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Foreign Currency Denominated Borrowing in Central Europe: Trends, Factors and Consequences

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INTRODUCTION

Foreign currency borrowing has been a relatively new but fast spreading phenomenon in the Central European New Member States. Foreign currency borrowing has been driven by various factors including interest rates gaps between domestic and foreign currencies, appreciation of local currencies, weakening of liquidity constraint of consumers. While the stocks are still low, the flow figures reflect a sizeable shift in the borrowing pattern of both household and corporate sector and prompted several institutions and economists to warn concerning the likely undesired consequences of this trend.

The paper presents the evidence concerning the different growth of foreign currency denominated borrowing in the Czech Republic, Hungary, Poland and Slovakia. Te first part gives a brief overview about the risks involved with foreign currency borrowing. The second part presents the empirical evidence and the driving factors behind them in the four New Member States.

I. RISKS IN FOREIGN CURRENCY BORROWING

Foreign currency loans may offer low interest rates in nominal terms, but the risks involved are substantial. Foreign currency borrowers are exposed to significant exchange rate and interest rate risk, and maturity mismatches may arise. The notion that these risks are covered by interest savings is applicable only to the aggregate number of borrowers but not to individual borrowers, who (can) usually opt for only one borrowing currency. In light of the large share of foreign currency loans in total lending in certain regions and of the particularly high homogeneity of collateral provided by households, substantial concentration risks may emerge.

If the explanation patterns offered by the theory of rational herd behavior for the boom in foreign currency borrowing are correct, it may be possible that borrowers who took out Swiss franc-denominated loans did not consider all the risks involved in their decisions. Therefore, the trends in foreign currency borrowing deserve to be closely monitored.

I.1 Exchange Rate Risk

Foreign currency borrowers are directly exposed to foreign exchange risk. Valuation changes triggered by shifts in exchange rate relationships increase or decrease the domestic currency denominated value of the foreign currency liabilities. Therefore, interest to be paid on the foreign currency loans outstanding also changes. Exchange rate movements feed through to interest expenses in every interest payment period, while (in bullet loans) the amount of capital outstanding is affected only by unrealized valuation changes until the end of maturity.

Given the volatility of exchange rates, the actual amount of exchange gains or losses depends critically on the length of the period under review. It must be noted, however, that for bullet loans, the exchange rate gains (or losses) posted in the past few years were merely unrealized gains and that gains from favorable exchange rate movements materialized solely in interest payments. Also, lending in foreign currency increased the volatility of the amount of loans outstanding.

It must also be noted that over a prolonged period of time, exchange rates can move into completely different directions. The exchange rate movements of different borrowing currencies may differ on a large scale.

I.2 Interest Rate Risk

Foreign currency loans are exposed not only to exchange rate risk, but, since they are usually extended on a rollover basis, also to considerable interest rate risk, even in the eurozone: switching from other foreign currency to euro helps avert the interest rate risk only to a limited extent. Over the past few years, the euro money market rates have been comparatively highly correlated with the analogous interest rates in Switzerland and in Japan.

I.3 Performance Risk of Repayment Vehicle

Additional exchange rate, interest rate, and market risks emerge in schemes with repayment vehicles which are not collateralized and from which the borrower cannot easily switch to another repayment vehicle, as the developments in the international stock markets over the past few years have shown. Since these borrowing schemes emerged only a few years ago but have maturities of twenty years or more, the risks they are exposed to do not materialize immediately; however, they already affect the risk profile of both borrowers and lenders now.

I.4 Economic Risks

Since foreign currency loans denominated in Swiss francs are usually taken out for exclusively domestic purposes and borrowers primarily use income earned at home to service their loans, additional risks may arise if the domestic economy and the borrowing currency's interest and exchange rates evolve in different directions, as a country's monetary policy is normally geared to suit domestic economic conditions.

In a macroeconomic context, another issue to be examined is whether or to what extent foreign currency lending is a (constitutive) element of banking and currency crises. Even though in the run-up to the Nordic banking crisis and the Asian crisis, foreign currency lending to domestic nonbanks saw a sharp rise, foreign currency borrowing alone has apparently not played a key role in the emergence of banking crises. Papers on the causes of

banking crises show that a rise in foreign currency lending (alone) is not an indicator for the sector's heightened vulnerability.

However, a marked increase in loan growth is often a leading indicator for instabilities. In Scandinavia, for instance, both foreign currency lending and household debt expanded notably. The question arises whether the increase in "cheap" foreign currency loans pushed up loan demand.

I.5 Who Bears the Risks?

Even though the risks foreign currency directly entail are borne by the borrowers who, in most cases, do not hedge against these risks, banks' risk positions may also be affected, if indirectly. When the maturities of the loans and of the refinancing instruments differ, maturity mismatches may arise, just like in other cases. In those cases where refinancing is based on maturity-matched interbank deposits (or corresponding swaps), however, thanks to the identical interest rate lock-in period valid for both the loan and the refinancing instrument, the fee charged to borrowers does not involve interest rate or maturity transformation risks for the banks; these risks must be entirely borne by the borrower.

At the same time, owing to the rising share of foreign currency loans, exchange rate developments have an increasingly large impact on companies' and households' debt service capacity. If a foreign currency borrower defaults, the bank immediately has an open foreign exchange position, since it continues to be obliged to refinance this loan. The same applies when borrowers convert their liabilities outstanding from foreign currency into domestic currency and the bank has not refunded this loan with exactly matching maturities and as long as the maturity mismatches persist. In other words, for banks, foreign currency loans are fairly similar to options. The value of this option to a large extent depends on the borrower's liquidity and the changes in the relevant currency's exchange rate.

II. Lending in foreign currencies in Central Eastern Europe

The share of loans in foreign denominations to the private sector shows much variance in Central Eastern Europe, caused mainly by different monetary policies (interest rate spreads and exchange rate fluctuations), institutional settings (such as state-subsidized housing loan schemes), the willingness of banks to lend in foreign currencies (or their desire to offload FX risk), and the clients' awareness of the significance of FX risk.

The nine New Member States can be divided into three groups by the extent of lending in foreign denominations. In the three Baltic countries (Estonia, Latvia and Lithuania) with currency board regimes, loans in foreign currencies are natural choices for banks: these exchange rate regimes have proven to be stable and credible; foreign-owned banks in these countries can access cheap foreign resources from their parent companies. Lending in foreign

currencies relieves them of FX risk while clients are willing to take this risk on due to the stability of the exchange rate.

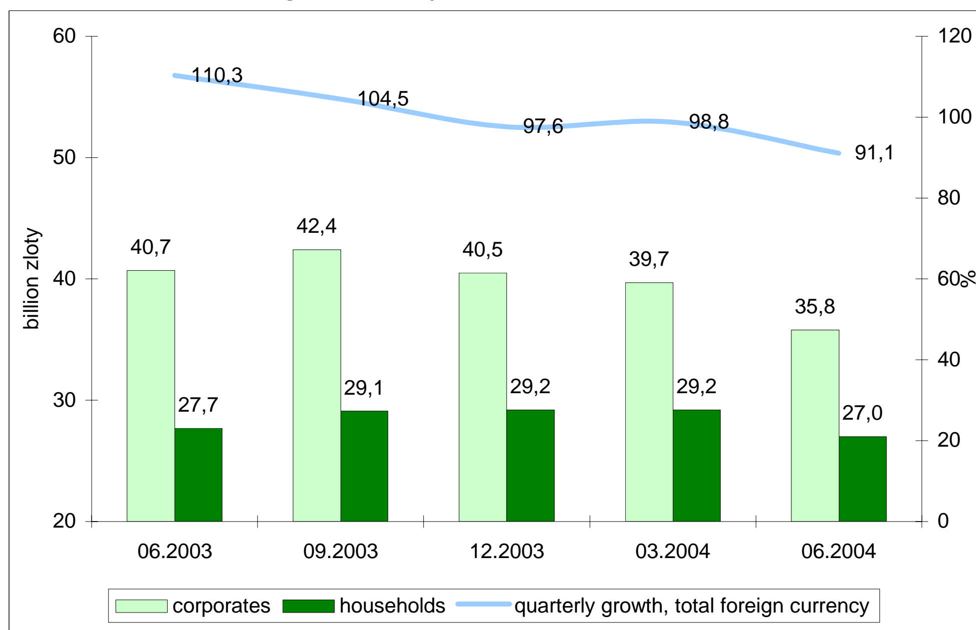
In three countries – the Czech Republic, Slovakia and Slovenia – foreign-denominated loans are not significant. The third, intermediate group consists of Hungary and Poland, where foreign-denominated loans have gained much significance in recent years. The following analysis provides a brief glance at the four Visegrad countries (Czech Republic, Hungary, Poland, Slovakia). In our view the experience of Poland could prove to be useful for Hungary.

Poland

In 2003-2004, the volume of household borrowings under instalment loans denominated in foreign currency declined significantly (down 59%). In conjunction with the repayment of foreign currency loans by corporates, this accelerated the decline in foreign currency outstandings that had started in the first quarter of 2004 (these dropped 10%, as opposed to an increase of 23.6% in the first half of 2003). At constant exchange rates (as at December 2003), the decrease would have come to 8.3%. On the one hand, this was the result of banks tightening their criteria for assessing the creditworthiness of customers applying for foreign currency loans, while on the other hand it reflected ebbing demand for foreign currency loans as a result of the narrowing interest rate differential between these and zloty loans, and also the high exchange-rate risk involved.

In consequence, the share of these loans in bank portfolios declined, which had a positive impact on average asset yields during the first half of 2004. Nevertheless, the change of trend observed in exchange rates, allied with the increases in NBP interest rates, may again swell demand for foreign currency loans.

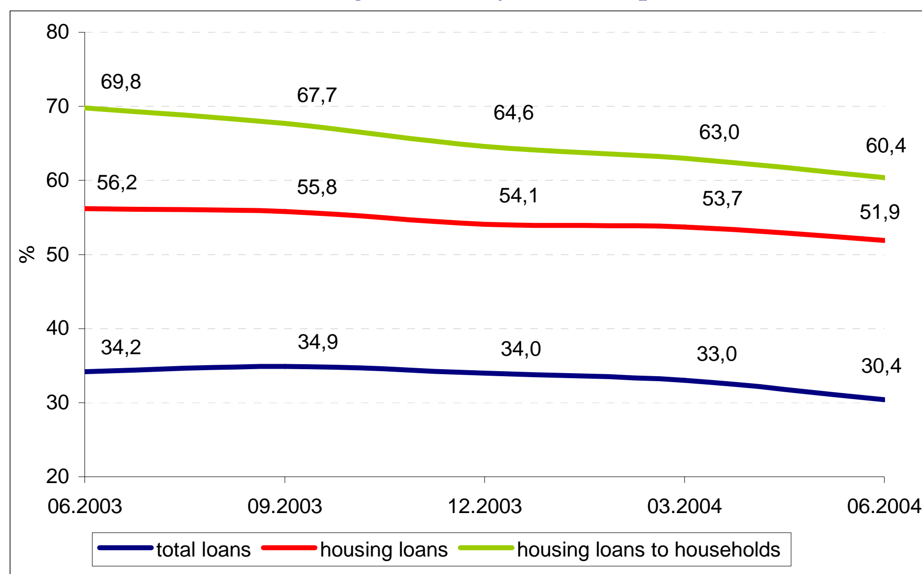
Chart 1. Foreign currency loans to non-financial customers



Source: National Bank of Poland

The high share of foreign currency loans in housing loans to households is noteworthy; in general, these customers do not hedge against FX risk. In the case of foreign currency housing loans, banks are exposed in the long term to two types of risk at the same time, namely, the possibility of the customer's FX risk transforming itself into the bank's credit risk as a result of the depreciation of the zloty, and the risk of a fall in property prices (with collateral values being reduced and increased specific provisioning expense). Since total outstandings to non-financial customers grew relatively slowly, the share of households' foreign currency borrowings under housing loans rose 0.5 points (to 9.6%).

Chart 2. Foreign currency loans in portfolios



Source: National Bank of Poland

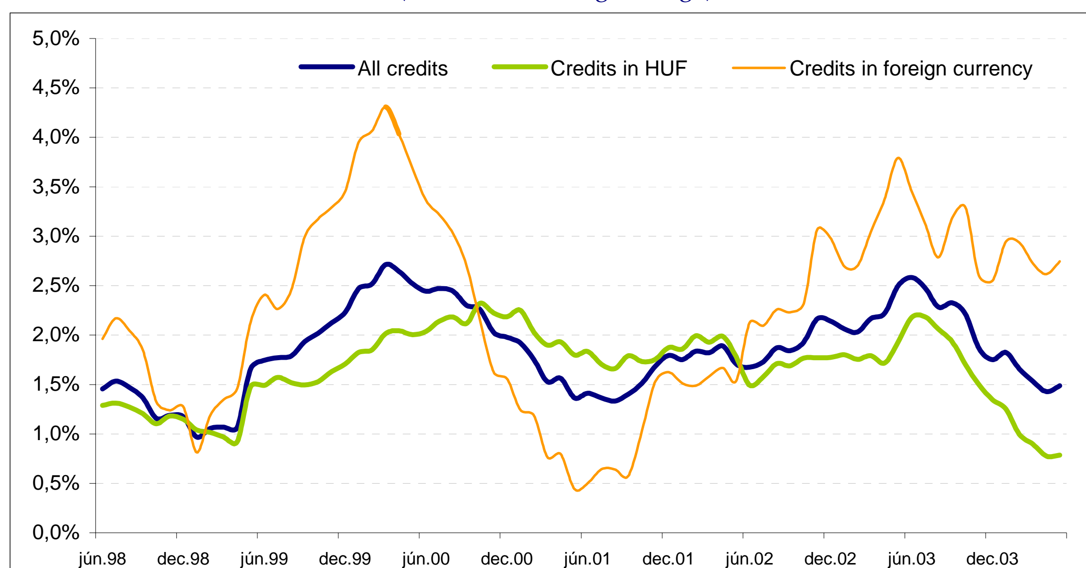
Polish monetary policy could have affected the willingness to lend and borrow in foreign currencies significantly. Early this millennium the Polish central bank maintained high domestic interest rates in order to aid the process of disinflation. Even though the exchange rate was volatile, this encouraged borrowing in foreign currencies with lower interest rates. Indebtedness in foreign currencies rose dynamically until 2003, when the Polish zloty depreciated against the euro by 17%. This event resulted in rising instalment payments (in zloty), decreasing willingness to borrow in foreign currencies, and a break in the rise of foreign-denominated borrowing.

Hungary

Between January 1998 and December 2004 loans and credits of monetary institutions increased (at current prices) from 3525 bn HUF to 12,167 bn HUF; during the same period foreign-denominated credits and loans rose from 1001.3 bn HUF to 4063.6 bn HUF. Excluding monetary institutions and the government, total loans increased from 2079.3 bn HUF to 9241.5 bn HUF, while foreign denominations rose from 537.9 bn to 3600.3 bn HUF. At the aggregate level, foreign denominations gained a share of around 5 percentage points (up from 28.4% to 33.3%); among private non-monetary clients they gained an extraordinary 13 percentage points (up from 25.9% to 38.9%). Credits to the non-monetary private sector in foreign currencies seem to exhibit strong pro-cyclical behaviour: during lending 'booms' (at the turn of 1999/2000 and early 2003) their growth rate is higher, during 'squeezes' (in 2001) they decline relatively faster. Since 2003 this pattern seems to change however: the growth rate of credits in HUF declined as if during a credit crunch, but credits in foreign currencies continued to expand at a rapid pace.

Chart 3. Month/month change in credits to non-monetary private sector

(12 month moving average)

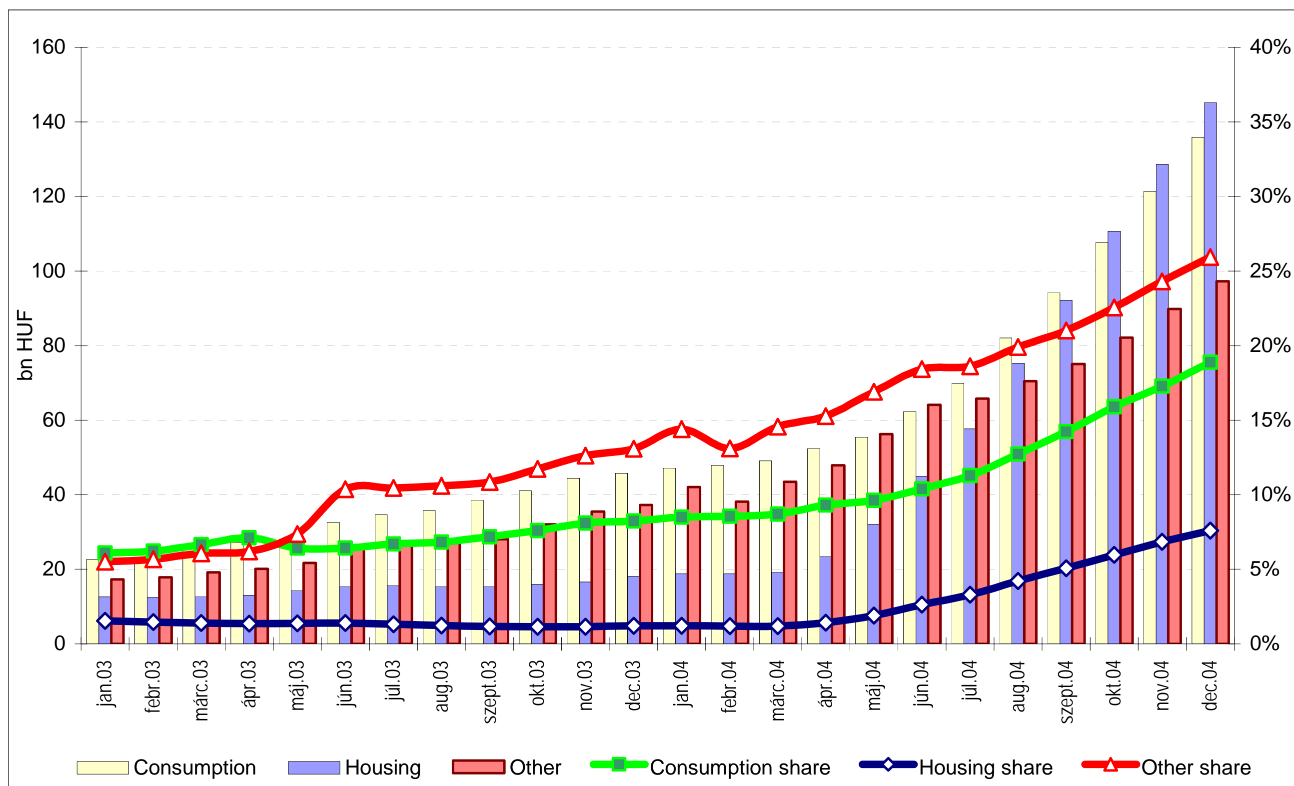


Source: National Bank of Hungary

Non-financial companies loan significant amounts in foreign currencies, especially in the longer term. Short term foreign credits spread rapidly: while total -1 year loans rose by 9.9% between February 2003 and December 2004, such loans in foreign currencies increased by 61%. Therefore the share of foreign currencies in short-term loans rose by 10 percentage points. Mid-term (1-5 years) loans in foreign currencies increased in a less spectacular pace, their respective share stagnated. On the other hand, long-term (5- years) foreign loans grew by 54% (signalling a rise in investments), with foreign denominations accounting for roughly two-thirds of new credits. At the end of 2004 foreign denominations accounted for around one-third of short term, 40% of mid-term and 60% of long-term corporate loans.

Households have recently engaged in large scale borrowing in foreign currencies. While the share of foreign loans from monetary institutions in all household credits was just 3.5%, at the end of 2004 it was 12.6%. In absolute amounts the most significant increase was experienced in lending for housing purposes: 132.6 bn HUF worth of housing loans in foreign currencies have been issued in 2003-2004. In 2004, foreign denominations accounted for 123.8 bn HUF in a total rise of 357.8 bn HUF housing credits. In a relative sense, consumption and other credits gained even more significance: by the end of 2004 the share of foreign currencies in these categories approached 20% and 25% respectively. Due to the large increase in housing credits, the maturity of foreign loans to households is long on the average: 14% of all long-term (5- years) household loans are denominated in foreign currencies instead of the 2.5% just two years before.

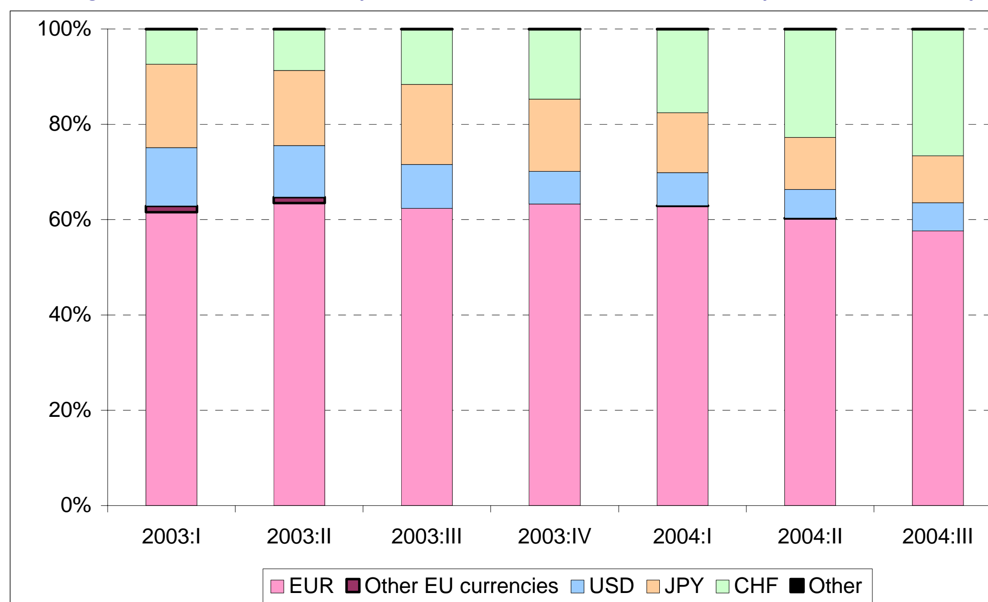
Chart 4. Loans in foreign currencies and their share is total loans to households
by monetary institutions in Hungary



Source: National Bank of Hungary

Most foreign loans to non-monetary clients (close to 60%) are denominated in euros. (Monetary institutions borrow exclusively in forints and euros.) The common currency has not lost much of its significance in the last two years, but loans Swiss francs are on the rise at the expense of US dollars and Japanese yens. At the end if 2004 Swiss francs accounted for about a quarter of all foreign-denominated loans and credits of monetary institutions to non-monetary sector clients.

Chart 5. Foreign loans of monetary institutions to non-monetary institutions by currency



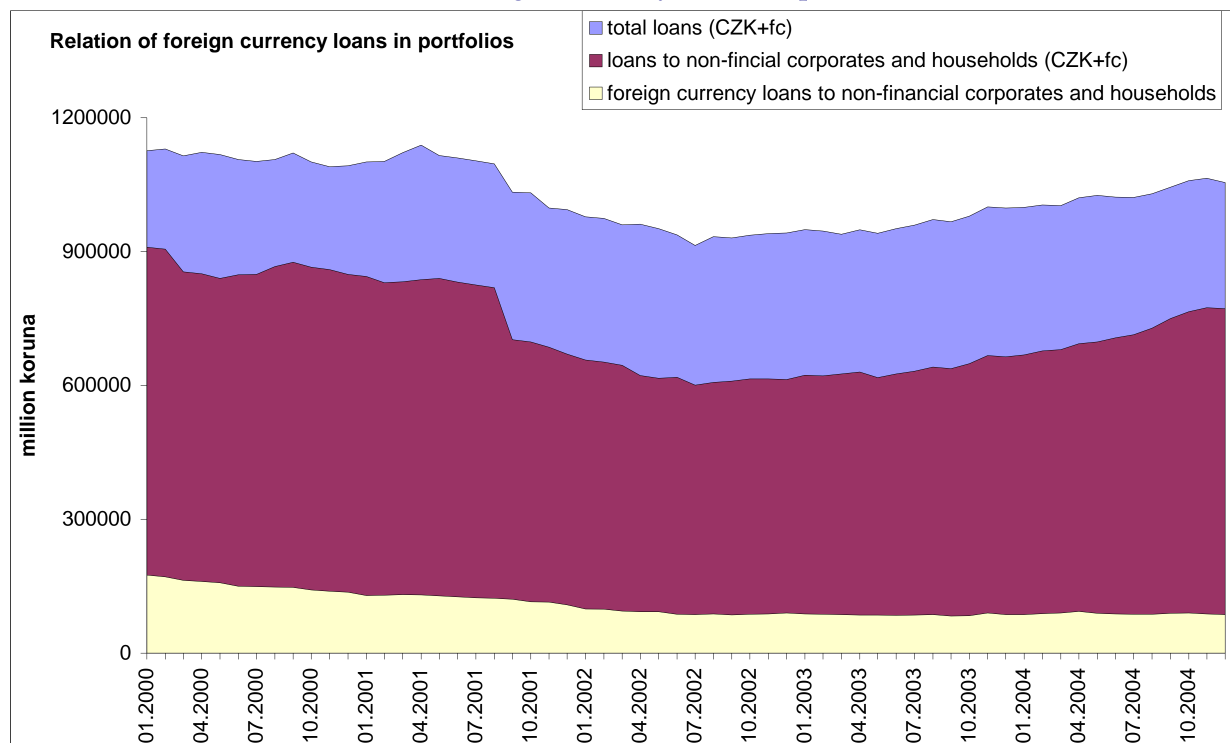
Source: National Bank of Hungary

The most important driving factor behind the rise of foreign-denominated loans in Hungary is probably the change in the system of subsidized housing loans. The Hungarian government initialized program of subsidized forint loans to households for housing purposes in 2001. Due to the low credit costs for households this program became very popular and resulted in a lending bonanza: housing loans/GDP increased from around 5% in 2000 to almost 18% by mid-2004. However, growing macroeconomic pressures forced the government to increase domestic interest rates by 3% points in December 2003 and to tighten credit conditions from 2004. Commercial banks responded by offering clients foreign (euro- and Swiss franc-) denominated housing loans in order to maintain their level of profitability and utilize their capacities in household lending. Households seized the opportunity of cheap credit while ignoring the potential of future FX risk. As the Hungarian forint has a rather volatile history these risks could be significant. The Polish experience shows that clients (especially households) become fully aware of FX risk only after negative experiences. However, such a shock would have adverse effects on the growth performance of the economy.

Czech Republic

The exchange rate should not be a source of banking sector instability in the near future provided that we see a continuation of the relatively low volatility of the koruna-euro rate. In terms of direct impact, foreign exchange risk is constrained by the banking sector's comparatively low exposure to foreign currency transactions (15% of total assets) together with the preponderance of activities geared towards interbank transactions (usually with parent banks) and the banks' generally low open foreign exchange position.

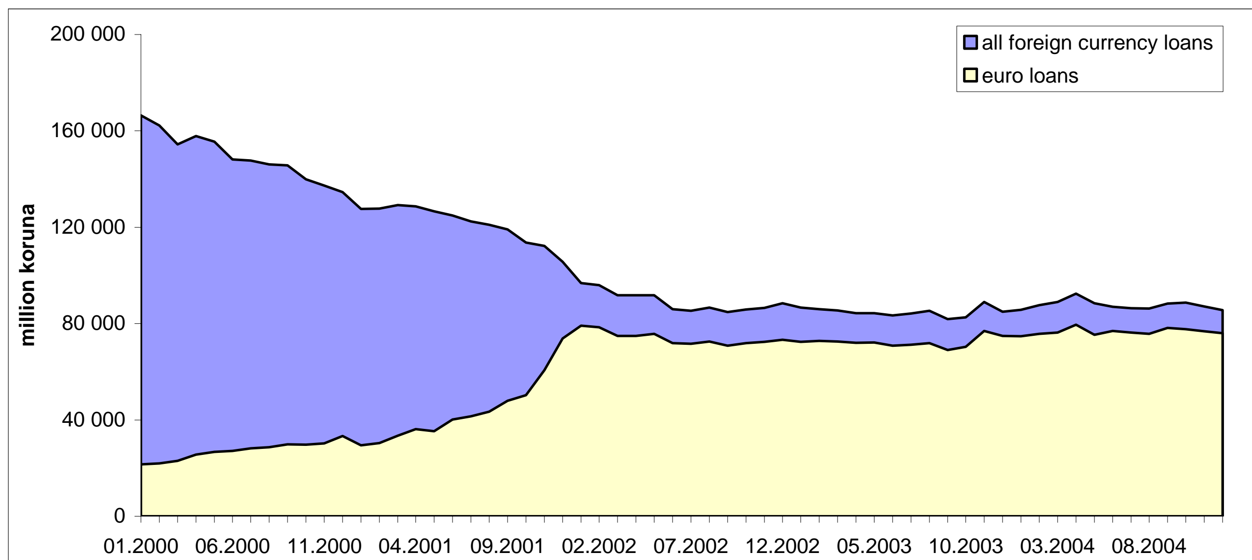
Chart 6. Foreign currency loans in portfolios



Source of pieces of data: Czech National Bank

Foreign exchange risk could also indirectly bring about an increase in credit risk, if the stability of the corporate sector were to be endangered. Foreign currency loans, however, form only 16.2% of the total loan volume. The 2001–2002 experience moreover suggests that the corporate sector is able to withstand fairly sizeable exchange rate swings. What is more, the stability of the koruna-euro exchange rate up existed until the end of 2004 and an only moderate appreciation trend appeared in the second half of the year. Overall, then, the indirect exchange rate risk is much lower than, for instance, during the monetary turmoil in 1997.

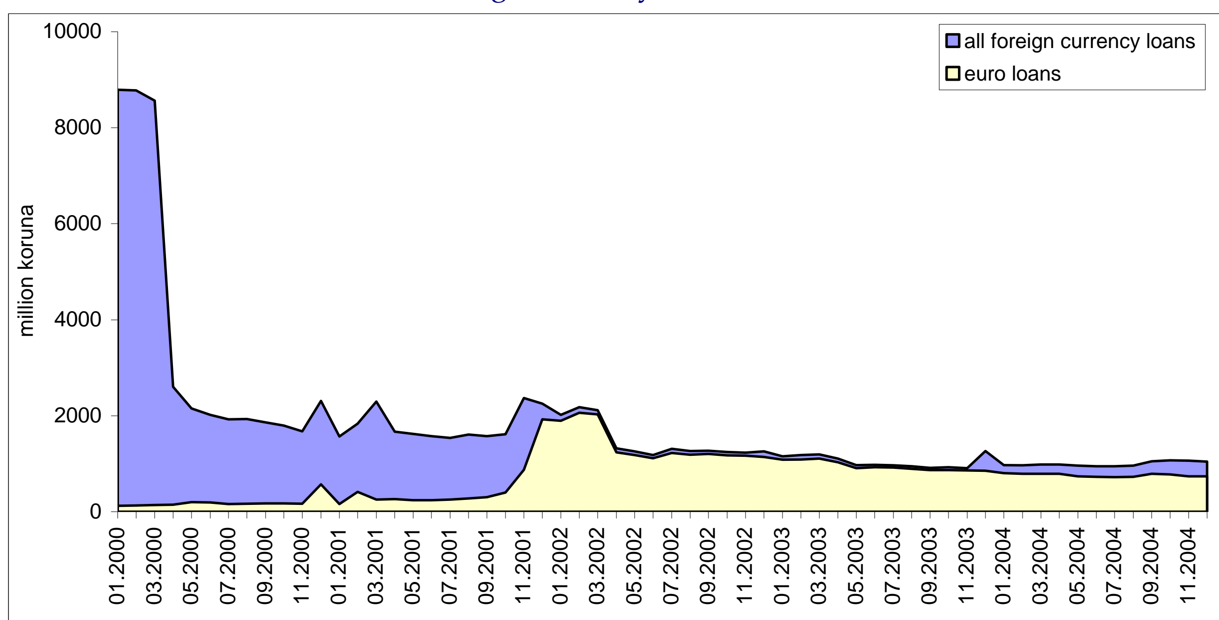
Chart 7. Foreign currency loans to non-financial corporations.



Source of pieces of data: Czech National Bank

In the non-financial corporate sector, we can see a stabilized level of foreign currency loan stock, approximately a proportion of 88% was denominated in euro at the end of year 2004. Stable processes has been taking place in the household sector for a year, although there is structural realignment. Throughout the year 2004, the stock of foreign currency loans is relatively unchanged, whilst the proportion of euro loans decreased from nearly 100% (beginning of 2004) to 70% (end of 2004).

Chart 8. Foreign currency loans to households

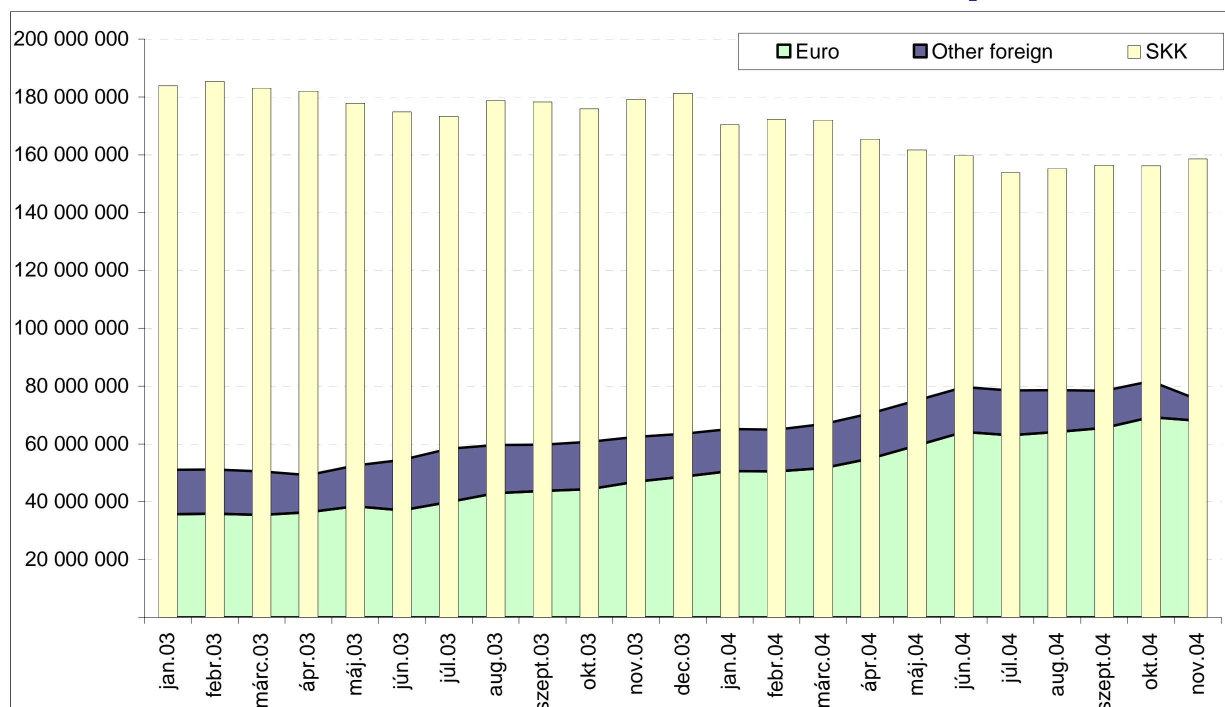


Source of pieces of data: Czech National Bank

Slovakia

Lending in foreign currencies has not expanded in recent years in Slovakia. At the beginning of 2003 the share of foreign currencies in loans of credit institutions was 117.7 thousand bn SKK (19.56% in a total stock of 601.5 thousand bn SKK loans); in November 2004 it was 130.5 thousand bn SKK (18.25% of the total loan amount of 714.7 thousand bn SKK).

Chart 9. Loans of credit institutions to non-financial companies

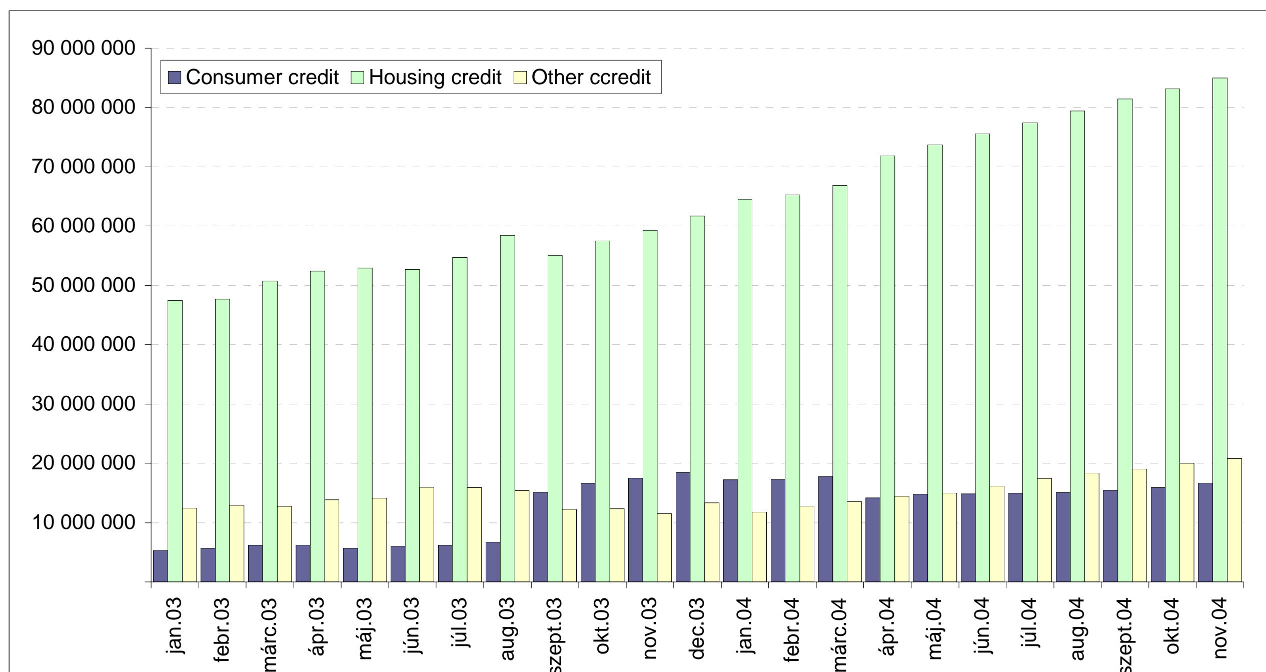


Source: National Bank of Slovakia

While the aggregate level shows a relative decline in foreign currency credits, this has not been the case for all sectors. Loans in foreign currencies among banks decreased considerably (from 66 thousand bn SKK in January 2003 to 13 thousand bn SKK in November 2004), but loans to non-financial companies increased during the same period from 21.7% to 32.2% (from 51 thousand bn SKK to over 75 thousand bn SKK) with euro loans taking the lead: while loans in SKK shrunk by 14% and loans in other currencies declined by 52.7%, euro loans nearly doubled (91% rise). Two simultaneous effects have taken place: substitution from SKK to foreign currencies on one hand, and a strong substitution among these currencies towards euro on the other.

Other sectors have not caught up in foreign credits however. The share foreign currencies in households and NGO credits remain well below 5%; most of these are concentrated in non-consumption, non-housing credit types. Foreign credits for consumption and housing purposes are virtually nil, although housing loans are rapidly rising (79% increase in 22 months).

Chart 10. Loans of credit institutions to households and NGOs



Source: National Bank of Slovakia

The comparatively low share of foreign currencies in Slovakian banks' credit portfolios can partly be explained by the fact that the consolidation and privatization of Slovak banks has just been finalized: commercial banks have only recently turned their attention toward households. Subsidies to housing loans only apply to loans in koruna – these factors result in a low ratio of household debt in foreign currencies. Comparatively low interest rates do not motivate clients to borrow in foreign currencies either. The story of Hungary suggests however that once the system of housing loan subsidies changes, banks may choose to propose loans in foreign currencies, should this take place before the introduction of the euro.