

# Property Index Overview of European Residential Markets

European housing 2012





# Introduction

We are pleased to present to you the second edition of Property Index.

This publication analyses factors influencing the development of residential markets and compares residential property prices in selected (not only) 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.

In this issue we have for interest added data regarding Russian residential property prices.

The prices in the selected countries and their major cities differ significantly as a 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.

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 second issue of the publication of interest for your business and we would be delighted to receive your feedback.

# Economic Development in Europe

The European Union faced challenging economic conditions in 2012, with an intensifying sovereign debt crisis in the euro zone, the spectre of a double-dip recession for several countries and weakening growth in even the better-performing countries.

The year 2012 was from the perspective of the European Union characterised by a recession that started at the end of 2011 and is linked to the financial crisis and unsustainable debt levels. Real GDP growth dropped to -0.3%. The unsustainable accumulation of debt in the private and public sector, combined with uncertainty over the macroeconomic situation and asset quality as well as adverse credit conditions, has triggered substantial balance-sheet adjustments in several European states. Corporate debt levels have started to fall gradually since 2009, but weak economic activity and its negative impact on corporate profitability interrupted this decline in 2012.

The economy of European Union was in 2012 influenced especially by three interrelated factors – the banking crisis, sovereign debt problems and the crisis of competitiveness.

The banking crisis is still developing. Large-scale purchases by the European Central Bank managed to slow down panicking public actions (withdrawing euro deposits from banks in selected EU countries and depositing them in Germany), but it seems that comprehensive banking reform may minimise the negative effects of the crisis and stabilise the banking system.

The euro zone continued its struggle to contain the sovereign debt problems of several member countries, including Spain, Italy, and Greece. The inability of these governments to pay interest on their debt has impacted the banks in stronger European countries, notably France and Germany, which have large exposure to the sovereign bonds. The European recession prompted banks that are holding the troubled assets to reduce lending, which contributed to lower growth across the region.

During 2012, euro finance ministers agreed on a second bailout package for Greece, which included a 53% write-down for investors in Greek bonds. In May, concern grew over Spain's fiscal health when a major bank requested a massive bailout and disclosed troubled assets. Following the Greek election in June, the European central bank pledged to provide monetary support to protect the euro, triggering a rally in stocks and bonds.

Euro zone's stability is threatened by depressed economic activity and social unrest. With a relatively-high rate of unemployment, domestic demand in the selected EU countries is collapsing. By the end of 2012, private consumption and investment had both fallen for five quarters in a row. On the back of a global economic recovery, external demand is than set to remain the predominant growth driver. Crisis-stricken countries have to restart their economic growth by boosting exports. Unfortunately, after a decade of economic boom in the 2000s, wages and prices in some EU countries are relatively high (considering labour productivity), making their goods and services less competitive.

Joblessness has increased steadily over the past two years, reaching 12% in the euro area and 11% in the EU with a very large degree of divergence across EU countries.

Inflationary pressures continue to ease after commodity prices decreased. The gradual decrease in consumer-price inflation has accelerated in 2012 as the impact of past increases in indirect taxes and commodity price hikes falls out of the annual comparison and weak economic activity as well as bleak labour market prospects.

A change in the European economic outlook may be regarded as positive, but continuing high unemployment, stagnating consumption and volatile exports may lead to several quarters of fragile economic growth. As in 2012, a 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 decreased from 3.9 in 2011 to 3.3 completed apartments per 1,000 citizens in 2012.

The highest housing development intensity in the selected countries in 2012 was seen in France (7.8 completed apartments per 1,000 citizens) and Austria (5.0 completed apartments per 1,000 citizens). Residential development in France and Austria in 2012 exceeded the European Union average by 133% and 50% respectively.

Housing development intensity in Italy, Poland, Belgium and the Netherlands in 2012 oscillated around the European average.

Housing development in the Czech Republic in 2012 amounted to almost 84% of the European Union average, which is a slight increase compared to previous years – however, this increase is mainly caused due to the decline in residential construction in the EU; in absolute terms, residential construction in the Czech Republic decreased from 2.9 in 2011 to 2.81 completed dwellings per 1,000 inhabitants in 2012.

Housing development in Denmark and the United Kingdom achieved in 2012 almost similar values as in 2011.

The lowest intensity of housing development in 2012 was found in Hungary (1.1 completed apartments per 1,000 citizens) and Germany (1.9 completed apartments per 1,000 citizens), where the percentage values are 42% and 68% of the European average, respectively.

## Housing Stock

The housing stock includes all residential units intended for living, inhabited (in which at least one person has permanent or long-term residence) as well as vacant (units, in which no person with permanent or long-term residence is registered).

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 2012 reached a similar level as in 2011, ie 473.6 apartments per 1,000 citizens.

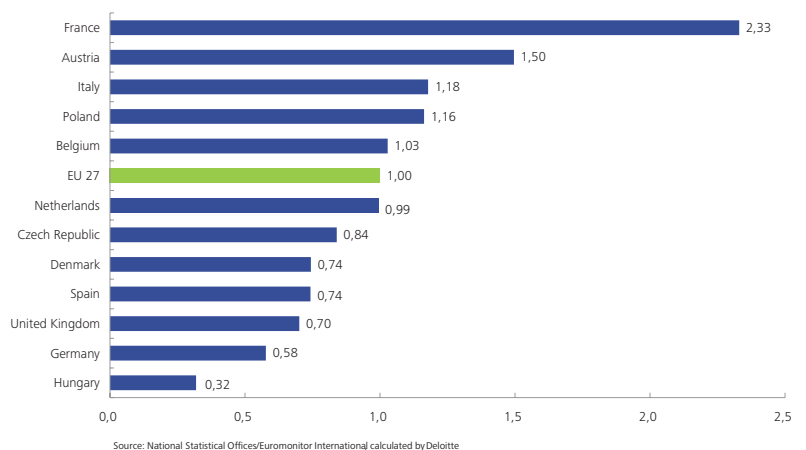
In the comparison of selected countries, (as in 2011) Spain reported the greatest housing stock recalculated per 1,000 citizens in 2012, exceeding the European average by more than 19% (563 apartments per 1,000 citizens). The second-greatest housing stock was found in France, where the percentage value exceeded the EU average by 12% (532 apartments per 1,000 citizens).

Countries such as Spain and France remain rather-specific markets on a long-term basis due to the ownership of second/leisure apartments particularly at the seaside or in the mountains.

As in 2011, the lowest housing stock in 2012 per 1,000 citizens was found in Poland (almost 25% below the European average, ie 357 apartments per 1,000 citizens) and in Belgium (almost 16% below the European average, ie 357 apartments per 1,000 citizens). It could be stated that in the above-mentioned countries there is still space for new development.

### Housing development intensity

Index of the number of completed apartments per 1,000 citizens 2012  
EU 27 = 1



In a general geographical comparison, Eastern European countries are below the European average.

## Ownership Structure

In 2012, the highest proportion of privately-owned apartments could be found in Hungary, where the average per 1,000 citizens showed 127 more privately-owned apartments than the European Union average.

In Germany, Denmark, Austria and France, rental housing plays a significant role. For example, in 2012, Germany reported approximately 300 rented apartments per 1,000 citizens.

Germany also reports the lowest share of privately-owned housing in all of Europe – there are 81 fewer privately-owned apartments per 1,000 citizens than the European Union average.

One specific detail of the residential market is cooperative housing, whose character, however, is identical to privately-owned housing in many respects. This form of housing is an important part of the residential market particularly in the Czech Republic, Poland and Italy.

In the Czech Republic, the preference for privately-owned housing in previous years led to an abrupt imbalance between privately-owned housing (including cooperative housing) and rental housing, as opposed, for example, to neighbouring Western European countries.

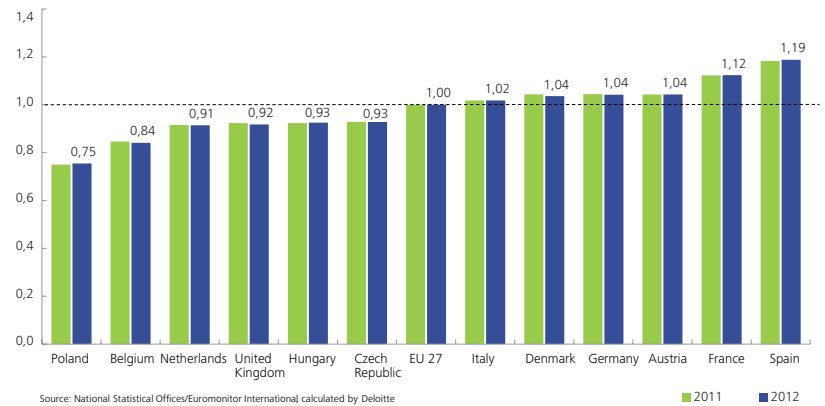
The highest level of privately-owned housing continues to be seen in Eastern European countries. The only exceptions are Spain and the United Kingdom.

Eastern European countries report a substantially-lower share of housing unit owners burdened by mortgage loans, which is principally due to the region's specific development:

- Non-functioning mortgage markets and residential real estate markets for tens of years; and
- Massive privatisation of housing stock for non-market prices.

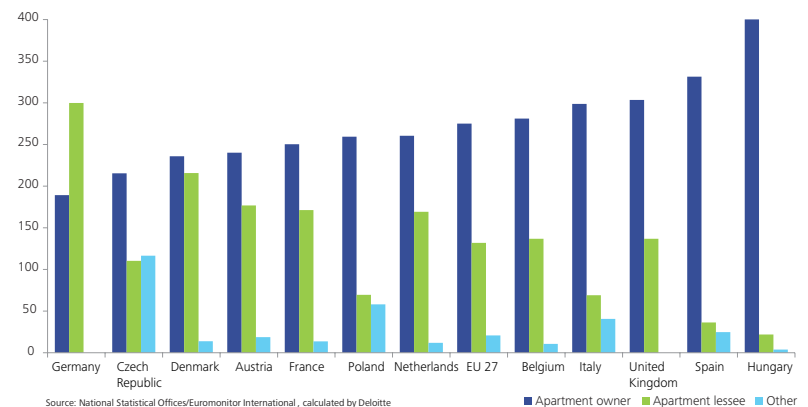
## Housing stock in 2012

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



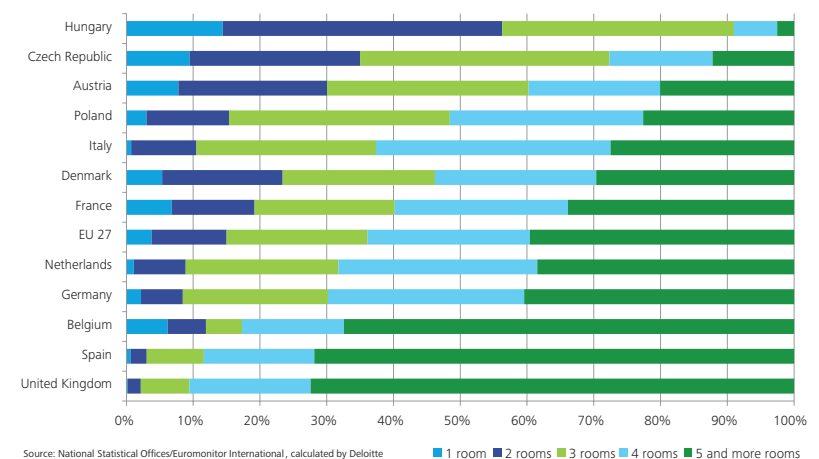
## Housing Stock According to Ownership Structure

Number of households per 1,000 citizens in 2012



## Housing stock by accommodation unit size

Households living in apartments with a certain number of rooms in 2012



## Apartment Size – Number of Rooms

The comparison of the housing stock by real estate type (inclination to living in family houses) still shows that Western European countries, as opposed to other European countries, tend to acquire or rent property with a higher number of rooms.

The housing stock by apartment size in the European Union in 2012 (when taking into account the number of households living in certain type of dwelling) could be divided as follows:

- 1 room – 4% of households;
- 2 rooms – 11% of households;
- 3 rooms – 21% of households;
- 4 rooms – 24% of households;
- 5 or more rooms – 40% of households.

As in 2011, also in 2012 the highest number of large apartments in terms of the number of rooms was found in the United Kingdom, Spain, Belgium and Germany. The majority of apartments in the above-mentioned countries have 5 or more rooms. Over 70% of the housing stock in the United Kingdom and Spain is made up of apartments with 5 or more rooms.

In 2012, the smallest apartments could be found in Hungary, the Czech Republic and Austria, where historically apartments with two or three rooms are predominant.

In a geographical comparison, the inhabitants of Eastern European countries tend to live in smaller apartments.

## 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 2012 exceeded EUR 3,543,000 per 1,000 citizens and EUR 8,300 per household in current prices based on year-on-year exchange rates.

The highest housing costs of the selected countries in 2012 were found in Denmark and newly also in the United Kingdom. The total housing costs in these countries exceeded the European Union average by 82% and 36% respectively.

Compared to other EU Member States, the housing

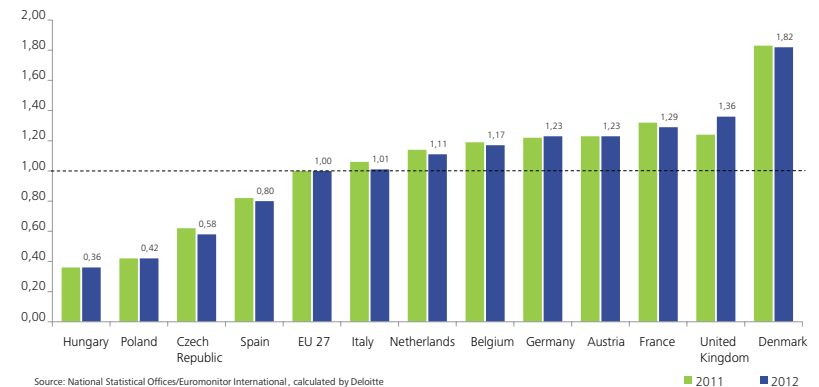
costs in the Czech Republic in 2011 and 2012 amounted to approximately 60% of the European Union average, which ranks the Czech Republic among the countries with relatively-low housing costs.

As in 2011, the lowest housing costs out of the selected countries were reported in Hungary and Poland, where they have for a long time not exceeded 36% and 42% of the average housing costs in the European Union, respectively.

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 still be expected in Eastern European countries' future, especially given the estimated average age of most of the 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

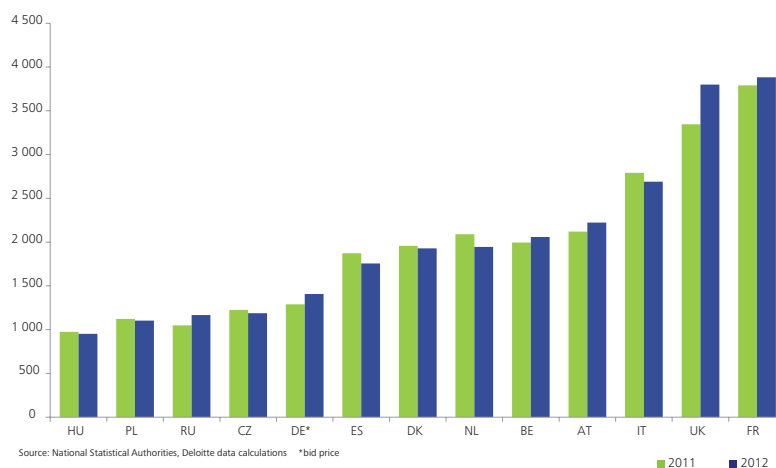
In the second edition of Property Index, Russian data were included to demonstrate the different situation compared to Western European countries and transitive economies in Central Europe. The comparison of transaction prices in selected European countries in 2011 and 2012 indicates the following:

- After the significant price growth after 2000, the price of properties in the transitive economies of Hungary, Poland and the Czech Republic slightly decreased. Contrarily, the new dwellings in Russia grew. Generally, the transitive economies and Russia have the lowest average transaction prices just slightly above EUR 1,000/m<sup>2</sup> (excluding Hungary, with prices under EUR 1,000/m<sup>2</sup>);
- Despite the recorded price growth in Germany, prices do not differ significantly from those in the Czech Republic or in Poland; however, the economic level of Germany is much higher. The relatively-low price average is caused by the relatively low prices in East Germany and the difference between more rural and urban growth cities;
- The group of the countries with average realised prices around EUR 2,000/m<sup>2</sup> includes Austria, Belgium, Denmark, the Netherlands and Spain (with slightly lower price level);
- Not surprisingly, the most expensive were recorded in the UK and France, followed by Italy.

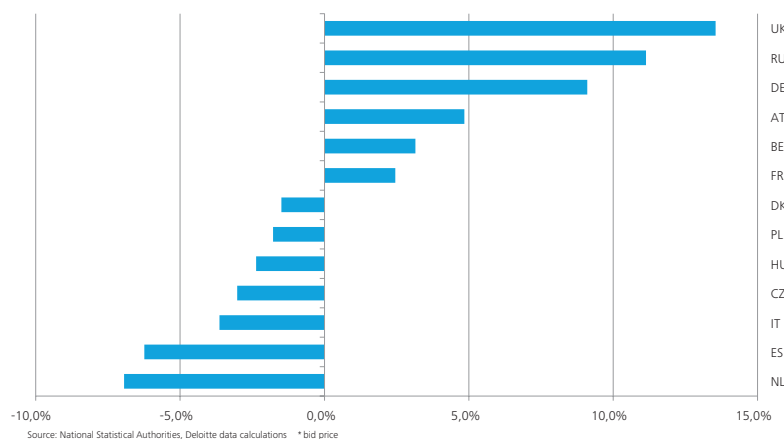
The year-on-year price changes differed significantly in compared countries. The highest price growth was seen in the UK (+13.5) and Russia (11.1%), followed by Germany (+9.1%). Moderate price growth was recorded in Austria (+4.8%), Belgium (+3.1%) and France (+2.5%). The transitive economies experienced a decrease in prices denominated in EUR – Poland (-1.8%), Hungary (-2.4%) and the Czech Republic (-3.0%). Negative price development continued in Spain (-6.2%) and Italy (-3.6%). The prices in the Netherlands decreased by 6.9%.

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, the Czech Republic and Italy; in the other countries, statistical authorities analyse only one of the transaction or offered prices.

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



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





Generally, in 2012 (excluding Denmark) the discount was higher than in 2011, reaching 12,2% in Italy, 11,7% in the Czech Republic, followed by Denmark (10,2%) and Poland (5,7%). The growing gap between the transaction and offered price may indicate a weak demand side worsening the position of the supply side.

The prices vary when comparing new and older dwellings to be purchased. Generally, older dwellings are significantly cheaper, especially in Hungary (-46% in 2012), Austria (-37% in 2012). In the Czech Republic, Germany and Spain, older dwellings are 29%, 25% and 23% below the price of new developments. The difference is less significant in Poland, France and Italy ranging between 14% and 18%.

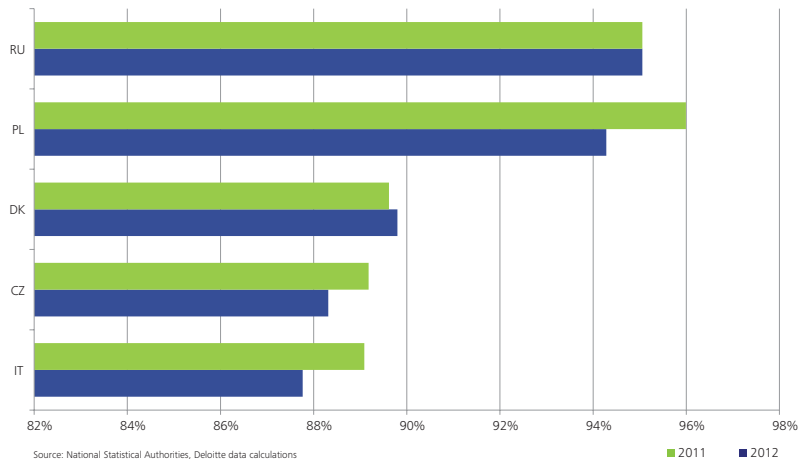
Despite the fact that the price development of new and older dwellings is convergent in the UK, together with Russia, these are the only two countries where new developments are cheaper than older dwellings.

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

A comparison of transaction prices in selected European cities in 2011 and 2012 indicates the following:

- Inner London is the most expensive city in Europe, with an average transaction price reaching almost EUR 10,000/m<sup>2</sup>. Further price growth was seen between 2011 and 2012. The price growth was recorded also in Outer London, reaching almost EUR 6,000 in 2012.
- In Paris, the average transaction prices of older apartments reached EUR 8,300 in 2012 and Paris region EUR 5,500.
- Munich, as the most expensive German city in terms of housing, reached an average price of EUR 5,000 m<sup>2</sup> in 2012;
- Cities with average transaction prices around EUR 4,000/m<sup>2</sup> are Moscow, Milan, Rome, Lyon and Marseille;
- Not surprisingly, the cheapest cities can be found in CEE region, namely:
  - Budapest, with an average transaction price of EUR 1,198/m<sup>2</sup>;
  - Warsaw, with an average transaction price of EUR 1,656/m<sup>2</sup>.

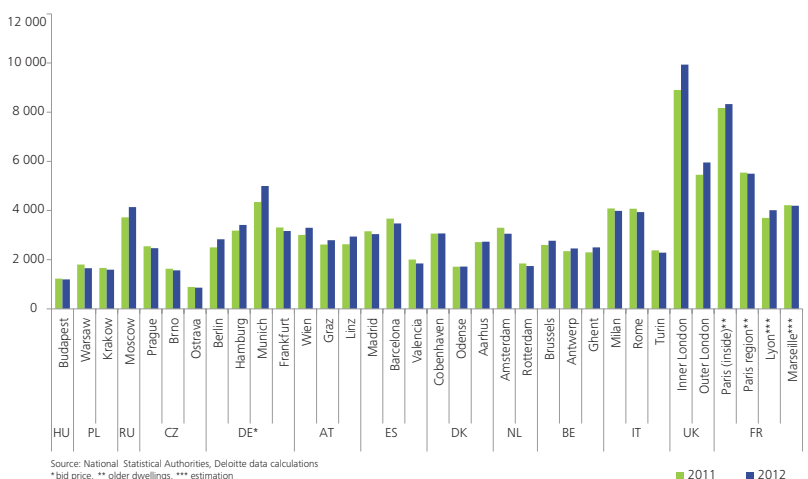
Transaction price as the percentage of the offered price of the new dwelling



Price Difference of the Older Dwellings  
Discount (%) of the older dwelling



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



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

- There are two major cities where the prices exceed the national average more than three times – Munich and Moscow, where the prices reach 355% of its country average;
- There is a group of cities which prices reach more than 200% of its country average – London, Berlin, Frankfurt, Hamburg, Paris and Prague;
- 4 capital cities exceed the national average by more than by 50% -, Madrid, Copenhagen, Warsaw and Amsterdam.

The price development between 2011 and 2012 was recorded in the capitals of the compared countries. The most significant price decrease (in EUR) was seen in Warsaw (-8.1%), followed by Amsterdam (-7.3%).

The opposite trend – dynamic price growth- was significant mainly in Berlin (+13.3%), Inner London (+11.6%), Moscow (+11.3%) and Vienna (+9.7%).

## Affordability of Own Housing

As in the first edition of Property Index, 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 m²).

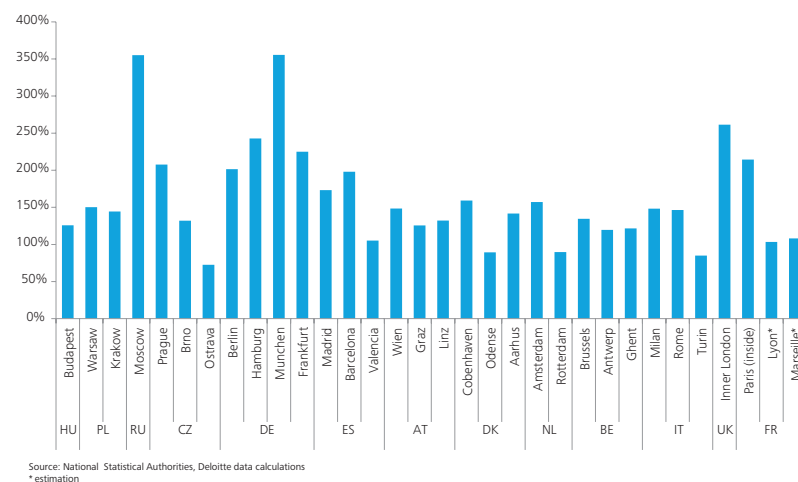
The criterion ranges from 2.2 years in Denmark to 10.1 years in Russia.

The most affordable housing was recorded in Denmark and Germany. These two countries are followed by the group of countries including Belgium, the Netherlands, Spain and Austria with relatively affordable own housing ranging 3.6 – 5.4 years for a standard dwelling

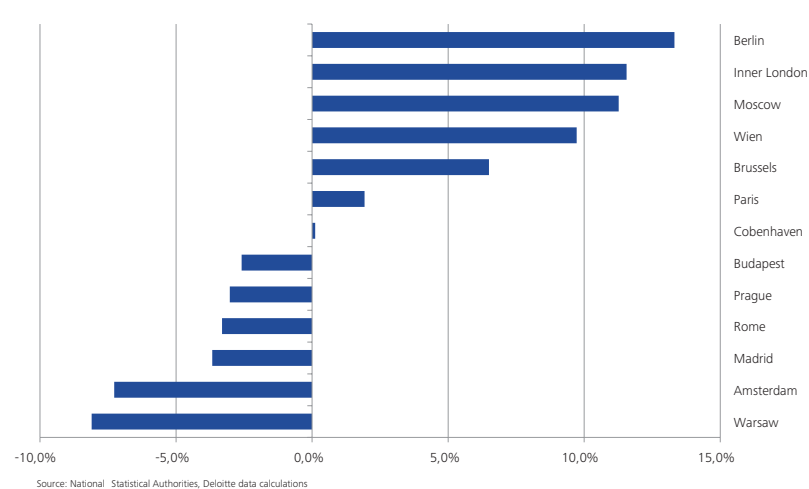
Another group with less affordable own housing concentrate countries with 6.9 – 7.7 years needed for the 70 m² new dwelling – the Czech Republic, Hungary, Poland and Italy.

The highest number of gross annual salaries is needed in the UK (8.9), France (9.4) and Russia (10.1).

**Comparison of the Main Cities to the Country Average** (country average = 100%), 2012



**Average Transaction Price of the New Dwelling - Capitals** Annual change (%), 2012



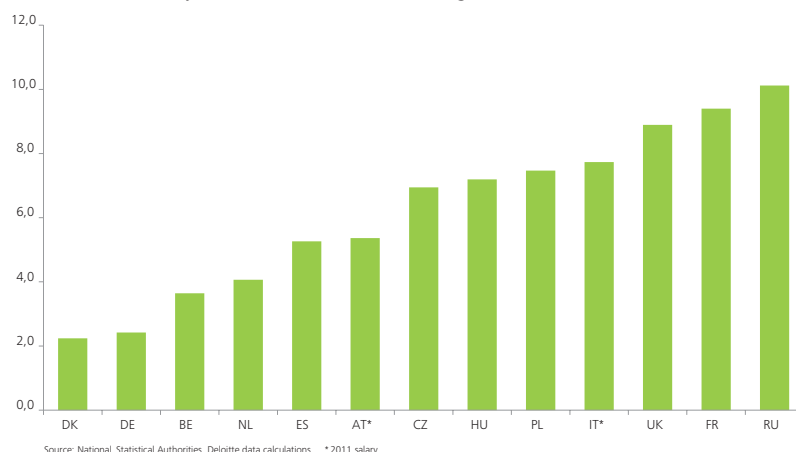
The affordability of own housing does not seem to correlate significantly with the economic level of the country. When GDP per capita in PPP and affordability are seen in one chart, three groups of countries may be seen:

1. Denmark, Germany, Belgium, the Netherlands and Austria, with high GDP per capita and the most affordable own housing.
2. Italy, UK and France with levels of GDP per capita in PPP at the EU average or slightly above (100-109% of EU-27) and similar affordability of own housing (7.7 – 9.4 gross annual salaries for the new dwelling – 70 m<sup>2</sup>).
3. The transitive economies of the Czech Republic, Hungary and Poland, where GDP per capita in PPP is generally lower (66 – 80% of EU-27 average), and with the 6.9 – 7.5 gross annual salaries, the own housing affordability is also below average.

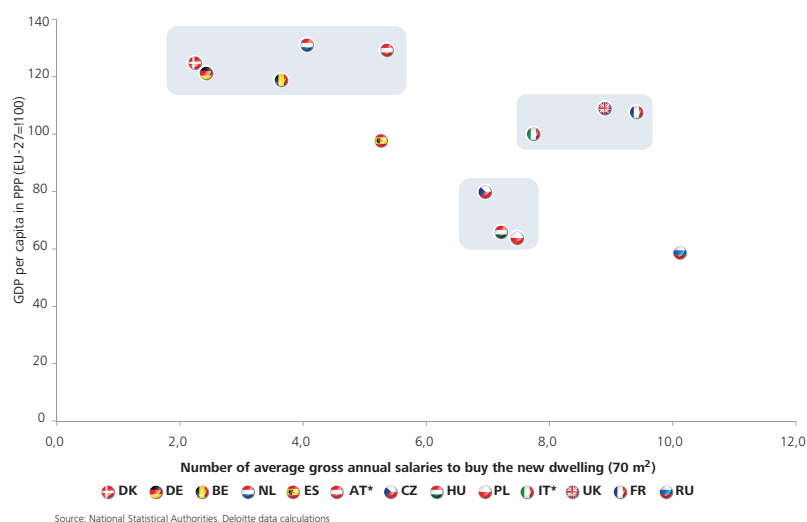
The decreasing prices of properties in Spain resulted in more affordable own housing, but with GDP per capita in PPP under the EU-27 average, they cannot be included in the first group. Russia is the least developed country in the comparison and own housing is the least affordable.

### Affordability of Own Housing

Gross annual salaries for the standardized new dwelling (70 m<sup>2</sup>), 2012



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



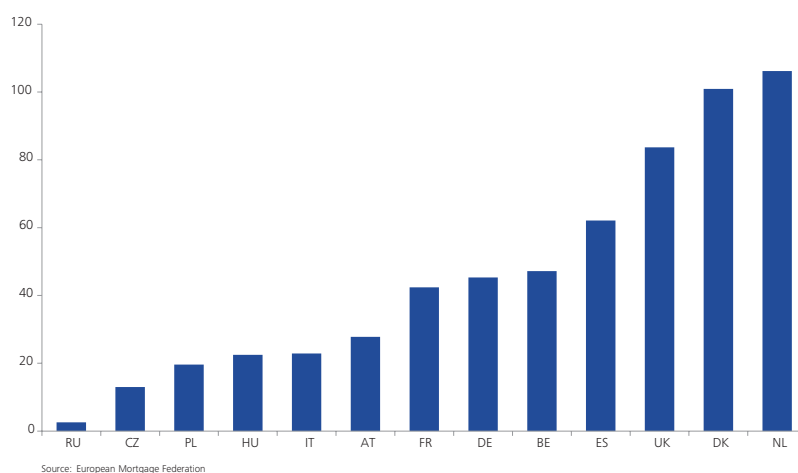
# Mortgage Markets in Europe

## Indebtedness of the Housing Stock

An important indicator on the residential market is the indebtedness of the housing stock, ie the proportion of the volume of mortgage loans to GDP. This indicator has significantly-different values for the monitored countries – while the EU27 average is 51.7%, the Czech Republic reports the lowest level of indebtedness from EU members, ie 13% of GDP; the Netherlands and Denmark on the other hand report the highest level of indebtedness amounting to a mortgage-to-GDP proportion of over 100%. Russia, as a non EU-member country, in comparison has the lowest indebtedness of the housing stock, reaching 2.6% of GDP.

Of the monitored western European countries, the lowest level of indebtedness is reported by the housing stock in Italy and Austria, amounting to 23% and 28% of GDP. In the two major European economic powers, France and Germany, the recorded level of mortgages is 42% and 45 of GDP.

Residential debt to GDP (%) 2012



## Residential Debt per Capita

The following criterion has several factors that influence its value:

- Price of the property;
- Loan to Value;
- Number of mortgages 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.

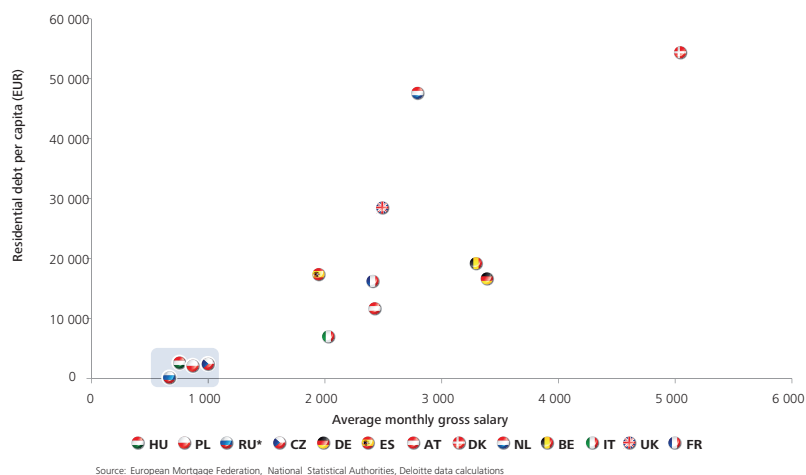
The newest EU joiners, the transitive economies of Hungary, Poland and the Czech Republic, with the lowest salaries, have the lowest residential debt per capita in the EU. In line with the lower salaries – lower residential debt equation, Russian residential debt per capita is the lowest in the comparison (EUR 311).

The Netherlands, the UK, France and Austria, with salaries ranging from EUR 2,400 to 2,800, differ a lot in the residential debt per capita – in the Netherlands, the debt is 4 times higher than in Austria (EUR 47,590 compared to EUR 11,930). The UK, with EUR 28,790, is significantly higher than France, with EUR 16,340.

Compared to other Western European countries, Italy has relatively-low residential debt per capita, even if considering the relatively-low average salary.

The highest debt per capita can be seen in Denmark; on the other hand, the average salaries are by far the highest.

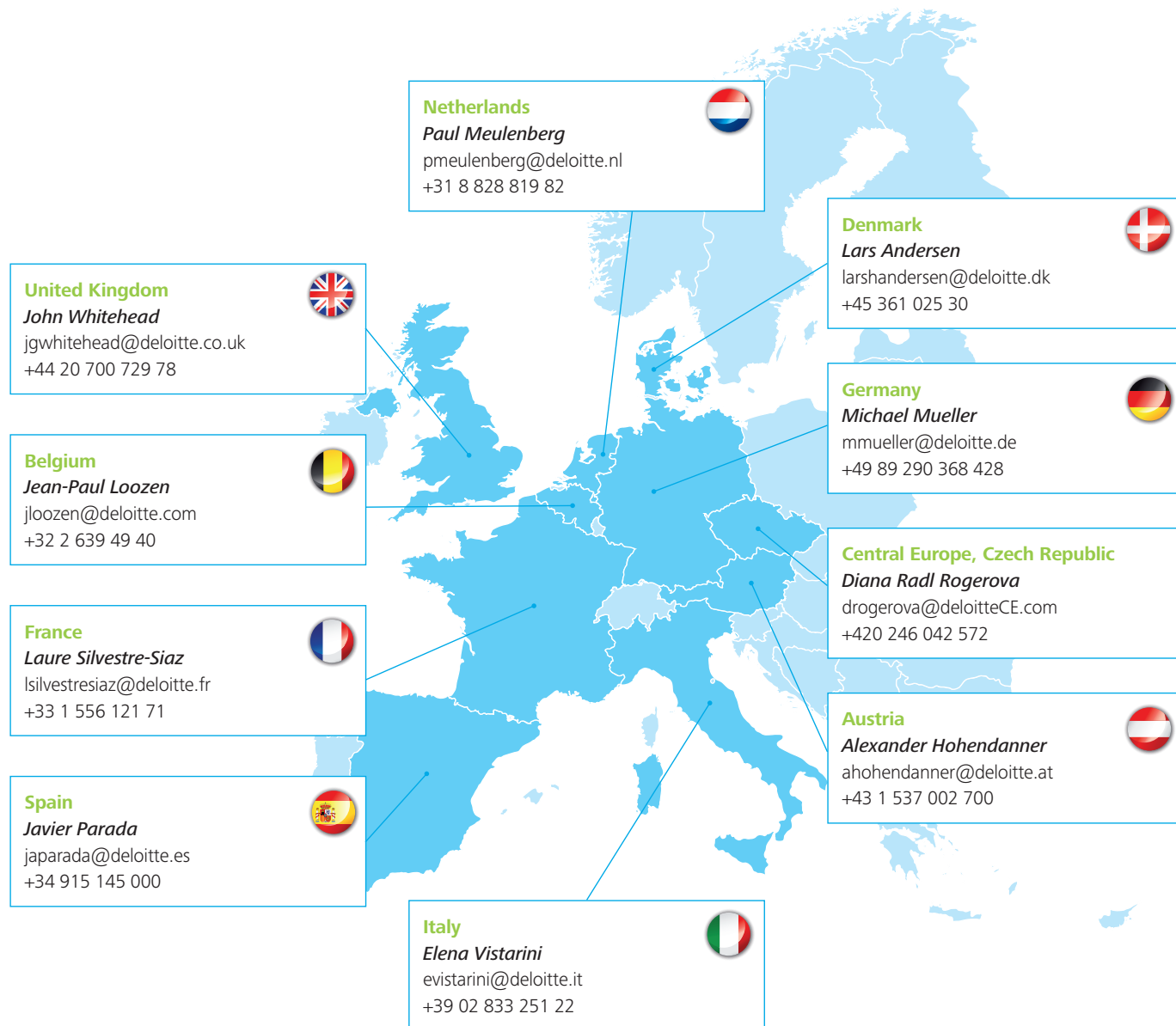
Residential debt per capita (adult over 18 years of age, EUR) and average monthly gross salary



# Highlights

- The highest housing development intensity in the selected countries in 2012 was seen in France and Austria
- As in 2011, the lowest housing stock in 2012 per 1,000 citizens was found in Poland (almost 25% below the European average)
- The highest level of privately-owned housing continues to be seen in CEE countries. The lowest share of privately-owned housing was recorded in Germany
- Also in 2012 the highest number of large apartments was found in the United Kingdom, Spain, and Belgium
- The highest housing costs of the selected countries in 2012 were found in Denmark
- The year-on-year price changes differed significantly in compared countries. The highest price growth was seen in the United Kingdom and Russia. Contrary, the significant price drop was seen in the Netherlands and Spain
- the compared countries and cities:
  - London and Paris remained the most expensive capitals in Europe with an average transaction price reaching almost EUR 10,000/m<sup>2</sup> in Inner London and EUR 8,300/m<sup>2</sup> in Paris
  - Cheapest cities can be found in CEE region, namely: Budapest, with an average transaction price of EUR 1,200/m<sup>2</sup> and Warsaw with EUR 1,650/m<sup>2</sup>
  - There are 2 major cities, where the prices exceed the national average more than three times – Munich and Moscow, where the prices reached 355% of its country average
- To buy a new dwelling (70 m<sup>2</sup>), the needed number of annual gross salaries ranges from 2.2 in Denmark to 10.1 in Russia

# Contacts



# Authors



**Diana Rádľ Rogerová**

*Partner*

Real Estate Leader

+420 246 042 572

[drogerova@deloittece.com](mailto:drogerova@deloittece.com)



**Petr Hána**

*Manager*

Real Estate & Construction

+420 246 042 825

[phana@deloittece.com](mailto:phana@deloittece.com)



**Pavel Novák**

*Consultant*

Real Estate & Construction

+420 246 042 364

[pnovak@deloittece.com](mailto:pnovak@deloittece.com)

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