Housing Loan Developments in the Central and Eastern European EU Member States

Zoltan Walko[1]

Over the past few years, lending to households[2] has grown substantially in most Central, Eastern and Southeastern European (CESEE) countries, with housing loans accounting for the bulk of new lending in many of them. The pace of credit growth has raised concerns about macroeconomic and financial stability, and has been a topic often addressed by economic analysis on the region. The rapid development of housing loans in CESEE has assumed an additional dimension since mid-2007, when the problems in the U.S. housing market started to culminate. Given the topicality of the issue, this short analysis reviews recent major developments of housing loans in the ten Central and Eastern European EU Members States (CEE-MS) and outlines its major driving forces, associated risks, and policy implications, covering the period from end-2004 to end-2007.

1 Housing Loans Expanded Strongly in Recent Years

Over the past few years, lending by resident banks to households has grown substantially in the ten CEE-MS. On average[3], the outstanding stock of loans to households in the region nearly doubled from 12.3% of GDP at the end of 2004 to 22.5% of GDP by the end of 2007. The largest increase occurred in the three Baltic countries, followed – with some margin – by Bulgaria and Romania. Despite this impressive growth, the level of household credit as a percentage of GDP (22.5%) in the CEE-MS still amounted to only around 40% of the euro area average at end-2007. While the gap to the euro area was biggest in Slovakia and Romania (at 37 to 38 percentage points), household credit in Estonia and Latvia already came close to the euro area average (gap of 10 to 12 percentage points). Moreover, at end-2007, the size of household credit as a percentage of GDP was bigger in Estonia and Latvia than in Greece and Italy and comparable to that in Austria and Belgium.

Among the different categories of loans to households, loans for house purchase (housing loans) grew most dynamically in the CEE-MS, up by 6% of GDP on average between end-2004 and end-2007. The biggest expansion, by around 20% of GDP, was observed in Estonia and Latvia (although the volume of housing loans as a percentage of GDP had been high in these countries already at end-2004), followed by Lithuania (up by around 12% of GDP). Housing loans grew dynamically also in several other CEE-MS. In Bulgaria, the Czech Republic and Poland, they expanded by 6.2% to 7.4% of GDP in the period under review, while in Hungary, Romania, Slovenia and Slovakia, they grew by around 3% to

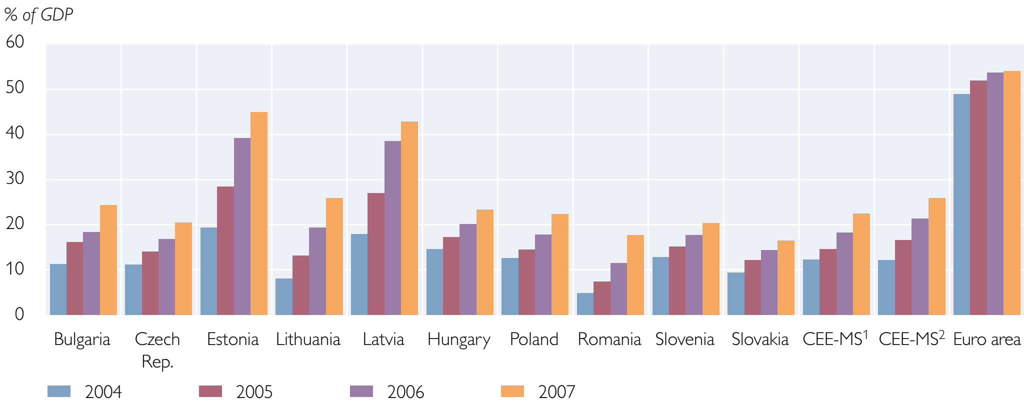
[1] *Oesterreichische Nationalbank, Foreign Research Division; zoltan.walko@oenb.at.*

[2] *In this contribution, the term households covers households and non-profit institutions serving households (NPISH), in line with ESA95 (S.14 and S.15).*

[3] *This analysis refers to weighted average data for the ten CEE-MS (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) that were obtained by adding loans and GDP expressed in euro over the countries in the sample. Given that weighted average data are strongly impacted by Poland (and other big or financially more developed countries in the sample), we also present unweighted averages in the charts (e.g. simple average of the ratios over the ten countries). It should be noted that comparative analysis is complicated by the fact that publicly accessible, harmonized, detailed data on housing loans are not always available for these countries, for example with respect to the currency and maturity structure of the loans and their quality (including e.g. information on nonperforming loan ratios, loan-to-value ratios, etc).*

Chart 1

Loans to Households

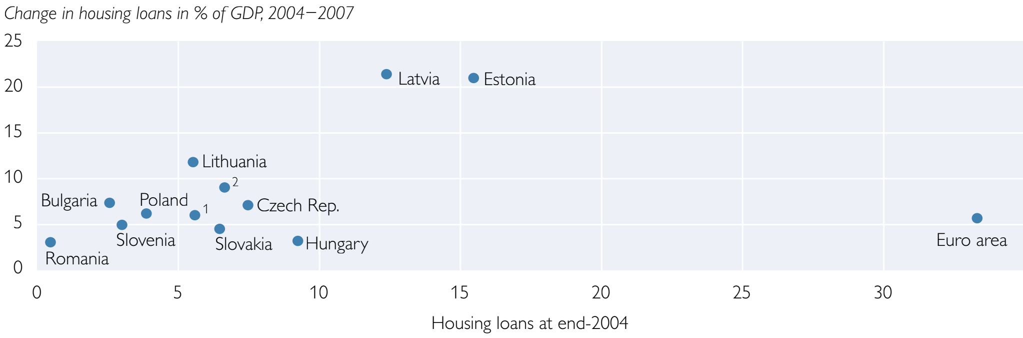


Source: NCBs, ECB, OeNB.

[1] *Weighted.*
[2] *Unweighted.*

Chart 2

Development of Housing Loans



Source: NCBs, ECB, OeNB.

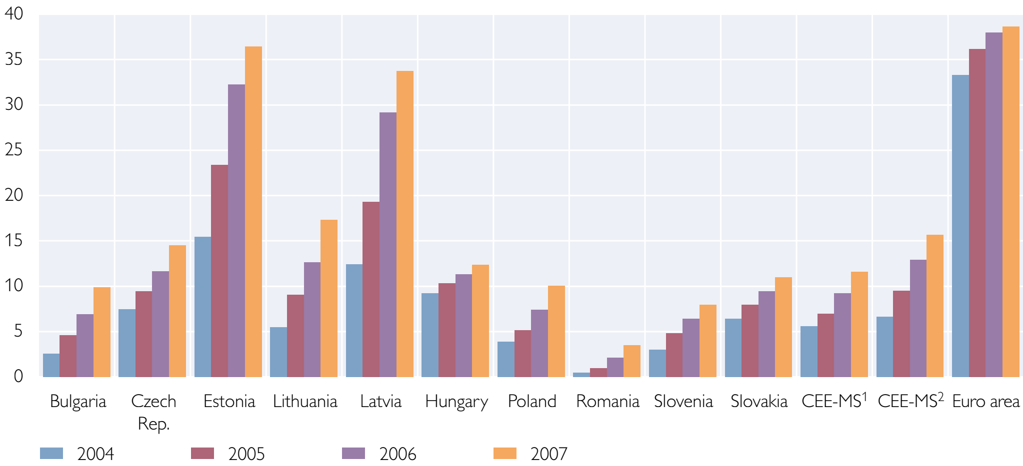
[1] *CEE-MS weighted.*
[2] *CEE-MS unweighted.*

5% of GDP. There is some evidence that – with the notable exception of the Baltic countries and Romania – the expansion was bigger in countries that started from lower housing loan levels. In the euro area, housing loans grew by 5.3% of GDP, with Ireland, Spain and Portugal taking the lead with growth rates of about 13% to 20% of GDP; in several other euro area countries (Belgium, Greece, France, Luxembourg and Finland), growth rates were also higher than on average in the CEE-MS.

As a result of these developments, the volume of housing loans as a percentage of GDP reported for Estonia and Latvia already came close to the euro area average (38.8%) at end-2007. In fact, it was comparable to the levels observed in some euro area countries (Belgium, France, and Finland) and even higher than in some others (Austria, Greece, Italy). The housing loan level in Lithuania was

Chart 3

Housing Loans to Households



Source: NCBs, ECB, OeNB.

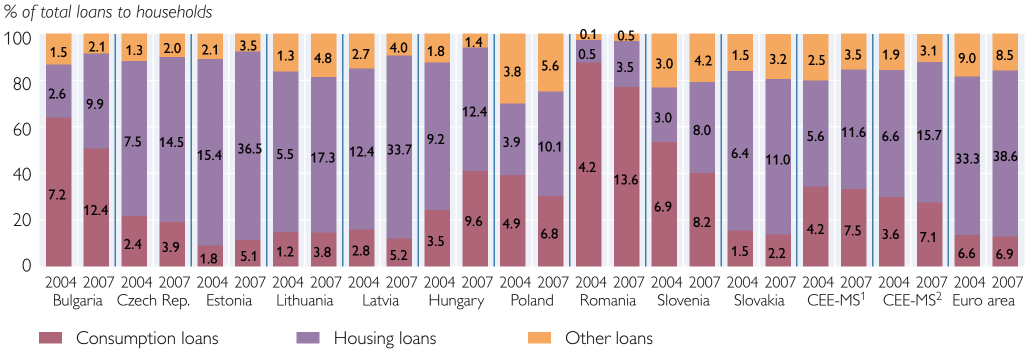
1 Weighted.
2 Unweighted.

comparable to that of Italy (the euro area country with the lowest level of housing loans), while the levels observed in the remaining CEE-MS were lower than those in euro area members.

The dynamic expansion of housing loans in the CEE-MS also drove up their share in total loans to households from 45.6% to 51.4% in the period under review, while the share of the two other household loan categories (i.e. consumption loans and other loans) decreased. A similar development was observed in the euro area, where the share of housing loans in total loans to households climbed from 68.0% to 71.5% and the share of the two other loan categories declined.

Chart 4

Structure of Loans to Households



Source: NCBs, ECB, OeNB.

1 Weighted.
2 Unweighted.

Note: The figures in the bars represent the volume of loans as a percentage of GDP.

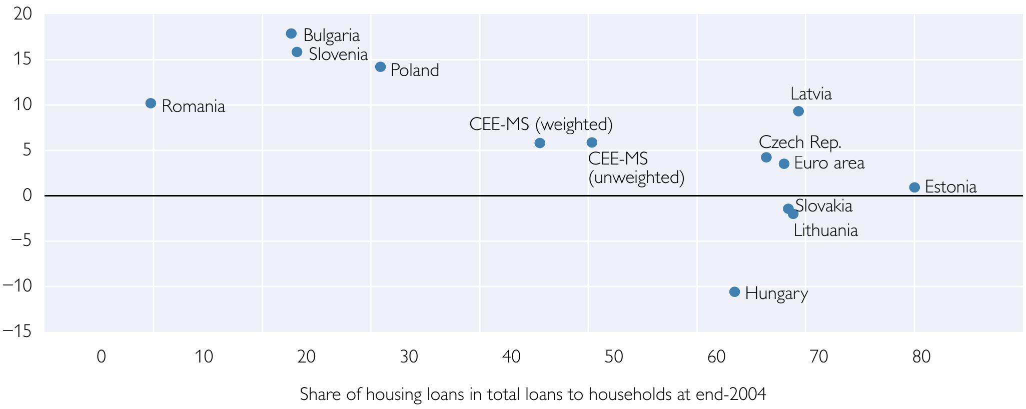
Among the CEE-MS, the share of housing loans grew most dynamically in Bulgaria, Poland, Romania and Slovenia, i.e. in those countries where housing loans represented a comparably small portion of total loans to households in 2004. By contrast, the share of housing loans decreased substantially in Hungary and, to a smaller extent, also in Lithuania and Slovakia (albeit from comparably high levels especially in the latter two countries). In Hungary, this development was accompanied by a marked shift in the structure of household loans toward consumption loans. Since the second half of 2006, this increase in consumption loans may have been related to households' consumption smoothing in response to a sharp decline in real income, but the longer-term trend was likely related to a gradual substitution of free-purpose (mostly foreign currency-denominated) mortgage loans for forint-denominated housing loans on less favorable conditions, especially following the gradual tightening of the housing subsidy system since 2003. Another factor needs to be taken into account in this context: The categorization of consumer and housing loans does not necessarily reflect the actual use the money is put to. In the case of Hungary, for example, Magyar Nemzeti Bank (MNB) estimates that as many as 30% of subsidized housing loans were used to finance consumption. At the same time, foreign currency-denominated home equity loans (freely usable mortgage loans) have recently often been used for housing purposes, because administration related to borrowing and using the money is much simpler for such loans than for housing loans, and the difference in pricing between the two types of loans has narrowed (MNB, 2008).[4]

Even though between 2004 and 2007 the share of housing loans in total loans to households rose more rapidly in the CEE-MS than in the euro area, their share was still significantly smaller in the former group of countries at the end of 2007 (51.4% versus 71.5%). This is consistent with the higher share of consumption loans in the CEE-MS compared with the euro area.

Chart 5

Development of the Housing Loan Share

Change in the housing loan share in %, 2004–2007



Source: NCBs, ECB, OeNB.

[4] *This bias is in addition to the potential classification bias between loans to households and loans to nonfinancial corporations in case the owners of small and medium-size enterprises take out personal loans and make the funds available to their company.*

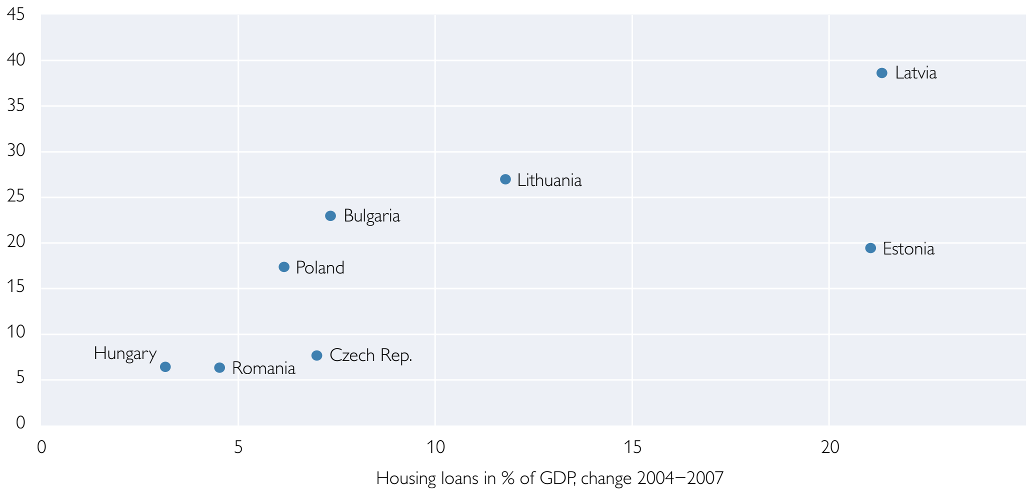
2 Both Demand and Supply Factors at Work

The robust development of housing loans in the CEE-MS over the past few years was supported by various factors. On the demand side, income growth and improving income expectations boosted credit demand in general, in line with the suppositions of the finance-growth nexus (see below). In addition, rising income levels may have fueled demand for better and more housing (especially given poor housing conditions to start with) and thus demand for housing loans. Moreover, in several CEE-MS, the rise in house prices went hand in hand with an increase in the volume of housing loans; the two developments probably reinforced each other: For example, expectations of a future increase in property prices may have contributed to a growing demand for housing loans, and the resulting higher demand for housing (that was not sufficiently met by housing supply) created additional upward pressures on house prices. The existence of such a relationship is supported both by empirical evidence suggesting that housing loan growth seems to play an important role in house price dynamics (Égert and Mihaljek, 2007) and by the fact that rising house prices raise the value of the collateral, thus enabling borrowers to take out more loans[5] (even at stable loan-to-value ratios[6]). In some countries, housing subsidy systems and/or favorable tax treatment of housing loans (e.g. in the Baltic countries, the Czech Republic, Slovakia, and Hungary – especially before the reform of the subsidy system) have likely contributed to demand for housing loans.

Chart 6

Housing Loans and House Prices

Average year-on-year change of real house prices in %, 2004–2007



Source: UniCredit Group, NCBs, OeNB.

[5] *Analogously to the "financial accelerator" effect as described e.g. by Terrones and Mendoza (2004).*

[6] *However, empirical evidence suggests that in some CEE-MS strong competition among banks on the housing loan market was associated with a loosening of lending standards, including increasing loan-to-value ratios.*

A major factor on the supply side was the entry of foreign banks (mostly from other EU Member States) into the CEE-MS banking sectors and the resulting heavy competition for market shares on the expanding, profitable and relatively less risky housing loan markets. During this process, more diversified credit instruments became available to borrowers at lower costs, longer maturities and on more flexible terms (e.g. lower amortization requirements, higher loan-to-value ratios) (UniCredit Group, 2008; IMF, 2006). The dynamic expansion of housing loans can be partly explained by the relatively lower level of risk involved with housing loans, as they are generally secured by mortgages, which also reduces necessary investments in information gathering. Moreover, housing loans generally offer comparably higher margins for banks (EBRD, 2006, 2007). Some improvements in the institutional framework (e.g. land registries, legal systems in general and property rights in particular) may also have created additional incentives for banks to grant housing loans. At the same time, the relatively low level of housing loans in Central and Eastern Europe compared with more advanced economies may be associated with the continued need to clarify property rights and to establish clear title deeds systems (EBRD, 2006, 2007).

3 Associated Risks

In general, financial deepening has been a welcome phenomenon in the CEE-MS during the past decade. There is a large body of literature about the finance-growth nexus that emphasizes the positive relationship between credit-to-GDP levels and economic development, with most results suggesting causality going from financial deepening to economic growth (for a literature overview, see e.g. Terrones and Mendoza, 2004, or Rajan and Zingales, 2001). Credit growth in the CEE-MS has improved access to credit for both households and corporations, thus making the intertemporal smoothing of consumption and investment easier, and has also likely led to a more efficient use of financial resources through the reallocation of credit from the public to the private sector (see e.g. EBRD, 2006, or Égert, Backé and Zumer, 2006).

The rapid increase in housing loans in particular has had beneficial effects on housing conditions in the CEE-MS both in terms of the availability and the quality of housing. Given that in the pre-transition era, housing used to be both scarce (e.g. in terms of the average size of dwellings or of floor space per occupant) and of poor quality (e.g. no piped water, bath or flush toilet, poor insulation) (see Égert and Mihaljek 2007; UniCredit Group, 2008), housing loans have certainly contributed to raising living standards in the CEE-MS.

However, some related risks should not be overlooked.[7] From a macroeconomic point of view, the strong growth in housing loans has contributed to an output boom in the construction sector. In some countries (especially the three Baltic countries), this sector showed signs of overheating in the form of emerging capacity shortages (e.g. bottlenecks of qualified labor and strong wage rises) and very rapid house price increases, thus pushing house prices closer to the estimated

[7] *The following overview focuses on risks related to housing loans in particular. For risks associated with rapid credit expansion in general (e.g. macroeconomic vulnerabilities, implications for banks' portfolio quality, risk management capacities or refinancing structure, borrowers' debt burden) see e.g. Sirtaine and Skamnelos (2007), IMF (2006), Tamirisa and Igan (2006), or Terrones and Mendoza (2004).*

equilibrium levels (UniCredit Group, 2008). The construction boom thereby contributed a lot to overall economic overheating. It should be noted, however, that the tightening of credit conditions by local banks especially in Estonia and Latvia since early 2007 has led to a sharp slowdown in the growth of housing loans and construction activity as well as to declines in house prices. Moreover, housing construction has likely fueled import demand (e.g. for high-quality building materials and interiors). In addition, in so far as housing loans have raised households' overall financial resources to finance consumption, housing loan growth may have contributed to rising inflationary pressures and/or may have burdened the current accounts. In fact, countries that saw the steepest rise in housing loans as a percentage of GDP are among those with the biggest imbalances in the region (Baltic countries, Bulgaria).

With regard to potential financial stability risks associated with the rapid rise in housing loans, the share of foreign currency-denominated loans is remarkably high in several countries. In Romania, loans extended in foreign currencies accounted for nearly 90% of the stock of outstanding housing loans at the end of 2007 according to available statistics. In Bulgaria, Hungary and Poland, the share was also high at between 37% and 55%. Considering the high share of foreign currency loans in total lending to households and the high share of housing loans in total loans to households in the Baltic countries (particularly in Estonia and Latvia), a significant portion of housing loans is denominated in foreign currencies in these countries. Borrowing in foreign currency exposes (mostly unhedged) households to the risk of a lasting depreciation of the home currency and an increase in the foreign interest rate level. These risks are further exacerbated in Hungary and Poland by the high share of the Swiss franc in the total stock of foreign currency housing loans.[8]

Long-term loans with a maturity of more than five years account for the bulk (>90%) of housing loans in the CEE-MS. Banks generally pass on to borrowers a substantial part of the associated interest rate risk in the form of floating rate loans, which, however, does not eliminate the interest rate risk but just transforms it into credit risk. In addition, the long-term nature of housing loans increasingly requires banks to find corresponding long-term refinancing facilities, while the domestic deposit base is dominated by short-term maturities. This has led to increased issuance of mortgage bonds and heavy reliance on financing from parent banks in most CEE-MS, and there has been no widespread securitization of housing loans so far.

There are also concerns that the housing loan boom in the region over the past few years has in part been supported by a lowering of origination standards and product innovations (e.g. lengthening of maturities, rising loan-to-value ratios), which have made access to finance easier for "marginal" customers (IMF, 2006). While anecdotal evidence suggests that in several CEE-MS, higher-income groups accounted for the bulk of household borrowing (for house purchase) (e.g. IMF, 2007; MNB, 2008; ČNB, 2008), aggregate data on (continuously rising) household indebtedness may conceal a growing share of low(er)-income borrowers having taken out such loans in the recent past.

[8] *Insufficient data availability prevents a more structured and detailed analysis.*

Housing loan growth has also heightened the banking systems' overall exposure to the property market (in addition to the exposure inherent in (i) loans extended to corporations in the construction sector and in the real estate, renting and business activities sector as well as (ii) mortgage loans in other sectors).[9] In addition to cyclical risks in the aforementioned economic branches, banks are increasingly affected by house price risks and the potential need to liquidate property collateral in case of borrowers' default. While there is no clear evidence of a house price bubble in the CEE-MS, banks do face house price risks, as is evidenced by the fact that real growth of house prices has decelerated rapidly and substantially in the three Baltic countries since the beginning of 2007.

4 Conclusions and Policy Implications

In a number of CEE-MS, loans to households and housing loans in particular have developed very dynamically over the past few years. As a result, the stock of housing loans as a percentage of GDP reached the level of some euro area countries in a few CEE-MS, although in most of them it is still much lower. This development was supported by both demand- and supply-side factors, such as rising income levels, increasing house prices, improvements in the institutional framework, more diversified credit instruments and more favorable borrowing terms. While the rapid increase in housing loans has likely had favorable effects on housing conditions in the CEE-MS both in terms of the availability and the quality of housing (and thus on living standards), these benefits have not come without risks. Tensions in macroeconomic stability, increased exposure to foreign currency-related (exchange rate and foreign interest rate) risks for borrowers, heightened credit and liquidity risks for banks and their larger exposure to house price risks are the most striking factors.

In response to these macroeconomic and financial stability risks related to the rapid expansion of housing loans, economic policymakers have taken action in several CEE-MS. The measures included, inter alia, tightening or abolishing housing subsidy or tax benefit systems (e.g. Hungary, Estonia), increasing the risk weights for mortgages loans (e.g. Estonia), requiring banks to strengthen credit risk management – with a particular focus on mortgage and foreign currency lending – (e.g. Poland), tightening loan-to-value ratios (e.g. Romania, Latvia) or making loan classification/provisioning rules more stringent (e.g. Bulgaria, Romania).

In combination with other factors (such as rising interest rates, stricter lending practices of foreign parent banks, moderating house price expectations, and potentially increased risk awareness on the part of both lenders and borrowers in the wake of the global credit market squeeze since mid-2007), these measures have already contributed to a cooling down of the housing loan boom in some of the CEE-MS (most notably in Estonia and Latvia, but also in Lithuania and Bulgaria). In Estonia and Latvia, this cooling has not come without an adverse impact on the real economy, which underscores the close interlinkages between the financial sector and the real economy. These links will become even more important as financial deepening is advancing also in other CEE-MS.

[9] *In fact, available data suggest that loans to the construction sector, the real estate, renting and business activities sector, and housing loans taken together accounted for a considerable portion of banks' total loan portfolio (up to 40% to 70%) at end-2007, and this share has risen substantially over the past few years.*

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Annex

Selected Data on Housing Loans

	Loans to households (incl. NPISH)[1]		Housing loans to households (incl. NPISH)[1]		Change in house prices (real)[2]	Share of foreign currency loans in total housing loans[3]		Share of long-term loans in total housing loans[4]	
	2006	2007	2006	2007	2004–2007	2006	2007	2006	2007
Bulgaria	18.3	24.4	6.9	9.9	23.0	34.7	37.3	95.0	95.7
Czech Republic	16.8	20.4	11.6	14.5	7.7	0.1	0.1	96.7	97.9
Estonia	39.2	45.0	32.3	36.5	19.4	. .	. .	. .	. .
Lithuania	19.3	25.9	12.6	17.3	26.9	. .	. .	99.1	98.9
Latvia	38.5	42.9	29.2	33.7	38.7	. .	. .	81.7	88.5
Hungary	20.1	23.4	11.3	12.4	6.6	33.8	46.4	97.9	98.3
Poland	17.9	22.4	7.4	10.1	17.3	63.8	55.2	. .	. .
Romania	11.4	17.7	2.1	3.5	. .	. .	89.7	. .	. .
Slovenia	17.7	20.3	6.4	8.0	. .	. .	. .	. .	. .
Slovakia	14.3	16.4	9.4	11.0	6.3	1.7	3.3	90.0	91.5
CEE-MS (weighted)	18.2	22.5	9.2	11.6	. .	. .	. .	. .	. .
CEE-MS (unweighted)	21.4	25.9	12.9	15.7	. .	. .	. .	. .	. .
Euro area	53.7	54.0	38.0	38.6	. .	1.4	1.4	97.3	97.4

Source: Eurostat, ECB, NCBs, UniCredit Group, OeNB.

[1] *In % of GDP.*
[2] *In %, annual average.*
[3] *In %.*
[4] *With a maturity of more than five years.*