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# ECFIN *Country Focus*

ECONOMIC ANALYSIS FROM EUROPEAN COMMISSION'S DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS

## HIGHLIGHTS IN THIS ISSUE:

- Hungary has been experiencing one of the strongest deleveraging processes since the start of the financial crisis in the EU
- Private sector deleveraging has both demand and supply side determinants, with the importance of the latter increasing recently
- Loan supply pressures have been aggravated by government measures burdening the financial sector and reducing the growth performance of the economy

## Private sector deleveraging in Hungary: economic costs amplified by government policies in the banking sector

By Mihály Kovács\*

### Summary

*Hungary was among the first EU countries to face severe market stress at the start of the financial crisis. The combination of high external and government debt levels and a weak growth performance made the country vulnerable to external shocks. Since late 2008, helped by financial assistance from the EU (Balance of Payments programme) and the IMF (Stand-by arrangement), a considerable adjustment has been taking place. This is evident primarily in the private sector but also to some extent in the government sector and is contributing to an improving negative net international investment position (NIIP), which has been going hand in hand with a decreasing external debt.*

*Private sector adjustment was necessary particularly in view of the high level of external funding in the banking sector. Both credit demand and credit supply factors were important in this respect. Household and corporate sector debt was not particularly high from a European perspective, but higher than in regional peers. In addition, the high repayment burden and the structure of debt with a high share of foreign-currency-denominated debt justified household and corporate sector deleveraging. Supply pressures have also been important due to decreased risk tolerance, increased funding costs, a deteriorating loan portfolio, and repeated government intervention in the sector.*

*Based on composite indicators of loan demand and supply pressures, Hungary seems to have experienced the highest supply pressure among European countries in the past year, while demand pressure stands around the EU average. Deleveraging has resulted in high economic costs in Hungary, with the falls in both credit and GDP being among the largest in Europe compared to pre-crisis levels. Overall, the interventionist policies targeted at the banking sector affected the pace of the deleveraging and therefore had a non-negligible cost in terms of growth performance.*

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## Deleveraging and its consequences for economic performance

■ *Deleveraging has prolonged and significant consequences on economic performance*

Deleveraging needs arise if financial markets perceive debt levels as unsustainable. As the assessment of sustainability is based on expected income growth and financing costs, which are uncertain, financial market sentiment can turn around significantly and persistently, leading to prolonged phases of debt reduction, as is the case in the current crisis. The negative relationship between debt and growth is documented in a wide range of empirical studies, although the exact magnitude is debated.<sup>1</sup> Cuerdo et. al. (2013) present simulations with the Quest model, which substantiate factors that can influence the economic costs of deleveraging. Simultaneous deleveraging in the private and public sectors, and also in several countries in parallel, increases these costs. However, a high degree of openness of a country and structural reforms that enhance the flexibility of wage and product markets reduce the magnitude of adverse effects on economic output. In addition, the flexibility of monetary policy, including the possibility of sustaining accommodating monetary conditions, also helps to mitigate the adjustment burden.

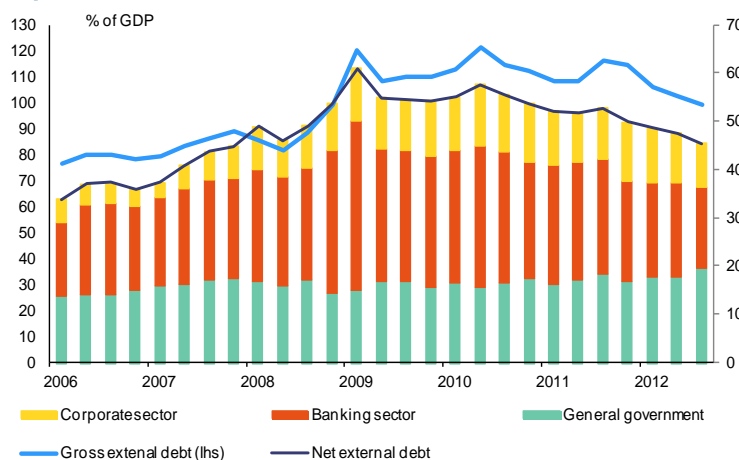
### Determinants of private sector deleveraging in Hungary

■ *Hungary was the first EU country to request BOP assistance in order to avoid an extreme pace of deleveraging*

Hungary has entered the financial crisis with a high external and government debt (see Graph 1) and weak growth prospects. At the onset of the financial crisis, the country faced imminent refinancing problems on both the government bond and the interbank markets, which led to a BoP assistance programme from the EU and a Stand-by arrangement from the IMF. Although Hungary is a small open economy with a relatively flexible labour market,<sup>2</sup> the autonomy of monetary policy has been seriously constrained by the high share of FX debt in all sectors. This was high in particular among households with FX debt at 60% of the total or around 25% of GDP in 2008.<sup>3</sup>

Since 2008, a significant adjustment has been taking place, in particular in the private sector, while government debt has also declined somewhat recently. The pace of decline of both private sector debt and government debt has been attenuated by revaluation effects due to the weakening of the HUF against the EUR and most notably against the CHF compared to pre-crisis levels.<sup>4</sup> An examination of the composition of net external debt reveals that the bulk of such debt belonged to the banking sector, where the most rapid adjustment has also been occurring.

Graph 1: The structure of net external debt



Source: Magyar Nemzeti Bank (MNB)

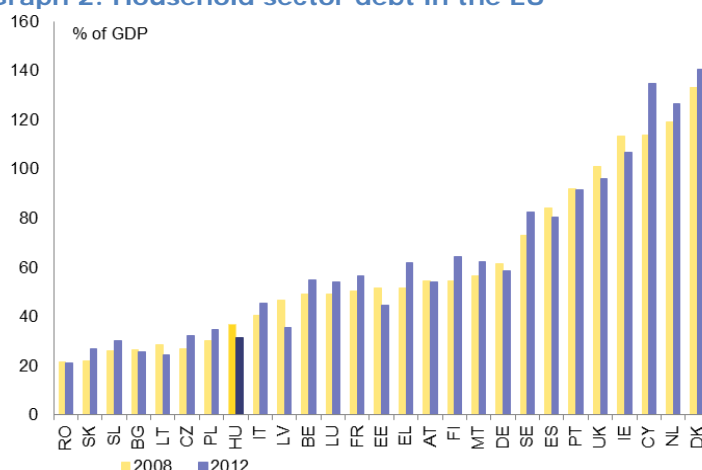
■ *Private sector deleveraging in Hungary has been caused by both*

While the adjustment was warranted due to the high starting level of external debt of the banking sector, it is less clear-cut whether this should be interpreted as a demand or supply problem, i.e. due to the over-indebtedness of the households and the corporate sector or because of banks' decreased willingness to maintain their exposure within the country.

credit demand and credit supply factors

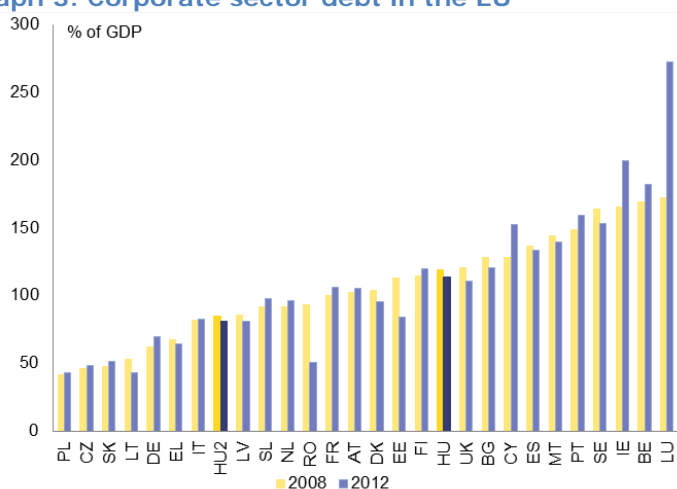
As regards demand-side factors, the high external funding of the banking sector was partly mirrored in the high indebtedness of the corporate and household sectors. However, it is important to stress that the level of household debt was not particularly high in international terms, while a proper comparison of corporate sector debt to other European countries is hindered by statistical factors like the accounting practice of special purpose entities (SPEs)<sup>5</sup>. After correcting for the presence of SPEs, the debt level of the corporate sector remains moderate in Hungary, though higher than that of regional peers. In addition to the level of non-financial private sector debt, the banking sector's high level of external funding is also related to a low level of deposits, which can be considered an important supply-side element.<sup>6</sup>

Graph 2: Household sector debt in the EU



Source: European Commission, data for 2012 refer to Q3 figures; data for Bulgaria, Cyprus, Luxembourg and Romania are only available until 2011

Graph 3: Corporate sector debt in the EU



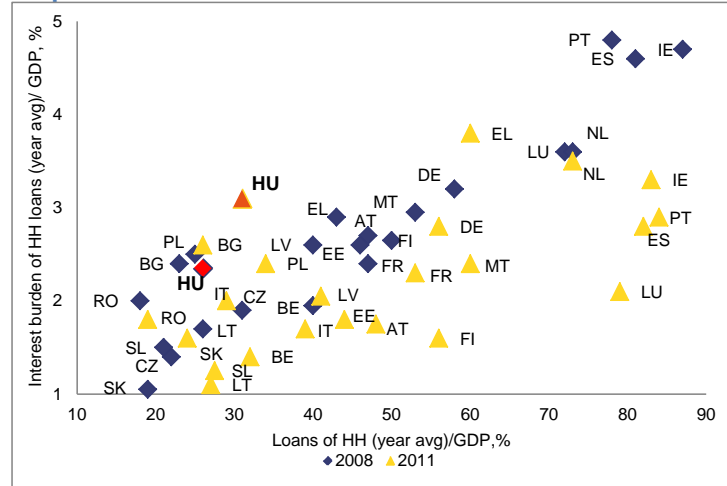
Source: EUROSTAT (HU2: debt without SPEs, author's calculation), data for 2012 refer to Q3 figures; data for France, Ireland, Luxembourg and Slovenia are only available until 2011

Household and the non-financial sector debt levels were not particularly high, but other indicators, most notably the high interest expenditure and the high share of FX debt, pointed to a high degree of fragility. Furthermore, the depreciation of the HUF vis-à-vis the CHF by over 40% between 2008 and 2011 caused a sharp increase in the interest burden of households, becoming one of the highest in the EU (Graph 4).<sup>7</sup>

Determinants of loan supply have also played an important role. As a consequence of the financial crisis, decreasing risk tolerance led to an increased search for liquidity and a need to strengthen the capital position of the sector. This resulted in efforts both to decrease loan-to-deposit ratios through tightening lending conditions and to reinforce the capital base by reducing risk-weighted assets. Both factors contributed to a reduction in lending. Loan supply pressures have also been aggravated by increasing funding costs, linked to rising interest

rates for the sovereign, and frequent government intervention in the sector (from 2010 onwards). Given the dominant presence of international banks and in order to avoid excessive deleveraging, parent banks of Hungarian branches were urged to join the multilateral framework of the European Banking Coordination Initiative (Vienna initiative), under which the largest foreign-owned commercial banks committed to maintaining their overall exposure to the country.

Graph 4: Interest rate burden of households

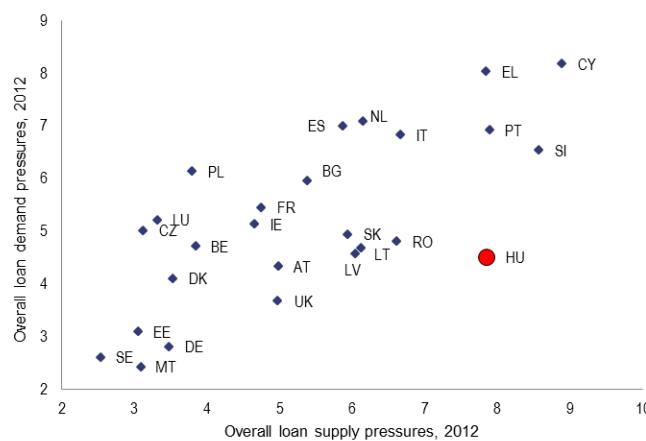


Source: Szigel-Fáykiss (2012)

It is difficult to disentangle demand and supply factors in a deleveraging process. Darvas (2012) summarises recent research on the importance of credit supply factors on economic growth. The broad conclusion is that supply shocks contributed significantly to falling credit mainly in peripheral euro-area countries. Regarding estimates for Hungary, Sóvágó (2011) concludes that 2/3 of the fall in corporate lending was attributable to supply factors up to 2010. Tamási-Világi (2011) reported relatively minor credit supply effects (a few percentage points) on corporate sector lending. However, none of the papers on Hungary covers the period after 2009, when the financial sector was the target of various regulatory and fiscal measures. Cuerdo et. al. (2013) constructed composite indicators for loan demand and supply pressures for EU countries.<sup>8</sup> Based on this analysis, it can be argued that while credit supply pressures in Hungary are among the strongest in the EU, credit demand pressures seem to be close to the EU average. More specifically, the Hungarian central bank (MNB) argues that most of the credit decline in the household sector has been demand driven, while supply factors have been more important in the corporate sector.<sup>9</sup> The regularly-published financial condition index of the MNB shows a -4 pps contribution by the banking sector to cumulative GDP growth between q4 2008 and q4 2012, which also highlights the importance of supply-side factors.<sup>10</sup>

■ Currently, loan supply pressures seem to be more important

Graph 5: Loan demand and supply pressures in Europe



Source: Cuerdo et. al. (2013)

## The effect of government policies on deleveraging

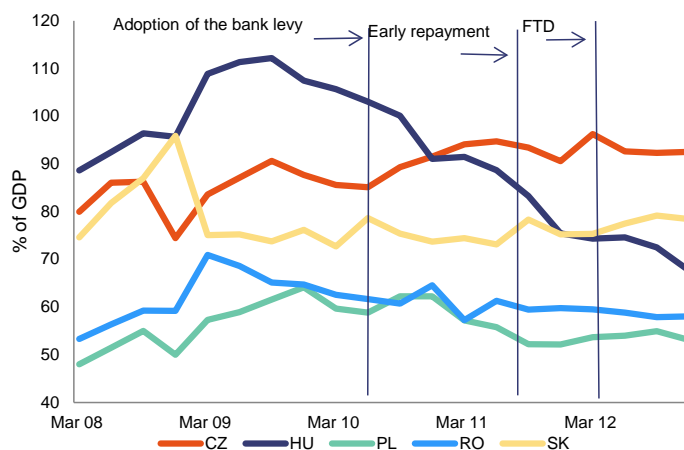
The government's policy of high additional levies and interventions in the financial sector contributed to both supply- and demand-side deleveraging. In particular, in the last few years, the Hungarian authorities introduced several consecutive policy steps that can be grouped to three types of measures which affected the banking sector's profitability and banks' behaviour (see details in Table 1). First, in 2010 an extra levy on banks' 2009 assets was introduced and maintained at its introductory level, despite initial promises of significant reductions therein from 2012 onwards. As a further step for 2013, an additional one-off bank levy was introduced to compensate for lower than expected revenues compared to original plans from the financial transaction duty. Second, an early repayment scheme was introduced, which allowed households to reimburse their debt below market rates, thereby contributing to sizeable losses in the sector, but also helped household FX debt to fall by 23%, although mainly for the most solvent debtors. Finally, a duty was introduced on financial transactions as of 2013. Although a certain ceiling is being applied in case of electronic payments, the size of the 2013 transaction duty seems to be somewhat higher than envisaged under the EU proposal. Also, the structure seems to be different from the proposed European guideline on taxing financial transactions on securities as opposed to banking transactions. Overall with these different measures, surtaxes on the banking sector have increased to above 1¼% of GDP, contributing to large losses in this sector in 2011-2012.<sup>11</sup>

### ■ Government policies induced deleveraging

**Table 1: Policy measures increasing the burden on the financial sectors**

Policy measure	Details of the measure	Effect on the financial sector
Bank levy	<ul style="list-style-type: none"> <li>•0.53% of 2009 assets above HUF 50bn, 0.15% of 2009 assets up to HUF 50 bn. First planned for 2 years and decreased significantly from 2012, later kept at the EU average level.</li> <li>•Finally the bank levy is kept as a permanent tax measure with the original parameters (adopted 11/12/2012)</li> <li>•A further one-off bank levy was introduced for 2013 (adopted on 26/06/2013), to compensate for lower than expected revenues from the financial transaction duty.</li> </ul>	0.5% of GDP from 2010  0.7% of GDP in 2013 (including the one-off levy)
Early repayment scheme	Households were allowed to repay early their FX debt at a non-market exchange rate from cash or HUF loans if applied for the scheme in the period from 29/09/2012 up to 29/02/2012. Banks were allowed to decrease the bank levy by 30% of the losses from the scheme.	0.9% of GDP in 2011,
Financial transaction duty	Introduced from 2013 (latest version adopted on 26/06/2013 and effective from August), 0.3% on bank transactions with a ceiling of HUF 6000 (0.6% without ceiling in case of cash withdrawal).	0.6% of GDP in 2013 and 0.7% of GDP from 2014

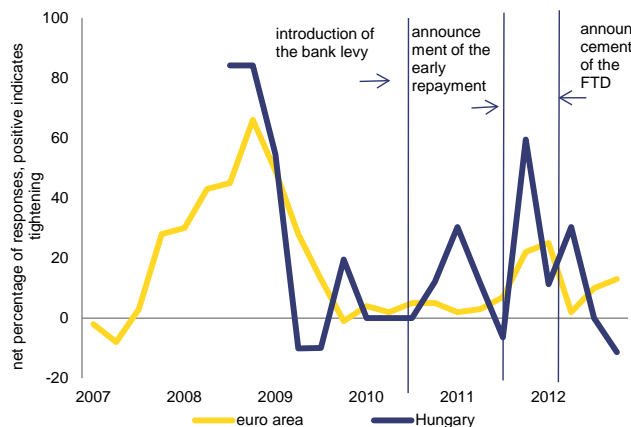
**Graph 6: Foreign banks' exposure in the Central and Eastern European region**



Source: BIS

The size of these measures should be compared with a pre-tax profit of around 1% of GDP in 2009 (before the measures were adopted) or the value added of the whole sector of around 4% of GDP. Therefore the policy steps contributed significantly to the losses of the banking sector in 2011 and 2012.<sup>12</sup> As the profitability of the Hungarian banking sector fell far behind regional peers, the country lost its attractiveness for the allocation of foreign funds, which was mirrored by the sharply declining exposure of foreign banks in the country from mid-2010 (Graph 6). Importantly, a decline in the foreign exposure started when the economic recovery was already underway. This change in the behaviour of the banking sector might also be linked to the end of the negotiations on the first financial assistance programme of the EU and IMF and consequently the end of the Vienna Initiative. The announcements and adoption of the government measures had a visible effect not only on foreign bank's exposure to Hungary, but also on the tightening of lending conditions (Graph 7).

**Graph 7: Expected changes in lending standards to the corporate sector\***



\*Based on the Senior Loan Officers' survey for Hungary and the euro area Source: MNB and ECB

## Deleveraging had high economic costs, partly as a result of government policies

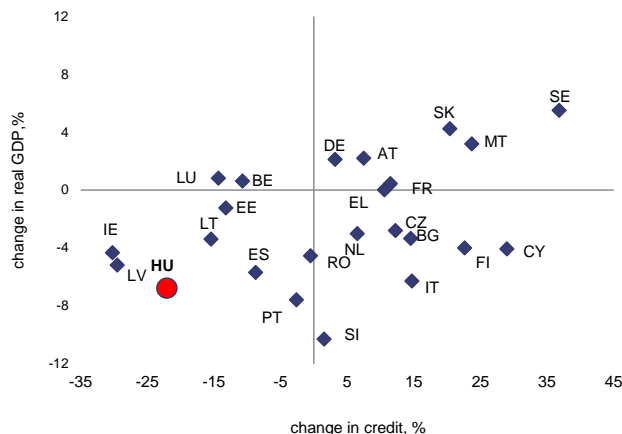
The fall in both credit and GDP in Hungary compared to pre-crisis levels is among the highest in Europe (Graph 8). These two variables are strongly related, although the direction of causality is not easy to establish. While deleveraging seems to be justified also from the demand side, the importance of supply-side determinants may have increased recently. These factors could have been induced by the government's strategy toward the financial sector, which enhanced financial disintermediation. In addition, an uncertain business environment (related to frequent changes in the tax system and increasing entry cost in certain service

■ Hungary has been experiencing one of the highest economic costs of

*deleveraging in Europe, partly due to government intervention in the financial sector*

sector segments) is likely to have contributed to a low demand for credit. These factors contributed to historically low investment rates, which are currently below 17% as opposed to above 20% before the crisis (and still observed in other Visegrád countries), with negative consequences on economic growth. The problem with financial intermediation is also mirrored in the very low productivity growth rate of the economy, as indicated in the 2013 In-Depth-Review on Hungary.<sup>13</sup>

**Graph 8: Change in credit and GDP since the start of the financial crisis**



from q3 2008 to q4 2012, Source: Author's calculation, Commission services (EUROSTAT), ECB

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<sup>1</sup> See among others Kumar-Woo (2010), Reinhardt-Rogoff (2010) and Herndon et al. (2013).

<sup>2</sup> See Kátay (2009).

<sup>3</sup> In the corporate sector the share of FX debt was close to 25%, while in the government sector it amounted around 30% in 2008. This latter share increased to 45% after the disbursement of EU-IMF loans.

<sup>4</sup> The EUR/CHF exchange rate is important as a substantial share of the FX debt (around 98% of household mortgage loans and over 28% of corporate loans) was denominated in Swiss Franc in 2008. Between Q3 2008 and Q4 2012, the cumulative revaluation effect on net FX debt in the economy was close to 8% of GDP.

- <sup>5</sup> SPEs are legal entities created to fulfill narrow, specific or temporary objectives. SPEs are typically used by companies to isolate the firm from financial risk, but also for tax optimization purposes. The non-financial private sector debt of Hungary is distorted by the different accounting practice of special purpose entities (SPEs) in the Hungarian statistics compared to other Member States. According to current practice, SPEs are classified as non-financial corporations in the Hungarian statistics. This practice deviates from that of most other Member States in which SPEs and other SPE-type units engaged in financial intermediation are usually classified as being part of the financial corporations' sector. For this reason, the non-financial private sector debt of Hungary in the EIP Scoreboard indicator is not comparable to the figures of many other Member States concerned. Debts of SPEs amounted to 17-34% of GDP in the last few years, substantially increasing the indicator for Hungary. As these corporates are set-up for tax optimization purposes and do not have real economic relationship with residents, they should be distinguished from other companies. This comparability issue is being addressed by a Task Force at European level.
- <sup>6</sup> MNB (2010) concluded that, despite the relatively high level of households' financial wealth compared to other countries, it was low compared to the level of government debt. Thus the low deposit level and the need for external funding of the banking sector can also be explained by the channeling of household savings to the financing of government debt.
- <sup>7</sup> See MNB (2010) and Fáykiss-Szigel (2012).
- <sup>8</sup> The importance of demand and supply pressures is based on the ranking of these different factors compared to the average EU values. Demand pressures consists of a composite indicator of the unemployment rate, consumer confidence, economic sentiment, a house price index, and demand indicators in the Senior Loan Officer (SLO) survey. Credit supply indicators consist of capital ratios, banking sector profitability, high risk foreign claims of banks, sovereign CDS, NPL increase, and supply factors in the SLO survey.
- <sup>9</sup> See MNB (2013a).
- <sup>10</sup> See MNB (2013b).
- <sup>11</sup> Smaller additional surtaxes on the banking sector and the insurance sector are not listed in the table.
- <sup>12</sup> These losses amounted to 0.9% and 0.6% of GDP in 2011 and 2012.
- <sup>13</sup> The latest In-Depth Review on Hungary (see European Commission (2013)) analyzed the factors behind the weak growth performance of Hungary. It was concluded that, in terms of components of potential growth, capital formation and TFP were lagging behind substantially compared to the country's regional peers. Both factors are related to the problem of financial intermediation and tight lending conditions.