

# Property Index Overview of European Residential Markets

How do Europeans live,  
and for how much?





# Introduction

We are pleased to present to you the first edition of Property Index – a new publication by Deloitte. This publication analyses factors influencing the development of residential markets and compares residential property prices in selected European countries and cities. Our goal is to provide you with European residential market data on a regular basis.

How do Europeans live, and for how much? This issue focuses especially on housing specifics and the prices of own housing in selected countries in Western and Central Europe:

- Austria;
- Belgium;
- Czech Republic;
- Denmark;
- France;
- Germany;
- Hungary;
- Italy;
- Netherlands;
- Poland;
- Spain; and
- United Kingdom.

The prices in the selected countries and its major cities differ significantly as the result of historical development and various factors affecting the volume of supply and demand. The main factors are particularly:

- Intensity of residential development;
- Ownership structure of the housing stock; and
- Standard size of the dwelling.

The current issue of Property Index was prepared by a proven international and cross-functional team of Deloitte professionals in the development, mortgage and real estate markets. This publication has been prepared using data collected by individual Deloitte offices in selected countries. Property Index capitalises on Deloitte's extensive knowledge of the real estate and development industry, enabling us to provide you with independent and credible information.

We hope you will find this publication of interest for your business and we would be delighted to receive your feedback.

# Economic Development in Europe

After the global economic slumps in 2008 and 2009, there was a gradual revitalisation of economic activity during 2010 and in the first half of 2011. However, since the second half of 2011, the expectations regarding further development have changed significantly and growth has been gradually slowing down in developed economies, predominantly in Europe, and worries have arisen that certain economies might again fall into recession at the beginning of 2012.

After a short period of remission, the financial cooling off that started almost four years ago is probably entering a new phase. The phase is characterised by states clearly announcing careful fiscal policies and many of them having also adopted quite radical savings measures in the expenses parts of their budgets, or a higher tax burden. On the other hand, however, the risk of recession is complicating this process significantly and endangers the sustainability of the reforms. The fiscal situation is a potential factor increasing the risk of recession, as well as an area of economy that worsens dramatically due to recession. Nevertheless, it is clear that the period of growth of EU economies that had been driven by state budget deficits is coming to an end. EU countries will face significant public budget restructuring and maybe also a slower rate of economic growth in the long run.

The burst of the financial bubble in 2008 and 2009 revealed the instability of the base on which the economic growth of European countries and the majority of developed countries was built; a base that was largely built on a high proportion of debt. Due to the crisis, the private sector was forced to look for savings and to increase efficiency so that it would be able to cope with its extraordinary debt and get it back to a more-sustainable level. This resulted in an unavoidable short-term deepening of the economic downturn and contributed to the slowdown of the economic recovery. The deleverage process at the household level in countries that reported a fast growth in indebtedness will probably proceed in a similar manner.

Some EU countries have created a national debt so high that it cannot be solved without major interventions in the economy and the life of the citizens on the side of expenses as well as income in the short or medium term. However, at the same time, restrictive and savings-related budgetary measures have a short-term impact on economic performance, resulting in the performance of state budgets, and can make the unsatisfactory fiscal situation even worse.

It is at this time too early to predict a repeated global recession or the coming of a major long-term slowdown; however, a change in the European economic outlook may be regarded as a warning, mainly with regard to the current high level of unemployment. The impact on the expectations of the business segment and the qualified public will be particularly critical, although the current development in this area is surprisingly stable. Nevertheless, a continuing significant economic recovery from the crisis cannot be expected in Europe in the near future.

# Residential Markets in Europe

## Housing Development Intensity

The indicator of housing development intensity on the residential market of the European Union showed 3.9 completed apartments per 1,000 citizens in 2011.

The highest housing development intensity from the selected countries in 2011 was seen in Spain (6.5 completed apartments per 1,000 citizens) and France (5.7 completed apartments per 1,000 citizens). Residential development in Spain and France in 2011 exceeded the European Union average by 67% and 46% respectively.

It is remarkable that Spain, Italy and France – some of the countries most threatened with financial problems – are among the countries with the highest housing development intensity. In respect of Spain, the housing development intensity 1.7 times higher than the European average might be caused by the development of holiday apartments (secondary housing) and the Spanish government's administrative support (deduction for buying a primary apartment for taxpayers with incomes above €24,100, end of 2010). The holiday apartment market in Spain is driven both by international investors and a part of population that perceived the purchase of a second or a third apartment as a component of their investment strategy.

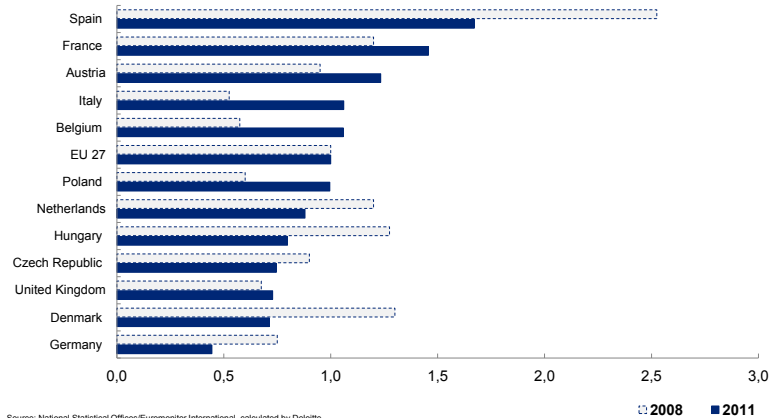
Housing development intensity in Poland, Belgium and Italy in 2011 oscillated around the European average.

The lowest intensity of housing development was in 2011 found in Germany and Denmark. In these countries residential market in the long-term perspective appears to be relatively saturated. In Germany, an increasing demand for the next 15 to 20 years is expected – and it shifts from rural areas to the economical stronger cities.

A comparison of the housing development intensity between 2008 and 2011, based on the available information, shows that Spain saw the greatest drop (number of completed apartments per 1,000 citizens – in 2008: 10.1; in 2011: 6.5), followed by Denmark (number of completed apartments per 1,000 citizens – in 2008: 5.2; in 2011: 2.8) and Hungary (number of completed apartments per 1,000 citizens – in 2008: 5.1; in 2011: 3.1). Contrarily, the country to experience the highest growth in housing development intensity was Italy (number of completed apartments per 1,000 citizens – in 2008: 2.1; in 2011: 4.2) and Belgium (number of completed apartments per 1,000 citizens – in 2008: 2.3; in 2011: 4.2).

### Housing development intensity

Index of the number of completed apartments per 1,000 citizens  
2008 and 2011, change  
EU 27 = 1



Source: National Statistical Offices/Euromonitor International, calculated by Deloitte

## Housing Stock

The housing stock in individual selected countries changes on a year-on-year basis depending primarily on housing development intensity. The average housing stock in the European Union in 2011 was 474 apartments per 1,000 citizens.

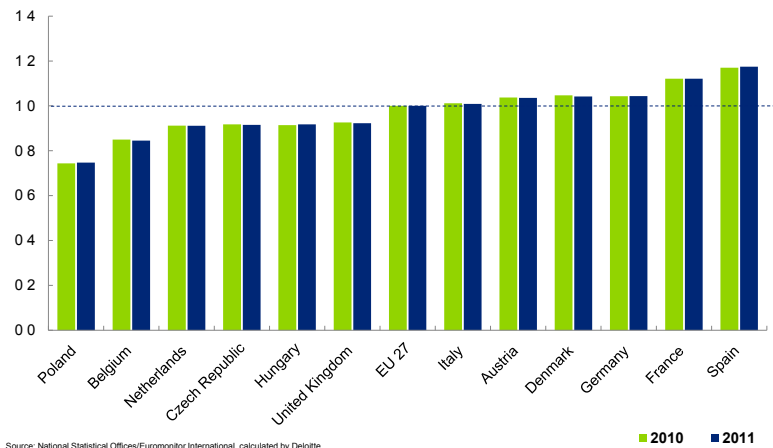
In the comparison of selected countries, in 2011 Spain, as in the previous residential market development indicator, reported the greatest housing stock recalculated per 1,000 citizens, exceeding the European average by more than 17% (559 apartments per 1,000 citizens).

Countries such as Spain and France are rather-specific markets due to the ownership of second/leisure apartments particularly at the seaside or in the mountains.

The lowest housing stock in 2011 per 1,000 citizens was found in Poland (almost 26% below the European average, ie 355 apartments per 1,000 citizens).

### Housing stock in 2011

Index of the number of apartments per 1,000 citizens  
EU 27 average = 1



Source: National Statistical Offices/Euromonitor International, calculated by Deloitte

## Apartment Size – Number of Rooms

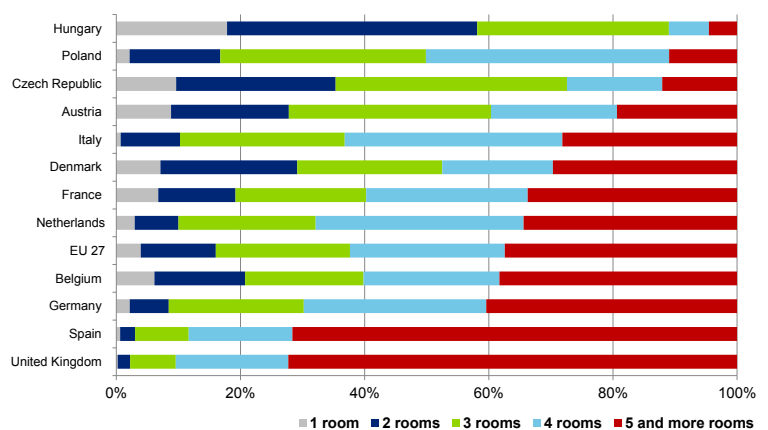
The long-term comparison of the housing stock by real estate type shows that Western European countries, as opposed to Eastern European countries, tend to acquire property with a higher number of rooms.

From selected countries in 2011 the highest number of large apartments in terms of the number of rooms was found in the United Kingdom, Spain and Germany (the majority of apartments having 5 or more rooms). In these countries there also appears the inclination to live in family houses.

On the other hand, the smallest apartments could be found in Hungary, Poland and the Czech Republic, where historically apartments with two or three rooms are predominant.

### Housing stock by accommodation unit size

Households living in apartments with a certain number of rooms per 1,000 citizens in 2011



Source: National Statistical Offices/Euromonitor International, calculated by Deloitte

## Housing Costs

The average consumer costs of housing in the European Union (in other words the costs of households in individual EU countries such as rent, services, repairs and reconstructions) in 2011 exceeded EUR 3,200 per citizen and EUR 5 800 per household.

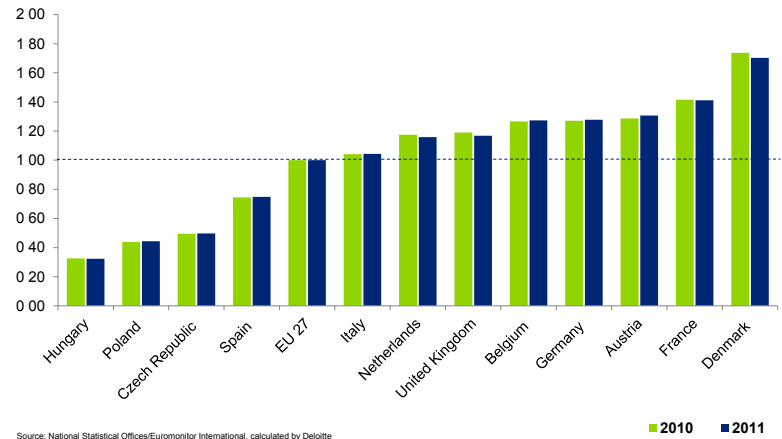
The highest housing costs of the selected countries in 2011 were found in Denmark and France. Total housing costs in these countries exceeded the European Union average by 70% and 41% respectively.

The lowest housing costs out of the selected countries were reported in Hungary, where they have for a long time not exceeded 40% of the average housing costs in the European Union.

A comparison of the average values of housing costs in Eastern and Western Europe shows that the Eastern European average is significantly lower than that of Western Europe. Nevertheless, a regular annual increase in total housing costs can be expected in Eastern European countries' future, especially given the estimated average age of the most of apartments (the need for reconstructions, additions or revitalisations of family houses or blocks of flats).

### Total consumer costs of housing

Index of the total annual costs per 1,000 citizens  
EU 27 average = 1



# Comparison of Residential Property Prices in Selected Countries and Cities

## Average Transaction Price of a New Dwelling in Selected Countries

The comparison of transaction prices in selected European countries in 2010 and 2011 indicates the following:

- Despite the growing price development in last decade, the transitive economies of Hungary, Poland and Czech Republic have the lowest average transaction price at around 1,000 EUR/m<sup>2</sup>;
- Prices in Germany do not differ significantly from those in the Czech Republic or in Poland; however the economic level of Germany is much higher;
- The group of the countries with average realised prices around 2,000 EUR/m<sup>2</sup> includes Spain, Austria, Belgium, Denmark and the Netherlands;
- The most expensive dwellings are in France, followed by UK and Italy.

The year-on-year price changes differed significantly in compared countries. The highest price growth was seen in France (+6,2%), followed by Germany (+4,0%), Austria (+3,14%) and Belgium (+3,0%). The price growth in the UK was 2,5% in EUR and 4,0% in GBP. The Czech Republic experienced growth in EUR (+1,5%), but the price declined in CZK (-1,3%) because of the appreciation of CZK.

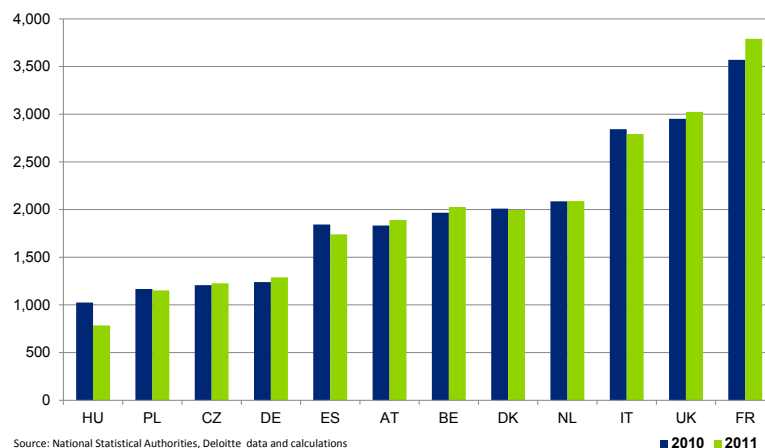
The opposite case was in Poland, where prices decreased in EUR (-1,2%), but increased in PLN (1,3%). Negative price development continued in Spain (-5,6%).

The biggest drop in prices was seen in Hungary -20,1% in local prices (HUF) and -23,5% denominated in EUR.

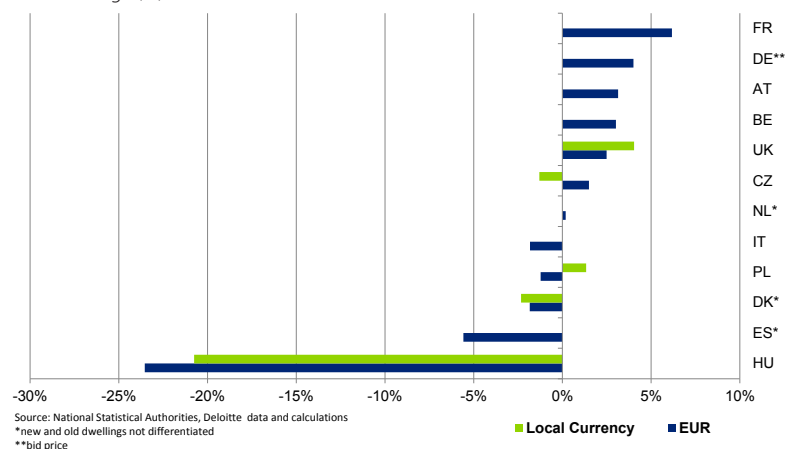
The spread between the offered and final transaction prices of new dwellings is a very important market indicator as it may demonstrate the situation of buyers (demand side) and sellers (supply side) and their negotiating power. This indicator may be compared in Poland, Denmark, Czech Republic and Italy; in other countries, statistical authorities analyse only one of the transaction or offered prices.

Generally, in 2011 the discount was lower than in 2010, reaching 11% in Italy and the Czech Republic, followed by Denmark (10%) and Poland (5%).

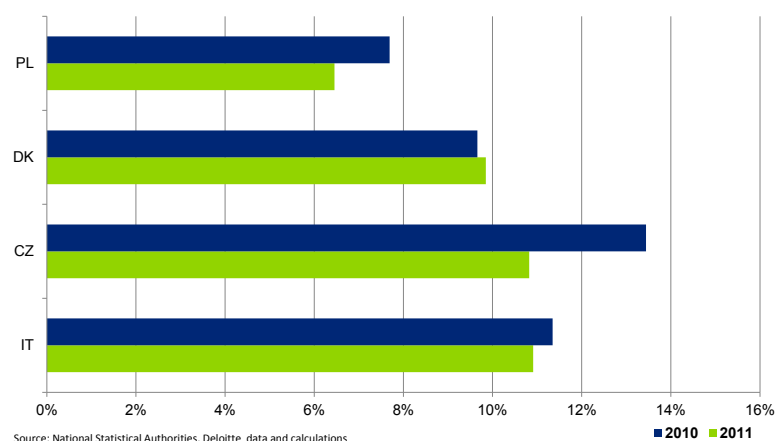
Average Transaction Price of the New Dwelling  
EUR/ m<sup>2</sup>



Average Transaction Price of the New Dwelling  
Annual change (%)



Spred between transaction and offered price of the new dwelling





The prices vary when comparing new and older dwellings to be purchased. Generally, older dwellings are significantly cheaper, especially in Austria (-36% in 2011). In the Czech Republic, Hungary and Germany, older dwellings are around 25% below the price of the new developments. The difference is less significant in Poland, France and Italy ranging 12 – 18%.

Despite the fact, that the price development of new and older dwellings is convergent in the UK, it is the only country where new developments are cheaper than older dwellings.

### Average Transaction Price of a New Dwelling in Selected Cities

A comparison of transaction prices in selected European cities in 2010 and 2011 indicates the following:

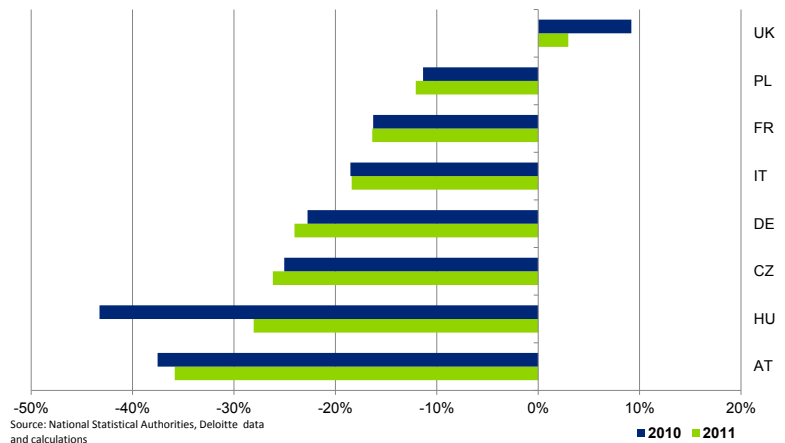
- Paris is the most expensive city in Europe with an average transaction price exceeding EUR 8,000 /m<sup>2</sup> and the significant price growth was seen between 2010 and 2011
- The group of the cities with average realised prices of around EUR 4,000 /m<sup>2</sup> includes Marseille, London, Milan and Rome;
- Cities with average transaction prices exceeding EUR 3,000 /m<sup>2</sup> are Lyon, Copenhagen, Frankfurt, Hamburg, Vienna and Amsterdam;
- Not surprisingly, the cheapest cities can be found in CEE region, namely:
  - Budapest, with an average transaction price of EUR 940 /m<sup>2</sup>;
  - Warsaw, with an average transaction price of EUR 1,922 /m<sup>2</sup>;

A comparison of the prices of dwellings in the main European cities and their respective national average may identify the biggest price differentiation country by country:

- There are 4 major cities, where the prices exceed the national average more than twice – Frankfurt, Hamburg, Paris and Prague;
- 5 capital cities exceed the national average by more than by 50% - Copenhagen, Berlin, Warsaw, Vienna and Amsterdam.

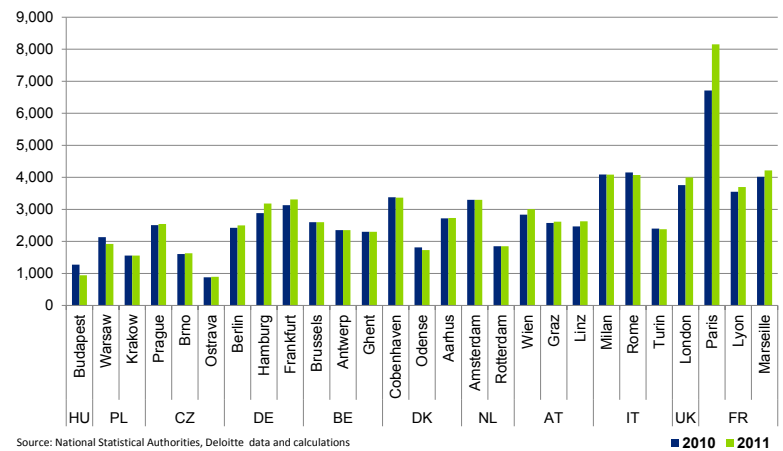
### Price Difference of the Older Dwellings

Discount (%) of the older dwelling



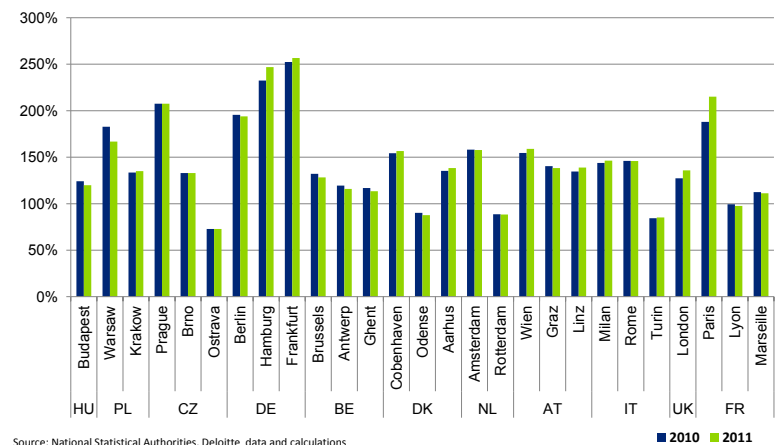
### Average Transaction Price of the New Dwelling

EUR/ m<sup>2</sup>



### Comparison of the Main Cities to the Country Average

(country average = 100%)



The price development between 2010 and 2011 differed significantly in capitals of compared countries. The highest price decrease (in EUR) was seen in Budapest (-26,1%), followed by Warsaw (-9,9%).

The opposite trend - price growth- was significant mainly in Paris, London, Vienna and Berlin.

### Affordability of Own Housing

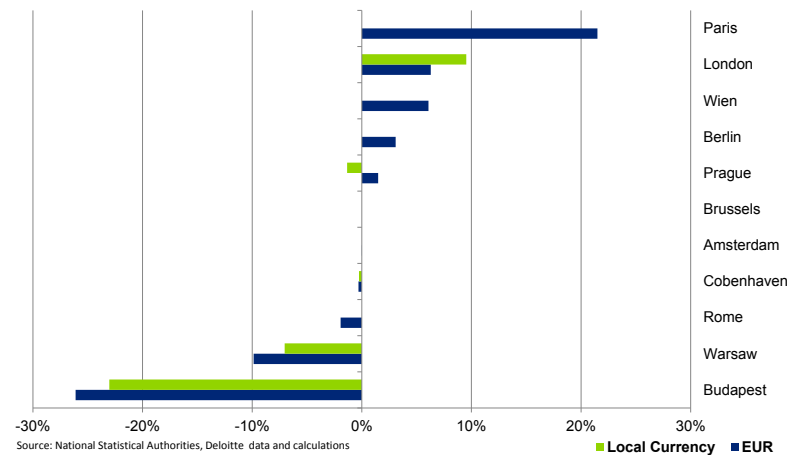
The gross monthly salaries and the transaction prices of the new dwellings in the selected cities and countries were compared to measure the affordability of own housing. The criterion is number of the annual gross salaries required to buy a standard-sized new dwelling (70 m<sup>2</sup>).

The criterion ranges from 2.43 years in Denmark to 9.1 years in France. The majority of countries reaches the value of 6 – 9 years, except Denmark, Germany and Belgium, where fewer than 4 gross annual salaries are needed for the 70 m<sup>2</sup> new dwelling.

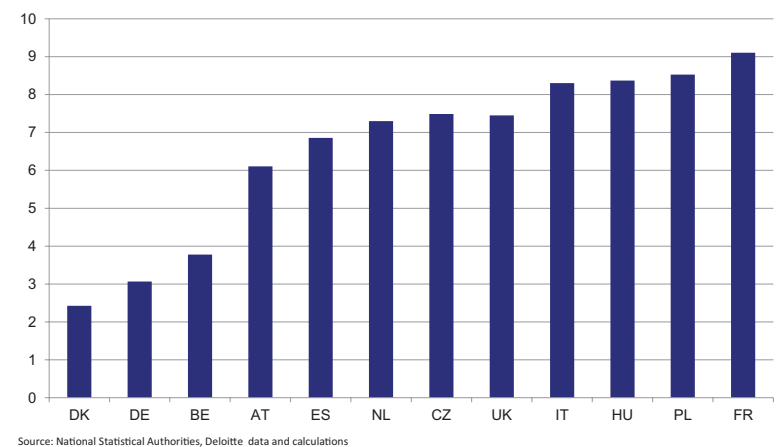
The affordability of own housing does not seem to correlate significantly with the economic level of the country. When GDP per capita in PPP and affordability are seen in one chart, there are two groups of countries:

1. Denmark, Germany and Belgium with high GDP per capita and the most affordable own housing.
2. Spain, Italy, UK, Netherlands, Austria, France with relatively-high levels of GDP per capita in PPP (100 – 133% of EU-27 average) and similar affordability of own housing (6-9 gross annual salaries for the new dwelling – 70 m<sup>2</sup>). The transitive economies of the Czech Republic, Hungary and Poland, where GDP per capita in PPP is generally lower (63 – 80% of EU-27 average), are with the 7,5 – 8,5 gross annual salaries in the same group.

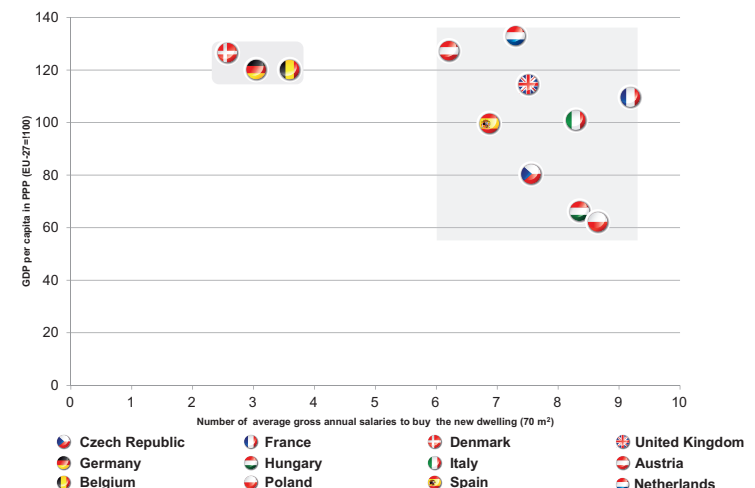
**Average Transaction Price of the New Dwelling - Capitals**  
Annual change (%)



**Affordability of Own Housing (2010)**  
Gross annual salaries for the standardized new dwelling (70 m<sup>2</sup>)



**Affordability of the own housing and the economic level**



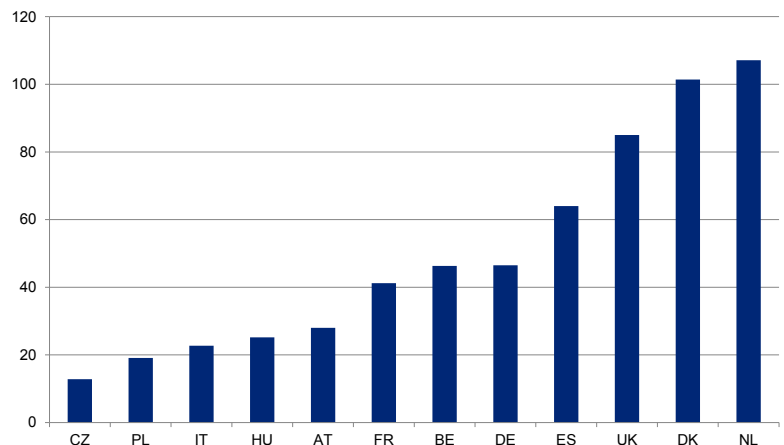
# Mortgage Markets in Europe

## Indebtedness of the Housing Stock

An important indicator of the residential market is the indebtedness of the housing stock, ie the proportion of the volume of mortgage loans and the GDP. This indicator has significantly-different values for the monitored countries – while the EU27 average is 52%, the Czech Republic reports the lowest level of indebtedness, ie 13% of GDP, and the Netherlands and Denmark on the other hand report the highest level of indebtedness amounting to a mortgages-to-GDP proportion of over 100%.

Of the monitored western European countries, the lowest level of indebtedness is reported by the housing stock in Austria, amounting to 28% of GDP. In France, the level of mortgages is 41% of GDP. The indebtedness of the German housing stock is 47%.

Residential debt to GDP (%)



Source: European Mortgage Federation

## Residential Debt per Capita

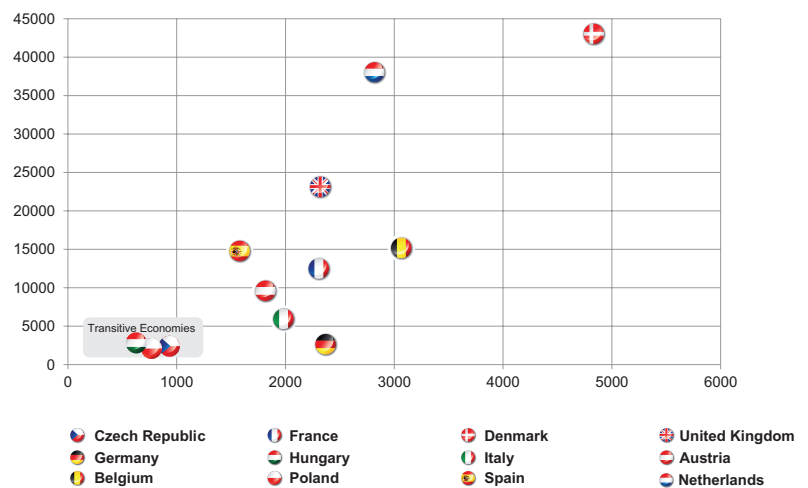
The following criterion has several factors that influence its value:

- Price of the property.
- Loan to Value.
- Number of mortgage issued to number of inhabitants.

The newest EU joiners, the transitive economies of Hungary, Poland and the Czech Republic with the lowest salaries have the lowest residential debt per capita.

The Netherlands, the UK, France and Germany, with salaries ranging from 2,300 to 2,700 EUR, differ a lot in the residential debt per capita – in the Netherlands the debt is 16 times higher than in Germany (38,010 EUR compared to 2,360 EUR). UK with 23,270 EUR is significantly higher than France, which is with 12,310 EUR in line with Italy, Austria and Belgium. The highest debt per capita can be seen in Denmark; on the other hand, the average salaries are by far the highest.

Residential debt per capita (EUR) and average monthly gross salary



Source: European Mortgage Federation, National Statistical Authorities, Deloitte data and calculations

# Highlights

- A comparison of the housing development intensity between 2008 and 2011, based on the available information, shows that Spain saw the greatest drop.
- The lowest housing stock in 2011 per 1,000 citizens was found in Poland (almost 26% below the European average, ie 355 apartments per 1,000 citizens).
- The highest housing costs of the selected countries in 2011 were found in Denmark and France. Total housing costs in these countries exceeded the European Union average by 70% and 41% respectively
- The year-on-year price changes differed significantly in compared countries. The highest price growth was seen in France, followed by Germany and Austria. Contrary, the significant price drop was seen in Hungary (-23.5%) and Spain (-5.6%).

- From the compared countries and cities:
  - Paris is the most expensive capital in Europe with an average transaction price exceeding EUR 8,000 /m<sup>2</sup>;
  - Not surprisingly, the cheapest cities can be found in CEE region, namely: Budapest, with an average transaction price of EUR 940 /m<sup>2</sup>;
  - There are 4 major cities, where the prices exceed the national average more than twice – Frankfurt, Hamburg, Paris and Prague.
- To buy a new dwelling (70 m<sup>2</sup>), the needed number of annual gross salaries ranges from 2.43 in Denmark to 9.1 in France.

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