

# Tamás Balás and Márton Nagy: Conversion of foreign currency loans into forints\*

Foreign currency lending to households, which entered an exceptionally dynamic phase in 2004, has reduced the efficiency of monetary policy, and the rather high share of foreign currency loans has now become a source of risks to financial stability. As this high share of FX loans will only decline slowly, we will have to face the resulting problems for a long time. In recent years, the Magyar Nemzeti Bank (MNB) pointed out these problems at numerous forums, including in its Report on Financial Stability. One of the most obvious tools to mitigate the risks arising from foreign currency debt would be quick conversion into forint loans. In such a case there is a transfer of costs and exchange rate risks between the different economic actors. The transfer of costs stems from the fact that debtors will only be willing to convert their foreign currency debt into forint loans if the instalments remain unchanged or are lower. In addition, conversion also entails the transfer of exchange rate risks, as households' open FX positions would be 'purchased' by another sector. Therefore, no conversion technique exists that could reduce risks. On the contrary: by having the government or the central bank take over the open FX positions of households it would only increase vulnerability and add to the real economic costs. The risks stemming from foreign currency debt can only be mitigated by macro-economic stability, i.e. low inflation and an economic policy that improves both external and internal equilibrium.

## RAPID ACCUMULATION OF HOUSEHOLD DEBT DENOMINATED IN FOREIGN CURRENCIES

At the end of the first half of 2010, Hungarian household debt was close to HUF 10,600 billion (40% of GDP). Within this, foreign currency loans amounted to HUF 7,300 billion (or 28% of GDP), which is two-thirds of the total debt (Table 1). This high share was reached in the second half of 2008; since then it has been stagnating or slightly decreasing. Over 90 per cent of foreign currency debt is denominated in Swiss franc and approximately 7 per cent in euro.

There were three major stages in the accumulation of the high volume of foreign currency debt. This type of household lending appeared in Hungary in 2000, initially for car purchase financing. In the period 2000–2003, car

purchase loans were almost exclusively responsible for growth of foreign currency debt. Home loans of this type started to gain ground in 2004, after tightening of the housing subsidy scheme, which essentially meant discontinuation of the programme. Soon afterwards, in 2004 and 2005, home equity loans were introduced, which gave new momentum to the build-up of foreign currency household debt. The sharpest increase in foreign currency lending was experienced between 2006 and 2008, despite the fact that the central bank pointed out the associated risks on a number of occasions and forums. Of the new lending on the whole, the share of foreign currency loans had risen to 80 per cent by the end of 2008 and the corresponding figure for mortgage loans was over 90 per cent. In response to the global financial crisis, the growth of foreign currency debt ceased by the end of 2008 and then started to decline.

**Table 1**

### Household debt and number of contracts as of 30 June 2010

	Outstanding amount (HUF Bn)			Number of contracts (in thousands)*		
	HUF	FX	Total	HUF	FX	Total
Households' total loans	3,333	7,266	10,599	2,800	5,600	8,400
from which mortgage loans	1,667	5,474	7,141	300	1,000	1,300
from which housing loans	1,527	3,089	4,616	295	550	845

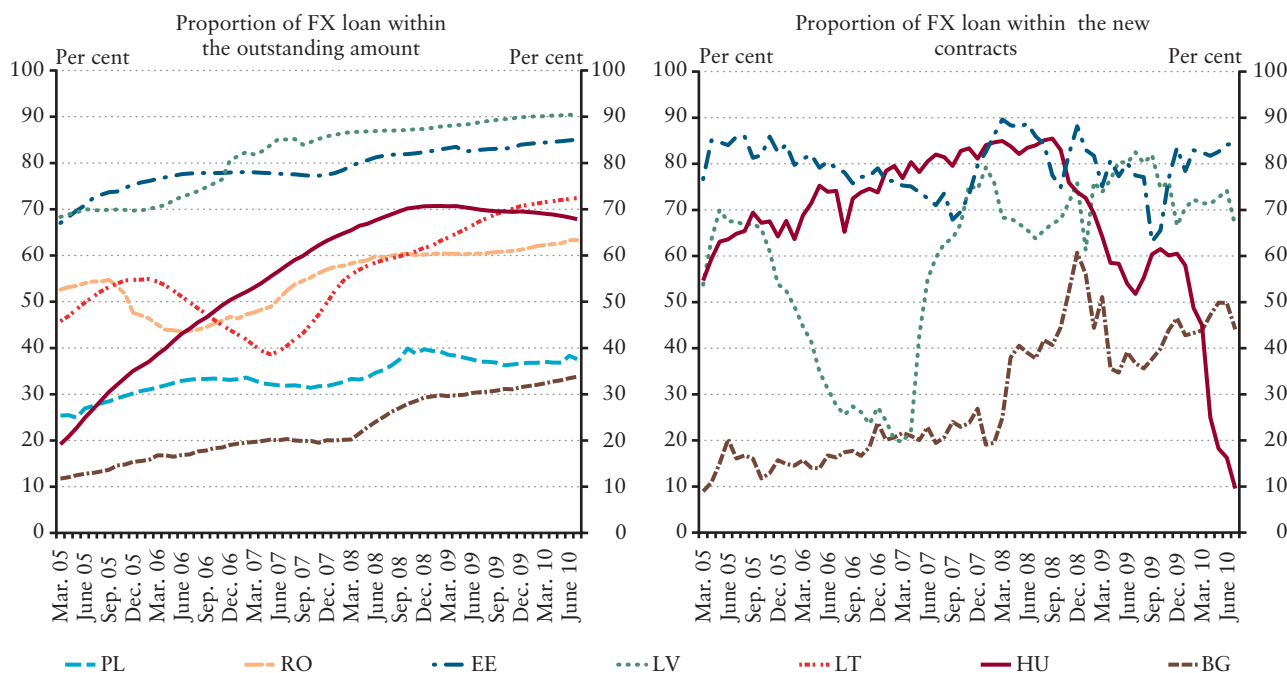
Note: The number of contracts is based on estimates.

Source: MNB.

\* The views expressed in this article are those of the author(s) and do not necessarily reflect the official view of the Magyar Nemzeti Bank.

Chart 1

Share of foreign currency debt versus total and newly disbursed household loans in an international comparison



Note: The share in new loans is a three months' average.  
Source: National central banks.

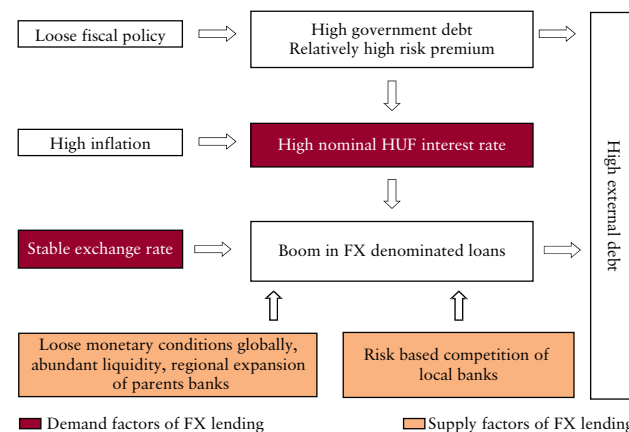
By regional comparison, the 70 per cent share of foreign currency loans of Hungarian households is high and is only exceeded by the Baltic States (see Chart 1). The corresponding figure for the Czech Republic and Slovakia is below 1 per cent.<sup>1</sup> Not only the share of foreign currency loans, but also their growth rate was exceptionally high in Hungary between 2004 and 2008. Nowhere else in the region did foreign currency lending grow so fast for such a long time compared with local currency loans. After the fast spread, foreign currency lending in Hungary experienced a likewise fast winding-off as contracts for new loans reveal.

WHAT WERE THE CAUSES OF SPREADING FOREIGN CURRENCY LENDING?

The underlying reasons (see Chart 2) for the surge in foreign currency lending is an issue addressed by a number of domestic and international papers. One of the conditions for foreign currency lending is the free capital flow, which has gradually become the case through the European integration process. Literature cites the difference between local and foreign currency interest rates as one of the engines driving foreign currency lending (Basso et al., 2007; Rosenberg-Tirpák, 2008; Csajbók et al., 2009; Oblath,

Chart 2

Underlying reasons for the emergence of foreign currency lending



2010; Bihari and Valentinyi, 2010). As the covered interest parity does not necessarily hold in the short run, it is the nominal interest rate differential that affects households' borrowing decisions.

In Hungary a loose fiscal policy and high government debt contributed to a notable difference in interest rates through

<sup>1</sup> The share of foreign currency retail loans was only 2.7 per cent prior to Slovakia's adoption of the euro.

an increased sovereign risk premium. Higher inflation accompanying the convergence process also resulted in higher nominal domestic interest rates, which also translated into higher nominal interest rate differentials.

Research findings by Csajbók et al. (2009) point to other factors that also played an equally important role in the emergence of foreign currency lending. The study provides empirical evidence that, if households have access to long-term loans denominated in the local currency at a fixed interest rate, it curbs indebtedness in foreign currencies. To this end, banks must be able to offer long-term local-currency loans, which in turn requires predictable and sizeable domestic savings over the long term. The absence of fiscal incentives eroded the viability of forint mortgage bonds and, hence, fixed-rate forint loans. This, in turn, gave further impetus to the spread of foreign currency lending.

The stable exchange rate of the forint, attributable to the narrow currency band that was in place until 2008, probably also played a role in the rapid expansion of foreign currency lending in Hungary. It is not a coincidence that the MNB was regularly arguing for the introduction of a floating exchange rate regime before 2008.

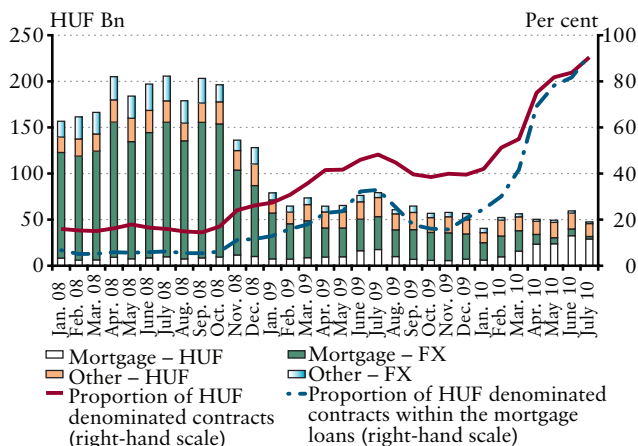
Finally, a number of analyses, including those by Banai et al. (2010),<sup>2</sup> argued that the expansion of parent banks in the region, the excess supply of liquidity and risk-based competition by banks on the supply side were also conducive to the accumulation of foreign currency debt. Over the past decade, the business policy of domestic banks was based on acquiring an ever growing number of clients while exposing themselves to an increasingly large amount of risk (i.e. offering riskier products and accepting subprime clients).

### HOW LONG WILL WE HAVE TO LIVE WITH THIS HIGH PROPORTION OF FOREIGN CURRENCY LOANS?

The driving forces behind foreign currency lending before 2008 faded significantly in Hungary after the onset of the financial crisis in October 2008. The economic downturn led to a worsening in households' income expectations. Parallel to a balance sheet adjustment by the banks, global liquidity was drying up. As a result, the refunding of foreign currency loans became more expensive and funds were harder to come by. Dramatic portfolio deterioration put an end to risk-based competition. Lower inflation and fiscal tightening also contributed to lowering the difference between forint and foreign currency interest rates. Effective

Chart 3

#### Developments in newly disbursed household loans



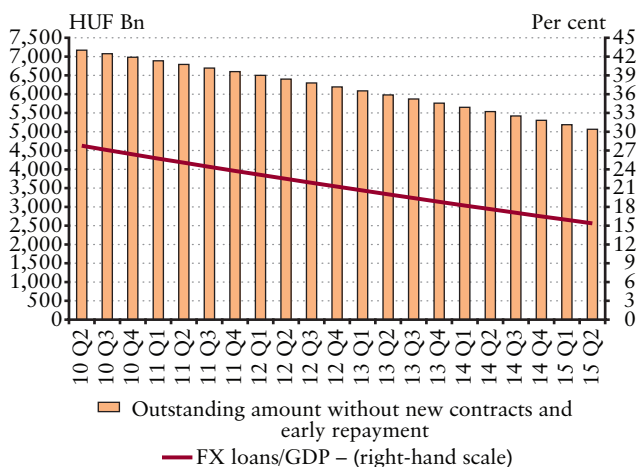
Source: MNB.

from March 2010, a government decree on prudent lending as well as the act on the prohibition of foreign currency lending, which went into force in August, were also crucial in restricting foreign currency lending. The currency makeup of new lending soon followed suit and forint lending is now prevalent (See Chart 3).

Nevertheless, this latest advance for forint loans only exerts a limited impact on the currency composition of foreign currency debt, as new originations have fallen to one-third or a quarter of earlier figures. Because of the high share of mortgage loans with an average remaining maturity of 15 years, the existing foreign currency debt will take rather

Chart 4

#### Decline in foreign currency household debt without newly issued loans or pre-payments



Source: MNB and the authors' own estimates.

<sup>2</sup> Ádám Banai–Júlia Király–Márton Nagy (2010): The demise of the golden age in Hungary. ("Foreign" and "local" banks – before and after the crisis) *Közgazdasági szemle*, Volume LVII, February 2010, pp. 105-131.

long to diminish. Based on our approximate estimates, provided that no new foreign currency loans are issued, it would take 5 years for the current portfolio to shrink by 30 to 35 percent (see Chart 4).

Without new issuance and assuming annual economic growth of four percent, it would take five years for Hungary's foreign currency debt to decrease from 24 percent of GDP to 13 percent. Thus, the stronger the economic growth the sooner the problem posed by foreign currency lending can disappear.

### WHY IS THE HIGH PROPORTION OF FOREIGN CURRENCY DEBT REGARDED AS A PROBLEM?

A high share of foreign currency loans significantly impairs the efficiency of both exchange rate and interest rate channels of monetary transmission. As a rule, a weaker forint improves the competitiveness of export-oriented companies, which in turn stimulates output. However, a weaker exchange rate can also restrain growth due to the high share of foreign currency debt, through the net worth of the real and the financial sector. Due to the high share of foreign currency loans, a weaker forint would reduce disposable income due to higher loan instalments, while the resulting higher foreign currency debt would lead to a decrease in wealth of the private sector and, within that, of the household sector.

A weaker forint may also adversely affect banks' net worth, but the degree to which a weaker exchange rate might restrain economic growth depends on financial institutions' ability and willingness to lend. The stronger the banking sector's liquidity and capital position, the less economic growth is impeded by depreciation. If a deteriorating liquidity and capital position limits banks' ability to lend, financial institutions reduce their lending, which may in turn result in lower economic growth. Lower growth may impair banks' liquidity position and the quality of their client portfolio, to which the banking industry responds by further tightening of lending conditions, thereby further weakening economic performance. An accelerating negative spiral may lead to a deep recession.

Not only do foreign currency loans weaken the exchange rate and the interest rate channel of monetary transmission: the larger the weight of foreign currency loans, the smaller impact a change in the central bank's base rate is likely to exert on loan origination, because the central bank's interest rate policy cannot influence the interest rates of foreign currency lending products. However, a rate hike increases the difference between the interest rate applied to local

currency loans and those denominated in a foreign currency, which may fuel demand for the latter as they might seem "relatively affordable". No domestic research on the strength of the interest rate channel is currently available. Brzoza-Brzezina et al. (2010) propose that a rise in the central bank base rate reduces lending in the region and, hence, in Hungary. However, the rising volume of foreign currency debt significantly reduces the elasticity of the domestic rate (its impact on loan issuance). In Hungary, whenever the base rate is raised, 50 to 60 per cent of the decrease in forint debt is offset by a rise in foreign currency debt.

Besides weakening monetary transmission, a high proportion of foreign currency loans also poses an increased risk to financial stability. A weaker exchange rate quickly translates into higher monthly instalments. Higher instalments weaken debtors' ability to pay and increase the probability of default (PD).

A weaker exchange rate also erodes coverage for mortgage loans. The loan-to-value ratio (LTV) represents the HUF value of the foreign currency loan versus the price of the given property. If the exchange rate of the forint weakens, the loan-to-value ratio also deteriorates, i.e. it increases. This means that if loans are defaulted, loss-given default (LGD) will be higher. Based on the above, a weaker exchange rate – through a higher probability of default and higher losses – increases loan losses (PD x LGD).

On the other hand, a weaker exchange may also increase banks' earnings because the HUF value of the interest-bearing foreign currency assets forming the basis for interest income rises. However, this impact is lower than that of higher loan losses.

A weaker HUF exchange rate reduces the amount of the available capital while it increases the risk weighted balance sheet total. A dominant part of the balance sheet total is denominated in foreign currency; as a result, a weaker exchange rate may increase risk weighted assets (RWA) and thereby reduce the capital adequacy ratio. Overall, depreciation deteriorates banks' profitability and capital position, which is adverse to financial stability.

A weaker exchange rate may give rise to both solvency and liquidity problems. The maturity of foreign currency loans is longer than that of the foreign currency funds financing them or the foreign currency swaps which swap forint funds for foreign currency liquidity (maturity mismatch). The maintenance and roll-over of foreign currency swaps require considerable forint liquidity. A weaker exchange rate increases the HUF value of the forward leg of the existing foreign currency swaps, and as a result, many banks must respond to margin calls by providing additional foreign

currency margin requirements. Due to the depreciation of the forint exchange rate, and because of the requirements of a margin call, forint liquidity decreases and the foreign currency swap portfolio rises further.

## WHAT WOULD BE THE IMPACT OF CONVERSION OF ALL FOREIGN CURRENCY HOUSEHOLD LOANS INTO FORINT?

As households' foreign currency debt takes long to decline, the related risks are likely to persist for a long time. While the conversion of foreign currency debt into forints may seem an obvious option, as we will see, due to the associated transfer of cost and exchange rate risk, this would not merely fail to reduce the vulnerability of the economy and, hence, the country; it would actually increase it.

### Economic actors have varying interests in relation to conversion

The interests and willingness of households, banks, the government and the central bank vary widely in relation to conversion of foreign currency debt into forints. Households will only be interested in conversion if the expected burden of repayment for the foreign currency loans consistently exceed that of forint loans of the same initial amount and term. As, however, households borrowed at different exchange rates, their future exchange rate and interest rate expectations and thus their willingness to bear costs may also vary.

One major consideration in banks' decisions is the potential earnings of a product, i.e. whether it is foreign currency or forint loans that offer a higher margin. Another important factor is the extent of deterioration in the portfolio that banks anticipate as a result of exchange rate depreciation if no conversion takes place. In addition to credit risks, they also take into consideration the liquidity risks stemming from a declining, yet still high foreign currency swap portfolio. Here again, there is the problem that portfolio quality, liquidity position and profitability vary from bank

to bank, and therefore, they would only be willing to convert under different terms.

In addition to financial stability, the government also has social aspects to consider. Currently, several million individuals have some form of foreign currency debt, and approximately one million people have mortgage loans. Depreciation of the forint's exchange rate increases the number of debtors defaulting on their foreign currency loans, which – by the foreclosure of the property serving as collateral – would lead to serious social problems and have adverse fiscal implications.

The central bank may want to contemplate the viability of conversion in order to enhance the efficiency of monetary transmission and mitigate risks to financial stability.

### Conversion of foreign currency debt into forints entails significant cost transfers between the different sectors of the economy

Conversion of foreign currency loans into forints results in significant costs. To a large extent, the cost of converting household loans depends on the exchange rate, at which conversion is to take place, as well as the interest rate applied and maturity. It also depends on what percentage of all foreign currency debt is affected by the conversion. Debtors will only be willing to have their foreign currency loans converted into forint debt if their monthly instalments remain unchanged or are lower. If a fixed volume of foreign currency debt is converted and maturity does not change, the lowest estimate for costs is the cost of conversion at the current exchange rate and foreign currency interest rate, because in this case instalments remain unchanged. Naturally, if instalments decrease, costs will be higher.

The costs stemming from exchange rate differences depend on the rate of exchange applied to conversion. The lower limit means a conversion at the current rate, in which case there are no exchange rate-related costs. If, however,

**Table 2**

**Costs arising from exchange rate differentials, provided that the entire foreign currency debt portfolio is converted**

(30 June 2010)

	Costs from the change in exchange rate	
	HUF Bn	as percentage of GDP
Households' total FX denominated loans	1,354	5.2%
from which mortgage loans	925	3.5%
from which housing loans	506	1.9%

Source: Authors' own estimates.



conversion occurs at a rate that is more advantageous for the debtor, costs may increase markedly. According to 2008 figures, the majority of households (60 to 70 percent) borrowed in an exchange rate range of CHF/HUF 150 to 165. If debt were converted at the exchange rate effective at the time of borrowing, costs would be significantly higher, amounting to 1.9 to 5.2 percent of GDP (the calculation assumes an exchange rate of CHF/HUF 210, see Table 2).

The cost pertaining to interest rate differentials is the product of the difference between the APRs of forint and Swiss franc loans, and the HUF value of all foreign currency debt. The total cost is the net present value of these current and future payments (until maturity).

What also matters is whether the interest rate differential is calculated at the foreign currency interest rate prevailing at the time of borrowing or at the current rate. The average APR on Swiss franc loans when most were taken out was around 6 percent for home loans and 7 percent for home equity loans. Corresponding figures were 7.7 and 8.4 percent, respectively, at the end of June 2010. A difference of 140 to 170 basis points translates into an approximately 20 percent difference in instalments.

We have examined two scenarios. One takes into account the Swiss franc interest rate effective at the time of borrowing, the other the current Swiss franc interest rates (spot and forward). In the first scenario, the Swiss franc interest rate is fixed (households expect the interest rate to revert to the original value and stay there). In the second, it is a floating rate (on the basis of the current forward yield curve). Accordingly, we consider interest on newly originated forint loans fixed in the first scenario and floating in the second. We assume that the current maturity remains unchanged; therefore, we use the average remaining

maturity of the existing debt portfolio, i.e. 15 years, in our calculations. We based our calculations on the interest rate, exchange rate and portfolio data that were effective at the end of the first half of 2010.

Since the end of 2009, with Swiss franc loans taking an increasingly low profile and interest on newly originated euro loans increasing, a new wave of low-interest forint mortgage loans has become available. Due to cuts in the central bank base rate, interest on these products is now below 10 per cent. Nevertheless, compared to the initial APR of Swiss franc loans, the APR of newly issued forint loans is 3.3 percentage points higher for housing loans and 2.6 percentage points higher for home equity loans. As for other loans (the majority of which is car purchase loans), the difference is even higher, exceeding 7 percentage points.<sup>3</sup> Thus, the present value of the cost of conversion would be very high: it would exceed 2 percent of GDP, and would be close to 7 percent if the entire foreign currency debt portfolio were converted into forints (see Table 3).

In the second scenario (if the APR applicable to the current CHF loan portfolio is taken into account), costs do fall to a large degree, but are still high. By late June 2010, the interest rate differential between newly issued forint loans and existing Swiss franc loans had decreased to 1.7 percentage points for housing loans and 1.2 percentage points for home equity loans. As regards other loans and car purchase loans, which account for the majority of these loans, the interest rate differential is still high, generally over 4 percentage points.

Based on these findings, the cost of conversion would amount to 2.7 percent of GDP if the country's entire foreign currency debt portfolio were converted. Corresponding figures for mortgage loans and housing loans are 0.8 per

**Table 3**

**Costs arising from interest rate differentials. Calculations were based on the APR on CHF loans effective at the time of borrowing and on the assumption that the entire foreign currency debt portfolio is converted**

(30 June 2010)

	NPV of costs from interest rate difference	
	HUF Bn	as percentage of GDP
Households' total FX denominated loans	1,805	6.9%
from which mortgage loans	850	3.3%
from which housing loans	517	2.0%

Note: NPV (net present value): the present value of future costs.

Source: Authors' own estimates.

<sup>3</sup> No data is available on the distribution of the portfolio by interest rates effective at the time of borrowing. We estimated the average interest rate effective at the time of borrowing based on the interest on the existing portfolio and on newly issued loans.

**Table 4**

**Costs arising from interest rate differentials. Calculations were based on the APR on CHF loans when derived from the current yield curve and on the assumption that the entire foreign currency debt portfolio is converted**

(30 June 2010)

	NPV of costs from interest rate difference	
	HUF Bn	as percentage of GDP
Households' total FX denominated loans	696	2.7%
from which mortgage loans	217	0.8%
from which housing loans	145	0.6%

Source: Authors' own estimates.

**Table 5**

**Present value of the total costs incurred by the conversion of CHF debt into forints, provided that the entire foreign currency debt portfolio is converted**

(30 June 2010)

	Redenomination with the current exchange rate and APRC		Redenomination with the exchange rate and APRC at granting	
	HUF Bn	as percentage of GDP	HUF Bn	as percentage of GDP
Households' total FX denominated loans	696	2.7%	3,159	12.1%
from which mortgage loans	217	0.8%	1,776	6.8%
from which housing loans	145	0.6%	1,023	3.9%

Source: Authors' own estimates.

cent and 0.6 percent, respectively (see Table 4). This estimation undershoots actual costs because the interest rate applicable to the conversion may be lower than the current interest rate pertaining to the existing portfolio (or the interest rates that can be derived from the yield curve).

Based on the above, we provided two alternative estimates for exchange rate and interest rate-related costs. An analysis of the total costs reveals that even the minimum costs of conversion can be significant (see Table 5). In the case of an interest rate lower than the current one, and with an exchange rate higher than the current one, total costs may rise considerably. At a macro-economic level it is not an additional burden, rather, it is a reallocation of costs to economic actors (households, banks and the government) according to who is going to bear the costs.

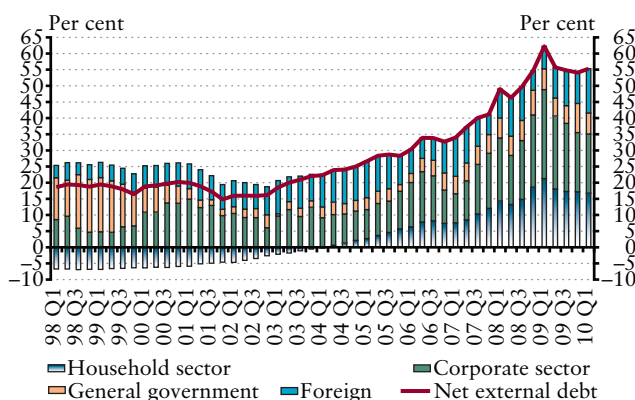
Finally, it might be worth noting that conversion also entails administrative costs and there are also administrative limitations. The amendment process of agreements pertaining to loans to be converted may take rather long, incurring further costs.

**Converting all foreign currency household debt also entails a significant transfer of exchange rate risk between the different sectors of the economy, which might have a hefty price tag**

The conversion of all foreign currency debt would not reduce household debt and, hence, the country's net external debt. The reason for this is that the volume of household debt would remain unchanged after the conversion, only the name of the currency would change. As conversion would not bring about any change for any sector or, based on the above, for households regarding indebtedness per se, ultimately, there would be no change in the country's indebtedness either. Given that net external debt equals the sum of the net exchange rate positions of economic sectors (see Chart 5), households' open positions would have to be taken over by another sector if conversion was to take place. Currently, households have open HUF positions because of their foreign currency debt; therefore, they would benefit from the appreciation of the forint's exchange rate in the form of lower monthly instalments. If the entire foreign

Chart 5

### Open FX positions of main sectors as a percentage of GDP



Source: MNB.

currency debt portfolio were converted, households' open HUF positions, currently amounting to 18 per cent of GDP, would cease to exist.

### Why can't banks assume the exchange rate risk exposure of households?

Currently, banks' FX assets outweigh their foreign currency liabilities, as a result of which they have an open position that is closed outside the balance sheet (the termin leg of the currency swap is an on-balance sheet item, while its forward leg is an off-balance one). Thus, domestic banks finance foreign currency loans in two different ways: using HUF through swaps or by borrowing in foreign currency.

If household debt were converted under normal circumstances, that is, either the borrower or the bank initiates conversion in the financial markets, banks' open positions in their balance sheet would be closed, or, in the event of a larger-volume conversion, the situation would even 'reverse', as their foreign currency liabilities would now outweigh their foreign currency assets. Banks could close foreign currency swaps, now the opposite of the initial swaps, on international markets or with the corporate sector, the government or the central bank. Whenever economic participants assume the open FX positions of households outside their balance sheet, the on-balance sheet positions of banks are changed or reversed. Although a significant change may materialise in banks' on-balance sheet positions, due to high capital requirements, their total B/S position remains closed. In consequence, the banking sector cannot assume households' open positions, it can only function as an intermediary.

On the borrowers' side – with the intermediation of banks on the spot FX market – there is HUF demand when loans

are disbursed and HUF supply when they repay their loans. This means that, irrespective of the type of financing provided by banks, a fast, large-scale conversion of foreign currency loans would result in a considerable depreciation of the forint.

### The assumption of positions by non-residents would lead to a weaker exchange rate and higher yields

Currently, non-residents' open exchange rate position amounts to 10 per cent of GDP. If, via the intermediation of the banking system, the entire position of households were assumed, the exchange rate risk exposure of the non-resident sector would be three to four times its current level. Non-residents could assume households' position in two different ways. With assumption on the balance sheet, non-residents would have their foreign currency assets converted into forints (spot deal) and, subsequently, purchase forint assets, i.e. government securities, shares and central bank bonds. Non-residents would only be willing to assume households' sizeable open position at a lower exchange rate and/or a higher interest rate.

### The corporate sector is unlikely to assume households' position

Currently, the current net open FX position of the corporate sector amounts to 18 per cent of GDP. The corporate sector would be able to assume households' open position through further borrowing in foreign currencies from banks (on-balance sheet assumption), or concluding forward positions with banks or directly with households (outside of the balance sheet assumption). However, the corporates that intend to switch their FX position are likely to have taken out a foreign currency loan in the required amount or concluded the required number of derivative transactions. Another disincentive is that even if the corporate sector assumed households' net open FX position, it may not be able to manage it significantly better.

### Although the government and the central bank would be able to assume households' positions without depreciating exchange rate, the resulting significant exchange rate exposure would increase the risks to the sustainability of public debt

The government and the central bank would be able to assume households' open FX position without a depreciation of the exchange rate. The government would be able to assume the position through changing the currency composition of government securities to be issued in the future. However, if the country's entire foreign currency debt portfolio were converted, the share of foreign currency debt



in public debt would jump from the current (already high) 43 per cent to 72 per cent. The central bank would be able to use its foreign currency reserves to neutralise the HUF sell transactions by banks at the time of the conversion. It is important to stress that the open position of the consolidated general government (including the central bank) would rise from the current 7 per cent of GDP to 31 per cent, irrespective of whether the position were assumed by the government or the central bank. Such exposure would mean that 10-per cent depreciation would raise the already high public debt – which amounts to close to 80 per cent of GDP – by 3.1 percentage points. Given the current global investor climate, where worries concerning the financeability of countries have increased markedly, this would only add to the country's vulnerability. Thus, the assumption of households' position by the government or the central bank is not a realistic alternative under the current circumstances.

### Increasing moral hazard

The conversion of foreign currency debt is likely to increase the moral hazard associated with foreign currency lending, as it might encourage irresponsible debtor behaviour and adversely affect households with HUF loans. The availability

of a bailout programme for debtors with foreign currency loans could send the message to prospective borrowers that a consistently weak exchange rate triggers government intervention, which in turn might encourage them to take out foreign currency loans and undertake heavier indebtedness. This may reduce the borrowers' risk awareness and offer an unjustified advantage over those who deliberately refused to assume exchange rate risks despite higher HUF interest rates. Limiting conversion to delinquent borrowers would also carry significant risks because such may impair the willingness to repay significantly.

Presumably, it is not only because of a weaker exchange rate that debtors default on their loans. Therefore, an exclusive focus on debtors with foreign currency loans is expensive and also generates disincentives. Unemployment may also contribute to borrowers' insolvency. The causes of unemployment are mainly factors that are beyond borrowers' control. Therefore, easing the terms of repayment for debtors with foreign currency loans would discriminate against those having taken out forint loans. Thus, it is imperative that the causes of default and the most appropriate means of managing such causes be properly examined and identified in the case of defaulting debtors.

#### International experience

There are examples of the conversion of private sector debt from Asia and Latin America. Conversion was a failure in every country: voluntary conversion met with a low rate of participation and compulsory conversion incurred enormous costs.

In *Mexico*, where the majority of debt was denominated in USD, voluntary conversion programmes were introduced in the early 1980s. To this end, the government established a foreign exchange risk coverage trust fund (FICORCA) supervised by the central bank. FICORCA converted USD loans into peso loans (at an extended maturity of 8 years, with a 4-year grace period) at a fixed exchange rate guaranteed by the government, thereby assuming debtors' open foreign exchange rate position. The programme involved approximately 2,000 corporations, and, based on IMF calculations, its fiscal costs amounted to 2 per cent of GDP. Low costs were due to the fact that only few debtors volunteered. The peso appreciated against the dollar after 1993, which translated into a sizeable profit for FICORCA.<sup>4</sup>

A classic example of conversion is *Argentina's* 2002 asymmetric pesofication, which was harshly criticised by IMF.<sup>5</sup> The programme

included a deposit freeze, an end to convertibility and the introduction of a dual exchange rate regime. Bank balance sheets were dedollarised at the following rates: one Argentine dollar per USD on the asset side, and 1.4 Argentine dollars per USD on the liability side. The programme imposed significant losses on the economy, as it led to a loss of depositor confidence and a collapse in financial intermediation. Moreover, depositors took advantage of loopholes in the system to release frozen deposits, which made banks dependent on the central bank liquidity window. On the asset side, worrying about further disadvantageous government measures, creditworthy borrowers who could afford to do so decided to pay off their loans. The fiscal costs of the programme amounted to 15 per cent of GDP and the government measures set back lending seriously.

Widespread debt restructuring programmes allowing conversion were also introduced in *Chile* (1982) and *Indonesia* (1997). However, only few corporations availed themselves of the opportunity of conversion in both countries.<sup>6</sup>

<sup>4</sup> Stone, Mark R.: Corporate debt restructuring in East-Asia: Some lessons from international experience. IMF paper on policy analysis and assessment. 1998.

<sup>5</sup> Laeven, Luc and Laryea, Thomas: Principles of household debt restructuring. IMF staff position note. 2009.

<sup>6</sup> Hagan, Sean-Kalter, Eliot-Weeks-Brown, Rhoda: Corporate Debt Restructuring in the Wake of Economic Crisis. In: Charles Collins-G. Russell Kincaid (editor, 2003): Managing Financial Crises Recent Experience and Lessons for Latin America. IMF OP.

## CONCLUSIONS

The conversion of foreign currency debt into forints does not reduce the debt of households and, hence, the net external debt of the country. Instead, it generates a transfer of costs and exchange rate risks between the different economic actors. Cost transfer arises because debtors will be willing to swap their foreign currency debt to forints only if instalments remain the same or are lowered. In addition to cost transfer, a transfer of foreign exchange rate risks also occurs, where households' open FX positions should be 'purchased' by another sector. Non-residents would only be willing to assume the entire position at a much weaker exchange rate and at much higher interest rates. Only the government or the central bank would be able to assume the entire position of households without the immediate weakening of the forint's exchange rate. Given Hungary's heavy foreign currency debt, however, this may increase its vulnerability, which could, vicariously though, still lead to a depreciation of the forint's exchange rate. Thus, conversion does not put an end to the vulnerability arising from the existing foreign currency debt. The assumption of the net open FX position by another sector does not reduce vulnerability and may even increase it.

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