

Residential Property Markets in CESEE EU Member States

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This paper provides an overview of residential property market developments in ten Central, Eastern and Southeastern European (CESEE) EU Member States over the last 10 to 15 years, featuring price developments, housing conditions, affordability, housing financing and policy measures targeting residential property markets. The descriptive cross-country approach particularly focuses on the period of the economic and financial crisis by capturing the recent boom and bust of residential property prices across the whole region. We observe that high levels of home ownership and low costs of external housing financing were related to rising residential property prices. Besides the small size of the rental market, rising demand for affordable good-quality housing suggests that price developments during the forthcoming catching-up of residential property markets are likely to be dynamic. In this respect, policy action in different areas should increasingly attempt to keep a lid on housing market developments in CESEE.

JEL classification: E3, F36, P2, P5, R21, R31.

Keywords: Residential property market, housing finance, regulation of housing markets, CESEE countries

1 Introduction

As residential property is one of the major components of household wealth, price developments in the residential property market are closely linked to the real economy and the financial sector. On the one hand, price trends in residential property markets influence household consumption and investment decisions via wealth effects. On the other hand, residential property transactions are often loan-financed, and property constitutes an important type of collateral for private debt. In turn, changes in residential property prices affect households' net debt positions and future borrowers' capacities to service their loans. Large-scale residential property financing may thus ultimately impact financial stability. In addition, the residential property market is closely tied to key economic sectors such as construction.²

These interlinkages have been evident not least since the beginning of the recent financial crisis. Several examples for the interaction of residential property and financial markets can be found both in the most recent past (e.g. in Ireland and Spain) and in the more distant past (e.g. in the second half of the 1980s and in the early 1990s, when property price developments caused severe banking crises in Finland, Norway and Sweden). As strong residential property price fluctuations can have destabilizing effects on the real economy and on finance, their monitoring has become an important element in the surveillance of macroeconomic imbalances. Most recently, this was emphasized by the European Commission's design of the scoreboard for the surveillance of macroeconomic imbalances, which

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² ECB (2011) provides a brief overview of the direct and indirect channels relating residential property markets to the real economy and the financial market.

explicitly takes into account the development of residential property prices (European Commission, 2011)³.

Against this background, this paper presents a systematic descriptive overview of private housing market developments in ten Central, Eastern and Southeastern European (CESEE) EU countries over the past ten to fifteen years.⁴ We add to the results of earlier papers on housing market developments in the CESEE region by capturing the most recent dynamics of the bust of residential property prices from a cross-country perspective, which allows us to show trends observable in the region as a whole.⁵ This is of particular interest as all CESEE residential property markets have undergone a transformation process since the late 1980s, which resulted in certain peculiarities common to most CESEE countries despite country-specific institutional settings: a boom-bust development in residential property prices; a high degree of home-ownership which is, to a large extent, financed via housing loans that are often denominated in a foreign currency; underdeveloped rental markets with relatively high rental costs; and room for improvement regarding the availability and affordability of good-quality housing.

This paper addresses these issues by first providing information on residential property price developments in CESEE over the pre-crisis, crisis and post-crisis periods. Depending on data availability, the pre-crisis period generally covers the period from 2004 to the second quarter of 2008, the crisis period covers the period from the third quarter of 2008 to the end of 2009 and the post-crisis period covers the year 2010. This choice is largely motivated by turning points in the developments suggested by the available data, namely the halt of the post-accession boom in the fall of 2008 and the start of economic recovery at the beginning of 2010. However, one should be aware of country-specific developments, e.g. the earlier start of the economic downturn in the Baltic countries. Furthermore, the classification “post-crisis period” could be too optimistic at the current juncture.

In a next step, we analyze the structural aspects of residential property markets (such as, *inter alia*, the ownership rate and affordability) from a household perspective. Housing loan market developments capture the role of banks in financing residential property. As country-specific institutional settings are important for residential property price developments, national economic policies and regulations are addressed, too. In this respect, this paper attempts to form the basis for future empirical research on the interlinkages between these structural aspects and residential property price developments.

This paper is structured as follows: Section 2 reviews residential property price developments. Section 3 deals with factors impacting property price developments such as structural aspects of housing markets, the affordability of residential property, financing issues and economic policies related to residential property markets. Section 4 concludes with policy recommendations and avenues for future research.

³ More generally, also the IMF recently emphasized the synchronization of financial and residential property markets, arguing that surveillance and domestic policies need to take this phenomenon into account more specifically (IMF, 2011b).

⁴ The sample of CESEE countries analyzed in this paper comprises Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia and Slovenia. The time span and country coverage shown in the charts vary according to data availability.

⁵ For more detailed CESEE country-specific information, see OECD (2005a), EMF (2011) and UniCredit (2011).

2 Residential Property Price Dynamics in CESEE Countries

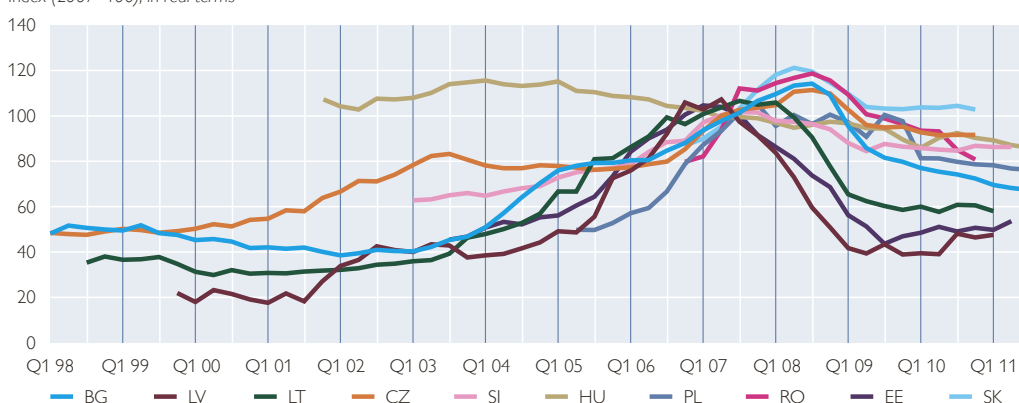
Residential property markets are far from being transparent asset markets. They have particular characteristics which imply difficulties in collecting comparable data on prices. For example, houses and apartments are very heterogeneous and residential property prices can therefore vary considerably within a country (see box). In addition, the processes required for the purchase or sale of a property vary across countries, and turnover rates of properties are particularly low in CESEE, which makes it more difficult to assess price developments there (Hilbers et al., 2008). It is also crucial whether the data to be used for analysis are based on transaction (or selling) prices, collected e.g. from tax returns or private real estate agencies, or from asking (or offer) prices taken simply from advertisements (see chart 2). Data quality also depends on the distribution of the reported transactions, as prices differ according to type of dwelling, location, quality and whether the transactions refer to new buildings only or also to existing ones (Palacin and Shelburne, 2005). National central banks, national statistical offices and private real estate agencies provide residential property price data on CESEE.⁶ As data collection does not rely on a uniform (international) method, we analyze data from different sources, trying to present the most comparable data referring to residential property prices in capital cities (see chart 1).

In the run-up to the economic and financial crisis, prices rose sharply in most CESEE countries. These price hikes at least partly reflected the general catching-up process in CESEE; as living conditions changed, real estate markets began to be developed accordingly. Strong economic growth, a rise in real wages combined with strong demand for residential property and abundant housing loan supply are

Chart 1

Residential Property Price Developments in CESEE EU Capitals

Index (2007=100), in real terms



Source: BIS, ECB, national central banks, national statistical offices, REAS (residential market advisory company).

Note: The price index for BG refers to residential properties in large cities. All indices are HICP deflated. More detailed definitions of the residential property price indices are provided in the appendix.

⁶ As a result of the recommendation given in the report on "The Financial Crisis and Information Gaps" submitted by the Financial Stability Board and the IMF to the G-20 finance ministers and central bank governors, the BIS has started to publish data on property prices in 42 countries. In addition, Eurostat is working on a handbook on how to properly compile residential property price indices (e.g. Eurostat, 2011b). See Hilbers et al. (2008) and Murphy (2010) for details on different data collection methods.

all found to have played a role in the pre-crisis real estate price hikes in CESEE (Égert and Mihaljek, 2007). Demographic factors were also important for property price increases, as the generation of baby boomers born in the late 1970s boosted real estate demand in some countries (e.g. the Czech Republic) despite the overall decline in population figures in the region. In addition, the privatization of residential buildings, the absence of large-scale rental markets and high rental costs were closely related to residential property price developments. FDI is also found to have impacted residential property market developments in CESEE.⁷

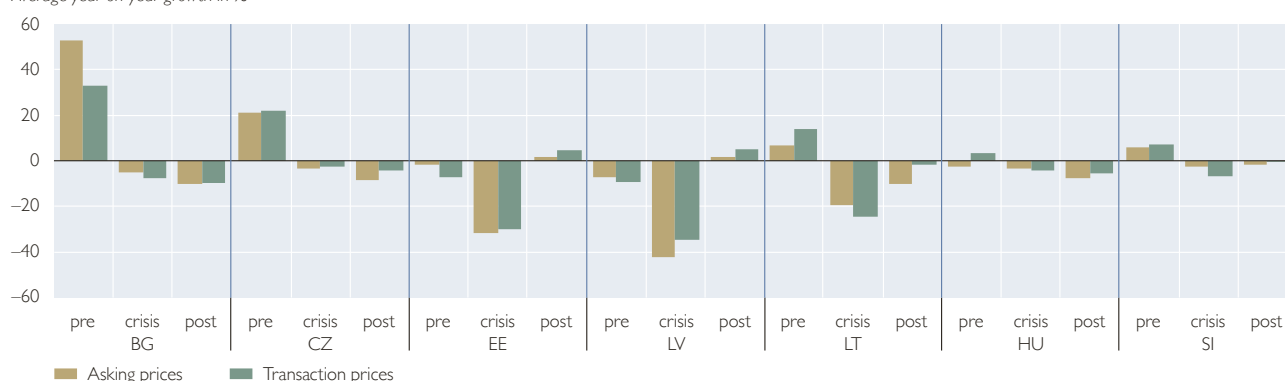
Although fundamental factors seem to have driven residential property prices, strong price increases for several consecutive quarters could also have been a sign of overshooting, particularly if followed by equally severe price contractions, which can be observed ex post. The European Commission's scoreboard for the macroeconomic imbalances procedure indicates that year-on-year changes in deflated housing prices of more than 6% could be referred to as a sign for overshooting (ECB, 2011). In all CESEE countries, deflated residential property price indices for the respective capital cities recorded strong year-on-year increases by clearly more than 6% over several consecutive quarters in the pre-crisis period. This shall only serve as a first indication for imbalances observed in the market during the pre-crisis period, as additional figures – such as long-term price changes and volume indicators – shall be considered to complement the assessment of the European Commission (2011).

After residential property prices had peaked, their contraction was sharp, too, in most CESEE countries and continued for several consecutive quarters. In Estonia and Latvia, prices already fell markedly in 2007. Residential property prices in the Czech Republic, Slovakia, Bulgaria and Romania started to decline only in the

Chart 2

Transaction Prices and Asking Prices in CESEE EU Countries

Average year-on-year growth in %



Source: FHB, REAS (residential market advisory company) and official data sources (BIS, ECB, national central banks, national statistical offices).

Note: Pre-crisis period: Q1 07–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. REAS price index based on average asking prices for properties located in capital cities. Transaction price indices refer to capital cities except in the case of BG (large cities) and HU (whole country). PL, RO and SK have been excluded owing to a lack of transaction price data or due to insufficient time series. The pre-crisis period only starts in Q1 07 because no comparable data for asking prices were available for an earlier point in time.

⁷ Although we take note of the macroeconomic importance of the construction sector and of FDI inflows (Égert and Martin, 2008, and Mitra, 2011), this aspect is not treated in this paper as no detailed information is available on construction sector developments (in terms of gross value added or employment) and on FDI inflows that are directly related to residential property.

second half of 2008, when the financial crisis hit CESEE. The strongest fall in prices, however, was recorded in the Baltic countries as shown in chart 2, which compares real estate transaction and asking prices, taking account of different data collection methods⁸. This comparison reveals that data on both transaction and asking prices, which often originate from different sources, show broadly similar developments over time although the strength of the average year-on-year growth rate varies somewhat between transaction and asking prices.

Selected country-specific evidence reveals that the boom and bust of residential property prices was more pronounced in some CESEE countries, while it seems to have been more balanced in others (e.g. Poland). For example in Estonia, the economic bust, which also hit the residential property market, resulted from preceding unbalanced macroeconomic developments, such as in the construction sector, and was closely linked to other macroeconomic imbalances, e.g. in the nontradable sector (Brixiova et al., 2010). In Poland, by contrast, the residential property price contraction was not as sharp as in Estonia (see chart 1). The Polish construction sector was not as large as the one in Estonia, relative to the overall economy, and economic growth dynamics were more balanced. This might have slowed down the fall of property prices. In Hungary, the residential property price index behaved rather differently from that in other CESEE countries. The strong increase in Hungarian residential property prices at the end of the 1990s⁹ was largely driven by the generous housing subsidy program which comprised, inter alia, interest rate subsidies on long-term mortgages and personal income tax exemptions related to housing loans. The Hungarian government started reducing the program in 2003, which lowered the demand for residential property and led to a slow and steady decline in residential property prices (see chart 1 and FHB, 2009, Hegedüs, 2010, and Molnár, 2010). This shows that country-specific institutional settings are important for residential property price developments. They are therefore discussed in more detail in section 3.4.

Box

Regional Differences in Residential Property Prices

Regional differences within the CESEE countries add to the complexity of residential property price developments. Chart A shows that in the period from 2004 to 2010, residential property in CESEE capital cities was most expensive, although price levels in large (non-capital) cities were relatively close to those observed in the capitals (except in Bulgaria). Fundamental structural differences such as economic activity in the respective region, its employment level and opportunities, income level and demographic structure account for a large price divergence between residential property in the cities and in the country.

In CESEE, housing policy previously tended to be an aspect of labor policy, which provided housing where employment was created (Keith et al., 2000). Since the beginning of transition, the geographical distribution of economic activity in CESEE has widely changed and so has the regional demand for housing (Palacin and Shelburne, 2005). The relocation of industries, factory foreclosures and better labor market conditions have fostered urbanization, which

⁸ In many cases, data on transaction prices are collected and published by official institutions, whereas data on asking prices are collected by private organizations.

⁹ This information can be obtained from the house price index which is provided by the FHB Land Credit and Mortgage Bank Company and which covers Hungary as a whole. It shows that much of the increase in house prices occurred over the period from the beginning of 1998 until the end of 2000.

Chart A

Regional Developments of Residential Property Prices in Selected CESEE EU Countries

Prices per square meter in EUR



Source: BIS, ECB, Latio, national central banks, national statistical offices, Ober-Haus Real Estate Advisors, REAS (residential market advisory company).

Note: Pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. No data available for the capital city of SK for Q1 04–Q3 06 and the whole country of LV for Q1 04–Q4 05. Data on property prices in real terms (HICP deflated, 2005=100) at current exchange rates in EUR.

fueled a rising demand for housing in the cities. However, the supply of new housing often lagged behind and rental housing was scarce, too (Dübel, Brzeski and Hamilton, 2006). In turn, residential property price levels increased much more strongly in urban than in rural areas. In addition, the price divergence posed a constraint on labor mobility as rural households often lacked resources to afford an accommodation in more dynamic regions (Palacin and Shelburne, 2005). Besides labor migration within countries, external demand for housing by CESEE citizens working abroad has put upward pressure on residential property prices because the remittances have at least partly been used to finance residential property. Demand for second homes additionally fostered price hikes in tourist areas (Égert and Mihaljek, 2007).

Regional differences in housing market policies also account for diverging residential property price developments. Federal or devolved government systems allow regional authorities to pursue policies that are different from those of the central government. In turn, residential property markets in regions with poorly developed legislation (e.g. regarding land registry, contract enforcement or planning control) often lacked transparency. Most likely, transaction prices have thus been distorted and often high. In addition, a lack of regulation and professionalism of real estate advisory services further distorted price developments (Keith et al., 2000).

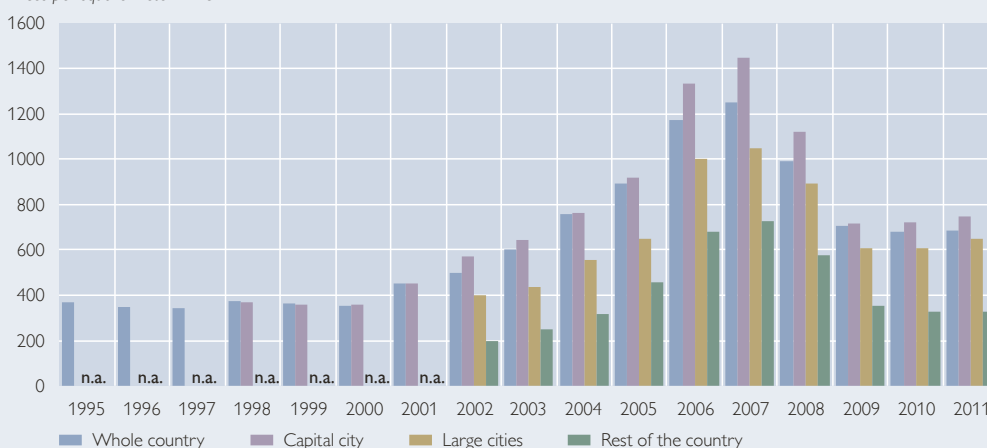
Country-specific evidence for Estonia, where data on regional housing price differences are more easily available than in other CESEE countries, shows that residential property prices increased from 2000 to 2007 in all regions (chart B). Loosened credit conditions, which allowed potential debtors to take out larger amounts of credit, particularly fostered demand for residential property (Tamm, 2007). In turn, residential property prices appreciated, driven additionally by the booming construction sector and by optimistic expectations of further price increases. After the price peak in 2007, buying property in Estonia became cheaper and prices dropped by more than 30% in 2009. The bust in residential property prices went hand in hand

with the downturn in the Estonian economy as a whole, as explained above. While from 2009 to 2011 buyers in rural areas profited even further from slightly declining price levels, capital cities and large cities saw a slow rise in residential property prices according to the official data. Over the entire period, prices remained lowest in the rural areas of Estonia.

Chart B

Regional Developments of Residential Property Prices in Estonia

Prices per square meter in EUR



Source: BJS, Eesti Pank, Estonian national statistical institute.

Note: The indicated property prices are annual average prices at current exchange rates and in real terms (HICP deflated). Data for 2011 refer to the first and second quarters of 2011.

To sum up, most CESEE residential property markets recently experienced a boom and bust cycle, albeit to different degrees. Property price increases have not always reflected the catching-up process and have also shown unbalanced developments in many cases. The decline in residential property prices went along with banks' rising reluctance to grant new housing loans (see section 3.3) and thus restrained demand for housing. In addition, construction activity slumped and can be expected to remain subdued until the market will have absorbed the stock of available housing.¹⁰ Changes in the institutional setting and policy framework followed (see section 3.4). As a reaction to most recent developments, residential property prices in CESEE showed a further declining tendency at the beginning of 2011, except in Estonia and Latvia, where prices rebounded.

3 Factors Related to Property Price Developments

This section analyzes some of the key factors related to property price developments in the CESEE countries. We start by flagging some of the structural differences before looking at the affordability of residential property and at financial deepening. A review of policy and regulatory measures concludes this section.

3.1 Ownership Structure and Housing Conditions

Two of the most striking features of the residential property markets in CESEE are the high share of owner-occupied housing and the relatively low quality of

¹⁰ Some CESEE countries initiated government programs (cofinanced by EU funds) targeting the renovation of public buildings to stimulate the construction sector, such as Lithuania from 2009 to 2010.

housing stock. These aspects of CESEE residential property markets are mainly a legacy of communist housing policy. During the socialist period, public rental housing was provided via a state-owned controlled housing system which was based on low housing costs, centralized production and state or enterprise control over housing allocation, which often resulted in a mismatch of supply and demand and housing shortages (Tsenkova, 2011).

Privatization and restitution in the 1990s totally changed the CESEE housing system. Many cooperative, state-, municipality- and employer-provided dwellings were privatized and sold to tenants, often with a discount of 80% or more from the estimated market price. As a consequence, shares of owner-occupied housing increased strongly in all CESEE countries with the exception of Poland, where cooperatives own a large share of the housing stock (chart 3).¹¹ While such asset transfers enhance households' wealth, high maintenance costs weigh heavily on the owners of often poorly maintained dwellings. The mass privatization process also left a large number of dwellings with unclear ownership, and responsibilities for common areas remained unclear, too. These circumstances have been a disincentive for private owners to invest in their property and have resulted in a deteriorating quality of the housing stock and thus a depreciation of privately owned residential property (Dübel, Brzeski and Hamilton, 2006). Moreover, from a macroeconomic perspective, the high share of owner-occupied accommodation may well be a bottleneck for labor mobility in the region (see e.g. OECD, 2010).

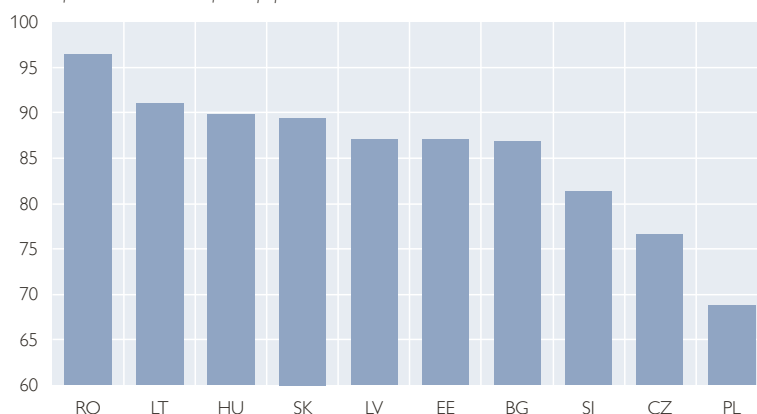
Despite these disadvantages, the rental market has only played a relatively small role in the CESEE countries during the last two decades; it has been concentrated in urban areas. In many CESEE countries, its size has even decreased significantly since the beginning of transition, mostly through the transfer of house ownership to sitting tenants (Amann, 2008). A household survey conducted in several CESEE countries showed that while only about 3% of the surveyed households lived in rented homes in Romania in 2002, this share amounted to 16% in Lithuania and about 30% in Poland (Dübel, Brzeski and Hamilton, 2006).

Affordable good-quality housing has remained scarce in CESEE – particularly for low-wage earners and marginalized groups of the population. The relatively high share of the population living in dwellings classified as overcrowded or severely deprived shows that there remain deficiencies in the market which ought to be addressed by policymakers (chart 4). At around 30% of the total population, the share of the population living in severely deprived homes is par-

Chart 3

Owner-Occupied Housing in CESEE EU Countries (2009)

Share of home owners in % of total population



Source: Eurostat (EU-SILC).

Note: Includes owners with and without outstanding mortgages or loans.

¹¹ More generally, cultural, sociological and demographic aspects, the availability, variety and cost of financing, policy choices such as making mortgage interest rates tax deductible, and other fiscal measures are important determinants for international differences in home ownership rates (Springler and Wagner, 2010).

Chart 4

Housing Conditions in CESEE EU Countries (2009)



Source: Eurostat (EU-SILC).

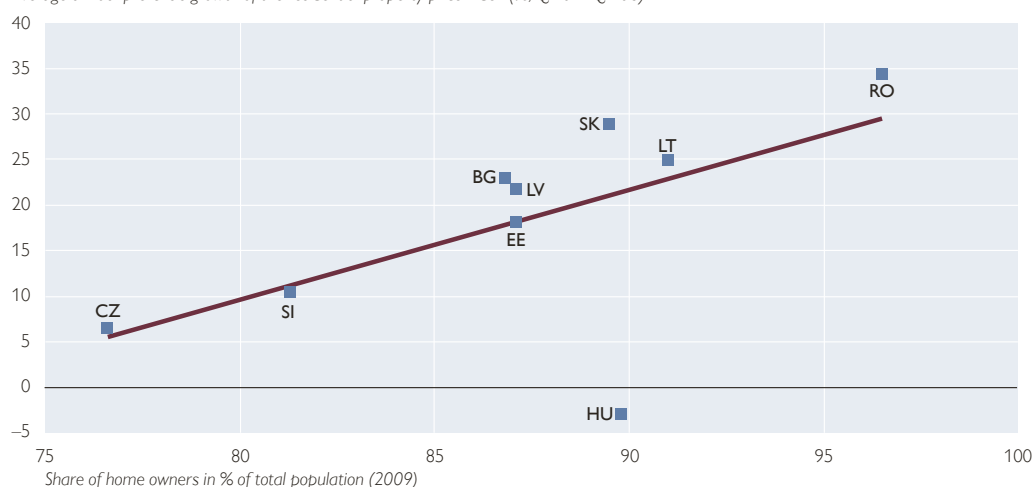
Note: The overcrowding rate describes the proportion of people living in an overcrowded dwelling, as defined by the number of rooms available to the household, the household's size, as well as its members' ages and family situation. A person is considered as living in an overcrowded dwelling if the household does not have at its disposal a minimum number of rooms equal to one room for the household, one room per couple in the household, one room for each single person aged 18 or more, one room per pair of single people of the same gender between 12 and 17 years of age, one room for each single person between 12 and 17 years of age not included in the previous category and one room per pair of children under 12 years of age (Eurostat definition). The severe housing deprivation rate is defined as the share of persons living in a dwelling which is considered as overcrowded and exhibits at least one of the following characteristics: no bath or shower, no indoor toilet, a leaking roof or lighting that is considered as too dark (Eurostat definition).

ticularly high in Romania compared to other CESEE countries. Overall, convergence to the quality levels prevailing in the euro area, where the percentage of the population living in overcrowded and severely deprived homes amounted to 11.3% and 3.4%, respectively, in 2009, still seems to be a long way off for most CESEE

Chart 5

Residential Property Prices and Home Ownership

Average annual pre-crisis growth of the residential property price index (%; Q1 04–Q2 08)



Source: BIS, ECB, Eurostat, national central banks, national statistical offices, REAS (residential market advisory company).

Note: Residential property prices used as in chart 1. The share of home owners includes owners with and without outstanding mortgages or loans. Due to lack of data the series start in Q3 04 for Estonia and Q4 07 for Romania and Slovakia. Poland has been excluded because of outlier data.

countries. Social housing programs exist but are limited, and public rental accommodation is often of poor quality as reported by the World Bank (Dübel, Brzeski and Hamilton, 2006).

Chart 5 suggests that CESEE countries with a higher home ownership rate (and hence a smaller rental market) also saw a stronger increase in residential property prices in the pre-crisis period. Similarly, rising residential property prices were related to a higher share of the population living in severely deprived homes in the region. The affordability of housing is an important issue in this context. The above-mentioned aspects of housing quality also suggest that the demand for housing improvements and new housing in the CESEE countries will remain high until the quality and quantity gap in the housing stock has been closed. This, in turn, suggests that real estate price developments during the catching-up period are likely to remain dynamic.

3.2 Affordability of Residential Property

As household wealth has been hit by the economic and financial crisis and the availability of mortgage loans has become tighter, housing affordability has become an even more important issue for domestic residents in CESEE. Housing affordability can generally be defined as the capacity to meet housing-related costs while “maintaining the ability to meet other basic costs of living” without incurring financial difficulties (Burke, 2004, Robinson, Scobie and Hallinan, 2006). Housing-related costs refer to the purchase of residential property and the running costs of owning or renting a home (such as water and electricity costs). We focus on the so-called purchase affordability by relating residential property prices to gross wages and salaries in chart 6 (OECD, 2005b).¹² While causality between residential property prices and wages cannot be determined in this context, the affordability index shown in chart 6 allows for analyzing changes in affordability over time.¹³ Affordability first decreased in most CESEE countries during the boom period. Later, residential property became more easily affordable as residential property prices posted a somewhat stronger decrease than wages and salaries during and after the 2009 crisis. These developments were most striking in Latvia and Bulgaria. Most recent data show that housing became slightly less affordable in Estonia and Latvia in 2010, while affordability remained largely stable or slightly improved in the other CESEE countries.

Although housing affordability increased during the economic and financial crisis as shown in chart 6, it was at the same time impaired by other factors such as decreasing non-wage income, declining employment or the high level of household debt. For example, the unemployment rate in CESEE increased from around 6% in 2007 to more than 12% in 2010 (unweighted average, Eurostat), which – despite its presumably mainly cyclical nature – indicates that in the near future a smaller share of the population is likely to obtain bank funding for housing purposes. In addition, households’ indebtedness markedly augmented in the last decade and an

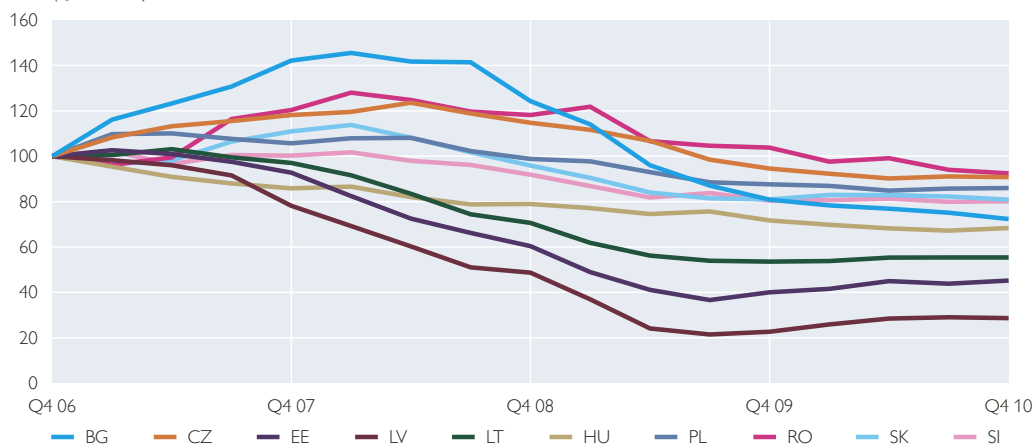
¹² *The housing markets for domestic residents and expatriates working for foreign companies operating in CESEE may differ considerably in terms of price levels and affordability.*

¹³ *Affordability measures usually require a benchmark by which to tell at what proportion of total income housing costs become unaffordable (Robinson, Scobie and Hallinan, 2006). The affordability measures shown in chart 6 and 7 are calculated using price indices, which means they only show changes over time. Further aspects of affordability are discussed in Robinson, Scobie and Hallinan (2006) and Gan and Hill (2009).*

Chart 6

Development of Housing Affordability

Index (Q4 06=100)



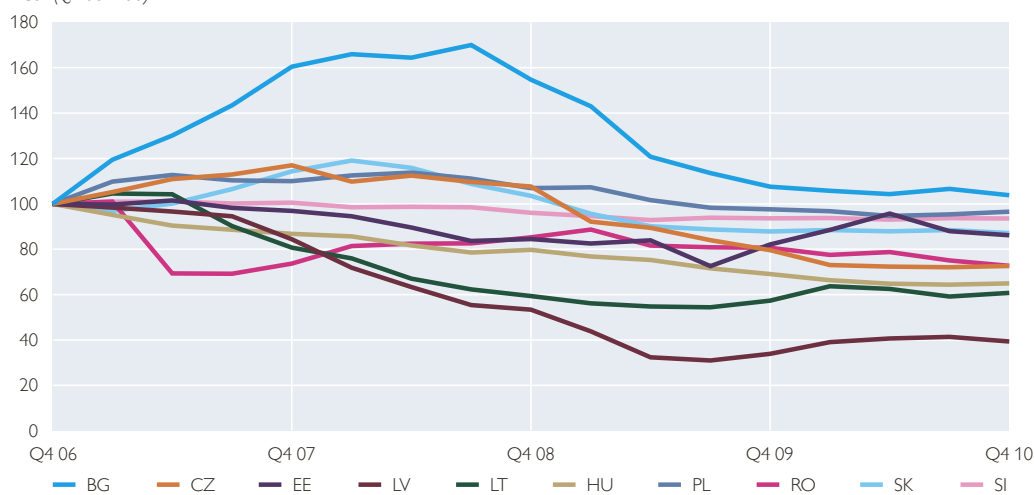
Source: Eurostat, OeNB, REAS (residential market advisory company).

Note: The index of housing affordability is calculated as the ratio of the residential property price index to the index of wages and salaries at current prices (in nominal terms and in national currency, seasonally and working day adjusted). The residential property price index refers to properties in the capital cities.

Chart 7

Development of the Price-to-Rent Ratio

Index (Q4 06=100)



Source: Eurostat, OeNB, REAS (residential market advisory company).

Note: The price-to-rent ratio is calculated as the ratio of the residential property price index to the index of actual rents for housing (neither seasonally nor working day adjusted). The residential property price index refers to properties in the capital cities.

increasing number of indebted households faced difficulties in meeting their debt servicing commitments in late 2010 as a result of the economic and financial crisis.¹⁴ Risk premia on household loans also went up in the course of the crisis, weighing negatively on affordability (see section 3.3).

¹⁴ This information is taken from the OeNB Euro Survey, which is conducted on a regular basis in nine CESEE countries. In this case, respondents were asked whether they had found it more difficult to pay down their loans as a result of the economic and financial crisis (Dvorsky, Scheiber and Stix, 2011, p. 58).

Another aspect related to affordability is a comparison of the costs of owning and those of renting a home. Rents in CESEE have been relatively high compared to residential property prices because demand for rented homes has been strong in view of rising residential property prices, underdeveloped rental markets and subdued supply (Dübel, Brzeski and Hamilton, 2006).¹⁵ During the financial crisis, renting became even more expensive than buying residential property, as the residential property prices are considered to be more sensitive to cyclical fluctuations than rents (chart 7). Financing issues need to be considered in the context of affordability, too.

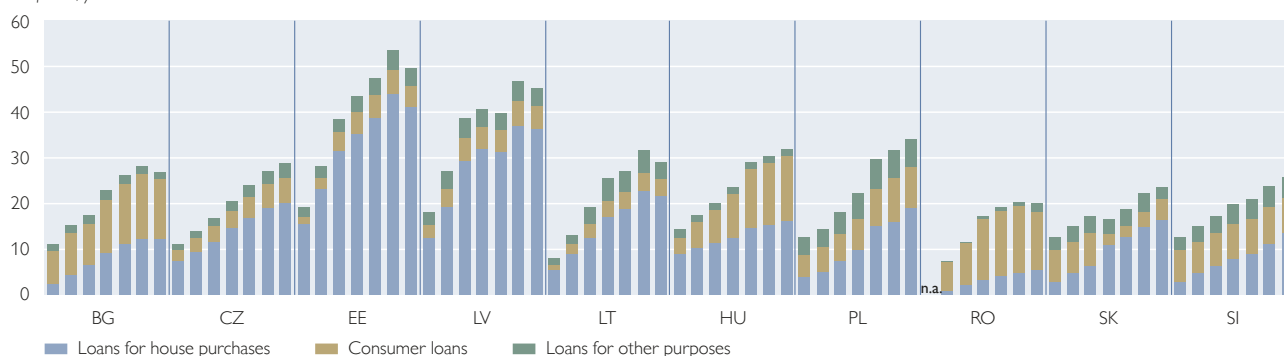
3.3 Financial Deepening and the Financing of Residential Property

CESEE households have increasingly taken on external financing for housing purposes. In recent years, the average stock of outstanding loans for house purchases in the CESEE countries increased from around 7% of GDP in 2004 to 20% of GDP in 2010 (unweighted average). These housing loans accounted for the largest component of loans to households in 2010 in all CESEE countries analyzed except for Bulgaria, Romania and Hungary (chart 8). In Romania, the share of consumer loans in GDP was more than twice as high as that of housing loans, whereas in Bulgaria and Hungary both loan categories were almost equally important. On the supply side, at the end of the 1990s, particularly the establishment of savings and mortgage banks as well as capital inflows to the region enhanced the creation of more sophisticated credit instruments (Mitra, 2011). The softening of credit standards caused by strong competition among banks as well as progress in the enforcement of property rights and the registration of property deepened the market for housing finance (Warnock and Warnock, 2008, and World Bank, 2011). On the demand side, rising housing debt was interlinked with increasing disposable income and intertemporal considerations (expectations of higher wages)

Chart 8

Household Credit Stock by Loan Purpose (2004–2010)

% of GDP, year-end



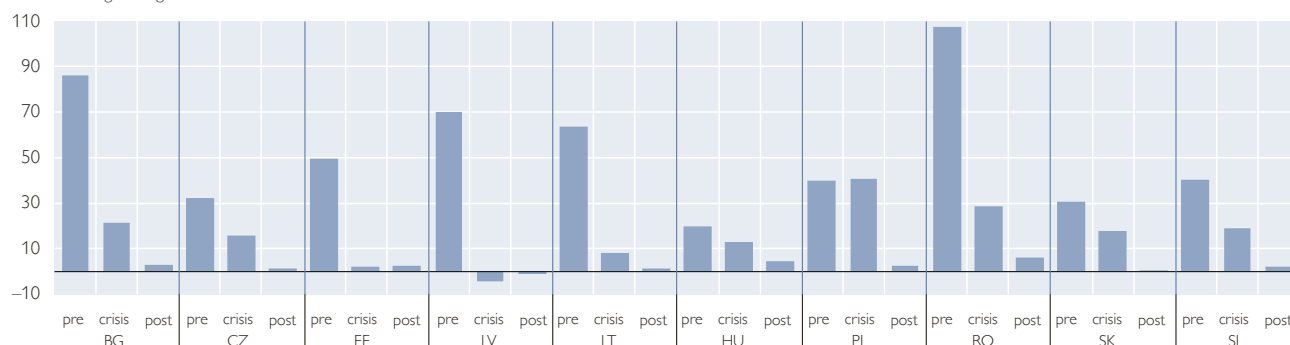
Source: ECB, IMF, national central banks, OeNB.

¹⁵ It is not clear to what extent social housing is included in the data on rents. The share of social rented homes in total housing stock declined, however, from above 20% in 1990 to levels of around 3% in 2000 and has remained low since. Section 3.4 points out its minor role in the housing market. Social housing means homes that are owned and managed by local authorities. It is generally provided by councils and nonprofit organizations such as housing associations (social rented homes are let at lower rents than those rented out by private landlords).

Chart 9

Lending to Households for Residential Property Purchases

Annual average real growth in %



Source: ECB, IMF, national central banks, OeNB.

Note: Pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. Data for EE and SI starts in Q1 05 and data for RO in Q3 06.

combined with low leverage at the beginning of the process. In addition, the absence of large-scale rental markets combined with the high cost of renting homes prompted households to buy residential property – a development which eventually drove up house prices.

With the onset of the financial crisis, bank lending to households for house purchases weakened strongly, and growth rates still remain depressed in some countries, particularly in the Czech Republic, Slovakia, Latvia and Lithuania (chart 9). Banks have been more reluctant to grant new housing loans in view of worsening risk perceptions and tighter credit standards while households' demand declined, given higher debt financing costs, high uncertainties about their future incomes, job insecurity and thus the future affordability of mortgages. In 2010, the stock of outstanding housing loans ranged between 6% of GDP in Romania and 41% in Estonia (chart 8).

The annual percentage rate of charge (APRC) provides information – that is comparable across countries – on the annualized costs of new housing loans in local currency, which is another aspect of housing affordability.¹⁶ The APRC comprises an interest rate component and any loan-related charges paid by borrowers to lending banks.¹⁷ Although policy and market interest rates have gone down since the beginning of transition, the nominal APRC for housing is found to have been generally high in the CESEE countries and to have increased even further over time (see chart 10). The real APRC, however, reached levels below zero in the pre-crisis period in some countries. Thereafter, developments across CESEE diverged more strongly, a trend which partly reflected the fact that financial markets increasingly differentiated between individual CESEE countries. In Estonia, for example, interest rates reached quite a low level in 2010 as the convergence process was perceived to be sustainable in the run-up to euro adoption.

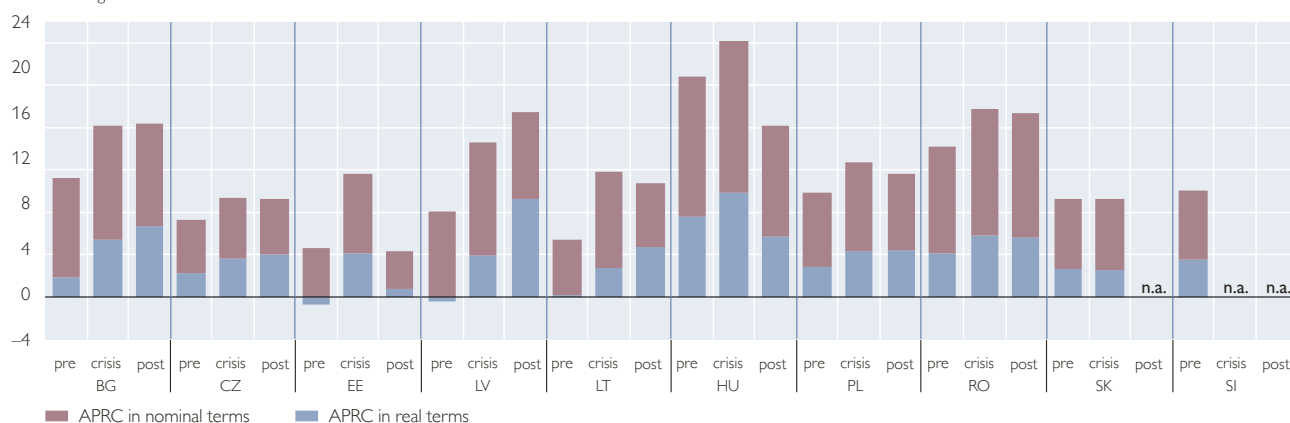
¹⁶ Comparable time series for the APRC only start in 2004. For longer periods, bank lending rates taken from the IMF's International Financial Statistics (IFS) database show that nominal interest rates for domestic currency lending to households declined from around 50% in 1994 to below 10% in 2004.

¹⁷ The composition of other charges varies across countries because the definitions in the Consumer Credit Directive (Directive 87/102/EEC) are applied differently across countries and because national financial systems and credit securitization procedures differ (ECB, 2003).

Chart 10

APRC on Local Currency Loans to Households for Residential Property Purchases

Period average in %



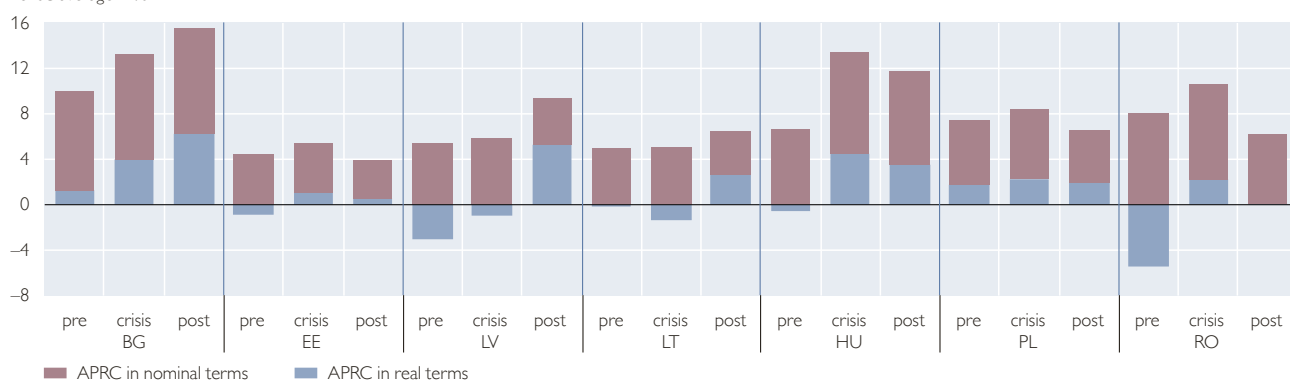
Source: ECB, national central banks, OeNB.

Note: APRC = annual percentage rate of charge; pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10.

Chart 11

APRC on Euro Loans to Households for Residential Property Purchases

Period average in %



Source: ECB, national central banks, OeNB.

Note: APRC = annual percentage rate of charge; pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. The Czech Republic, Slovakia and Slovenia are not included in this chart. In the Czech Republic and – prior to its introduction of the euro in 2009 – in Slovakia, the share of foreign currency-denominated housing loans was very small. Slovenia already adopted the euro in 2007.

A particular aspect of financial deepening in CESEE has been foreign currency lending, which had increased strongly prior to the crisis. In 2010, the shares of foreign currency lending ranged from 60% to 98% of total housing loans in Hungary, Latvia, Lithuania, Poland and Romania according to national central banks' statistics. Chart 11 shows that the level of the APRC on loans denominated in euro was considerably below that on loans denominated in domestic currency until 2010. At least for the pre-crisis period, there is evidence that a considerably lower APRC on euro-denominated loans – together with the lack of long-term financing in domestic currency – contributed to the attractiveness of foreign

currency loans, which are mainly used for housing purposes (see e.g. Crespo Cuaresma et al., 2011, and Steiner, 2011).¹⁸

Once the crisis hit CESEE, high shares of foreign currency lending posed risks to financial stability. Empirical evidence based on household survey data shows that during the crisis, households which took out a foreign currency-denominated mortgage and were hit by one or more negative income shocks had to cut base consumption more strongly than similar households servicing local currency-denominated debt (EBRD 2011). Exchange rate fluctuations were problematic for borrowers, particularly for unhedged Hungarian and Polish borrowers who had taken out Swiss franc-denominated loans, as the depreciation compromised their repayment ability. Nevertheless, foreign currency mortgage borrowers in CESEE appear to have continued to service their debt at the expense of consumption according to the EBRD (2011) survey results. Apart from exchange rate fluctuations, the strong decline in residential property prices in many CESEE countries reduced the value of the collateral of mortgage loans (irrespective of the currency of denomination) relative to the outstanding loan amount for individual mortgage loans. On the one hand, new debtors consequently received less collateralized credit than they would have in times of higher residential property prices. On the other hand, as the economic downturn caused solvency problems for debtors, banks were required to reevaluate the underlying assets used as collateral for loans, which does not only appear difficult given the low turnover rates in residential property markets but also weighs on banks' balance sheets given their need for higher risk-weighted assets. Moreover, carrying out a revaluation of underlying assets based on falling property prices is particularly problematic if nonperforming

Chart 12

Residential Property Prices and APRC

Annual average pre-crisis change in the residential property price index (% Q1 04–Q2 08)



Source: BIS, ECB, national central banks, national statistical offices, REAS (residential market advisory company).

Note: APRC = annual percentage rate of charge. Residential property prices used as in chart 1. Due to a lack of data the series starts in Q3 04 for Estonia, in Q2 06 for Poland and in Q4 07 for Romania and Slovakia.

¹⁸ The same reasoning applies to lending denominated in Swiss franc, which largely dominated foreign currency lending in Hungary and Poland.

mortgage loans are to be foreclosed. Other factors, such as protracted foreclosure procedures, the existence of foreclosure and eviction moratoriums¹⁹ and the above-mentioned low mortgage market liquidity provide further obstacles to mortgage foreclosures.

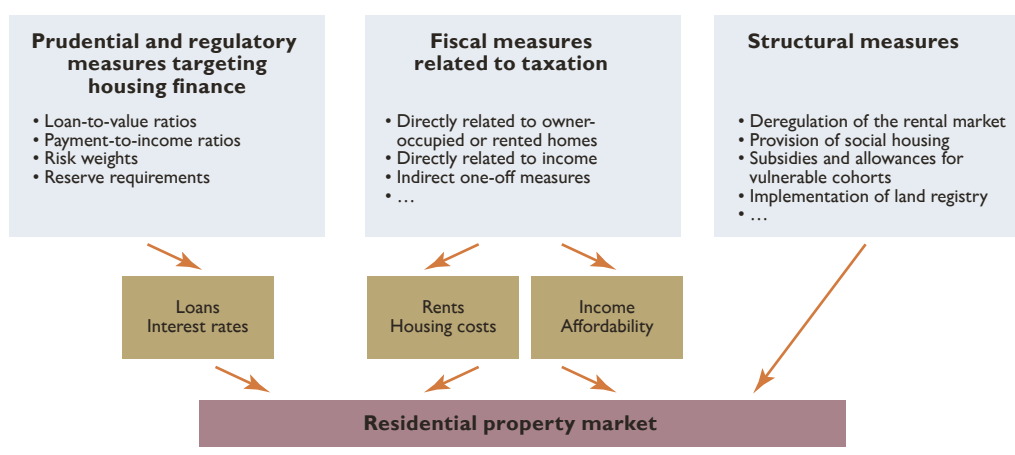
Overall, financial deepening has been closely intertwined with residential property price developments in the CESEE countries (IMF 2011b). In particular, the necessity, for households, to finance home ownership in the absence of large-scale long-term rental markets and rising residential property prices seems to be related to the surge in housing loans. Declining real interest rates can also be associated with increasing residential property prices, as shown in chart 12 (see also Égert and Mihaljek, 2007). Crowe et al. (2011), therefore, talk about a “twin boom” in CESEE real estate and credit markets.

With the beginning of the financial crisis, the growth of housing loans has declined, and region-specific risks have materialized from the high share of household loans denominated in foreign currency. In particular, the decline in residential property prices has reduced the value of underlying collateral, which in turn weighs on banks’ balance sheets. Dübel and Walley (2011) highlight that lenders thus face an elevated level of risk from over-relying on inflated house prices.

3.4 Policy Measures Related to Residential Property Market Developments

A wide range of policy measures impact property market developments. Apart from monetary policy and macroprudential measures aimed at housing finance, fiscal and structural measures can have a strong impact on developments in the residential property market, e.g. via housing costs, income and affordability. The combined impact of these measures on residential property prices can be particularly strong if they work in the same direction (Hilbers et al., 2008). In general, governments should provide a policy framework which ensures that the markets can operate in an efficient way without any distortions. Chart 13 illustrates the

Chart 13



¹⁹ In Hungary, the foreclosure moratorium was replaced in the third quarter of 2011 by a new regulation allowing banks to only foreclose a certain ratio of the collateral of their nonperforming loan portfolio.

main types of policy measures available and how residential property markets are influenced through the various channels.

In the CESEE countries, numerous policy measures have been implemented which have had an impact on residential property market developments. Policy action has also been reconsidered and readjusted over the past fifteen years. The impact of these policy measures on residential property markets of course highly depends on the entire institutional setting in each individual country. Reform progress has not only varied among CESEE countries but also within the regions of the individual countries, depending on the respective government system (Keith et al., 2000). In the following, similarities and differences of selected policy measures across the CESEE region are identified, keeping in mind that explicit policy recommendations have to account for country-specific institutional characteristics. Future policy-oriented empirical research, as is known from the literature on the effectiveness of policy measures in impacting credit developments, is called for in this context.²⁰

Fiscal measures operate on an individual or collective basis (e.g. capital grants to help households to accumulate sufficient starting capital, or subsidies and allowances to reduce mortgage interest expenses). Taxes can be categorized into direct taxes related to taxpayers' net household income, direct taxes related to the property used as collateral and indirect taxes in the form of one-off measures (transaction costs or fees for property transfers or applicable to an inheritance). They should be designed in a way so as not to distort economic behavior in the real estate market and not to crowd out property transactions into the legal black hole (Keith et al., 2000). Table 1 provides a cross-country overview of the most recent status quo of tax measures targeting residential property markets in the CESEE countries. In the majority of countries covered here, mortgage interest payments are tax deductible, although tax deductibility is usually restricted to primary residences. In Poland, for example, the tax deductibility of interest payments has already been abandoned, while the system of interest rate subsidies applicable to some types of housing is to be withdrawn in 2012. In other countries, such as Lithuania and Hungary, the tax deductibility of interest payments was also withdrawn in recent years while in others, tax deductibility was newly introduced (e.g. in Bulgaria in 2009)²¹. In general, tax deductibility on mortgage interest rates reduces the user cost of owning a home. Some papers analyze how the abolishment of tax deductibility affects housing prices. They argue that housing prices declined as the demand for houses decreased owing to the fact that mortgage interest rates were no longer tax deductible (Cecchetti and Rupert, 1996). In view of the absence of large-scale rental markets and the subsequent need for households to purchase residential property, the impact of an abolishment of tax deductibility on the demand for homes can be assumed to be limited in CESEE.

²⁰ See e.g. Polgar and Zdzienicka (2011) for related research on policy measures targeting credit developments and related caveats to empirical research.

²¹ More of the impact of tax deductibility will be borne by households at higher income levels, mainly because lower-income households do not itemize their tax returns (Cecchetti and Rupert, 1996). But, as higher-income households hold a smaller share of their wealth in housing than lower-income households, changes in the value of their other assets may mitigate the decline in the price of their homes. Since renting is often a substitute for home owning, market forces drive the prices of both rented and privately owned homes at the same time.

Table 1

Housing Market-Related Taxation in 2011

	Direct taxes			Indirect one-off taxes	
	Tax deductibility of interest payments	Tax on imputed rent	Property or real estate tax	Capital gains tax	Transaction tax, fees, stamp duties
BG	Yes	No	Yes	Yes	Yes
CZ	Yes	No	Yes	No	Yes
HU	No	No	Yes	Yes	Yes
LV	No	No	Yes	Yes	Yes
LT	No	No	Yes	No	Yes
PL	No	No	Yes	Yes	Yes
RO	No	No	Yes	Yes	Yes

Source: European Tax Handbook (International Bureau of Fiscal Documentation).

No CESEE country imposes taxes on imputed rent for owner-occupied housing, but most countries impose a property tax that has a similar effect. VAT taxation also often promotes home ownership, which is already at a high level in the CESEE countries. EU membership required VAT changes which added some volatility to housing construction and transaction costs, i.e. property purchase costs and mortgage loan costs, which may have a direct impact on housing market activity and in turn indirectly affect labor mobility in the years after implementation (Kierzenkowski, 2008).

Regarding *structural changes* in residential property markets, it is particularly important that governments develop capacities for administrative and technical support in surveying and mapping property, and that they ensure reliable contract enforcement and implement efficient land registration procedures (Keith et al., 2000). However, particularly at the beginning of transition, there had been a certain suspicion among households e.g. about governments' motives for collecting information on privately owned property, given the households' past experience with corruption. Buyers' uncertainty about their purchased rights and the value of the property added to the risk of dealings in the real estate market (Keith et al., 2000). It has therefore been important to foster the efficiency and reliability of the legal framework for residential property dealings.

With regard to housing affordability, the availability of public housing programs is an important aspect. With the shift away from direct state intervention to market-based provision of housing services in the 1990s, municipalities have emerged as the predominantly new "social" landlords, but social housing programs had a low priority until the end of the 1990s. At that time, national housing programs aimed at emphasizing the role of the rental sector in some CESEE countries (e.g. in Hungary in 2000), by setting related rents below market levels, for example (which affected 5% to 10% of market rents on average). It is noteworthy that rent arrears in this segment have become a widespread phenomenon creating pressure for housing administration and management.²²

²² In large cities in Romania, for example, one-third of rent revenues are defaulted on, while in smaller cities the share is 25% (Tsenkova, 2011).

Direct subsidies for new public housing in CESEE have been largely eliminated, although some ad hoc funding is provided. In the absence of systematic policy intervention, the urban poor in the CESEE countries are settling in the rapidly growing informal peripheral urban areas of large cities. To dampen the growth of these informal settlements, various projects have been implemented, ranging from legalization to programs for resettlement in social housing (Tsenkova, 2011). In recent years, the pressure for more affordable social housing in the CESEE countries has been increasing against a background of various patterns of social exclusion. Subsidies and allowances for vulnerable cohorts have been implemented, but there seems to be further room for improvement in light of the low share of the rental market in residential housing and ongoing social exclusion (Hegedüs, 2010, Kierzenkowski, 2008, and Tsenkova, 2011).

Apart from changes in fiscal measures, the development of a residential property market additionally requires a stable framework for housing finance. This, in turn, requires the development of commercial legal systems regulating financial reporting and the enforcement of contracts (Keith et al., 2000). The impact of the *macroprudential regulation* of housing finance on the development of residential property markets is essential for understanding residential property price developments, too. Governments and national central banks had started to pay increasing attention to the rise in household debt (taken on particularly for housing purposes) already before the financial crisis (see section 3.3.). Supply-side measures taken by some CESEE governments comprised e.g. moral suasion, stricter risk weights (e.g. in Bulgaria and Poland), tighter capital requirements on (foreign currency) mortgage lending (e.g. in Poland), a more conservative treatment of eligible collateral (e.g. in Bulgaria and Romania) and guidelines or stricter rules for loan-to-value (LTV) ratios (e.g. in Hungary, Poland, Lithuania and Romania) or payment-to-income (PTI) ratios (e.g. in Hungary; see Crowe et al., 2011, and IMF, 2006).

The currency denomination of housing loans has to be considered in designing macroprudential regulation. LTV and also PTI ratios are very sensitive to exchange rate movements. In fact, e.g. Hungary implemented different maximum LTV ratios according to the respective currency denomination on mortgage loans and vehicle-financing loans in June 2010 (Lim et al., 2011). In Poland, a closer monitoring of LTV ratios of foreign currency loans was already introduced before the crisis. In addition, banks increasingly have to consider possible changes in the value of collateral used for mortgage loans. In Romania, e.g., loans may only be granted if the value of the collateral sufficiently covers the loan under an adverse economic scenario.

Overall, all governments in the CESEE region have implemented several of these measures and changed them often, in particular since the beginning of the crisis. In general, it is important that the applicable policy framework provides adequate conditions for encouraging property transactions and does not drive them outside legal control (Keith et al., 2000). For the time being, an assessment of the mid- or long-term outcomes of the policy measures is still quite difficult as many of them have not been in place long enough.

4 Concluding Remarks

This paper provides a systematic overview of residential property markets in the CESEE EU countries during the recent boom and bust cycle that most countries in the region have experienced. During this cycle, most CESEE countries saw a strong rise in residential property prices, which only partly reflected the catching-up process and was followed by a more or less severe contraction. Rising residential property prices in the CESEE countries went hand in hand with declining housing affordability in the run-up to the 2009 crisis. During the financial crisis, residential property became more affordable as the slump in residential property prices was stronger than in wages and salaries. However, most recent data indicate that affordability has deteriorated again in some countries. Related indicators, such as rising unemployment and increased indebtedness, have also negatively affected households. Moreover, affordability is closely linked to distinctive structural characteristics of residential property markets in CESEE, such as widespread home ownership and a high share of the population living in overcrowded and low-quality dwellings. These aspects of CESEE housing conditions suggest that the demand for housing improvements and new housing will remain high until the quantity and quality gaps are closed. In this respect, price developments during the catching-up period are likely to be dynamic in CESEE. As concerns housing finance, financial deepening has been closely intertwined with residential property price developments and resulted in a rapid increase in the indebtedness of private households; loans taken out by households are often used for housing purposes and denominated in foreign currency, which entails risks for unhedged borrowers.

Going forward, the main task for policymakers would be to draw the right lessons from the past boom-bust episode in most CESEE countries and to establish a policy environment which does not trigger destabilizing residential property price fluctuations or addresses them if macroeconomic and financial imbalances related to the residential property market occur. The scoreboard for the surveillance of macroeconomic imbalances and the macroeconomic imbalances procedure of the European Commission (2011) can be seen as a first step in the right direction. Beyond that, sustainable developments of CESEE housing markets should be supported – with sustainability referring to the continuous affordability of at least basic and adequate housing for all cohorts of society. This, in turn, requires a better knowledge of the impact of various policy measures on residential property prices. Preliminary evidence, for example, indicates a link between the increasing stock of housing loans, high ownership rates, poor housing conditions and rising residential property prices. Fiscal measures, which can also contribute to rising housing prices and lead to market distortions, deserve particular attention. While subsidies and allowances for vulnerable cohorts have been implemented, there is room for further improvement, particularly in view of the low quality of housing stocks and the related poor housing conditions. Macroprudential policies should aim to prevent the build-up of large and vulnerable stocks of housing loans, in particular in foreign currencies.

Future research should analyze in more detail the impact of the various policy measures on residential property markets as well as the role of international capital flows in housing finance. Such analyses would benefit from an improved availability of comparable cross-country time series for residential property prices in the CESEE region.

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Annex

Table A1

Data Sources of Residential Property Prices used in Chart 1

Country	Coverage: geographical areas and type of dwelling	Statistical concept and method	Compiled by/ Retrieved from
Bulgaria	Big cities (27 district centers); existing flats	Transaction price per square meter	National statistical office/ BIS
Czech Republic	Capital city; existing flats	Transaction price per square meter	National statistical office
Estonia	Capital city; existing and new flats	Transaction price per square meter	National statistical office/ BIS
Hungary	Capital city; existing dwellings	Transaction price per square meter	National central bank/ BIS
Latvia	Capital city; existing and new flats	Transaction price per square meter	National statistical office/ ECB
Lithuania	Capital city; existing and new flats	Transaction price per square meter	National statistical office/ ECB
Poland	Capital city; existing flats	Asking price per square meter	Private organization/ BIS
Romania	Capital city; existing and new dwellings	Asking price per square meter	REAS
Slovakia	Capital city; existing and new dwellings	Asking price per square meter	REAS
Slovenia	Capital city; existing flats	Transaction price per square meter	National statistical office/ ECB and BIS