g., the exchange rate risk, as a riskier product must be more expensive).

As a result, from the mid-2000s, household borrowing – with the ratio of foreign currency loans rising – started to rocket and then collapsed (Lentner, 2015b:308). The conversion of foreign currency loans to forint loans practically put an end to foreign currency lending. Consequently, these loans dropped to pre-crisis levels as a ratio of GDP. These developments are shown in the following "humpback", or rather "excrescent" diagram.

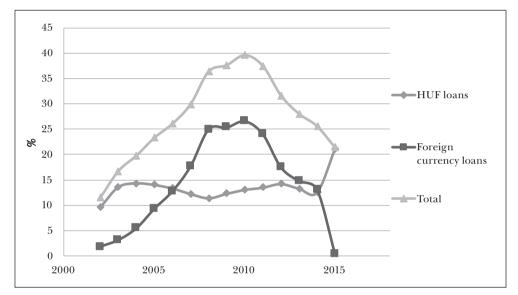


Figure 4: Household borrowing (HUF, foreign currency and total) as percentage of GDP

Source: The authors' compilation

Approximately 1 million households were granted mortgage loans, affecting 3 million people, nearly one-third of the population. Three-quarters of the affected families had children. Most of them were indebted in foreign currency, primarily in CHF. The average repayment instalments of CHF loans increased from HUF 40,000 in 2008 to HUF 86,000. The ratio of distressed loans had risen to 11 per cent by mid-2011. For this reason, in 2010–2011, banks sold 2 per cent of their foreign currency-denominated mortgage loans (to factoring or debt management companies).

After the crisis, household borrowing dropped drastically. Household loans to GDP still remain at the 2004 level. At least one tenth of debtors found themselves in a severe crisis. Their banks terminated their loan agreements and in many cases took their homes. A small proportion re-rent homes purchased by the appointed asset manager (this is a very low ratio, as this opportunity was only open to the long-term unemployed).

The crisis in the international financial system undermined the Hungarian financial system, which was inappropriately structured to withstand risk. In response, numerous actions were taken to withdraw the previous income growth, and even reverse it. Household incomes declined – due partly to a drop in real wages and partly to higher unemployment. 13th-month benefits granted by the government (to pensioners and public and civil servants) were terminated in 2009. Value added tax was raised by 5 per cent (2009). In 2011, private pension fund yields were paid off, and from 2012 VAT was further increased by 2 percentage points. Wages and salaries were heavily taxed. In 2008, 55 per cent was deducted from wages on average, and the tax margin was a conspicuously high 65–75 per cent.

In addition to approximately doubled debt service, incomes were burdened by utility fee hikes affecting all layers of society. This is shown by the fact that one million households were late in paying utility fees, several times the number of defaulting foreign currency loan debtors.

As a result, household consumer expenditure dropped significantly, as shown by the fact that it is only expected to return to the pre-crisis level (2007) in 2017. The value of household investments dropped to half. The situation is even less favourable in household home investments. Their current value (1.4 per cent of GDP) is merely a third or fourth of the value recorded before the crisis. As a consequence, a considerably higher ratio of incomes is spent on savings, in response to the lending shock experience and due to postponed investments. Some of these savings are actually made under the pressure of circumstances; indeed, households enjoy a smaller share of their income. An even more serious problem includes the long-term effects of a drop in investments. Housing difficulties have an adverse impact on the birth rate and the construction industry, which is driven by domestic demand, as well as causing shrinkage in the domestic market, which in turn limits SME sector growth.

### Household savings

As a result of the crisis, household savings rose considerably after 2009. The annual growth in household savings amounts to 4–5 per cent of GDP.<sup>13</sup> Initially, it was deposits that increased, and then it was the amounts placed in investment funds and government securities. In addition, assets held by the household sector in businesses also rose significantly. A propensity to save grew considerably: in seven years, the growth in net savings among the population came to 19 per cent of GDP.

The flat-rate personal income tax presumably contributed to the surge in savings. The tax regime put the social stratum that could be expected to save considerable amounts from its surplus income in a favourable position. Others also needed to start saving well in advance if they planned major spending (on a home or car). They did not seem to have access to loans with acceptable conditions within a few years.

The following figure compares borrowing to savings to show the weight of households in the stabilization of the national economy.

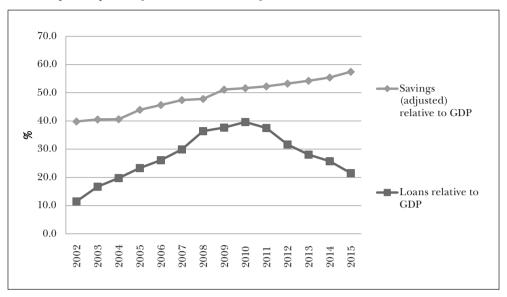


Figure 5: Household savings and loans as percentage of GDP. Adjusted for nationalized private pension funds (not included) after 2011

Source: The authors' compilation

In comparison with 2001, gross household savings increased by 20 percentage points (from 47 to 67 per cent of GDP). In comparison with the borrowing peak (2010), household borrowing relative to GDP fell by nearly 20 percentage points. (It would be worth analysing the current position of household lending separately with and without revaluations in comparison from a deep level of 2001 to 2015.) As a result of all this, as mentioned above, household investments, and especially housing investments, will have difficulty rising beyond their historical low.

The weight of loan-intensive car purchases within household spending has decreased considerably. The effect hit the home sector even harder. Home building fell one quarter of its previous value, and the number of home purchases dropped by 40 per cent. While two-thirds of the purchase price was previously covered by loans, by now this ratio is one-third at the most, and purely cash purchases are frequent. The fact that home renovation activity has declined even more represents a mass phenomenon. Overall, shrinking credit brought about a significant postponement in purchases of higher-value goods.

Thus, forcing down the indebtedness of the national economy entailed a kind of "forced" household savings. Note, however, that a development in household income closely correlates with external debt service. Such household savings are favourable for financing the national economy, as debt service has a price. And this price must be paid not only by the individual parties, but also by the whole national economy. Not to mention the negative effects on the future generation caused by lost investments. As shown in our previous analysis of the financial position of the various sectors of

the national economy, household savings finance the external debt of the national economy, which is in a grave situation.

After the crisis, the situation was further aggravated by the pre-2000 decline in household real incomes. In Hungary, real wages only reached the levels recorded before the regime change in 2004, and if the numerous fringe benefits paid in the 1980s are also taken into consideration (free kindergarten and crèche, employer's home purchase subsidy etc.), then the 1988 level was only reached in 2005 or 2006. The purchase value of wages paid in Hungary was only half of those recorded in more advanced countries in our region (and no more than a third or quarter at foreign exchange value) in the decade that started in 2000. However, the situation must also be considered from the perspective that the ratio of wages and similar incomes to GDP amounts to half of GDP, just as in other countries in the region (while this ratio is around 60 per cent in the old Member States of the EU). This is increased by the non-wage incomes of sole traders, classified as part of the household sector.

In any case, it is true that in the course of the crisis, the weight of the burdens put on households – to consolidate the national economy – is even greater if the developments of its incomes and savings are taken into consideration in comparison with the unfavourable processes of the years before the crisis.

### Households as the stabilizers of the national economy

A decline in household income – aggravated by an increase in unemployment – was a kind of an emergency reaction to external indebtedness that jeopardised national sovereignty. Remember that the country's gross debt significantly exceeded even GDP. As a result, the country's national assets were at risk with the impending consequence of forced privatization, depreciation of household assets, insecure finance ability of the institutional network etc. In an international comparison, the structure of the banking system was severely vulnerable. Essentially, banks violated numerous lending rules (the ratio of deposits to loans, pricing risks in loans, the riskiness of financing their external debt etc.) (Lentner, 2015a:308). In addition, the central bank had an extremely low<sup>14</sup> level of reserves to secure lending against risks. This situation was further worsened by the fact that, as mentioned above, foreign parent banks withdrew huge amounts from their subsidiaries operating in new EU Member States, including Hungary, in order to stabilize their shortage of funds.

The drastic cut in household resources, which was a prompt reaction to consolidate the country's external debt crisis, must be considered in this context, even though it deserves criticism in several respects. In this study, we did not analyse how much a cut in household incomes may be harmful. An income decrease may contribute to additional income decreases, thus becoming a kind of vicious circle. This is because household consumption and investment (whether human or physical) are integral parts of the economy. Any "cut" in them may cause serious losses for the economy, which should rather increase its resources instead of reducing them on account of indebtedness. After 2010, Hungary was seeking a way out of this vi-

cious circle. Actions taken after 2010 to stabilize the position of households (and the financial system, which was in crisis) can only be comprehended in this grave historical situation. Any action to boost household income had to be taken with extreme caution. The heavy debt service caused by external indebtedness did not allow a significant adjustment in the use of the internal income. In addition, banks were not interested in retail lending either. Actions aiming to ease the situation of banks (funding them with "cheap" low-risk money) have still not prompted riskier investments in the real economy recently.

#### ACTIONS TO STABILIZE HOUSEHOLD INCOME AND ASSETS

Without an analysis, a list of the actions taken is provided. Analyses would certainly add more detail to the point. However, even without an analysis, we think that the actions listed served to stabilize household burdens and improve the financial potential of households, as a business unit of the economy, for example, to moderately encourage investment, which had been frozen. What is even more important, a definite impetus can be seen in perhaps the most important area of household "investments": demographic investments (i.e., having children), especially in the interest of the generation that will become productive in the future and thus in order to stabilize the pension system. The most significant ones included the following.

In 2013, the institution termed the "exchange rate cap" was introduced as a first step towards the conversion of foreign currency loans to forint loans. In 2015, the complete portfolio of foreign currency loans (including car loans) was converted to forint loans. As a result of the 2015 conversion of foreign currency loans to forint loans, the principal loan debt decreased by 16 per cent. Together with the limitation on interest rates exceeding the benchmark, this resulted in a 20–25 per cent reduction in repayment burdens. Many debtors sold their home and bought another one (a smaller one or one located in worse surroundings) to repay their loans. Despite such a grave debt situation, the majority of borrowers kept paying their loans (by the dates due) at great cost.

Household indebtedness fell to nearly half of the value recorded in 2008 primarily as a result of repaying mortgage loans. As a ratio of GDP, the reduction was 16 percentage points.

From 2013, community work was considerably expanded.

The flat-rate income tax from 2012 provided households with a significant amount of income. This had two impacts worth mentioning. First, families without children in the top fifth of the population received a surplus of about HUF 300 billion. Second, families with children retained about HUF 150 billion per annum.  $^{15}$ 

The tax regime was specifically rounded out with job protection action plan benefits (Giday, 2013:407) and wage rises to offset tax hikes.<sup>16</sup>

Mention must also be made of the chain of effects brought on by oil prices, followed by a drop in prices, which resulted in falling fuel prices and actions taken to push down overhead costs. Loan repayments required 4–6 per cent of household income per annum (representing 2–3 per cent of GDP, or 12–14 per cent in six years).

It was neither a government action nor a market development, but ensued from an EU regulation that the opportunity to find employment in any EU Member State has been available from 2011, resulting in several hundred thousand Hungarians finding jobs in more developed countries.

Finally, but among the first in significance, actions taken to mitigate the burdens of families who raise children must be noted. These were implemented partly by reducing related costs and partly through supporting housing investments (continued payment of the child home care allowance if the mother found employment, increased tax benefits for families with two children, housing investment subsidies paid for children, and the high benefit for establishing a family home, the so-called "CSOK").

# PUBLIC DEBT AND ITS RESTRUCTURING

The following figure plots the central budget debt and some of its components.

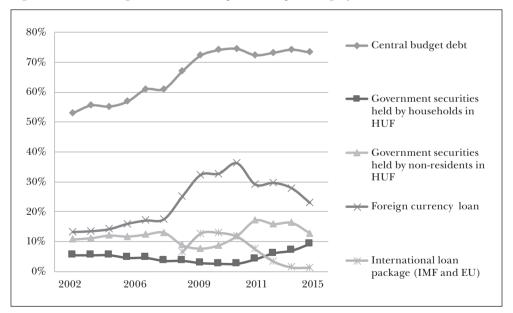


Figure 6: Central budget debt and its components as percentage of GDP, 2002–2015

Source: The authors' compilation

The peak in the central budget deficit after 2007 is explained if general budget spending is analysed together with spending by the other sectors. Overspending by all the sectors in the national economy and the cumulative external indebtedness resulting from financing such overspending can be seen together in this general budget debt peak.

Firstly, let us analyse general government spending alone. From mid-2002, following up on their 2002 election promises, the government went into chronic overspending, causing a high deficit.<sup>17</sup> The 13th-month pension payment and the 50 per cent rise in wages for civil and public servants drove government debt relative to GDP from 52 to 69 per cent in five years (Giday, 2013:288).

The government paid high interest (4–4.5 per cent of GDP). Although the year 2006 saw a tightening, 90 per cent of this tightening was based on tax hikes instead of remedying the root cause and cutting spending (Kovács, 2014:350). In addition, the surge in the oil price, which offset a significant portion of the positive effect of the foreign trade balance, was not anticipated. As the remaining strategic state-owned properties (MOL, the natural gas industry and Postabank) were sold, there was insufficient Hungarian power to counterbalance foreign interests. In this respect, the following items may be highlighted in government spending:

- The value of government investment projects was also high (in excess of 4 per cent of GDP per annum).
- Local governments borrowed huge amounts in foreign currency (by 2009, this portfolio had exceeded 4 per cent of GDP) (Lentner, 2014:339).
- A significant ratio of constructions was implemented in a PPP scheme (Báger, 2015:159), disregarding the fact that this was far more expensive than any other source of funding.

An analysis of government indebtedness does not in and of itself explain the debt peak after 2007. The reason is that the government, under attack by speculative forces, was the sovereign institution that took out the rescue loan from the IMF–EU in 2008 for the purpose of stabilizing not only the position of public finances, but also the external financial position of the national economy. (See our previous analyses of the external debt of the whole national economy (private included), which must ultimately be secured by the sovereign state.) As a consequence, a financial emergency evolved in Hungary in 2008 because central bank reserves were insufficient to securely cover the unrestricted gross external debt (which increased to 110 per cent of GDP). Speculators exploited the situation, and Hungary was not provided any loans to honour its maturing payment liabilities. Everyone remains silent about the fact that in 2008–2009, it was not only households and corporations that were heavily burdened by the foreign currency debt crisis, but also the Hungarian national economy. For this reason, the government as a national income holder had to intervene and apply for an international loan to prevent the country's insolvency.

The figure below illustrates the trends in the government debt. The wave in the curve of government debt was due, for the most part, to the foreign currency debt owed to international institutions (from loans taken out by the government from international institutions to top up foreign currency reserves).

The figure also shows a subsequent development. In 2010, the new government assumed the responsibility of repaying the IMF-EU foreign currency loan which had been taken out because of the crisis. Funds were raised on the domestic market for this purpose. As the outcome shows, despite sharp criticism in the Hungarian busi-

ness media, the government was capable of achieving this goal. The fact that the foreign currency lending crisis compelled households to save significant amounts was of great assistance. In targeted steps, the government increasingly used these savings to finance its debt. The chart illustrates that parallel with a decrease in government debt denominated in foreign currency and non-residents' forint debt in government securities (for the most part, due to repayment of the IMF–EU loan), households increased their purchase of government securities. A reduction in forint-denominated government securities held by non-residents relieves the country of the double risk of this type of lending. The chart clearly shows the gradual restructuring of financing in government debt and the return to money market financing (Bánfi–Bánfi–Bánfi, 2013:220). As a result of these changes, a significant reduction was seen in the government debt denominated in foreign currency (to 24 per cent by 2015), and the ratio of forint-denominated government debt owed to non-residents also dropped considerably (Barcza, 2015:452). At the moment, the latter only slightly exceeds government securities held by Hungarian households.

All this shows that government debt restructuring according to the active financing logic noted above was successful. It is also worth mentioning that the interest incomes paid to households are not taken out of the country and so they raise domestic consumption. Thus, it was possible to transform the interest income flowing out of the national economy before (negative liability) into two types of positive financing (domestic income and domestic consumption).

Since the restart of economic growth, the gross government debt has been falling by an annual average of 1 per cent of GDP (Domokos–Pulay–Pető–Pongrácz, 2015:441). The drop in the government debt and its financing has considerably reduced the interest paid to the rest of the world. As a result, the interest relative to GDP fell by 1.4 percentage points between 2014 and 2017.

After six years of chronic deficit-making, the Hungarian government has been strictly adhering to the 3 per cent deficit limit since 2011. Its income has been fundamentally restructured for two reasons. One of them is the profound change in the tax regime: consumer taxes have been increased considerably, while employment taxes have been cut. The other reason is that with an upturn in the EU's convergence programmes, EU transfers also grew and represent a significant ratio in incomes. On the expenditure side, a major change included the use of EU funds, representing cyclically fluctuating amounts. As the majority of funds transferred for convergence were spent on fulfilling government duties in the 2007–2013 period, government projects had (temporarily) nearly doubled by the period between 2012 and 2015. <sup>18</sup>

Due to the fact that the deficit remained below the 3 per cent limit, the primary balance had a surplus of about 1 per cent per annum in the past few years. In other words, the government's overall spending was less than its incomes, and this itself had a restrictive effect on the economy. The situation is somewhat eased by now because interest expenditures are falling. Thus, an annual 0–0.5 per cent primary balance will be sufficient to achieve a 2–2.5 per cent deficit, and this effect will boost growth slightly.

#### THE CENTRAL BANK AND ITS FUNDING PHILOSOPHY

After the autumn of 2001, when the central bank extended the exchange rate band, assertive speculative flows of funds permanently appreciated the forint, significantly increasing the trade deficit. Thus, the chronic current account deficit grew further. The current account deficit, an indicator of a country's external indebtedness, fluctuated around 7-8 per cent of GDP for several years. The central bank's forint appreciation policy indirectly contributed to raising external indebtedness. Simultaneously, the central bank also enlarged Hungary's foreign currency exposure with its failure to prevent the spread of foreign currency lending. As a result, by the autumn of 2008, it had turned out that the central bank was unable to attend to its duty to protect the legal tender. In the course of a speculative attack, the central bank had to increase the foreign currency reserve to a considerably higher level. To provide initial assistance, the government allocated the loan borrowed from the IMF-EU to the central bank in the autumn of 2008. However, repayment of this loan required repeated amounts of foreign currency, and the central bank obtained them from commercial banks (through bond issues, paying additional interest).

The central bank's criticism of the government's overspending fell on deaf ears. In this situation, the central bank employed interest rate hikes again and again, increasing the interest burden as well as inflationary expectations, but it failed to address the root causes (i.e., government overspending and external indebtedness).

From 2012 on, the central bank gradually lowered the base rate in small steps from 7 to 0.9 per cent by 2016 (Dedák, 2013:87). In addition, with scheduled government security purchases and the low interest rates on FGS loans, it managed to reduce interest rates (gradually but definitively) in the domestic markets: in government securities, in corporate loans, and – following the conversion of foreign currency loans to forint loans – in household mortgage loans as well.

The period between 2009 and 2012 can be viewed as a time of "internal depreciation". Due to foreign currency loan debtors' shaken position, the government refused to undertake major forint depreciation.

Following the conversion of foreign currency loans to forint loans, foreign currency reserves were decreased in 2015–2016, and thus funds were released to stabilize the financial system and boost financing.

Currently, the central bank is taking the initiative to create a "bad bank" to help commercial banks get rid of their distressed corporate loan portfolios.

In 2013, the central bank announced the Funding for Growth Scheme to halt the shrinkage of lending to the SME sector.

The following figure contains a striking illustration of how badly this was needed. This is manifest in the fact that between 2010 and 2015, credit institutions increased their deposit portfolios instead of attending to their duty, i.e., supplying the economy with financial instruments (the rise in household deposits provided them with resources to this end).

12,000 10.000 8.000 ■ Cumulativ changes in cash and 6.000 deposits ■ Cumulative changes in debt 4,000 securities 2,000 ■ Cumulative changes in loans 0 2010-2015 period 2005-2009 period -2,000-4,000-6,000

Figure 7: Comparison of cumulative changes in finantial institutions lending activity in two successive periods (2005–2009 and 2010–2015) (HUF billions)

Source: The authors' compilation

### Restructuring Swiss franc loans

Banks reacted to the fall of Swiss franc interest rates in a way diametrically opposed to the norm: instead of decreasing their interest rates, they increased them, and the Annual Percentage Rate in Swiss francs grew to 7–8 per cent. The other shock was caused by the 25 per cent appreciation of the Swiss franc in 2011. The extra profit realised on these loans is characterised by the central bank's analysis, which shows that the banks' estimated cost of funds for Swiss franc mortgage loans was 2 per cent, but they transferred these loans to households at 8–9 per cent APR between 2010 and 2014. This means that the banks imposed an extra margin on debtors, who were also required to pay the exchange rate risk. In reaction to this, at the end of 2011, the government left a short period open for prepayment at an exchange rate that was more favourable than the market rate. This was a solution for one-fourth of the debtors in the crisis situation. Prepayment reduced the household mortgage loan portfolio by a quarter. Although this caused losses for certain banks, financial stability improved through the reduction of credit institutions' external indebtedness. Naturally, the fact that the sector was deprived of its better performing debtors is another issue.

In 2013, the "exchange rate cap" was introduced in coordination with the banks and the central bank. This was the first step towards the conversion of foreign currency loans to forint loans, and, naturally, two-thirds of the performing debtors registered for it. As a first step in the conversion of loans denominated in foreign currencies, the exchange rate of the Swiss franc used for conversion was fixed in 2014. In retrospect, this proved to be the right decision, as debtors were thus protected against another

strengthening of the Swiss franc (which actually struck like lightning by 20 per cent in early 2015). In 2015, the complete portfolio of foreign currency loans (including car loans) was converted to forint loans.<sup>20</sup>

The central bank assisted first in the elaboration of the exchange rate cap and then in the conversion of foreign currency-based household loans to forint loans. Following the conversion of foreign currency loans to forint loans, the central bank reduced the foreign currency reserve in 2015–2016, thus creating the opportunity to grant long-term loans to commercial banks to enable them to steadily finance foreign currency loans converted to forint loans.<sup>21</sup> The funds thus becoming available at banks were tapped to finance government securities.

As households' foreign currency risk fell with prepayment and the exchange rate cap, financial and monetary policy was no longer a captive of the exchange rate after 2013. This facilitated the central bank's enforcement of an increasingly active financing approach in its monetary policy.

# How did we manage to pull ourselves out of indebtedness "by our own bootstraps"?

It is a fact that growth resumed despite heavy debt reduction. This can only be understood in light of the changes implemented by economic policy makers after 2010. A detailed analysis of the programmes listed is beyond the scope of this article. As emphasised above in a different context, we consider it important to note that the factors listed contributed to the significant improvement in the trade balance of the national economy. The factors determining financing in the national economy underwent changes. This played a role in the increase in the national economy's financial assets (Lentner, 2015a:463), which helped to reduce the national economy's debt towards the rest of the world. As discussed in the first part of this article, the gross external indebtedness of the national economy fell from 110 to 68 per cent of GDP, in other words, by 40 percentage points in five years, or 8 percentage points per annum.

The most important actions taken to improve economy financing:

- 1. Coordination between the central bank and the government
- 2. Radical change in the tax regime
- 3. Dismantling the private pension fund scheme
- 4. Levying taxes on and curbing monopoly profits
- 5. Restructuring Swiss franc loans

In our opinion, the key element in the simultaneous restart of growth and debt reduction was that the synergic impacts between the steps above created qualitatively new forms of conduct and financing relationships.

- The government and the central bank acted in concert to involve increasing household savings in domestic financing, where appropriate, in financing the government debt. With a larger share of the general government debt financed from household funds, more national assets remain in Hungary. This approach was applied in financing the government budget, and more specifically, the government debt.

- Thus, in 2013, a more intensive rising of funds from households in forints was announced. In three years, the government securities held by households rose from HUF 900 billion to HUF 4.3trillion. In 2012–2013, the central budget assumed the local governments' foreign currency debt in the amount of HUF 1.3 trillion, thus reducing external vulnerability (Lentner, 2015a:308).
- The central bank's Self-Financing Programme was a radical change (Kolozsi–Hoffmann, 2016:15). The central bank used this programme to redirect a high ratio of the funds placed by commercial banks with the central bank to finance the forint ratio in the government debt. As a result of these changes, a significant reduction was seen in the government debt denominated in foreign currency (to 24 per cent by 2015), and the ratio of government debt owed to non-residents as part of the forint-denominated debt also dropped considerably.
- The aim of the central bank's self-financing programme launched in 2014 was to reduce Hungary's external vulnerability. With the transformation of the central bank's monetary policy instruments, the central bank stimulated banks to go through an adjustment. The banks realigned significant sources from the central bank's instruments into government securities. In the last two years, the stock of banks' government securities increased by more than HUF 2.2 trillion, and according to the international investment community, the Hungarian economy has become more resistant to external shocks.
- In 2013, the central bank announced the Funding for Growth Scheme to halt the shrinkage in lending to the SME sector. The amount allocated was HUF 2.5 trillion, representing 8 per cent of GDP.

As the inflation rate fell, the amount of cash retained by households increased, currently amounting to 12 per cent of GDP (Novák–Vámos, 2014:540).

- This is 1.5 times the usual 8 per cent. This means additional resources placed at the central bank, which is channelled back into the domestic economy (see FGS) like oil for this driving engine.
- The aim of implementing a drastic change in the tax regime was to boost economic growth and to provide tax benefits to depressed sectors that are lagging behind in GDP generation. The majority of industry-specific taxes were converted to consumer taxes.
- Levying taxes on and cutting monopoly profits. (For example, industrial electricity and natural gas prices exceeded those used in the Visegrád states by 20 per cent before 2009.)
- Financing the external debt from withdrawn pension fund assets, and the purchase of state assets in strategic sectors (in banks and energy).
- Managing the foreign currency debt crisis with central banking instruments (halving household debt).
- In the past few years, the grey (semi-legal) economy has started to whiten. This is suggested by a State Audit Office report, which establishes that a rise in VAT payments has exceeded the turnover increase in the past 2–3 years, and thus the annual tax surplus amounts to 0.95 per cent of GDP. According to a study conducted for the

central bank's Fiscal Council, the ratio of the hidden economy fell by 2 percentage points between 2010 and 2014.  $^{22}$ 

Changes in labour taxes and household transfers between 2011 and 2012 might add 2 and 1.5–2 per cent to GDP growth, respectively, because of a change in working behaviour. This is shown by a micro-simulation model (Baksay–Csomós, 2014).

# CONCLUSION - FUNDING AS A KEY FOR THE PAST AND THE FUTURE

Both economics training and public thinking fail to recognise that in a globalized world the rest of the world is an important sector in the Hungarian national economy. In the case of indebtedness, the rest of the world has a claim and the nation as a whole owes a debt. The "debtor has to pay" logic fails to reveal macro-economic correlations. This is because on a macro-economic level, the national economy as a whole and its institutions constitute a debt community vis-à-vis the rest of the world. Thus, the excessive external indebtedness of the government and the corporate sector as part of the national economy is covered by those with accumulated domestic assets. For this reason, they are in a position to pay the price of reducing debt first through the reduction of their income and/or by saving an increasing ratio of their income. In case the regulatory environment channels savings to domestic financing, the internal resources can generate more income. And this promotes its growth. The latter represents the logic of active financing over that of passive financing. The 30-percentage-point drop in the external debt to GDP in four years was allowed by a shift to active financing. This represents the recognition that domestic financing should also be managed like the domestic market. The external debt could only be reduced through a significant increase in household savings and the use of financial instruments inactivating domestic resources. Reduction was achieved with interest rate cuts and the central bank's Self-Financing Programme known as Funding for Growth Scheme and by a targeted multi-faceted government programme to stabilize household incomes. (This included programmes aimed at stabilizing the position of debtors in Swiss francs, the moderation of the income-draining effect of monopoly profits, tax and employment policy programmes, aimed at aiding families and increasing the birth rate etc.).

Such an operation was required after the 2008 crises, which consisted not only of cutting expenditures, but also measures to help the system to recover. What does this mean? Prior to the 2008 financial crisis, a cyclical peak developed on the country's debt curve. Foreign-owned Hungarian subsidiary banks made a considerable contribution to this cycle: in the upward period of the cycle with a massive encouragement of borrowing (from external resources), and then in the downward period with the withdrawal of external funds and a lending freeze. Private indebtedness to the rest of the world in the upward phase of the cycle even exceeded government debt. Although the central bank made efforts to check such pro-cyclical budget financing around the mid-2000s, at the same time it also contributed to external indebtedness. It failed to

provide sufficient coverage for the alarming size of indebtedness, either by topping up central bank reserves or by regulating collateral for banks' foreign debt. As a consequence, an emergency situation developed in Hungary's external financing.

Developments in external indebtedness clearly show that external financing must be managed on the level of the national economy as a whole. This is because the way external resources are linked to internal income generation is also important. If domestic connections are inefficient, then just as in a poorly built electrical network, a significant part of the power (in our case, external resources) may be lost. If connections are good, power may increase. This is what, in general, financing is about. Thus, the fundamental question in the external financing of the national economy is the creation of appropriate domestic connections. In other words, financing should drive domestic income generation and should not trigger financing of economic cycles. If this is not done, external financing results, sooner or later, in using up domestic assets, whether physical or human. For instance, cheap wage labour attracting foreign money (capital) also finances external debt service to the detriment of domestic human resources.

This study calls attention to the previous gross errors made in the external financing of the Hungarian national economy as a whole, without questioning the responsibility of the individual participants in external indebtedness. Our main purpose was to demonstrate as well that Hungary does have significant domestic resources that can be used in financing. The active financing approach, which gained ground after 2010, placed the emphasis on raising domestic resources for funding as opposed to external indebtedness. The Government Debt Management Agency and the National Bank of Hungary have provided numerous examples of the successful tapping of domestic resources. Partly as a forced outcome of the foreign currency crisis, household savings have made it possible to reduce the external debt. These savings are major resources, which have also appeared in corporate financing, but only the initial steps have been taken in this area.

In light of this, the question arose whether the financing of the national economy has improved recently. The answer is yes. This explains why domestic income generation and its proper use have managed to boost growth despite a severe reduction in external resources.

Coverage for the excessive external indebtedness of the government and the corporate sector is provided by households in the last resort with its significant financial and real assets. It follows from this that the population may be the main sector in financing to reduce the external debt. This can be done passively, by merely "cutting" incomes, as well as actively. The latter constitutes an operation which repairs the financial system while operating. In this context, the article differentiates passive financing (requisition of funds to fill the holes) and active financing (redirecting domestic funds towards domestic financing). An analysis of the developments from this perspective revealed that the change of economic policy approach after 2010 brought about major changes in the financing of the national economy. A demonstrative step in this process was the prepayment of the IMF–EU credit package and the simultane-

ous adoption of an economic policy relying on domestic resources. This change of attitude is a logical continuation of the shift in approach that put the development of domestic markets into the foreground of economic policy. In our analyses, we revealed that the focus has shifted to domestic funding.

Note that the primary and urgent task after the crises was to heal bad wounds caused by the debt crash. The financial position of the Hungarian national economy shows many positive processes. Nevertheless, its position remains partly vulnerable. This suggests that there is a great deal still to be done to turn the flow of domestic financial funds into a growth stimulus instead of a mere recovery. The upturn in household consumption is a good sign; however, this is "only" indicative of the fact that it will soon (in 2017) reach the pre-crisis level. Corporate lending, in other words, raising corporate funds via financing instruments, is still anaemic. The weight of household savings shows that we have a foundation on which to build. The government budget is not the only area in which this domestic resource may be mobilized to do effective finance; the SME sector may also be funded, and far better, more securely and cheaply than currently. Each tiny step taken by the central bank in this direction, i.e., towards a kind of non-bank lending, would presumably boost domestic financing resources significantly, for example, by providing guarantees for lending between corporations. In light of the above, one might ask: "Does the Munchausen effect work after all?" In response to the shock caused by the indebtedness crisis, self-healing mechanisms kicked into action with help from the central bank and the government. But in the area of autonomous financing of domestic corporations, there is much to be done.

### NOTES

- This study has been conducted within the framework of the Wekerle Sándor Scientific Workshop of Public Finances – National University of Public Service, Institute for Public Finances.
- This research will continue within the framework of the project above, under the following title: Who Finances Whom, or Who Pays in the End? What do the Financial Accounts of the National Economy Suggest? (forthcoming in the next issue of *Polgári Szemle*) by András Giday and Szilvia Szegő.
- <sup>3</sup> A fair glimpse of this economic policy debate is offered in the "Exchange of Views" column in *Pénzügyi Szemle*, vol. 1, 2007 (essays by Péter Mihályi, István Csillag and György Szakolczai). The dramatic acceleration of external indebtedness is, however, not hinted at in the debate.
- In a debate aired on Radio Kossuth, economist György Surányi called attention to the fact that through foreign currency lending operations, authorities were compelled to involve the population in the financing of the country's disastrous external debt ("Ütköző" with Péter Róna and György Surányi, Radio Kossuth, 12 June 2014).
- When we speak of a country's indebtedness, practically everybody thinks of the government budget. The external indebtedness of a national economy is not even a part of everyday conversation. And even more importantly, the concepts and the statistical system of external indebtedness are neither sufficiently comprehensible nor unequivocal.
- This was mildly facilitated by falling oil prices. If completely adjusted for a decline in the terms of trade, the 2009 foreign trade surplus would have been around 5 per cent.
- <sup>7</sup> Evaluation of benefits to the EU-15 countries resulting from the implementation of the Cohesion Policy. No. 28, IBS, Warsaw, 2011, 172, http://ibs.org.pl/app/uploads/2016/07/IBS\_Report\_01\_2011.pdf.

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- Prior to 2008, it had the opposite effect: GDP growth increased by 1–1.5 per cent per annum driven by a rapid growth in domestic lending.
- <sup>9</sup> The gross value of the latter fell from 16 to 10 per cent, and their net portfolio (from 8 per cent) to 4 per cent of GDP.
- In general, they apply for tenders with basic improvements not requiring rapid decisions and implementation (site expansion, replacement of 1–2 pieces of basic machinery etc.). If in contrast, market expansion requires the rapid installation of a new machine, they usually do not rely on slow grants, for fear of losing a market opportunity.
- Tender invitations are expected for 30 per cent of HUF 9000 EU funds (GOP, ROP etc. tenders) in manufacturing, tourism and logistics.
- This is because the government intends to commit most of the funds and distribute the majority of them in the period between 2016 and 2018.
- This represents 8 per cent of household income (such high values were unprecedented in any single year in the period between 2002 and 2008).
- <sup>14</sup> Zsuzsa Mosolygó, lead economist at the Government Debt Management Agency, named the insufficiency of the MNB's foreign currency reserves (in comparison with the sovereign risk) as one of the root causes of the crisis in the discussion entitled "Original Signs Hungary and the Financial Crisis". Ultimately, this was the factor that led to the EUR 20 billion loan being taken out from the IMF, the European Commission and the World Bank (Portfolio.hu internet portal, 18 November 2008).
- <sup>15</sup> After minor modifications, this amount currently comes to HUF 230 billion per annum.
- The latter is called an "expected" wage rise for those who earn less than HUF 230,000 per month (see Svraka–Szabó–Hudecz, 2013:401).
- <sup>17</sup> The deficit relative to GDP was 8 per cent of GDP on average between 2002 and 2006.
- A kind of division of labour can also be seen here, just as in the case of companies. The EU finances large and very costly development projects, like railway modernization, underground construction etc., while renovations and minor investments are financed by local governments or the central budget.
- <sup>19</sup> MNB Report on Financial Stability, November 2013, 47.
- As a result of the 2015 conversion of foreign currency loans to forint loans, the principal loan debt decreased by 16 percent on average. Together with the limitation on interest rates exceeding the benchmark, this resulted in a 20–25 percent reduction in repayment burdens.
- In their summary and analytical essays, Csaba Lentner et al. provide a detailed analysis of the central bank's role in the management of the foreign currency lending crisis and ultimately in securing the financial conditions for the conversion of loans from a foreign currency basis into loans denominated in forints (see Lentner, 2015c).
- ECO-VISTA, p. 58, www.parlament.hu/documents/126660/769617/N%C3%B6veked%C3%A9si+k%C 3%A9pess%C3%A9g%C3%BCnk+%C3%A9s+a+rejtett+gazdas%C3%A1g+%282016%29.pdf/963758a6-0509-4c7e-bb90-7fa6a670e9c7 (accessed 2 November 2016).

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#### Data sources:

Portfolio data, balance of payments, etc. published on the Central Bank of Hungary website.

Central Bank publications: Balance of Payments Report, Report on Inflation, Report on Growth, Financial Stability Report.

### APPENDIX

# IMPACTS OF ACTIONS CORPORATIONS

	Effects				
Actions	Inflation reduction	Income growth	Liquidity improve- ment	Strengthen- ing confi- dence etc.	Comparison with other Visegrád countries
Liabilities					
EU funds		+	+		also in Hungary
FGS	+	+	+	+	only in Hungary
Funds withdrawn by Western banks			-	-	stronger in Hungary
Costs					
Interest rate cut	+	+		+	stronger in Hungary
Energy price cut	+	+		+	stronger in Hungary
Expected wage rise		-			only in Hungary
Cutting telecom fees	+	+		+	stronger in Hungary
Adoption of an electronic road toll	-	-			also in Hungary
Crisis taxes	+	+		-	1–2 elements also in Hungary
Other					,
Online cash register	-	-		becoming legal	only in Hungary
Slightly weakening forint	-	+		+	stronger in Hungary
Tax change (EVA rise, KATA, KIVA)		-		-	
EKR				Becoming legal, administrative burden	only in Hungary

# IMPACTS OF ACTIONS HOUSEHOLDS

	Inflation reduction	Income growth	Liquidity improvement	Strength- ening con- fidence	Comparison with other Visegrád countries
Lending and saving					
CHF mortgage interest rate hike	-	-	+	-	not in Hungary
Prepayment		+		+	not in Hungary
Availability of government bonds		+			stronger in Hungary
Conversion of FCY loans to HUF loans	+	+		+	stronger in Hungary
Costs					
Central bank interest rate cut	+	+			for households, only for new forint loans, but there are hardly any
Reduction in overhead costs	+	+		+	stronger in Hungary
Expected wage rise		-		+	only in Hungary
Job protection action plan	+	+		+	
VAT hike (to 27 per cent)	-				also in Hungary
Flat-rate personal income tax	+	+		-	only in Hungary
Other					
Extension of community work		+		+	stronger in Hungary
Reversal of the private pension fund scheme	+	+ (yield pay- ment)	+ (liquidation by the state)	-	
Reduction in the period of unemployment benefits		-		-	