

# Residential Market Development in 2009





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# Foreword

We are pleased to provide you with the findings of the second joint study conducted by Deloitte and Hyposervis focused on residential development.

As with the late 2008 study, in this year's study we focused on the drivers affecting residential market development in the Czech Republic. We also mapped the developers' and financial institutions' responses and attitudes on residential market development in light of the subsiding economic crisis and the forecasts of further development.

The study showed more optimistic results in general as the decline in new residential development in 2009 appeared less severe than expected. Most development companies adapted to new market conditions and no mass failures of developers occurred. The 2008 year-end panic has disappeared and the market has been stabilising slowly. The mortgage market slump, although sharp, was in the end not as dramatic as expected. The number of started apartments was higher than expected and the number of apartments being completed even slightly increased.

The survey also showed that the additional drop in residential property prices was not as sharp as anticipated, with the market settling at a new price level. A significant proportion of respondents stated that in the current situation there are good opportunities for buying a new apartment. In two years time, developers expect a gradual increase in apartment prices and in the number of apartment units sold, which will mean a return to the pre-crisis level. According to estimates from financial institutions, both the number and volume of granted mortgages will amount to approximately 90% of the 2008 figures. The respondents assume unanimously that the market will more or less return to the sustainable level of 2006 after the crisis has faded away. The survey confirmed unambiguously that financial institutions and developers, as well as the qualified public, perceived development in the forthcoming period more optimistically than in 2008.

In 2009, the market experienced an anomaly: the sales of completed apartments, or apartments close to completion, exceeded the number of apartments under preparation. The sales of new projects were fairly limited, as was the actual start of construction work on such projects. Thus, from the second half of 2008, the continuity of residential project preparation and construction initiated between 2000 and 2002 was interrupted temporarily for at least two years. Given that residential development is a long-term process and that two or three years can elapse between when a residential

project is started, completed, and delivered to a new owner, a gradual balancing of offer and demand, as well as a substantial drop in offered apartments before completion or completed apartments, can be expected. Moreover, a repeated gradual increase in the sales of apartments in the stage of preparation and realisation can also be assumed.

For the upcoming period, the main topic of expert's discussions will be, in our opinion, the formulation of a long-term sustainable concept of housing development in the Czech Republic, focused on newly re-starting the residential development, as it plays a significant role primarily as a:

- Socially-stabilising factor of the Czech society; and
- Stimulating factor of the economy, as residential development and building construction have a significant multiplication effect on the whole economy and employment.

Selected stimulation measures that may have a positive impact on demand for residential property are highlighted at the end of this study.

In the interests of continuity, this year's study was prepared by the already proven joint team of experts from Deloitte and Hyposervis specialising in mortgage and real-estate market development. The goal of the study was to offer independent, objective, and comprehensive information on the current status of the business environment in residential development and on the expected future developments:

- Developers will gain information on the conditions under which banks will grant project financing and mortgage loans;
- Financial institutions will gain perspective on the current situation and information on developer and end client expectations; and
- Real-estate agents and construction companies will gain an overview of the trends and key changes that substantially affect supply and demand in the residential development market.

We would like to thank all the companies that participated in the survey and verification of its results for their help and cooperation.

Deloitte Advisory

Hyposervis

March 2010

# 1 Macroeconomic Development

## 1.1 Economic Development in Europe

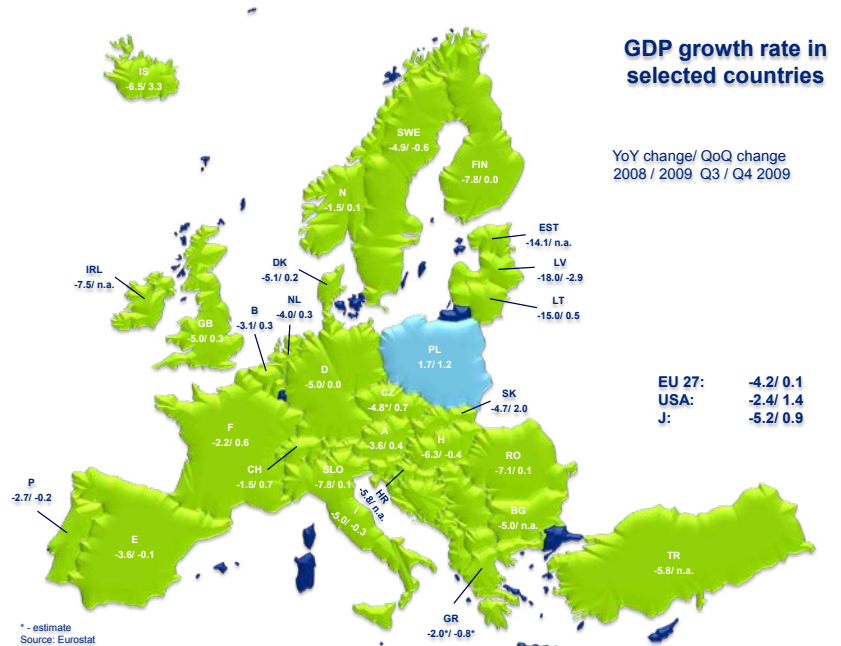
The current data on the development of almost all crisis-stricken economies show the decline reached its lowest point as early as the 1st quarter of 2009. From the second half of 2009, the situation in stock markets gradually improved and industrial production and exports were recovering. The remaining problem is, however, the sustainability of economic development:

- Data on the performance of individual economies are still fluctuating, indicating a slowly improving economic performance on average.
- The volume of fiscal subsidies, which support economic growth to some degree, appears obviously unsustainable. As the subsidies cannot keep pace with demand in a relatively short-term horizon, they have to be stopped and the governments will have to adopt cost-cutting measures, which increases the risk of maintaining economic recovery.

In 2009, the economies in EU countries were affected primarily by weak economies worldwide, weakening confidence, sharp decline in exports, and tight terms of financing. In 2009, the actual GDP in the 27 countries of the European Union (EU) and the 12 eurozone countries (EZ) recorded an average year-on-year drop of 4.2% and 4.1%, respectively. After stabilising in the first three quarters of 2009, the GDP growth rate in the 4th quarter achieved positive values in nearly each country monitored.

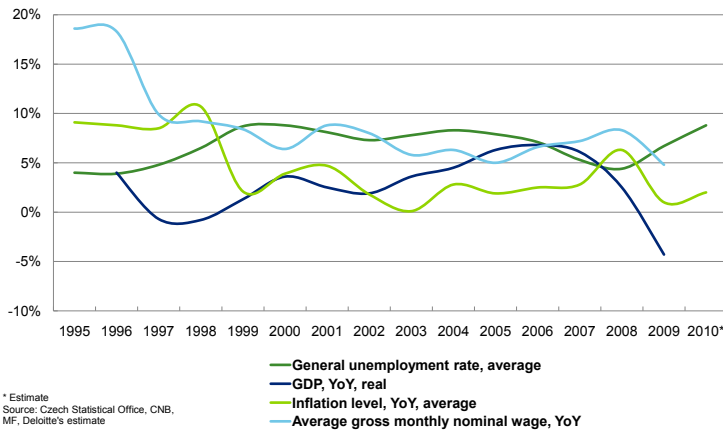
The sharp decline in 2009 affected most of the European economies heavily dependent on exports of industrial products. The year-on-year drop in industrial production in the EZ was most apparent in April and May 2009. In November 2009, the unemployment level in the EZ amounted to 10%, which is the same as in the USA. Inflation reached 0.9% as of the year-end.

- In 2009, the German economy reported a 5% decline despite the government measures (tax relief, gradual increase in export, and rising consumption).
- Slovakia recorded a high proportion of exports, mainly the export of cars. The drop in foreign investments in the 1st quarter of 2009 resulted in a sharp quarter-on-quarter decline in GDP (- 8.6%). But from the 2nd quarter, GDP grew and the overall 2009 slump amounted to 4.7%. As a result of Slovakia's economic situation, the unemployment rate increased to over 12%, which is the highest value in the last 4 years.



- Unlike apparently every other EU country, Poland was able to avoid the recession. Poland's moderate growth in the first three quarters of 2009 was mainly driven by household consumption and the average year-on-year growth of actual GDP amounted to 1.7%. The Polish economy was affected positively by a weakened currency, a huge financial stimulus package, and its enterprises' and households' relatively low level of indebtedness.
- In the first two quarters of 2009, the US economy recorded a decline between 1.6% and 0.2%, and the 3rd quarter showed quarter-on-quarter growth of 0.6%. The overall year-on-year decline of the US economy amounted to 2.4% in 2009. As of the 2009 year-end, the unemployment rate was 10%. The cooling of the economy was slowed down by increased consumption, which was primarily driven by the government's stimulus package and tax cuts. Some improvement, although unimpressive, was apparent in the US real estate market at the end of 2009.

## Development and Forecast of Selected Macroeconomic Values



### 1.2 Economic Development in the Czech Republic

The Czech economy was largely affected by the financial crisis in 2009. The Czech economy itself was not to blame, however, as the dramatic deterioration of the global economy largely contributed to the economic decline. In addition, this external blow apparently hit the Czech economy after the economic cycle had reached its peak and was already in decline.

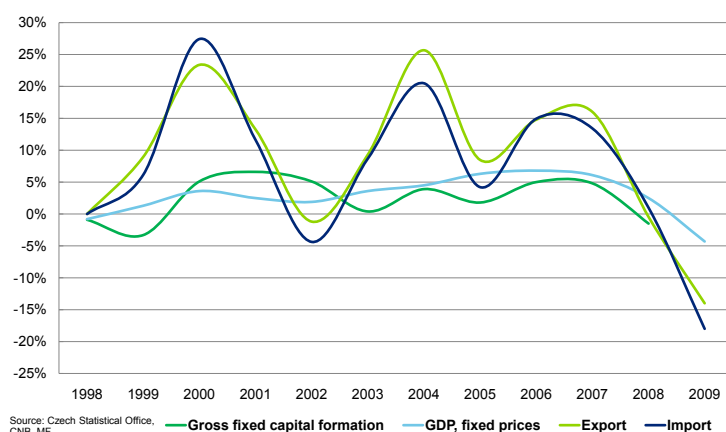
Other negative factors included the marked appreciation of the Czech crown in the first half of 2008, which impacted enterprise performance in 2009 (lack of protection against lower sales), and the high level of economic sensitivity to less demand for some commodities. One positive factor, however, was a stable financial sector and its relatively low exposure to crisis-stricken assets.

Despite the relatively high level of financial and macroeconomic stability in the beginning of 2009 a relatively marked slump in the Czech economy was recorded, which was mainly caused by low demand for exports. The slump soon subsided, however, thanks to sales of new cars in a number of European markets. In other sectors, the curve of declining activities was not as sharp and some activities likely did not hit bottom in 2009. The labour market reached its lowest level at the end of 2009 and the results from the beginning of 2010 do not raise any hopes for quick improvement.

As a response to the economic slump, the Czech Republic took anti-crisis measures, but only in a limited number and volume and mostly at the macroeconomic level. Awareness of a noticeable worsening of the financial position and related jeopardy of state finances triggered the efforts to reduce the nation's state finance deficits.

The weak Czech economy corresponded with the development of financial markets and the banking sector: effects of the crisis resemble those in neighbouring countries although the Czech financial sector was struck by the crisis to a relatively small degree. The financial market was not sufficiently liquid and risk margins increased. Higher awareness of risk made more clients not creditworthy even though the banks were sufficiently liquid in general and their priority was to provide new loans to increase profit. The stricter approach to granting loans and the changed economic climate led to a decline in the volume of loans provided to enterprises - the volume of new loans granted to enterprises from January to November 2009 was 7.2% lower than in the preceding year. The crisis's impact on households and their expectations also triggered a decline in the mortgage market - a 36.6% slump compared to 2008 and an almost 50% slump compared to the record year 2007.

### Development of Selected Macroeconomic Indicators in the Czech Republic



#### Czech Republic – Considerable Uncertainties

Although development in the Czech Republic differed little from that in the rest of the world, preliminary data from the end of 2009 showed a certain surprise as the economy did not slow down the pace of the year-on-year slump, compared to most neighbouring countries. Unless the final data shows otherwise, recovery in our country may be slower than in the neighbouring countries.

One of the key factors of the Czech economy's return to growth will be its competitive position and demand for investments. While the competitive position of the Czech Republic is not expected to change too much in the short term as it is dependent on more factors, eg fiscal reform, demand for investments represents a risk and it may not change for several years. The low level of demand resulted in superfluous supplies that will be used gradually once demand recovers. As the Czech economy was investment-intensive, this scenario only represents a real threat in terms of slow economic growth in the following period.

The Czech economy's return to growth depends on the pace of the global economy's recovery, and mainly the pace of the EU economy's recovery. The highest uncertainty in this area is the unconvincing results of recovery events to-date (even though recovery rather than decline or stagnation was indicated), together with the need to abandon generous fiscal stimulus relatively quickly (in numerous countries) and to switch to a gradual consolidation of public funds. Even under

relatively favourable prospects of a gradual recovery of the global economy (which is the basic and most likely scenario), however, there are reasons to believe our economy to experience lower growth than expected. Such reasons lie in macro policies; others may be structural or may concern how some markets function:

- Method and scope of the fiscal consolidation of public funds; the major risk may be that the procedure will be inefficient, which may result in the loss of economic credibility, financial market fluctuations and subsequent forced sub-optimal reforms.
- Mix of reform measures, which may be politically attractive but unfavourable for growth, will weaken economic competitiveness, and increase the risks of slower growth or a higher unemployment rate.
- Lower demand in investments may last for several years, slowing down the growth in some markets.
- The potential of some markets may have been exhausted before the crisis (true perhaps for residential development to some extent).

In all cases, it is necessary to note that the overall gradual recovery of the economy does not mean a return to growth for all sectors, and particularly not a return to pre-crisis growth.

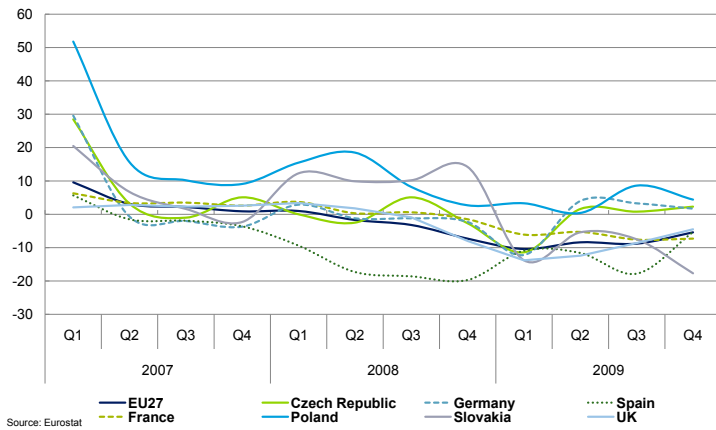
### 1.3 Construction Sector Development

#### Construction Sector in Europe – Strong Impact on Decline in Residential Development

The sharp fall in the European construction industry continued in 2009. Although some markets started to recover at the end of year, in many countries (eg Spain) the recovery is more of a “statistics trap” as the figures are compared on a year-on-year basis with the periods already seriously hit by the recession. In each country with the common indicators (eg fast growth of the economy including purchasing power, high proportion of residential development in the construction industry, inflow of EU funds), the decline in construction is driven by a sharp decline in building construction, where residential construction plays a significant role.

#### Construction Production in Selected EU Countries

Percentage Change, in Quarters (t/t-4)



# 2 Residential Markets in Europe

## 2.1 Development in Selected Residential Markets

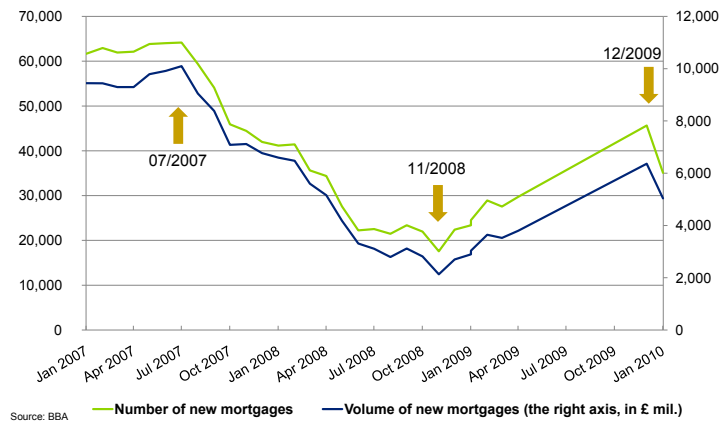
### Great Britain

The economic recession in Great Britain curbed the enthusiasm of people interested in owning their own home. Property prices returned to a reasonable level, but under different loan terms and conditions. During past decades, residential property prices grew on average by approximately 36% per decade (prices net of inflation), and thus an apartment or house represented one of the most stable investments.

Due to the current uncertainty in the markets and buyers' concern about their ability to repay mortgage loans, the proportion of residential property in private ownership is expected to go down while the proportion of rental housing is expected to increase. Whereas the rate of return (ROR) on residential property is the lowest for family houses, where it ranges at the level of 3.75% on average, the highest ROR is for one-room flats, where it exceeds 5.5% per year on average. The ROR also varies by region, eg in London it ranges closely above 5% per year.

The British mortgage market reached its peak in November 2006, and since then it more or less declined until November 2008, when it hit bottom, dropping to 77.8% in terms of the number of new mortgage loans and 82.4% in terms of mortgage loan volume, compared to its peak. Since December, the market resumed growth and this trend continued month-on-month until December 2009. In that period, the volume of new housing mortgages on the British mortgage market almost tripled and increased 2.6 times in terms of the number of new housing mortgages. Thus, the market gained 57.7% of its peak in November 2006 in terms of the number of new housing mortgages and 52.6% in the volume thereof. January 2010, however, saw this positive development lose strength, when the market recorded a month-on-month decline of 23.1% in the number of new housing mortgages and of 20.9% in the volume thereof. The months to come will show whether it was a one-time deviation in the market owing to expired tax reliefs for property owners or whether it represents a W-shaped recession in the residential market. The 2010 estimate indicates further decline in residential property prices all over Great Britain, ie between 2-7%, subject to the property size and region.

### Development of the Number and Volume of New Mortgages in the UK



### Poland

Poland is the only EU country that was not seriously hit by the economic recession. Nevertheless, slower economic growth in 2009 reduced the prices, reduced the offer of residential property, and reduced the number of concluded deals (in the first quarter of 2009, the sales of residential property recorded a month-on-month decline of approximately 50%). The economic cooling showed the most in the number of started apartments, which recorded a 30% month-on-month decline. The decreasing interest in purchasing residential property and limited access to bank financing in 2009 virtually stopped new housing development in Warsaw and surrounding areas. The number of completed apartments dropped and in 2009 it approached its long-term average of the previous periods. The current economic situation is playing more into the hands of large developer companies that are able to provide for project financing. The positive factor in the Polish residential property market is that the excess of offer-over-demand did not reach significant values in 2009.

In the first three quarters of 2009, the prices of new residential property in Poland declined; the first quarter of 2009 even recorded a quarter-on-quarter slump of as much as 12%. The situation in the fourth quarter changed, however, and the prices slightly increased. The current rates of mortgage loans in Poland are approximately 8.4% per year.

### Hungary

The mortgage loan interest rate in Hungary ranged between 12-13%, which was the highest in Europe. Yet, the sales of residential property dropped by approximately 10% only in 2009. The highly limited access of developers to bank loans stopped or postponed numerous projects in 2009. The Hungarian residential market is likely to face a VAT increase and real estate tax increase as well. Another significant cooling factor of the Hungarian residential market may be the shock that a large part of the population will face as a result of the dramatically rising number of households mortgaged in foreign currencies. At the end of 2009, Budapest recorded a year-on-year decline in real estate prices of approximately 20%.

### Slovakia

Despite advantageous mortgage interest rates, starting at 4.5% per year in 2009, the sales and prices of apartments were on the decline. The Slovak residential market experienced growth later than the Czech market but it was more dynamic and, consequently, its current decline is more striking than the decline in the Czech Republic. Unlike in previous periods Slovak buyers, like Czech buyers, were interested mainly in completed or almost completed apartments, and negotiated to a greater degree the final price of residential property. Developers still faced problems with acquiring loans in 2009, as financial institutions insisted on restrictions and required a large volume of pre-sales and own equity. The economic cooling also resulted in a suspension or postponement of a number of residential projects. The average 2009 price of residential property in Slovakia dropped 11.1% year-on-year to EUR 1,344 m<sup>2</sup>.

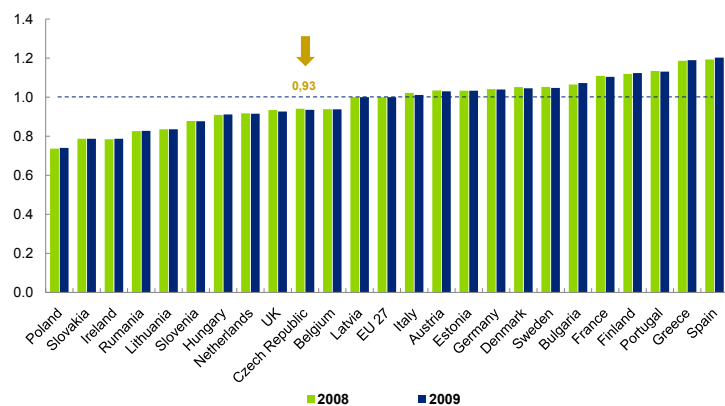
## 2.2 Available Housing

The international benchmark of the available housing indicates that the Czech Republic has achieved 93% of the EU average in the number of apartments in relation to the number of inhabitants. Consequently, new development will be dependent, first of all, on the population increases and changes in the number of older apartments.

According to data from the Czech Statistical Office and subsequent recalculation, the total number of apartments in the Czech Republic was 4,622,000, which works out to 441 apartments per 1,000 inhabitants. The European benchmark data indicate 471 apartments per 1,000 inhabitants. In countries comparable to the Czech Republic, such as Belgium or the Netherlands, in 2009 the number of apartments equalled 442 and 431 apartments per 1,000 inhabitants, respectively. Generally speaking, the former Eastern block countries have not reached the European average. The data on the overall number of apartments in individual EU countries differ because the methodology used by institutions that prepare statistics at the European level or the national level is not unified.

### Available Housing

*Index of the number of apartments per 1,000 inhabitants*  
Average EU 27 = 1



Source: National statistical offices/ Euromonitor International, Deloitte's calculations

### 2.3 Ownership Structure

Compared to the rest of the EU, the Czech Republic holds a relatively low proportion of rental housing. For example, the number of households in rental apartments per 1,000 inhabitants is only 37% of the level in Germany or 64% of that in Austria.

The proportion of privately owned apartments increased over the last 15 years mainly through the privatisation of municipal apartments, transfer of cooperative ownership to private ownership, and in particular thanks to the strategy of developers that primarily built projects intended for direct sale. Residential development projects intended for rental were only implemented periodically in the preceding period.

One important specific characteristic of the Czech residential market is “cooperative construction” and “cooperative residence/housing”, which do not exist as extensively in other EU countries. In the Czech Republic almost 112 households per 1,000 inhabitants live in a cooperative apartment. Although declining as a result of apartment sales to individual members of housing cooperatives, this type of residence represents approximately one-seventh of all inhabited apartments in the Czech Republic.

### 2.4 Consumer Housing Expenditures

The total amount of consumer housing expenditures in the Czech Republic in 2009 was 51% of the European Union average, and the Czech Republic, therefore, is one European country with relatively low consumer housing expenditures, particularly in comparison with Western Europe.

The average annual consumer housing expenditure in the EU in 2009 amounted to EUR 3,100 per inhabitant. The lowest housing expenditures of all European countries can be seen over the long term in Bulgaria and Lithuania, where the percentage values reached 18% and 23% of the pan-European average in 2009, respectively. A comparison of the average values of Eastern and Western Europe shows that Eastern Europe significantly lags behind the West as the total housing expenditures there amounted to merely 18% of the pan-European average. Western Europe, on the other hand, exceeded this average by 6% (the same as in 2008).

### Available Housing by Ownership

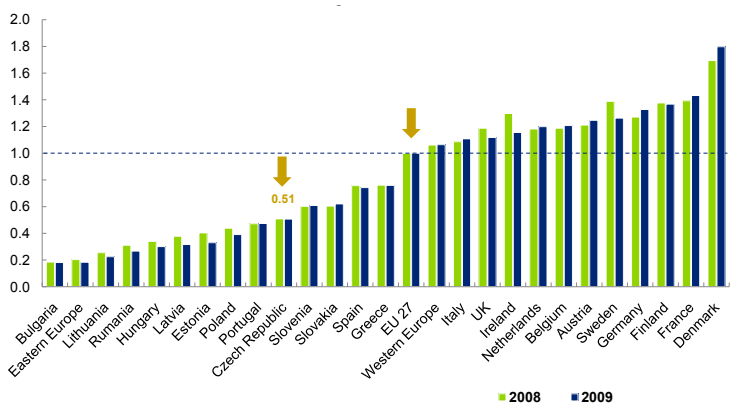
The number of households per 1,000 inhabitants in 2009



Source: National statistical offices/ Euromonitor International

### Total Consumer Housing Expenditures

Index of the total annual housing expenditures per 1,000 inhabitants Average in EU 27 = 1



Source: National statistical offices/ Euromonitor International, Deloitte's calculations

When comparing total annual consumer spending on repairs and maintenance per 1,000 inhabitants, the Czech Republic occupies one of the lowest places of all the countries compared. The amount of expenses for repairs and maintenance in the Czech Republic in 2009 was only 16% of the pan-European average (EUR 26.8 per inhabitant).

Compared internationally, the lowest total consumer spending on repairs and maintenance of apartments was in Finland (EUR 7.1 per inhabitant), which represents 4% of the pan-European average. The highest consumer spending on repairs and maintenance of apartments per 1,000 inhabitants in 2009 was in Great Britain (more than twice the all-European average) and in Poland (66% above the European average). The comparison of the average values of Eastern and Western Europe clearly shows that Eastern Europe lagged behind the West by 45% in 2009.

According to the estimate, most apartments in the current Czech residential market are 25-45 years old. One can therefore expect that in the upcoming years the market will increasingly see more renovation and revitalisation projects (particularly in apartments of concrete panel buildings), and thus higher investments in repairs and maintenance of the number of apartments.

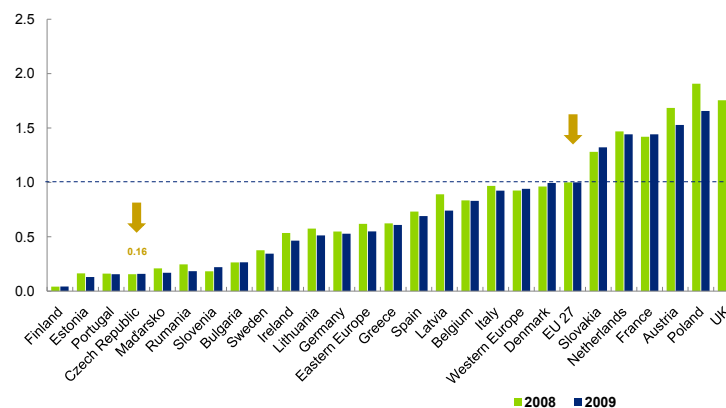
### 2.5 Intensity of Residential Development in Europe

Residential development in the Czech Republic in 2009 reached 85% of the EU average in terms of the residential development intensity indicator, ie the number of completed apartments per 1,000 inhabitants.

In the comparison of European countries, the Czech Republic overtook, for example, Germany and the UK in the indicator of residential development in 2009. The number of completed apartments in the Czech Republic was 3.67, in Germany 1.9 and in the UK 2.5 per 1,000 inhabitants. As in 2008, Ireland reported the highest number of completed apartments in 2009. In Western Europe, 4.3 apartments per 1,000 inhabitants were completed on average.

### Total Consumer Expenditures on Apartment Repairs and Maintenance

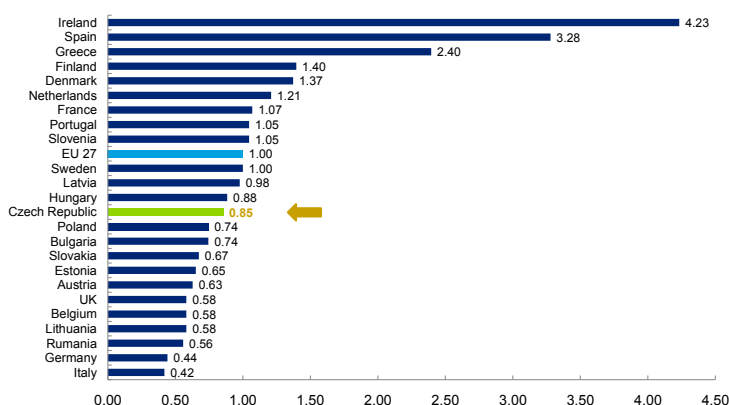
Index of the total annual expenditures per 1,000 inhabitants  
Average in EU 27 = 1



Source: National statistical offices/ Euromonitor International, Deloitte's calculations

### Housing Construction Intensity

Index of the number of completed apartments per 1,000 inhabitants in 2009  
Average in EU 27 = 1



Source: National statistical offices/ Euromonitor International, Deloitte's calculations

## 2.6 International Comparison of New Residential Property Prices

The price per square meter of new residential property in Prague reached EUR 2,200 in 2009, which represents the highest value in the benchmark of Central European countries. During the monitored period, the situation in the Prague residential market was strongly affected by the changes in bank financing. The sales of residential property markedly dropped and, consequently, the offer of new apartments exceeded demand in 2009. Construction of new residential projects was limited due to developers' problems with financing their projects (high level of pre-sales and a markedly higher share of own equity was required, as compared to preceding years).

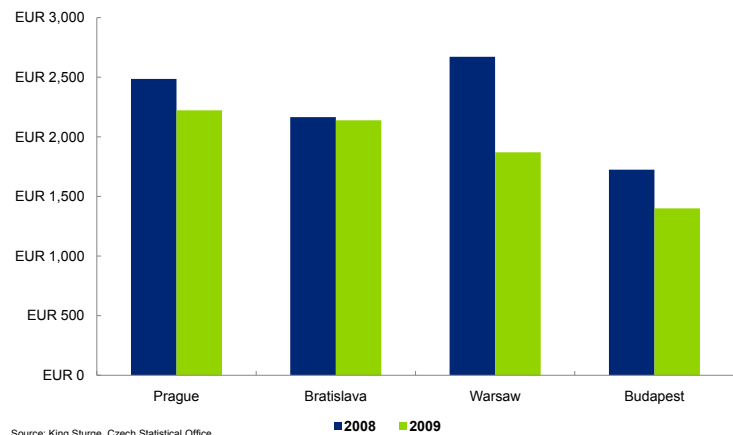
In Bratislava, the average price of new residential property reached EUR 2,100/m<sup>2</sup> in 2009. The offering prices of new apartments in the Slovak capital, however, stagnated at the end of 2009. The selling prices in Bratislava were as much as 10% lower than the offering prices, primarily due to discounts.

The 2009 price per square meter in a new Warsaw apartment reached EUR 1,900 (EUR 2,600 in 2008, ie decline of approximately 30%). The difference was due to a 10-15% year-on-year decline in real estate prices and new Polish currency rate. The year-on-year sales of residential property fell by almost 50% at the end of 2009. The declining interest in the purchase of residential property and limited bank financing and different expectations of developers and potential buyers with regard to prices reduced the number of new housing developments on the Polish market.

Of the cities benchmarked, Budapest recorded the lowest average prices of new residential property, ie EUR 1,400/square meter. Real estate prices in Budapest also saw a year-on-year decline of almost 20%.

All benchmarked cities recorded a price decline in 2009 (between 5-20%), as well as a decline in the sales of residential property (between 10-50%), increase in mortgage loan interest rates (between 5-13%), and a distinctly smaller offer of residential housing.

**Prices of New Residential Real Estate in Selected European Cities**  
Price for m<sup>2</sup>



# 3 Factors Affecting Residential Construction in the Czech Republic

## 3.1 Real Estate Market Development in the Czech Republic

The Czech real estate market recorded the most severe slump so far in 2009, when the real estate investments recorded a year-on-year drop of almost 80% and the commercial speculative construction of new industrial buildings almost stopped or, as in the case of office, retail and residential buildings, was markedly reduced. The rental prices of commercial property dropped by 5-10%, depending on the property location and quality. Buyers were less interested in residential property.

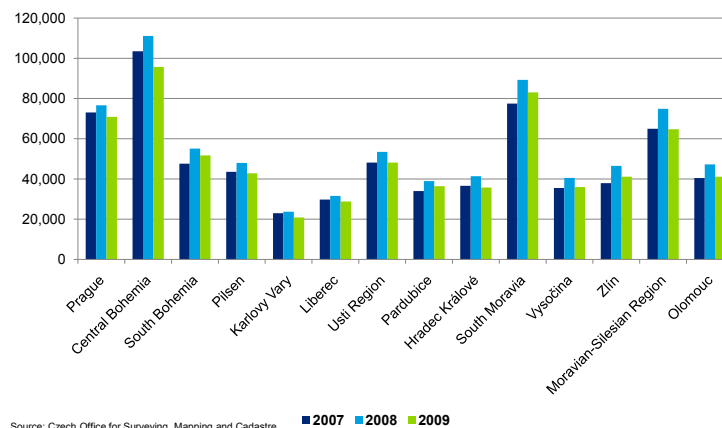
The number of records in the Real Estate Registry dropped year-on-year by almost 10% to 696,962 in 2009. The majority of the records made in the RE Registry in 2009 concerned ownership rights. All in all, there were 453,298 transfers of ownership rights registered in 2009, which represents a 12% year-on-year decline. This fact shows that real estate activity fell by 12% in 2009, compared to 2008. The number of records concerning apartments fell 8% to 169,618, and the records on land fell 15% to 573,645. From a regional perspective, the highest number of records was registered in the Central Bohemian Region in 2009.

## 3.2 Construction Sector Development in the Czech Republic

The construction sector stands as one of the most significant sectors of the Czech economy, having a high multiplication effect on the entire economy and employment rate. It employs approximately 10% of the people working in the public sector (approximately 460,000 people). The volume of construction production exceeds half a billion crowns, which creates 7-8% of GDP and is one of the most significant segments of the Czech economy. One million crowns invested/spent in the building industry generates CZK 2.71 million in related sectors of the Czech economy and creates approximately 3.5 FTEs in the building sector and related sectors of the economy.

- Construction production in stable prices recorded a year-on-year decline of 1% in 2009. Construction companies with over 50 employees concluded 33,720 new construction contracts, which represent a year-on-year increase of 7.3%.

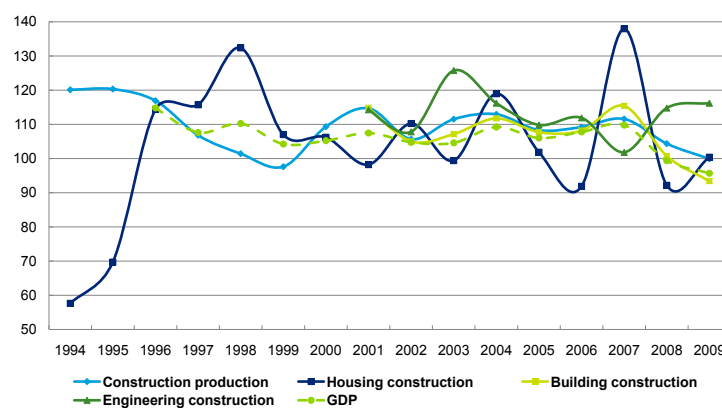
Records in the Real Estate Registry - Transfer of Ownership 2007 - 2009



Source: Czech Office for Surveying, Mapping and Cadastre

Development of Construction Production and GDP

Index (the preceding year's value = 100)



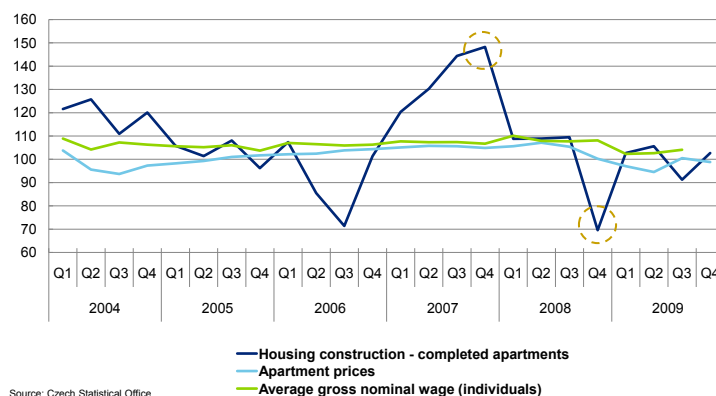
Source: Czech Statistical Office

- The total value of newly concluded contracts dropped year-on-year by 26.4% in 2009, which amounts to CZK 183.6 billion. Building construction declined by CZK 76.0 billion (a 35.7% drop) and engineering construction declined by CZK 107.6 billion (a 18.1% drop). The slump in the volume of concluded construction contracts was partially due to the unusually high comparable basis of 2008, when the volume of new contracts in engineering construction increased by 51.8%. The average value of a newly concluded construction contract was CZK 5.4 million in 2009, which is 31.4% lower year-on-year.
- The construction industry's results were driven by particularly large public contracts. Conversely, 2009 saw a marked decline in the number of building construction contracts (eg apartment buildings and commercial buildings).
- The average number of registered employees in construction companies with 50 plus employees dropped by 0.2% year-on-year in 2009.
- The average monthly nominal wage of a construction sector employee increased year-on-year by 5.5% to CZK 28,091 in 2009.
- The 2009 building construction markedly decreased, ie by 7%, while engineering construction increased year-on-year by 14.3% in 2009.
- Building authorities issued 7.8% fewer building permits. On the other hand, more expensive structures were built whose approximate value grew year-on-year by 4.3%. The total value of newly concluded construction contracts in the Czech Republic dropped year-on-year by 26.4%.

The construction industry in the Czech Republic has not most likely hit bottom yet. The biggest obstacles seem to be a marked decline in demand, the same as in engineering construction, increasing competition where there are more potential constructors per fewer orders, and standing problems with project financing. Negative influences on the current development in the construction sector include the extension of invoice due dates and the increase in insolvency proceedings. The negative influence of the economic cooling on the entire construction industry has consequences in the area of residential construction as well.

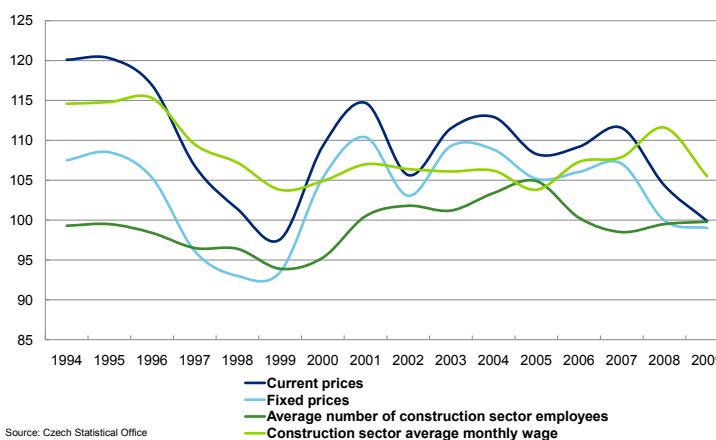
### Development of Indicators Affecting the Czech Developer Market

Index (the same period of the preceding year = 100)



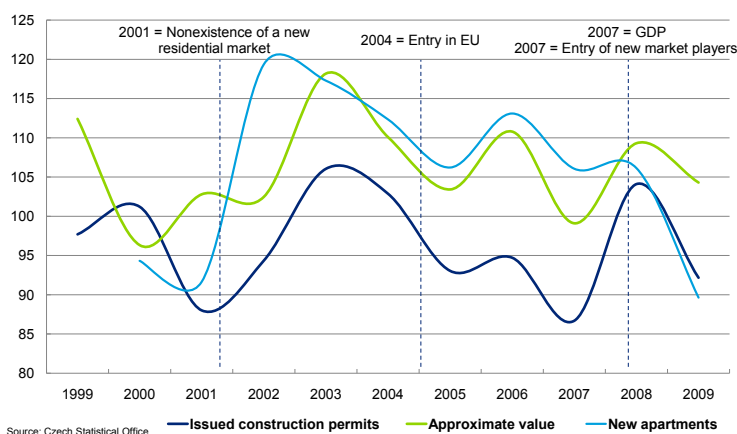
### Construction Production Development

Year-on-year indexes (the same period of the preceding year = 100)



### Issued Construction Permits, Approximate Value of Buildings

Year-on-year indexes (the same period of the preceding year = 100)



### 3.3 Demographic and Economic Indicators Affecting the Residential Market

#### Demographic Development

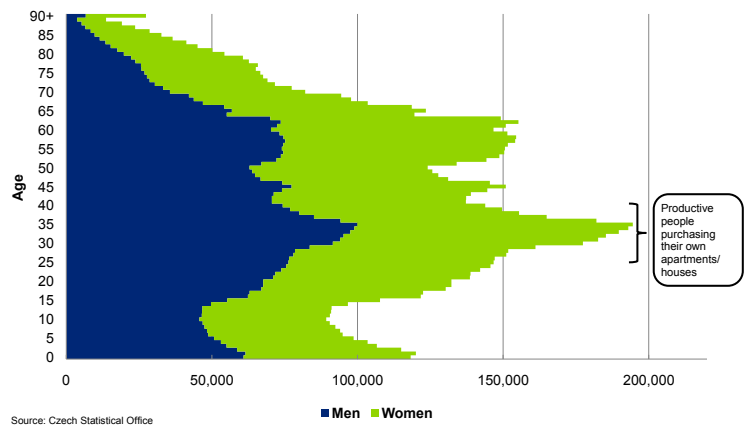
According to the data of the Czech Statistical Office, the total population of the Czech Republic as of the 4th quarter of 2009 was 10,526,600.

The most important group in respect of the development of the residential and real estate market in the long term is the population between 25 and 40 years of age. The vast majority of this economically active age group represents demand for owning their own house/apartment, thus they will become an important target group for most developers and financial institutions.

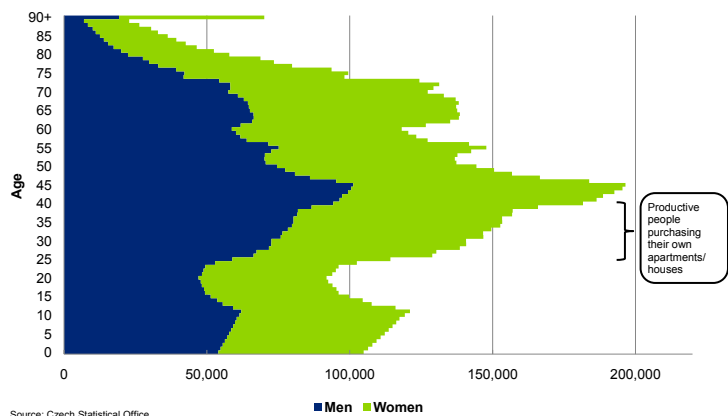
The monitored age group, ie between 25-40 years of age, represent 2,676,235 people in 2010. This age group, however, will gradually decrease in upcoming years and in 2020 the Czech Republic will have 318,000 fewer people aged 25-40, totalling 2,357,405. The number of productive people in the above-mentioned age group will gradually decline and by 2050 the 25-40 age group will total only 1,961,725 people in the Czech Republic, ie more than 714,000 fewer people than in 2010. Therefore, demand for residential construction and financial products focused on housing in this important age group will continue to fall over the next 40 years.

With respect to demographic development, however, it is expected that the gradually shrinking population of the Czech Republic will be replaced by newly arriving foreign nationals with permanent or long-term residence permits. At the beginning of 2010, there were more than 431,000 foreign nationals (most of them aged 25-40) with permanent or long-term residence permits in the Czech Republic.

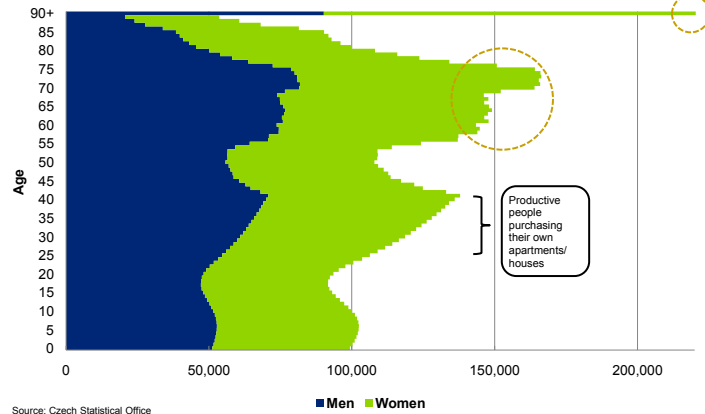
Age Structure of Inhabitants (Year 2010)



Age Structure of Inhabitants (Year 2020)



Age Structure of Inhabitants (Year 2050)



### ***Demographic and Economic Factors***

The Czech Republic counted 5,312,300 economically active people at the end of 2009. The structure of inhabitants' economic status, however, is influenced by social and economic factors, in addition to natural shifts in age composition. Such factors include primarily increases in the unemployment rate (in 2009), higher retirement age, and extended years of education. These factors then influence the proportion of employed people in the overall population of the country.

Compared to 2008, when 48.1% of all inhabitants worked, this proportion shrank to 46.8% (4,927,300 persons) in 2009 as a result of the economic decline.

### ***Demographic and Social Factors***

In consideration of the anticipated demographic development in the Czech Republic, residential property may create a profitable investment with anti-inflation effects and stable prices in the longer term, although some variations in these prices may occur. The insufficiently resolved issue of retirement pensions of today's productive generation (the 25-40 age group) sparks investments in real estate as an advantageous form of "supplementary pension insurance". Investments in private homes are currently deemed another possible pillar of retirement pensions. Having one's own residential property for a potential lease or sale in retirement age is considered a convenient and relatively safe form of wealth. In the years to come, the demographic development in the Czech Republic will offer a new segment in the residential market to developers and investors, such as homes for seniors (providing accessible and dignified accommodation) in specialised housing facilities or rental board and care apartment buildings.

# 4 Development of the Residential Property Market in the Czech Republic

## 4.1 Residential Property in the Czech Republic

### Residential Construction Development

Residential construction in the Czech Republic has developed in line with the economic, political and demographic situation in the country in the past sixty years.

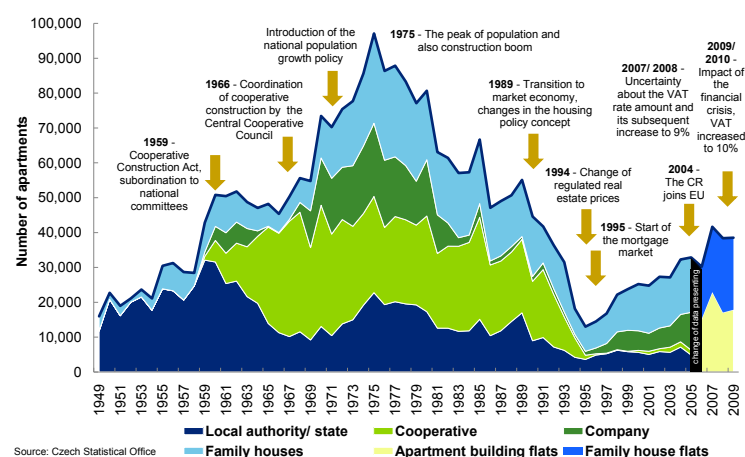
Residential construction reached a peak in the mid-1970s when the intensity of residential construction represented nearly 100,000 completed apartments per year.

A substantial increase in the construction of new apartments in the Czech Republic was reported after 2000 when available financial products intended to finance housing were introduced on the market (mortgage loans and building savings loans), especially in 2002 when interest rates markedly decreased and the maximum length of loan repayment was extended. This together with the baby boom generation's coming to the market and a substantial increase in the standard of living initiated a rapid development. Residential property became an interesting investment thanks to the support for privately owned housing, the availability of products, tax relief and annual rapid growth in prices.

The exceptionally high demand for residential real estate – which was predominantly supported by high growth in household income, low unemployment, low interest rates of mortgage loans, culmination of the baby boom generation's interest in own housing and the certainty of the increase in the prices of residential real estate resulting from a change in the VAT rate in 2007 – was reflected in the dynamic shift in the development of residential real estate construction and in the historically maximum year-on-year increase in the number of completed (a year-on-year increase of 38%) and started apartments funded through a record volume of mortgage loans. After the intention to increase the VAT rate (as of 1 January 2008) was announced a number of clients reassessed the timing of their plans to acquire own housing and housing surplus was established on the market.

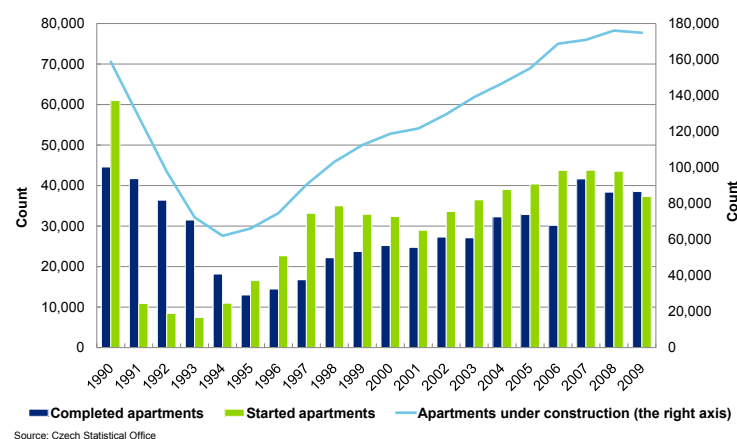
2008 saw a significant change in the positive development of housing construction reported in previous years. A material slump in residential construction occurred (namely in the fourth quarter) predominantly due to the saturation of the real estate market and the expected impacts of financial crisis. For the first time since 2001, a lower number of apartments were started in the year-on-year comparison in 2008.

Number of Completed Apartments Between 1949 - 2009



Housing Construction in the Czech Republic

The number of apartments completed, started and under construction



The “financial” crisis of the second half of 2008 hit the Czech residential housing market in 2009 when the demand for real estate was reduced by up to 30% on average, in some market segments by up to 50%. This was predominantly caused by the overall economic development in the Czech Republic including the growing employment rate (according to the Czech Statistical Office, the average unemployment rate in 2009 was 6.7% which was 2.3 p. p. more than in 2008) and related uncertainty whether households would be able to pay mortgage loans. In addition, mortgage loans became less easily available as banks became more cautious when granting new mortgage loans. At present, households are postponing residential real estate acquisitions as they expect a further decrease in prices and are distrustful of projects being completed by developers.

Due to the decrease in demand the number of started apartments has dropped. In 2009 construction of 37,319 apartments was started which is a 14.3% decrease compared to 2008. The number of started apartments was decreasing in all quarters of 2009, at most in the second and fourth quarter when a 21.2% year-on-year decline was reported compared to the same period of the previous year. The number of started apartments in 2009 decreased for the first time in 15 years (since 1994) below the level of completed apartments.

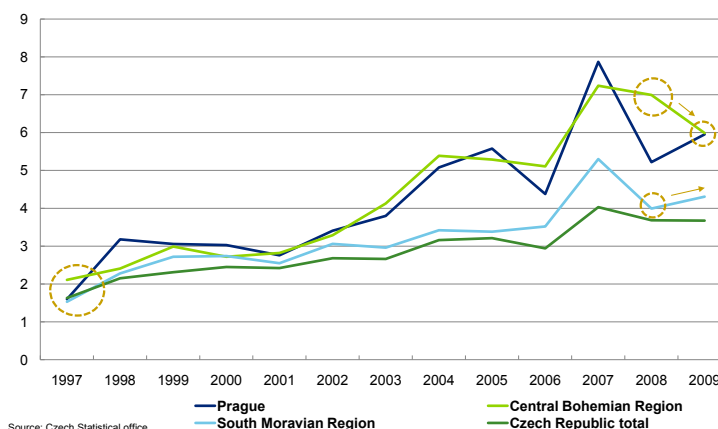
In 2009, 38,526 apartments were completed which is a slight increase of 0.4% compared to 2008. The number of completed apartments grew in the first, second and fourth quarters while in the third quarter a decline of 8.8% was reported and the average values of 2009 were approximately equal to those in 2008.

Despite the impacts of the financial crisis in 2008, since the middle of the 1990s there had been a constant excess in the number of started apartments over completed ones in the Czech Republic through 2009. In the years of the development boom the residential market created a reserve of apartments under construction that would be completed in the following several years. The total number of apartments under construction as of 31 December 2009 was 174,913. In the year-on-year comparison, the number of apartments under construction on the market is lower by approximately 1,200 compared to 2008 and higher by 3,900 compared to 2007.

Revival on the residential housing market depends on a positive macroeconomic development to be started and the trust and stability in the middle class population segment to be returned.

### Housing Construction Intensity

The number of completed apartments per 1,000 inhabitants (as of 30 June of the indicated year)



Source: Czech Statistical office

### Residential Construction Intensity in the Czech Republic

Residential construction intensity (the number of completed apartments per 1,000 inhabitants) reported nearly linear growth from the second half of the 1990s to the first quarter of 2007. In 2007, the above-specified influences caused a substantial change in the dynamics of residential construction intensity. While from 2000 to 2006 2.7 apartments per 1,000 inhabitants were completed on average in the Czech Republic, in 2007 the value of this indicator was 4 completed apartments per 1,000 inhabitants. The subsequent decrease in the intensity of residential construction reported in 2008 (3.68 completed apartments per 1,000 inhabitants) may be viewed as a natural return of the residential market to the values sustainable in the long-term. In 2009, the residential construction intensity achieved approximately the same values as in 2008, ie 3.67 completed apartments per 1,000 inhabitants. The average long-term value of this indicator in the Czech Republic from 2000 to 2009 was 3.1 completed apartments per 1,000 inhabitants.

In the long-term, the highest intensity of residential construction in the Czech Republic was identified in Prague and in the Central Bohemian region where approximately 8 and 7 apartments, respectively, per 1,000 inhabitants were completed in 2007. In 2008, the intensity in both of these regions dominating the Czech residential market decreased. While in 2009 the intensity of residential construction continued to decrease reaching 5.98 (a decrease of 1.02), in Prague it grew by 0.73 to reach 5.95 completed apartments per 1,000 inhabitants.

In these two regions the intensity of residential construction was balanced. An increase in the intensity in residential construction was reported in the South Moravian region in 2009 when it reached 4.3 completed apartments per 1,000 inhabitants (an increase of 0.3).

The development of the intensity of started residential construction (the number of started apartments per 1,000 inhabitants) was nearly the same as the development of the number of completed apartments per 1,000 inhabitants. A significant difference was reported in 2007 and 2008 when at first the number of completed apartments significantly grew and subsequently materially dropped while the average number of started apartments in the Czech Republic reported stagnation and a subsequent mild decrease. In 2009, the intensity of the started residential construction fell to 3.6 started apartments per 1,000 inhabitants in the Czech Republic, which was a decrease by more than 14% year-on-year.

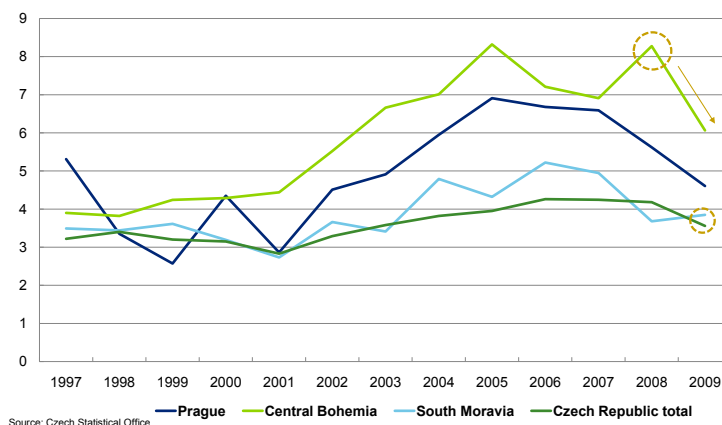
The average long-term value of the intensity of the started residential construction from 2000 to 2009 in the Czech Republic was nearly 3.7 started apartments per 1,000 inhabitants.

The highest intensity of started residential construction as well as the highest number of completed apartments per 1,000 inhabitants are reported in the Central Bohemian region and in Prague in the long term. While in 2007 the intensity of started residential construction in both regions only differed by 0.3 started apartments per 1,000 inhabitants, in 2008 the intensity of started residential construction grew by more than 10% year-on-year (as opposed to other regions in the Czech Republic and Prague) and the difference between Prague and Central Bohemia was more than 2.6 started apartments per 1,000 inhabitants. In 2009, a reverse trend was reported in Central Bohemia. The intensity of started residential construction in Central Bohemia in 2009 was corrected to reach 6 started apartments per 1,000 inhabitants. In Prague this indicator was 1.4 started apartments per 1,000 inhabitants lower than in Central Bohemia.

A positive development in the intensity of started residential construction (as well as in the number of completed apartments per 1,000 inhabitants) is expected in the South Moravian region. South Moravia reported an increase in both above-mentioned indicators by 0.2 started apartments and 0.3 completed apartments per 1,000 inhabitants.

### Intensity of started housing construction

The number of started apartments per 1,000 inhabitants (as of 30 June of the indicated year)



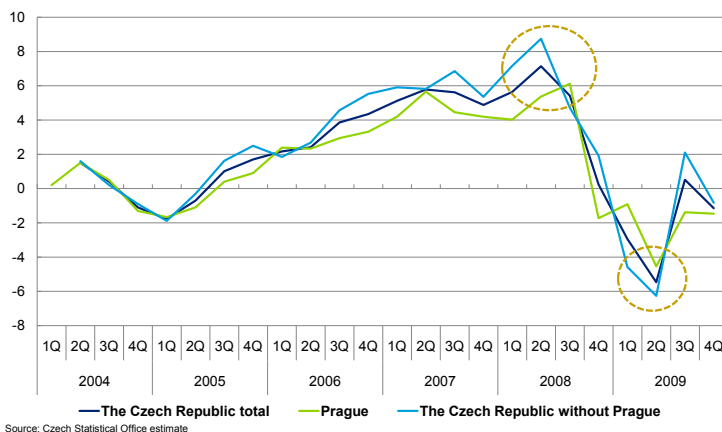
### Residential Real Estate Price Development

The prices of apartments in the Czech Republic were continuously growing for nearly 15 years and only reported slight fluctuations (eg in 2004). The residential market expected this trend not to change. The increased interest in own housing was beneficial for development and construction companies and, thanks to the multiplication effect, for the entire economy.

Due to the increased demand for own housing and the relative availability of funding, apartment prices were grown intensely in several previous years which resulted in a general increase in the prices of residential real estate in the Czech Republic.

### Apartment Price Indexes

Offer prices of residential real estate (QoQ change in %)



Between 2006 and 2008, the Czech residential real estate market showed significant growth in residential real estate prices which was attributable to a boom in the Czech economy. The increase in real wages, positive development on the labour market, appreciation of Czech crown, availability of housing loans and optimistic expectations of Czech households incited decisions to buy own apartments. Other factors impacting the demand for apartments included a substantially higher birth rate, marriage rate and a change in the life style of the population.

In the third and fourth quarters of 2008 and in the first half of 2009 the residential real estate market reported a substantial reduction and a subsequent very abrupt year-on-year drop in the growth rates of offer prices which was caused (apart from other reasons) by the financial crisis and restricted demand.

The decrease in the demand was noticeable in the second half of 2008 when the largest development companies reported a 10-20% year-on-year decline in the interest in new apartments. The market revival originally expected in autumn did not materialise and prices were corrected on the residential real estate market (reduction of residential real estate prices). In the third quarter of 2008, after thirteen quarters of increase, residential real estate prices reported stagnation year-on-year (ie an increase of only 0.2%). The first quarter of 2009 showed a year-on-year decrease which intensified in the second quarter of 2009 to the historically lowest level (a decrease of 5.5%). In the third and fourth quarter of 2009, the prices of residential real estate in the Czech Republic at first grew by 0.5% and subsequently decreased by 1.2% year-on-year.

Residential real estate outside Prague shows the sharpest price decrease on the apartment market according to the year-on-year changes in offer prices of residential real estate monitored in individual quarters.

### Apartment Price Indexes

Development of offer and realised prices - The Czech Republic total (QoQ change in %)



Source: Czech Statistical Office estimate

### Apartment Price Indexes

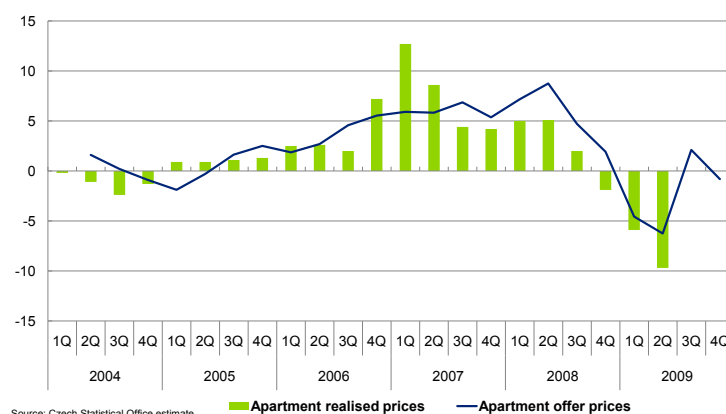
Offer versus realised prices - The Czech Republic total (average in 2005 = 1)



Source: Czech Statistical Office

### Apartment Price Indexes

Development of offer and realised prices - The Czech Republic without Prague (QoQ change in %)



Source: Czech Statistical Office estimate

After the highest year-on-year growth in the second quarter of 2008 when the prices of apartments grew by 8.7% compared to the same period of the previous year, the first quarter of 2009 fell by 4.6% year-on-year and in the second quarter by 6.3%. This means that within nine months the negative change was 13.3 p. p. and within a year the loss exceeded 15 p. p. In the third and fourth quarters of 2009 the prices of residential real estate outside Prague first grew by 2.1% and subsequently reported a less significant decrease of 0.8%.

Prague reported the highest year-on-year increase in the offer prices of apartments in the third quarter of 2008, ie in a period when the prices on the residential real estate market outside Prague showed a relatively strong decrease. The prices of apartments in Prague in this quarter grew by 6.1%. The abrupt drop in the prices of Prague residential real estate was first identified within the fourth quarter of 2008 when the prices of apartments grew from the 6.1% increase in the third quarter to the year-on-year decrease of 1.7%.

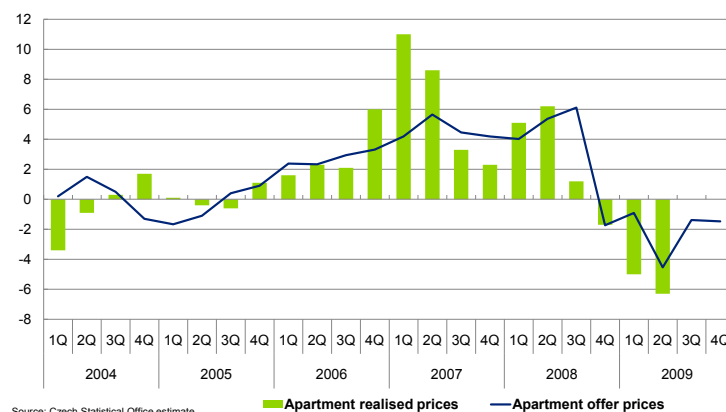
In the first quarter of 2009, the Prague residential real estate market indicated a slightly positive change in offer prices. Compared to the first quarter of 2008, prices only decreased by 0.9%, which was a slower drop compared to the end of 2008. At the same time the decrease rate was substantially lower compared to the prices of apartments in the regions outside Prague. Another significant phase of the decrease in the offer prices of Prague residential real estate was reported in the second quarter of 2009, when the offer prices fell by 4.5% year-on-year. In the third and fourth quarters of 2009, the prices of residential real estate in Prague fell by 1.4% and 1.5%, respectively, year-on-year.

### Offer versus Real Prices

The realised demand did not correspond with the offer prices, predominantly in the first half of 2007 and 2009. In the first and second quarters of 2007 the enormous increase in the demand on the real estate market resulted in such pressure on prices that people buying residential real estate paid 12% and 9% higher prices on average compared to the same periods of 2006. The offer prices grew by 5.5%. Conversely, in the first half of 2009, the enormous decrease in the demand on the real estate market resulted in such pressure on prices that people buying residential real estate paid up to 7% lower prices on average compared to the same period of 2008 and the offer prices decreased by 4.2% on average.

### Apartment Price Indexes

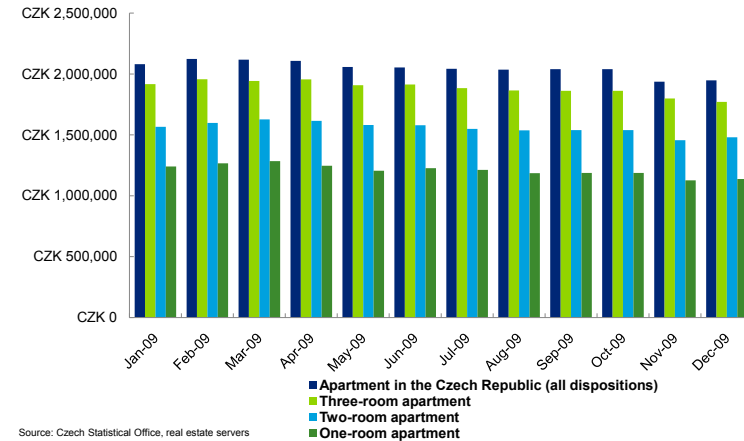
Development of offer and realised prices - Prague (QoQ change in %)



Source: Czech Statistical Office estimate

### Apartment Price Development in the Czech Republic

Year 2009 - monthly countryside average



Source: Czech Statistical Office, real estate servers

## 4.2 Rental Housing

The portion of rental apartments in the Czech Republic has been decreasing since 1990 (as a result of privatisation, sale of municipal apartments, lack of interest from investors and developers and other aspects) and it accounts for 20-22% of permanently occupied apartments to date, which represents from 800 to 850 thousand apartments. From this number, 20-25% relate to the contractual rent sector while in 75-80% of apartments rents are paid under the Act on Unilateral Increase of Apartment Rent (regulated rent). A more significant development of the rental housing market is hindered by the legislative arrangements including regulated and market rents. Deregulation in the Czech Republic should be completed in 2012 when the relations between lessors and lessees should be settled and rents in all apartments should be calculated based on market conditions.

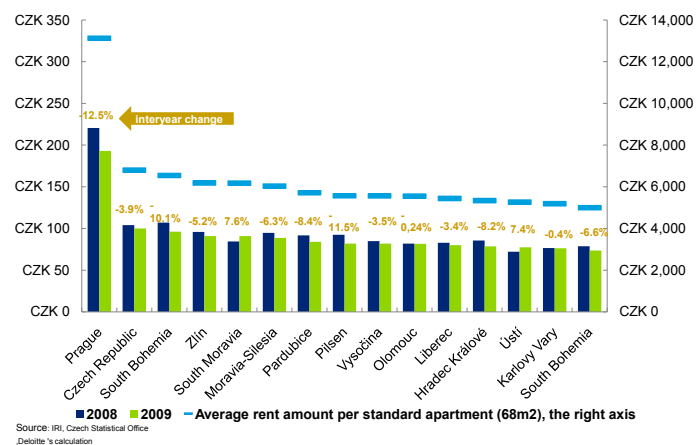
In previous years that showed a general shift to proprietary housing on the residential market the importance of rental housing was fading away. Due to the current economic development this trend has reversed predominantly because a certain portion of the population fears to purchase own apartments (rental housing is more flexible and in case of loss of income there is no risk of default in debt payment) or is not able to accumulate a sufficient volume of funds for the acquisition or making the minimum investment required. The change of the trend is supported by the fact that in some regions, the difference between the rent amount and the amount of possible mortgage payment has increased. Rental housing is a standard form of housing for all social groups in most European countries and as such it should not be confused with social housing.

According to estimates, the demand for rental housing grew by more than 5% year-on-year in 2008. The estimates for 2009 were from 10 to 15%. Despite the growth in demand from clients interested in rental housing, the likely long-term trend in rental housing is stagnation due to the market saturation by available apartments to be rented, ie an excess of supply over demand.

## Rent Price Development – Market Rent

A market rent is a rent agreed upon by the lessor and lessee. As opposed to regulated rent, the market rent reflects the relations between supply and effective demand on the local apartment market in individual cities. In 2009 the market rent in the Czech Republic reported a slower decrease on average compared to apartment prices.

Market Rent Prices in Regions - Square meters



The average prices of market rents in the Czech Republic decreased by 3.9% towards in end of 2009. The largest drop in prices was reported in Prague where the year-on-year decrease was 12.5%. A similar decrease was reported in the cities in the Plzeň (-11.5%) and Central Bohemian (-10.1%) regions. The prices of the market rent decreased year-on-year in almost all of the Czech Republic (12 regions). The exceptions are the Ústí nad Labem and South Moravian regions where the average market rents grew by more than 7% year-on-year at the end of 2009.

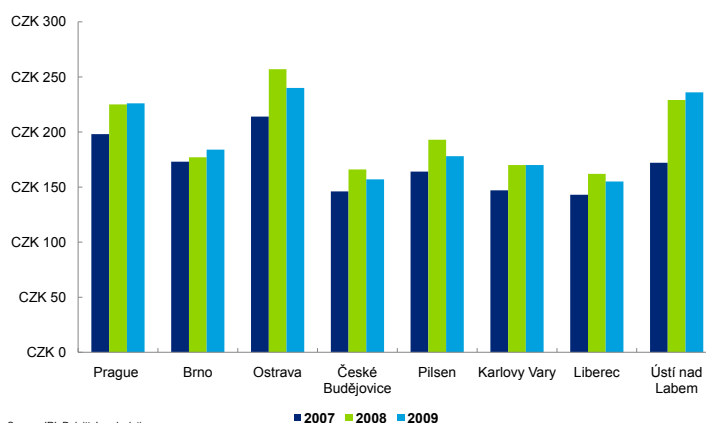
The average market rent decreased by 3.8% year-on-year towards the end of 2009 to CZK 100 per sq m. The highest average rent prices are reported in Prague where lessees pay CZK 13,100 for a standard apartment on average (68 sq m, 40% wear) without fees (services, energy etc). The second most expensive place is the Central Bohemian region with a market rent of CZK 6,500, followed by the Zlín region with the average market rent of CZK 6,200. Locations with the cheapest rental housing include cities in the Ústí nad Labem, Karlovy Vary and South Bohemia regions where the average market rent for a standard apartment is about CZK 5,000.

In the segment of new apartments of up to 70 sq m, the highest year-on-year decrease in market rent in the Czech Republic was reported in Plzeň (a decrease of 7.8%) and Ostrava (a decrease of 6.6%) in 2009. Conversely, increase in market rent prices over individual years was reported in Brno (an increase by nearly 4%) and Ústí nad Labem (an increase by 3%).

A new apartment of 70 sq m could be rented for CZK 266 per sq m in Prague, for CZK 184 per sq m in Brno and CZK 178 per sq m in Plzeň. The highest amounts of market rent were achieved in Ostrava and Ústí nad Labem. This situation is predominantly caused by the character of apartments, lack of available apartments for rent, lower acquisition costs of apartments and in Ostrava by the development of the region due to the completion of transportation infrastructure construction.

#### Market Rent Prices in Selected Towns

New apartment of 35 - 70 m<sup>2</sup> in average location



Source: IRI, Deloitte's calculation

#### Rent Income

Market rents are substantially impacted by a relatively large number of minor investors who buy apartments as investments to capitalise on the invested funds by generating income from the rental, or as a form of pension security. Lessors are pressed by a large supply to decrease prices; however, sufficient demand for rental housing enables them to maintain the market rents on a relatively stable level.

#### Average Prices, Annual Rents and Incomes from the Rent in Selected Towns of the Czech Republic

Flat sized 68 m<sup>2</sup>

		Prague	Brno	Ostrava	České Budějovice	Plzeň	Karlovy Vary	Liberec	Ústí nad Labem
Standard apartment in average location	Standard apartment average price	CZK 2,965,000	CZK 2,461,000	CZK 1,207,000	CZK 1,750,000	CZK 1,951,000	CZK 1,878,000	CZK 1,848,000	CZK 1,057,000
	Average annual rent	CZK 135,000	CZK 110,000	CZK 92,000	CZK 82,000	CZK 86,000	CZK 92,000	CZK 79,000	CZK 78,000
	Annual income from the rent	4.5%	4.5%	7.6%	4.7%	4.4%	4.9%	4.3%	7.4%
New apartment in average location	New apartment average price	CZK 4,092,000	CZK 3,249,000	CZK 1,629,000	CZK 2,310,000	CZK 2,575,000	CZK 2,479,000	CZK 2,440,000	CZK 1,427,000
	Average annual rent	CZK 184,000	CZK 150,000	CZK 196,000	CZK 128,000	CZK 145,000	CZK 139,000	CZK 126,000	CZK 193,000
	Annual income from the rent	4.5%	4.6%	12.0%	5.5%	5.6%	5.6%	5.2%	13.5%
New apartment in good location	New flat average price	CZK 4,151,000	CZK 3,421,000	CZK 1,750,000	CZK 2,433,000	CZK 2,711,000	CZK 2,610,000	CZK 2,569,000	CZK 1,533,000
	Average annual rent	CZK 207,000	CZK 169,000	CZK 220,000	CZK 137,000	CZK 163,000	CZK 149,000	CZK 135,000	CZK 206,000
	Annual income from the rent	5.0%	4.9%	12.6%	5.6%	6.0%	5.7%	5.3%	13.5%

Standard flat - older flat sized 68 m<sup>2</sup> with abrasion 40%

Source: IRI, Realit, Czech Statistical Office, Deloitte's calculation

For an apartment owner and lessor, the key parameter is the return on rent. In 2009, the decreasing trend in rent income stopped after several years (the average income from rent in 2008 dropped below 5% compared to over 8% in 2000). This was caused by the fact that market rents in some cities in the Czech Republic decreased more slowly than apartment prices.

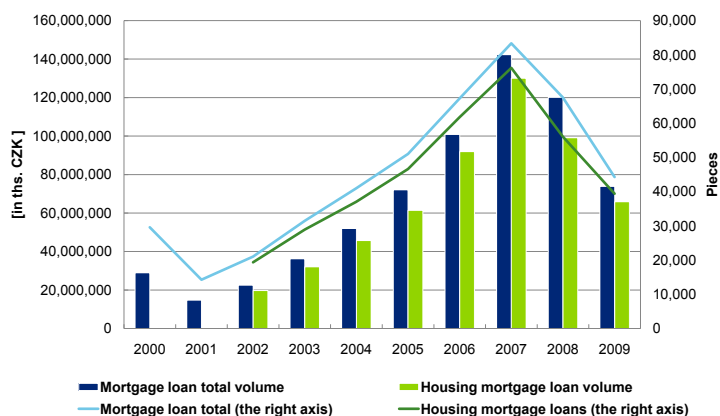
In 2009, the average income from rent depending on the apartment's age, size and location was around 4.5-5% in Prague, 4.5-4.9% in Brno and 4.3-5.3% in Liberec. Ostrava and Ústí nad Labem are again unique, eg by the character of apartments, the lack of available apartments for rent and lower acquisition costs of apartments. A long-term decrease in the income from rent combined with the decrease in prices and the income of individuals and households is reflected in the decision making by potential buyers of new apartments.

### 4.3 Mortgage Market Development

The mortgage market in the Czech Republic in 2009 reported probably the largest swing in its history. The differences in the perception of the market situation between the providers - banks and clients became fully evident.

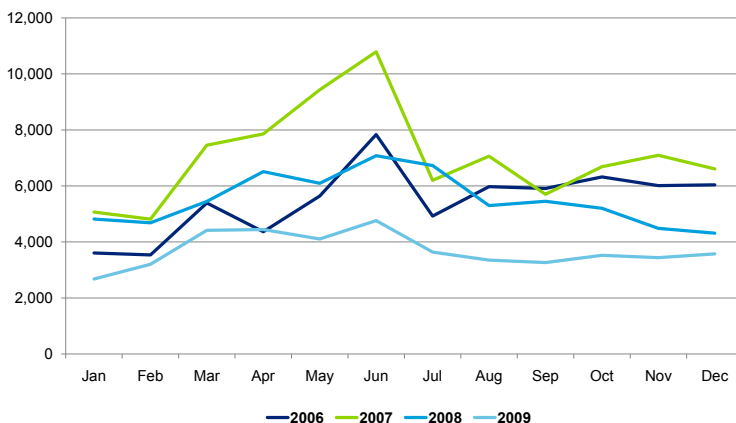
After the 20% decline in 2008, the Czech mortgage market reported in 2009 another significant year-on-year decrease of over 32% in the number and nearly 37% in the volume of provided mortgage loans. Compared to 2007, the mortgage market decreased by nearly 50%. The first quarter of 2009 was characterised by a substantial change in banks' behaviour but clients did not materially change their expectations developed over the last three years of easy mortgage loan availability. The second and third quarters were markedly impacted by the waiting strategy on the side of demand and the expected decrease in real estate prices and interest rates. A substantial but not positive role was played by media that substantially inflated expectations. In the fourth quarter, the view of the situation by banks and clients reversed. The banks' negative expectations relating to material worsening in mortgage loans repayment did not come true and banks have gradually started easing their restrictions imposed at the beginning of the year. Conversely, clients' fear of increasing their debt burden materially increased which probably substantially reduced demand for mortgage loans compared to early 2009.

Development of Mortgage Loan Numbers and Volume in Individual Years



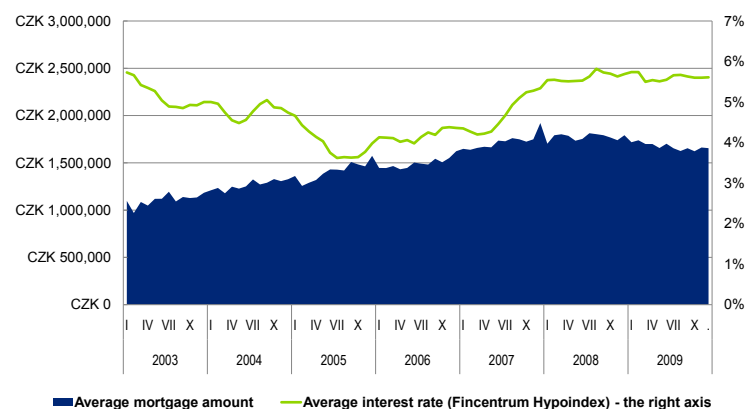
Source: MMR

Development of Mortgage Loan Numbers in Individual Months of Selected Years



Source: Hypoindex, Hypoindex

Average Interest Rate (FINCENTRUM HYPOINDEX) and the Average Mortgage Amount January 2003 - December 2009



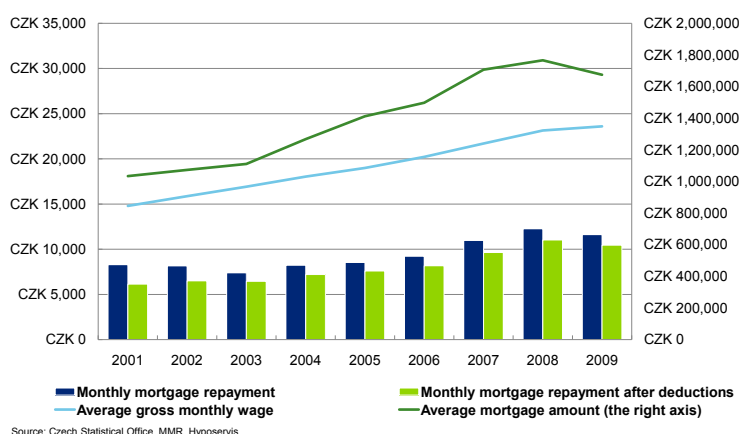
The total number of provided mortgage loans amounted to 44,402; 64,497 and 83,340 in the total volume of CZK 74.3 billion, CZK 113.9 billion and 142.3 billion in 2009, 2008 and 2007, respectively. The number of granted mortgage loans in 2009 was lower than in 2005.

Compared to 2008, when the average mortgage loan amount still grew year-on-year in spite of the mortgage market decrease, in 2009 the average mortgage loan amount decreased by approximately 5.5% compared to 2008 and 2.5% compared to 2007 (in 2007: CZK 1.71 million, in 2008: CZK 1.76 million, in 2009: CZK 1.67 million). In 2009, this trend was most likely influenced by a substantial decrease in the share of new apartments financed by a mortgage loan.

Although the year-on-year development of the number and volume of mortgage loans was perceived very negatively throughout 2009, the month-on-month trend was comparable to previous years. From January to June, an increase in the number and volume of mortgage loans was reported while July witnessed a substantial month-on-month decrease. In the second half of the year the values were nearly identical with a variance of +/- 10%. In January 2010, a slight decrease of 5.3% and 7% in the number and volume of mortgage loans, respectively, was reported (in January 2010 a total of 2,533 mortgage loans were granted in the volume of CZK 4.28 billion, while in January 2009, the number of mortgages was 2,657 totalling CZK 4.6 billion). Although this is not a material decrease year-on-year, it was the worst result in the last five years.

A substantial change occurred in the structure of bank mortgage products in 2009. Towards the end of 2008 and in the first quarter of 2009, banks were vigorous in eliminating groups of higher-risk products such as 100% LTV mortgage loans, "low doc" mortgages without providing standard proof of income or mortgage loans aimed at foreigners, and in general they reduced the acceptable loan-to-value ratio (LTV). The standard maximum LTV shifted in most banks to approx. 70%. Near-prime and sub-prime products were entirely eliminated from the market and banks introduced stricter credit granting criteria, returning to the safer levels applied in 2004 and 2005. Throughout the year 2009, banks were gradually softening their LTV limits which stabilized between 80 to 85% at the end of the year. A substantially higher weight in the applicant creditworthiness assessment was assigned to the credit history of each client, not only in the mortgage loan area but also in the consumer loan, credit card and sales finance segments.

**Comparison of Mortgage Loan Costs in Individual Years**



Source: Czech Statistical Office, MMR, Hyposervis

In 2009, interest rates on mortgage loans followed the same trend as in 2008. Client expectations relating to the anticipated decrease in interest rates did not materialise. The rates for new clients compared by Hypoindex – a weighted average interest rate for which new mortgage loans are provided to private individuals – oscillated around 5.5% p. a. in 2009. Lower rates were permanently reported for the three and five year fixing.

The rule that the base interest rates as set by the Czech National Bank were used as basis to drive commercial loan interest rates substantially changed in 2009. The Czech National Bank decreased its base rate first to 1.75% p.a. and subsequently this historic minimum was reduced several times to 1.0% p. a. in December 2009. However, this reduction had as expected only a minimal impact on commercial and mortgage loan interest rates and consequently also on the residential market. In 2009 the expectation that banks would not directly reduce client interest rates owing to the increased risk sensitivity was confirmed.

From 2002 to 2009 the average mortgage loan repayment grew slightly faster than the average wage. As a result of the decreased effect of the state financial subsidy on mortgage loans for new apartments (the main positive effect was namely reported between 2000 and 2003) and the changes in tax deductions, the real burden of mortgage loan clients has gradually increased since 2003. In 2009, the state financial subsidy was granted to a limited group of clients within the category of young clients up to 36 years of age who acquired residential real estate not older than two years and did not own any other real estate.

In 2009, the interest rate and therefore the mortgage loan repayment cost changed for a number of mortgage loan holders due to the expiry of the fixing period. This was predominantly related to clients who signed up either a five year or a three year interest rate fixing in 2004 and 2006, respectively. According to estimates, the change in fixing affected approximately 20% of all mortgage loan clients for whom it represented an increase in interest rates by at least 1.5-2 percentage points. In 2009, most banks changed their long-term strategy of providing pricing incentives to new clients only and substantially converged interest rates offered to existing clients at the date of re-fixing to rates offered to new clients. However, this was not true for all clients - the trend of offering lower rates to clients with good repayment history as opposed to clients that had difficulties repaying their loans in previous years was clearly noticeable.

#### 4.4 Development of the Building Savings Sector

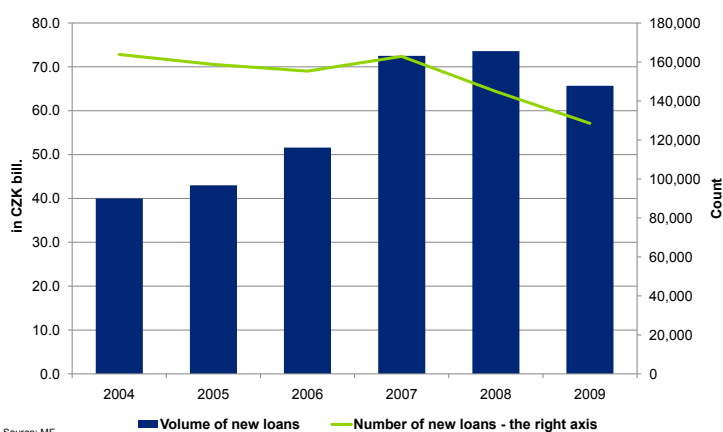
In 2009, building savings banks also felt the impacts of the economic recession. The willingness of the population to save money or incur debt has been lower under the current economic situation. After several years of ongoing growth, this was reflected in the decrease of both new building savings contracts as well as in the lower volume of new building savings loans. Media information indicating that the level of state subsidy for building savings might be reduced further also had a negative impact on the development of building savings in 2009.

According to the information from building savings banks, 575,292 new building savings contracts were concluded with the total value of the target amount of CZK 183 billion. The average target amount in the contracts concluded with individuals was CZK 309 thousand. Compared to 2008 when the number of new contracts was 705,463 and the average target amount was CZK 303 thousand, the number of concluded contracts decreased by 130,171 while the average target amount grew by CZK 6 thousand in 2009.

Towards the end of 2009, the total number of building savings contracts in the savings stage was 4.92 million which is approximately 150 thousand less than towards the end of 2008 when their total number reached 5.1 million.

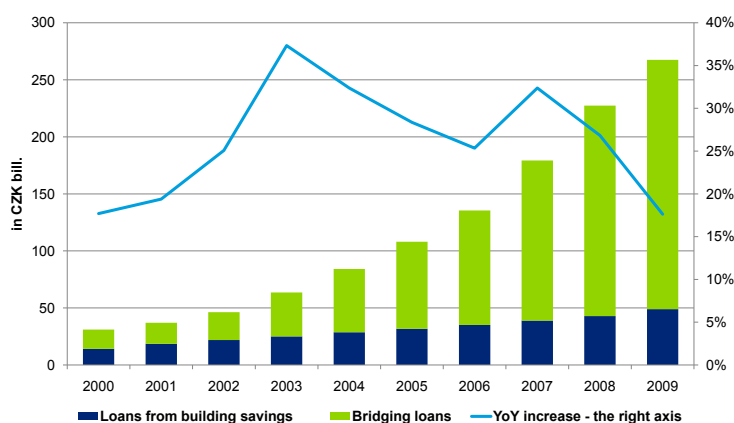
The total number of building savings loans amounted to 988,353 as of 31 December 2009 whereby the number of loans grew by 17,000 compared to 2008 when approximately 971,176 loans were reported. The total volume of loans toward the end of 2009 reached CZK 267 billion.

Volume and Number of Building Savings Loans in Individual Years



Source: MF

Total Volume of Building Savings Loans as of the Year End



Source: ACS5

The number and volume of new building savings loans decreased under the circumstances of economic recession in 2009 by more than 11% year-on-year. In total, building savings banks concluded loan contracts in the volume of CZK 66.4 billion which was only approximately CZK 10 billion less than the volume of loans provided by mortgage banks.

The structure of new building savings loans has not changed in the long term. Most loans from building savings (80%) are used to repay bridging loans, 12.5% are intended for renovation and modernisation. As for new bridging loans, 40% are intended for modernisation and renovation, 31% for purchasing apartments or family houses and 13% for the construction of new houses or apartments.

#### 4.5 Share of Delinquent Housing Loans

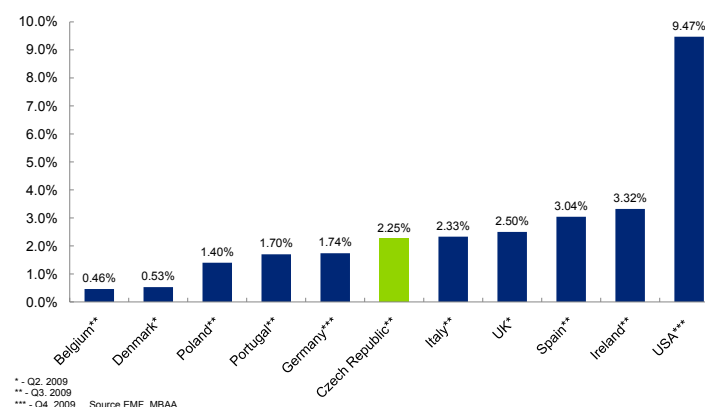
As a result of the economic slow-down and the growing unemployment the portion of delinquent loans has grown. The share of non-performing loans (NPL) in the total volume of loans was 5.4% at the end of January 2010. With respect to households, the share of NPLs grew to 4% at the end of January 2010 compared to 3.8% at the end of 2009.

As for housing loans (mortgage loans, building savings loans), the NPL share is lower compared to consumer loans. Housing loans are usually secured by real estate and a failure in loan repayment may result in the debtor's loss of own housing. In general it is expected that the economic recession will show its full impact on the Czech population in 2010 when the level of unemployment will culminate together with the difficulties to repay debts. Financial reserves (such as savings, severance payments, credit card limits and overdrafts) of mortgage loan holders whose income was substantially reduced are expected to be fully used up.

The share of mortgage loans that are delinquent for a long time in the total number of mortgage loans exceeded 2% in the middle of 2009 and continued to grow in the following months to reach 2.25% in the third quarter of 2009. As for the portion of long-term delinquencies reported by building savings banks, the situation is slightly more positive. Building savings banks report on average a share of long-term delinquent building savings loans of 1.7-1.8% of the total volume of provided loans in 2009.

In general, mortgages show a higher share of delinquent loans than building savings loans, predominantly because building savings loans are provided for lower

**Percentage of Long-Term Defaulted Mortgage Loans in Selected European Countries 2009**



amounts (their repayment is easier) and for most of these loans clients are required to regularly save before the loan is granted. Financial institutions thus have a sufficient payment history of loan applicants.

Factors impacting the development of the share of defaulting mortgage loans in Europe primarily include the start of economic slowdown (in West European countries the start of the financial crisis was reported approximately nine months earlier than in the CEE region), labour market development (growing unemployment), development of the banking sector (availability of mortgage loans, interest rate development etc) and residential market development (the impact of real estate prices falling below the level of the outstanding mortgage loan, reduction of started development projects etc).

Compared to other selected European countries the share of long-term delinquent housing loans in the Czech Republic is average. Within the benchmarked countries, the largest share of delinquent mortgage loans was reported in Ireland and Spain where it exceeds 3%. Conversely, the lowest figure was reported by Belgium and Denmark where it oscillated around 0.5%.

The growing volume of delinquent mortgage loans in the Czech Republic represents a real threat to both owners of residential real estate acquired using a mortgage as well as for financial institutions. Namely the abrupt change in the long-term trend is alarming compared to 2008 when the mortgage NPL ratio was estimated at 1%.

# 5 Measures Affecting Demand for Residential Construction in the European Union

## 5.1 Legislative / Tax Measures in EU 27 countries

In the European Union countries, the housing market plays both a significant role of a supplier of housing as well as a socially-stabilising role in the society. In developed countries the opportunity to purchase one's own home has long been perceived sensitively mostly by the middle class — an important socio-economic group of citizens who contribute largely to GDP. The availability of different forms of housing for individual groups of inhabitants is paramount and thus the governments of EU27 countries take interest in supporting this market through legislation in different ways.

The governments' approach to housing support is extremely important particularly in the current turbulent times — the demand for new residential construction is closely related to the construction industry, which ranks among the key industries of national economies in European countries, and as such have very high multiplication effect on employment and the economy.

The most frequent legislative measures of improving the availability of own housing in EU27 countries include:

- **Deductibility of interest on mortgage loans.**  
This measure is in effect in 62% of countries in the EU including the Czech Republic.
- **Exemption from tax on capital income.**  
This measure is in effect in 85% of European countries including the Czech Republic.  
The exemption usually requires meeting certain conditions such as a minimal length of real estate ownership, using the real estate for own housing needs, etc.
- **A lower VAT rate or exemption from VAT.**  
This measure is in effect in 52% of European countries including the Czech Republic. A lower VAT rate or VAT exemption usually requires meeting certain conditions. This measure substantially affects the price, and thus the availability, of real estate.
- **Utilisation of tax loss on the leased apartment.**  
This measure is in effect in 52% of European countries including the Czech Republic.  
The utilisation of the tax loss usually requires meeting certain conditions — it is applicable only to a certain type of income, eg it is not applicable to income from employment. This measure has an impact on the demand of those groups of inhabitants who intend to lease apartments.

Other legislative measures used in the European Union are not as frequent and have different forms including:

- Local subsidies to improve problematic areas in the Netherlands; and
- Tax effectiveness of certain expenses associated with maintenance and repairs of own real estate in Sweden.

The tax measures introduced in individual European countries differ in their number and are not interdependent geographically or otherwise. No generalisation applies that residential real estate markets in countries which have in place numerous measures supporting demand for real estate are affected less by the residential market downturn than others. Yet, there is a large group of countries including the largest EU economies which have introduced certain measures and whose markets are currently relatively stable and have chances for early recovery. Stimulating demand for residential construction is perhaps one of the best ways of getting out of the current economic recession due to the substantial multiplication effect of the construction industry.

## 5.2 Mortgage Guarantee Funds

One of the most important factors which currently affect demand for new residential construction is uncertainty and concerns about future economic developments. The economic recession brings with it potential decreases in available pensions or loss of employment, and thus people reassess their investment priorities and postpone purchasing long-term investments such as housing.

In this context, 41% of European countries have established guarantee funds for distressed mortgage holders. The Netherlands, Luxembourg and Ireland established their guarantee funds before the current crisis; other countries established them under anti-crisis packages mainly in 2009 (eg Poland and the United Kingdom). They are either based merely on commercial grounds, or are established by governments on other than market principles.

The key is defining the terms and conditions for using the guarantee fund, and the form and scope of the guarantee. Examples of the terms and conditions of the newly introduced funds include:

- **Greece:** The fund guarantees up to 25% of the real estate's value. The guarantee is limited to loans up to EUR 500 thousand granted between April 2009 and December 2010. The guarantee applies only to buildings, not land.
- **Hungary:** The fund guarantees up to 80% of the loan value provided to debtors who have lost their jobs and have been searching for a job actively since October 2008 under the following conditions: the loan is executed before the end of June 2009 and does not exceed EUR 75 thousand, and the real estate's market value does not exceed EUR 112 thousand as of the date of accepting the loan. Applicants must continue to repay at least a minimal amount, ie EUR 40 per month, for the acquired housing. The bridging loan, provided from the state budget, must be repaid within 10 years.
- **Poland:** The guarantee fund was established for those who are incapable of repaying their mortgage loan as a result of losing their job or terminating their business from July 2008 to the end of 2010. To meet the conditions, applicants must be registered as unemployed and the real estate under the mortgage loan must be the only real estate owned by the owner. The support is provided as a contribution of up to EUR 290 per month to repay the mortgage loan for the period of up to one year. The contribution is an interest-free loan which must be repaid within 10 years.
- **Slovenia:** The fund is available for Slovenian citizens and permanent residents whose income does not exceed the multiple of 1.5 of the average wage. The support is applicable to mortgage loans amounting from EUR 5 thousand to EUR 100 thousand that have been received before the end of 2010. The fund is used to make the loan repayments if the loan holder is incapable of doing so, yet, the received support must be repaid within two years.

# 6 Results of the Survey

## 6.1 Methodology of the Survey

The survey focused on the residential market development in 2009 and its predictions for future periods was based on an empirical questionnaire and included three parts based on the type of entity operating on the residential market, ie:

- Developers, construction firms, investment groups and real-estate agencies;
- Financial institutions including universal banks, mortgage banks and building savings banks which provide project and mortgage financing; and
- General qualified public who demanded in the past or currently demands housing in new residential projects.

The survey took place in early 2010, ie during January and February.

### *Developers, Construction Firms, Real Estate Agencies and Financial Institutions*

The survey included leading developers, construction firms, real estate agencies, universal banks, mortgage banks and building savings banks which provide project and mortgage financing and operate in the Czech Republic.

The individual entities were surveyed using structured questionnaires allowing the companies to add details and specific information to individual questions.

The questionnaires distributed and completed via the Internet included questions about the impact of the financial crisis on the residential market and the banking sector, the development of the residential market in 2009 and the prediction of its future development. Both questionnaires were structured to allow the benchmarking of results.

The questionnaire for developers, construction firms and real estate agencies included 53 questions; and the one for financial institutions included 47 questions.

To evaluate the questionnaires, the mathematical and statistical analysis of empiric data was used; to process data, the applicable mathematical and statistical procedures were used. In addition to relative frequencies, individual answers were tested for their interdependence on the company type. To make the identified values more synoptic, findings are illustrated graphically.

### *General Qualified Public*

The survey included qualified public which demanded in the past years or currently demands housing in new residential projects.

The survey, based on a structured questionnaire distributed and completed via the Internet, included 81, mostly closed, questions relating to the overview, preferences and the concerns and expectations of respondents associated with the residential market development.

To evaluate the questionnaires, a mathematical and statistical analysis of empiric data was used. To process data, applicable mathematical and statistical procedures were used. In addition to relative frequencies, the individual answers were tested for their interdependence on predefined indicators of the composition of the sample. To make the identified values more synoptic, findings are illustrated graphically.

## 6.2 Results of the Questionnaires from Financial Institutions and Developers

### Financial Institutions

The survey included universal banks which provide project (developer) and/or mortgage retail financing, and building savings banks.

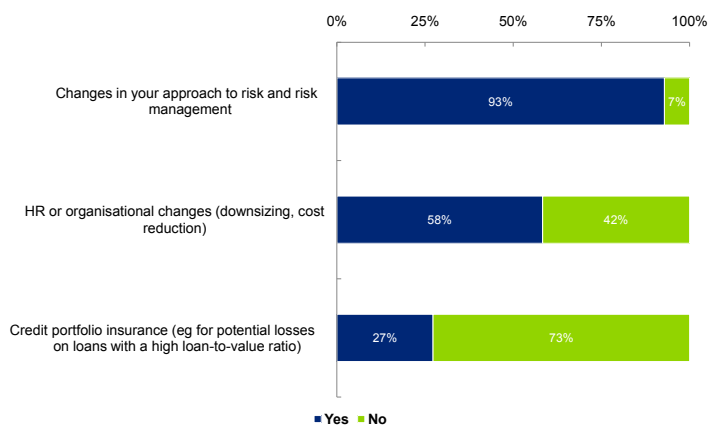
### Impacts of the Global Financial Crisis and Global Recession

Financial institutions have introduced numerous measures in connection with the financial crisis. Almost all companies (93%) changed their approach to risk and risk management.

Financial institutions have principally tightened credit approval criteria (such as creditworthiness requirements, maximum acceptable loan-to-value ratio, minimum share of client's equity, greater investor's participation, etc), limited financing of risk bearing deals and placed higher demands on the quality of cash flows. They have also focused on more consistent analyses and monitoring, optimisation and centralisation of debt collections processes and strengthening of workout. Most of the companies have increased their risk margins.

About half of the financial institutions (58%), more frequently universal banks than building savings banks, have implemented HR or organisational changes or downsizing to cut operating costs and/or optimise selected departments.

What Key Measures Have you Introduced in Connection with the Financial Crisis?



Only about 25% of companies have utilised credit portfolio insurance (e.g. for potential losses on loans with a high LTV (loan-to-value) ratio). Other reported measures include improving process efficiency, assessing clients more precisely, revaluating collateral to new market values or greater attention paid to the current portfolio management.

Almost 64% of financial institutions reported their credit expansion to be restricted by the parent company. About 89% of companies have reduced the maximum acceptable LTV ratio and reduced their loan exposure.

About 67% of financial institutions, mainly large banks, reduced also their exposure in selected sectors.

Financial institutions report different responses to contract breaches by clients: 78% of them prolonged loans based on partial repayments, 67% of financial institutions asked for an increase in collateral, and about 50% of them used independent business reviews of projects which they have financed.

Other measures for mortgage loans reported by financial institutions include asking clients to buy credit insurance to secure their ability to repay loans.

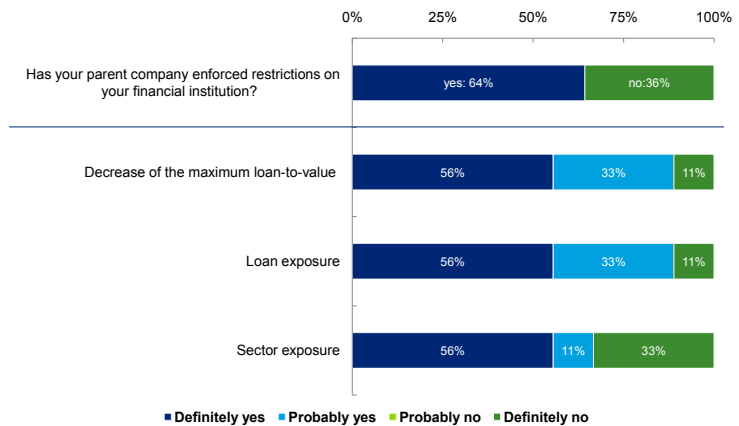
### Project Financing

Due to the financial crisis, financial institutions which provide project financing have changed the product standards.

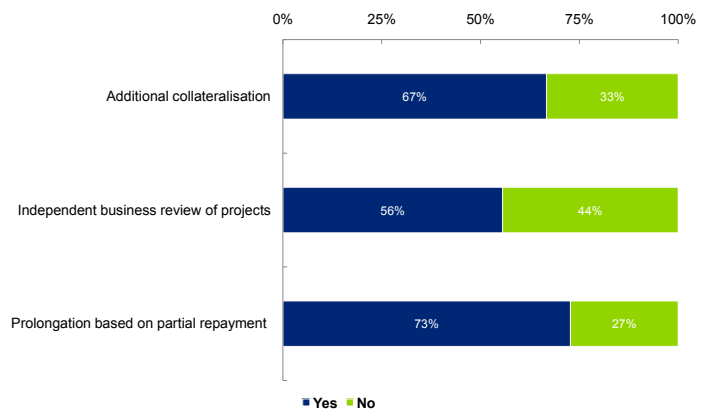
About 89% of banks have adopted stricter screening of developers taking into account the developer’s history and stricter assessment of financed projects; 50% of these companies plan no changes in this approach over the next six months. While 38% of mostly large banks intend to adopt an even stricter approach, 13% of companies will start loosening their restrictions.

About 78% of financial institutions have tightened their loan collateralisation conditions. In the next six months, 38% of companies, mostly large banks, will make no changes in their collateralisation conditions; 38% of companies, mostly smaller financial institutions, will further tighten their restrictions; and 25% of companies plan already to start loosening the loan collateralisation conditions.

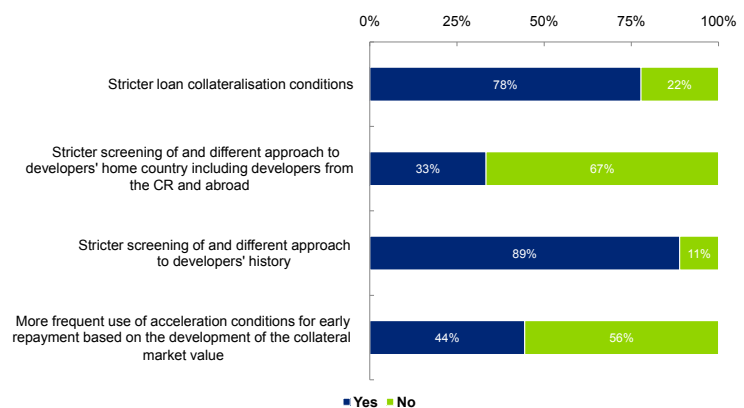
### Restrictions Imposed by the Parent Company



### How Has your Financial Institution Dealt with the Breach of Contracts by Clients?



### What Specific Changes in Project Financing Standards Have you Introduced in Response to the Financial Crisis?



Only 44% of companies included in their changes in project financing standards the more frequent use of acceleration conditions for early repayment based on the development of the collateral market value.

Only 33% of companies introduced a stricter attitude to developers' home country (a Czech or foreign entity); however, 50% of them, usually smaller financial institutions, plan further tightening their approach in the next six months.

For problem projects, certain financial institutions newly placed pressure on corporate restructuring and agreed to prolong the loan only subject to meeting the set business objectives.

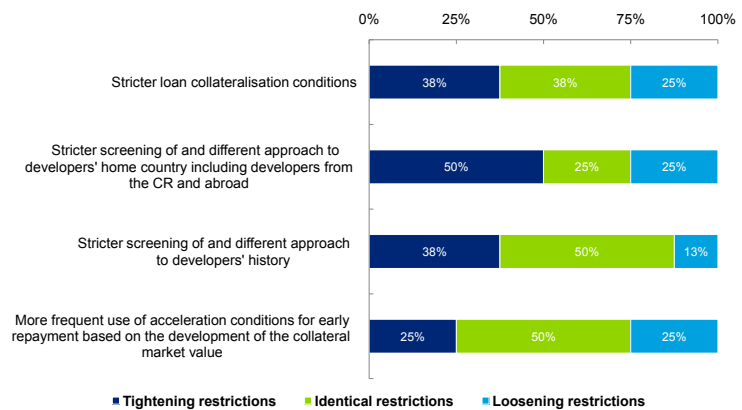
Compared to 2008, financial institutions report increasing the minimum required share of equity from 18% to 34%, on average, in 2009. This parameter is expected to stagnate over the next period, declining to 30% on average in 2011.

Similarly, the minimal required pre-sales (for the first drawing of loans) grew abruptly year-on-year from 21% to 34% on average between 2008 and 2009. Financial institutions expect this figure to slightly grow further in 2010, falling to 29% on average in 2011.

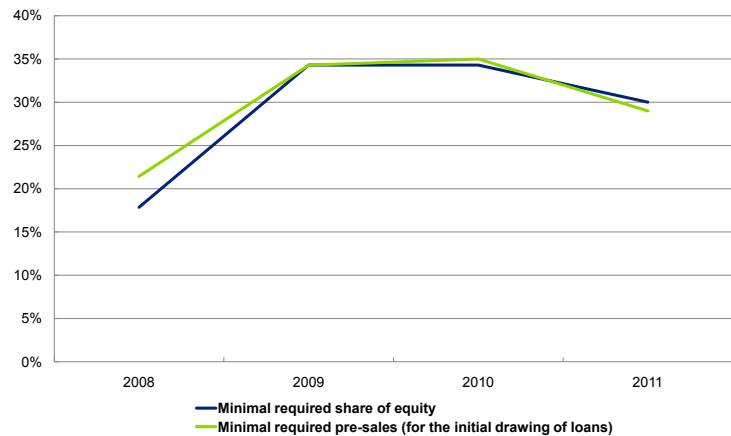
In 2009, financial institutions report a major drop in the number and volume of financed development projects on average to 34% or 35%, respectively, of the levels seen in 2008.

Until 2010, the projects are expected to grow gradually; in 2011, the growth is expected to accelerate, to the value of 57% in terms of the number of or to 58% in terms of the volume of financed development projects in 2008.

### How Do You Plan to Further Modify These Standards in the Next Six Months?

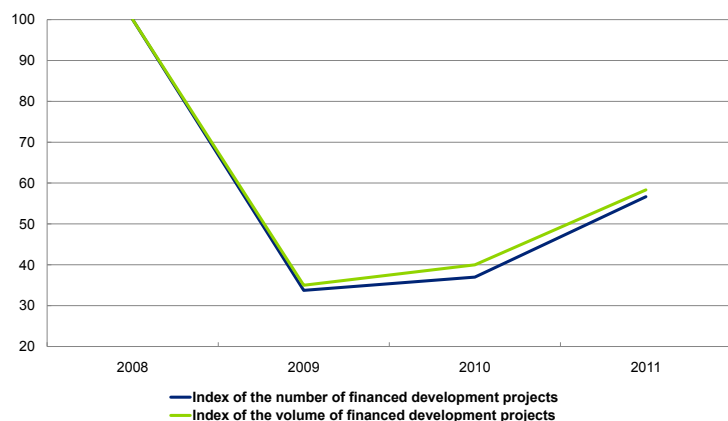


### Estimated Development of Project Financing Indicators



### Development of Project Financing Indicators in Individual Years

(Indexes, year 2008 = 100)



## Mortgage Financing

In addition to adjusting their product parameters, financial institutions report having generally implemented a more prudent approach to approving mortgage loans. In addition to the above measures, they also often reviewed their applicant's available income calculation formula, limited or temporarily suspended the provision of higher-risk types of loans including new methods of assessing applicants for high LTV loans, and tightened criteria for selecting and valuing real estate to be accepted as collateral.

In response to the financial crisis about 75% of financial institutions, usually banks, tightened their conditions for granting mortgage loans from September 2008 to September 2009. Building saving banks usually adopted this measure in the following period.

Only 33% of financial institutions changed their conditions for granting mortgage loans from October to December 2009, of which 50% further tightened their conditions and another 50% loosened them.

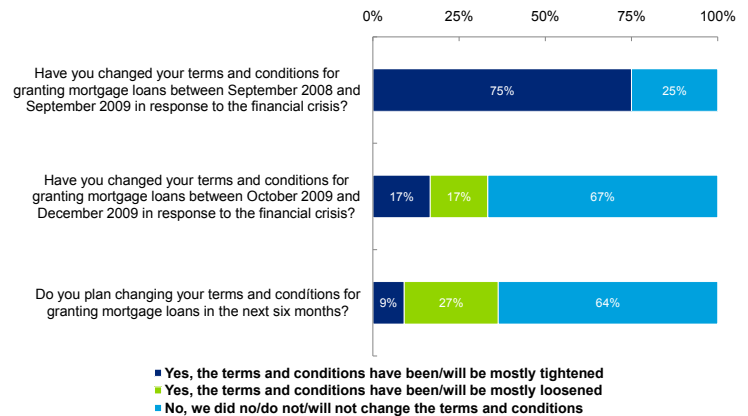
Only about 36% of financial institutions plan revising their terms and conditions in the next six months. While the institutions will usually loosen their conditions for granting mortgage loans, the building savings banks will usually continue tightening them.

The surveyed financial institutions report that, compared to 2008, the share of successful mortgage loan applicants fell from 85% to 77% in 2009. They expect the approval rate to grow again in the next two years, reaching the 2008 values in 2011.

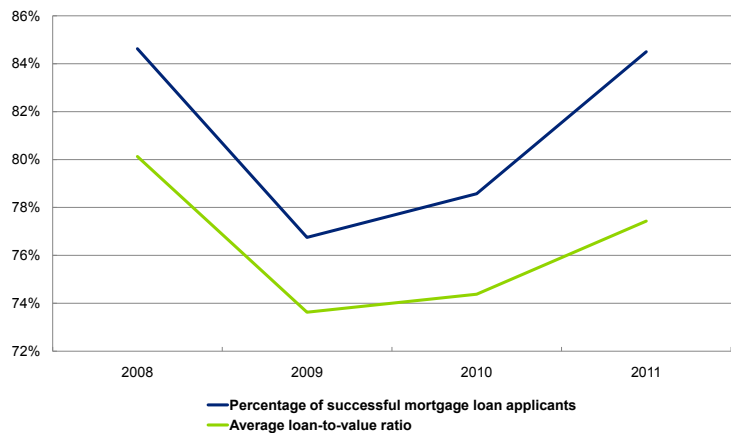
Compared to 2008, the average loan-to-value ratio fell from the average 80% to almost 74% in 2009. Financial institutions expect the LTV indicator to grow gradually to 74.5% and 77% in 2010 and 2011, respectively.

Financial institutions expect the major drop in granted mortgage loans to 72% (in terms of number) and 73% (in terms of volume) of the level achieved in 2008 to be followed by growth of these indicators in the coming years.

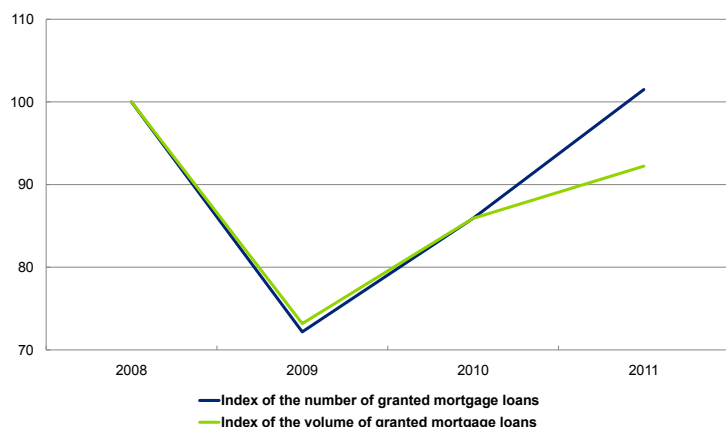
## How Have you Changed or Plan to Change Your Terms and Conditions for Granting Mortgage Loans?



## Development of the Mortgage Financing Indicators in Individual Years



## Estimated Development in the Number and Volume of Granted Mortgage Loans (Indexes, year 2008 = 100)



In 2010, the companies expect the number and volume of granted mortgage loans to reach 86% of the value achieved in 2008.

The number and volume of mortgage loans is expected to grow also in 2011. While the growth of the overall volume of loans is expected to be slightly slower (92% of the volume in 2008), the growth in the number of granted mortgage loans is expected to be 2% higher than in 2008.

The greater growth in the number and volume of granted mortgages in 2010 and 2011 is usually expected by smaller-sized financial institutions.

### Impact on the Market and Its Recovery

About 50% of the surveyed financial institutions, more frequently banks than building savings banks, reported having a portfolio of distressed assets. While two thirds of these companies do not consider selling their distressed assets, one third of companies, usually smaller companies, lean towards this measure.

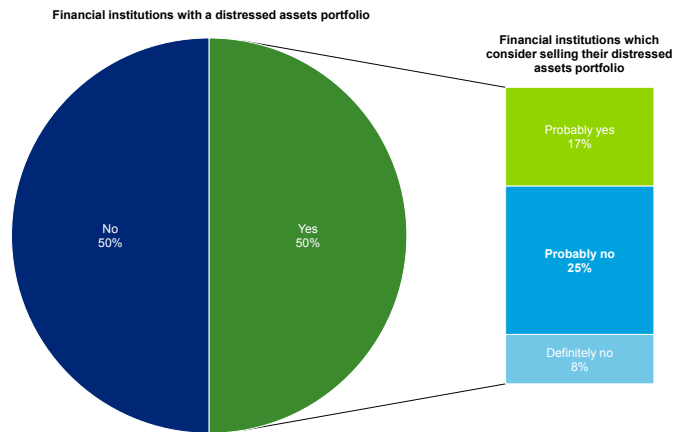
About 71% of financial institutions are not concerned that their current (restrictive) approach to clients would affect their future revenues.

One fifth of the financial institutions reported higher fraud incidence in mortgage loans in connection with the financial crisis.

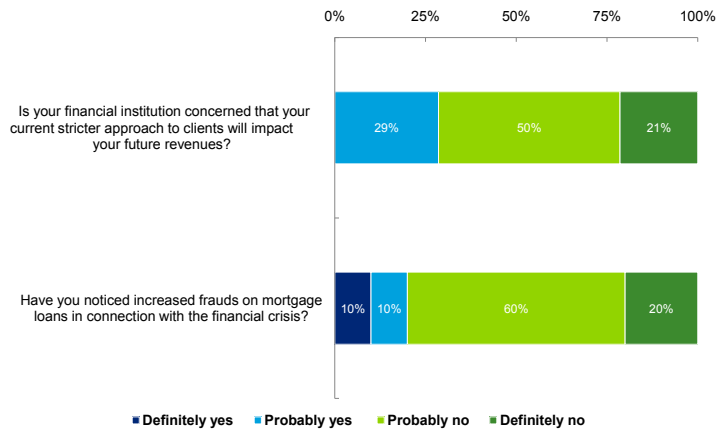
None of the surveyed financial institutions consider that the residential market has already fully recovered, or that it will never recover in the future. About 62% of the institutions expect the market to recover in the future; more than one third think that the market is already recovering.

Financial institutions estimated to what level the market would return after its recovery. The answers mostly included the years from 2003 to 2008. About 36%, usually large companies, answered 2006 and 27%, usually smaller companies, answered 2008.

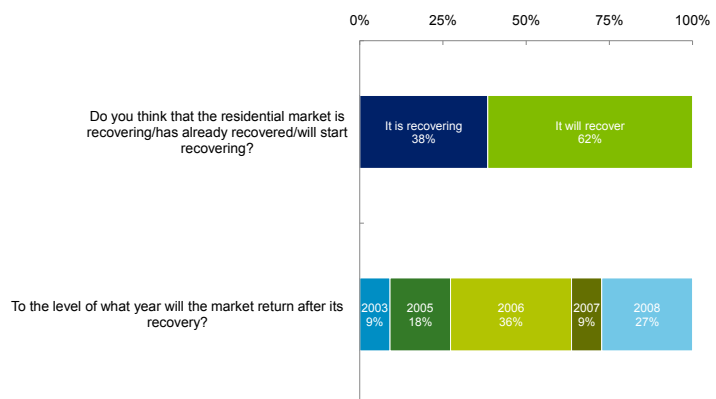
### Distressed Assets



### Impacts of the Financial Crisis



### Market Recovery



### Developers, Construction Companies, Investment Groups and Real Estate Agencies

The survey included Czech and foreign developers, construction companies, investment groups and real estate agencies involved in residential development and new housing construction projects. For the purposes of this survey, the above group of companies is collectively referred to as “developers”.

### Impact of the Global Financial Crisis and Global Recession

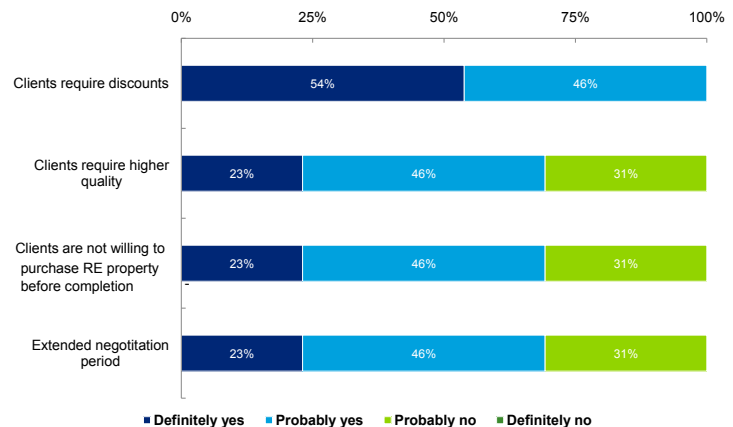
According to developers, the global financial crisis and recession have influenced, in a certain way, the behaviour of clients interested in purchasing their own housing. All the surveyed companies (100%) report that clients currently require discounts from real estate purchase prices. About 69% of companies report that clients place greater emphasis on the quality and standard and are less willing to purchase their residential property before completion (pre-sales), considering their final purchase of residential property for a longer period of time which extends the negotiation time. Developers also report that due to the financial crisis clients newly require the developers to have good references and that clients have generally higher demands on different selection parameters such as creditworthiness, location, stability, etc.

Developers report that, in 2009, the number of sold residential units fell dramatically to 67% of the number of sold apartments in 2008 and expect this number to increase abruptly to 96% in 2010 and fully get back to the value of 2008 in 2011.

2009 also saw a decrease in the price levels of sold residential units to 87% of the price level in 2008. A more significant decrease was felt mainly by smaller developers.

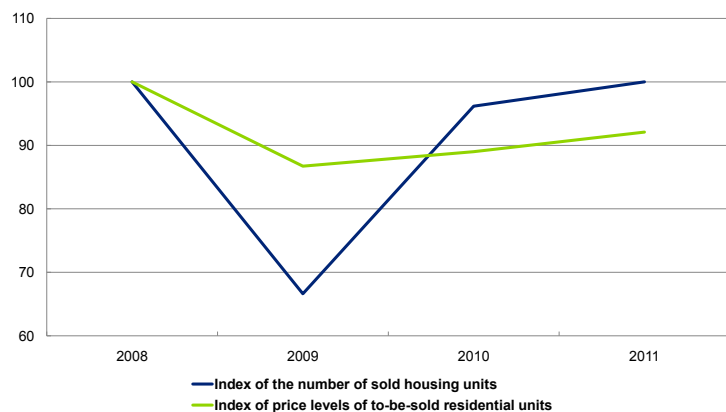
In the next two years, developers expect prices to grow gradually to 89% and 92% of the 2008 values in 2010 and 2011, respectively.

### What Changes in the Attitude of Clients Does Your Company See?



### Estimated Numbers and Price Levels of Sold/To-be-Sold Residential Units

(Indexes, year 2008 = 100)



## Project Financing

Developers report having felt changes in the approach of banks which provide project financing due to the financial crisis.

According to all surveyed developers, banks tightened their loan collateralisation conditions. About 64% of developers believe that banks will not further revise these conditions in the next six months, 18% of developers expect these conditions to be further tightened and another 18% expect them to be loosened.

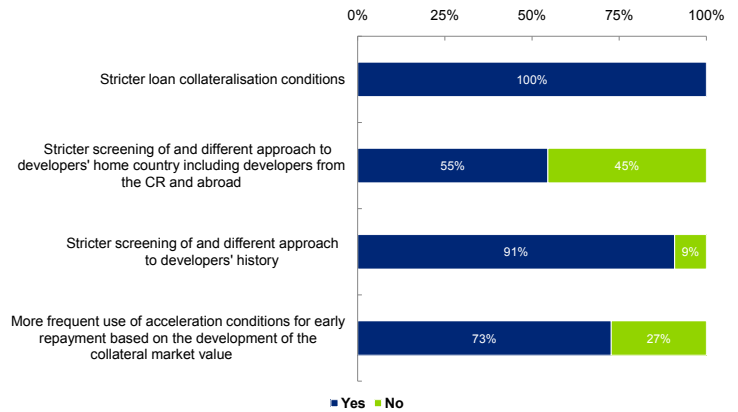
About 91% of companies report a stricter approach by banks to developers' assessment and a different approach to developers based on the developers' history. Similar to the above, developers usually do not expect the banks to revise their approach in the next six months.

About 73% of developers believe that acceleration terms and conditions for early repayment based on the market value of the collateral were used more frequently. A fourth of the developers, usually smaller companies, expect banks to further tighten this restriction in the next year; large companies usually expect this restriction to be loosened. About 55% of developers report stricter screening of and a different approach to Czech and foreign developers.

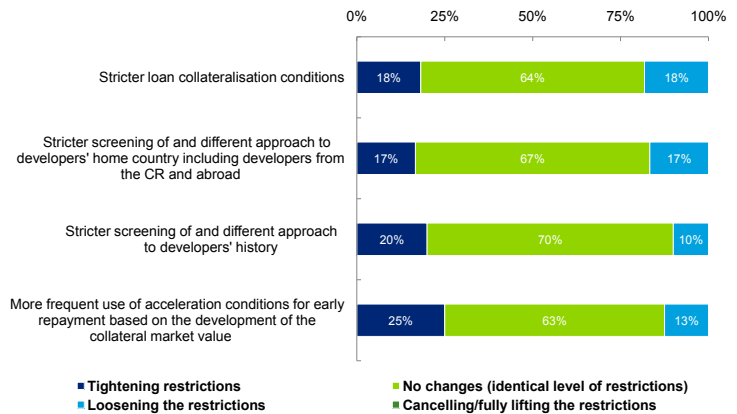
Developers report the minimal required equity to have grown, on average, from 22% to 35% in 2009, and expect its gradual decline to 31% and 30% in 2010 and 2011, respectively.

Similarly, the minimal required pre-sales grew from 18% to 38% in 2009, and the developers expect it to slightly decrease in 2010 and stabilise at 30% in 2011.

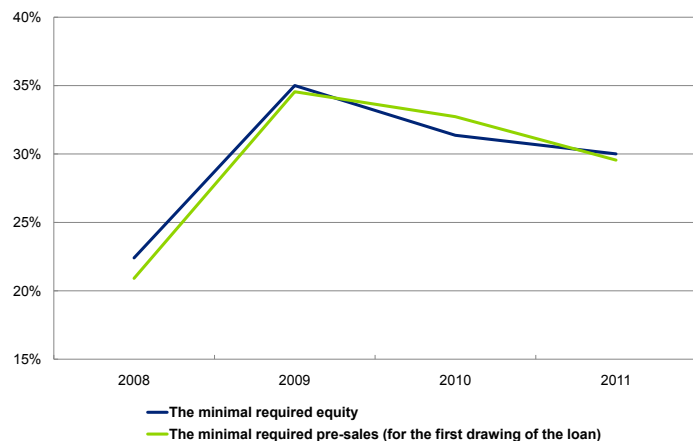
### What Specific Changes in Project Financing Standards Do You See in the Bank's Behaviour in Response to the Financial Crisis?



### Do You Believe that Banks Plan Further Revising these Standards in the Next Six Months? If You Do, What Would They Do?



### Development of Project Financing Indicators

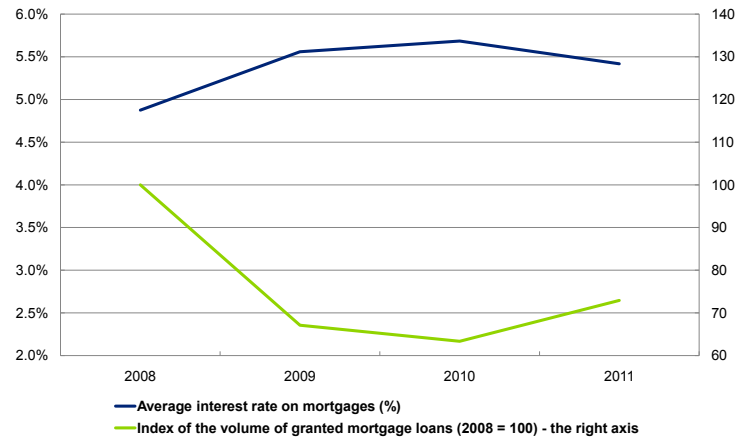


### Mortgage Financing

With regard to the development of mortgage financing indicators, developers report average interest rates on mortgage loans at 4.9% p.a. and 5.6% p.a. in 2008 and 2009, respectively, and, in 2010 and 2011, they expect average interest rates at 5.7% p.a. and 5.4% p.a., respectively.

Developers report the volume of granted mortgage loans to have abruptly fallen to 67% of the 2008 value and, until 2010, they expect this volume to further slightly decline to 63% of the 2008 value, growing slowly again from 2011.

### Development of Mortgage Financing Indicators

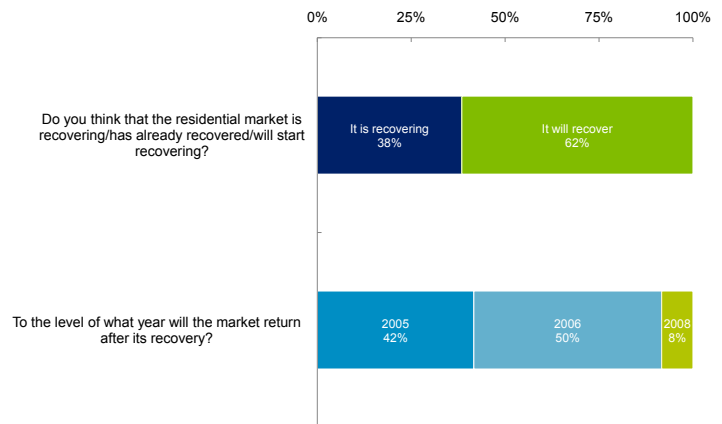


### Impact on the Market and Its Recovery

The survey included the question whether the companies believe that the residential market has already recovered, is currently recovering, will recover in the future, or will never recover.

The market will recover and is currently recovering according to 62% and 38% of respondents, respectively. About 50% of companies expect the market to return to the level of 2008, 42% expect it to return to the level of 2005 and 8% of developers expect the market to return to the level of 2008.

### Market Recovery



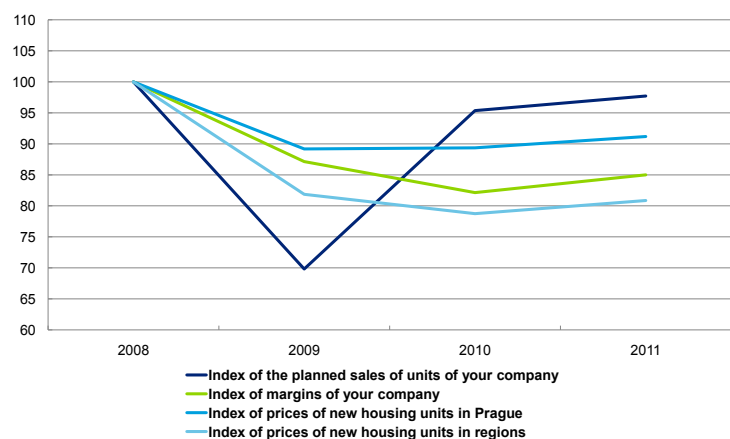
### Market Prediction Including Prices, Margins and Sales Methods

According to the developers, in 2009, the planned sales of residential units fell abruptly to 70% of 2008, the prices of new residential units in regions fell to 82% of 2008, the margins of companies declined, on average, to 87% of 2008 and the prices of new residential units in Prague slightly declined to 89% of 2008 on average.

The graph illustrates the expected development of these indicators in the coming years. The planned sales of units will grow abruptly to 95% of 2008, slowly approximating the levels of 2008 in 2011.

### Development of Indicators in Individual Years

(Indexes, 2008 = 100)



According to the developers, in 2010, the prices of residential units in regions and the margins of companies will continue decreasing slightly to 79% and 82% of 2008, respectively, starting to increase slowly in 2011. The prices of residential units in Prague are expected to start increasing slowly in 2010 (only by a few tenths of percent) as well as in 2011 (to the level of 91% of the 2008 prices).

Developers gave their positions to the measures aimed at supporting the residential market.

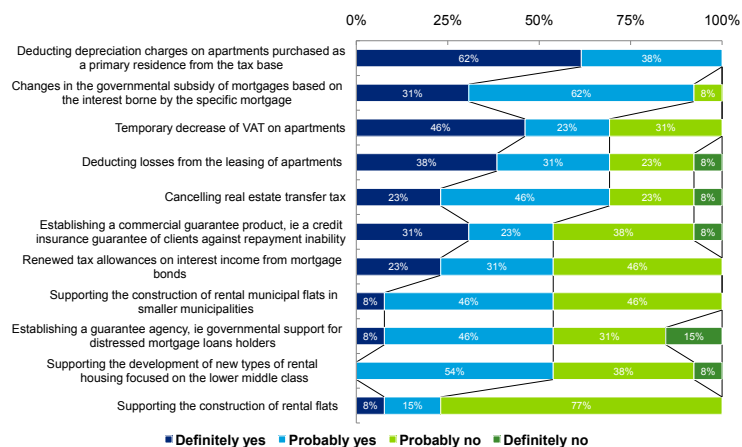
All companies (100% of respondents) consider deducting depreciation charges on apartments purchased as a primary residence from the tax base as an effective measure and almost all companies consider changes in the governmental financial subsidy of mortgages based on the amount of interest borne by the specific mortgage as an appropriate measure.

About 69% of developers agree with temporarily decreasing the VAT on apartments, deducting losses from the leasing of apartments, and cancelling the real estate transfer tax.

The opinions of companies on the other measures differ. While 50% of respondents perceive the other measures as appropriate support of the residential market, the other 50% sees them as inappropriate.

The disputable measures include establishing a commercial guarantee product, ie a credit insurance of clients against repayment inability, renewing tax allowances on interest income from mortgage bonds which is usually supported by smaller companies, supporting the construction of municipal flats for rent in smaller municipalities, establishing a guarantee agency as governmental support for inability to repay mortgage loans which is usually supported by companies that have many units for sale, and supporting the development of new types of rental housing focused on lower middle class which is mostly supported by large developers. About 77% of companies do not perceive the support of rental housing as a measure which makes sense in supporting the residential market.

### Which Measures Make Sense in Supporting the Residential Market?



**Benchmarking of the Results of Financial Institutions and Developers**

Given that certain questions focused on project financing included in the survey were identical or similar for both the financial institutions and developers, it was possible to compare the answers and see where they differ and where they agree.

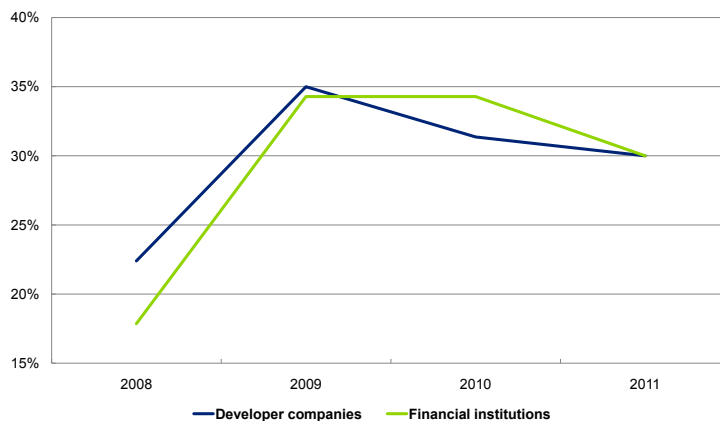
While the financial institutions expect the minimal required equity to decrease in 2010, the developers expect it to decrease before 2011.

Financial institutions and developers report an average growth rate between 2009 and 2011 of 94% and 93%, respectively; thus, both the banks and developers expect a similar average decline.

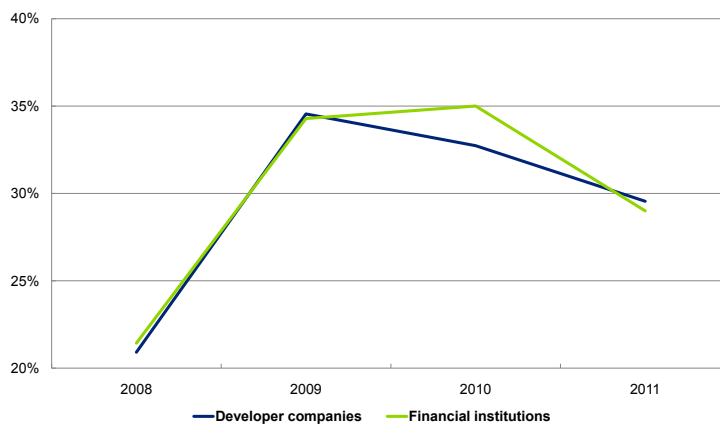
While the financial institutions expect that, compared to 2009, the required minimal pre-sales for the first loan drawing will grow in 2010 and decline in 2011, the developers expect the pre-sales to start declining in 2010.

Both the financial institutions and developers expect an average growth rate between 2009 and 2011 of 92%; thus both the banks and developers expect the same average level of decline between 2009 and 2011.

**Minimal Required Share of Equity (%)**



**Minimal Required Pre-sales (for the initial drawing of loans) (%)**

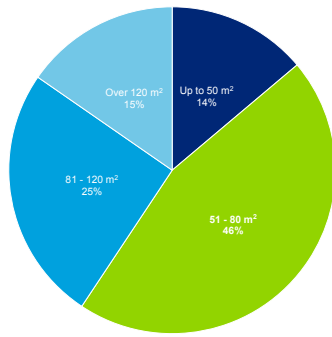


### 6.3 Results of the Questionnaire for the Public

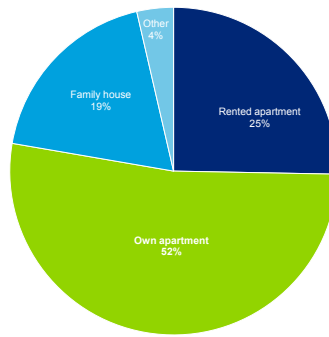
#### Composition of the Sample

Respondents were grouped as follows based on individual indicators:

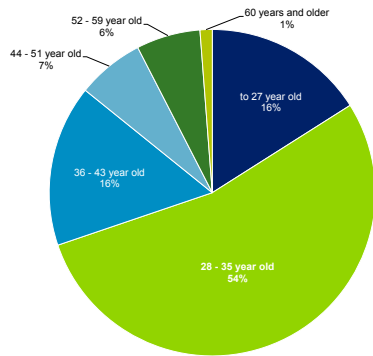
**Size of respondent apartment**



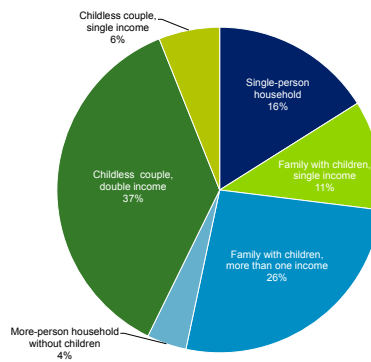
**Respondent housing**



**Age of respondents**



**Ranking households by type**



The age of the respondents' sample of is as follows: 70% of respondents, ie the prevailing group, are younger than 35 years; 54% of respondents are between 28 and 35 years which is the age when people most frequently have families and get their first homes; and 16% of respondents are people between 36 and 43 years who are mostly interested in purchasing residential property as an investment (their second home).

The households are represented in the respondents' sample as follows: the majority of households (37%) are couples with double income and no children; more than 25% of households are families with children and more than one income.

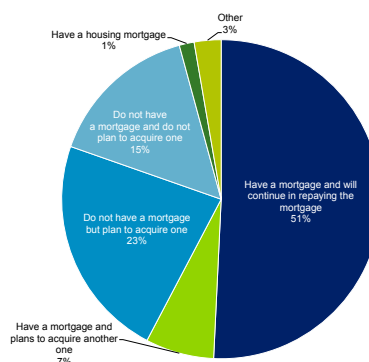
The type and size of housing of respondents is as follows: 77% of respondents live in apartments, of which about 52% live in their own apartments and 25% live in rented apartments; the most frequent size of apartment (46% of respondents) is apartments between 51 and 80 m<sup>2</sup>, which are typically apartments that have two or three rooms plus kitchen; and less than 1/6th of respondents live in apartments whose area is smaller than 50m<sup>2</sup>.

The mortgage arrangements of respondents are as follows: 51% of respondents currently have mortgages and will continue repaying them; 7% of respondents plan on getting another mortgage in addition to their current one; 23% of respondents, the second largest group of respondents, have no mortgage loan but plan on getting one; and only 1% of respondents use their building savings loans to finance their housing.

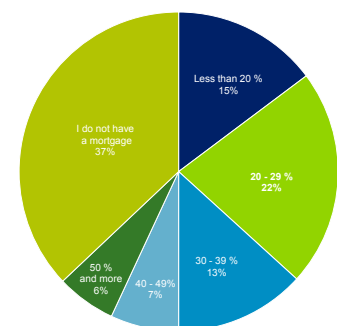
The majority of respondents who have mortgages are below the limit of a secure amount of repayments where their monthly mortgage-related expenses should not exceed 40% of the household net monthly income. The share of the mortgage loan repayment in the net monthly household income is usually between 20% and 29%. The smallest group includes respondents whose monthly mortgage repayment is greater than 40% or 50% of the household income.

Statistically significant differences were identified for the above groups for all questions relating to the opinions of respondents.

**Division of respondents in relation to mortgage**



**Share of the mortgage loan repayment on the household net monthly income**



### *Opinions of Respondents: Analysis of Individual Questions*

#### **Concerns of Respondents in Connection with the Current Economic Situation**

The answers of respondents to the question which situations they feared in the context of the economic recession are as follows. Most of respondents fear that their household income will decrease. Similarly to 2009, every second respondent, usually respondents who live in single-member households, fear their income will decrease.

Respondents who fear lower household income the least include people younger than 27 years of age and childless couples in 2010. By contrast, in 2009, the respondents who feared lower household income the least included people whose mortgage repayments were less than 20% of their net household income, respondents between 52 and 59 years of age, people who lived in their own apartment and people who had a mortgage and planned on getting another one.

In 2009, the number of people who fear the lower availability of mortgage loans decreased by 15% compared to 2008. Almost one third of respondents, mostly older people who live in family houses or larger apartments and people whose mortgage repayment exceeds 40% of their net household income, fear this situation.

About 30% of respondents fear losing their job. Concerns about losing a job decreased year-on-year by 7%. In 2009, respondents who more frequently feared losing their job and thus also their regular income include people who live in larger apartments (80-100 m<sup>2</sup>) and people who do not have a mortgage but plan on getting one. Childless couples and people living in apartments smaller than 80 m<sup>2</sup> usually have no fear of losing their job.

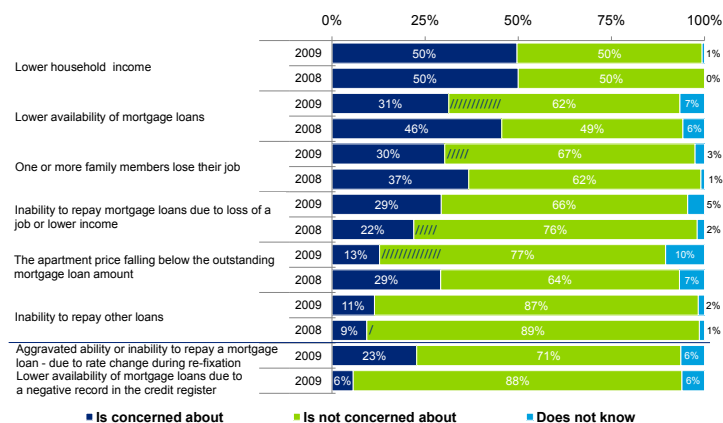
The fear of respondents of not being able to repay their mortgage loans due to losing a job or lower household income grew, year-on-year, by 7%; 29% of respondents, ie older aged people, people who live in larger apartments and people whose mortgage loan repayment exceeds 40% of their net household income fear this situation.

The fear of the apartment price falling below the outstanding mortgage amount is typical for people younger than 35 years and people who already have one mortgage loan and plan on getting another one. These concerns decreased substantially compared to the past year, the year-on-year decrease is 16%.

The fear of being unable to repay other loans is reported by 11% and 9% of respondents in 2010 and 2009, respectively. Respondents who feel this risk typically include people between 44 and 51 years of age, families with children, and households whose mortgage loan repayment exceeds 50% of net income. Childless couples and people who live in their own apartments are usually not concerned about this situation.

This year's survey includes additional situations of concern, ie aggravated ability or inability to repay mortgage loans due to changes in the fixation of mortgage rates and the lower availability of mortgage loans due to a negative record in the credit register. While more than 23% of respondents fear the aggravated ability or inability to repay their mortgage loans due to changes in the fixation of mortgage rates, only 6% of respondents fear the lower availability of mortgage loans due to a negative record in the credit register.

### Concerns of respondents in connection with the current economic situation

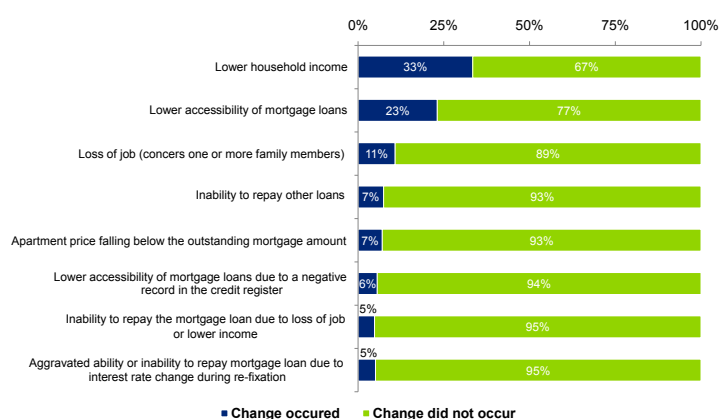


### Situations Really Suffered by Respondents in Connection to the Recession

The survey performed in 2010 identifies which of the situations the respondents are concerned about in the context of the current economic situation have really happened since the last year.

More than one third of respondents report their household income decreasing between 2009 and 2010. This situation is typical for households with children and single income, and households where the mortgage loan repayment exceeds 50% of net income.

### Situations incurred by respondents in connection with the economic recession



About 23% of respondents, usually households with children and single income, report lower availability of mortgage loans. About 6% of respondents report lower availability of mortgage loans due to a negative record in the credit register. About 7% of respondents report that the price of their apartment fell below the mortgage amount.

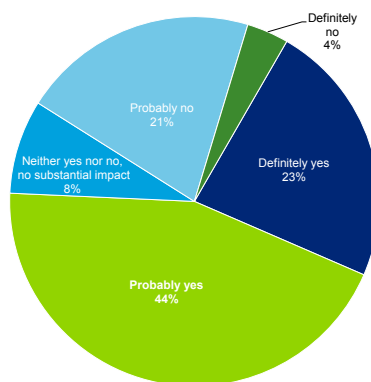
About 11% of respondents report that they themselves or family members lost a job.

About 7% of respondents report their inability to repay other loans. Problems with repaying other loans are typical for people who live in large apartments (larger than 120 m<sup>2</sup>) and households where the mortgage loan repayment exceeds 50% of net income. About 5% of respondents report their inability to repay mortgage loans due to losing their job or having lower income. The loss of job and lowered income more seriously affected households where the mortgage loan repayment exceeds 50% of net income. About 5% of respondents, typically people who live in large apartments (larger than 120 m<sup>2</sup>) and single-income families with children, report aggravated ability or inability to repay mortgage loans due to changes in the fixing of mortgage rates, which is far greater percentage than the 2.25% reported by the market.

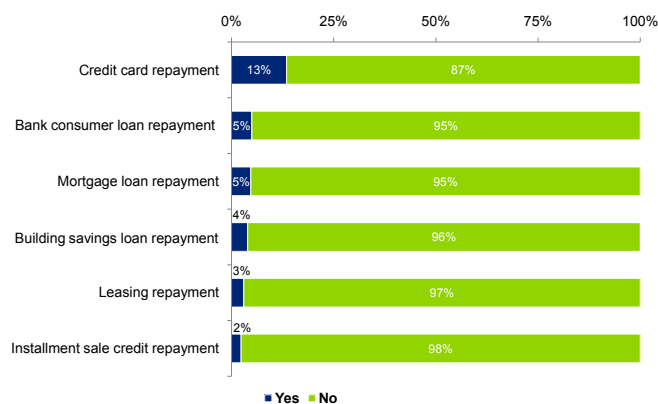
## Loans

The respondents were questioned whether one missed or delayed mortgage loan repayment or credit card repayment could compromise their negotiating new loans or fixing new rates. About 67% of respondents believe that it will compromise them, of which 23% believe that it definitely will compromise them. About 25% of respondents believe that one missed or delayed mortgage loan repayment will not compromise them. About 4% of respondents believe that it will definitely not compromise them. While respondents who consider one missed or delayed loan repayment to compromise them in their dealings with banks are typically people between 44 and 51 years of age, respondents who do not believe to be compromised in their dealings with banks by one delayed or missed mortgage loan repayment or credit card repayment are typically between 28 and 35 years of age.

### Influence of one missed or delayed loan repayment on negotiating a new loan or new fixation (Mortgage loan repayment or credit card repayment)



### Missed or delayed loan repayment (In the last 2 years)



More than 13% of respondents did not make their credit card repayment on time in the past 24 months by mistake or by negligence.

About 5% of respondents did not make their bank consumer loan repayment or mortgage loan repayment on time in the past 24 months. A missed mortgage loan repayment is more frequent for people who live in large apartments (larger than 120 m<sup>2</sup>) or who live in family houses. About 4% of respondents failed to make their building savings loan repayment on time, 3% failed to make their leasing repayment on time and 2% failed to make their instalment sale repayments on time.

More than 25% of respondents, typically people between 44 and 51 and people who have mortgage loans, are well aware of where and how data about the timely repayment of bank loans and other than bank loans are registered and of the ability to obtain information about payment discipline. More than 63% of respondents, typically people between 28 and 35 years of age and people planning their second mortgage, know that such information exists somewhere but are not aware of any details. About 11% of respondents, usually people, who have no mortgage loan, know nothing about where and how payment discipline information can be obtained.

### Incentives by Developers/Sellers Motivating People to Buy Apartments

As in the 2009 survey, respondents were questioned which incentives by developers or sellers would motivate them the most to buy an apartment.

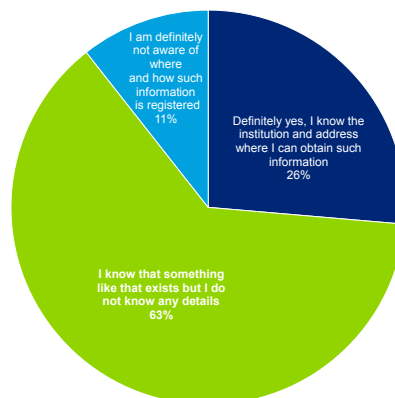
Individual preferences were ranked, based on the answers of respondents, from the most preferred incentive to least preferred one.

The year-on-year comparison shows that the respondents have not changed their preferences in incentives motivating people to buy apartments. As compared to 2008, the incentives newly include the guaranteed lowest price on the market which ranks third in 2009. Similarly to 2008, the majority of respondents prefer discounts from the purchase price of the apartment.

The identified preferences show that respondents continue to prefer financial benefits to bonuses in kind when buying apartments.

The discounts from the purchase price of apartments are preferred by people who have no mortgage but plan on getting one and people who live in apartments smaller than 50 m<sup>2</sup>. The settlement of repayments and interest is mostly preferred by people younger than 27 years. The guarantee of the lowest price on the market is preferred by people who live in rented apartments. The insurance guarantee is preferred by people between 44 and 51 years of age and people who live in rented apartments; this incentive does not motivate respondents who live in their own apartments.

### Awareness of people about the opportunity to obtain information on payment discipline



Ranking	Incentives by developers or sellers motivating people to buy apartments
1	Discount of the purchase price of the apartment (5 - 10%)
2	Covering mortgage repayments up to the designated level /paying the mortgage loan interest for 1 year
3	Guaranteeing the lowest price on the market
4	Insurance guarantee, ie paying the credit insurance premium against mortgage repayment inability
5	Providing certain home furnishing such as kitchen unit for free
6	Providing a car for free

The gratuitous furnishing of apartments is preferred to a lesser extent by people who live in apartments smaller than 50 m<sup>2</sup>. The free car is the least favourite incentive from the list principally preferred by respondents who live in medium-size apartments (between 50 and 80 m<sup>2</sup>).

## Legislative Incentives Motivating People to Buy Apartments

The survey included questions to identify which legislative measures would currently motivate respondents the most to buy apartments. The individual legislative incentives were ranked (similarly to the developer/seller incentives) based on the preferences of respondents from the most preferred legislative incentive to the least preferred one.

The most preferred incentive is deducting depreciation charges on apartments purchased for primary residence from the tax base. The second most preferred incentive is decreasing the VAT on apartments temporarily. The least preferred legislative incentive is deducting the loss from the leasing of apartments which is perhaps because the market of rented housing is undeveloped.

The ranking of individual legislative incentives mostly depends on the awareness of people of their existence, their coverage in media and their actual use in practice.

The changes in the governmental support of mortgages by providing financial subsidy based on the specific interest borne by the specific mortgage is mostly preferred by people between 28 and 35 years of age. Establishing a guarantee agency and deducting the loss from the leasing of apartments are mostly preferred by families with children and people who live in larger apartments.

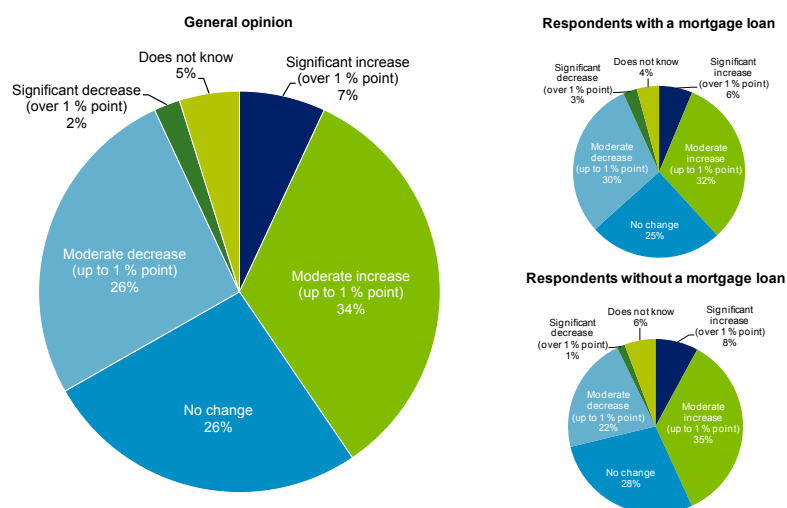
## Expected Changes in Interest Rates on Mortgage Loans

The respondents reported their expected changes in interest rates on mortgage loans within one year. While more than 41% of respondents expect the interest rates on mortgage loans to grow during 2010, 28% of respondents expect the interest rates on mortgage loans to decrease during 2010. More than 25% of respondents expect the interest rates to stagnate (remain unchanged) during 2010.

The survey revealed no major differences between the respondents who currently have a mortgage loan and those who do not have one in their opinions on the development of changes in the interest rates on mortgage loans (their opinions differed by approximately 2-3 p.p.); the possibility of a slight decrease of the interest rates on mortgage loans (up to 1 p.p.) was 8% more frequent in the case of respondents who have mortgages.

Ranking	Legislative measures motivating people to buy apartments
1	Deduction depreciation charges on apartments purchased for primary residence from the tax base
2	Temporary decrease of VAT on apartments
3	Changes in the governmental subsidy of mortgages based on the interest borne by the specific mortgage
4	Establishing a guarantee agency, ie governmental support for inability to repay mortgage loans
5	Deducting losses, if any, from the leasing of apartments

## Expected change of mortgage interest rates in 1 year



While the increase in interest rates on mortgage loans during one year is more frequently expected by people who live in family houses, their decrease is more frequently expected by people who live in their own apartments.

### Expected Changes in Prices of New Apartments

More than 39% of respondents expect the prices of apartments on the Czech residential market to remain unchanged during 2010 (in 2009, only 22% of respondents expected no changes in the prices of apartments).

More than one third of respondents expect the prices of apartments to decline in 2010, which is much less compared to 2009 when almost 70% of respondents expected the real estate prices to decline. While 31% of respondents expect a slight decrease (up to 10% of the current price) in 2010, only 3% of respondents expect a major decrease (by more than 10% of the current price).

More than 24% of respondents expect the prices of apartments to grow in 2010. While 2% of respondents expect a major increase in the prices of apartments (by more than 10% of the current price) in 2010, 22% of respondents expect a slight increase (up to 10% of the current price). The increase in the prices of apartments is expected mostly by older-aged people between 52 and 59 years of age and people who currently do not have a mortgage loan but plan on getting one.

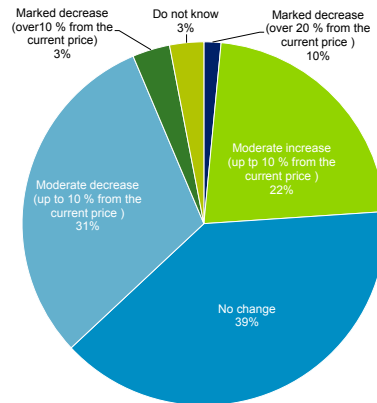
### Convenient Time for Buying New Apartments

The respondents were questioned whether the current time is convenient for buying new apartments (to map the potential demand for new residential real estate). According to the survey, 60% of respondents would currently buy apartments; 13% of respondents definitely consider this time convenient to buy apartments; and 48% of respondents consider the current time rather convenient to buy apartments. More than 19% of respondents consider the current time inconvenient for buying apartments. About one fifth of respondents have a neutral attitude to the convenience of this time and market situation.

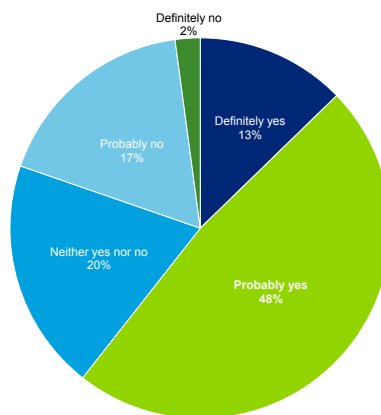
While respondents who more frequently consider this time convenient for buying apartments are between 44 and 51 years of age, those who more frequently do not consider this time convenient in this respect are between 28 and 35 years of age. Respondents who consider this period convenient for buying apartments more frequently expect the price levels of apartments to remain unchanged in 2010.

Thus, according to the survey, growing demand will not result in higher prices of apartments in 2010.

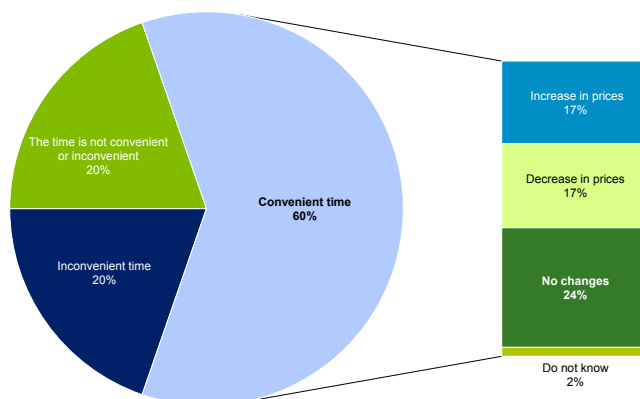
Expected changes in prices of new apartments during 2010



Convenient Time for Buying New Apartments



Changes in real estate prices expected by respondents who consider the current time convenient for buying residential real estate



# 7 Conclusions of the Study

## 7.1 Summary

The decline in new residential construction in 2009 was more moderate than expected. The panic from the anticipated negative developments on the residential market at the end of 2008 calmed and the market has gradually stabilised. The decline in the mortgage market was also more moderate than expected; the number of started apartments exceeded expectations; and the number of completed apartments slightly grew. Most developers learnt to live under the new conditions; no mass failures of developers were reported. The residential market has stabilised at a new price level. Financial institutions and developers as well as the qualified public, are more optimistic than a year ago.

The study of the impact of the financial crisis on residential development published at the beginning of last year showed how significant can be the role of governmental administrative measures in creating cycles in the residential market. The administrative intervention by increasing the VAT on apartments in 2007, or to put it more precisely, the uncertainty and ambiguity of information associated with introducing this measure resulted in a stocking-up of the housing market on new apartments and thus in an abrupt increase in the apartment prices, a shortage of building materials and workforce, and last but not least, the exhaustion of demand for residential construction in the following years when the natural drop in the market due to the lower demand was accompanied by the consequences of the global financial crisis and the following recession. It became apparent that residential construction, if the development is smooth, has positive multiplication effects on the whole economy; however, if unsteady, it has many negative impacts including:

- Extreme fluctuations in residential property prices;
- Insufficient or excessive capacities of construction firms;
- Economic problems of developers;
- Growing uncertainty resulting in implementation of risk-mitigation measures at financial institutions; and
- Growing speculations of prospective buyers about unrealistic growth or decline in real estate prices.

A similar situation occurred in Great Britain at the beginning of 2010 when the limit for real estate

tax payment was decreased from GBP 175,000 to GBP 125,000, ie by 28.5% which meant increasing the tax by up to GBP 1,750. The market responded to the given increase by its steep fall in January 2010 when the number and volume of new mortgage loans for housing declined, month-on-month, according to the British Bankers' Association by 23.1% (number) and 20.9% (volume). This confirms the critical impact of governmental measures on the acceleration or slow-down of residential construction, which can substantially contribute to the convalescence or further slow-down of the economy particularly during a recession due to the major multiplication effect of residential construction or building construction on both the economy and employment.

## Development of the Czech Residential Market

The indicator of the volume of available housing in the Czech Republic expressed as a percentage of available housing per 1,000 inhabitants has neared the EU27 average, and its level is comparable to Belgium and slightly exceeds the Netherlands and the United Kingdom. Further growth is expected only with respect to the increase in population and renewal of available housing. Given the social and economic changes in the Czech society over the past 20 years, there is certain risk associated with available housing, in particular the deployment of available housing across the territory of the Czech Republic: the deployment is not fully aligned with economic and social requirements, which is reflected in large differences in prices and occupancy across individual regions. Compared to other European countries, the indicator of the intensity of residential construction per 1,000 inhabitants in the Czech Republic in 2009 exceeded, for example, the residential market development in Germany or the United Kingdom.

While the Czech Republic neared the comparable Western European countries in terms of the volume of available housing, it lags behind in terms of its quality and age. The Czech Republic significantly falls behind Western Europe in terms of annual consumer expenses spent on repairing and maintaining apartments. If available housing is not renewed and sufficiently maintained, and the dated buildings are not replaced by new ones, there is a certain risk of developing ghettos. Compared to Western European countries, the percentage of rental housing is relatively low in the Czech Republic. The number of households living in rented apartments per 1,000 inhabitants is only 37%

or 64% of the level reported by Germany and Austria, respectively. With regard to the fiscal problems of the Czech Republic, rental housing should be developed principally from private sources by supporting small private investors or creating conditions for the entry of institutional investors.

The surveyed developers report that the number of residential units sold in 2009 fell sharply to 67% of the number of residential units sold in 2008 and the price level of sold residential units also fell in 2009 to 87% of the price level of 2008 and to 82% of the price level of 2008 in the regions.

### **Mortgage Market**

The Czech mortgage market fell in 2009 by almost 40% compared to 2008. Following a year-on-year decrease by 20% already in 2008, the market reached the level of only 50% of its most successful year, 2007. Compared to 2008, the value of an average 2009 mortgage fell approximately by 5.5%.

### **The Market Faces Increasing Risk Related to Delinquent Mortgages**

In mid 2009, the share of non-performing mortgage loans exceeded 2% while further growing, during the following months, to 2.25% in the third quarter of 2009. The aggravated ability or inability to repay mortgages due to interest rate changes during re-fixation was reported by 5% of respondents, more frequently by people who live in large apartments (larger than 120 m<sup>2</sup>) and single-income families with children, which is significantly higher than the 2.25% figure reported by the market.

### **Project Financing**

The cooling of the whole Czech economy and the drop in residential construction were reflected in the financing of developer projects. The surveyed banks report that, compared to 2008, the minimal required equity grew substantially from 18% to 34% on average in 2009. In 2009, financial institutions report that the number and volume of financed developer projects fell sharply to 34% and 35%, respectively, compared to 2008. Most developers report more frequent use of acceleration conditions for early repayment based on the development of market value of the collateral.

## **7.2 Expected Development of the Residential Market in the Czech Republic**

The survey reveals that, compared to 2008, residential property price decreases are expected to a lesser extent. While more than 39% of the surveyed qualified public expects that the prices of apartments will remain unchanged on the Czech residential market in 2010, only 22% of respondents expected that prices would remain unchanged in 2009. More than 60% of respondents in this year's survey consider the current time convenient for buying a new apartment.

The development on the residential real estate market confirms the above-mentioned stabilisation of prices. The current status of prices is well-balanced, with some oscillations in the range of tenths of percentage points. In the next two years, developers expect prices to gradually grow to 89% of 2008 prices in 2010 and to 92% of 2008 prices in 2011. In 2010, developers expect the number of sold residential units to grow abruptly to 96% of the number of apartments sold in 2008 and to return to the value of 2008 in 2011.

Financial institutions expect, on average, that while, in 2009, the number and volume of granted mortgage loans fell to 72% and 73%, respectively, compared to 2008, these indicators will grow again in the following years. The financial institutions expect the number and volume of granted mortgage loans to reach 86% of the 2008 value in 2010. The indicators are expected to grow also in 2011; however, the financial volume is expected to grow more slowly (92% of the 2008 volume) than the number of mortgages which is expected to be 2% higher than it was in 2008.

The surveyed financial institutions expect the value of the minimal required equity to be constant at 34% between 2009 and 2010 and to decline, on average, to 30% in 2011.

The surveyed institutions estimated to what level the market would return after its recovery. The answers include years between 2003 and 2008. The most frequent answer for both the financial institutions and developers is 2006; the second most frequent answer for the financial institutions is 2008 and for developers it is 2005.

### **Development of Supply and Demand**

In 2009, the sales of completed apartments and almost completed apartments largely outweighed the sales of apartments under construction. In 2009, the statistics reports a drop of more than 14% in initiated apartments, however, this information only reflects the number of issued building permits. The developers report that the initiation of sales of new projects and the initiation of the actual construction of new projects was substantially limited. The data regarding the decline in financed development projects indicate that the sales of new residential projects decreased by two thirds. Hence, the continuity of preparing and implementing residential projects, which started between 2000 and 2002, has been interrupted temporarily since the second half of 2008 for the period of at least two years.

Given that the residential development is, indeed, a long-term process and it takes at least 2 or 3 years from starting the preparation of a residential project to completing it and handing over the product/apartment to the new owner, the expectations are as follows: supply and demand will come into balance; at the same time, the supply of apartments under construction or the supply of completed apartments will decrease substantially; and the share of the sales of apartments under preparation and under construction will start growing again gradually.

### **Price Development**

Generally, residential real estate prices are expected to stagnate in 2010. 2009 confirmed that while the growth in residential real estate prices took place, more or less, on a flat basis, the decline in prices did not take place on a flat basis and was lower than expected. In 2010, the quality and location of the specific apartment will drive the prices to a greater extent. We gradually expect more significant differences in the prices of new apartments and old non-remodelled apartments mostly in prefabricated block of flats whose prices grew unrealistically in the past years but also declined the most dramatically of all types of apartments in 2009. The price level of the residential market is expected to stabilise at the level of 2006.

### **Benchmarking of the Expected and Actual Development of Prices for Individual Types of Real Estate in 2009:**

<b>Old apartments in brick-built blocks of flats</b>	<b>Apartments in prefabricated blocks of flats</b>	<b>New apartments</b>
<b>Price declines expected in 2009 compared to 2008</b>		
0 – 20%	20 – 30%	5 – 15%
<b>Price declines actually reported in 2009</b>		
up to 10%	up to 25%	up to 9%

### **Expected Price Development for Individual Types of Real Estate for 2010 Compared to 2009:**

<b>Old apartments in brick-built blocks of flats</b>	<b>Apartments in prefabricated blocks of flats</b>	<b>New apartments</b>
<b>Estimated price development in 2010</b>		
0% to +3%	-5% to 0%	-2% to +2% *

\* - depending on the size, quality and location

The individual categories of apartments are expected to be differentiated to a greater extent based on their standards in terms of the size of the apartment and materials, location, public facilities and the available transportation infrastructure. Almost all apartments to date have been referred to as luxurious or excellent. Similarly, prices are expected to be differentiated to a greater extent based on the individual town districts.

**Influence of Long-Term Development of Real Estate Prices**

Residential property prices are not likely to grow as dynamically as before 2008 in the following years. According to European benchmarks, as in the previous year, the annual growth of the apartment price of 2-3% above the inflation rate is considered sustainable in the long term.

The development recorded in the United Kingdom shows that, for four decades and regardless of numerous different cycles, residential property kept growing, on average, by 36% per decade (net of inflation) which means that the value of residential property grew annually on average by 2.9% in real terms over the monitored period of 50 years.

Foreign experience also shows that residential property is a good long-term investment for its price stability and anti-inflation effect in the long term.

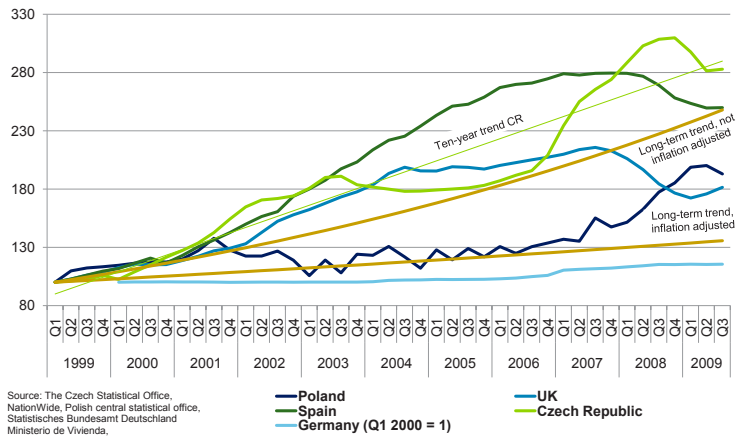
**Mortgage Market Development**

The unsteadiness of the Czech mortgage market in 2009 due to the different perceptions of the market situation by the providers, ie banks and clients, is expected to be followed by the gradual alignment of these perceptions, resulting in a more balanced market supply and demand in 2010.

The prevailing opinion is that interest rates on standard products with longer-term fixation will not decline in the near future. Banks continue to mistrust the further development of unemployment and the inherent higher risk of the inability of people to repay their loans.

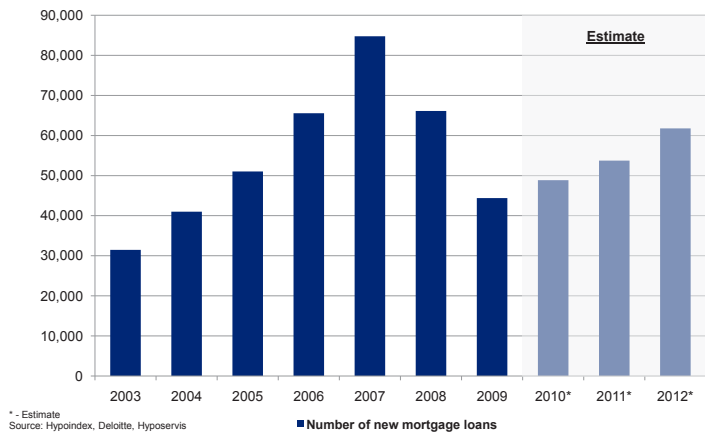
The new anticipated trends include launching of alternative mortgage products based on variable (floating) interest rates intended mainly for more sophisticated banking clients. This trend can have a very positive short-term motivation effect on the market because, in times of low CNB base rates and the lower value of money on interbank markets, it evokes a decreasing interest rate trend on the mortgage market. On the one hand, this factor was one of the key triggers of the residential market recovery in the past as well as between 2004 and 2006 with regard to mortgage products with short-term fixation.

**Apartment Price Index in Selected Countries**  
(Q1 1999 = 100)



Source: The Czech Statistical Office, NationWide, Polish central statistical office, Statistisches Bundesamt Deutschland, Ministerio de Vivienda.

**Forecasted Development of the Mortgage Market**



\* - Estimate  
Source: Hypoindex, Deloitte, Hyposervis

On the other hand, if the share of mortgages grows significantly in this segment, there will be a higher risk of quicker fluctuations in interest rates from the long-term perspective than in the case of the long-term fixation of rates, which could result in a lower stability of this group of loans in terms of repayment ability. However, given the existing nature of the Czech mortgage market where the longer fixation of interest rates prevails in the long-term, no major shift of demand to the above segment is likely to be expected.

The mortgage market as a whole will continue to be affected by the current fear of public to draw new loans, directly dependent on the overall economic development of the Czech Republic and the labour market. The volume of average mortgage is most likely to be influenced by the share of mortgages for purchasing new apartments and family houses in the total number of real estate transactions.

2010 is not likely to see changes in the trend of clients' migration among banks for loans refinancing, firstly because banks have substantially and positively changed their approach to re-setting interest rates at the end of the fixation in 2009, and secondly, because clients who have lower income due to the recession or have difficulties in repaying their mortgages have lower chances for loan refinancing. The share of refinancing in the total number of mortgage transactions is expected maximally at 10% of the total number of mortgages; similarly to 2009, the migration will most frequently result from the natural needs of clients in adjusting their existing terms and conditions of their mortgages. A reliable statistics of refinancing transactions are not available to date; this indicator is tracked by banks only on individual basis.

There are indications that the mortgage market, as the current major provider of financing for new real estate acquisitions, is either incapable or unwilling to fully accept the potential risk of the debt-trap of some mortgage clients and usually deals only with the escalated cases associated with already delinquent mortgages. The monitoring results from 2009 indicate that banks have not yet established mechanisms which would prevent this situation and which would allow banks to proactively deal with the pending risk of mortgage borrowers under financial stress before they become severely delinquent. This ultimately results in certain secondary risks which could adversely affect the whole residential and mortgage market, such as the risk of arrival of sub-prime non-banking products, because these products would be used for lending money to people, who are typically already under financial stress and effectively incapable of making their mortgage repayments, to refinance their mortgages but at much higher interest rates, thus creating the "rob Peter to pay Paul" effect. This could ultimately result in the selling of the pledged real estate in a much faster way and on non-banking grounds for substantially lower prices, which would further worsen the social situation of the mortgage holders.

### 7.3 Measures Affecting Demand for Residential Construction

The current topic for discussion is a new concept of housing development in the Czech Republic sustainable in the long term which emphasises the importance of residential construction in the Czech Republic as:

- A socially stabilising factor of Czech society; and
- A trigger of the economy because residential construction or building construction have a significant multiplication effect on both the economy and employment.

Role in the society	Measure	Comments
<b>Socially – stabilising factor</b>	<i>Mortgage guarantee fund for distressed mortgage holders</i>	<ul style="list-style-type: none"> <li>• Guarantee fund provides guarantees for those mortgage loan holders who are incapable of repaying their loans due to adverse circumstances, eg they lost their job</li> <li>• The support is, for example, provided as interest-free deferral of repayments for a few months or years to enable debtors to meet their obligations</li> <li>• Successful examples from abroad</li> </ul>
	<i>Tax relief associated with buying apartments as own housing</i>	<ul style="list-style-type: none"> <li>• Own housing is one of the pillars of securing for retirement</li> <li>• Apartment owners do not burden the social system</li> </ul>
	<i>Dealing with the issues of the housing of senior citizens</i>	<ul style="list-style-type: none"> <li>• Supporting the construction and operation of centres for senior citizens</li> <li>• Municipal land for construction</li> <li>• Construction of networks financed by distributors</li> <li>• Supporting municipalities in remodelling hotel-type real estate, for example, to centres for senior citizens</li> <li>• Transparent social policy for seniors at the level of the state and municipalities</li> </ul>

Role in the society	Measure	Comments
<b>A trigger of the economy</b>	<i>Support of rental housing</i>	<ul style="list-style-type: none"> <li>The Czech Republic has, compared to other European countries, a low share of rental housing.</li> <li>Create conditions for the entry of: <ul style="list-style-type: none"> <li>Private investors (Build-to-Let)</li> <li>Institutional investors</li> </ul> </li> </ul>
	• <i>Entry of small private investors</i>	<p>Investments in apartments to let:</p> <ul style="list-style-type: none"> <li>Is one of the pillars for securing the retirement of the owner;</li> <li>Increases demand for apartments to let, hence naturally regulating the rent.</li> </ul> <p>Small private investors would appreciate an amendment of the Income Tax Act allowing them to deduct the loss from leasing the apartment in the tax return</p>
	• <i>Entry of institutional investors</i>	<p>From the investor's or developer's perspective, rental housing is currently not a very attractive residential market segment because of:</p> <ul style="list-style-type: none"> <li>Long return on investment, ie the investment returns in 20 to 30 years and income is lower;</li> <li>The necessary high financial stability;</li> <li>High investment in furnishings;</li> <li>The necessity of long-term maintenance and renovations;</li> <li>Legal instability;</li> <li>The necessity to deal with receivables;</li> <li>The short-term nature of leasing relationships;</li> <li>The necessity to provide services;</li> <li>High administrative costs; and</li> <li>Unprepared legislation.</li> </ul>
	<i>Supporting the construction of infrastructure in developers' projects</i>	<ul style="list-style-type: none"> <li>Municipal land for construction</li> <li>Construction of networks financed by distributors</li> </ul>
	<i>Supporting the improvement of housing in terms of quality and energy consumption</i>	<ul style="list-style-type: none"> <li>The Czech Republic falls behind the rest of Europe significantly with its expenses on the maintenance and repairs of available housing. <ul style="list-style-type: none"> <li>Continuing with the thermal insulation programs and the Green Savings Programme</li> <li>Support of energy efficient residential development (subsidies of programs such as the Green Savings Programme</li> <li>Opportunity to deduct certain expenses associated with the maintenance and repair of own real estate</li> </ul> </li> </ul>

# Highlights

- Decline in new residential construction in 2009 was lower than expected
- Panic from the market development at the end of 2008 dissipated and people have started to behave rationally
- The decline in the mortgage market was lower than anticipated; number of initiated apartments exceeded expectations and number of completed apartments even grew slightly
- Most developers have learnt to live under the new conditions
- The residential market stabilised at a new price level
- The market has established new rules and parameters
- People interested in purchasing real estate continue to speculate about further market decline
- Financial institutions and developers as well as the qualified public are more optimistic than a year ago
- Opportunities are being sought for restarting the growth of residential construction as:
  - A socially stabilising factor of the Czech society
  - A trigger of the economy (residential and building construction have a significant multiplication effect on the economy and employment)
- There is a need to find a new concept of housing development in the Czech Republic that is sustainable in the long term

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Hyposervis refers to Hyposervis a.s., its affiliated companies and subsidiaries. Hyposervis is a leading agent in mortgage financing in the Czech Republic with the principal focus on the coordination and management of mortgage loans in residential development projects. Its clients include leading Czech and international development companies. It has concluded cooperation contracts with all mortgage banks for which it acts as a mortgage loan agent.

For more information, refer to [www.hyposervis.cz](http://www.hyposervis.cz).

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