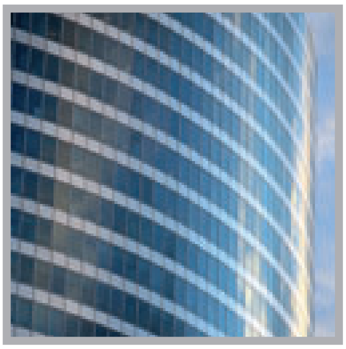
UniCredit Group

Residential Real Estate in CEE



"Supply Shortage: Clear Driver for Sustainability"

May 2008

Index

Residential Real Estate in CEE

Summary

Over the last decade, many countries in the CEE region have been experiencing a significant increase in house prices, raising concern about possible risk of overvaluation. Understanding the fundamentals behind the CEE regional real estate market has therefore become a priority.

The privatisation process had one clear effect on house prices throughout the region. Dwellings were sold to tenants at low, non-market clearing prices, leading to strong misalignments with fundamentals.

As a consequence of privatisation, home ownership is generally high in the region, but the quality of housing stock still lags behind the Western European standard. Moreover, the supply of new housing has always been unable to fill the demand gap, despite acceleration observed in recent years especially in the capital cities and urban areas. On the demand side, increasing stabilisation of the economic environment, favourable demographics trends, fast convergence in incomes and wealth in combination with better accessibility to credit have been supporting strong demand for improvements in living standards. The widening demand was, however, accompanied by a sharp deterioration in the affordability of housing, especially for lower income groups. As a result, in many countries demand for house purchase remained mainly linked to the emerging middle class segment or to high net worth individuals. An important demand driver in CEE has also been the emergence of demand from abroad, especially for real estate in the capital cities and in the holiday home segment. Additional drivers include domestic real estate demand for investment purposes, with a growing category of buyers also represented by migrant workers channeling a substantial part of their savings into the domestic market. Overall, we still believe that house prices in the region are compatible with an equilibrium level, based on households' income and interest rates prevailing in the market. Still, there might be some out-of-equilibrium trends in some sub-segments.

Looking ahead, the residential property market continues to present opportunities. Despite the current global scenario, we continue to maintain a positive view – on the back of still large unsatisfied demand and 'potential demand' currently limited by affordability issues – with some moderation of past trends, but without a backlash. There are clearly a few areas to monitor which might exhibit some oversupply – i.e. the holiday home sector in Bulgaria – which might suffer from low quality/low infrastructure, reduced foreign demand given the current international scenario and insufficient domestic demand. Slowing demand from abroad in addition to still low affordability for resident households might also contribute to some imbalances in capital cities such as Bucharest. In this context, the major warning example remains Kazakhstan where the real estate bubble is bursting.

Regional overview
Quantitative and qualitative gap in supply: clear driver for sustainability

Debora Revoltella and Fabio Mucci

High home ownership, but quantitative and qualitative housing shortage too

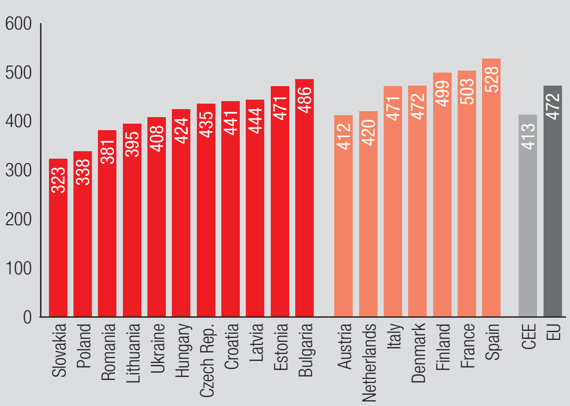
Despite the accelerated growth in supply observed in recent years, the CEE residential property market is still characterised by a quantitative and qualitative housing shortage. Some figures can give a hint of the situation:

- The number of dwellings per thousand inhabitants stands at an average of 413 in the region, below Western Europe standards (472), according to the latest available data in each country.
- The average usable area of housing at the regional level is around 63 square metres, vs. an 87 square metre average in the more mature Western EU countries. In the "old" EU, homes have an average of 4.2 rooms, but only 2.8 in CEE.

In many countries, the existing stock has predominantly been inherited from the former socialist housing system, with more than 70 % of dwellings built between 1945 and 1990. The communist regime left the CEE region with a unique housing stock of relatively recent, but often rundown homes. The overall legacy is represented by a suburban and rural stock of houses with limited amenities and poor insulation, sometimes even unfit to reside in. In most countries, apartments were built as panelled blocks, with an intended life-span of 30 to 40 years, which is now expiring. In Bulgaria, for example, the relative share of brick buildings is close to 60 %, whereas the rest still mostly constitutes dwellings made of pre-fabricated reinforced concrete walls. Maintenance issues are particularly relevant in some CIS countries. In Ukraine and Russia, official statistics reveal that more or less half of the total housing stock requires partial or full restoration, with 4 % and 3 % respectively subject to demolition. In Kazakhstan around 22 % of urban housing is still not connected to the water supply, 31 % lack canalisation and over 38 % central heating. The quality of dwellings is less of an issue in Hungary and in the Czech Republic.

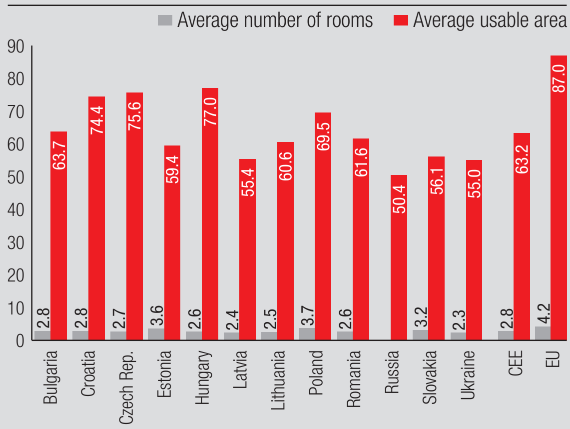
As a consequence of privatisation, home ownership is high. Prior to the 1990s, housing ownership was restricted to peasants' private houses in villages, with most urban housing being either municipal, state or cooperative owned. The rapid and extensive privatisation process in the early 1990s has contributed to widespread private ownership. Dwellings were sold to tenants at low, non-market clearing prices (20 % of the market value or less was common practice). Nowadays, around 77 % of the housing stock in the region is owner occupied, vs. a 64 % average in the older EU states. Only the Czech Republic and Poland have a relatively lower proportion of owner occupation at 47 % and 59 % respectively, mainly reflecting the well-developed cooperative sector resulting from the role of cooperatives as the main developer under communism. Still, the legal status of a large portion of such housing (so-called "owner cooperatives") can be assimilated to private ownership, thus bringing the overall share of owner occupation pretty much in line with the

Dwelling stock per '000 inhabitants1), 2)



Sources: UniCredit Group CEE Research Network, "Housing Developments in the European Countries 2005" (Department of the Environment Heritage and Local Government, Ireland).
Notes: 1) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, SK, UKR; EU: AT, DK, FI, FR, IT, NL and ES; 2) Data as of 1991 for Italy, as of 1996 for Finland, as of 2000 for Denmark, as of 2001 for Lithuania and Spain, as of 2002 for Austria, France and Netherlands, as of 2006 for Bulgaria, Croatia, Estonia, Latvia, Poland, Romania and Ukraine and as of 2007 for Czech Rep, Hungary and Slovakia.

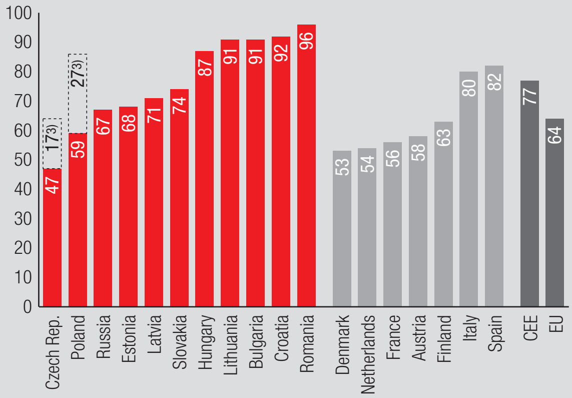
Average usable area and number of rooms1), 2)



Sources: UniCredit Group CEE Research Network, "Housing Developments in the European Countries 2005" (Department of the Environment Heritage and Local Government, Ireland).
Notes: 1) EU proxy including Austria, Denmark, Finland, France, Italy, Netherlands and Spain; 2) Data as of 2001 for Bulgaria, Czech Rep., Croatia, Latvia, Lithuania and Slovakia; as of 2005 for Russia and Ukraine; as of 2006 for Estonia, Hungary, Poland and Romania.

regional average. Not surprisingly, the rental market is rather underdeveloped in the region, especially in medium-sized cities and small villages, and often limited to the luxury up-market segment due to the appealing demand from local wealthy people and the growing number of foreigners working in the capital cities. Overall, rented housing constitutes roughly 10 % of the regional housing stock, with a somewhat higher share observed in the capital cities.

Owner-occupancy ratios in CEE countries and Western Europe[1), 2)]

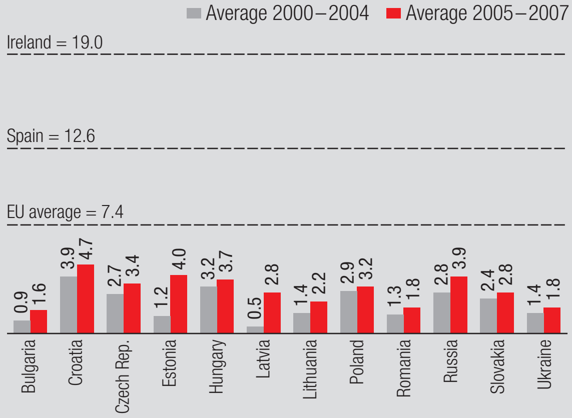


Sources: UniCredit Group CEE Research Network, UNECE Bulletin of Housing Statistics for Europe and North America 2006, "Housing Developments in the European Countries 2005" (Department of the Environment Heritage and Local Government, Ireland).
Notes: 1) Calculated as ratio between owner-occupied dwellings over total occupied dwellings measured in physical units, except for Russia (sqm); 2) For EU: last available Census. Data as of 2001 for Bulgaria, Czech Rep., Croatia, Latvia, Lithuania and Slovakia; as of 2005 for Hungary and Russia; as of 2006 for Estonia, Poland and Romania; 3) Dwellings in cooperative ownership

Still, high home ownership combined with a qualitative and quantitative gap in terms of housing supply means opportunities for further growth.

The supply gap observed in the region is a direct effect of the transition process. During the communist era, the former centrally planned system dominated the housing market in the construction phase but also by providing houses at low rents and maintenance costs. In the 1990s in virtually all CEE economies there was a huge decline in residential construction, as the public sector redirected spending toward other branches of the economy and the private sector failed to compensate. **The construction sector has grown since 2000 and really only accelerated in 2005–2007, sustained by favourable economic trends and the rapid expansion of the financial industry.** The leading banking institutions teamed up with construction companies to provide favourable loan conditions, largely benefiting from the low-cost external financing. The construction sector has also been one of the main destinations of the massive inflows of capital targeting the region. Acceleration in construction activity resulted in a general increase in the number of newly completed dwellings per thousand inhabitants in the region, which rose from 2.0 units in 2000–2004 to almost 3.0 in the last three years. Croatia, Hungary, the Czech Republic, Poland, Russia and Slovakia have experienced relatively stable trends in construction growth. The acceleration in construction activity was particularly strong in the Baltic States and Bulgaria, stimulated by the booming domestic and foreign demand of new apartments, especially in the capital cities and particular locations (seaside), improved access to bank financing and swiftly rising house prices with high expectations for further growth. In Bulgaria and Estonia the ratio of newly completed dwellings per thousand inhabitants almost doubled in three years, while it tripled in the case of Latvia.

Dwelling unit completion per '000 inhabitants[1), 2)]



Sources: UniCredit Group CEE Research Network, "Housing Developments in the European Countries 2005" (Department of the Environment Heritage and Local Government, Ireland).
Notes: 1) Proxy for the EU including Austria, Denmark, Finland, France, Italy, Netherlands, Spain and Ireland; 2) Bulgaria, Croatia and Russia (no. of apartments): 2005–2006

A good part of the acceleration was connected to intensive housing construction, especially in the capital cities and urban areas, with an increasing role being played by the holiday home segment in coastal areas as in the case of Bulgaria and Croatia, and winter resorts in the mountains for the Czech Republic. As a result, the share of new construction activity concentrated in the capitals over the last three years was above 15 % in all countries, peaking at 32 % in the case of Bratislava, whilst remaining below 10 % in the case of Warsaw and Bucharest. Although supply is generally limited and the residential property market of the region is far from saturated given the still high level of unsatisfied demand (also substantiated by the average selling time even in the capitals being in line with Western Europe, at 1 to 3 months), there is some oversupply in specific segments and geographical areas. Budapest has been a typical example of market correction induced by over adjustment in the level of supply. The concentration of construction activity, especially by specialised companies and property developers in the capital area, led to a sharp upturn in the volume of per capita housing construction between 2000 and 2005 (7.2 units completed per thousand inhabitants in 2005), with house prices rising much faster than building costs. In 2006, signs of oversupply brought about a decline in the volume of new flats and slower growth in prices. There could also be some oversupply in the resort segment in Bulgaria, which became the hottest destination for new real estate property attracting significant capital from abroad. After the holiday home segment took off, the relative share of newly completed dwellings at the seaside increased from 25 % in 2003 to as much as 51 % in 2007. The recent development in building permits combined with some clear-cut evidence of oversupply and weakening external demand in response to the poor international scenario at present increase the risks of a stronger correction in this segment.

Lengthy procedures for obtaining building permits and a lack of complete and transparent land registers have been the main obstacles to even stronger expansion in construction activity at the regional level. In many countries, the ownership of land was very often split into long and narrow parcels with relevant records available in two or more registers (like in the case of Kazakhstan, Ukraine and some south-eastern European countries), hampering the process of establishing title. In the ex-Yugoslavia, ownership rights are still unclear following the war. As confirmed by a recent survey of the EBRD[1)], significant improvements have been achieved throughout the region in reforming land registration system with many countries reducing the amount of unregistered properties significantly, though problems still remain in several jurisdictions (Croatia, Poland, Russia and Serbia). Other barriers to a faster development of residential real estate have been the **absence of spatial development plans and the scarcity of building plots at reasonable prices**, especially in large cities. Given the above, more and more developers are starting to target diversification, with new development projects around capital cities or in second-tier towns. This is the case in Romania for example, with new development projects around Bucharest, or in Russia, with developers starting to target regional towns with more than 1 million inhabitants. One growing problem is the lack of specialised labour, which has been negatively affected by the increasing migration toward western European countries. The construction sectors in countries like the UK and Ireland have benefited from a large-scale inflow of skilled workers from the CEE region, contributing to the increasing shortage of labour in the countries of origin (as is the case in Bulgaria and Romania). In Russia and in some other countries, building costs are increasing fast due to the lack of construction materials too, which gives a strong competitive advantage to developers who are vertically integrated.

Following the peak observed in 2005–2006 and 2007 H1, the disruption of the global financial crisis during the summer of last year sparked a deceleration in construction activities. The repricing of risks at the international level is indeed reflected in higher costs of funding for the local economies and the local banking industry, leading to a tightening of credit. Kazakhstan has been particularly badly hit, after several years of booming demand and supply (in selective segments). The authorities' plan to build a new capital in Astana, matched to the strong financial industry interest in the real estate sector and combined with fast rising prices and a lack of alternative forms of investment, clearly fuelled a bubble which is now bursting. Uncertainties over the local political environment and the global scenario contributed to slowing the performance of the construction sector in Turkey too, where the number of newly constructed buildings contracted by 7.3 % in 2007 accompanied by only a marginal increase of 1 % in building permits, which could be the prelude to further deceleration in construction activity this year. Still, it is worthwhile mentioning that in the case of Turkey a large quantity of buildings are developed without formal permits, thus a decline in permits might not be a reliable indicator. Lower international demand might be reflected in lower foreign investment in residential real estate properties in some seaside destinations of the region, like in Bulgaria.

Unsatisfied potential demand still large, but lowering affordability

Increased stabilisation of the economic environment, fast growth in incomes and wealth and easier availability of credit have been supporting strong demand for improvements in living standards and thus for new demand in residential real estate properties in the region. As mentioned, despite the high home ownership, the qualitative and quantitative gap in terms of housing supply means opportunities for growth. On top of this, some benign demographic trends have also played a role.

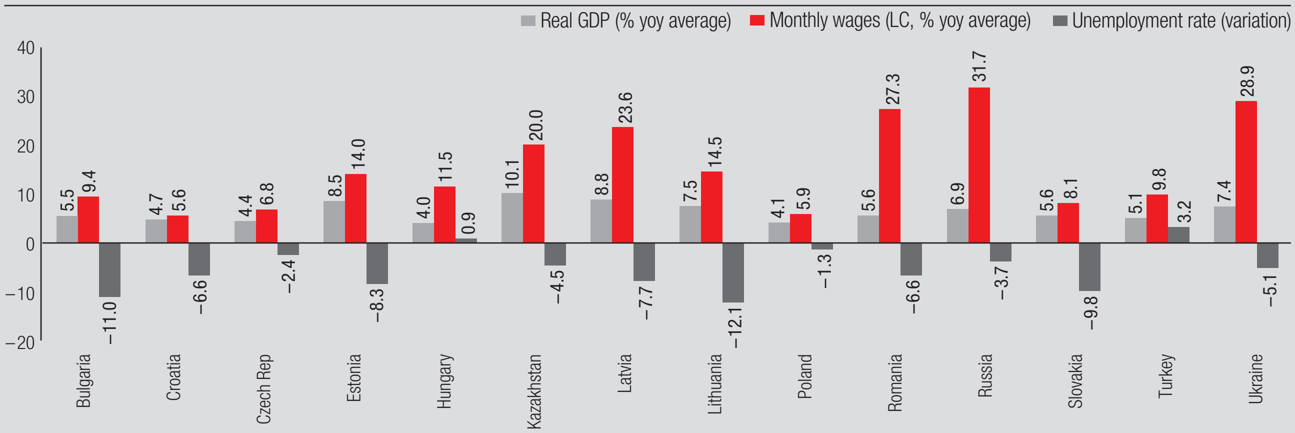
The profound transformation process and the sequence of reforms observed in CEE economies over the last decade, stimulated also by the EU convergence process, have contributed to stabilising the macroeconomic environment with strong growth dynamics and falling inflation. Since 2000, regional GDP growth has gradually been picking up pace, peaking at 7.1 % in 2004 and at 6.8 % last year. Growth has been particularly strong, especially in the Baltic states, averaging almost 9 % in the last three years, and former CIS countries including Turkey (+7.2 %), with SEE lagging slightly behind although it still experiences robust growth (+6.2 %). Strong economic growth led to dynamic increases in household incomes, with both personal disposable income and wages recording strong growth. Based on purchasing parity standards the gap between per capita income in CEE countries and in Western Europe has been falling, from 44 percent in 2000 to almost 60 percent of the EU-27 average at the end of last year, with the most visible improvements observed in the Baltic states, Slovakia and Romania.

Households in the region tend to have relatively low saving ratios, but their savings approach increasingly focuses on real rather than financial assets. The accumulation of financial wealth has picked up to double-digit growth rates in each of the last four years, expanding by over 20 %[2)] on average throughout the region to around 60 % of GDP at the end of last year compared to a ratio of 43 % in 2000. Although CEE wealth and Eurozone wealth are converging rapidly, a significant gap still remains (with the same ratio being above 200 % in the Eurozone). Rapid growth in financial assets was also accompanied by accelerating household debt. As a consequence, net financial wealth accumulation has been decelerating, though still remains positive. Growth in household credit has mostly been associated with growth in mortgages, thus meaning a shift from financial to real forms of savings. Major country differences linger on. In most of the Central European countries and to some extent in the Baltics, development in mortgages and a booming real estate market have been driving the accumulation of real wealth, with housing and consumption only partially crowding out financial wealth accumulation. In the case of Poland, only through the emer-

1) EBRD, 'Mortgages in transition economies' 2007

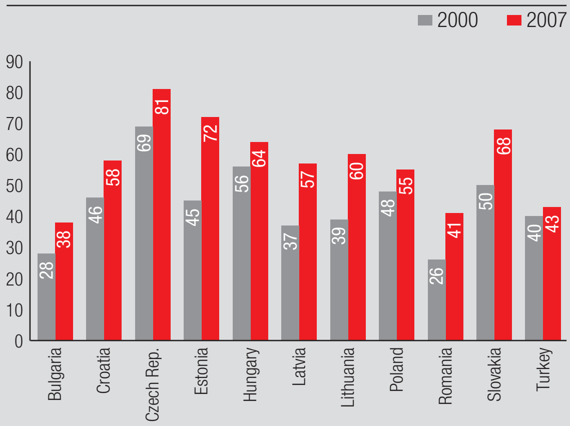
2) Figures refer to the average growth of household financial assets in CEE. The average includes new EU member states and candidate countries (Croatia and Turkey).

Economic growth and labour market conditions (2000–2007)*



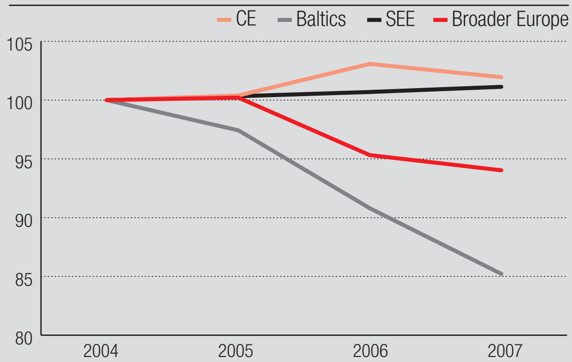
Source: UniCredit Group CEE Research Network
*) The nominal annual average wage growth is calculated from 2002 for Kazakhstan and from 2004 for Turkey.

GDP per capita (EU27=100 in PPS)



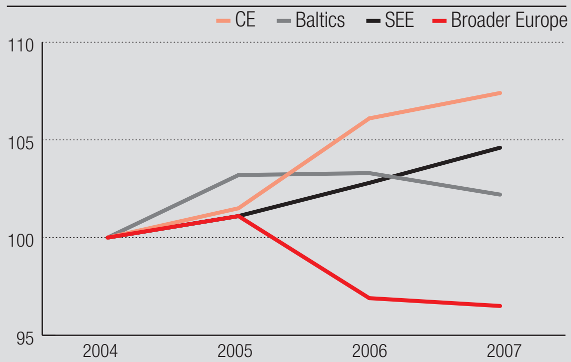
Source: Eurostat

Net financial wealth as a percentage of GDP
(Index 2004=100)1), 2)



Source: UniCredit Group CEE Research Network
Notes: 1) Central Europe: Czech Republic, Hungary, Poland and Slovakia; South-Eastern Europe: Bulgaria, Croatia and Romania; Broader Europe: Russia and Turkey; 2) Net financial wealth is defined as the difference between households' financial assets and liabilities.

Corrected net financial wealth as a percentage of GDP
(Index 2004=100)1), 2)

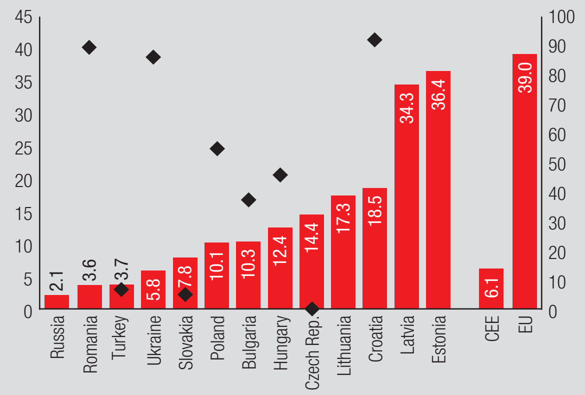


Source: UniCredit Group CEE Research Network
Notes: 1) Central Europe: Czech Republic, Hungary, Poland and Slovakia; South-Eastern Europe: Bulgaria, Croatia and Romania; Broader Europe: Russia and Turkey;
2) Corrected net financial wealth is defined as the difference between household's financial assets and the non-mortgage component of debt.

gence of new saving flows from the rural population has the growth trend in both financial and real wealth continued. Similar trends are indeed detected in some SEE countries like Croatia and Bulgaria where the emergence of hidden savings also plays a role. In Romania, Russia and Turkey the lower ratios of both net financial wealth to GDP and corrected net financial wealth to GDP signal the increasing willingness of households to live on credit, especially for consumption purposes given the very low endowment of durables.

All over the region, real estate property demand has been strongly influenced by the increasing availability of housing loans. Until recently, housing finance was almost non-existent in many countries. The improvement in the legal and regulatory environment induced by the EU convergence process, combined with the restructuring of the banking system and the elimination of restrictions to foreign competition, have contributed to increased availability, lower prices and more flexible terms (such as lower amortisation requirements and higher loan-to-value ratios) of housing finance. In some countries like the Czech and Slovak Republics, Hungary and Croatia, the availability of housing loans has been further encouraged by the introduction during the mid-1990s of government housing subsidy schemes and tax incentives (in the form of tax deductible interest payments and/or reduced property taxation). All these factors contributed to the strong pick-up in the amount of outstanding mortgages observed in the region, reaching almost 10 %[3] of GDP at the end of last year from only 1.3 % at the beginning of the decade. Particularly fast growth was observed in less developed markets like Romania, Russia, Bulgaria and Ukraine, and more recently Turkey, where mortgage credit has expanded at double/triple digit rates in the last four years, albeit from a very low starting base. Still, the penetration of mortgages relative to GDP compares unfavourably with the level observed in the Eurozone, where the same ratio stood at 39.0 % in 2007, revealing huge potential in the longer term especially with an increasing share of the population expected to become eligible for loans.

Housing credits (in % of GDP and share of FX in total, 2007)

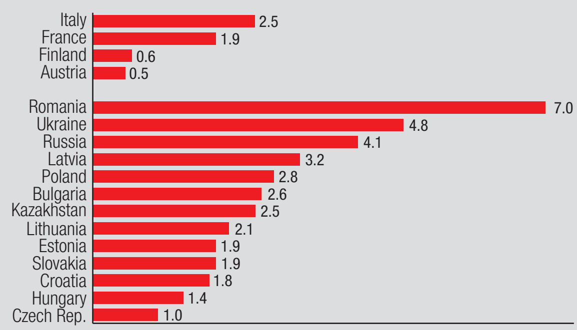


Sources: UniCredit Group CEE Research Network, ECB.

In most countries the rise in mortgages has been accompanied by strong growth in loans denominated/indexed in foreign currency, mainly the euro but increasingly the Swiss franc too. The growth in foreign-denominated loans has been particularly fast in countries like Hungary, Poland and Romania fostered by the still high differential in interest rates compared to those prevailing for the most popular foreign currencies, the low awareness of households and the supply pressures exercised by banks. As a result, the share of FX loans in total housing loans surged to reach almost 90 % in Romania, and 55 % and 46 % in Poland and Hungary respectively at the end of last year. The share of foreign-denominated loans has been expanding very quickly in Bulgaria, Croatia and in the Baltic states too. In those countries, however, despite a huge share of FX-indexed loans, the risks appear to be tempered as long as the current exchange rate regimes hold and FX loans are denominated in euro. The rapid surge in overall household indebtedness, especially in FX, coupled with banks increasingly using external funds to finance growth in domestic credits, have prompted most central banks in the region to introduce several measures (both administrative and prudential) to cool down the overly fast expansion in credit. Rapid expansion especially in foreign-denominated loans remains a clear issue of concern, especially in the context of flexible exchange rate regimes (i.e. Poland, Romania and Hungary) as it exposes individuals to heightened FX risk.

Despite rising income and improved access to the credit market, the affordability of housing investment remains the major constraint on the demand side. Over the last seven years, growth in real estate property prices has been much faster than that in wages resulting in a sharp deterioration in housing affordability, especially for lower income classes. Countries like Poland, Bulgaria, Russia, Ukraine[4] and Romania have experienced the highest gap, with house prices outstripping income almost 4-fold to 7-fold in the latter three countries in 2007. Some lowering in affordability resulting from the observed price growth is also evident in the rest of the region, although it remains in line with the Western European average to some extent. **Affordability issues mean that in many countries demand for house purchases remains mostly related to the emerging middle class segment or to high net worth individuals.**

Affordability index (2007)[1), 2)]



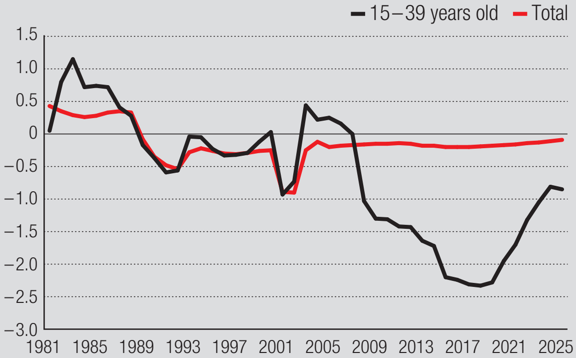
Sources: UniCredit Group CEE Research Network, Department of the Environment Heritage and Local Government (Ireland) "Housing Developments in the European Countries 2005".
Notes: 1) The affordability index is calculated as house prices (EUR per sqm)/average gross monthly wages. 2) As of 2006 for Latvia and Lithuania, 2005 for Italy, Finland and Austria and as of 2003 for France. Prices for "old" EU countries (except Finland), Latvia and Romania refer to the capital cities.

An important demand driver in CEE has been the emergence of demand from abroad, especially in the capital cities and holiday resorts, or the domestic real estate demand for investment purposes. Speculation motives seem to have played a role in this context (as witnessed, for example, by the withholding of supply in expectation of further price increases), in conjunction with a booming second-home market. Although precise information on the number of transactions related to foreign buyers is not easily available, anecdotal evidence suggests that numbers are quite high (as in the case of Romania, where demand from foreigners is estimated at 40 % of total demand for residential units[5]), or in the case of the residential market in Moscow, where it is estimated that roughly 40 % of demand is associated with investment purposes). A growing category of buyers has also been represented by migrant workers who have channelled a substantial part of their savings into the domestic real estate market over the last decade (remittances of Romanians and Bulgarians working abroad reached almost EUR 5.0 billion and 1.3 billion respectively).

3) Excluding Russia and Ukraine

4) In the case of Ukraine, it is widely known that incomes are severely underreported in official statistics; 5) Source: Colliers

Evolution of CEE population (yoy % growth)*



Source: UniCredit Group CEE Research based on Eurostat
*) CEE: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Romania and Slovakia

The impact of demographic trends has been positive so far, but will fade in the medium term. The baby booms recorded at regional level in the late 1970s/early 1980s, mainly derived from demographic policies encouraging births during the Communist regime gave marked impetus to the strong demand at present. In countries like Slovakia and Romania, the increase in the working population was mainly recorded in the 1990s, but had a limited impact on the demand for housing in that period due to the radical transformation taking place, though it has contributed to amplifying demand in recent years. The impact on local demand was more visible in the case of the Czech Republic, Hungary and especially Poland, supported by even faster convergence in living standards and lifestyles (as reflected by the declining average age in which people leave their parental home and the declining number of persons per household). Looking ahead, the demographic outlook appears generally unfavourable, given that population growth throughout most of the region has been in negative territory since the collapse of communism. Falling pressure from newly created homes may thus contribute to reducing the fundamental part of demand in the longer term. Increasing migration towards western European countries, especially for those aged 15–39, might even exacerbate such trends. This is not the case in countries like the Czech Republic or Kazakhstan, which have been benefiting in recent years from a positive surplus in the migration balance. Another important demographic trend is related to intra-country migration, which has led to a strong concentration in demand, particularly in the capital cities. We expect this trend to continue in the future.

Fast growth in CEE house prices: should we be worrying?

Growth in house prices has been persistently high recently throughout the whole CEE region. Annual house price inflation has been particularly high in the Baltic States, Romania and Bulgaria in the aftermath of/around EU accession (between 23 % and 40 % in real terms[6]) marking a significant acceleration compared to previous periods. In the second group of countries including Poland, Croatia, Slovakia, the Czech Republic and Russia, price increases were more moderate in the 2004–2007 period – ranging from 6 % to around 22 % – with a more marked deceleration in the case of Hungary as a result of recent adjustments in housing supply. In the Czech Republic and Slovakia, fears of real estate prices exploding after accession to the EU failed to materialise, as prices of flats remained more or less stable and even declined (in local currency terms) in 2004–2005, before rapidly recovering afterwards. Price increases were the highest in CIS countries like Ukraine and Kazakhstan swelling more than ten-fold over the last seven years. In general, high price increases have mainly been concentrated in large cities and in coastal areas. Prices in the Black Sea coast of Bulgaria last year were four times higher than in 2000, with the majority of properties bought by foreign investors' off-plan.

Residential property prices (yoy % changes in local currency – real terms, period averages)

Country	avg '01–'03[1]	avg '04–'07[2]
Bulgaria	–0.5 %	23.0 %
Croatia	–3.7 %	7.1 %
Czech Rep.	9.9 %	7.7 %
Estonia	31.8 %	19.4 %
Hungary	14.7 %	6.6 %
Latvia[3]	23.6 %	38.7 %
Lithuania	14.0 %	26.9 %
Poland	20.0 %	17.3 %
Romania	n.a.	n.a.
Russia	14.9 %	21.8 %
Slovakia	28.8 %	6.3 %
Ukraine	n.a.	n.a.

Capital	avg '01–'03[4]	avg '04–'07[5]
Sofia	6.4 %	14.5 %
Zagreb	–0.8 %	5.6 %
Prague	13.0 %	6.5 %
Tallinn	12.4 %	22.5 %
Budapest	9.6 %	5.0 %
Riga	24.2 %	31.6 %
Vilnius	5.6 %	30.5 %
Warsaw	–7.6 %	18.8 %
Bucharest	4.4 %	32.6 %
Moscow	32.3 %	18.5 %
Bratislava	39.8 %	4.7 %
Kiev	40.3 %	39.7 %

Sources: UniCredit Group CEE Research Network, NCBs.
Notes: 1) Average growth in 2003 for Estonia, Poland, Russia and Slovakia; 2) Average growth in 2004–2006 for Latvia and Lithuania; 3) Prices for Latvia refer to Riga suburbs; 4) Average growth in 2003 for Tallinn, Warsaw, Moscow and Bratislava and avg 2002–2003 for Bucharest; 5) Average growth in 2004–2006 for Riga and avg 2004–2005 for Vilnius.

Prices in capital cities sometimes compare to western standards, despite lower household income. Data collected by IRG[7] indicates that in 2007 average house prices per square metre of new flats with 2 rooms (60/70 sqm) in the capital cities[8] varied from EUR 800 and 1,500 in Slovakia; to EUR 1,500 and 4,000 in Romania, Estonia, Hungary, Latvia, Slovenia and Ukraine; from EUR 1,000 to 4,500 in Russia and Poland. This compares favourably

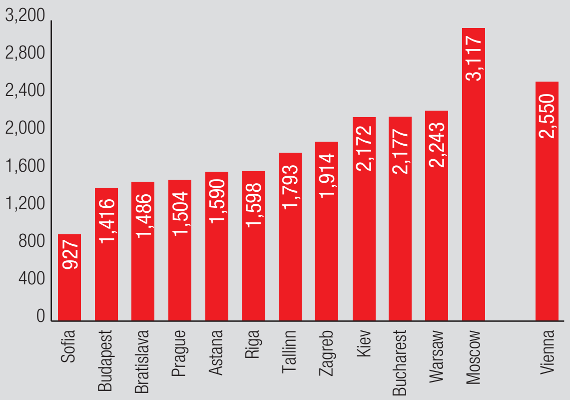
6) Calculated in local currency

7) Immobilien Rating Bewertung & Analyse
8) Prices refer in most cases to apartments located in central areas

with average house prices observed in western European capitals and even exceed some capitals like Vienna, where prices stood at EUR 2,550 on average in 2007. Data collected by local statistical offices fit perfectly into the above mentioned ranges.

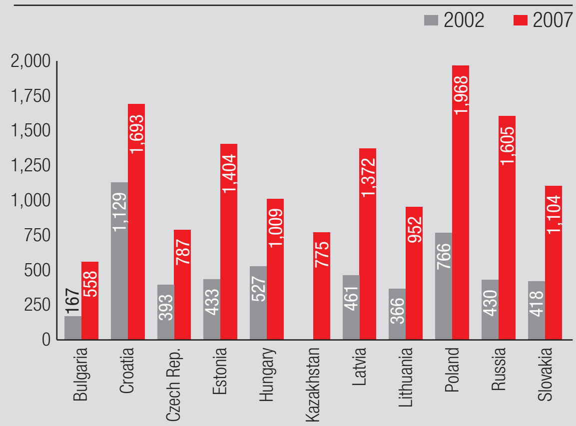
approached it in Croatia and Latvia. Only in the case of Poland and Romania are prices already above their theoretical level (although in the case of Romania results might be partially biased by the use of average house prices in Bucharest for the estimate).

Real Estate prices in the capital cities
(EUR per sqm in 2007)*



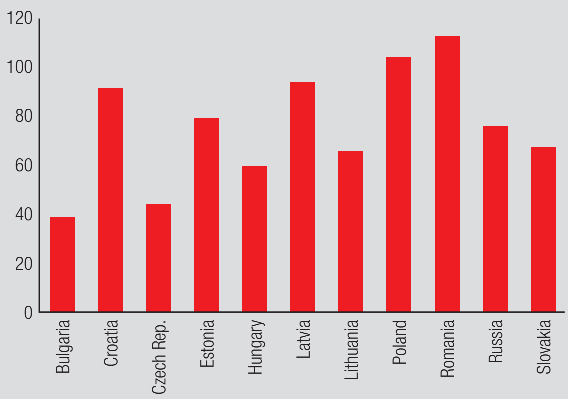
Sources: UniCredit Group CEE Research Network, IRG (Vienna).
*) Real property price in Astana refers to year end

Real Estate prices – country average (EUR per sqm)*



Source: UniCredit Group CEE Research Network.
*) LV, LT: 2006; Prices for Latvia refer to Riga suburbs.

Ratio of real prices over equilibrium prices in 2007*



Source: UniCredit Group CEE Research Network
*) LV, LT, RUS: 2006; Prices for Latvia refer to Riga suburbs, while for Romania to Bucharest

Equilibrium house prices and growth rates of actual prices (real terms, in local currency)

Source: UniCredit Group CEE Research Network.
Note: 1) CZ: 2001; EST, LT, PL, RO, SK: 2002; RUS:2003; 2) EST, PL, RO, SK: 2003–2007; LV : 2001–2006; LT: 2003–2006; RUS : 2004–2006.

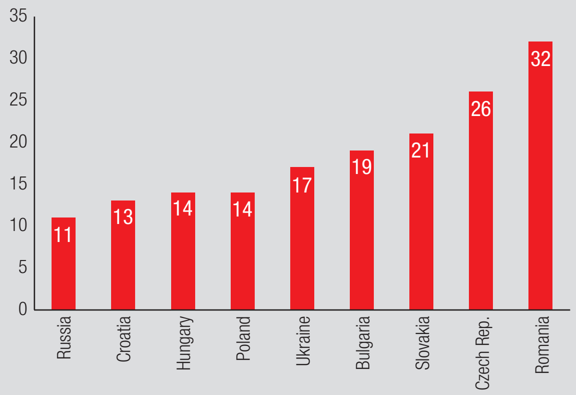
Still, residential real estate prices are moving towards an equilibrium level. We have roughly estimated equilibrium prices in the different countries of the region, using the level of economic development and prevailing conditions in the credit market as the main price determinants in the medium to long term. Using Eurozone countries as a benchmark, with an eight-year sample based on quarterly series, we estimated a target relationship between economic growth, real interest rates and the level of house prices. Applying this to the current level of per capita GDP at PPS and real interest rates in the CEE countries, we obtain the theoretical level of prices consistent with the level of economic development and the costs of borrowing. **The data still indicates that prices are undervalued compared to their theoretical level, providing evidence that the rapid increase in residential property prices could still be compatible with the convergence story.** In most of the region, house prices did not exceed 80 % of their theoretical level in 2007, and

At the beginning of this decade, real property prices in many countries were less than half the calculated equilibrium level, which is an indication that to some extent the recent growth can be explained by the initial undervaluation: initial low real prices are correlated with higher average growth rates in the following period. There are some exceptions to the general pattern: this is the case with the Czech Republic, Hungary, Slovakia and to a lesser extent Bulgaria, where the observed growth has been lower than expected given the low initial base, and Croatia, where possible signs of overvaluation have started to emerge in recent years.

To obtain some insight into the role played by the different factors in explaining house price dynamics in CEE countries we estimated a more formal model to identify the long-term relationship between changes in real house prices and its determinants (see box 1 for details). The results confirmed the existence of a strong positive correlation between property prices, the variables capturing past income growth and future expectations, confirming that improving household financial conditions favoured by robust economic growth remain key drivers of strong demand for housing in the region. A highly significant correlation is also found with housing credits, providing evidence that increased availability and lower costs of housing finance are equally important factors. In line with previous studies, our analysis also confirms that transition-specific factors like limited supply played a role in the observed dynamics of house prices and the timing of these increases. Finally, we also found confirmation that larger inflows of remittances are positively correlated with real house prices, reaffirming the role played by demand from residents working abroad especially in the SEE region.

Prospects for CEE residential property markets

Years to saturation*



Sources: UniCredit Group CEE Research Network, Eurostat
*) The number of years before saturation in the residential property market is calculated as the ratio between the estimated market potential (total number of households willing to buy a new house/flat) and the current level of construction activity (based on last available data) under the extreme assumption that all potential buyers will look for new housing.

Given the current global scenario, concerns about the prospects for the real estate market at global level are increasing. We uphold a positive view on the residential real estate segment in CEE, as we continue to believe that fundamentals point to further opportunities, even if there might be some out-of-equilibrium trends in some sub-segments.

Home ownership is generally high in the region, but the quality of housing still lags behind western standards. This means demand for renovation or new housing is potentially high. So far, the supply of new housing has always been unable to fill the demand gap, even despite acceleration in the last couple of years (in terms of new permits, completed homes). Growth in prices has been really strong across the region, partly due to the initial undervaluation and partly due to the gap in supply. Affordability levels have been declining, even if incomes of the population have been increasing. On top of the existing demand there could be "potential demand" at the moment limited by affordability issues. Our survey data[9] shows that almost 20 % of CEE households are expecting to look for new housing investments in the next 10 years or later. Overdue convergence in income levels should allow such demand to tap the market, provided that real estate prices moderate below income growth.

Affordability issues and the fact that so far, new supply has been concentrating mainly in the production for the high quality segments in the capital cities suggest a potential for diversification. As an example, in Russia on top of strong building and renovation activities in the capital, new projects will increasingly focus on regional cities with more than 1 million inhabitants. This is also the case of Romania, where developers are already starting to show interest outside the capital, targeting the upper-middle class living in the major cities of the country.

In some sub-segments of the market in certain countries we have seen foreign (or domestic) demand for investment/speculative purposes, which has partly supported the growth in prices. The repricing of risks at international level, reduced capital inflows in the countries, rising interest rates, etc, might soften such demand.

Overall we expect to see a moderation of past trends on the residential real estate market in CEE, but no backlash. We have also estimated a potential time for market saturation, which ranges from 11 years in Russia to 32 in Romania. Still, we expect the new international scenario, the tightening monetary conditions in most of the countries and low affordability levels will lead to some softening, possibly also to slowing price developments.

There are a few areas to monitor which might exhibit some oversupply – i.e. the holiday-home sector in Bulgaria – which might suffer from the low quality/low infrastructure, from reduced foreign demand given the current international scenario and the still insufficient domestic demand (prices relatively high). Bucharest may generate some imbalance in Romania, as affordability is an issue for a large share of the population. The major warning example remains Kazakhstan, where the real estate bubble has already started to burst.

9) Please refer to the chapter on 'Survey on living conditions' for further details

Box 1. Determinants of house prices in CEE – an econometric analysis

We model house price dynamics using a list of factors including household income, real interest rates, credit availability and supply-side variables. Considering the specificities of the CEE market we also include demand from abroad and remittances from emigrants as a potential driver of real estate. Speculation motives seem to be playing a role as well, with many countries also experiencing growing demand from foreigners, especially in capital cities and holiday resorts in connection with EU accession. As a result, we tried to proxy the effects of foreign demand with inflows of portfolio investments as a percentage of GDP, since these represent the most volatile component in the capital accounts, typically capturing speculative investment flowing into a country as well. However, we failed to obtain any clear evidence in favour of a large impact on house prices coming from this latter component, as the size of coefficients obtained was quite small and in some cases neither significant nor of the expected sign.

We estimate a pooled and mean group ARDL model (Pesaran, Shin and Smith 1999)* for our series of quarterly data from 2000 to 2007, covering 11 CEE countries. The unrestricted specification for the ARDL systems of equations for t=1,2…T time periods and i=1,2,…N countries for the dependent variable y is:

$$(1.1)\quad y_{i,t} = \sum_{j=1}^{m} \lambda_{ij} y_{i,t-j} + \sum_{j=0} \delta_{ij}^{'} x_{i,t-j} + \mu_i + \varepsilon_{it}$$

where x_{ij} is the vector ($k\ x\ 1$) of explanatory variables for group i, and μ_i represents the fixed effects. This model can be re-parameterised as:

$$(1.2)\quad \Delta y_{i,t} = \vartheta_i (y_{i,t-1} - \beta_i^{'} x_{i,t-1}) + \sum_{j=1}^{m-1} \gamma_{ij} \Delta y_{i,t-j} + \sum_{j=0}^{n-1} \gamma_{ij}^{'} x_{i,t-j} + \mu_i + \varepsilon_{it}$$

where β_i s are the long-run parameters and ϑ_i s are the error correction parameters. In terms of variables, the vector x_{ij} includes GDP per capita in PPS, housing credit (as a percentage of GDP), remittances (as a percentage of GDP), housing stock per million inhabitants and real interest rates on housing loans. In the regression, our dependent variables on house prices are expressed in real terms, deflated by the CPI index. All variables are expressed in logarithms, except for the interest rates. A negative and statistically significant error correction term is assumed as evidence of the presence of co-integration. The appropriate lag length selection was made using the Schwartz information criterion. Not surprisingly, the variable capturing income growth and expectations is significant and positive, confirming that this factor is one of the key drivers of strong housing demand.

Long term coefficients of house price determinants

	Coef.	P>|Z|	[95% conf. interval]	
Per capita GDP in PPS	1.084	0.025	0.138777	2.028204
RIR	–0.011	0.500	–0.04135	0.02018
Remittances	0.562	0.000	0.312507	0.810657
Housing stock	–2.770	0.001	–4.47949	–1.06044
Housing loans	0.222	0.046	0.004298	0.440264
ECT	–0.122	0.000	–0.16774	–0.07663
R^2	0.26			

Note: short-run coefficients not reported for economy of space. SBC (Schwarz) has been used to select the lag orders for each group.

The coefficient on the real interest rate (RIR) is negative as expected, but is not significant. Housing credit has a strong positive relationship to house prices, confirming that increased availability and the lower price of housing finance has played a strong role in the upsurge of demand for housing at the regional level. In line with other studies, the coefficient estimate for the housing stock per inhabitant is highly significant and has the expected sign, meaning that transition-specific factors like limited supply are behind the strong house price growth and the timing of these increases. Finally, we found confirmation that larger inflows of remittances are positively correlated with real house prices, providing first-time evidence about the relevance of demand from residents working abroad.

*) Pesaran, Shin and Smith (1999), 'Pooled Mean Group Estimation of Dynamic Heterogeneous Panels', Journal of the American Statistical Association, vol. 94, no. 446 pp. 621–634

Bulgaria
More selection on the holiday homes segment

Croatia
Monetary tightening to slow otherwise solid growth

Czech Republic
No housing bubble on the horizon (yet)

Hungary
Some oversupply, but no evidence of price bubble

Kazakhstan
Bubbles do burst

Poland
First signs of stabilisation, but housing gap remains

Romania
Some cooling but still with high potential in medium term

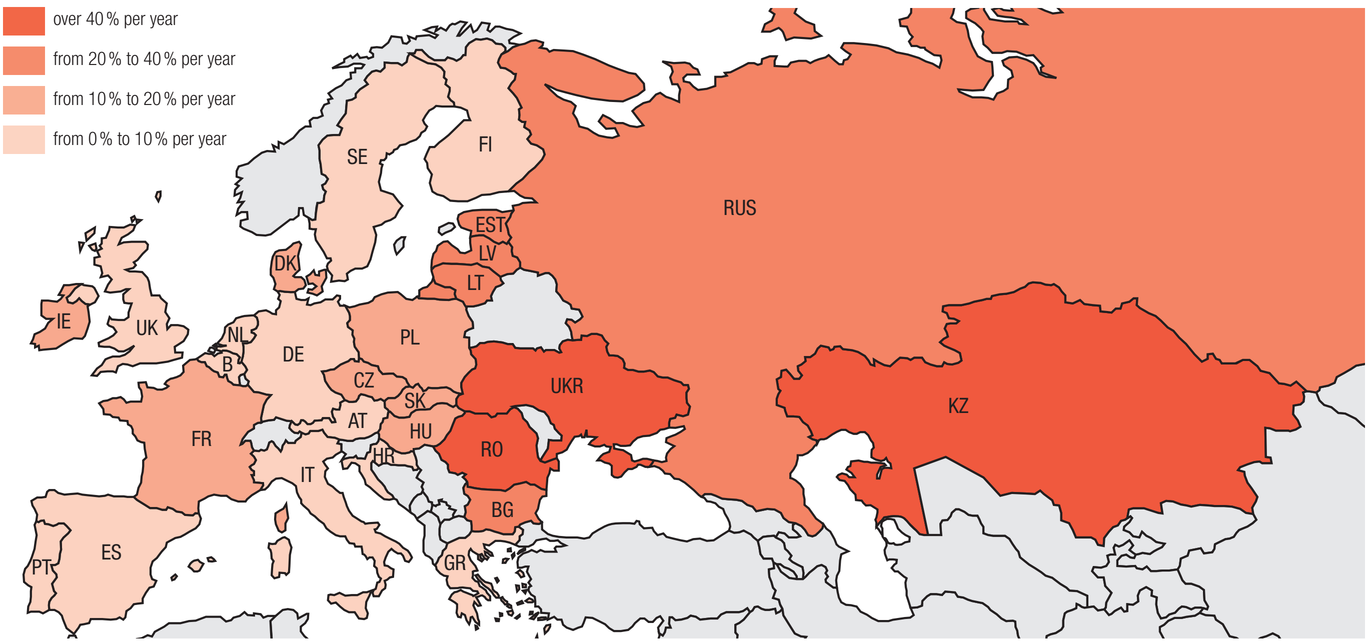
Russia
Residential property market still awaits development

Slovakia
Still healthy growth potential on the horizon

Turkey
Still a market for few people

Ukraine
Untapped potential in the medium-high segment, with some cooling in the luxury one.

Residential property prices in the enlarged Europe (yearly average increases 2002–2007)[1), 2)]



Source: National Statistical Offices, NCBs, Department of the Environment Heritage and local Government (Ireland), UniCredit Group CEE Research Network
1) Growth rates calculated in local currency (nominal terms). All data used are from NCBs and local Statistical Offices and refer to non-harmonised national sources, thus any comparison on the dynamic of house prices across countries should be taken with care; 2) BE, DE, IT: 2002–2005; NL, PT, LV, LT: 2002–2006. House prices for Latvia and Ukraine refer to capital cities.

Survey on living conditions in CEE
2 out of 10 intend to buy real estate property

Martin Mayr

A region-wide market research study was conducted to investigate current living standards as well as intentions to purchase real estate in the CEE region. In each of the 12 countries of the region (Russia, Ukraine, Poland, Czech and Slovak Republics, Hungary, Romania, Bulgaria, Slovenia, Croatia, Bosnia and Herzegovina and Serbia) at least 1000 interviews were conducted. The samples were representative for those aged 15 years and above. All interviews were conducted as personal face-to face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS). The questionnaire contained questions about current living conditions (house/flat; ownership, size of living space), intended purchases of real estate (any plans, when to buy, purpose of purchasing) and finally how this purchase should be financed (loan, savings, gift/inheritance, building societies).

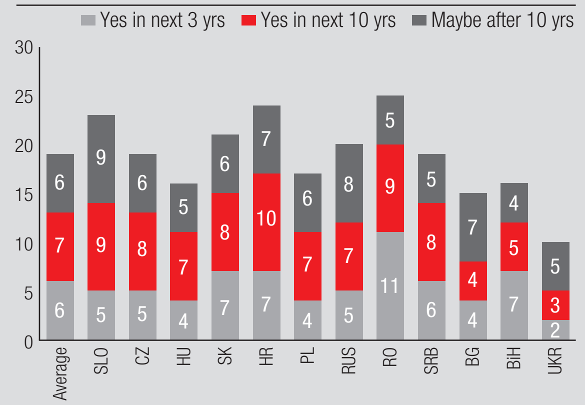
On average, more than one in every two respondents (56 %) said they lived in a house (detached, semi-detached) only 44 % live in flats. However, the results in individual countries deviate quite significantly from these averages: Bosnians (75 %), Serbs (71 %), Hungarians (70 %) live in houses more frequently, while people living in flats were overrepresented in Russia (84 %), Ukraine (63 %), Poland (58 %), Czech Republic (53 %) and Romania (52 %). In all countries – not surprisingly – flat users were found more often in the larger cities, while in small towns and especially villages the majority live in their own house.

Home ownership is high

A relatively small number of respondents (11 % on average) claimed to pay rent for their house or flat, while about one quarter live "for free" in property owned by someone else (mainly family members like parents, grand-parents, etc.). About two-thirds of the interviewees are also owners of the houses or flats they live in. Most owners were found in Ukraine (85 %), Hungary (83 %) and Romania (78 %), while renting is most popular in the Czech Republic (26 %) and Poland (21 %). Russia (32 %), Bosnia (33 %) and Slovakia (33 %) had the highest proportion of people still staying with their families.

Despite the relatively high level of home ownership, the results suggest that there is still potential demand for new housing construction and renovation in the mid-/long term. 19 % of interviewees are planning to buy their own real estate property: one-third plan to do so in the next 3 years, and another third in the next 10 years or later. Above-average figures were recorded for Romanians (25 %), Croats (24 %) and Slovenes (23 %) expressing their intentions to invest in new real estate property, while the weakest intentions for buying a new flat or house were found among interviewees from

General likelihood to buy house/flat*



Sources: UniCredit Group CEE Research, Bank Austria Market Research
*) Countries are ranked by level of per capita GDP.

Bulgaria (15 %), Bosnia (16 %) and Ukraine (10 %). Romanians also showed the strongest desire to buy a flat/house very soon, i.e. in the next 3 years, at 11 % of the adult population.

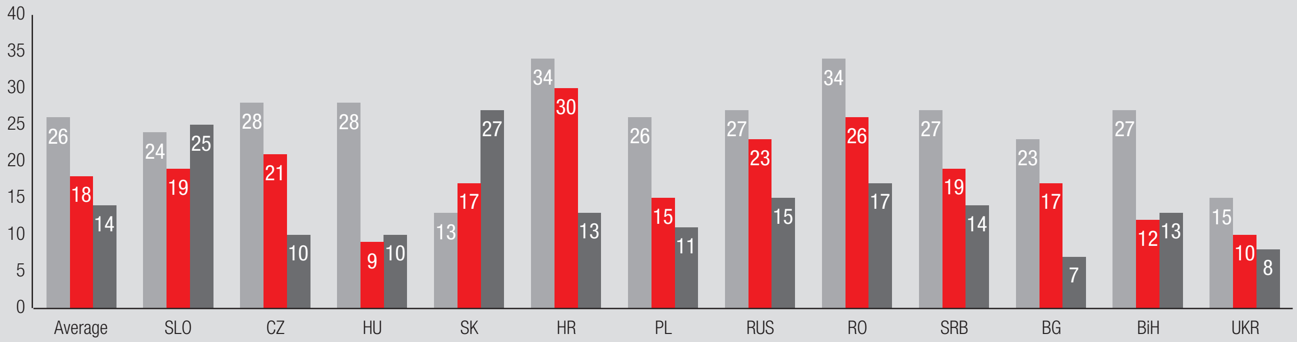
Apart from the regional differences, age was found to have a significant impact as well. In all countries, the number of people less than 40 years old intending to buy a flat or house was two to four times higher than in the age-group of those aged 40 years and older. However, again there was a wide range of results in the individual countries: while in Slovenia, Slovakia or Poland only 20 percent or even less of potential buyers are more than 40 years old, the respective scores in Ukraine, Romania, Bulgaria and Serbia was close to or even above 30 %.

As expected, the majority of those intending to buy a new house/flat plan to use this new property as their main residence (88 %), while 5 % consider the purchase of the flat/house as a means of investment (speculative) and another 5 % as a second house. The motivation to buy real estate for investment reasons only was identified more often in Serbia (9 %), Croatia (8 %) and Bulgaria (7 %), but barely in Poland (2 %) and Bosnia and Herzegovina (2 %). On the other hand, more Croats (8 %), Ukrainians (7 %), Slovenians and Bulgarians (6 % each) are planning to invest in a second residence.

Demand is linked to income

There is also a clear trend that respondents in the upper income third expressed a significantly higher intention to acquire a flat or house not only as a main residence but rather as an investment. Again, this trend was found significantly more often in Croatia and Romania.

Willingness to buy, by income



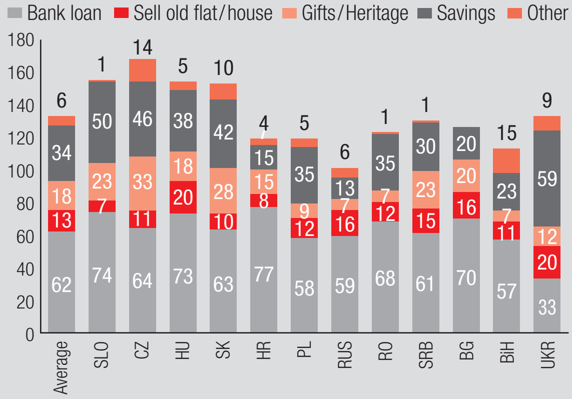
Sources: UniCredit Group CEE Research, Bank Austria Market Research

In terms of the ways of financing real estate investments, across the whole region bank loans were mentioned by the majority as the single alternative they are considering (65 %)*. Every seventh respondent is planning to invest the profits earned from selling their current house or flat into purchasing a new one. Every fifth potential buyer is speculating on financial support from family, relatives or friends in the form of gifts or inheritances. Own savings were mentioned by one third on average, other sources of financing by 6 % (mainly building society savings and loans). Again, significant regional differences were noted from the average scores in this context as well. As for loans, the Slovenes, Croats and Hungarians expressed the strongest intention to finance the new property with a loan (each over 70 %), while this was considered less of an option in Poland (58 %), Bosnia (57 %), Russia (59 %) and Ukraine (33 %). Savings on the other hand are available more often in the wealthier countries such as the Czech and Slovak Republics, Slovenia and Hungary (with the exception of Ukraine which shows a higher propensity to use savings compared to other lower-income Eastern European countries). In these countries, expectations of inheriting money from their parent's generation which can be used for buying a new house or flat are significantly higher. Finally, in the Czech and Slovak Republics the use of building society products are much more popular than in other markets too (14 % and 10 % respectively).

On average, each potential buyer of real estate is contemplating using 1.3 different sources for financing purchases. Czechs, Slovaks, Hungarians and Slovenians (the four "wealthy" countries) seem to have significantly more financial sources than their counterparts in the remaining countries. While potential buyers in these four countries have access to between 1.4 to 1.6 different possibilities for financing their new flat or house, the respective figures for Russia or Bosnia are barely above 1.0. Analysing answers by age, it seems quite obvious that older people – especially in South-Eastern countries (HR, BG, BiH, SRB and RO) – have been less able to build up substantial savings in recent years, and they rely on loans to a greater extent. Finally, when analysing data by income strata a significant finding is that the wealthier subpopulation has access to a larger variety of financing options for their new property. In the most extreme case (CZ) the top 30 % uses 2.0 different sources.

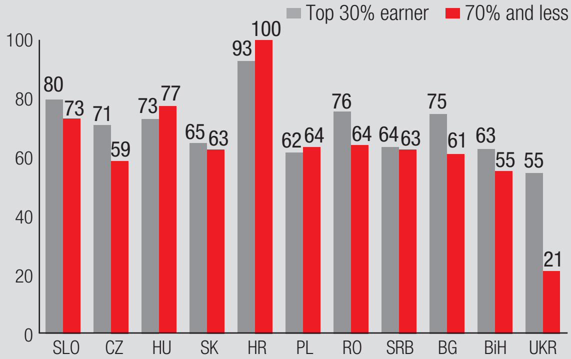
*) Including building societies

Plan to finance new house/flat 1), 2), 3)



Sources: UniCredit Group CEE Research, Bank Austria Market Research
1) Countries are ranked by level of per capita GDP;
2) Other includes loans granted by buildings societies;
3) Based on multiple choice

Willingness to use bank loans, by income 1), 2), 3)



Sources: UniCredit Group CEE Research, Bank Austria Market Research
1) Sample represented only by those intending to buy a new flat;
2) Percentages are calculated based on the results of the multiple choice question;
3) Countries are ranked by level of per capita GDP.

Commercial Real Estate in CEE
"Gold Rush" mentality has passed – back to fundamentals

Karla Schestauber

Commercial real estate investments have proven to be extremely successful in recent years

In retrospect, the period from 1997 to the first half of 2007 can be described as the "golden years" for commercial real estate [1] in CEE [2]. Healthy economic conditions and ample liquidity provided outstanding conditions for real estate investments. Yields well above those in Western Europe ensured considerable earnings potential.

The first smaller real estate properties were bought in Poland, the Czech Republic and Hungary by international investors in 1997. These properties were mostly buildings or lots in excellent locations. International developers arrived on the scene quickly, sharing the market with local companies. Successful IPOs by real estate companies broadened the investment market and strong yield compression made commercial real estate investments extremely successful. With the exception of 1998, total earnings (yield compression plus net cash flow) were in the double-digit range, with record high annual earnings above 30 % in 1997, 2005 and 2006 according to Degi Research [3].

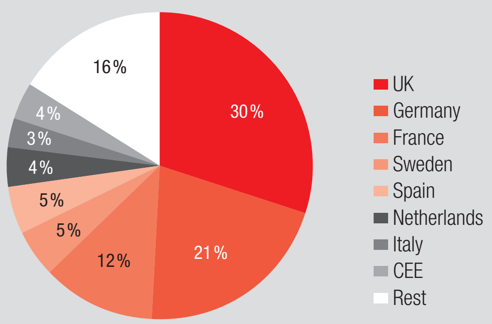
The geographic radius of activity gradually widened in the search for attractive real estate markets. While interest at the beginning was primarily focused on Warsaw, Prague, Budapest and the respective surrounding areas, developers and investors started advancing into the provincial cities and across the borders as far as Russia and Ukraine and even into more exotic markets such as Kazakhstan or Georgia. The risks resulting from limited transparency and legal instability (due to restitution claims for example) were offset by the high earnings potential. In addition, the legal and institutional conditions improved in many countries as a result of convergence with the EU [4].

Despite this success story of impressive growth rates, CEE's share of the total volume of direct real estate investments remains modest. According to Jones Lang LaSalle [5] the total volume of direct real estate investments in Europe amounted to a formidable EUR 244.1 bn in 2007 (only 4 % less than the record high in 2006). CEE's share of this total (albeit not including purchases of lots, for example) was just 4 %.

The office market has profited from strong economic conditions and the increasing importance of the service industry

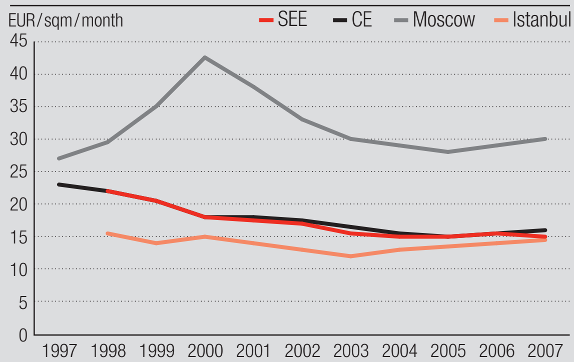
The office market in CEE has profited from robust economic growth and the restructuring of national economies towards services in recent years. The rapidly increasing level of direct investment brought international companies that generally demanded class A office space in good locations and were willing to pay higher rents for it. At first, local companies often made do with more affordable office space. But soon, the older office properties no longer met the rising requirements of local companies as well and the demand for better offices increased. Combined with the already short supply, this resulted in rents that were often considerably higher than those in Western Europe.

Location of European direct real estate investment



Source: Jones Lang LaSalle

Rents in central business district (CBD)



Source: Bank Austria Real Estate Research (CE: Warsaw, Prague, Budapest, Bratislava; SEE: Bucharest, Sofia, Zagreb)

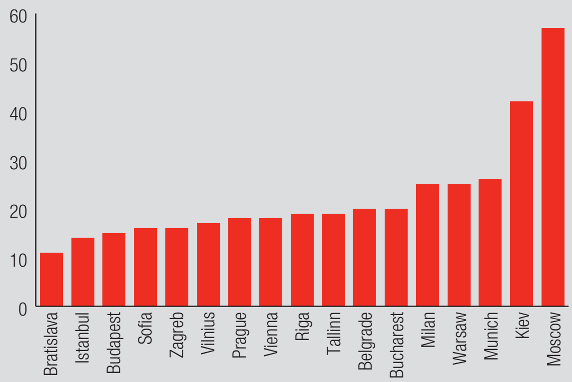
1) Essentially, the commercial real estate market comprises the market for office, retail (including shopping centres) and logistics properties. / 2) CEE is defined as the following countries: the EU Member States of Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia and the Baltic states, the EU candidate states of Croatia and Turkey, as well as Russia and Ukraine.
3) Degi Research: Global Values – Property Investments 2007/2008 / 4) On 1 May 2004 ten new states joined the European Union, including eight former Eastern Bloc countries (Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovenia, Slovakia and Hungary). On 1 January 2007 Romania and Bulgaria joined the EU as the 26th and 27th members respectively. / 5) Jones Lang LaSalle: European Capital Markets Bulletin 2007 and views of 2008

On average, office rents in CE and SEE countries gradually decreased from their high levels at the end of the 1990s. However, another strong surge in demand has caused rents to trend slightly upwards again over the last three years.

In the second half of 2007 prime rents[6] for office space in CEE (without Moscow and Kiev) ranged from EUR 16 to EUR 25 per sqm per month, which is still above those in Western European countries to a certain extent.

Rents in Kiev and above all in Moscow have run a somewhat different course, becoming significantly more expensive. Prime rents for office space in these cities are among the highest in the world. The large local corporate groups are willing and able to pay high prices on markets with a short supply of high quality office space. In contrast to most of the other CEE markets, local capital dominates the real estate market here. Accordingly, there are significant barriers to entry for international developers and investors.

Prime office rents (Prime net rent in CBD EUR/sqm/month)



Source: Colliers, Market Overview Office 2008

It is still unclear how much of an impact the subprime crisis will have on the supply of new office space in CEE. The number of projects in the pipeline ranges from considerable to quite substantial. However, the change in market conditions is likely to reduce the number of projects that are actually realised, thus limiting the supply of new office space. Nevertheless the shift in supply and demand towards tenants that is already being observed in some countries will continue.

6) Average rent quoted for a prime office building.

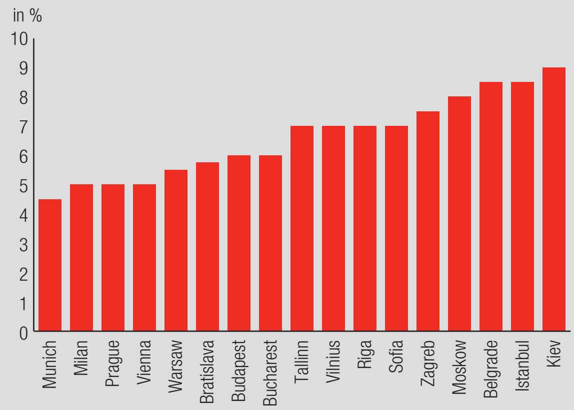
Office space

City	Office space per person in sqm	Under construction sqm per person
Zagreb	1.2	0.1
Prague	1.8	0.1
Moscow	0.7	0.1
Vienna	6.4	0.2
Belgrade	0.6	0.2
Munich	9.3	0.2
Milan	8.6	0.2
Bucharest	0.3	0.2
Kiev	0.3	0.3
Warsaw	1.7	0.3
Vilnius	0.3	0.3
Tallinn	0.8	0.4
Sofia	0.6	0.5
Bratislava	1.7	0.7

Source: Colliers, Market Overview Office 2008, own calculations

Looking at prime yields that can be realised in the office sector, it is clear that yields in the more mature economies of the Czech Republic, Poland, Hungary and Slovakia have converged with those in Western Europe. Much like in Western Europe, the change in international market conditions has recently led to a halt in yield compression or even to an increase. The countries in which yields are still significantly higher, such as Russia, Ukraine and Turkey, for example, have experienced decelerating yield compression.

Office Prime Yields (end of 2007)



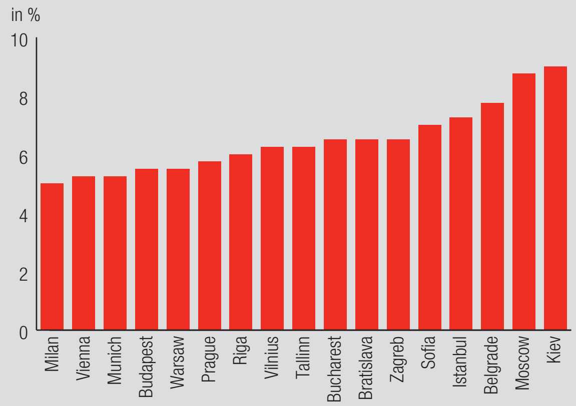
Source: Colliers, Cushman & Wakefield, IRG

Increasing purchasing power and a high level of pent-up demand among consumers have stimulated the retail market

The excellent economic conditions went hand-in-hand with improvements on the labour market and increasing purchasing power. A high level of pent-up demand among consumers was also observed. Generally, international food retailers, such as Tesco, Carrefour, Metro, Aldi, and Ahold to name but a few, were the first to venture into these new markets. Home improvement, electronics and discount furniture stores quickly followed suit. Shopping centres were also received well and have changed consumer habits. While the first shopping centres were mostly older properties that had been converted, the newly built ones increasingly started to measure up to international standards and attracted international chains. Concepts incorporating entertainment have been received very well by consumers too.

The retail market in CEE is characterised by dynamic growth. Yield compression has been marked. Since the markets are already fairly well saturated in most of the larger cities, developers and investors have either already moved into the smaller cities or have taken steps to do so. Speed is of the essence and a certain crowding-out of competition can be observed. Good concepts in good locations will survive.

Shopping Center Prime Yields



Source: Cushman & Wakefield, IRG

In addition to dynamic economic and purchasing power growth, the size of the respective country and the structure of its population are particularly important factors for successful investments. Accordingly, markets such as Russia and Turkey, which each have numerous cities with populations over a million, have a great deal of potential. Furthermore, yields are still significantly higher here than on other markets. However, potential investors cannot avoid performing precise micro analyses for these markets either.

The dynamic growth in the retail sector and the improvement of infrastructure have supported logistics facilities

Logistics activities often follow retail activities. The improvement of infrastructure, which is being supported with EU funding, is also facilitating the development of the logistics market. The yields for logistics projects are normally higher than those for office space or shopping centres.

In some countries, the level of transparency still leaves a lot to be desired

A lack of transparency is still a problem in some countries. Therefore, an adequate due diligence analysis is a must. In many cases, cooperation with strong local partners is recommended.

The World Bank's Doing Business rankings can be used as a roughly indicator of the level of ease of doing business of the various markets[7]. While some countries have implemented considerable reforms in recent years and are now well-ranked, there is still a need for action in others.

Rankings on the ease of doing business

2008 rank	Economy	2008 rank	Economy
17	Estonia	71	Kazakhstan
18	Georgia	74	Poland
20	Germany	75	Macedonia
22	Latvia	86	Serbia
25	Austria	94	Kyrgyz Republic
26	Lithuania	96	Azerbaijan
32	Slovakia	97	Croatia
45	Hungary	105	Bosnia and Herzegovina
46	Bulgaria	106	Russia
48	Romania	110	Belarus
53	Italy	136	Albania
55	Slovenia	138	Uzbekistan
56	Czech Republic	139	Ukraine
57	Turkey	153	Tajikistan

Source: Doing Business 2008, World Bank

What does the change in international market conditions mean for the commercial real estate markets in CEE?

With the outbreak of the US subprime crisis, international market conditions have changed drastically. Tighter liquidity and increasing risk awareness have made financing more expensive and less available. Also, the risk assessments for CEE countries have worsened considerably as measured by CDS spreads.

Highly leveraged market participants have already disappeared from the market. Fundamental factors have once again come to the fore. Uncertainty about the possibility of additional problems in the international financial system and the negative impact on the real economy remains high. The projections for economic development in CEE are still relatively positive. However, it is no longer enough just to pay attention to economic growth when considering commercial real estate projects. Even above-average economic growth is no longer a guarantee for a successful project. A precise market analysis is absolutely essential, whereby one must never lose sight of the fact that real estate markets are traditionally highly cyclical.

7) World Bank Doing Business 2008

Bulgaria
More selection on the holiday homes segment

Kristofor Pavlov

- Real estate and vertically integrated construction and tourism sectors have been at the forefront of Bulgarian economic expansion so far. The real estate market has additionally drawn support from the large-scale inflow of foreign capital.
- The residential property market in Bulgaria is characterised by a relatively high level of home ownership. Nevertheless, rapid wealth accumulation and the quest for improved living standards will remain the most relevant demand-side drivers in the local housing market going forward. On the negative side, down-beat demographic trends and in some areas (i.e. vacation resorts) over construction and lack of sufficient infrastructure (including road and wastewater facilities) will be the key market impediments.
- Generally, the residential real estate market has demonstrated resilience to the impacts of the global financial crisis. However, there are clear-cut signals of a softening of the holiday homes segment, as external demand is slowing down and costs of borrowing have increased (the withdrawal of UK customers is likely to be only partially compensated by newcomers from other destinations like Russia and Greece).

Structural indicators on residential property market

	Bulgaria 1)	Sofia 1)	CEE 2)	EU-15 3)
Population (in mn)	7.7	1.2	379.5	389.6
Per capita GDP (EUR)	2,835 4)	5,504 4)	5,226 5)	27,916
Dwelling stock per ’000 inhabitants	486	424	413	472
Dwellings by type of ownership (’000)	– 6)	– 6)	–	–
– of which owner-occupied dwellings (%)	91.0	84.6	76.6 7)	63.7
– of which rented dwellings (%)	8.0	14.3	–	–
– of which dwellings in cooperative ownership (%)	0.7	0.9	–	–
– of which dwellings in other types of ownership (%)	0.3	0.2	–	–
Average number of persons per dwelling	2.1	2.4	2.7	–
Average number of rooms per dwelling	2.8	2.4	2.8 8)	4.2
– of which newly built dwellings	–	–	–	–
Average usable area per dwelling (sqm)	63.7	65.3	63.2	87.0
– of which newly built dwellings	82.0	72.2	–	–

Sources: Statistical Office, Department of the Environment Heritage and local Government (Ireland), UniCredit Bulbank – Economic Research Unit
Notes: 1) 2006; 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) 2005; 5) Including KZ and TK; 6) Census 2001; 7) Excluding UKR; 8) Excluding RUS.

The number of dwellings per thousand inhabitants is 486 which compares favourably to both CEE countries (413) and the EU (472). The housing stock in Bulgaria reached 3,729,000 units in 2006, with the share of those located in the capital being around 14 % of the total. Practically all residential property in Bulgaria is privately owned (99 %). Not surprisingly, therefore, living in a rented dwelling is rare, particularly in medium-sized cities and smaller communities. Rented dwellings constitute roughly 8 % of the total housing stock in the country, and 14 % in the city. Vacant buildings and those which are unfit for use in the course of the entire year account for approximately 15 % of the total.

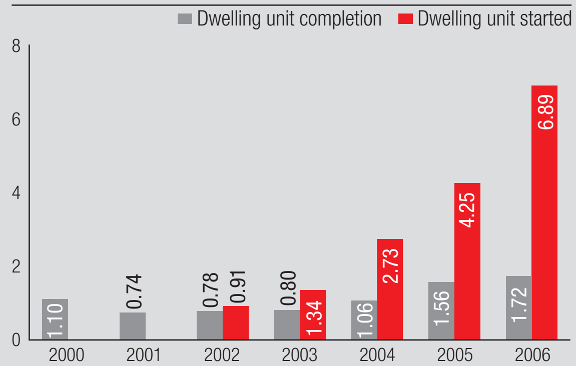
The bulk of the residential property stock in Bulgaria is characterised by being of relatively poor quality and was completed during the Communist era (roughly 80 % of the total). The relative share of brick-built dwellings is close to 60 %, whereas the rest is mostly dwellings made of prefabricated reinforced concrete walls. Roughly 40 % of the total stock of residential real estate comprises two-bedroom apartments, with three-bedroom apartments accounting for 32 %. An average dwelling in the country has 2.8 rooms, 64 square meters of usable area and 2.1 inhabitants. All these factors suggest that high-quality homes constructed in line with modern quality standards are still limited as regards their availability and that the search for improved quality is likely to remain the most important demand driver in the medium to long run. Customer preferences are clearly shifting in favour of more spacious dwellings that are also characterised by a higher quality of construction materials and the use of contemporary energy-saving solutions, as well as being located in districts with sufficient transport and other relevant infrastructure.

After slowing in 2006 (9.4 % yoy growth rate) the usable area of newly completed dwellings regained momentum, rising by 40 % yoy in 2007. A good part of this acceleration was connected to construction activity at the seaside which became the hottest destination for new real estate property. After the holiday home segment took off, the relative share of newly completed dwellings at the seaside increased from 25 % of the total in 2003 to as much as 51 % in 2007.

Despite such trends, **the acceleration in construction activities led to a 3% average increase in the total living floor space of homes in the last five years**, which in combination with other data suggests that the residential property market in the country is far from saturated, although some oversupply can be identified in places like the holiday homes segment, which is also highly dependent on international investors. The development of total building permits, including residential, office and other real estate property, has followed a gradually decelerating trend in the last four years. Nevertheless, total building permits, measured in terms of total floor space, has increased more than six-fold in the last five years to reach 1,356,000 square meters according to recently disclosed data for 2007. The structure of building permits is dominated by the residential property segment which accounts for roughly 60% of the total, with the rest being mostly holiday homes and other tourism-related real estate properties.

Given the standard length of the construction cycle and the data already reported on newly issued construction permits, we anticipate that the supply of newly completed residential property will grow steadily in the next three years, with growth rates gradually slowing from around 50% yoy in 2008 to as much as 20% at the long end of the forecast.

Dwelling units completed and started ('000 inhabitants)



Sources: Statistical Office, UniCredit Bulbank – Economic Research Unit

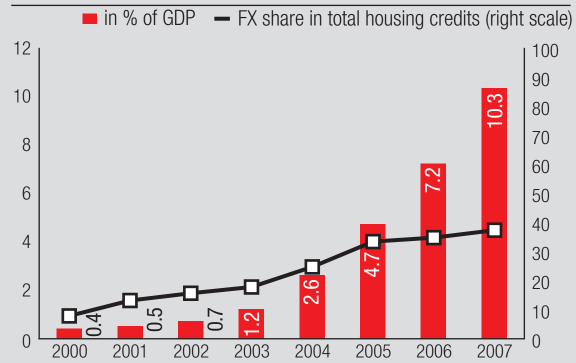
Data for the last two years reveal a moderate decrease in the volume of permits issued for new residential property buildings in the capital, which seems to suggest that the **construction boom in Sofia is softening** and the scale of construction activities will settle at more sustainable levels in the years to come.

The risks of a stronger correction, however, do linger on in the seaside segment. Growing signals for the weakening of external demand, deepening and rising risk aversion in response to the global financial crisis in combination with clear-cut evidence of over-construction in some traditional tourist destinations are likely to cool the market down, particularly when low quality production is considered.

Negative demographic trends in the country since the start of transition have resulted in a 13% decrease in the population, not including the intense emigration which apparently remains poorly captured by the official statistics. Likewise, the demographic prospects look unfavourable, particularly in the long run, as the average birth rate has stagnated and the relative share of the elderly population has risen. On the other hand, dynamic internal migration in the course of the transition led to a large geographical concentration of the population. Roughly half of the country's citizens live in the four largest cities, with only two out of twenty-eight regions reporting an increase in population numbers during the last decade. Logically, intensive internal migration has led to the concentration of new homes in the largest cities, preventing the emergence of large-scale regional disparities in the dwellings-to-population balance. Both the growing number of late marriages and the decreasing dependence of young people on the support of their parents are characteristic of the social environment that is positively affecting demand for one and two bedroom apartments.

Our market research survey[1)] shows that 15% of the population intends to buy real estate property in the next 10 years or later. Demand for new homes is strongest among high-income young and middle-age individuals. Thanks to real income convergence and improved access to the credit market households are increasingly investing in housing. The demand for residential property is also increasingly being fuelled by emigrants channelling part of their savings back into the domestic real estate market. Affordability of real estate is declining, however. The ratio of prices over wages increased from 1.3 in 2000 to 2.6 in 2007, while buying the house means using the whole income for 14 years (it was 7 years in 2000). Likewise, the survey found that potential new home buyers in Bulgaria are likely to rely heavily on mortgage loans to finance their residential property acquisitions.

Housing credits (in % of GDP and share of FX in total)*

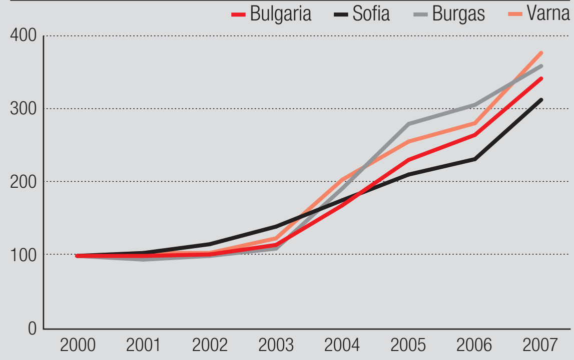


Sources: BNB, UniCredit Bulbank – Economic Research Unit
*) Share of FX loans refers only to loans granted by other MFIs

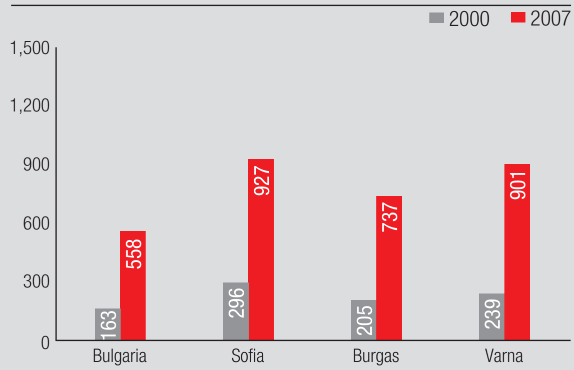
Traditionally, the mortgage market is dominated by commercial banks which control 98% of all outstanding housing loan exposures in the Bulgarian financial industry. There are no state subsidies or any other form of government support for the local housing market. Mortgage loans have long been viewed by commercial banks in Bulgaria as the preferred product for retail market expansion.

1) Survey based on 1,000 interviews of individuals aged 15 and older living in the largest cities of the country. All interviews were conducted as personal face-to-face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS)

Against such a backdrop, access to credit improved which was also accompanied by a sizeable reduction in the cost of credit. Intensive competition led to the gradual easing of eligibility requirements that banks apply with respect to their potential customers on the lending side. Accordingly, the maximum term of mortgage loans increased to 35 years and the maximum loan-to-value ratio rose to 100 %. Nevertheless, in contrast to the USA, the mortgage market in Bulgaria remains concentrated among the wealthiest 30 % of the population, while the penetration in the segment of customers with patchy credit histories (subprime segment) is very limited, if indeed it exists at all. At the end of 2007, total mortgage loans reached EUR 2.9 bn, which corresponds to 40 % of the total financial liabilities of households and roughly 10 % of full-year GDP. The main mortgage loan currency is the BGN (62 % of total) while EUR accounts for 37 % of the total.



Sources: Statistical Office, UniCredit Bulbank – Economic Research Unit
*) Prices refer to old one bedroom apartment (40 sqm)



Sources: Statistical Office, UniCredit Bulbank – Economic Research Unit
*) Prices refer to old one-bedroom apartment (40 sqm)

Bulgaria has been particularly successful in attracting foreign investor interest in the local real estate market. Cumulative FDI in tourism, real estate and the vertically integrated construction sector has reached more than 10 % of GDP for the last two years in a row. Geographically, demand is concentrated on the coastal area, with the capital and winter resorts still bearing secondary importance. On the negative side, the large external demand has led to some deterioration in the affordability of homes at the seaside, where real estate prices relative to average incomes of the local population are roughly 25 % higher than in the rest of the country, under conditions of low quality construction and related infrastructure. Moreover, the segment is highly dependent on rather volatile capital inflows and in the current international environment this enhances the risk of a sudden reversal.

After slowing down in 2006, the average market prices for housing regained momentum in 2007 rising by 28.9 % yoy. The acceleration of real estate prices has been bolstered by rapid real income growth, the increase in mortgage credits and record high FDI, channelled above all to the fast expanding holiday home segment. The double-digit increase in consumer price inflation and the boost in expectations in the first year of EU accession were also among the drivers of strong real estate price growth last year. Growth in prices has been even stronger in Sofia, with prices for medium size appartments ranging from EUR 400 to EUR 5,000.

On the whole we think that the balance of relevant supply and demand factors points toward a gradual deceleration of real estate prices in the years to come. We anticipate that credit growth and real income convergence will both support housing price growth, however, not to the exceptional extent witnessed last year. Likewise, there is growing evidence that external demand is already slowing down as the global financial crisis has negatively influenced both availability and the prices of credit. Real estate brokers are already reporting a decrease in holiday home buyers combined with a higher number of speculative investors who want to cash out and move on. The most recent quarterly data for the number of real estate deals registered by notary agencies throughout the country also indicates that, apparently, the market peaked in the previous year and what lies ahead is a process of moderation as regards both prices and the number of new real estate transactions.

In the housing segment, the relevance of factors such as superior location, the availability of infrastructure and access to sport and recreation facilities is likely to rise. Thus demand will increasingly concentrate on higher-quality apartments, where prices are likely to continue being characterised with potential for above-average growth.

In the largest cities, increasing land prices on top of the limited quantity of vacant building plots in the downtown area are gradually shifting the supply of new housing towards suburban areas or even further towards more remote communities.

On the other hand, over-construction and the insufficient road and water supply infrastructure have forced local authorities to limit or even stop issuing building permits in some resort areas. Thus the supply of holiday homes has shifted towards small and medium-scale resorts, also adding pressure to the prices of land plots still suitable for new construction.

Croatia
Monetary tightening to slow otherwise solid growth

Nenad Golac

- The residential property market in Croatia has recently experienced strong growth driven by extensive unsatisfied demand for better quality housing, significant growth in households' real disposable incomes and much better conditions and availability of housing loans.
- Prices of residential properties have risen significantly faster than CPI during the last three years, especially in the coastal area (mainly Istria, Dubrovnik and some of the most attractive islands) sustained by demand from abroad.
- This year, a temporary slowdown in the residential property market can be expected due to tightening credit conditions, with prices of average and lower quality dwellings (locations) likely to stagnate or even fall slightly. In the medium term, however, stable development of the market is more likely with increasing segmentation based on quality and location factors, with demand in the coastal area expected to be sustained by the removal of restrictions on property sales to EU residents starting from next year.

Structural indicators on residential property market

	Croatia 1)	Zagreb 1)	CEE 2)	EU-15 3)
Population (in mn)	4.4 4)	0.8 4)	379.5 5)	389.6
Per capita GDP (EUR)	7,038 4)	12,908 4)	5,226 5)	27,916
Dwelling stock per '000 inhabitants	441 6)	425 6)	413 8)	472
Dwellings by type of ownership ('000)	1,455	273	–	–
– of which owner-occupied dwellings (%)	91.6	90.1	76.6 7)	63.7
– of which rented dwellings (%)	7.1	8.6	–	–
– of which dwellings in cooperative ownership (%)	–	–	–	–
– of which dwellings in other types of ownership (%)	1.3	1.3	–	–
Average number of persons per dwelling	3.1	2.9	2.7	–
Average number of rooms per dwelling	2.8	–	2.8 8)	4.2
– of which newly built dwellings	2.9 6)	–	–	–
Average usable area per dwelling (sqm)	74.4	–	63.2	87.0
– of which newly built dwellings	83.6 6)	–	–	–

Sources: Central Statistical Office, Department of the Environment Heritage and local Government (Ireland), Zagrebacka Banca Research – UniCredit Group CEE Research Network
Notes: 1) Census 2001 considering only occupied dwellings; 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) 2005; 5) Including KZ and TK; 6) 2006; 7) Excluding UKR; 8) Excluding RUS.

Croatia has one of the highest percentages of home ownership rates in the CEE region – above 90 %, with an additional 8.5 % owning a second home. The existing housing stock in Croatia is predominantly inherited from the former socialist housing system and policy, especially in larger urban centres. Approximately 78 % of the housing stock was built between 1945 and 1990, 13 % before 1945 and around 9 % since 1990. Almost the entire housing stock within cities was nationalised after World War II and housing ownership for two decades was restrained just to peasants' private houses in villages. Following the economic reforms which started in 1965, the housing model was also liberalised and individual purchases of flats/houses were allowed again, and even facilitated by banks' housing loans. Nevertheless, the vast majority of dwellings in that period were bought by enterprises for their employees, while wealthier individuals used their savings and favourable loans to build additional holiday houses. After the transition in 1990, more than 318,000 dwellings in state/municipal/enterprise ownership were sold to tenants under very favourable conditions (big discounts for cash payments, long-term loans with negative real interest rates).

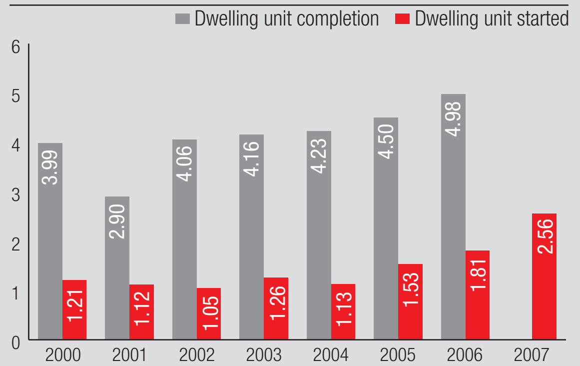
Although the number of dwellings for permanent living is approximately equal to the number of households, the supply is still inadequate, both quantitatively and qualitatively. Due to the fact that the process of urbanisation in the country is not yet complete, there is huge demand for higher quality dwellings in the cities, especially in the capital Zagreb, and in Split, the biggest city on the Adriatic coast. Additional demand was generated through large waves of immigration from other former Yugoslav republics during and after the 1991 – 1995 war. More recently, there has been increasing demand from foreigners for high-quality real estate along the Adriatic coast.

The quality of the existing housing stock is rather poor by modern standards; a significant number of units do not have independent central heating systems or sanitary facilities, the average number of rooms per unit is less than 2.8 and the average usable area per unit is at 74 sqm. However, the situation with newly-built dwellings is much better in this respect, although the average space and number of rooms per unit is still relatively modest (around 84 sqm and 2.9 respectively).

The construction of new dwellings and houses has been growing strongly in recent years, although there are still some obstacles for investors in the shape of complicated and lengthy procedures for obtaining building permits and official confirmation of property ownership from cadastre offices. Improvements in that field have occurred recently, but ample room for improvement remains. Another obstacle for even stronger construction activity is a lack of building land at reasonable prices under current market circumstances, especially in the biggest cities and along the entire coastal region.

The results of our survey [1] indicate that almost a quarter of respondents plan to purchase a new dwelling or house in the future. It is not surprising that most of them come from the youngest segments of respondents, aged up to 39 years, and also that they are among those with the highest incomes in the sample. The top 20 % of income earners are still less likely to buy new real estate than the second wealthiest segment, probably because they already own property. To note that there is a growing demand for a second house or for investment: 16 % of those who want to buy are doing it for those purposes. About 79 % of respondents planning to purchase new housing intend relying on bank loans only, 8 % on their savings and gifts or inheritance only, and 5 % on selling old property only. When offered the possibility of a multiple choice in financing, 77 % of potential buyers choose bank loans, 15 % savings, 15 % gifts/inheritances, 8 % income from selling existing property and 4 % building society loans. Surprisingly enough, those who choose building society loans as a way of financing are actually concentrated in the oldest segment of the population (aged over 50 years), whereas younger respondents are only marginally oriented towards building societies whose purpose is to attract long-term housing savings. As expected, the lowest segment by income is more oriented towards financing through building societies.

Dwelling units completed and started ('000 inhabitants)

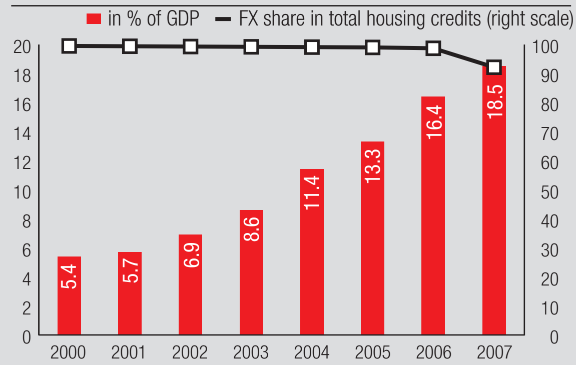


Sources: Central Statistical Office, Zagrebačka Banca Research

Generally, demographic trends are likely to lower the demand for new housing in the medium and long run because new generations are smaller, likely to wed later and therefore to live with parents longer. On the other hand, factors which are likely to increase demand for residential property are the broad aspirations for better living and housing standards, substantial growth in real disposable incomes as well as the increasing availability and affordability of housing loans (from banks and building societies). Another important factor which might boost demand is the traditional inclination of the wealthiest segment of the population towards investing in residential property as a popular way of saving. This reads especially true in the case of older people, who are neither familiar nor comfortable with investing in the stock market.

The strong growth of households' income in recent years has been driven by favourable macroeconomic conditions and also by a significant rise in employment. During the last two years the wealth effect induced by explosive stock market growth has been far from negligible either. There were also some tangible one-off effects of subsidies to war veterans and debt repayments to pensioners through special investment funds. Patterns in household financial investment behaviour have gradually changed in recent years with the role of traditional banking deposits declining in favour of riskier forms of saving, i.e. investments in shares and open-end investment funds as well as in life insurance and voluntary pension funds. It is difficult to estimate the exact level of investments in residential property as a pure means of household savings, but the trend is definitely rising given the much easier accessibility to housing loans/mortgages. Affordability of the real estate investment is however declining slightly, although it remains largely in line with Western European average. The ratio between prices and wages passed from 1.6 in 2002 to 1.8 in 2007, while investment in the house accounts for 9.5 years of annual income in 2007 (it was 8.4 in 2002).

Housing credits (in % of GDP and share of FX in total)



Sources: CNB, Zagrebačka Banca Research

The availability of housing loans rose dramatically after the restructuring and privatisation of commercial banks some ten years ago. It was further supported by the increasing penetration of foreign banks' due to their easier access to capital from abroad needed to fund such long-term lending. Thanks to the increasing competition that has emerged on the market and the favourable conditions on the international market at the same time, interest rates on housing loans fell in a relatively short time to levels comparable with most developed European markets. In addition, newly-established building societies offered even more attractive housing loans. As household indebtedness was rather low at the beginning

1) Survey based on 1,000 interviews of individuals aged 15 and older living in the largest cities of the country. All interviews were conducted as personal face-to-face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS)

of the cycle, both in absolute and relative terms, all preconditions for fast growth in housing lending were fulfilled. Another important factor was the essentially untapped potential of household residential property as collateral for borrowing. Unfortunately, the poor and untimely keeping of cadastre registers still prevents the full utilisation of this potential. A specific characteristic of the domestic housing credit market is that it is almost completely based on foreign currency clauses and so exposed to currency risk.

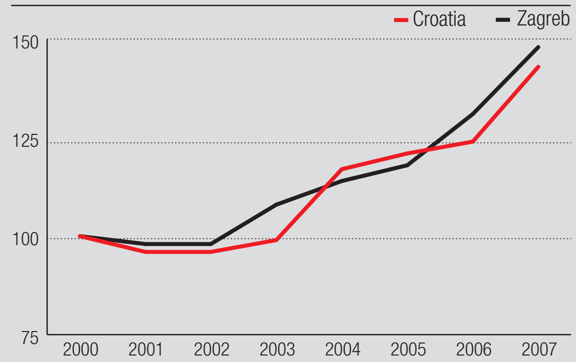
Several years ago a policy of "socially subsidised housing" was introduced, designed to enable young families without big initial savings to access the mortgage loan market by subsidising interest payments. There is also a discount available on the market price of dwellings in that scheme, due to the fact that cities and municipalities grant building land or sell it at discount prices. This form of building in recent years has contributed to some of the housing construction activity in a few big cities, including the capital Zagreb.

The role of foreign demand on the local residential property market is not easy to assess, because there are virtually no official statistics of transactions of that kind. Due to the formal obstacles for foreign citizens of most countries to buying real estate[2], the majority of transactions are performed through legal entities, i.e. firms registered by non-residents. Nevertheless, it is almost certain that foreigners have so far not been especially interested in residential properties in the capital Zagreb, or in any other inland city. Their focus has been trained on the coastal area, especially in Istria, Dubrovnik and some of the most attractive islands. We could say that the impact of demand from abroad is probably determining the prices of higher quality residential property in the coastal area. In any case, despite the substantial increase in prices observed in hot spots like Dubrovnik, overall the residential market on the coast appears not to be overheated and the removal of restrictions on EU residents starting from next year might help to sustain demand for residential property in that area in the years to come.

The role of remittances on housing demand is probably significant, but no exact data is available. Real estate investment funds are still a marginal factor in overall housing demand.

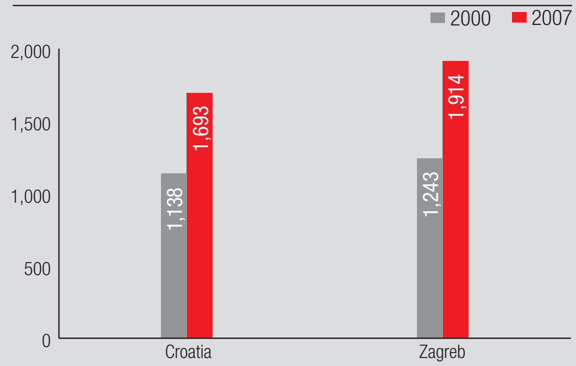
Developments in house prices during the last decade have primarily been linked to the trend of building land prices. Costs of construction have been essentially constant, and unsatisfied demand has determined the pricing pattern. All in all, the approximate growth in prices (because data has not been consistent and reliable throughout the observed period) was not so much higher than the average growth in prices represented by the CPI. The average annual growth in prices of newly built flats in EUR terms during the last twelve years in the country was around 4.8 %, and even lower in Zagreb, at 4.6 %. Similar rates of growth apply to the sample of used housing in the somewhat shorter period of nine years (to 2006). During the last three years, the prices of newly built dwellings went up on average by 7.6 % in Croatia and 9.8 % in Zagreb, and by approximately 11 % and 12 % for used apartments and houses respectively (to 2006). The average estimated price of newly built dwellings in 2007 was around EUR 1,700 in Croatia and EUR 1,900 in Zagreb.

Real Estate prices (Index 2000=100, in local currency)*



Sources: Central Statistical Office, CNB, Zagrebačka Banca Research
*) Price of new dwellings sold (excluding APN dwellings)

Real Estate prices (EUR per sqm)*



Sources: Central Statistical Office, CNB, Zagrebačka Banca Research
*) Price of new dwellings sold (excluding APN dwellings)

The prospects for the future development of prices seem less favourable at the moment due to the tightening of credit conditions manifested in higher interest rates and especially the lower availability of housing loans. The demand for higher quality housing is still unsatisfied, and prices are likely to rise further. On the other hand, the prices of average and lower quality properties (locations) are likely to stagnate or even fall slightly, although more significant price differences between locations is unlikely to occur until excess demand for housing is satisfied. The same applies for residential properties along the Adriatic coast. In the mid-long term, the market could become more differentiated and segmented. Judging from the fall in building permits in recent months supply is likely to suffer this year, while there are signs that some big foreign developers are preparing to enter the market in the coming years.

2) Restrictions on property sales to non-residents from EU member states are expected to be removed in the first part of 2009. Until then, the possibility for EU citizens to buy real estate in Croatia without using legal entities depends on the existence of reciprocity agreements between the two states.

Czech Republic
No housing bubble on the horizon (yet)

Pavel Sobisek, Patrik Rozumbersky and Vaclav Verner

- Demographic trends, improving financial conditions of households together with psychological factors such as the fear of losing rented housing have contributed to the steep rise in demand for housing in recent years. Such trends were even reinforced by favourable macroeconomic conditions and the government subsidy programmes which contributed to making housing investment more affordable. The supply side looks responsive, with completed housing units reaching a record high in 2007.
- Positive social and demographic trends that have recently supported demand are expected to remain firmly in place in the mid-long term, despite a temporarily slowdown in the short term due to higher costs of credit, lower income growth and the rise in the VAT rate starting from 2008, keeping the housing market away from bubble-like symptoms.

Structural indicators on residential property market

	Czech Republic [1]	Prague [1]	CEE [2]	EU-15 [3]
Population (in mn)	10.3	1.2	379.5 [4]	389.6
Per capita GDP (EUR)	11,105	23,386	5,226 [4]	27,916
Dwelling stock per '000 inhabitants	435 [5]	472	413 [7]	472
Dwellings by type of ownership ('000)	4,366	551	–	–
– of which owner-occupied dwellings (%)	47.0	22.2	76.6 [6]	63.7
– of which rented dwellings (%)	29.0	47.2	–	–
– of which dwellings in cooperative ownership (%)	17.0	25.2	–	–
– of which dwellings in other types of ownership (%)	7.0	5.4	–	–
Average number of persons per dwelling	2.6	2.3	2.7	–
Average number of rooms per dwelling	2.7	2.4	2.8 [7]	4.2
– of which newly built dwellings	3.1	–	–	–
Average usable area per dwelling (sqm)	75.6	–	63.2	87.0
– of which newly built dwellings	114.7	–	–	–

Sources: Statistical Office, Department of the Environment Heritage and local Government (Ireland), UniCredit Bank CZ – Economic Research
Note: 1) 2001; 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) Including KZ and TK; 5) 2007; 6) Excluding UKR; 7) Excluding RUS.

The supply of housing in the Czech Republic is not significantly below the EU average, and is slightly above the standard observed in the rest of the CEE. The last census from 2001 counted the number of housing units at 4,366,000. Taking into account statistics on finished units and the units destroyed/dismantled over 2001–2007, we estimate the existing housing stock will have reached 4.5 million in 2007. This constitutes around 435 units per 1,000 inhabitants, which is close to the EU average.

On average, 28,000 new dwellings a year have been completed over the past decade. The numbers of both housing started and that completed have risen continuously, reaching 43,796 and 41,650 units respectively in 2007, with intensive housing construction underway especially in mountain holiday centres. The strong activity in residential building in 2007 could be partially related to VAT changes in effect since 2008.

Despite the trends observed in construction, in many respects the quality of average living space remains below EU standards. Quality is only gradually improving, with living space measured in terms of sqm per occupant increasing to 30 in 2006 from 27.7 in 2001.

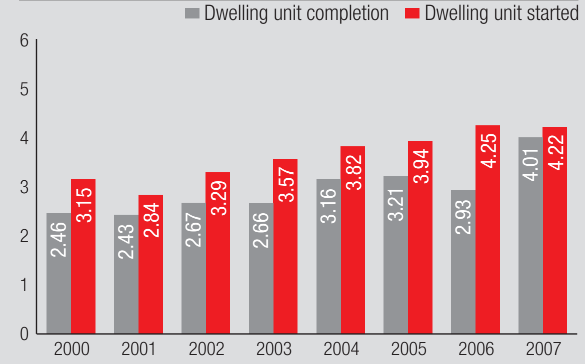
The number of rooms per dwelling is also only marginally on the rise. The prevailing size in family houses is 5 rooms plus a kitchen, while in multi-occupational buildings it is two-room apartments that are most frequent. A survey by the Czech Statistical Office in 2006 showed that around 25% of Czech households were still living in "dark" or "damp" housing.

Despite the differences in terms of quality, in comparison with most other European countries the housing stock in the Czech Republic does not seem to be too old. The share of housing built prior to 1945 is around 25%, which is surprisingly below the European average.

Together with a relatively low level of home ownership in comparison with the rest of the CEE region, positive social and demographic trends as well as a favourable economic environment have been behind the strong pick-up in demand for residential housing in recent years.

In 2006, the share of households living in their own house/flat amounted to 58.7%, whilst 25% of total households lived in rented accommodation (the latter figure being a decrease from the 32%

Dwelling units completed and started ('000 inhabitants)



Sources: Statistical Office, UniCredit Bank CZ – Economic Research

share registered in 1999). The rest of the population resided mostly in cooperative flats, which are concentrated mainly in large cities. With cooperative flats being transferred to private ownership and in light of the privatisation of municipal dwellings, home ownership has been increasing rapidly since the fall of Communism. The Czechs' preference for privately-owned apartments over rented housing has also been supported by psychological factors, such as fear of losing rented housing, fear of future rises in rentals and the prices of new homes.

The rising population trend since 2002 has also been an important phenomenon boosting the demand for real estate. Recent years have even seen this trend accelerate as the already high surplus in the migration balance was sustained by increasing demand for housing from the disproportionately firm age group of those born in the 1970s, who are also the most willing to upgrade their living standards. In recent years we have also observed two additional and relevant trends: 1. decreasing average age at which young people leave their parental home; and 2. declining average number of persons per household – a sign, among other things, of increasing convergence in living standards. Consequently, the number of households has been growing, intensifying the pressure on demand.

Accelerating wage income and the generous social system combined with a strong equity market performance has led to solid gains in household financial assets in the past several years. As a result, the accumulation of financial wealth has picked up to double-digit growth rates in each of the last three years, fuelled further by robust economic growth and a sharp fall in unemployment. This went hand-in-hand with improving consumer confidence and an increasing willingness to live on credit. In general, households are decreasing their savings rate and switching their savings propensity from financial to real assets.

According to our survey data [1], 19 % of households want to buy real estate property in the next years. 91 % intend to buy a house where to live, while 9 % are interested in the real estate as an investment opportunity or as a second house (a relatively low share compared to the rest of the region). The biggest potential in terms of plans for buying a house/flat comes from the richest 20 % of the population. Among this group, almost one fifth is considering purchasing a house/flat within the following ten years.

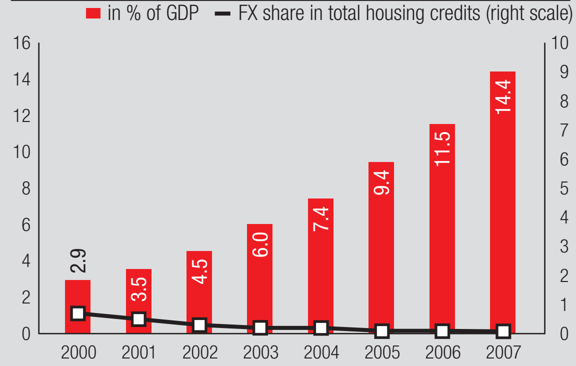
1) Survey based on 1,000 interviews of individuals aged 15 and older living in the largest cities of the country. All interviews were conducted as personal face-to-face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS)

The increasing availability of housing loans to finance investments in real estate has also played an important role in fuelling demand. There are two major sources for financing housing needs within the banking sector: mortgage loans and loans granted by building societies. At the end of February 2008, there were 6 building societies operating on the banking market and 17 (out of 31) commercial banks were authorised to provide mortgage loans.

The availability of housing loans to households has been encouraged in recent years by sound conditions as well as government-sponsored subsidy programmes. Despite narrowing somewhat lately, measures such as the tax deductibility of interest on mortgages, interest rate subsidies on mortgage loans to young people and government support of saving schemes in building societies have remained important state-sponsored programmes boosting the attractiveness of housing-related borrowing. Moreover, up to the end of 2007 the Czechs were allowed by the European Commission to apply the reduced VAT rate for housing construction. But even after 2007 most houses under construction have been excluded from the tax increase to the base VAT rate, due to the introduction of the "social housing" category, which covers all floor areas up to 120 sqm for flats and up to 350 sqm for family houses.

The low inflation environment coupled with rising competition among banks in the mortgage market contributed to making costs of housing financing relatively cheap in recent years. Even the banks themselves became more willing to provide loans to individuals following the establishment of a credit register of retail debtors, which helped to improve their credit-risk management.

Housing credits (in % of GDP and share of FX in total)



Sources: CNB, UniCredit Bank CZ – Economic Research

Driven by the above-mentioned factors, housing loans to individuals have been growing between 30 % and 40 % yoy in the last seven years, with the growth in mortgage loans permanently exceeding that of building societies. The fastest growth rates for housing loans (close to 40 % yoy) were observed at the beginning of 2004 backed by speculation about steep growth in flat prices connected with the country's accession to the EU, and also at the end of 2007 given the uncertainty over the definition of "social housing" and due to the expected hike in the reduced VAT rate from 5 % to 9 % starting from January 2008. The outstanding amount of bank credits [2] in real estate jumped to CZK 512.1 bn (14.4 % of GDP) at the end of 2007 from CZK 63.6 bn (2.9 % of GDP) at the end of 2000. The share of FX lending was negligible, amounting to a tiny 0.08 % of total bank loans for housing purposes in December 2007.

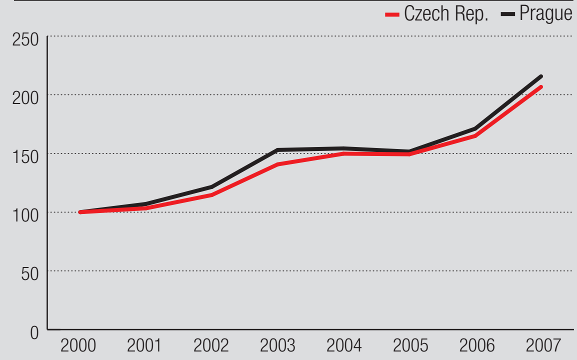
The survey results tend to confirm that bank loans would represent the major source of financing, to be used by almost two-thirds of those wanting to buy a house/flat. This form of financing would be preferred by the youngest group of people up to 29 years. Savings would represent the second most common source, mainly by people aged between 40 and 49 years and naturally by the top 20 % earners. Gifts and inheritances would play the biggest role in the youngest part of population, while funds from building societies would be the most favoured by the oldest group aged 50 and more.

Demand from abroad is playing an increasing role particularly in the capital city and in the mountain areas. The average annual increase of foreign demand for flats in Prague is estimated at between 10 % and 15 %, with the growth rate gaining momentum in the most recent months due to demand of clients from Russia. It is also estimated that foreigners account for roughly 25 % of the total clientele buying new flats in Prague or chalets in the mountains.

Fears of real estate prices exploding after accession to the EU in May 2004 failed to materialise, with prices of flats remaining more or less stable in 2004–2005. These fears were reflected in robust price increases before EU entry (prices of housing expressed in CZK soared around 25 % yoy in 2003). The second round of steep growth in real estate prices began in 2006. From the beginning of 2006 to the end of 2007, the average price of a flat per sqm soared by almost 50 % both at the country and capital level. While the surge in the first stage of this period seemed to be linked mainly to extremely cheap mortgage loans, in the final months of 2007 the major driver shifted to concerns over the deterioration in tax conditions on new housing construction from 2008. The economic boom accompanied by an acceleration of real wage growth and the increasing role of demographic factors helped to boost real estate prices in the last two years as well. Furthermore, given the rapid accumulation of wealth, flats are now more often purchased for speculative purposes, pushing prices up further. As for the growth rates in EUR terms, the prices of flats both in Prague and throughout the whole country more than tripled between 2000 and 2007, with roughly a quarter of this jump being attributed to the appreciation of CZK versus the EUR. At the same time, prices for used homes rose faster than those for new flats. Taking a regional perspective, the capital city proved to be the price leader with flat prices in other regions reacting after a delay. This was also the case for prices of building land, which rose only slightly more slowly than the prices of flats in the 2000–2006 period.

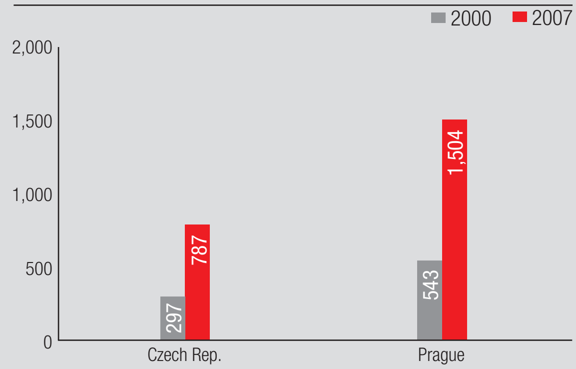
2) Including loans for house purchases granted by building societies.

Real Estate prices (Index 2000=100, in local currency)*



Sources: Statistical Office, Institute for Regional Information, UniCredit Bank CZ – Economic Research
*) Figures refer to the average prices for used dwellings (90 %) and new dwellings (10 %) with 68 sqm in good locations

Real Estate prices (EUR per sqm)*



Sources: Statistical Office, Institute for Regional Information, UniCredit Bank CZ – Economic Research
*) Figures refer to the average prices for used dwellings (90 %) and new dwellings (10 %) with 68 sqm in good locations

Positive social and demographic trends that have recently supported the demand for housing remain firmly in place. Nevertheless, there are at least three factors which might drive a temporary slowdown in the demand for housing: higher costs of credit following the recent increase in risk costs, slower real income growth, and the VAT effect which led to "frontloading" at the end of 2007.

Price trends for housing should mirror changes taking place on the demand side. Following the steep rise in the prices of housing in the past two years, a slowdown is expected in 2008. Real estate prices are estimated to grow by up to 10 % this year, with the move already incorporating the 4 % hike owing to the VAT rate change. Under no circumstances, however, do we expect the price growth to come to a halt or even turn negative over the next couple of years. We reckon the growth rate for real estate prices will more or less reflect the dynamics in wages. Such growth should help on the one hand to sufficiently cover the rising costs of developers connected to energy and building materials, securing the steady inflow of new housing projects to the market. On the other hand, the projected price growth will continue to keep the housing market away from any bubble-like symptoms.

Hungary

Some oversupply, but no evidence of price bubble

Tibor Nagy

- The residential property market still holds promising perspectives for both residential property developers on the supply side and investors on the demand side, despite recent signs of oversupply especially in the capital city.
- Despite some lowering of demand on the back of deteriorating loan conditions, decreasing real wages and the still high level of supply, no bubble bursting effect is endangering the dynamics of housing prices. Even in a worst case scenario, should demand recovery be delayed, we expect residential property prices to grow at somewhat below the CPI.
- The mortgage market still has room for further development, though excessive FX financing implies an increasing credit risk.

Structural indicators on residential property market

	Hungary 1)	Budapest 1)	CEE 2)	EU-15 3)
Population (in mn)	10.1	1.7	379.5 4)	389.6
Per capita GDP (EUR)	8,805	18,807	5,226 4)	27,916
Dwelling stock per ’000 inhabitants	424 5)	514 5)	413 8)	472
Dwellings by types of ownership (’000)	4,172	848		
– of which owner-occupied dwellings (%)	87.3	77.4	76.6 6)	63.7
– of which rented dwellings (%)	7.0	15.6	–	–
– of which dwellings in cooperative ownership (%)	1.3	5.1	–	–
– of which dwellings in other types of ownership (%)	4.5	1.9	–	–
Average number of persons per dwelling	2.4 7)	1.9 7)	2.7	–
Average number of rooms per dwelling	2.6 7)	–	2.8 8)	4.2
– of which newly built dwellings	–	–	–	–
Average usable area per dwelling (sqm)	77.0	–	63.2	87.0
– of which newly built dwellings	87.0	64.0	–	–

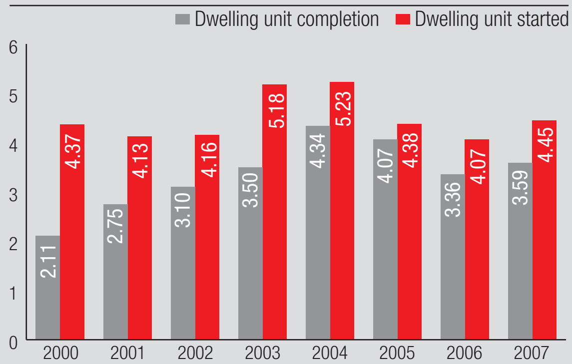
Sources: Statistical Office, GKI, Department of the Environment Heritage and local Government (Ireland), UniCredit Bank Hungary – Economic Department
Notes: 1) 2005; 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) Including KZ and TK; 5) 2007; 6) Excluding UKR; 7) 2006; 8) Excluding RUS.

The residential real estate market in Hungary does not present a major gap in supply, at least in quantitative terms and particularly in Budapest. In late 2007, somewhat more than 10 million Hungarians lived in 4.27 million flats, which implies that 2,357 people (1,945 in the capital) shared 1,000 flats, 5.9 % less than in 2000. The ratio of flats per thousands of inhabitants is higher in Budapest at 514 (and even higher than the EU average). The standard of the housing stock has gradually been improving recently. Almost all homes have electricity and 89 % are connected to the water supply, although only 56.9 % are hooked up to the public sewerage network. Detached houses represent 58.5 % of the total housing stock, more or less the same percentage as in 2000, with the density of detached houses being much higher outside of Budapest than in the capital. With a penetration rate of 0.9 % (1.6 % in the capital), rented flats owned by municipalities have only limited relevance.

Recent developments in the market have been affected by specific characteristics, with strong geographical concentration in demand and limited availability of building plots in specific locations. This links in to the uneven geographical distribution of labour market and other living standard parameters. Budapest is by far the most important centre of business life in Hungary and its residential property market outrivals any other location in terms of demand, prices and volume of real estate transactions. Given that around 87 % of dwellings are owner-occupied, the property market is rather inflexible. In addition, as there has been a shortage of housing up for rent (though the situation is slowly easing), rentals have exceeded an affordable level until the recent fall. Property developers thus concentrated their activities on the capital and its surrounding settlements, leading to a sharp upturn in the volume of per capita dwelling construction and property prices between 2000 and 2005. Between 1995 and 2006 flat prices rose faster than building costs, which inspired property developers to increase supply. In 2006, signs of oversupply brought a decline in the volume of new flats and in prices. Less favourable macroeconomic conditions and decreasing real wages in 2007, especially for the lower income classes, resulted in a decrease in housing demand. As a result, by the end of 2007 the share of unsold flats in the total new supply jumped to 21.5 % from 17.5 % in 2006. Even with stagnating demand, the HUF prices of used housing in 2007 rose by an average 4.3 % yoy, while the same indicator for new flats was 9.2 %. In euros, the average flat prices yoy (new and used) were up by 10.6 % outside Budapest and by 10.2 % in the capital. The prices of building plots compared to 2006 went up by 5 % across the country, +7.7 % in Budapest. In 2007 the average dwelling price per sqm was around EUR 1,009 in the countryside (+200 % compared to 2000), and EUR 1,416 in the capital.

As regards the main players, one should note that in 2007 out of all the new homes built in the country only 45 % were constructed by property developers, basically for sale, whereas in the capital the same indicator was 86 %. Privately built homes essentially accounted for the rest of the new supply as the state and municipalities have marginal relevance in housing construction. The average sqm per dwelling peaked in 1999 at 100, and since then it has declined to 87 on the back of the rising share of new flats commissioned by developers who are interested in building smaller-sized flats that are easy to sell. In terms of quality standards, except for the premium category, flats constructed by developers are generally smaller and are in multi-storey buildings, while private constructions are large detached/semi-detached houses, most of which stand on their own lot.

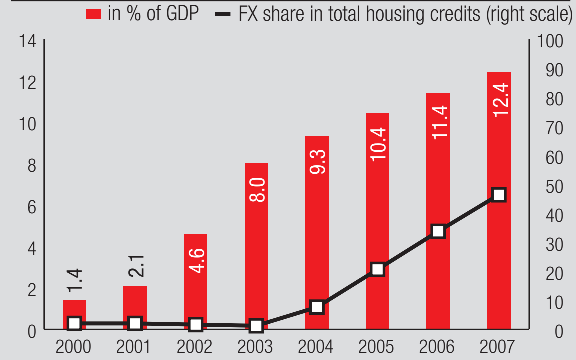
Dwelling units completed and started ('000 inhabitants)



Sources: Statistical Office, UniCredit Bank Hungary – Economic Department

State-subsidised home creation loan schemes implemented in 2000 substantially affected the development of the residential real estate market in Hungary. The peak in both the value of approved subsidised loans and in their share in the overall private investment in residential housing was reached in 2003, when 85 % of the amount granted as housing loans was subsidised, and 87 % of housing-related expenditures were financed by subsidised loans. As the socially targeted potential customer base started to narrow and later on the new government even imposed restrictions on conditions of availability, subsidised home loans gradually lost their popularity. Financial institutions then started to focus on FX lending. Within four years, the value of outstanding FX housing loans grew ten-fold and by the end of 2007 they accounted for 46.3 % of the total amount of housing loans. The share of subsidised loans has in the meantime declined to 49 % from the peak of 84 % in 2003. Despite the impressive growth over the past seven years, outstanding mortgage loans still totalled only 12.4 % at the end of 2007, well below the EU average of 39 %.

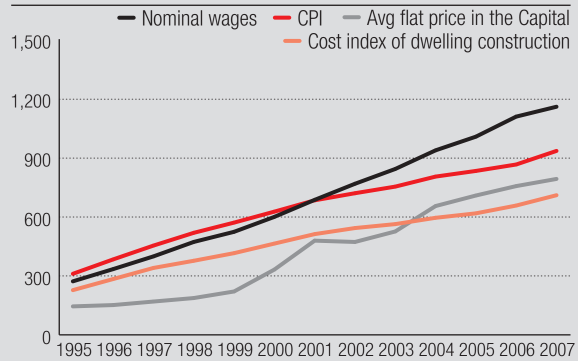
Housing credits (in % of GDP and share of FX in total)



Sources: NBH, UniCredit Bank Hungary – Economic Department

Age, wealth and income conditions are the decisive factors influencing demand. Besides improving living standards and the abundance of FX housing loans, the baby-boom population from the mid-1970s are now starting families and they also contributed to the demand increase. Indeed, according to our representative poll[1], 16 % of households intend to buy a house in the next years. 90 % are interested in buying a house where to live, while 10 % are interested in the second house or in an investment. Over 50 % of the respondents willing to buy either new or used flats in the next 10 years or later are aged below 30, and another 25 % is from the group aged between 30 and 39. The proportion of those not planning to buy a flat is 96 % among individuals aged over 50, while the same indicator for younger individuals (less than 29 years old) is only 60 %. The outcome of the mentioned survey indicates that the propensity to buy among individuals with income over EUR 566 (top 20 %) is twice that in the group earning EUR 453 or less. Nonetheless, those from the lowest income category (less than EUR 340) contemplating buying a flat represents 31 % of potential future clients on the residential property market.

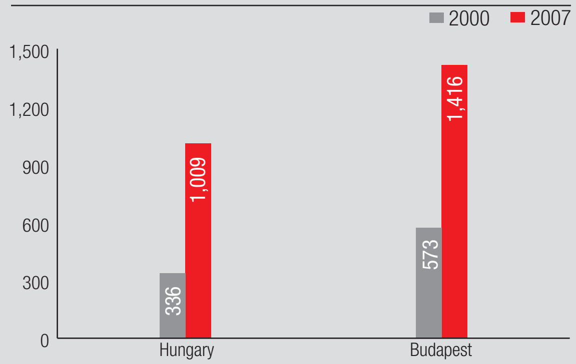
Real Estate prices (Index 1990=100, in local currency)*



Sources: Statistical Office, Ingatlan, UniCredit Bank Hungary – Economic Department
*) Average transaction prices of old and new dwellings

1) Survey based on 1,000 interviews of individuals aged 15 and older living in the largest cities of the country. All interviews were conducted as personal face-to-face interviews by Bank Austria's long term partner agencies (GfK, RmPlus, TNS).

Real Estate prices (EUR per sqm)*



Sources: Statistical Office, Ingatlan, GKI, UniCredit Bank Hungary – Economic Department
*) Average transaction prices of old and new dwellings

As to the problem of financing, only 3 % of respondents intend to purchase housing using just savings, while 6 % would raise the funds either by selling a used property or merely with a bank loan. The rest of the potential buyers (85 %) would use combinations of these three solutions. The older the questioned age group one belongs to, the less relevant bank loans become (53 %) in financing a property transaction compared to using own savings (32 %) or selling existing property (37 %). Not surprisingly, the youngest age group counts more on bank loans (84 %), while mobilising savings represents the second most significant financing solution (46 %). All in all, the outcome of the poll suggests that in the future the potential clients on the residential property market will be younger than 40 years old, belong to the group of either the well-off (EUR 566 or higher) or earning the lowest income (EUR 340 or less) and will raise around 48 % of the funds for the transaction in the form of bank loans.

Foreigners have played a key role on the demand side, contributing to the prosperity of the property market in the past ten years. Many were private individuals who began to discover the Hungarian property market in the late 1990s. The interest of foreign investors was driven by the notion that residential dwelling prices would rise many-fold after EU entry in 2004. Even if the price increase did materialise, it was far less than originally expected. In 2007 foreigners had a share of around 4 % in the total number of transactions in the residential property market, and in the capital the share was close to 5 %. In terms of value these figures are probably higher, as foreign investors prefer housing with premium quality and corresponding prices. As to foreign property developers, many of them acquired key positions on the supply side of the market.

In general, although we recognise some oversupply in the market, particularly in Budapest, we do not see evidence of a real estate bubble. We do see, however, quite moderate market dynamics. The current macroeconomic framework, however, does not fully support residential real estate demand. The fiscal correction plan implemented in the last two years has strongly constrained internal demand and in particular households income and consumption, as well as government consumption and investment activities. High inflation and increasing risk aversion in international financial markets are leading to a tighter monetary policy and higher interest rates. Relatively high rates in the Eurozone and a weaker Forint mean that even when considering the widely predominant FX lending products, conditions are worsening. In such a context, we expect no major change in housing demand in 2008. We forecast real estate prices growth at 7 % for new flats, more or less in line with average inflation. We expect the demand for used flats to drop by 5 – 7 % and prices to grow below inflation, at around 3 %. Rentals are expected to grow by 7 – 8 % in new flats and by 5 – 6 % in used housing. Prices of building plots are likely to rise by 8 % on average, or up to 10 % in premium locations. We expect construction costs to accelerate somewhat more than inflation. In 2008 the flat construction cost index is likely to accelerate up to around 8 %, although behind this aggregate figure the prices of building materials are anticipated to rise by 9 – 10 %.

Kazakhstan
Bubbles do burst

Vladimir Osakovsky

- The global liquidity crisis has clearly revealed the weaknesses of the Kazakh real estate boom. After several years of peaking demand, strong supply (even if concentrated in specific segments) and rising prices, domestic residential real estate prices fell by 10 % – 40 % in just a few months, as sales practically dried up.
- Strong public intervention is helping to protect a full burst of the construction industry sector. However, as no considerable improvement is in sight, further stagnation of the real estate market is anticipated, with a recovery in the mid-term fully conditional on the ability of banks to solve liquidity problems, repay external debt and resume lending and backed by a persistant structural housing gap out of the two main cities.

Booming construction activities in the last years have clearly fuelled a bubble, still without filling the Kazakh housing gap. From a fundamental point of view, the real estate market in Kazakhstan, just like most other CIS countries, has all of the potential long-term strengths derived from having outdated housing stock, which needs to be renovated or replaced, and high interregional migration due to the very low geographic concentration of the population. Just as in any other FSU country these problems and needs were actively addressed by official policies.

In Kazakhstan, however, government efforts took a much more proactive approach, which sets the local real estate market aside from general trends in the region. In particular, in the 1990s the government made efforts to relocate the capital of the country from Almaty to Astana, with the resulting massive fiscal spending on real estate projects in the new capital.

Another characteristic feature of Kazakhstan's real estate market developments is the extremely strong pace of development of the local financial and especially mortgage industry over the past several years. Massive expansion of domestic credit has boosted local demand, whilst also helping to expand the local construction and real estate sectors. To a considerable extent, such fast industry expansion is a result of consistent efforts by local authorities. However, the fast and prolonged expansion of the financial industry made sectors like real estate, construction, as well as the whole Kazakh economy increasingly dependent on external financing and, therefore, vulnerable to external shocks. As a result, the onset of the global liquidity crisis in August 2007 sparked a drastic correction of the local real estate market which continued well into 2008.

There is a huge need to upgrade the housing stock. According to official estimates of the local statistical agency, the total residential housing stock reached around 254.7 mn sqm in 2005, which is just 5 % more than the 243.4 mn sqm the country had back in 1991. At this level, Kazakhstan has about 16.5 sqm per capita, which is well below the western European level and even Russia's 21 sqm.

Moreover, the quality of the existing housing stock is rather low by any standards. According to official statistics in 2005 about 22 % of urban housing in Kazakhstan did not have a water supply, 31 % lacked canalisation and over 38 % central heating. The quality of rural housing is clearly much worse.

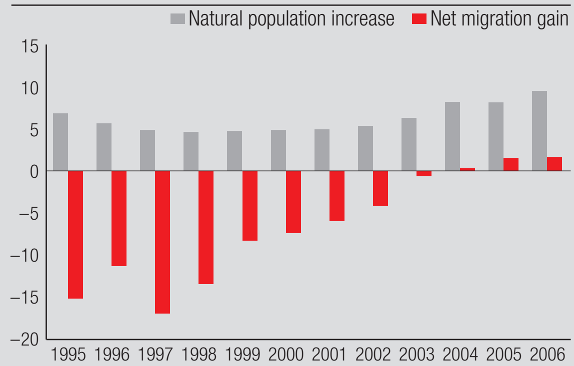
Overall, this data underlies the considerable housing shortage that persists in the country, with a great need for the renovation and rehabilitation of the existing stock.

According to official estimates, since 2000 the local construction sector has completed over 29 mn sqm of residential housing, which is about 1.9 sqm per capita. However, considering that the total housing stock remained relatively stable over the same period, it seems that most of the recent increase in new supply was offset by decommissioning due to aging or conversions of residential dwellings into commercial real estate.

It is also worthwhile noting the high degree of concentration of new construction activity in Kazakhstan. Almost 20 % of new housing over the past 8 years was constructed in the new capital Astana, mostly as part of the government relocation efforts. Given that Astana accommodates less than 4 % of total population, it seems there is a considerable inequality in housing improvements.

Demographics have also become an important demand factor. Throughout most of the 1990s, demographic development contributed to favouring supply rather than demand for housing, as between 1995 – 2000 a net 1.2 mn Kazakh inhabitants left the country, with the resulting sell-off of housing properties. However,

Demographic trends (People per 1000 population)

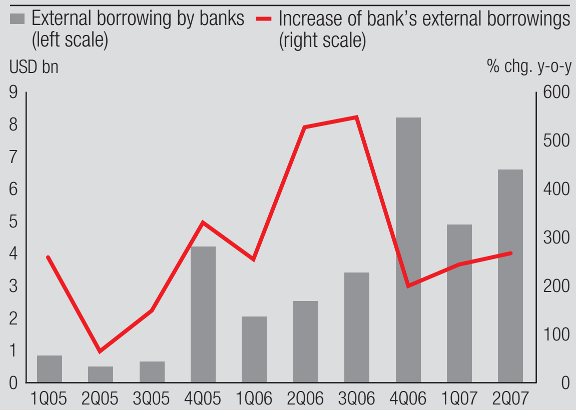


Source: Kazakhstan Statistical Agency

starting from 2004 the country turned into a net recipient of international migration. Unlike the dire demographic situation in neighbouring Russia, Kazakhstan continues to enjoy healthy rates of natural population growth. Overall, the total population of Kazakhstan has been increasing since 2002 at an average rate of about 0.8 %–1 % a year, which clearly provides for a steady increase in demand for residential housing in the country.

Moreover, the Kazakh economy and labour market also already passed through painful, but important restructuring during the 1990s, as average unemployment has been falling steadily since 1999, to around 7 % in 2007. Current unemployment appears to have mostly structural characteristics as it is likely to be driven by differences across regions – as regional wage differentials would suggest – rather than by persistent cyclical unemployment. As a result, the country's labour market can be considered rather tight.

External borrowing by Kazakh banks



Source: NBK

The robust growth of the national economy since early 2000 has led to a substantial increase in the levels of personal incomes and wages in the country. Thus real wages in Kazakhstan have doubled since 1999, whereas the continued appreciation of the KZT has helped to push average nominal wages in dollar terms to over 320 % the 1999 level.

As a result, the overall dynamics of demographics and labour market conditions clearly show the potential for real estate demand in connection with further improvements in macroeconomic fundamentals and household purchasing power.

However, despite massive increases over the past several years, the prevailing average salary of around USD 500 a month is still fairly low to be considered a potential source of housing demand. Unfortunately, there is no reliable data on the age/social status profile of the average real estate buyer in the country. However, it seems reasonable to assume that most of the existing demand for real estate properties in Kazakhstan is driven either by the relatively narrow class of wealthy professionals in the capital cities, or by support from the government.

Substantial support for the expansion of the real estate market and the construction sector came from the rapid expansion of the financial industry, which in 2006 and 2007 H1 expanded at over 40 % yoy. The rapid expansion was funded primarily through massive external borrowing by the Kazakh banking system, which greatly benefited from the country's investment grade ratings and some of the most effective management in CIS countries, backed by a stable and generally favourable business climate. Thus, between 2004 and 2007 H1 the domestic banking system benefited from the availability of low-cost external financing, while external borrowing has continuously accelerated, jumping from about USD 800 mn in 2005 Q1 to over USD 4.8 bn in 2007 Q1.

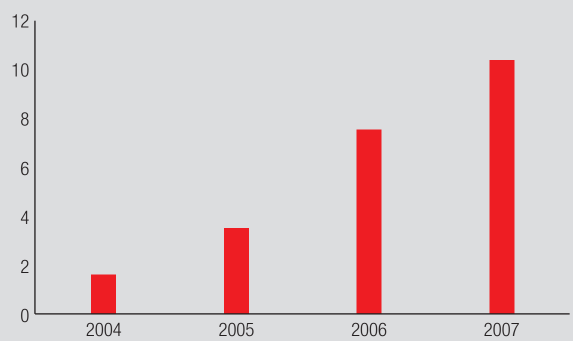
One of the main destinations of this massive capital inflow was the domestic construction industry. Total lending to the domestic construction industry by Kazakhstan's five largest commercial banks (which account for over 70 % of banking sector assets) jumped almost seven-fold in less than three years to reach USD 10.4 bn at the end of 2007 H1. As a result, the construction industry currently accounts for about 18 % of the total loans of the top five banks, making the industry one of the largest borrowers from the domestic banking system. Another source of capital inflows was the expansion of the local mortgage industry, which also boosted the construction and real estate market from the demand side.

Both of these factors have resulted in continuous growth in local real estate prices, especially in the key Almaty market, where prices for residential housing have more than tripled over the past several years.

Moreover, the availability of affordable credit on top of robust growth in prices on the local real estate markets has generated substantial investor demand for real estate. Although there is no reliable data available, local market analysts and dealers estimate that investors purchased up to 40 % of all real estate bought in Almaty, of which more than 30 % was financed through mortgages.

However, the dependency on external borrowing made the local banking industry highly vulnerable to external shocks. As a result,

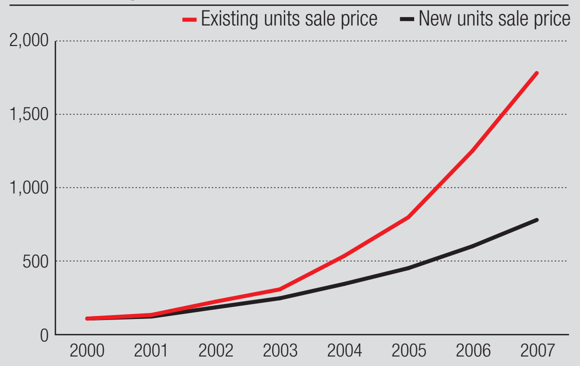
Total lending to construction industry by 5 largest commercial banks, eop (USD bn)



Source: company data, UCMIB estimates

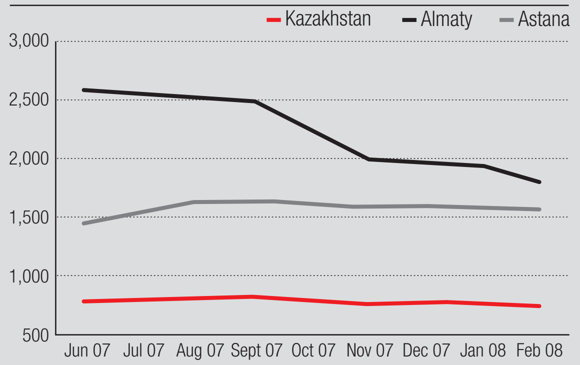
mounting problems with liquidity flows on global markets have adversely affected the ability of Kazakh banks to raise external financing, effectively stopping any meaningful growth in domestic lending since the onset of the crisis in August 2007.

Real estate prices in Kazakhstan (Dec eop, % of 2000 level)



Source: Kazakhstan Statistical Agency

Real estate prices (EUR per sqm)*



Source: Kazakhstan Statistical Agency
*) Existing home sales price

Consequently, the local construction industry took a hit from both supply and demand – through the declining ability of banks to finance construction projects and similar limits on mortgage loans. The local real estate market reacted immediately, with sales practically drying up, and prices in the key Almaty market falling by over 25 % in just 6 months. Moreover, unofficial estimates put the price decline at 30 %–40 %.

In fact, the drastic slowdown in the local construction industry is one of the major reasons behind an overall cooling of the economy, as GDP growth slowed from over 10 % in 2007 H1 to just 5.6 % yoy in 2007 Q4. Although the slowdown is expected to intensify in 2008, some continued high global demand for commodities and fiscal loosening might help to mitigate the reduction in GDP growth.

Massive problems in the construction industry have sparked a substantial policy response from the government, which has stepped in announcing the creation of a massive USD 4 bn stabilisation fund to support the local banking and construction system, and also proceeding with an unusual move to buy out up to 8,000 apartments in Astana at an estimated price of over USD 500 mn. We expect further moves in the future, although we believe that the scale of the problem and financing deficit by far exceeds any potential options for the government.

Overall, we reckon that the future of the real estate market in Kazakhstan depends directly on the ability of local banks to resolve their liquidity problems, repay external debt and resume lending. We do not expect considerable improvements in the real estate market in the short-term, but by 2010 some recovery should take place. Thanks to its strong resource base Kazakhstan's long-term potential output growth should amount to 5–7 % annually. In combination with the urgent need to upgrade the real estate stock this should not only lead to renewed and vibrant construction activity in the medium term, but also to a more broadly based upturn, which besides Astana and Almaty will also take place in the oil-rich provinces in the Western part of the country.

Poland
First signs of stabilisation, but housing gap remains

Andrzej Bratkowski

- The residential property market in Poland has so far benefited from the persistently high housing gap and the strong demand backed by favourable demographic trends (baby boom of the 1980s), fast growing house prices, low interest rates and easier access to the credit market.
- Following the strong increase in house prices observed until the first half of 2007, some signs of stabilisation started to emerge in H2 due to the tighter access to the credit market (induced by stricter monetary conditions) and the higher level of supply. Demand visibly shifted from apartments in city centres to detached houses built in suburban areas, also due to lower affordability rates.
- Looking ahead, accelerated growth in supply and some stabilisation in demand caused by the higher cost of housing loans and the lower demand from foreigners resulting from the ongoing liquidity shortage and US subprime crisis can be expected. We reckon growth in average house prices will stabilise in the 2008–2009 period, with annual growth exceeding 10 % only in the most attractive locations.

Structural indicators on residential property market

	Poland [1)]	Warsaw [1)]	CEE [2)]	EU-15 [3)]
Population (in mn)	38.2 [4)]	1.7 [4)]	379.5 [5)]	389.6
Per capita GDP (EUR)	6,397 [4)]	19,129 [4)]	5,226 [5)]	27,916
Dwelling stock per ’000 inhabitants	338	450	413 [7)]	472
Dwellings by type of ownership (’000)	12,877	766	–	–
– of which owner-occupied dwellings (%)	58.9	–	76.6 [6)]	63.7
– of which dwellings in cooperative ownership (%)	26.7	45.1	–	–
– of which dwellings in other types of ownership (%)	14.4	–	–	–
Average number of persons per dwelling	3.0	2.2	2.7	–
Average number of rooms per dwelling	3.7	3.1	2.8 [7)]	4.2
– of which newly built dwellings	4.2	–	–	–
Average usable area per dwelling (sqm)	69.5	56.6	63.2	87.0
– of which newly built dwellings	101.6	–	–	–

Sources: Central Statistical Office, Department of the Environment Heritage and local Government (Ireland), Bank Pekao – MRO
Note: 1) 2006; 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) 2005; 5) Including KZ and TK; 6) Excluding UKR; 7) Excluding RUS.

The Polish residential market is still characterised by a quantitative and qualitative housing gap, with accelerated growth in supply only materialising in the last couple of years. The statistical deficit of apartments was approximately 1 million apartments. In Poland, the number of apartments per 1,000 inhabitants is 338, whereas in the countries of the “old” EU it is 472. The gap between Europe and Poland is even bigger if one considers the usable area, furnishings and age of the apartments. According to the most recent census data, more than 23 % of the population still live in buildings erected before 1945, 27 % in buildings dating back to 1945–1970 and 37 % in buildings dating back to 1971–1988. Apart from some buildings constructed in cities before 1945, and detached houses, the residential stock built in that period is mostly worn-out, exhibits poor workmanship standards and has small usable areas. According to our estimates, in 2002 approximately 50 % of inhabitants were living in apartments with very low standards.

Since 2002, a total of 634,000 apartments have been commissioned which represents an estimated 4.9 % of the overall housing stock. In total, the buildings constructed after 1988 represent approximately 16.5 % of the housing stock. The usable area of newly-built apartments has gradually been increasing. In 2002, an average apartment’s usable area in existing housing was 68.6 sqm, while in newly-constructed buildings commissioned in 2001–2005 it totalled 104.1 sqm, and in 2007 it was 105.6 sqm. The average size of an apartment for sale in 2007 was 66 sqm (in 2006: 64.6 sqm), of a co-operative apartment 56.8 sqm (in 2006: 58.2 sqm) and of a privately-constructed one 142.2 sqm (in 2006: 143.1 sqm).

In the year 2006, some 58.9 % of the housing stock was owned by private individuals, 26.7 % was co-operative property, 9.7 % communal property, 2.8 % was owned by enterprises and 1.3 % by other entities. The high share of cooperative housing results from the role of cooperatives as the main developer and housing manager under communism.

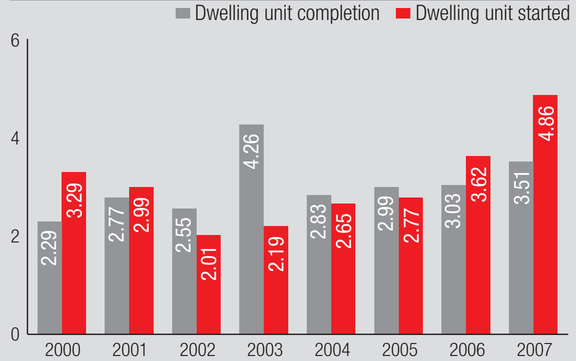
After a sharp decrease in the number of newly completed apartments in the first years of the transformation, the following years witnessed an upward trend of 5 %–6 % per annum. However, a considerable acceleration was noted only in 2007 when the growth rate topped 16 % with some 133,800 apartments completed. More than 50 % of the newly completed apartments and more than 70 %

of the new residential usable area was constructed privately. Developers built 34 % of apartments and co-operatives a total of 6.2 %.

The increase of 47.5 % in the number of building permits issued in 2007 and the heralded liberalisation of the building code indicate that the dynamics of newly commissioned apartments, in terms of quantity, will be even higher in 2008, and so in the years to come.

The absence of spatial development plans remains the main barrier on the supply side. The trading in real property is hindered by the lack of a complete register of land and mortgages. In rural areas the register is almost complete (owing to EU subsidies for 1 hectare of arable land), whereas in urban areas the progress of the register's development is much slower. The supply growth rate was also affected by the migration of construction workers; however, it is hard to estimate its size. This mostly concerned private housing construction based to a large extent on the services of small firms and craftsmen working in the grey economy.

Dwelling units completed and started ('000 inhabitants)



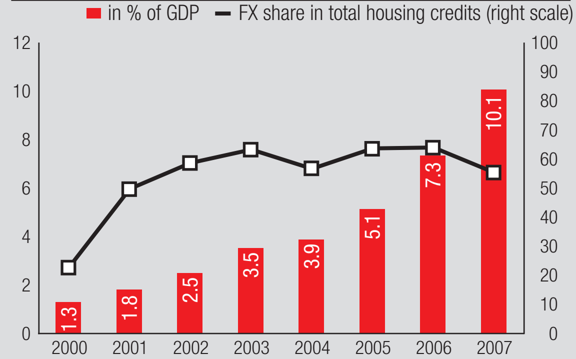
Sources: Central Statistical Office, Bank Pekao – MRO

An important stimulus to local demand came from the easier access to mortgage loans, the growth in household incomes, the baby boom of the 1980s as well as the high rental prices and the small supply of apartments for rent, which results from the poor legal protection for landlords of rented apartments. Demand was also affected to a certain extent by tax preferences. The VAT Refund Act remained in force until the end of 2007 (refund of the difference between the tax rates of 22 % and 7 % applicable to majority of construction materials) based on invoices and the classification of materials. The interest allowance covering the repaid instalments of previous loans still remains in force.

The declared housing needs are mostly due to young people living with their parents and also persons aged 30 – 39 who want to move to bigger apartments since their families have grown. Our survey data [1)] shows that 17 % of households intend to buy real estate property in the next years and among them only 4 % want to do that for investment purposes or as a second house. In the group of people aged 40+ only some 10 % declare their wish to buy an apartment, which results both from having better living conditions (when the children have moved out) and the more limited access to long-term loans.

The average salary in 2007 was PLN 2,691 (EUR 711), representing an 8.7 % increase on a yearly basis. Salaries in big cities were 15 % – 30 % higher than the average for the whole country, therefore the demand for apartments in those cities is growing much faster than in small towns. Due to the faster growth of income, households considerably increased their investments in both financial assets and real property in 2006 – 2007. As a result of the shift in savings from bank deposits to mutual funds and insurance, the strong growth of stock indices in recent years also improved the financial wealth of households. At the end of 2007, the financial assets of households amounted to PLN 800 bn (EUR 224 bn), posting a 15.0 % yoy increase. Rapid growth in assets was still accompanied by accelerating household debt, especially for house purchases stimulated by relatively low interest rates and rapidly increasing property prices.

Housing credits (in % of GDP and share of FX in total)



Sources: Central Bank, Bank Pekao – MRO

Through the year, loans became more and more expensive due to the overall tightening of monetary conditions and the rising cost of risk. However, demand for housing loans has still remained high. After 54 % growth in 2006, in 2007 the growth was around 50 %. Owing to the restrictions on FX denominated loans and the smaller spread between domestic and foreign interest rates than in previous years, the dynamics of PLN loans was higher than that of FX loans. The share of FX loans in total residential loans decreased from 63.8 % to 55.2 % in 2007. This trend was somehow reverted in the last part of the year on the back of a gradual increase in the spread between Polish and foreign interest rates. The interest rates on PLN-denominated mortgage loans rose throughout 2007 from 6.3 % to 7.5 % and on CHF-denominated loans from 4.1 % to 4.6 %. One could estimate on this basis that the monthly costs of loan servicing went up for PLN-denominated loans by 12 % and for CHF-denominated loans by 6 %. Despite the growing cost of debt servicing, the demand for loans remained high until 2007 Q3, while in Q4 it became less intensive, influenced mainly by the more limited access to loans and the lower expectations for continued and rapid increases in house prices. The ongoing repricing of risk reflected in the increasing credit spreads and costs of borrowing due to the US

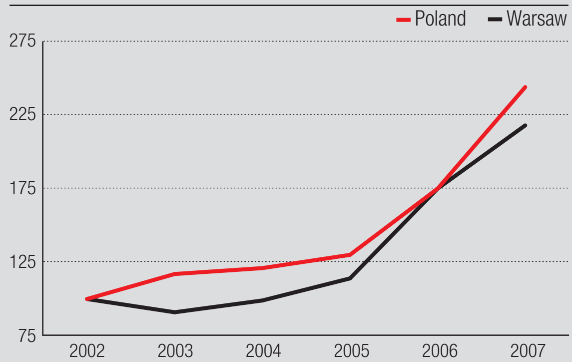
1) Survey based on 1,000 interviews of individuals aged 15 and older living in the largest cities of the country. All interviews were conducted as personal face-to-face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS)

subprime crisis is expected to bring demand for housing loans down in the short term, with loans expected to grow by around 16.0 % on average in the 2008–2009 period.

The results from our survey to suggest that people with incomes above the average more often have plans to buy new apartments. The highest shares in the financing of house purchases are accounted for by loans and savings, with the role of savings in financing growing proportionally to the buyers' age. The utilisation of loans for purchasing is planned mostly by younger people and those with average incomes. There is a greater interest in loans from people aged 50 and above compared to the group of those aged 40–49, who constitute a very low share in the total financing need due to the sale of their existing homes, indicating that in this age category residential investments are made for profit, or to purchase another apartment for leisure purposes.

The demand from foreign investors played an important role only in the case of luxury apartments and those in very attractive locations. In this market segment, prices grew at the highest rate, reaching levels above those observed in many other cities in Europe (in 2007 the highest price registered in Warsaw was EUR 11,700 per sqm). This demand somehow also affected the prices of other apartments in 2006, while in 2007 – also due to the crisis on the US property market – it played a rather insignificant role. In large cities the role of foreign investor demand for building plots was quite significant. The average price of a building plot in Poland was nearly EUR 50 per sqm and in Warsaw EUR 346, however, foreign developers paid some EUR 2000–3500 for building plots in the centre of Warsaw and Wrocław, and in one record transaction even EUR 8200.

Real Estate prices (Index H2 2002=100, in local currency)*

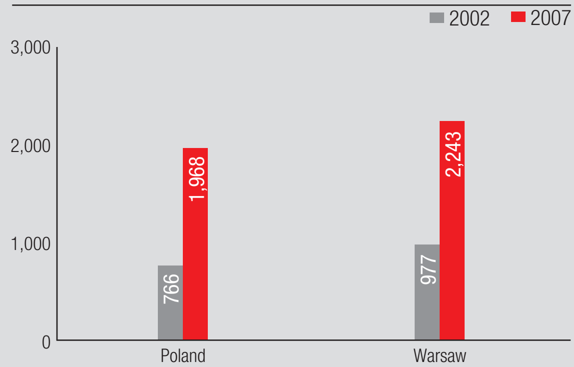


Sources: Central Bank, Bank Pekao – MRO
*) Prices refer to new dwellings sold

Following the growth of 51.5 % posted in 2006 [2], house prices in the primary market still grew fast until 2007 Q3, while in Q4 they started to decrease slightly (in zloty terms, though still increasing in euro terms because of currency appreciation). Overall, throughout 2007 the prices in the primary market rose by 21.1 % [2]. Similar trends were observed in Warsaw, whereas in other large cities the prices grew until the end of 2007. In the secondary market, the growth of prices between January and September last year was less intensive compared to 2006 (when they went up by 77.6 %) and the last quarter witnessed a similar decrease in prices as that noted in the primary market. The increase in the prices of building plots was stronger and estimated at 25.5 % in 2007 Q3, however, in this case too the prices fell slightly at year-end. The key reasons for the stabilisation in house prices ranged from an increase in the cost of borrowing to a shift in demand towards detached houses on the city outskirts, where prices were rather determined by construction costs (up by approximately 20 %–30 % in the last couple of years, half the growth rate observed in the prices of finished apartments). Nevertheless, the growth in prices elevated the land price to a level comparable with house construction costs. Stabilisation in the growth of house prices towards the end of 2007 was also connected to increased supply compared to previous years. A certain role was also played by the decrease in property prices on foreign markets, which contributed somehow to lower demand from foreigners, while at the same time the strategy of waiting for a fall in prices became more attractive.

2) Calculated using year end house prices

Real Estate prices (EUR per sqm)*



Sources: Central Bank, Bank Pekao – MRO
*) Prices refer to new dwellings sold; first available data: H2 2002

In the year 2008, further increases in interest rates may generate additional costs for loan servicing of 6 %–7 %, whereas the nominal growth of salaries is estimated at around 8 %–9 %. Therefore, **we do not expect any stronger decreases in demand for residential loans, however, the growth will be lower compared to recent years as borrowers will be more willing to wait for interest rates to fall and the supply of new apartments to rise.** Further improvements are expected on the supply side. The liberalisation of the building code is heralded for the year 2008 and should stimulate the construction of private houses as well.

We anticipate some further stabilisation in house prices this and next year, with some 5 %–10 % growth in prices in small towns caused by the increased construction costs of apartments, and a stabilisation or insignificant fall in prices in large cities, which will be caused by the lower prices of apartments constructed before 1990, and the slight growth in prices for new apartments. The growth in apartment prices may only soar above 10 % in the most attractive locations. Only the acceleration of economy growth, expected in 2010, may lead to faster growth in prices.

Romania

Some cooling but still with high potential in medium term

Rozalia Pal

- The Romanian residential market is characterised by a relatively high home ownership ratio and a generally low average quality of existing housing stock, while most of the new demand comes from top and upper middle classes and/or foreign investors, searching for medium to high quality dwellings, which are still rare in the market.
- Despite some limiting factors – especially in the capital – connected to the lack of specialised labour and the availability of building land, we expect further growth in supply with new constructions still unable to quickly fill the gap in terms of the medium/high quality housing required. Affordability will represent the major constraint on the demand side, mostly affecting the low income classes and targeting the segment of one-two bedroom apartments.
- The excess of potential demand for new housing will continue to support residential prices. Still, we forecast some moderation in the growth path. The impact of the international liquidity crisis is likely to cool the real estate market boom somewhat, particularly in the capital, as the repricing of risk at international level is leading to lower capital inflows and tighter monetary conditions, thus hindering the speculative/investment-related share of demand.

Structural indicators on residential property market

	Romania 1)	Bucharest 1)	CEE 2)	EU-15 3)
Population (in mn)	21.6 4)	1.9 4)	379.5 5)	389.6
Per capita GDP (EUR)	3,678 4)	8,149 4)	5,226 5)	27,916
Dwelling stock per '000 inhabitants	381	407	413 7)	472
Dwellings by type of ownership ('000)	–	–	–	–
– of which owner-occupied dwellings	96 4)	–	76.6 6)	63.7
– of which rented dwellings	2.6 4)	–	–	–
– of which dwellings in cooperative ownership	–	–	–	–
– of which dwellings in other type of ownership	1.6 4)	–	–	–
Average number of persons per dwelling	2.6	2.5	2.7	–
Average number of rooms per dwelling	2.6	2.4	2.8 7)	4.2
– of which newly built dwellings	3.5	3.6	–	–
Average usable area per dwelling (sqm)	61.6	64.8	63.2	87.0
– of which newly built dwellings	113.9	131.9	–	–

Sources: Statistical Office, Department of the Environment Heritage and local Government (Ireland), UniCredit Tiriac Bank – Economic Research
Note: 1) 2006; 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) 2005; 5) Including KZ and TK; 6) Excluding UKR; 7) Excluding RUS.

The number of dwellings per thousand inhabitants was at 381 (407 in the capital) in 2007, increasing from 352 at the beginning of the decade, but **still below the regional average of 413 and even more the Western European average (472).** According to the National Institute for Statistics (INS), residential stock in Romania at the end of 2007 reached around 8,270,000 units, of which almost 10% are located in the area of Bucharest.

The rapid and extensive privatisation of the housing stock in the early 1990s has contributed to widespread home ownership. Practically all residential property in Romania is owner occupied nowadays (96%) with only a marginal role for rented dwellings accounting for roughly 3% of the total stock. The rental market for residential units is mainly limited to the top and upper middle classes.

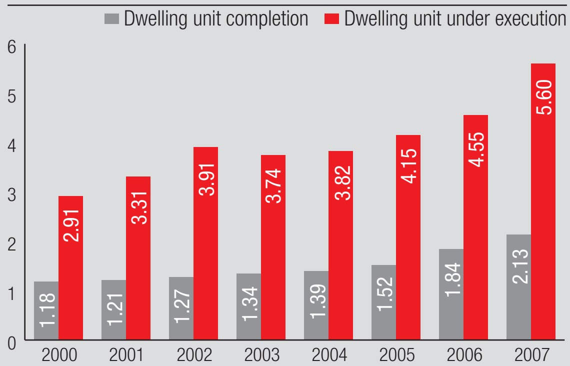
The average quality of existing housing stock is generally low. The size of the housing stock appears to be more or less in line with the regional average, but the quality of units varies considerably, and much of the stock suffers from inadequate maintenance and poor standards. The age of buildings and types of structure are clearly related to quality. According to the most recent census, only around 7% of the existing dwelling stock in Romania was constructed after 1989. In urban areas, 68% of households live in apartment blocks built during the communist period. The construction of flats dominated residential construction from the 1970s. Unfortunately, the initial quality of most of these multi-occupational buildings was poor and subsequent maintenance was lacking. The result is that in some areas – i.e. Slobozia – much of the newest housing is in the poorest condition. It should also be noted that many buildings in the country still require rehabilitation due to major earthquakes in 1977, 1986 and 1990.

New residential construction has constantly been on an upward trend since 2000, although a significant acceleration in construction activity has only been visible in the last couple of years. In 2006–2007, the number of units completed throughout the whole country swelled by an average 18 % on a yearly basis compared to slightly less than 5 % in the previous five years. The largest part of the new supply, especially in the countryside, is related to privately constructed houses, while units built by specialised companies accounted for only 14 % of the total in 2006.

Based on the latest figures reported by INS, Bucharest-Ilfov county has been one of the most active regions in terms of new construction activity with the number of finished dwellings reaching almost 3 units per thousand inhabitants in 2007, above the country's average of 2.1. The overall supply of new dwellings remains, however, far below the level observed in Western Europe of around 7 dwellings per thousand inhabitants. Bucharest represents one of the most dynamic European capitals, even experiencing an increase in population in the last couple of years (average yearly increase of 0.5 %) by attracting people from rural areas and other large cities seeking higher living standards and better labour market conditions. Overall, the better living conditions in the capital are clearly reflected in a very low level of unemployment at 1.8 % in 2007 compared to a country average of 4.3 %, and higher wages (30 % above the country average in 2007). It comes as no surprise that construction activity has been particularly strong in the capital.

Large residential projects are rather new in the country and mostly concentrated in Bucharest and targeting medium/high income classes. The first big residential project with more than 200 units was launched only in 2005, while 2007 was the first year of delivery with around 1,400 dwellings in the capital[1]. The initial projects focused more on luxury residential buildings with an average useful area of 130 sqm per dwelling. The first high-rise apartment building with 24 floors was launched in 2006 (Asmita Gardens). Recent projects with two bedroom dwellings and an average useful area of less than 100 sqm mainly target the upper middle class. Facilities like car parks, children's playgrounds, green areas and security are essential.

Dwelling units completed and under execution
('000 inhabitants)



Source: INS, UniCredit Tiriac Bank – Economic Research

Overall, the demographic influence on demand for housing in Romania has been pretty weak. The natural rate of increase has been negative since the early 1990s and was recently exacerbated by increasing emigration, especially in the group of people aged 25–39 years old. Even the baby boom generation of the 1950s and especially that of the late 1960s have not affected the observed dynamics in housing demand very much as they reached a productive age in a period when radical transformations in the economy were taking place, the mortgage market was inexistent and purchasing power was still rather low. Domestic migration towards the capital city have instead clearly played a role.

Today, demand for house purchases is mostly related to the emerging middle class, small investors and multinationals. Despite the remarkable increase in real income observed in recent years, average wages in Romania remain among the lowest in the region reaching RON 1,030 (EUR 309) last year (compared to a regional average of EUR 567). According to our estimate based on official statistics on average income per household, only the upper 10 percent of Romanian households can count on a monthly disposable income of around EUR 1,000. Moreover, the country continues to be characterised by relatively low household saving ratios with a lack of past accumulated wealth. Those figures clearly show that affordability of housing investment for an average Romanian household is very limited. On top of this, eligibility requirements to access the credit market represent another constraint to demand.

At the moment, around 60 % of total demand is generated by natural persons, with a large role played by Romanian residents working abroad who have channelled a substantial part of their savings into the domestic real estate market over the last decade (remittances of Romanians abroad reached EUR 4.9 bn in 2007, after peaking at 5.3 bn in 2006). A growing category of buyers is represented by private investors, mostly foreigners, accounting for roughly 40 % of total demand.[2]

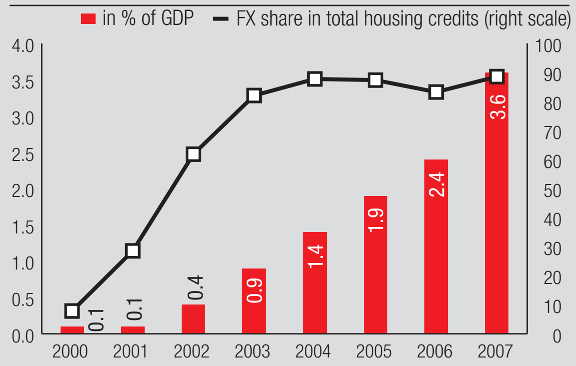
This evidence is confirmed by our recent survey based on 1,000 interviews covering the capital, large cities and small villages[3] showing that 25 % of households intend to buy real estate property in the next years. Among them quite a high share (17 %) is looking for an investment opportunity or a second house. The top 20 % of the population (with average monthly income above EUR 511) are far more likely to buy a dwelling in the next ten years or later (35 %) compared to the lower income classes (25 %).

The use of mortgage loans has only started to expand rapidly in recent years, as confirmed by the increase in the outstanding amount of mortgages as a percentage of GDP from almost zero in 2000 to 3.6 percent at the end of last year. Foreign denominated loans – mainly euro-based but increasingly also Swiss franc – have been the major driver of growth, expanding quickly (83 % yoy in 2007) and accounting for almost 90 % of total housing loans at the end of last year. **Although the mortgage market is still largely under-**

1) Source: Colliers: "Real Estate Review, Romania 2008"

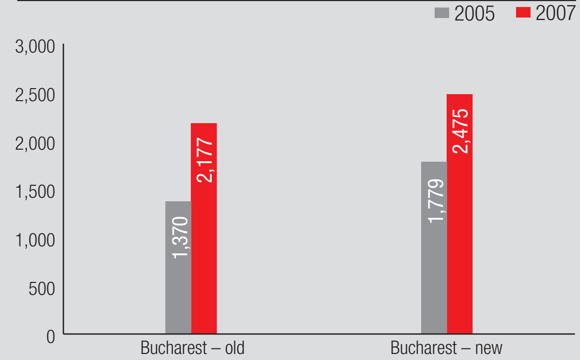
2) Source: Colliers / 3) All interviews were conducted as personal face-to-face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS)

Housing credits (in % of GDP and share of FX in total)



Source: NBR, UniCredit Tiriac Bank – Economic Research

Real Estate prices in Bucharest (EUR per sqm)*

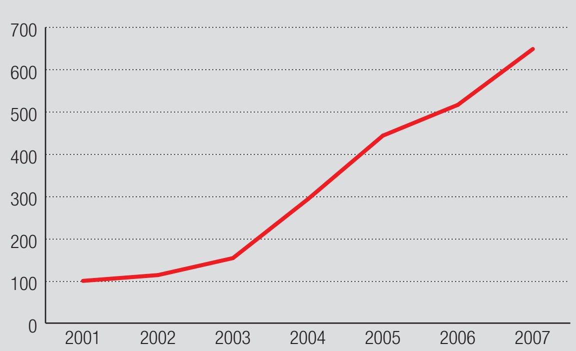


Source: ZF, Colliers, UniCredit Tiriac Bank – Economic Research
*) Prices for old dwellings refer to 3-room flats with 70–80 sqm in good locations (Alba Iulia, Aviatiei, Dorobanti, Unirii, Victoriei), while those for new homes to projects for the middle class in traditional residential neighbourhoods and medium-quality finishings (laminated or layered wooden floor, tiles, PVC windows). Last available data for old dwellings: Oct 2007.

penetrated even by regional standards, the increasing exposure to FX risk especially for unhedged borrowers represents a concern. Nevertheless, the potential for further expansion in the mortgage market remains connected with the increasing number of households expected to become eligible for a loan. While 65 % of those interviewed expressed their intention to buy an apartment relying exclusively on a mortgage loan, we believe that at the current stage a much lower share can really afford it.

Increasing demand, matched to the still limited supply of medium-high quality dwelling has clearly contributed to continuous growth in residential prices, which have reached comparable or higher levels than the main capitals in CEE. Particularly fast acceleration in house price growth was registered after 2004 in the run-up to EU accession. Moreover, the relative scarcity of building land in the central area of the capital and the low level of new supply resulted in a much stronger increase in prices for old housing in good locations compared to the newly built ones, despite their lower quality. According to local sources, the average prices for old dwellings reached almost EUR 2,200 per sqm in 2007 compared to the prices for newly-built apartments in central areas ranging from

Real Estate prices in Bucharest
(Index 2001 = 100, in local currency)*



Source: ZF, UniCredit Tiriac Bank – Economic Research
*) Prices refer to old dwellings: 3-room flat with 70–80 sqm in good locations (Alba Iulia, Aviatiei, Dorobanti, Unirii, Victoriei). Last available data: Oct 2007.

EUR 1,500 to EUR 4,000 [4]. Information on the evolution of real estate prices in the whole country are more difficult to obtain given the absence of a full set of statistics at national level. According to estimates of the NBR based on public notaries [5], prices have evolved in a very similar pattern to the capital, increasing by more than 400 % in 5 years. Clearly, the dynamics in prices matched to relatively low levels of income mean that affordability remains low and limited to a relatively small part of the population.

In the foreseeable future, we expect demand for better living conditions to continue to support the residential market, with the supply of new dwellings gradually filling the demand gap and with focus gradually shifting towards other cities in the country. Compared to previous years, the supply of residential units is expected to gain momentum as already testified by the strong upsurge in building permits granted last year. Bucharest is projected to remain the main market for developers with a new supply of more than 35,000 units likely in the next 7–10 years. Some factors such as the lack of specialised labour, the availability of suitable land and tightening credit conditions may nevertheless put a cap on development. Further growth in households' income is expected to increase the affordability of mortgage loans for the upper-middle class living in the major cities of the country. Attracted by this new market potential, developers are starting to show interest outside the capital. Ploiesti, Oradea, Costanta, Cluj-Napoca, Brasov, Iasi and Arad are among the cities with projects of around 3.5–5,000 units in the pipeline.

Some lowering of demand might materialise this year, however, following the anticipated cooling in the expansion of lending resulting from a general increase in the cost of risk and a tightening of monetary conditions, and more generally from lower capital inflows. Still, we believe the fundamental gap between structural demand and supply is a good indicator of the remaining growth potential on the market.

4) Source: Immobilien Rating Bewertung & Analyse (IRG)
5) Source: NBR, "Financial Stability Report 2007"

Russia
Residential property market still awaits development

Valery Inyushin and Roman Gromov

- The residential real estate market in Russia is clearly characterised by a lack of supply. The quality of buildings is below Western European standards, with more than 80 % of the stock being built in the Socialist era and 50 % in need of repair.
- Growth in supply is restricted by a lack and the cost of available land and of construction materials, rather than by a lack of capital. With these constraints being particularly strong in Moscow and in St. Petersburg, large developers are increasingly interested in diversifying towards the major regional towns.
- While the affordability of new apartments remains extremely low for the mass market, increasing income and rising access to the mortgage market is widening the demand pool for the middle class. Still, the biggest share of demand for new apartments in Moscow comes from high net worth individuals, who buy residential real estate as an investment, paying cash.
- Overall, the international liquidity crisis is likely to have a moderate impact on the residential real estate market in Russia. Tightening lending conditions might affect demand negatively, but on the other hand, the lack of alternative forms of investment stimulates demand for investment purposes, with saturation in terms of the quantity of housing not likely for some time to come.

Strong fixed investment and lively private consumption supported by dynamic personal income growth are the reasons behind the impressive performance of the Russian economy and the Russian real estate sector. High commodity prices remain supportive for the economy, while investment is further backed by government plans for accelerated infrastructure development, focusing on road and pipeline construction, and by housing programs at the federal and especially the regional level. On the other hand, strong inflationary pressures and rising interest rates, as well as increasing risk aversion, could potentially put a cap on progress.

Despite the fast expansion observed in the stock of residential units over the past 5 years, Russia continues to experience a major housing shortage. In 2006 there were 53 million households (with a total population of 142.2 million inhabitants) and a housing stock of 49.8 million units, up from 38.7 million in 1990. Home ownership was relatively high at around 70 % in 2007, following the extensive privatisation of the former state-run housing sector in the early 1990s (which effectively amounted to the state "giving" tenants their apartments).

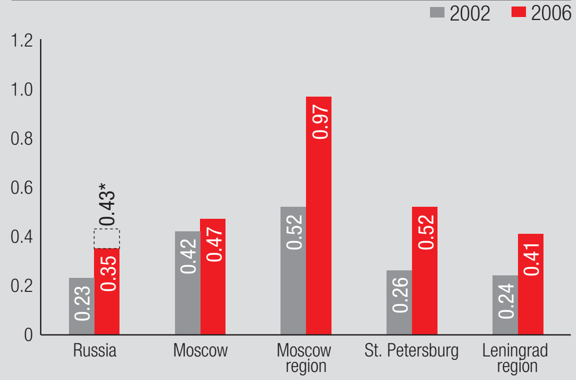
The vast majority (78.7 %) of households are urban-based. Moscow and the surrounding region account for 20 % of total residential stock and 5 % of the population. The stock of dwellings per inhabitant in the capital city area remains below the country average, at 19.7.

The quality of housing stock remains an issue in Russia. Current real estate stock per inhabitant in Russia is about 21 sqm (in some regions only 10 sqm) per inhabitant. This is significantly lower than the average figure in Europe (40 sqm per inhabitant) and the US average (68 sqm per inhabitant). Much of the population still lives in ageing Soviet-era housing stock, particularly outside the main cities – indeed, only 19.2 of the total housing stock was built after 1991. More than 50 % of the homes are in need of repair and many have not been repaired in the last 40–50 years. According to government estimates there are 93 million sqm of dilapidated housing in Russia (3.1 % of the total), of which 11.2 million sqm are below safety standards.

The provision of adequate and affordable housing for the lower income classes is an important issue in Russia. New supply in terms of square meters stood at 60.4 million in 2007, up from 50.6 in 2006. Despite having increased significantly, new construction per capita remains pretty low at just 0.43 sqm in 2007.

Most of the new construction activity is concentrated in Moscow and the surrounding region. Housing demand in Moscow benefits from local residents' interest and the influx of capital from the region. It should be noted that non-Muscovites owning an apartment in the city automatically have legal residency in the capital. Resident status is a prerequisite for legal employment and access to healthcare and education in the city. Based on the data gathered using different sources, only in Moscow, plans for building approximately 3.5 million sqm of residential housing in 2008 are in

New construction, by region (sqm per capita)



Source: Rosstat, UniCredit Group CEE Research Network – UniCredit Bank (Russia)
*) 2007

place. The Western Administrative region of Moscow leads the way in terms of the allocation of new sites, due to the soft ecological environment and a good supply of construction sites. In 2007 there were 1.2 million sqm of housing. In 2008, approximately 1.1 million sqm of residential housing will be built in the western administrative region.

Growth in the residential real estate market is strongly limited by a lack of material resources. The construction materials industry cannot satisfy the growing demand and there is a constant lack of cement, aggregates, bricks and steel. Prices for all these segments are increasing dramatically, which means a fast increase in building costs too. Material resources rather than capital are the strongest constraint to supply in the market. The major construction companies in Russia are Russian, including PIK, SU155, Glovmostroi, and Don Stroy. Given the above mentioned constraints, integrated construction companies, which control the production of cement and other materials, clearly lead the market.

Supply-side constraints are stronger in Moscow, prompting new developers to focus on other regional towns too. Constraints range from a lack of available land, very fast growth in land prices and in certain situations short-land lease agreements for constructors (meaning that if the construction phase takes longer than planned, the constructor can lose the rights to the land). On top of that there are long delays in getting necessary approvals, up to one year or more. This all fuels the interest of new developers in geographical diversification, with regional cities having more than 1 million inhabitants being the most popular. In these towns, pressures in terms of production constraints and costs are lower, while the bureaucracy burden is also lower. Towns like Ekaterinbourg, Chelyabinsk, Krasnodar, Perm, Volgograd and Samara are now considered the new frontiers for development by major real estate developers. PIK, for example, has plans to expand in 9 first-tier cities in 2008 – before moving towards another 10/15.

While the mass population largely stays out of the residential real estate market, on the demand side we can clearly identify 2 major groups – the high net worth individuals and the emerging middle class.

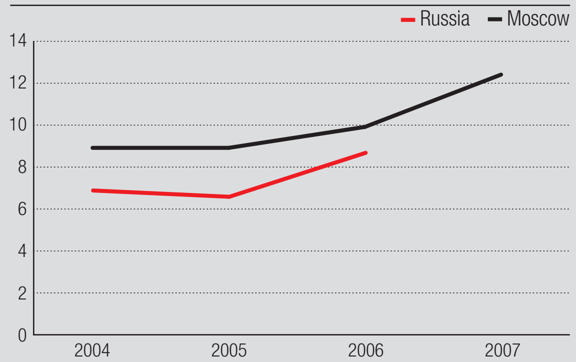
The first group mostly drives demand for investment purposes. They can buy real estate in cash, generally for renting, with relatively high returns. Their investment is mostly concentrated in high-quality buildings in Moscow as those are the most liquid investments. Due to a persistent gap in terms of supply, the vacancy rates for these apartments remain extremely low, as well as the number of days they stay on the market. It should be noted that in Moscow a large share of demand (estimated at around 40 %) is directly or indirectly for investment/speculative purposes. We do not expect, even in the aftermath of the international liquidity crisis, any abrupt reduction in such demand, as alternative forms of investment are more unpredictable and risky, and this is a cash-based form of investment.

The second component of residential real estate demand is related to the emerging middle class. Very strong income growth and rising living standards in recent years as well as increasing access to the mortgage market at affordable rates have contributed to a boom in medium/high-quality construction projects in the so-called business class areas around the two major towns.

Trends in demand are clearly reflected by the results of our recent survey (based on over 2,000 interviews *) covering the capital and large cities) showing that 20 % of the population intends to buy a new house in the next 10 years or later. 91 % of those who intend to buy are searching for their first apartment/house to live in, while 9 % are interested in the real estate market as an investment or as a second home. The willingness to buy a new house is almost twice as high (27 %) in the top 30 % of the population in terms of wealth compared to the lowest 50 % (15 %).

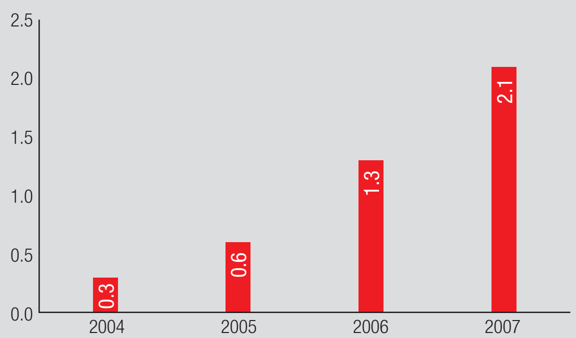
*) All interviews were conducted as personal face-to-face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS).

Apartment affordability (years)



Source: Rosstat, Moscow City Government, Deutsche UFG, UniCredit Group CEE Research Network – UniCredit Bank (Russia)

Housing credits (in % of GDP)



Source: Bank of Russia, UniCredit Group CEE Research Network – UniCredit Bank (Russia)

While there is still a persistent shortage in terms of supply, it is becoming increasingly clear that the quality of projects is important and that things like availability of infrastructure or specific locations matter for the sustainability of development projects. Moreover, while household incomes continue to grow, residential real estate prices are on the rise too. Affordability levels are declining – with the cost of an apartment ranging from 8/9 years' salary at the country level to 12 in Moscow. The situation is relatively better in the regions – high demand from households and high income growth are matched to relatively lower growth in prices, in an environment characterised by huge gaps in terms of supply.

Prices for residential housing in Russia have risen significantly since 2000 and are now at all-time highs. Overall, residential prices in Russia increased at a CAGR of 36 % in 2002–2006, with Moscow posting a CAGR of 45 %. Average housing prices reached USD 2,200 per sqm at the end of last year. Prices for residential space displayed different trends across various Russian cities in 2007. The highest annual price increases were observed in Krasnoyarsk (+74 %), Pern (+53 %) and Novosibirsk. In other large cities, prices increased in a range of 10 to 30 %. Housing prices in Moscow reached USD 4,272.

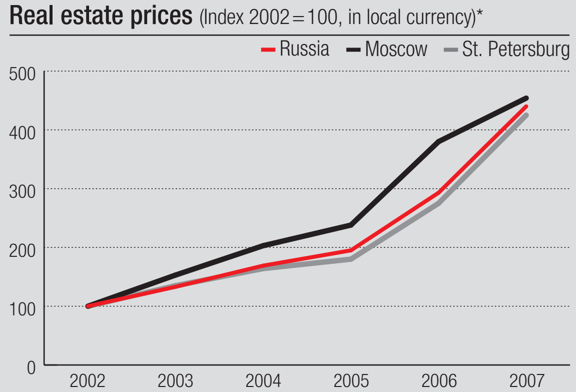
Providing affordable housing is a key priority for the government. Given the existing lack of supply, renewed state investment in housing has been made a national priority alongside efforts to encourage growth in the private housing sector. The Russian government set an ambitious goal of increasing housing stock to 26 sqm per capita by 2017, which means a target of over 130 million sqm of residential construction per year. Direct intervention from the state is likely to be significant. The Government Housing Program envisages a reduction in the waiting time for social housing from 16 years at present to 5–7 years by 2010. During 2007–2009 the government intends to spend EUR 5–7 bn per year on this program, funding mortgage refinancing and financing housing for young families directly.

As mentioned, the mortgage market plays a strong role in the development of the middle-class – mass market demand. The number of credit institutions offering mortgages has more than doubled in recent years to over 500 in 2007, with the main mortgage participants in Russia being banks. According to CBR, Sberbank is the main market player, followed by VTB and fast rising foreign players like DeltaCredit Bank (owned by Société Générale), Raiffeisen and UniCredit. Effective interest rates of mortgage loans have declined from 10–14 % in 2003 to 9–11 % in 2007, while the average term of loans increased from 10–15 years in 2003 to 20–25 years in 2007. Nevertheless, the Russian mortgage market still has the lowest per capita mortgage penetration and residential debt at around 2 % of GDP. At the same time Russia has one of the highest rates of growth in mortgage debt and we are sure that mortgage penetration will grow. Overall, despite some tightening in loan conditions, especially this year, we anticipate mortgages will continue to expand at favourable rates, increasing by an annual average of 64 % in 2008–2010 to reach almost 6.0 % of GDP. Such prospects are reinforced by evidence from survey data that the majority of potential buyers (60 %) would use bank loans to finance their real estate investments, with the share peaking at almost 70 % in the upper mass market segment.

All told we expect the Russian real estate market will continue to be restricted by supply rather than demand. On top of strong building and renovation activities in Moscow we expect that regional cities with more than 1 million inhabitants will start to attract attention. In the coming years, growth in prices should moderate slightly above inflation trends, but continue, since demand will be supported by mortgage availability, growing disposable income and the misbalanced supply and demand.

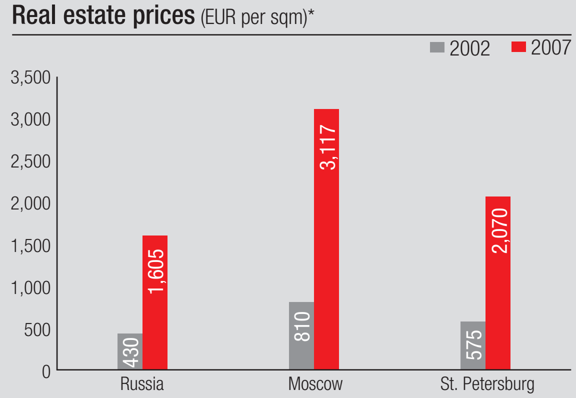
During 2007, government authorities constantly raised the topic of introducing a single tax rate on real estate. Implementing a single tax rate would decrease the volume of investment-type purchases, thereby stabilising prices. However, the Minister of Finance of the Russian Federation does not expect this tax rate to be implemented earlier than 2010.

Real estate prices (Index 2002=100, in local currency)*



Source: Rosstat, IRN, UniCredit Group CEE Research Network – UniCredit Bank (Russia)
*) Average prices on primary and secondary markets

Real estate prices (EUR per sqm)*



Source: Rosstat, IRN, UniCredit Group CEE Research Network – UniCredit Bank (Russia)
*) Average prices on primary and secondary markets

Slovakia
Still healthy growth potential on the horizon

Viliam Patoprsty and Lubomir Korsnak

- The residential property market is still characterised by a lack of supply – about 40 years behind the EU average (10 years in the case of Bratislava) in the case of newly constructed housing
- Demographic trends, favourable macroeconomic conditions and better accessibility to the credit market have supported demand for housing in recent years. Despite dynamic growth in the residential real estate market the gap between demand and supply is closing only gradually
- In the years to come, the growth of the residential real estate market will remain relatively sound, with no major risk of an abrupt correction in house prices, despite slower growth. Some signs of overheating are emerging, however, especially in specific segments such as buy-to-let properties (mainly in and around the capital) which might lead to less speculative demand in the near future

Structural indicators on residential property market

	Slovakia [1]	Bratislava [1]	CEE [2]	EU-15 [3]
Population (in mn)	5.4 [4]	0.6 [4]	379.5 [5]	389.6
Per capita GDP (EUR)	7,141 [4]	17,445 [4]	5,226 [5]	27,916
Dwelling stock per '000 inhabitants	323 [6]	365	413 [8]	472
Dwellings by type of ownership ('000)	1,666	219	–	–
– of which owner-occupied dwellings (%)	73.8	–	76.6 [7]	63.7
– of which rented dwellings (%)	7.7	–	–	–
– of which dwellings in cooperative ownership (%)	14.9	–	–	–
– of which dwellings in other types of ownership (%)	3.6	–	–	–
Average number of persons per dwelling	3.2	2.7	2.7	–
Average number of rooms per dwelling	3.2	3.0	2.8 [8]	4.2
– of which newly built dwellings	3.2 [9]	3.1 [9]	–	–
Average usable area per dwelling (sqm)	56.1	51.1	63.2	87
– of which newly built dwellings	71.0 [9]	75.7 [9]	–	–

Sources: Statistical Office of SR, Department of the Environment Heritage and local Government (Ireland), UniCredit Bank Slovakia Macroeconomic & Market Analyses Dept.
Notes: 1) Census data (2001); 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) 2005; 5) Including KZ and TK; 6) 2007; 7) Excluding UKR; 8) Excluding RUS; 9) 2006.

The supply of dwellings in Slovakia is not only significantly below the EU average, but also below the standards of other countries in the CEE region. On the other hand, above-average economic growth has stimulated the demand for housing. This has resulted in relatively dynamic growth in the prices of residential real estate in recent years, as well as a recovery of the new housing market, especially in the capital city of Bratislava.

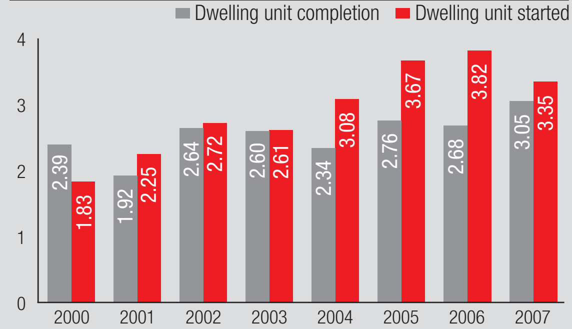
Based on the population and housing census from 2001 there were 310 dwellings per thousand citizens in Slovakia. Based on our calculation using statistics on new housing, the number of dwellings per thousand citizens went up by 13 to 323 dwellings in 2007. This is still far behind the EU average of 472, as well as below the CEE average of 413 dwellings. It means there is a shortage of about 500,000 dwellings in Slovakia compared to other countries in the CEE region, and about 800,000 less than the EU standard. The number of new dwellings has moved in a range of 14–20,000 per year over the last 5 years. Keeping this performance Slovakia should be able to reach the current EU level in approximately 40 years. The situation is slightly better in the capital city of Bratislava, which is close to the average CEE level. However, there is still a shortage of about 60–70,000 dwellings in Bratislava compared to the EU level.

Average living standards are not satisfactory and still not comparable with EU standards. The average usable area of housing in Slovakia was only 56 sqm in 2001 (just 51 sqm in Bratislava), while the EU average is 87 sqm. Newly constructed housing is of a higher standard, but with 71 sqm (76 sqm in Bratislava) they are still behind the EU average. The average number of rooms per dwelling is increasing only moderately (still slightly above 3 rooms per dwelling), while the improving quality of living in new housing is driven mainly by the increasing sizes of rooms.

An additional problem in Slovakia is the quality of existing housing. Most of the old housing (especially in the cities, constructed before 1990) is panelled blocks, the majority of which were built in the 1970–80s. The lifetime of this housing was projected to reach 30–40 years. This means a significant portion of these dwellings are close to or have exceeded their lifetime. The problem is being resolved mainly by reconstructing old houses, supported by government and EU funds (mostly in connection with efforts to decrease the energy intensity of houses).

The qualitative as well as quantitative lack of housing in Slovakia and in the capital city of Bratislava paves the way for dynamic growth in new supply, which could persist in the years to come. The administrative barriers for a construction boom are minimal. The main problem for developers is thus finding suitably integrated land to build on. The ownership of land is divided (often into long and narrow parcels), a practice rooted in history.

Dwelling units completed and started ('000 inhabitants)

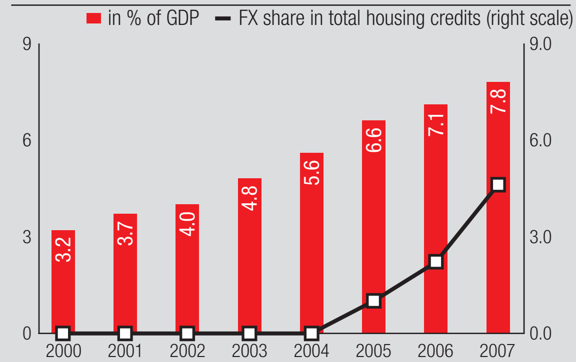


Sources: Statistical Office of SR, UniCredit Bank Slovakia Macroeconomic & Market Analyses Dept.

Despite a very low rate of home ownership before 1989, the individual privatisation of state-owned flats (mainly in panelled blocks) in the 1990s helped to boost this level significantly. As the prices of old flats were set reflecting just the initial construction cost and their age (meaning prices were very low, sometimes close to the average monthly wage), the interest of citizens was strong and almost every state-owned flat was sold to its tenants. The home ownership ratio thus reached 74 % in 2001 (close to the 77 % observed at regional level). Furthermore, there is essentially no market for newly-built houses for rent. The home ownership ratio is thus stable or slightly increasing.

The current strong demand on the residential real-estate market is supported (besides strong economic growth) by demographic trends too. The last "baby boom" was recorded at the end of the 1970s and the beginning of the 1980s. This means that this generation is now reaching its productive age. The demand for housing has thus significantly increased in recent years. The increase in the working population was recorded mainly in the 1990s, however, this had a limited impact on housing demand in this period. There are several reasons for that: changing lifestyle (people older when they get married or have their first child), less-developed banking sector, problems on the labour market, which was unable to absorb the strong inflow of new labour. Reflecting the transformation of the economy (closing of inefficient companies) and the low inflow of FDI in the 1990s for political reasons, the economy had to face high unemployment under conditions of relatively low wage growth, high inflation and high interest rates. This practically killed almost all of the demand and the residential real estate market essentially did not exist (despite government efforts to support it with several kinds of subsidies). However, with the economy growing more strongly followed by a recovering labour market as well as the standardisation of the banking sector and greater accessibility of housing loans in recent years, the demand for housing has increased significantly. Furthermore, this was amplified by postponed demand from the 1990s.

Housing credits (in % of GDP and share of FX in total)



Sources: NBS, UniCredit Bank Slovakia Macroeconomic & Market Analyses Dept.

The average gross wage reached SKK 20,146 (EUR 596) in 2007 recording 4.3 % real annual growth. Despite having one of the highest economic growth rates among CEE countries, real wage growth in Slovakia numbers among the stragglers (in CEE). It reflects the still relatively high unemployment rate as well as the weak labour unions. However, together with the gradual exhausting of skilled workers we expect higher pressure on wage growth in the coming years. The expectations of the population are therefore relatively positive. On the other hand, the accumulation of financial wealth in households remains relatively poor. Households' financial assets represent only 53 % of GDP (the ratio exceeds 200 % in the Eurozone). Therefore, it is not surprising that bank loans are expected to be the main source of financing for buying new homes. Our survey data (based on 1,000 interviews covering capital, large cities and small villages) shows that 21 % of households intend to buy real estate property in the next years, with 6 % of those looking for a second house or an investment opportunity. 73 % of those who want to buy a new home are planning (at least partially) to use bank loans or building societies to finance it. Such consumers constitute the highest share in the age-groups of those up to 29 (74 %) and between 30 and 39 years old (77 %). At the same time, these two age-groups cover 82 % of all future demand (based on current plans) over the next 10 years or later. As expected, the lowest interest in buying new homes is registered among those aged 50 years-old or more. Furthermore, besides bank and building society loans (39 % and 6 % respectively) this group would also like to finance new houses by using savings (33 %) or by selling their existing houses (29 %). Buying new houses in this age group is probably driven mostly by wanting to improve living standards, while the primary impulse for the younger age-group is to cover basic needs without having sufficient financial or non-financial wealth (i.e. need to use bank loans).

Those who want to buy new houses are dominated by the lower income classes (50 % of those with the lowest earnings account for 65 % of planned future buying). Surprisingly, 49 % of this group is planning to use own savings to finance their new homes (compared to 42 % on average among all the earning groups). The higher share of savings as a source of financing in low-income classes could be explained by the lower accessibility to bank loans for this group of earners.

Access to banking loans has significantly improved compared to the 1990s when the mortgage market did not exist and all the loans for housing were provided by building societies. At present, the market for housing loans can be considered developed, with relatively strong competition. The state therefore has restricted mortgage subsidies to only low-income young families.

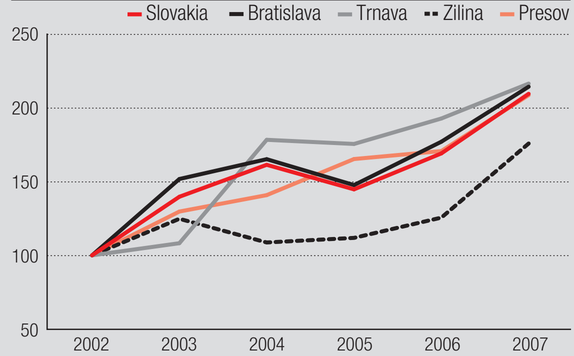
Housing loans have been the main driver behind booming retail loans in the last 5 years. Besides traditional mortgage loans (which represent 47.5 % of all housing loans) and housing loans provided by building societies (another 25.4 %), other housing loans are still more popular, already accounting for 27.2 % of all retail housing loans. Other loans for housing are represented mainly by consumer or investment loans for housing, which usually involve 100 % financing of a real estate by a bank loan which cannot be financed by a classical mortgage (due to legal constraints). Almost all loans for housing are in local currency. The FX share represents only 3.3 % (4.6 % excl. other loans for housing), furthermore 99.97 % thereof are provided in euro (even with the expected euro adoption in 2009, FX loans essentially do not exist in this segment). We expect the relatively good accessibility of bank loans for housing will stimulate the demand for new houses in the coming years too. Furthermore, strong competition on the domestic market could lead to a further shrinking of spreads and the refinancing of old mortgage loans respectively. Despite this, the market is still relatively conservative – the majority of banks only enable only loan terms of up to 30 years, and financing only up to 100 % of the real estate collateral.

The demand from abroad is significant only in the capital city and partially also in the High Tatras area. Based on information from developers in Bratislava, the demand of non-residents in the residential real estate segment accounts for approximately 15 – 20 % of new projects. The share of foreigners seems to be negligible in the market of old houses/flats, focusing only on the city centre.

Increasing demand together with insufficient supply (despite some signs of recovery) has pushed up the prices of housing in recent years. The average price per sqm grew by 109 %* from SKK 17,832 (EUR 418) in 2002 to SKK 37,306 (EUR 1104) in 2007. Even higher growth (+114 %) was recorded in Bratislava, where prices rose from SKK 23,457 (EUR 549) in 2002 to SKK 50,188 (EUR 1486). The main part of the real estate market is still situated in Bratislava, where prices are 2 – 3 times higher per sqm compared to other regions in Slovakia. The prices per sqm for housing are also the highest in Bratislava in comparison to purchasing power (measured by gross wages), reaching 190 % of the average gross monthly wage (in the Nitra region it is only 94 %).

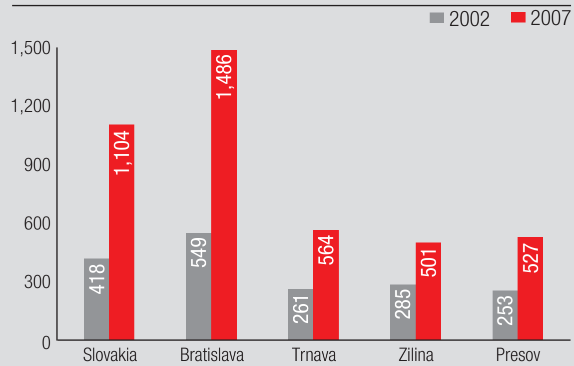
Despite the dynamic growth of the residential real estate market the gap between supply and demand is closing only slowly. There is roughly a 50 % shortage in the current housing stock (30 % in Bratislava) with a view to reaching the current EU standard. Taking into account the real economic strength of regions we estimate that the real demand could be much lower. However, together with the expected wage growth (driven by the increasing lack of skilled workers in the context of strong economic and investment activity), there is relatively high potential for a further increase in demand. The increase in the new supply is concentrated mainly in the region of Bratislava, which accounts for approximately 1/3 of new housing constructed in the whole country. Regional markets are still lively mainly thanks to the market for existing housing. Despite the relatively strong demand and the lack of supply we can already see some (so far very limited) signs of overheating. Rentals have recorded only a slight increase in recent years. Taking into account the dynamic growth in real estate prices, the rentals are close to a reasonable rate of return now, which could lead to a decrease in speculative demand in the near future. This is partially caused by lower demand in the segment of buy-to-let properties. Comparing the prices of housing with average wages we also observe the excessive growth in real estate prices over the last few years. While the price per sqm totalled 132 % of the average gross monthly wage in 2002 (118 % in Bratislava), it was 185 % in 2007 (190 % in Bratislava). Despite this we do not expect a significant decline in the prices of housing in the coming 2 – 5 years, as a result of the continual strong demand, which will only partially be covered by new housing. However, the dynamics of annual price growth should slow significantly. If not, the country could then face a veritable residential real estate bubble.

Real Estate prices (Index 2002=100 in local currency)*



Sources: NBS, UniCredit Bank Slovakia Macroeconomic & Market Analyses Dept.
*) Average price of old and new dwellings

Real Estate prices (EUR per sqm)*



Sources: NBS, UniCredit Bank Slovakia Macroeconomic & Market Analyses Dept.
*) Average price of old and new dwellings

*) Measured in local currency

Turkey
Still a market for few people

Doga Taslardan Ersoy and Yelda Yucel

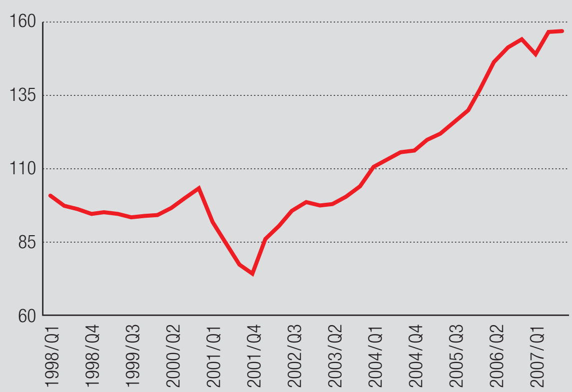
- The real estate and construction sectors have been the fastest growing sectors of the Turkish economy in the post-2001 crisis period.
- Factors such as decreasing interest rates (in parallel with declining inflation), positive sentiment in the economy and strengthening investor confidence (due both to Turkey's EU candidacy since October 2005 and the committed economic reform program monitored by the IMF), all contributed to robust growth. In 2007, global and local political uncertainties seem to have slowed this performance to some extent, although output growth in the construction sector still continues at satisfactory rates. 2008 will remain a challenging year with some downside risks especially in case the global and local political problems grow deeper.
- Despite the very low affordability of housing investment, with a large part of demand still coming from the middle and upper income groups, we expect good economic prospects and fast developing mortgage market, Turkish young population and increasing urban migrations to drive demand in the foreseeable future.

Lack of data is the major obstacle for any in depth analysis on the residential real estate market in Turkey. The Turkish Statistical Institute (TURKSTAT) compiles building statistics on the basis of building permits. Apart from that, information on the construction and residential sector is quite scattered, mostly in the form of private or public reports and issued only occasionally. Moreover, since a significant volume of houses/apartments are unregistered in urban areas flooded with shanty towns, it is not possible to obtain a complete and comparable picture of the real estate sector in Turkey, as well as the existing stock of buildings. While no formal data are available, average quality of the existing stock of building is low and there is widespread shanty housing around metropolitan cities. The majority of the current housing stock would not withstand earthquakes and needs major maintenance and renewal.

The whole construction sector, which is one of the engines of overall economic growth, faced a serious downturn during the 2001 economic crisis with a 17.4 % contraction in output. However, growth rates in the sector bounced back from 2002 onwards and grew by an average of 12.7 % during 2002–2006. As of 2007, output growth in the construction sector moderated compared to the previous five years, totalling only 5 %. Uncertainties in the economy in 2007 stemming from both dual elections (presidential and parliamentary) and concerns regarding the global economy increased risk perception and expectations of high interest rates, which clearly have contained overall construction sector growth.

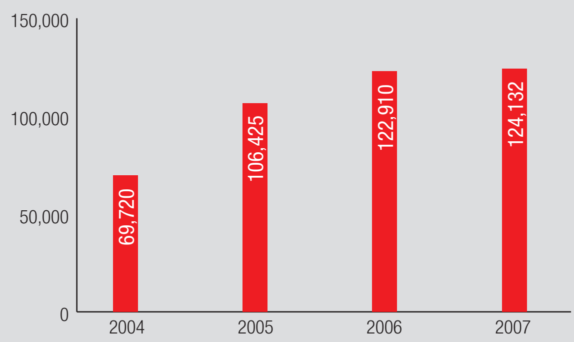
Data on new building permits reflect such trends. **Following a peak in 2005–2006, the 2007 figure marks a strong deceleration in planned construction activities,** with only a 1 % increase being recorded and permits being granted for 124,132,000 sqm. The number of newly constructed buildings reflects an even worse performance with a 7.3 % contraction, down to 105,865 buildings in 2007 from 114,204 a year ago. This might prompt a deceleration in construction activity and a slowdown in real estate prices. Still one should bear in mind that a large quantity of buildings are being developed without formal permits.

Construction Industry Output (1998 / Q1=100)*



Sources: TURKSTAT, Yapi Kredi Bank
*) New series, in real terms, seasonally adjusted

Building permits ('000 sqm)



Source: TURKSTAT

Both private and public sector agents have been heavily involved in the recent construction activity in Turkey. As of 2007 it is estimated that more than 1,000 mass housing projects throughout Turkey, mostly located in big cities like Istanbul, Ankara and İzmir, were carried out. On the public side, governmental agencies such as TOKI (Housing Development Administration), Emlak GYO (Real Estate Investment Company), and subsidiaries of municipalities like KIPTAS, TOBAS, etc. are the major players in construction projects in metropolitan areas.

The recovery in construction activities within metropolitan areas takes three distinct forms. Firstly, older houses in the cities are abolished and multi-storey buildings are built in their place. Secondly, upscale housing complexes with extended social services (security, sports, malls, etc.) are increasingly popular. And finally, suburban style luxury villas are built in line with the demand from the upper classes who want to move away from the disorder in the cities. However, except for mass housing projects which seem very widespread, there are no estimates regarding construction activity for villas or residential high-rises.

The State Planning Organization (SPO) estimates Turkey's new annual housing requirement to be around 600,000 units. Including renewals, the annual housing need increases up to 700,000 units. Turkey's young and increasingly urban population is the source of residential demand in the future. Around 70 % of the 70.6 mn Turkish population are now under 30. The average household size, which is almost double the EU average, could be another factor of residential demand in the coming years, assuming that the size of households will decline over time towards nuclear families. Currently, the rate of home ownership seems high (72 %), but this contracts significantly when speaking about urban areas (64 %). Therefore, urban areas are expected to become the main source of demand for new construction and residential activity.

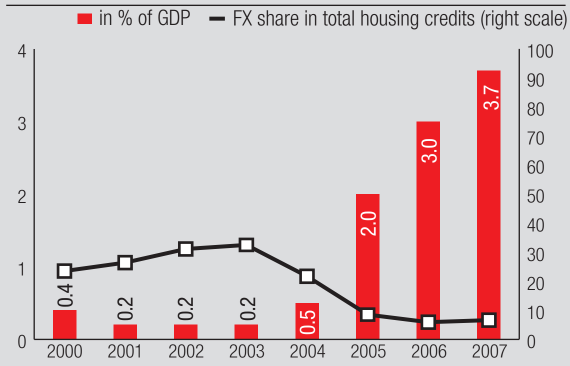
The mortgage market is new (the mortgage law was introduced in February 2007), which means that households only recently started to finance their home acquisitions in this way. The new regulatory framework introduced a variable rate on mortgages (different from current housing loans) and an early repayment penalty on fixed-rate mortgages. Also, this law enabled banks to securitise their mortgage loan stock and envisages a secondary market for issued mortgage securities.

Still, many people traditionally resort to own savings, to support from close family circles, friends and/or cooperatives. However, a negative feature of Turkey's family structure affecting the capacity of residents to purchase and sell is the co-ownership of real property (including commercial properties). Co-ownership results in the splitting of the real estate to many minor shareholders during the inheritance of real estate. This structure, unfortunately, hinders the development of the real estate market in a healthy fashion. If co-owners cannot agree on the use, sale or possession of the property, they may have to go to court to resolve the matter.

The question of affordability of the houses depends on the income growth of households, as well as the increase in the availability of financing, mainly mortgage loans. In the last few years, construction companies mainly targeted A and B+ income-level (first and upper part of the second highest income segment) customers. In the near future, middle and upper-lower income level customers will be focused upon. Generally, households that can afford a housing loan in Turkey (A income-level group) already own their houses or have purchased one by now. In this regard, the demand of the higher income classes is relatively saturated or at least will be soon. On the other hand, it is extremely difficult for the B level income group to finance themselves through loans as interest rates are still high for them. The decline in interest rates in recent years is insufficient to stimulate a satisfactory acceleration of loan demand for this group, as the decline in interest rates has been accompanied by an increase in asset prices as well. Nevertheless, we expect that as the affordability for households increases parallel to the growth in the economy, the size of the market will also increase exponentially. The distribution of incomes in Turkey is very uneven: **the fact that 20 % of households (top segment) control 48 % of total income implies that the potential for growth in residential demand in the future rests on reaching the middle and upper-lower income groups.**

A fast developing mortgage market represents an important factor expected to fuel demand for residential property in the mid-long term, given the low penetration compared to the rest of CEE estimated at 4 % of GDP in 2007. Indeed, outstanding mortgages swelled by 368 % in 2005, followed by 79 % and 39 % in 2006 and 2007 respectively. We expect mortgage loans to increase by around 37 % in 2008. The expected growth in 2008 could be realised mainly in the second half of the year due to the gloomy global economic environment at present and the problems triggered by the subprime mortgage market in the USA. As of September 2007 there are 700,000 mortgages in the system. Mortgages have become the key driver of rising household indebtedness among other consumer loan products and credit cards in particular. Overall household debt increased by around YTL 25 billion in 2007, of which approximately 36 % was generated through mortgages. The share of mortgages in the overall loan portfolio of the banking sector – that was only 1 % in 2003 – rose to 11 % in 2007.

Housing credits (in % of GDP and share of FX in total)



Sources: Central Bank, Yapi Kredi Bank

The competition among banks in terms of mortgage lending in Turkey can be considered aggressive since banks favour mortgages as a value driver – tickets are large, there is ample cross-selling potential and capital requirements are usually low. Moreover, Turkish banks tend to increase their use of swaps (leading to falling costs of risk – provisioning – and higher margins on mortgages) to fund prospering mortgage growth.

We believe that the mortgage market will continue to flourish for two main reasons:

- The continuously high level of housing demand due to population growth, migration, renewal and urban transformation that will further boost property developments and property sales.
- The decline in interest rates in the medium term that will make the financing of property acquisitions through mortgages more and more attractive for a growing share of the population. As mentioned above, only high income households can afford mortgages just now.

Demand from abroad represents another relevant driver behind the recent development in the Turkish residential market.

Turkey started to attract substantial foreign direct investment (FDI) from 2005. Along with the increase in investors' confidence in the Turkish economy, the real estate investments of non-residents also started to flourish in this period. Non-resident purchases of real estate in Turkey amounted to USD 1 billion in 2003, whereas this surged to USD 3 billion in 2006 and 2007, corresponding to 15 % of total FDI.

With over 300 days of sunshine a year, the Mediterranean and Aegean coasts of Turkey are popular tourist destinations for foreigners who demand quality residential property. Northern Europeans in particular love the Aegean coast. Thus foreign property developers are constructing leisure and entertainment complexes along the coasts, in light of the potential for foreign buyers. Joint ventures between international property groups and local developers in such residential projects are common-place.

On the other hand, growth in the Turkish economy has led to greater demand for commercial property space, particularly in the more established market of Istanbul. The Turkish retail market has been performing relatively well with consumer spending at high levels, and increasing confidence reflecting the country's growing financial stability over the last couple of years.

In some parts of Istanbul, Turkey's largest city with a population of 12 million and approximately 3 million homes, real estate prices rose by as much as 150 % to 200 % in 2005. **In the near future, we expect the price increase in the real estate market to be relatively contained, at around 9 % to 12 %.** One of the reasons behind the boom was the increase in home ownership in Turkey as economic growth translated into higher spending power, while declining interest rates and the strong domestic currency prompted people to invest in residential investments rather than other savings instruments (especially bonds and T-Bills). In Turkey, purchasing real estate is a very popular way of investing.

On the other hand, house price inflation has also put pressure on the affordability of houses. The current price per square meter in metropolitan cities is estimated on average at between USD 700 and USD 2,000 for mass housing projects, which is quite expensive given the low average income levels. Real estate prices may further increase since land supply is very tight in urban areas.

Compared to their European counterparts, house prices in Turkey are relatively cheap given that they are still 60 % to 70 % less than the Eastern European average and 80 % to 90 % less than the general European average.

The prospects for the Turkish residential property market remain positive, backed by rising housing needs and increasing access to bank financing. In this context, a fast developing mortgage market might contribute to boosting further demand, with mortgage loans expected to grow by around 35 % – 40 % yoy until 2010 if interest rates continue to fall and solid economic growth is attained. If interest rates gradually fall, considering the strong demand in the years ahead due to high housing needs, we think that in 2015 the mortgage loan / GDP ratio could reach approximately 11 % (from its current 4 %).

We expect this year and partially the next one, however, to remain very challenging in the context of higher political instability following the closure case against the ruling Justice and Development Party (AKP) in Constitutional Court. This combined with rising risks of further deterioration in the global outlook and higher interest rates may depress domestic consumption, leading to postponement in investment and some lowering in the demand for housing. In that context, the financing of residential housing market will also be difficult, with increasing possibility of tightening credit conditions. Although we do not anticipate a sudden halt in the sector, we might observe some slowdown in the rate of growth of construction activity, if global and local political problems grow deeper.

Ukraine

Untapped potential in the medium-high segment, with some cooling on the luxury one.

Tantely Ratovohery

- Given the widespread need for housing upgrades, excess demand remains a key feature of the Ukrainian residential property market. New supply is accelerating, but still lags well behind demand needs.
- Low affordability will continue to limit demand. With building companies having nearly exhausted the possibilities for building expensive housing in central parts of large cities, an increasing part of construction activity will be oriented toward suburban and regional areas.
- Real estate prices should continue to increase, however, with income and credit growth likely to slow over the next couple of years some cooling is on the cards. We expect some moderation in the pattern of real estate price growth this year (especially in the capital city areas), with an anticipated increase of around 15 to 20 percent at the country level compared to roughly 30 percent registered in 2007.

Structural indicators on residential property market

	Ukraine 1)	Kiev 1)	CEE 2)	EU-15 3)
Population (in mn)	46.9	2.7	379.5 4)	389.6
Per capita GDP (EUR)	1,808	5,087	5,226 4)	27,916
Dwelling stock per '000 inhabitants	408	–	413 6)	472
Average number of persons per dwelling	2.4	–	2.7	–
Average number of rooms per dwelling	2.3 5)	3.0 5)	2.8 6)	4.2
Average usable area per dwelling (sqm)	55 5)	56 5)	63.2	87.0

Sources: State Statistics Committee, Kiev Statistics Committee, Ukrainian Association of Real Estates Specialists
Notes: 1) 2006; 2) CEE: BG, CZ, EST, HR, HU, LT, LV, PL, RO, RUS, SK, UKR; 3) EU: AT, DK, FI, FR, IT, NL and ES (except for population and per capita GDP); 4) Including KZ and TK; 5) 2005; 6) Excluding RUS.

In 2006 there were 408 dwellings per thousand inhabitants in Ukraine, in line with the CEE regional average (413), but still below the 472 average of the EU. The housing stock in Ukraine reached 19.1 million units at the end of 2006, of which around 5 % are located in Kiev [1]. Home ownership is relatively high following the privatisation process.

For the bulk of the residential property stock, quality still lags behind western standards, with Ukrainian flats having almost half of the rooms and only 55 sqm of usable area. More than 42.1 % of Ukrainian households live today under the officially approved minimal sanitary level of 13.6 sqm per person. According to the Ministry of Housing and Communal Services around one third of buildings in Ukraine need overhauling and nearly 4 % of the housing stock is set for demolition. Overall, this implies that up to 50 % of the total stock needs to be renovated.

After declining through 2000, construction activities have recovered since 2001 in line with the economic stabilisation. The growth rate of commissioned sqm increased from 6.8 % in 2001 to 18.7 % in 2007. Last year, 10.2 million sqm of residential housing were commissioned or 221 sqm per thousand inhabitants, up from 8.6 million sqm in 2006. About 95,000 apartments were built in 2007, which means on average 2 units per thousand inhabitants (2.5 in urban areas and 1.1 in rural areas). Kiev accounts for 30 % of new construction activity.

1) Kiev has a population of 2.7 million inhabitants.

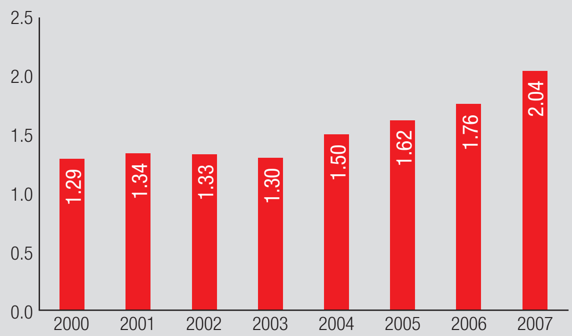
Acceleration in construction activity was fuelled by the huge potential demand and was made possible by the increase in the number of market players (construction companies and developers) attracted by high returns and the easier availability of credit since 2003. So far the supply side of the market has been dominated by local players, better able to manage the relationship with local authorities and survive the bureaucratic trials. As larger residential projects are now coming through, international players (Russians in particular) are gradually entering the market, bringing additional capital.

Market developments are affected by institutional problems related to land ownership, permits, etc. The cost of construction services in the housing sector has risen on average by 23 % each year since 2004, a rate that is well above the rate of inflation, but below the growth rate of nominal wages. Lack of transparency in the land market and opaque procedures for construction licences have contributed to a rise in construction costs and in the level of risk in the industry. Currently, the land market in Ukraine remains very murky and transactions are generally conducted in a very nontransparent way, with the real effective price of the deal and the deal itself often hidden. Building companies have nearly exhausted the possibilities for building expensive housing in central parts of large cities. A revival of construction in suburban areas, or peripheral parts of big cities and regional centres is emerging.

As the income of the population grows, the search for higher standards of living is the most important driver of housing demand in Ukraine. According to local authorities, nearly 80 % of all real estate transactions as of mid-2007 were driven by the need for quality improvements and to upgrade housing stock, with almost 58 % of households still unsatisfied with their living conditions.

Still, despite the strong increase in incomes registered so far, the **low affordability of housing investment remains a key constraint.** In 2002 – 2007, wages increased by almost 30 % on average per year, to reach EUR 195 at the end of last year, but the ratio between prices and monthly wages deteriorated from around 4.5 in 2004 to 4.8 at the end of 2007. The relevance of constraints arising from affordability issues related to demand for housing is also clear from our own survey, run on a sample of 1,000 individuals [2)].

Dwelling units completed ('000 inhabitants)



Sources: State Statistics Committee

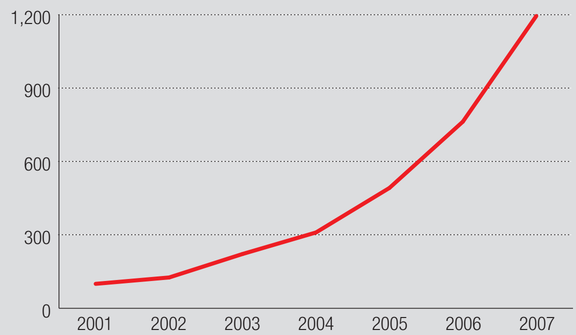
Notwithstanding the dissatisfaction with housing conditions, Ukrainian households are the least likely to invest in house renovation/purchases among their CEE peers, with only slightly more than 10 % of the people interviewed willing to buy a new dwelling in the next 10 years or later. Among those intending to buy, nearly 80 % plan to finance the purchase from savings and/or from selling old real estate property. Indeed, the **demand for residential property still mostly comes from the middle and upper income classes**.

Under such conditions, government plans to support lower income class investments in housing are likely to be the key to developing demand in the segment. The government has allocated up to 0.5 % of GDP starting from 2009. Currently nearly 1.3 million households are on the state waiting list for social housing, whereas the government is able to provide housing for no more than 20,000 households each year. The government has stated its intention to ease the burden of murky, bureaucratic, corrupt and speculative expenses on house prices. Furthermore it intends to strengthen the role of the State Mortgage Agency and the State Fund for Youth Housing, and to implement the state program for affordable, low-cost housing for low-income citizens.

2) Survey based on 1,000 interviews of individuals aged 15 and older living in the largest cities of the country. All interviews were conducted as personal face-to-face interviews by Bank Austria's long-term partner agencies (GfK, RmPlus, TNS)

In terms of medium-income classes, the strong expansion in demand remains conditional on even faster growth in the mortgage industry [3)]. In 2007 mortgage lending still accounted for 6 % of GDP, up from less than 2 % in 2005, while only 10 % to 15 % of new housing purchases were completed with mortgage financing. Around 60 % of those were concentrated in the central and four eastern regions. The stabilisation of the economy allowed banks to extend loans of up to 65 – 80 % of apartment costs (mortgaged property) and terms of 5 – 15 years. The current mortgage market is highly concentrated with the first five banks accounting for over 60 % of the market at the end of last year. Nearly 90 % of mortgage loans are disbursed in foreign currency.

Real estate prices in Kiev (Index 2001 = 100, in local currency)*



Sources: Ukraine Association of Real Estates Specialists (Realtors), Market Analysis Committee
*) Figures refer to average house (offer) prices in the secondary market

Since 2003 – 2004, a new investment-related/speculative segment of demand has emerged, with investors' interest focusing both on expensive premium class apartments and inexpensive apartments in mass residential districts, mostly in Kiev. Individuals with access to the credit market were able to buy an apartment, rent it and with the rent fully pay the cost of interest and capital. For premium apartments the rental rates enabled not only a breakeven on investments in a period of 5 – 6 years, but also extra gains. Further speculation was related to the construction phase, with people who were able to obtain a mortgage loan acquiring apartments in the primary market, to then sell in the secondary market after the residential house was up and running. Under such conditions, **foreign demand is playing an increasing role in the development of the Ukrainian residential property market**. Ukraine, and Kiev in particular, represent an excellent investment opportunity for foreign property investors mainly due to its size, strategic location and enormous potential for development. Massive funds have thus been allocated to take advantage of development and acquisition opportunities on the property market, with large speculation fuelling the recent increase in house prices. According to some estimates, more

3) One of the main impediments to development in the mortgage market is still connected to the fact that over 75 % of real estate transactions take place in the secondary market with banks highly concerned about the lack of transparency surrounding each deal. Moreover, according to a recent analysis of the EBRD, lenders are concerned by the presence of a law designed to protect families with children, which makes eviction subject to approval from the Ministry of Youth Affairs. The uncertainty connected to the receipt of such administrative approval and the length involved represents a deterrent to lending to young families.

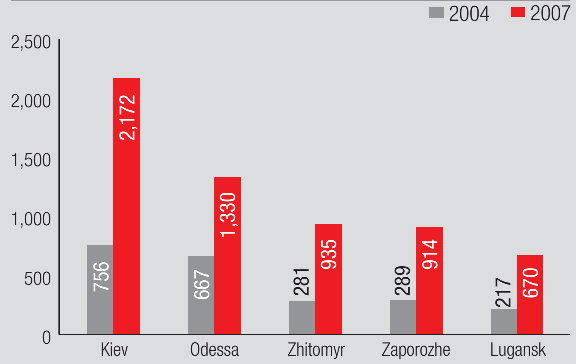
than 30 % of completed dwellings are currently acquired by market intermediaries for subsequent resale.

After a period of steadily rising real estate prices since 2004, last year brought some stabilisation, especially in the Kiev market on the back of lowering demand, particularly in relation to speculation. Prices on the secondary market in Kiev reached almost USD 3,000 per sqm, swelling more than three-fold relative to 2004 (compared to nominal GDP growth in USD terms of 2.2). Some other cities, such as Zhitomyr, Zaporozhe and Lugansk show an even higher figure, but with a lower absolute price level (between USD 900 and 1,300 per sqm).

Prospects for the Ukrainian residential property market remain positive in the medium term with foreign developers expected to play an increasing role. Real estate prices should continue to increase, driven by high demand, insufficient construction, the expected rise in the cost of communal services, energy resources and building materials. However, with income and credit growth likely to slow over the next couple of years, some cooling is on the cards. We expect a moderation in the pattern of real estate price growth this year (especially in the capital city areas), with an expected increase by around 15 to 20 percent at country level compared to roughly 30 percent registered in 2007.

In the near future, development on the residential property market might also be influenced by the expected introduction of a new tax on real estate ownership from January 2009. Notwithstanding the current technical, political and procedural (judicial) obstacles to its introduction, the adoption of this new tax would impact in at least two ways on market and house price development. Firstly, market intermediaries will have the incentive to sell their housing stock as soon as possible before the implementation of the tax, to avoid any impact on profits. Secondly, the implementation of the tax itself might contribute to dragging house prices up as sellers will try to lay the burden on the buyers.

Real estate prices (EUR per sqm)*



Sources: 'Kontrakty' based on Ukraine Association of Real Estates Specialists (Realtors), Market Analysis Committee
*) Figures refer to average house (offer) prices in the secondary market

Low affordability will also continue to limit demand from lower-income classes. With building companies having nearly exhausted the possibilities for building expensive housing in central parts of large cities, an increasing part of construction activity will be oriented toward suburban and regional areas. Meanwhile, given the repricing of risk in international capital markets there could be some cooling off in speculative investments.

Even in the context of limited access to foreign financing and low affordability, the mortgage market is expected to continue delivering strong growth rates in the mid-term, averaging 48 % on a yearly basis in the 2008 – 2010 period.

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