



**Property Index**

Overview of European  
Residential Markets

11<sup>th</sup> edition, August 2022

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# Introduction

We are delighted to present you the 11<sup>th</sup> edition of the Property Index - Overview of European Residential Markets. Since the publication of the first edition of Property Index, it has become one of the most influential and comprehensive reports that accurately survey Europe's residential real estate markets and has been a valuable source of information for professionals, institutions and the general public.

The main purpose of the Property Index is to analyze significant factors that contribute to the formation of housing markets based on a different national developmental perspective and to draw a comparison of residential property prices in a number of different countries and cities across Europe.

Aim of this report is to provide regular updates on the European residential market and to capture how European citizens live as well as the costs associated with living.

Although the publication aims to provide readers with a comprehensive overview of residential markets in Europe for the last year, it is important to note the ongoing geopolitical situation triggered by the Russian invasion in Ukraine. Without a doubt, this invasion has led to a worsening of the energy crisis in several European countries. On top of that, the residential market has been considerably affected by price increases in construction materials and labour shortages.

Authors of this year's edition of Property Index hope that you will find this publication interesting and that it will provide you with deep insights and information.

For this year's edition of the publication, we have surveyed the residential markets in:

- |                              |                   |                      |
|------------------------------|-------------------|----------------------|
| Austria (AT);                | Germany (DE);     | Portugal (PT);       |
| Belgium (BE);                | Hungary (HU);     | Romania (RO);        |
| Bosnia and Herzegovina (BA); | Ireland (IE);     | Serbia (RS);         |
| Bulgaria (BG);               | Italy (IT);       | Slovakia (SK);       |
| Croatia (HR);                | Latvia (LV);      | Slovenia (SI);       |
| Czech Republic (CZ);         | Netherlands (NL); | Spain (ES); and      |
| Denmark (DK);                | Norway (NO);      | United Kingdom (UK). |
| France (FR);                 | Poland (PL);      |                      |

This edition of Property Index continues in the tradition of a relatively steady number of participating countries.

The majority of the indicators presented are calculated on a year-over-year basis. The geopolitical situation in Europe impacts these indicators (e.g., the conflict in Ukraine or the refugee crisis). As a result of fiscal measures, several economic factors may affect the volume of supply and demand in the residential market or the exchange rate during 2021.

A proven international and cross-functional team of Deloitte professionals in the real estate development, mortgage, and property markets prepared the Property Index. This publication has been prepared using data collected by individual Deloitte offices in the participating countries.

Property Index capitalizes on Deloitte's extensive knowledge of the real estate and development industry, enabling us to provide you with independent and credible information.



## Paris

Defended its position as the most expensive city to purchase a square meter of apartment in Europe before Munich, London and Oslo.

**4,905**  
EUR/sqm

United Kingdom has been ranked the most expensive country in terms of new apartment prices in 2021.

**20.13%**

The biggest percentual annual change in prices of new dwellings has been observed in Prague between 2020 and 2021.



## Berlin

It is the only capital city in which transaction prices of new dwellings remained at the same level as last year.

# High lights

**13.3**

Citizens in the Czech Republic had to pay the highest multiple of their annual gross salary to purchase a new 70 sqm dwelling.

**974**  
EUR/sqm

Bosna and Hercegovina recorded the most affordable housing prices on country level in the Property Index.

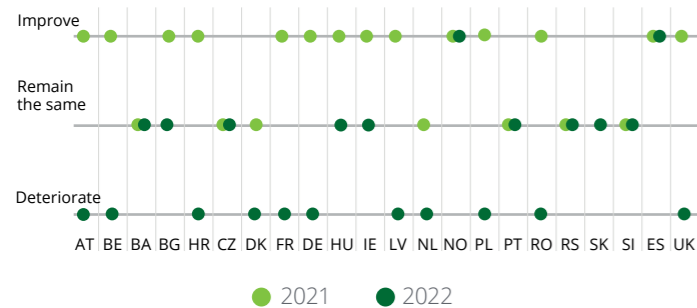
**29.10** EUR/sqm

A rent level of average dwelling rent is again the highest in Paris.

# What is next for residential markets in Europe?

Without a doubt, a leading topic of public debate during the last 2 years has been COVID. The pandemic sparked a chain of events that prompted unprecedented changes to the European economies and of course residential markets.

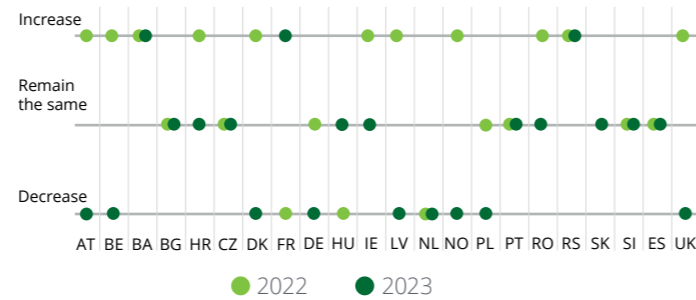
## For the coming months (H2 of the year), we expect the overall economic climate will



In comparison to 2020, the last year could be characterized as 'controlled'. That is because countries across Europe felt more in control of pandemic using targeted lock-downs and relied on successful outcomes of vaccination campaigns that would allow return to 'old normal'.

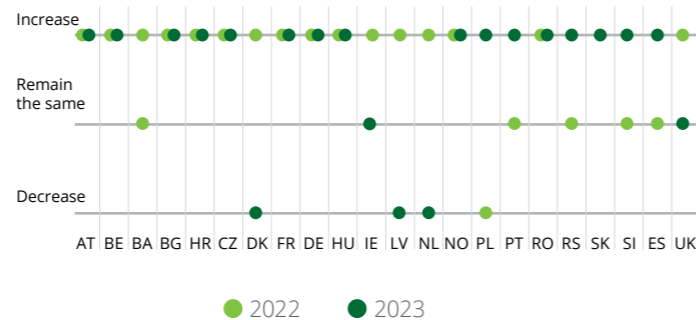
As COVID-related impacts on residential market proved to be mostly of a short-term character, there are another issues that will affect property sector in the near future. Across Europe, the most visible one is growth of construction works prices and closely associated shortage of construction materials.

## We expect that construction activity during the coming year on residential market will



With respect to that, one thing that European countries were not able to fully address as a response to pandemic are ongoing disruptions to supply chains. These disruptions result in higher construction risks for developers as uncertainty around availability of workforce and materials is being increasingly transferred to pricing.

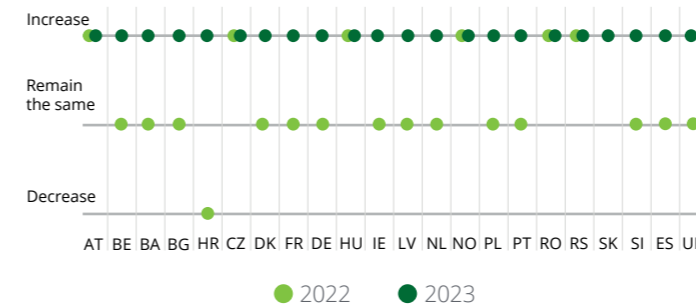
## For the coming year, we expect that prices of dwellings



Another issue visible across surveyed countries lies within limited supply of new housing. For a several years now, the prices on primary markets in most important European cities have been determined by stringency of urban planning legislation at the same when demand has been on record highs.

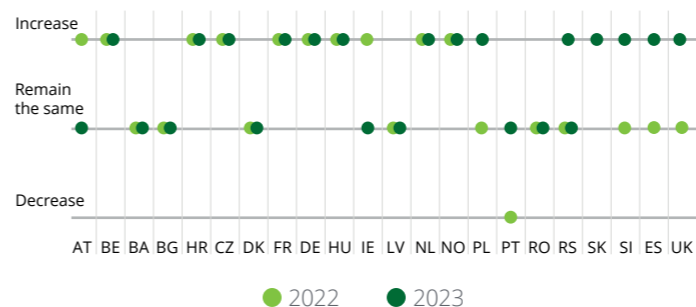
This demand had been driven by relatively low interest rates on mortgages, changes to structure of households where we observe tendencies of decrease in size of average household, ongoing urbanisation due to in-country migration to larger cities and perception of real estate as a stable long-term investment.

## For the coming year, we expect that interest rates for mortgages on residential dwellings in will



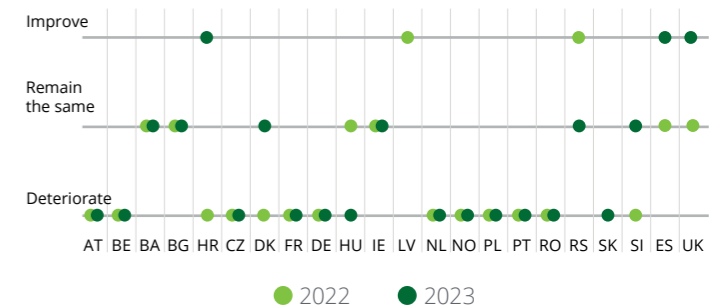
Dynamic price increase mixed with low interest rates in some countries came under oversight of ESRB (European Systemic Risk Board) that send a warning to respective countries concerning medium-term vulnerabilities on residential market in early 2022.

## For the coming year, we expect that residential market rents in will



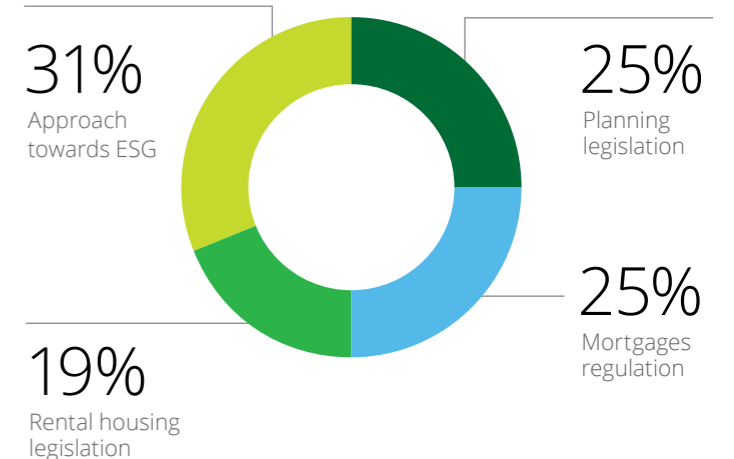
On top of all of the issues, in February came Russian invasion to Ukraine. As many European countries showed solidarity with refugees, the most visible impact in terms of residential market has been visible on neighbouring countries of Poland, Slovakia and Hungary. A common sign throughout the Q2 2022 is decreasing supply on rental markets as many dwellings listed for rent are being used to house families fleeing situation in Ukraine.

## For the coming years, we expect the affordability of own housing will



Revolving topic across surveyed markets remains affordability of own housing. There are only few countries, where, in comparison to previous year, the affordability has improved. Looking forward, the expectation is that affordability will remain an issue in most countries in the foreseeable future.

## In the coming year (2023), we expect changes in residential market in



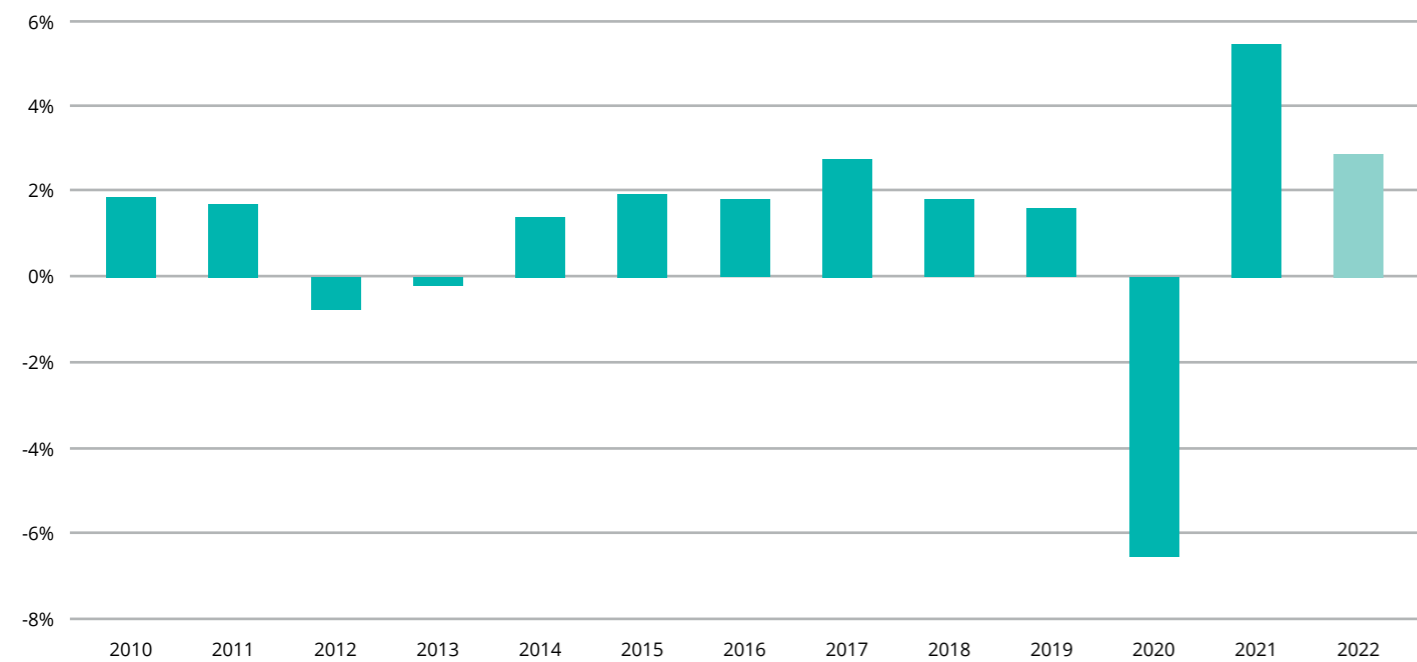
# Economy outlook

## challenges ahead for property markets

The economy of the Eurozone has been growing for 6 years since the 2012 – 2013 Eurozone Sovereign Debt Crisis. However, this economic boom has been terminated by the Covid-19 pandemics. The pandemic resulted in an economic recession as GDP fell by 6.6% in 2020, with Spain and Italy exhibiting the sharpest declines in GDP. The Economy of the Eurozone partially recovered in 2021 as it grew by 5.4%. Even though the economic expansion was fast, pre-pandemic level was not reached.

This fast economic growth has been achieved despite disruptions to global supply chains caused by the pandemic. Disruptions led to a shortage of semiconductor chips which has been brake mainly on production in the automotive sector. The disruptions also led to a rise in the prices of raw materials and construction materials. For this year, the International Monetary Fund forecasts the growth of the Eurozone economy by 2.8%. Risks to the forecast are skewed to the downside. There is a risk that the flow of Russian gas to Europe will be halted because of the war in Ukraine and because of sanctions that the EU imposed on Russia. If this risk materializes, the recession will be inevitable. Even if Russian gas continues flowing, high prices of energy will be a drag on economic growth.

Growth of real GDP in the Eurozone

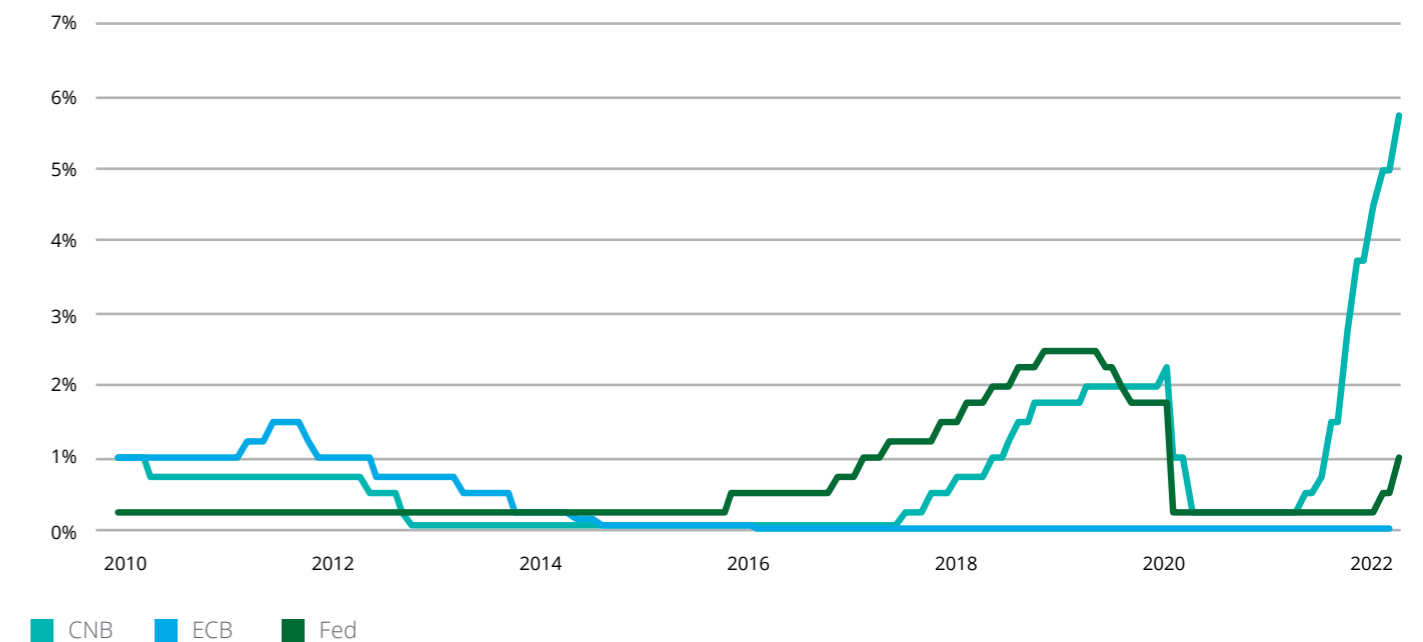


Source: Eurostat, IMF, Deloitte forecast

The combined effect of disruptions of supply chains, energy crisis, and high prices of wheat and other commodities accelerated inflation. In the Eurozone, it reached 7.5% in April, which is a multi-decade high. Further acceleration is expected. Inflation became by far the biggest macroeconomic problem worldwide. Central banks around the world got under pressure to accommodate growing inflation by raising interest rates. But the majority of

them, mainly the Fed and ECB, considered high inflation as temporary and hesitated to tighten monetary policy. Central banks eventually changed their minds. But in the meantime, inflation got unanchored. Fed has already raised its main rate by cumulative 75 basis points and will continue doing so at the expected pace of 50 bps per meeting. ECB, on the other hand, did not raise its main policy rate yet. The first hike is expected in July.

Growth of real GDP in the Eurozone



Source: www.cbrates.com

The housing market is usually sensitive to economic conditions, especially GDP growth and interest rates. The Correlation between lagged GDP growth and house prices in the EU is positive and very high. Unless high energy prices trigger a recession, GDP growth could be supportive of real estate prices. On the other hand, tighter monetary policy increases mortgage rates which in turn could reduce demand for real estate and slow growth in real estate prices.

# Comparison of Residential Markets – Housing Development Intensity



### Completed dwellings

In the introductory chapter of this year's edition of Property Index, the focus is primarily on the indicator of housing development intensity in the residential market. That is the number of completed dwellings per 1,000 citizens surveyed in respective country.

Fewer than two completed apartments per 1,000 citizens were recorded in the following four countries last year: Bosnia and Herzegovina, Latvia, Spain, Portugal and Slovenia.

On the other hand, the highest number of dwellings per 1,000 citizens had been delivered to the markets in France (6.95), followed by Poland with 6.16 dwellings per 1,000 citizens.

Comparing absolute values of completed dwellings in 2021, France has been continuously keeping its firm position as European leader in dwelling completions, with 471,000 dwellings completed last year. It has been followed by Germany (310,000 dwellings) and Poland (234,700 dwellings).

Based on the data collected by Deloitte national offices, only 2,600 dwellings were completed in Bosnia and Herzegovina in the previous year. It may be converted into the lowest housing development intensity per 1,000 citizens across monitored European nations. A similar trend has been spotted in Latvia and Slovenia, with 2,900 and 4,015 completed dwellings respectively.

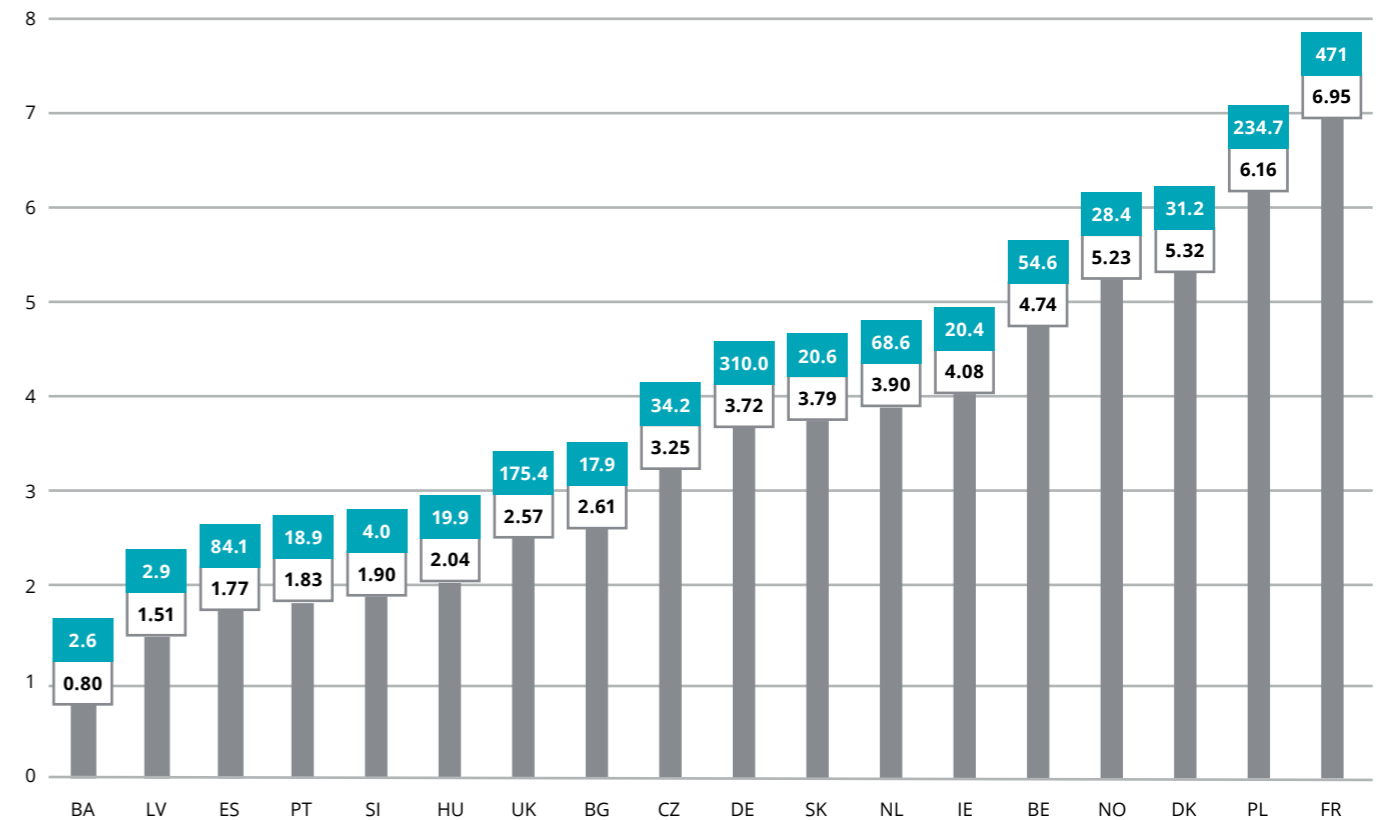
In terms of year-on-year percentual comparison, France has witnessed an immense increase of 23.4%. Additionally, strong annual growth has also been observed in the United Kingdom (+18.0%), Bulgaria (+15.9%), Slovenia (+13.4%), and Portugal (+12.9%).

Looking at negative tendencies, Hungary has been experiencing a dramatic drop of 29.5% in the number of completed dwellings.

There are also other countries that have observed a decrease in new completions – Belgium (-12.86%), Latvia (-8.0%), Denmark (-7.3%), Slovakia (-3.9%), Norway (-2.6%), Netherlands (-1.0%), Czech Republic (-0.7%) and Ireland (-0.5%).

### Housing Development Intensity

Index of number of completed dwellings per 1,000 citizens



■ Number of completed dwellings per 1,000 citizens ■ Total number of completed dwellings (ths.)

Source: Deloitte national offices

### Initiated dwellings

Similarly, the parameter of initiated dwellings has been calculated to present country comparison across Europe.

The highest number of initiated dwellings per 1,000 citizens in the last year had been recorded in Austria (10.56 dwellings per 1,000 citizens). Then, Poland and Slovenia followed with 7.28 and 6.06 initiated dwellings per 1,000 citizens, respectively.

On the contrary, the lowest new construction activity has been recorded in Italy (1.03 initiated dwellings per 1,000 citizens). Both Bosnia and Herzegovina and Latvia initiated less than 2 dwellings per 1,000 citizens in the last year.

Furthermore, Bosnia and Herzegovina, and Latvia seem to have the smallest overall volume of newly with less than 5,000 dwellings initiated through 2021.

From the point of view of initiated dwellings in absolute numbers, the greatest volume of initiated dwellings was seen in France (386,700),

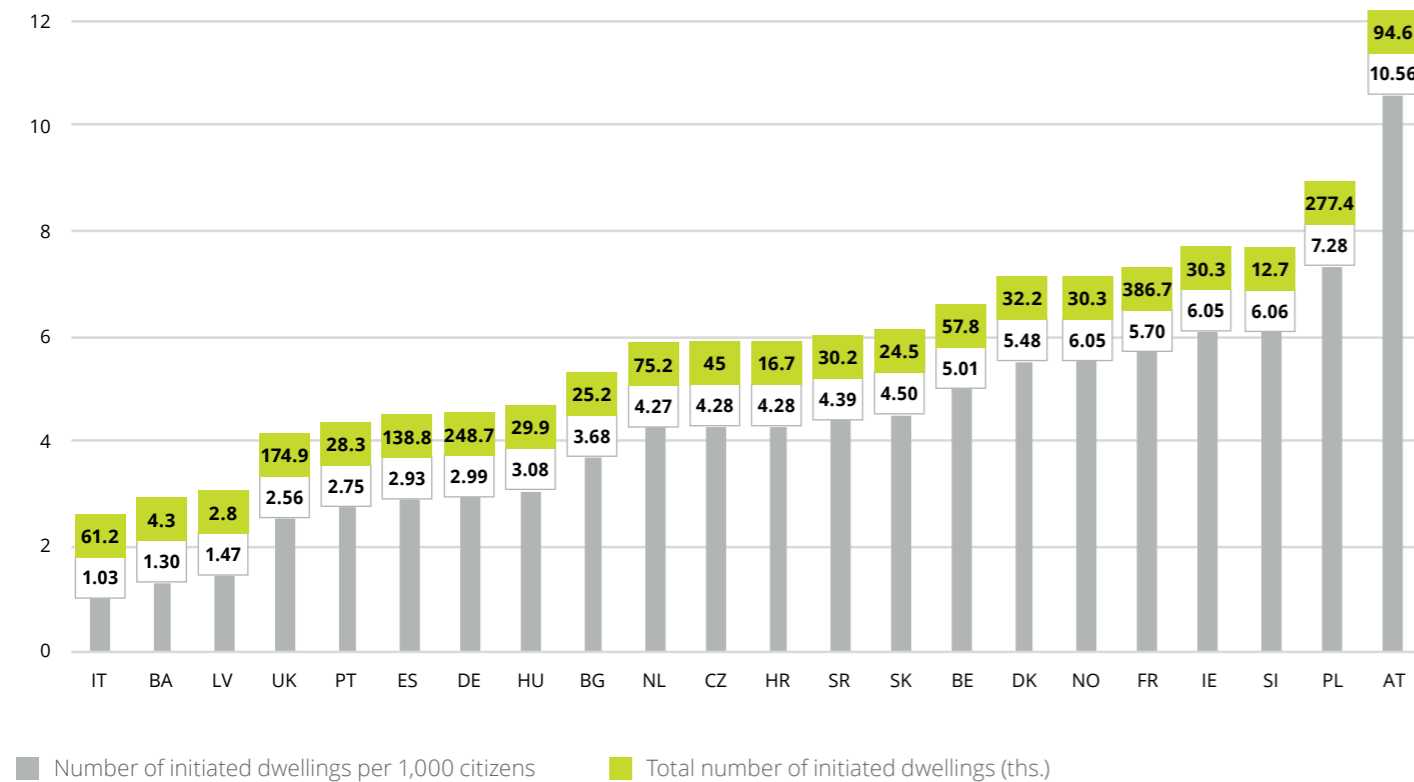
Poland (277,400) and Germany (248,700). At the same time, these three European countries were the only ones with over 200,000 initiated dwellings in the last year.

Based on a year-on-year comparison of initiated dwellings, it is worth mentioning that the positive trend of initiated dwellings has been observed in 20 out of 21 participating European countries. Only Austria has recorded a slight decrease of 3.80% in terms of initiated dwellings in the country.

The highest increase in initiated dwellings compared to 2020 has been noted in Ireland (+39.7%), the United Kingdom (+37.1%), Serbia (+33.4%), and Hungary (+32.7%). Double-digit increase of initiated dwellings has been recorded in the Czech Republic (+27.6%), Italy (+24.7%), Slovakia (+24.1%), Poland (+23.9%), Spain (+22.0%) and Belgium (+21.3%).

### Housing Development Intensity

Index of number of initiated dwellings per 1,000 citizens



Source: Deloitte national offices

### Housing Stock

Apart from the number of both completed and initiated dwellings in each European country, the size of the total housing stock is often perceived as the mainstay of quality of life and level of economic development in the respective country.

Based on the data gathered by Deloitte national offices in Europe, the largest stock is in Croatia, with 604 dwellings per 1,000 citizens in 2021. It is followed by Bulgaria (585 dwellings per 1,000 citizens) and Portugal (579 dwellings per 1,000 citizens). On the other hand, the highest total number of dwellings in housing stock has been repeatedly recorded in Germany with more than 43.1 million units in total.

On the other side of the spectrum, six participating countries – the United Kingdom, Poland, Slovenia, Slovakia, Ireland and Austria all have less than 450 dwellings in stock per 1,000 citizens.

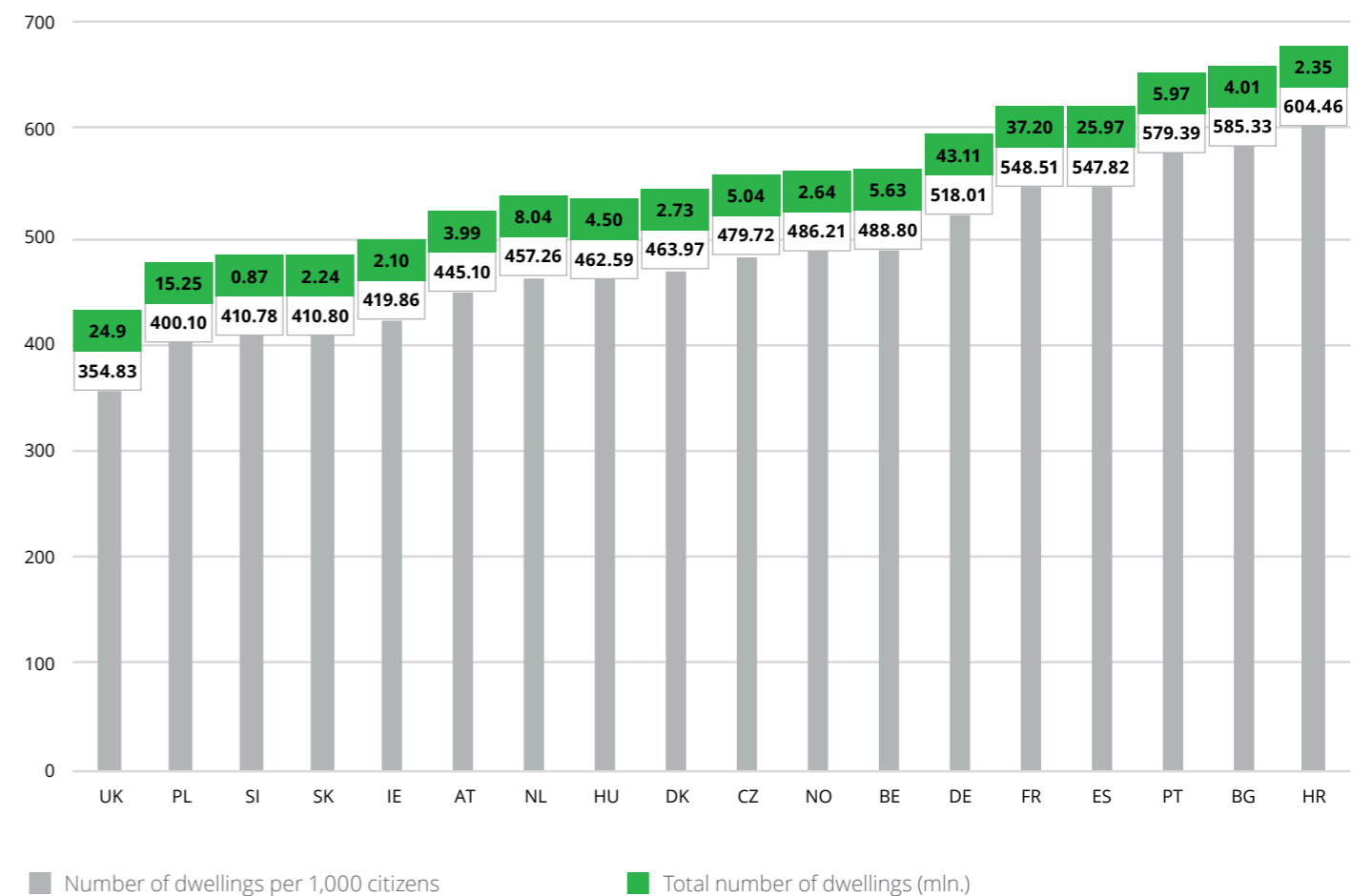
The country with the second largest housing stock is France totaling approx. 37.2 mil. dwellings. France has been accompanied by Spain (26.0 mil.), the United Kingdom (24.9 mil.) and Poland (15.3 mil.).

On the contrary, the smallest housing stock belongs to Slovenia with 0.87 mil. dwellings in total.

In this year's edition of Property Index, the average size of the housing stock amounts to 461 dwellings per 1,000 citizens within the selected countries. Above-average size of housing stock is observed in 11 from 18 surveyed European nations.

### Housing Stock

Number of dwellings per 1,000 citizens



Source: Deloitte national offices



# Comparison of Residential Property Prices in Selected Countries and Cities

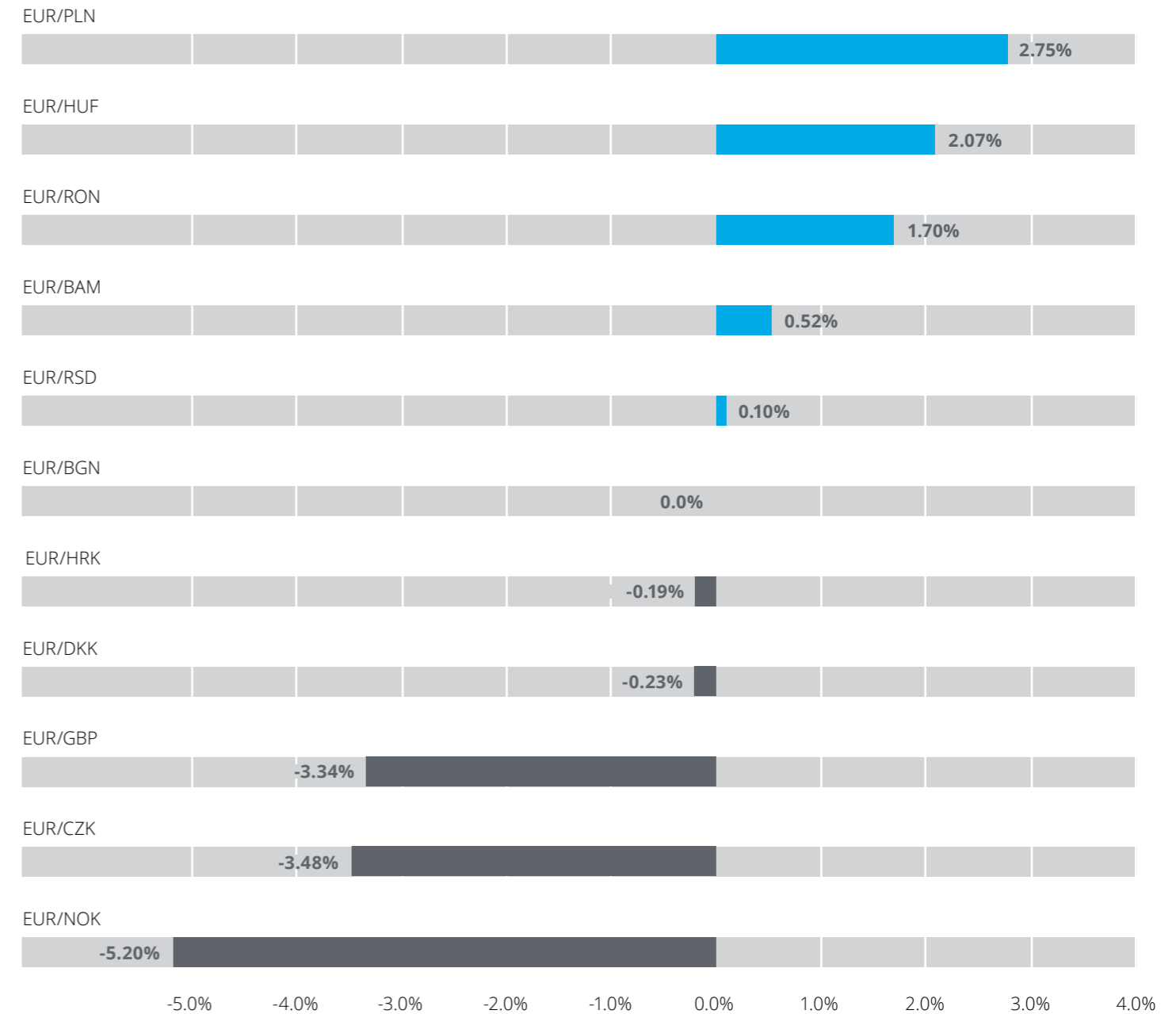
**This year's edition of the Property Index includes statistics from 23 European countries and 68 individual cities. To provide complex and harmonized outcomes in the publication, all collected price statistics are converted into the currency of Euro.**

**At this moment, it is worth mentioning that annual price changes within analysed markets have been affected by the development of currency exchange rates in selected European countries, as shown in the chart below.**

Compared to last year's publication of the Property Index, depreciation of Euro in relation to national currency has been witnessed in several countries – Norway (-5.2%), the Czech Republic (-3.5%), the United Kingdom (-3.3%), Denmark (-0.2%), and Croatia (-0.2%).

On the contrary, Euro experienced appreciation against national currency in Serbia (0.1%), Bosna and Hercegovina (0.5%), Romania (1.7%), Hungary (2.1%) and Poland (2.8%).

**Euro exchange rates changes average 2021/2020**



Source: European Central Bank



## Average Transaction Price of a New Dwelling in Selected Countries (EUR/sqm), 2021

Since the last year's edition of the Property Index, all European countries have experienced some new and unprecedented challenges on the global scale. In addition to the war in Ukraine, European countries have faced rapid increases in the energy costs, construction materials prices, and labour costs. All that affected the average transaction price last year.

The United Kingdom took over the leading position of the most expensive country with a price label of 4,905 EUR/sqm for the year of 2021. Subsequently, Austria with a price tag of 4,782 EUR/sqm was ahead of France with an average transaction price transaction of at the level of 4,639 EUR/sqm.

In addition, Germany and the Netherlands joined the most expensive countries in 2021, resulting in 4,600 EUR/sqm and 3,949 EUR/sqm.

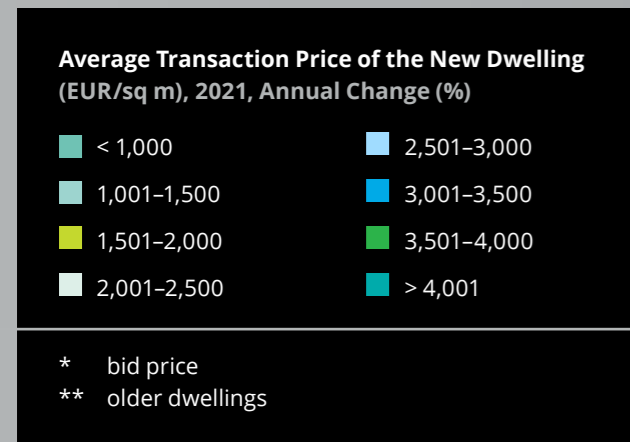
On the opposite side of the price spectrum, Bosnia and Herzegovina have recorded the lowest average transaction price of new dwellings of 974 EUR/sqm. It is the only country where prices remain below

1,000 EUR/sqm. Romania follows it with the average transaction price for all dwellings of 1,266 EUR/sqm.

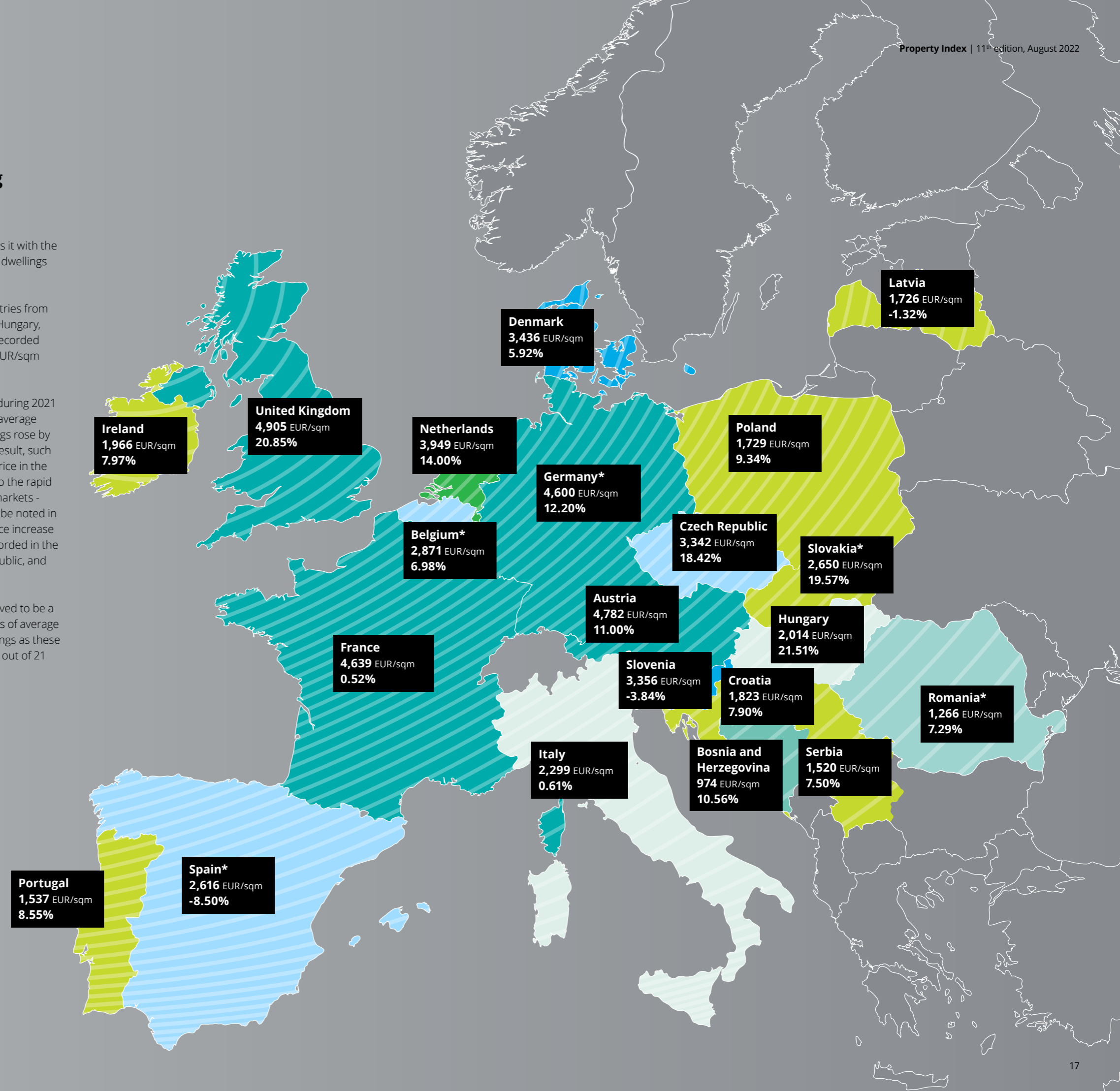
Like the last year's edition, countries from the CEE region (Latvia, Croatia, Hungary, Poland, Serbia, Romania) have recorded average prices between 1,500 EUR/sqm and 2,500 EUR/sqm in 2021.

The most intense price growth during 2021 is visible in Hungary, where the average transaction price of new dwellings rose by 21.5% compared to 2020. As a result, such a high increase in the average price in the country is generally attributed to the rapid rise in prices in key residential markets - larger cities. This trend can also be noted in other European countries. A price increase of about 20% has also been recorded in the United Kingdom, the Czech Republic, and Slovakia.

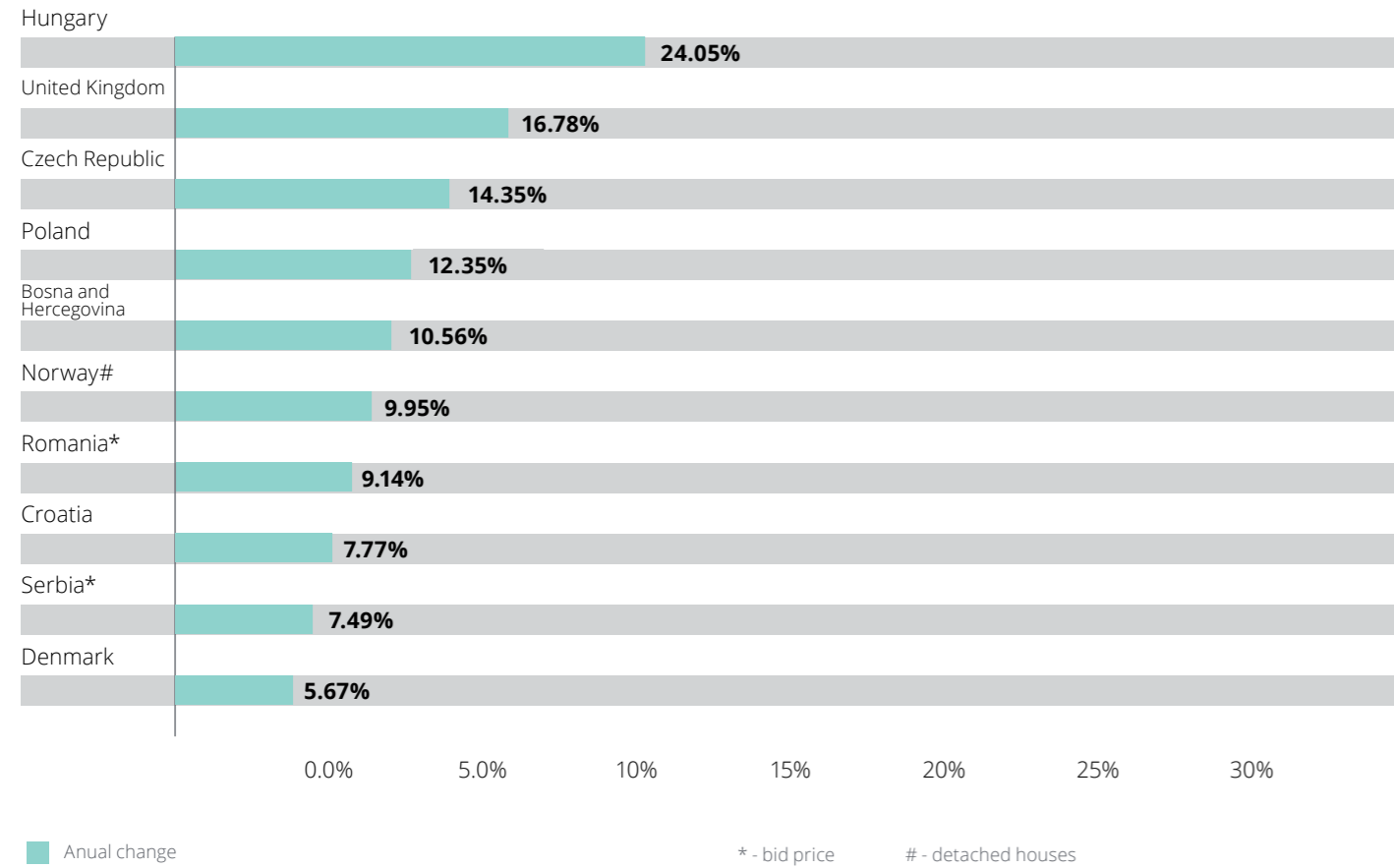
To sum up, the last year has proved to be a year of an upward trend in terms of average transaction prices of new dwellings as these prices increased in 18 countries out of 21 observed.



Source: Deloitte national offices



**Annual Change of Average Transaction Price for a New Dwelling in Local Currency**



A more accurate comparison of the annual change in average transaction price for a new dwelling might be observed by the conversion into the selected national currencies.

The biggest annual change from this point of view has been observed in Hungary with an increase of 24.05%. Hungary is followed by the United Kingdom with an average transaction price increase of 16.78% and the Czech Republic with an annual change of 14.35%. From non-euro countries, the lowest growth has been recorded in Denmark (5.67%) and Serbia with an annual price increase of 7.49%.

**Average Transaction Price of a New Dwelling (EUR/sqm) and annual change**

Vienna		AT	8.2%	5 788
Graz		AT	9.5%	3 416
Linz		AT	9.3%	4 382
Brussels		BE*	6.0%	3 869
Antwerp		BE*	9.5%	4 050
Ghent		BE*	4.6%	3 950
Banja Luka		BA	1.0%	1 236
Sofia		BG	10.3%	1 262
Varna		BG	2.9%	885
Burgas		BG	1.1%	900
Zagreb		HR	4.8%	1 950
Prague		CZ	20.1%	4 353
Brno		CZ	22.4%	3 494
Ostrava		CZ	11.6%	1 983
Copenhagen		DK	8.6%	7 283
Aarhus		DK	2.9%	4 528
Odense		DK	0.8%	3 322
Paris		FR	4.2%	13 462
Lyon		FR	12.7%	5 262
Marseille		FR	-6.0%	4 391
Berlin		DE*	10.2%	6 500
Hamburg		DE*	13.1%	6 900
Munich		DE*	11.7%	10 500
Frankfurt		DE*	16.7%	8 400
Budapest		HU	16.3%	2 566
Debrecen		HU	13.6%	1 456
Győr		HU	19.0%	1 542
Dublin		IE	2.9%	2 792
Cork		IE	5.9%	2 118
Galway		IE	1.7%	2 179
Milan		IT	2.3%	3 844
Rome		IT	1.6%	3 208
Turin		IT	0.3%	1 922
Riga		LV	4.4%	1 903
Amsterdam		NL**	19.7%	7 600
Rotterdam		NL**	27.3%	3 875
Oslo		NO#	17.2%	8 417
Bergen		NO#	13.6%	4 925
Trodheim		NO#	17.1%	5 200
Gdańsk		PL	10.6%	2 238
Katowice		PL	10.9%	1 743
Krakow		PL	8.0%	2 099
Łódź		PL	8.1%	1 541

Poznań		PL	5.6%	1 779
Wrocław		PL	5.2%	1 938
Warsaw		PL	7.8%	2 406
Lisbon		PT	1.0%	4 715
Porto		PT	6.4%	2 753
Bucharest		RO*	8.1%	1 573
Cluj		RO*	8.2%	1 940
Brasov		RO*	12.1%	1 348
Belgrade		RS	9.9%	2 172
Novi Sad		RS	7.9%	1 345
Niš		RS	9.3%	1 010
Bratislava		SK*	13.2%	3 490
Banská Bystrica		SK*	14.9%	2 409
Košice		SK*	38.2%	2 757
Ljubljana		SI	5.0%	3 393
Maribor		SI	16.7%	2 599
Celje		SI	-6.1%	2 577
Madrid		ES*	3.8%	5 073
Barcelona		ES*	5.6%	6 251
Alicante		ES*	9.2%	2 376
London (inner)		UK	6.4%	8 426
London (outer)		UK	11.3%	6 510
Manchester		UK	19.7%	3 628

% Annual change    Average transaction price of a new dwelling    \*-bid price    \*\*- older dwelling    #- detached houses

Source: Deloitte national offices

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

In terms of European cities comparison, Paris has been leading the category of the most expensive city in the publication with an average price tag of 13,462 EUR/sqm for a new dwelling.

Only Munich has been exceeding level of 10,000 EUR/sqm with a price tag of 10,500 EUR/sqm.

The average price level of 7,500 EUR/sqm have been exceeded by four other cities - London (8,426 EUR/sqm), Oslo (8,417 EUR/sqm), Frankfurt (8,400 EUR/sqm) and Amsterdam (7,600 EUR/sqm).

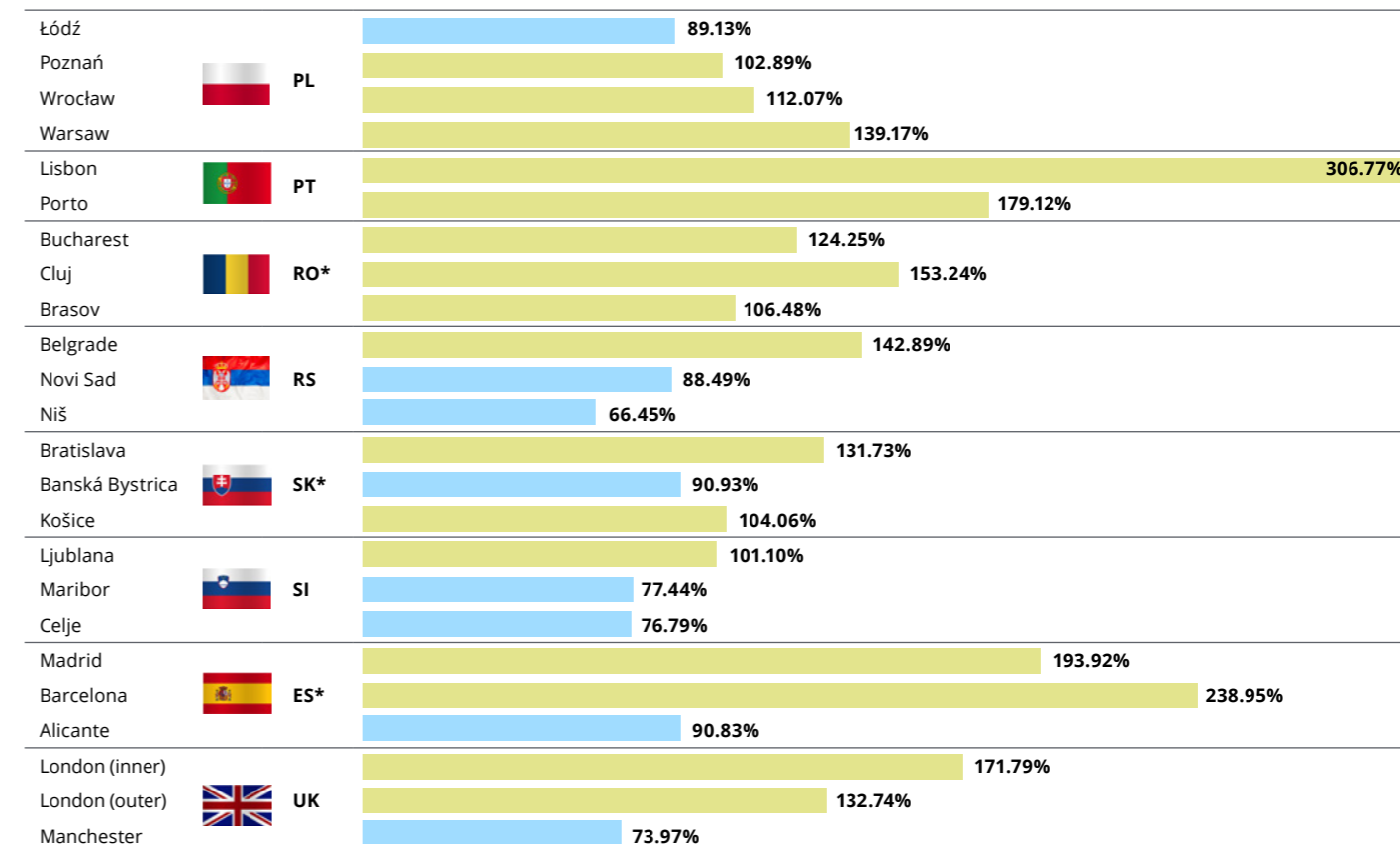
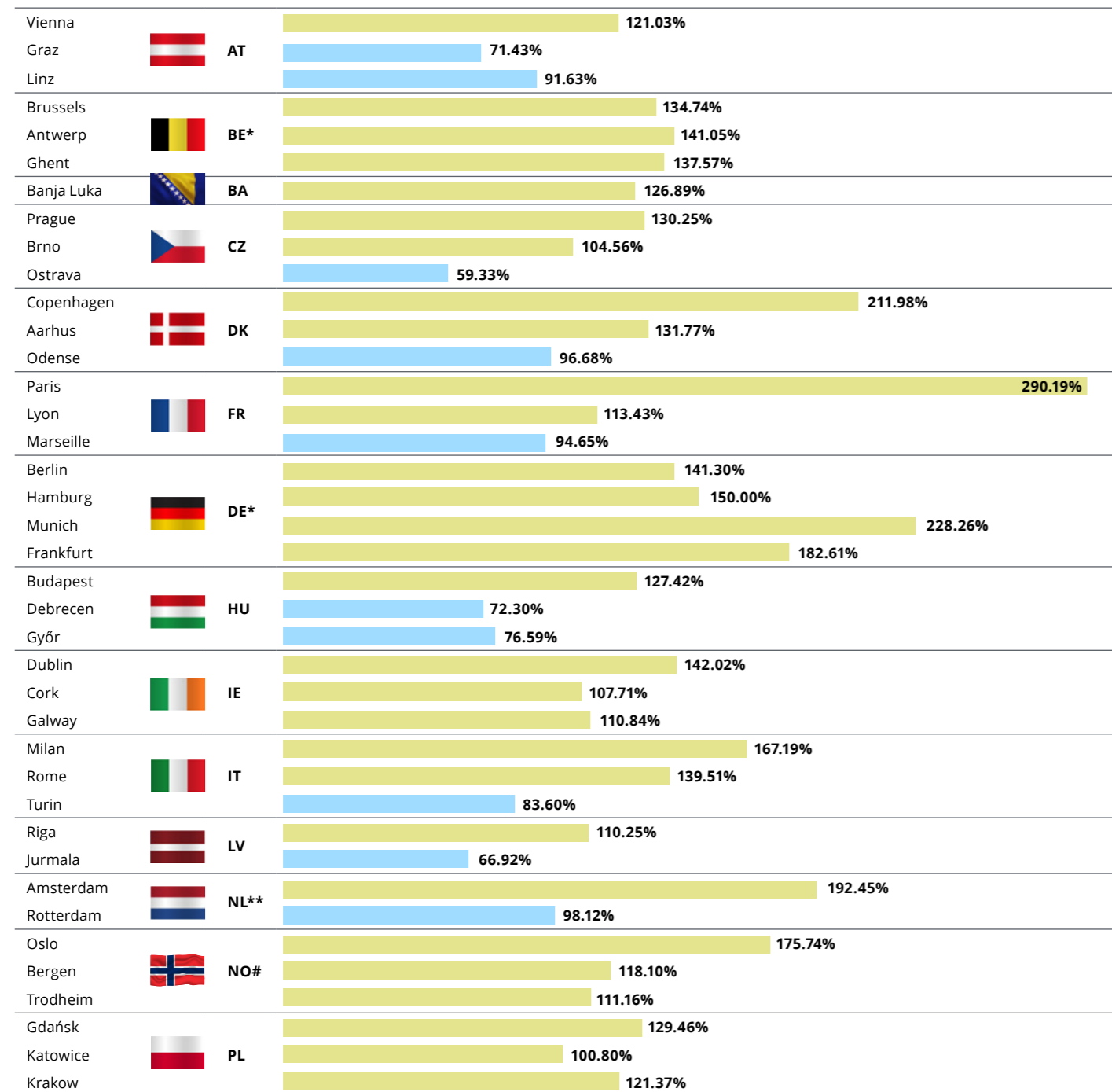
Furthermore, there are also expensive cities that are not capitals. A few examples of these cities include Antwerp (Belgium), Milan (Italy), Cluj (Romania), and Barcelona (Spain).

On the contrary, only two European cities from 68 surveyed cities have recorded average transaction prices below 1,000 EUR/sqm. It is the case of Varna (885 EUR/sqm) and Burgas (900 EUR/sqm) in Bulgaria.

Annual increase of average transaction prices in the surveyed cities is clearly visible in Košice (+38.2%), Rotterdam (+27.3%), Brno (+22.4%) and Prague (+20.1%).

Only 2 surveyed cities in this year's publication recorded a decrease in the average transaction price for a new dwelling - Marseille (-6.0 %) in France and Celje (-6.1%) in Slovenia.

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



■ < 100%    
 ■ > 100%    
 \* bid price    
 \*\* older dwellings    
 # detached houses

Source: Deloitte national offices

The following section of the present-day Property Index focuses on a comparison of prices of the surveyed cities in relation to their respective national averages.

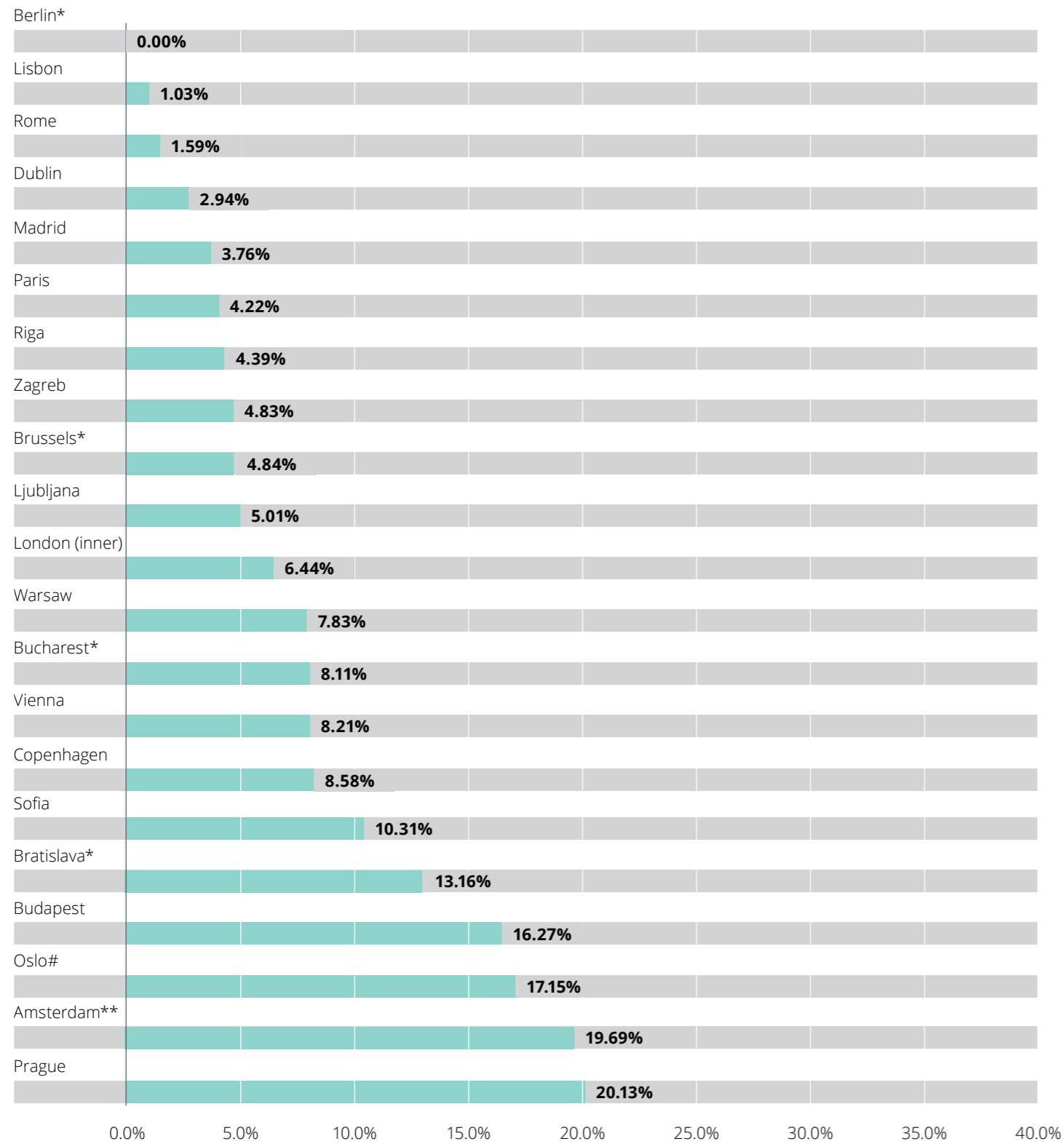
The largest disproportion last year could be observed in Portugal, as price levels in Lisbon stand at 306.77% of the national price average. Beyond that, Lisbon is the only city in this year's edition of the Property Index that exceeds the national average more than three times.

From the remaining cities, only Paris was close to exceeding this milestone, as prices in the French capital stood at 290.19% of the national average.

There are, however, other cities with relatively high prices in comparison to the national average. Copenhagen, Munich and Barcelona in 2021 all recorded price levels at least 2x higher than the national average. All those cities could be commonly characterized by one similar feature – they all “embody” a driving force of national economies in a particular country.

Similar to the last year's publication, Ostrava from the Czech Republic and Niš from Serbia are the only two cities from the compiled list with the lowest ratio to their respective national price averages with 59.33% and 66.45%, respectively.

**Average Transaction Price of New Dwellings in Capital Cities, annual change**



Based on the previous article, we can conclude that most of countries' capital cities are undoubtedly its most important and largest markets. To demonstrate the development of transaction prices across observed European countries, we examined the annual price changes in-depth in each capital city separately.

Based on data collected by Deloitte national offices, property prices grew significantly within most of the observed European capital cities markets in the last year. The only exception is Berlin, which did not experience any percentual annual change last year. Based on a review of the European capital cities, Rome had witnessed an increase of 1.59% compared to the previous year when the price had declined (-3.11%).

The largest percentual annual change in dwelling prices has been recorded in Prague (+20.13%) and Amsterdam (+19.69%).

A strong increase has also taken place in Oslo (+17.15%), Budapest (+16.27%) and Bratislava (+13.16%).

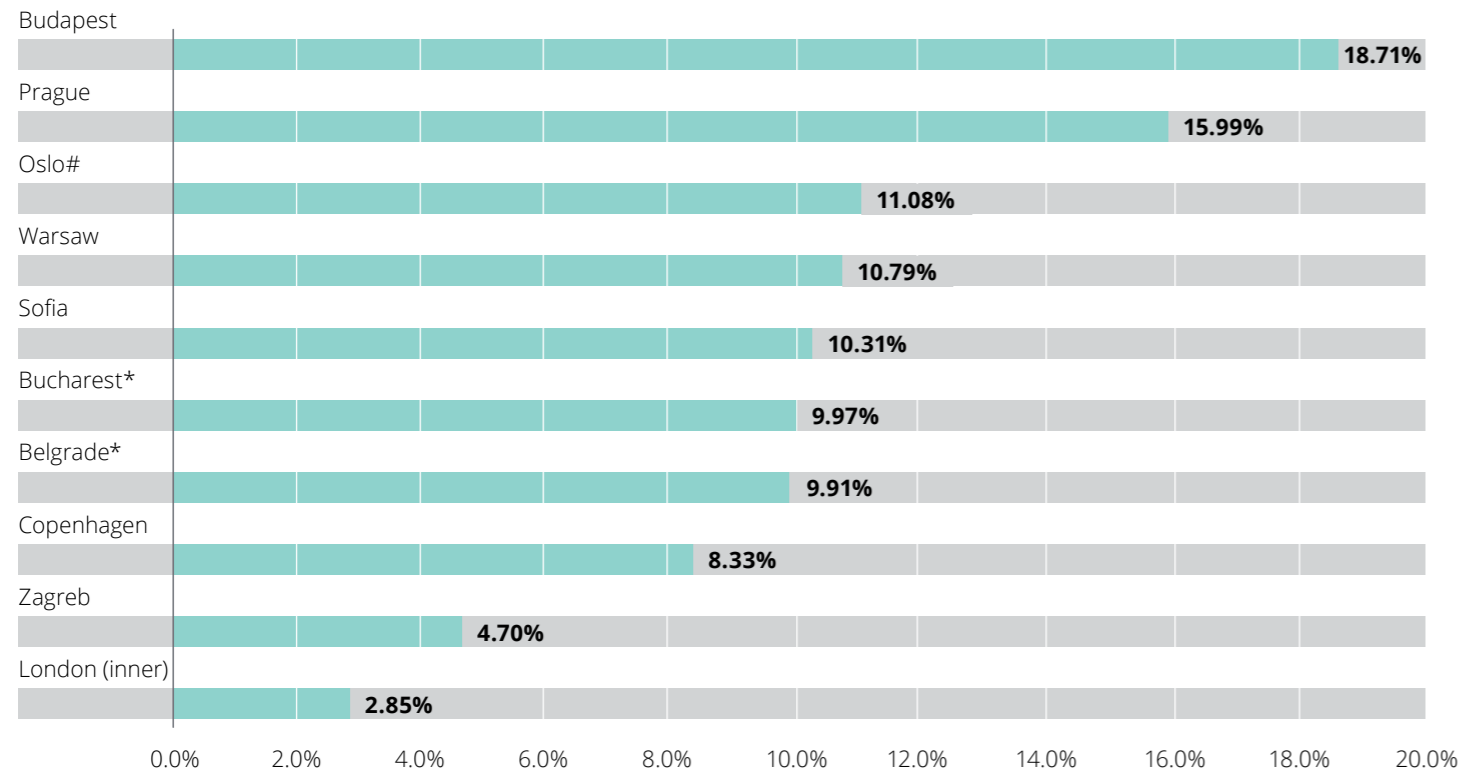


■ Annual change

\* bid price  
 \*\* older dwellings  
 # detached houses

Source: Deloitte national offices

**Annual change of average transaction price of a new dwelling in local currency**



Changes in average exchange rates of selected currencies between 2020 and 2021 have had an impact on the average transaction price of dwellings within capital cities.

Citizens in Budapest have been experiencing the most dynamic increase of 18.71%. It has been followed by Prague with an annual change of 15.99% and Oslo with 11.08%.

On the opposite side of the spectrum, the average transaction price in London (inner) has increased by 2.85%, accompanied by Zagreb by 4.70%.

■ Annual change

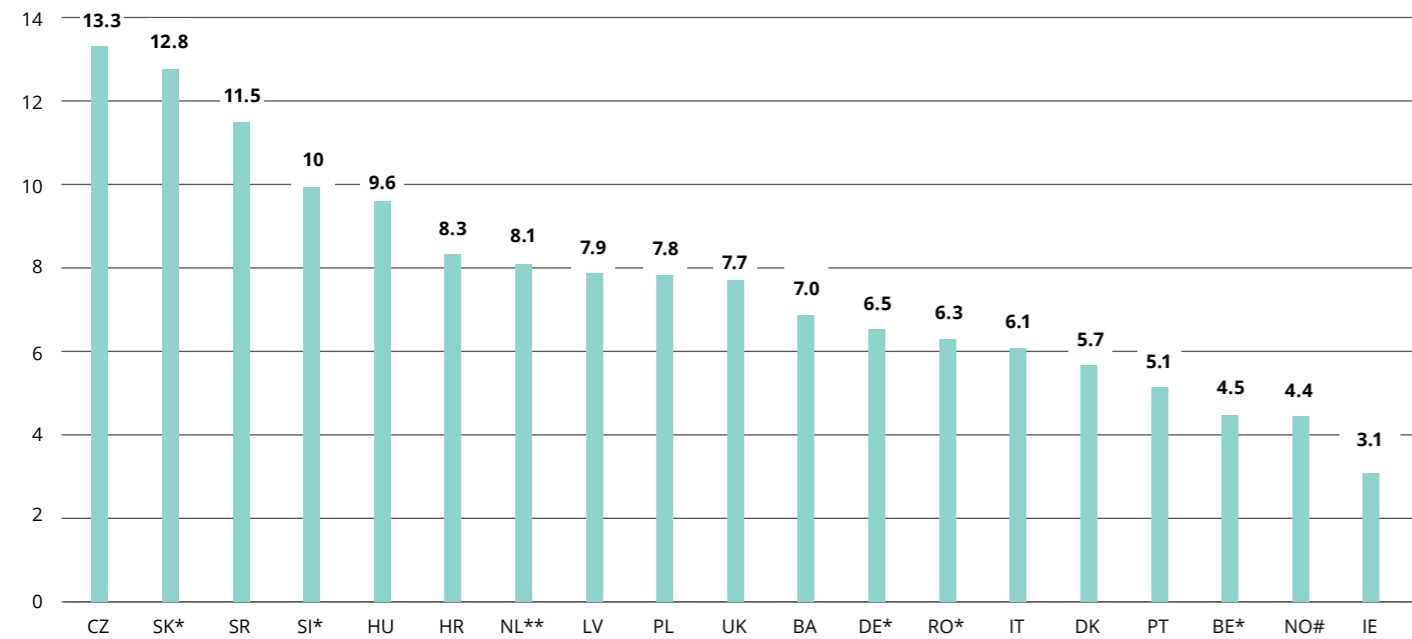
- \* bid price
- \*\* older dwellings
- # detached houses

Source: Deloitte national offices



### Affordability of Own Housing

Multiple of annual gross salaries to purchase a 70 sqm dwelling



\* bid price    \*\* older dwellings    # detached houses

Source: Deloitte national offices

### Affordability of Own Housing – Countries

Affordability of own housing in respective European countries may be seen as the most representative indicator of Property Index publication. In line with previous editions, the affordability of own housing is calculated as the number of average gross annual salaries required for the purchase of a standardized new dwelling with an average size of 70 square meters in each country.

According to the latest data, the Czech Republic can be considered the least affordable country in Europe with respect to home ownership. Buyers in the Czech Republic will need on average 13.31 gross annual salaries in order to purchase a new dwelling. In comparison to the last year, the affordability of owning a home has declined by an equivalent of 1.11 annual gross salaries.

The second least affordable own housing among 19 surveyed European countries has been found in Slovakia, which was similarly ranked at the top in the last year's edition. Slovaks need approx. 12.76 gross annual salaries to purchase a new standardized dwelling. In comparison to the last year's publication, Slovak citizens need an extra 2.16 annual gross salaries to purchase a new apartment.

Slovakia has been followed by Serbia, where 11.49 average gross salaries are needed to purchase an average new dwelling. Buyers in Slovenia, Hungary, Croatia, and the Netherlands need to put aside equivalent of between 8 and 10 gross annual salaries aside to purchase a new own apartment.

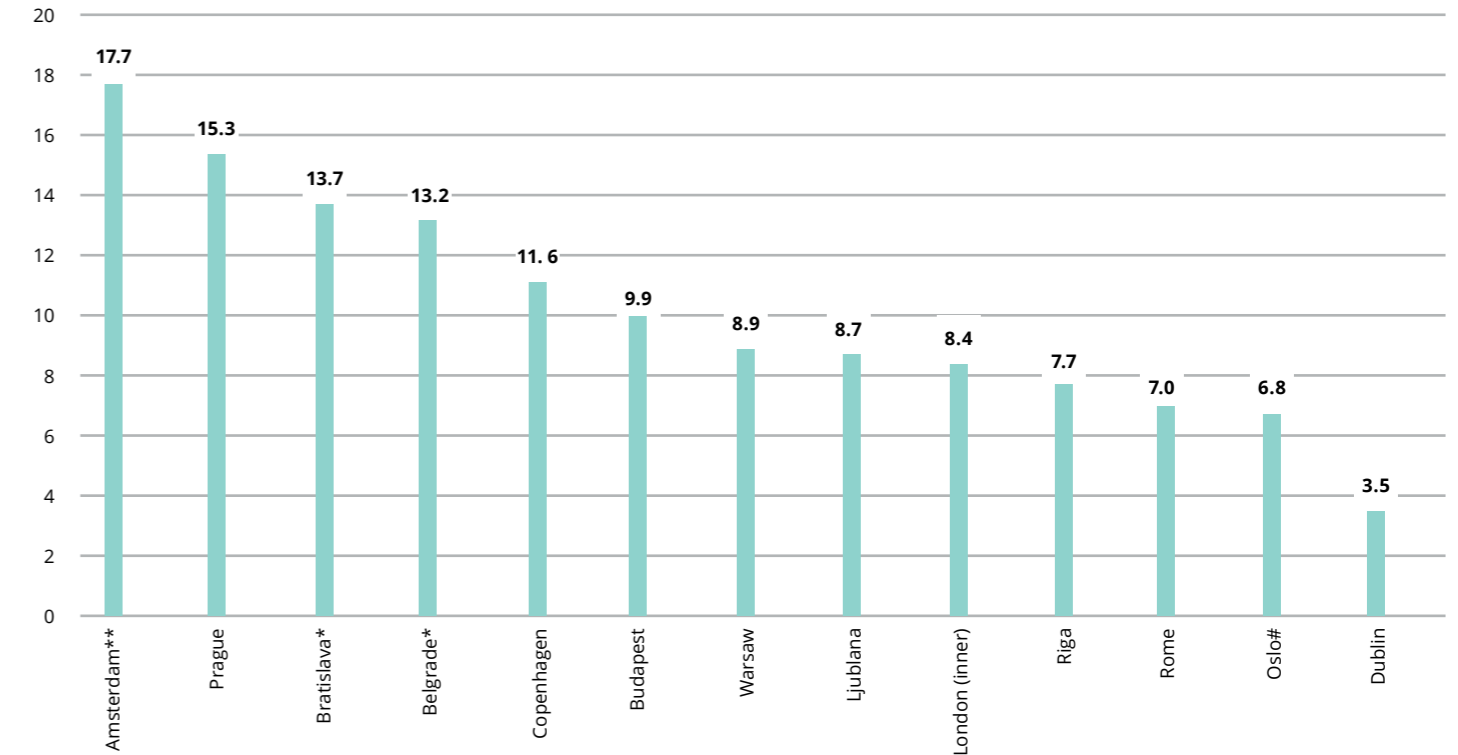
Residents of Latvia, Poland, the United Kingdom, Bosnia and Herzegovina, Germany, Romania, and Italy must save an equivalent of between six and eight gross annual salaries to obtain housing.

In Denmark, Portugal, Belgium, and Norway, local citizens need to put aside between 4 and 6 annual gross salaries to afford a new dwelling.

Similar to last year's results, there is a specific case of Ireland. Despite having the best measured affordability of own housing (3.1 gross annual salaries), the country is currently undergoing a major housing crisis as strict mortgages regulation in combination with increasing construction prices made many development schemes not viable and resulting in significant lack of supply.

### Affordability of Own Housing

Gross annual salaries for a standardised new dwelling by city



\* bid price    \*\* older dwellings    # detached houses

Source: Deloitte national offices

### Affordability of Own Housing - Selected cities' markets

In comparison to the previous editions of Property Index, this new chapter deals with the affordability of own housing from the perspective of European capital cities for which both data on prices and salaries have been available. The outcomes are based on the same methodology applied as in the previous chapter that deals with affordability on a national level.

Based on the available data from individual capital cities across Europe, the least affordable city in terms of purchasing a new standardized apartment is Amsterdam in the Netherlands. Citizens here need to save an equivalent of approx. 17.67 average gross annual salaries to afford their own housing in 2021.

In the survey, Amsterdam was followed by citizens of Prague, Bratislava, and Belgrade. Whereas citizens from Prague could afford a new own apartment with 15.34 average gross annual salaries, citizens of Bratislava and Belgrade need to lay aside approx. 13.74 and 13.20 average gross annual salaries.

If citizens from Copenhagen, Budapest, Warsaw, Ljubljana, and London (inner) seek a new apartment, it is necessary to save up an equivalent of between 8 and 12 average gross annual salaries in their capital city.

More affordable own housing has been discovered in Riga, Rome, and Oslo, whereabouts an equivalent of 6 up to 8 average gross annual salaries are needed to afford to purchase a new standardized own apartment.

As is the case of Ireland, Dublin seems to be the most affordable from the selected cities. This, however, does not take into account wider economic factors such as access to mortgages and low supply resulting in factual worsening of affordability of own housing.

## Rental market

Continuing a long-term tradition of publishing Property Index, this year's edition includes a comparison of rental prices among selected cities across European countries participating in the survey.

According to available data based on different European cities, Paris has been leading the pack with 29.10 EUR/sqm/month. Average monthly rents of over 20 EUR/sqm were recorded in seven cities - Oslo (26.6 EUR/sqm), London (25.1 EUR/sqm), Amsterdam (22.5 EUR/sqm), Trondheim (21.3 EUR/sqm), Barcelona (21.3 EUR/sqm), Copenhagen (20.5 EUR/sqm) and Bergen (20.3 EUR/sqm).

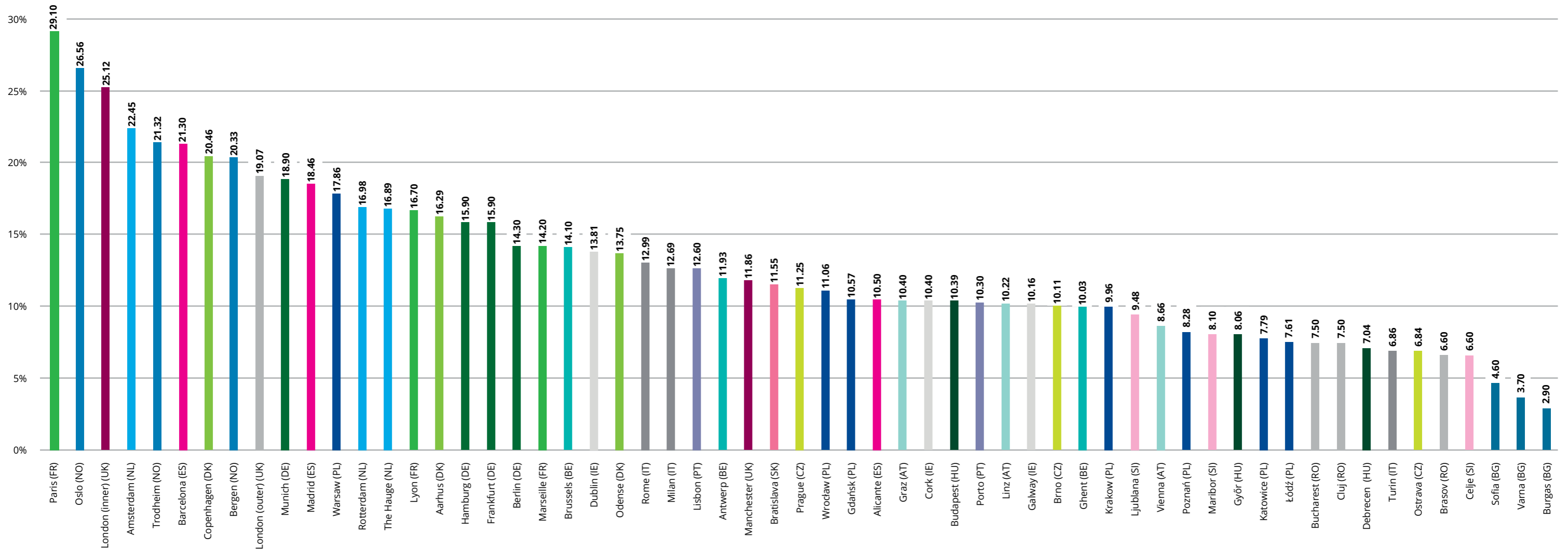
Throughout central European countries, similarly to the last year, Warsaw is the most expensive city with a price tag of 17.9 EUR/sqm/month. It has been followed by Bratislava (11.6 EUR/sqm) and Prague (11.3 EUR/sqm). Like the last year's research, Budapest with 10.4 EUR/sqm is cheaper than smaller CEE cities of Polish Wroclaw (11.1 EUR/sqm) and Gdańsk (10.60 EUR/sqm).

From a different perspective, the biggest annual change in rental housing prices has been observed in Barcelona (+27.54%). Another significant annual change has been experienced in Győr (+26.96%), Alicante (+25.75%) or Warsaw (+18.01%).

On the opposite side of the scale, the lowest average rent price levels have repeatedly been noticed in Bulgaria, specifically in Burgas, where citizens could pay on average 2.90 EUR/sqm/month, followed by Varna with 3.70 EUR/sqm/month and Sofia with 4.60 EUR/sqm/month.

Other Balkan countries (Bosnia and Herzegovina, Croatia and Serbia) are ranked at the bottom of the list and thus take pride in the best affordability in rental housing prices across Europe.

Average Monthly Rent (EUR/sqm)



- Austria (AT);
- Belgium (BE);
- Bulgaria (BG);
- Czech Republic (CZ);
- Denmark (DK);
- France (FR);
- Germany (DE);
- Hungary (HU);
- Romania (RO);
- Ireland (IE);
- Italy (IT);
- Netherlands (NL);
- Norway (NO);
- Poland (PL);
- Portugal (PT);
- Slovakia (SK);
- Spain (ES);
- United Kingdom (UK);
- Slovenia (SI);

Source: Deloitte national offices





## Summary statistics of country average prices

	Average bid price of new dwellings – sqm	Average transaction price of new dwellings – sqm	Average bid price of older dwellings – sqm	Average transaction price of older dwellings – sqm
<b>Austria</b>	NA	4 782	NA	3 628
<b>Belgium</b>	2 871	NA	NA	2 167
<b>Bosna</b>	NA	1 236	NA	740
<b>Bulgaria</b>	NA	NA	NA	NA
<b>Croatia</b>	NA	1 823	NA	NA
<b>Czech Republic</b>	3 762	3 342	2 566	2 167
<b>Denmark</b>	3 608	3 436	2 847	2 711
<b>France</b>	NA	4 639	3 372	3 385
<b>Germany</b>	4 600	NA	3 400	NA
<b>Hungary</b>	2 115	2 014	946	901
<b>Ireland</b>	NA	1 966	NA	1 966
<b>Italy</b>	2 630	2 299	2 101	1 837
<b>Latvia</b>	NA	1 726	NA	767
<b>Netherlands</b>	NA	3 949	NA	3 250
<b>Norway#</b>	NA	3 807	NA	4 765
<b>Poland</b>	1 819	1 729	1 729	1 556
<b>Portugal</b>	4 400	1 537	2 364	1 250
<b>Romania</b>	1 266	NA	NA	NA
<b>Serbia</b>	NA	1 520	NA	1 104
<b>Slovakia</b>	2 650	NA	2 206	NA
<b>Slovenia</b>	NA	3 356	NA	1 818
<b>Spain</b>	2 616	2 602	1 694	1 704
<b>United Kingdom</b>	NA	4 905	NA	3 565

# detached houses

Source: Deloitte national offices



# Mortgage Markets in Europe

Within Property Index publication, it is also necessary to pay attention to the mortgage market across the European continent. Hence, one of the most representative indicators of the residential market is the indebtedness of the households. In other words, the proportion of the outstanding volume of all mortgage loans issued to households to households' disposable income. Consequently, the ability of households to take on new debt is one of the determinants of house price growth.

Looking at available data, the level of indebtedness very extensively differs among European countries. From the general point of view, this is mainly due to several factors: share of mortgage holders among the population of each country, maturity of mortgage markets and historical developments in the separate national residential market.

European countries such as Romania, Hungary, Latvia, or Slovenia record a relatively low rate of indebtedness - below 30 % of total outstanding residential loans to household disposable income.

Central European countries such as Poland and the Czech Republic, kept the level of indebtedness below the level of 50%.

The highest level of indebtedness has been observed in Denmark, Norway and the Netherlands. All three countries have been exceeding the indebtedness level of 170%.

Germany and France, the most populous countries in Europe with the largest housing stock, have been marked by an indebtedness ratio in the range of ca. 75%.

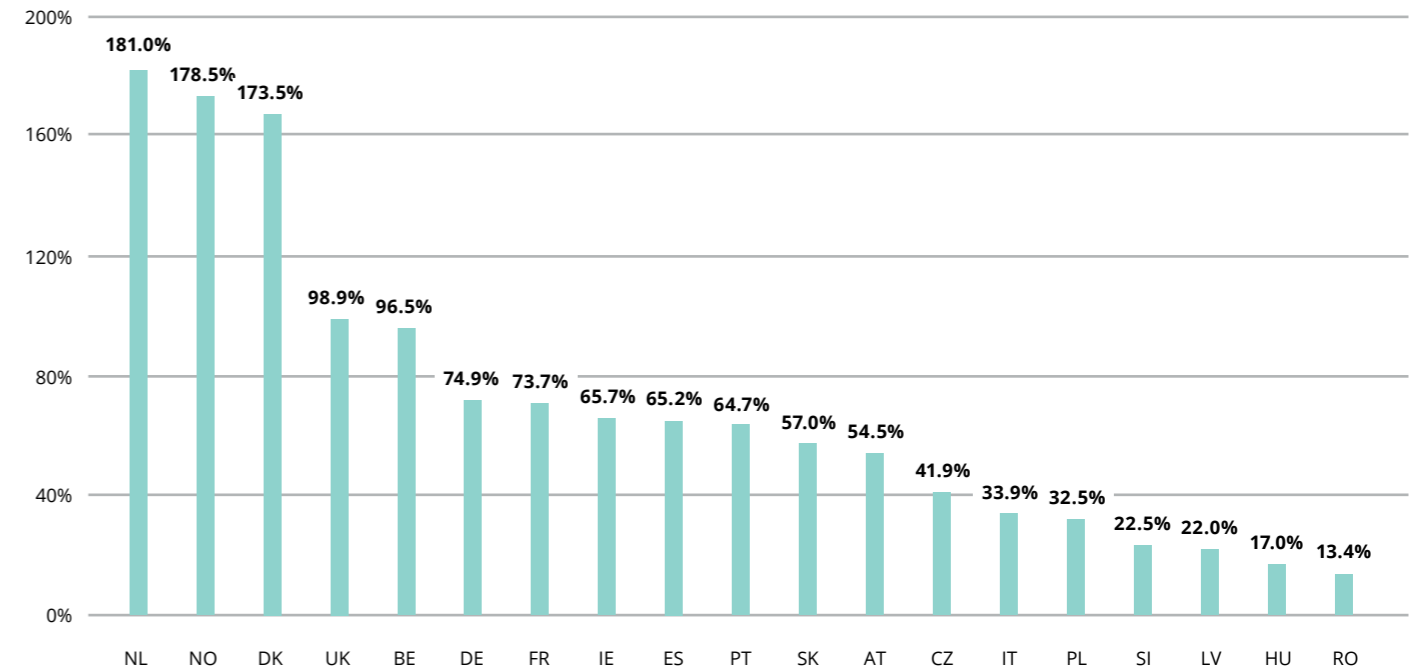
Looking at interest rates on residential mortgages, the highest rates have been recorded in Poland followed by Hungary, jointly exceeding the rate of 4.0% in 2021. It is worth noting that Poland has lately been experiencing a very steep increase in average mortgage interest rates as it stood at the rate of 2.5% during 2020.

Except for those two countries, average mortgage interest rates over 2% have been observed in other eight countries - United Kingdom, Latvia, Hungary, Bulgaria, Ireland, the Czech Republic, Romania, and Bosnia and Hercegovina.

On the other side of the spectrum, the most affordable average mortgage interest rates have been traditionally recorded in Portugal (0.8%), France (1.1%) and Slovakia (1.1%).

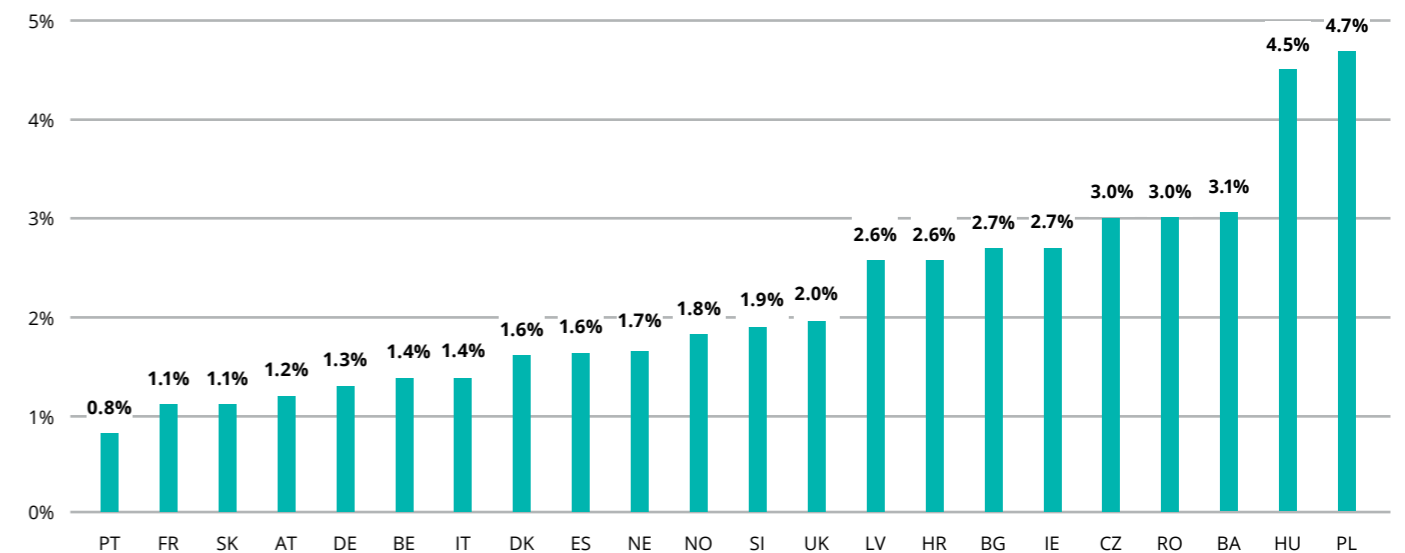
To shortly summarize, there is a slight upward trend in average mortgage interest rates among participating European countries. There are, however, exceptions. For example, Portugal, Austria, Spain and Slovenia have all witnessed a slight decrease in the mortgage interest rate.

Total outstanding residential loans to disposable income of households ratio (%), 2021



Source: Hypostat 2021

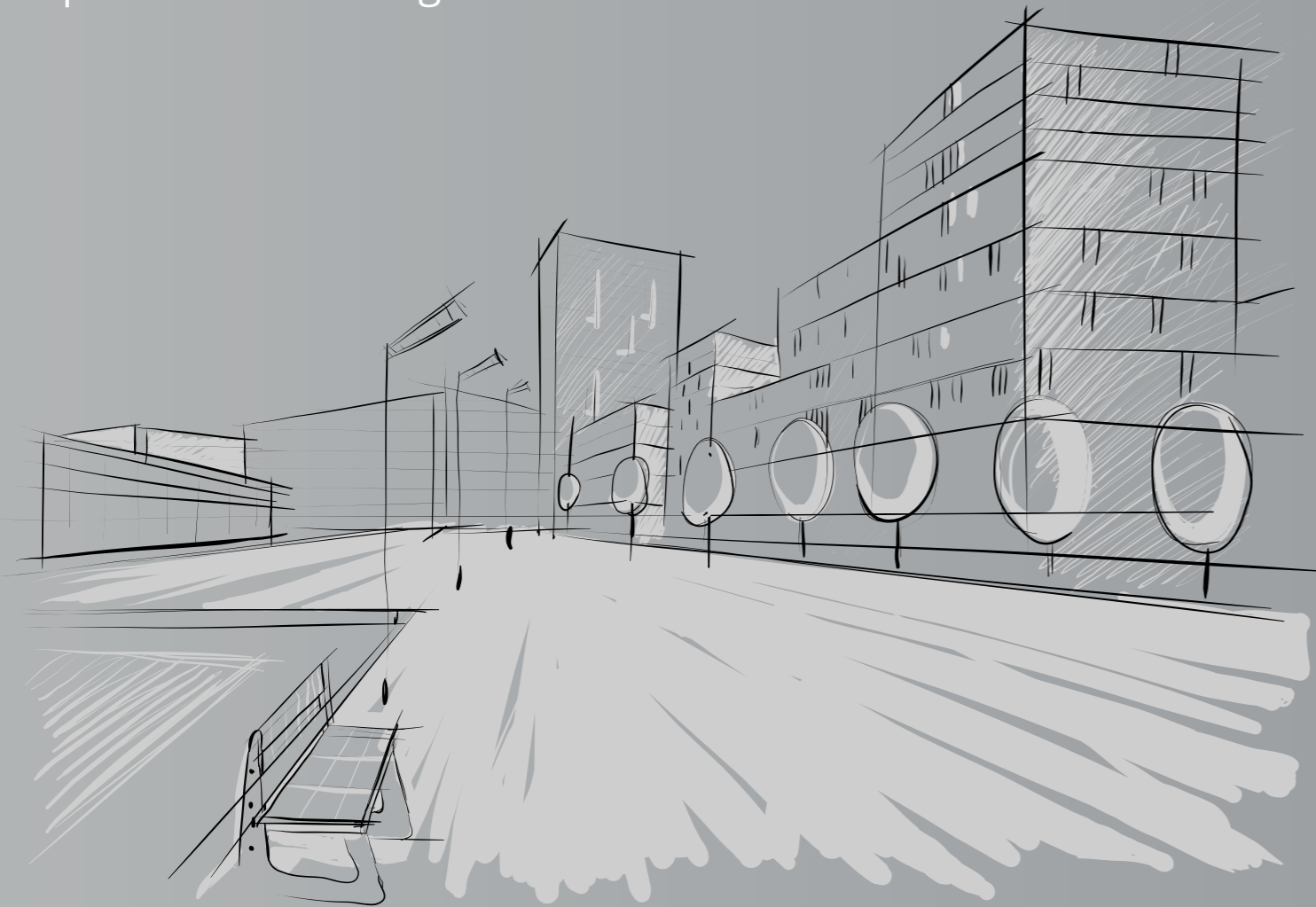
Average Mortgage Rate (%), 2021



Source: Deloitte national offices

# Annex: Comments on Residential Markets

Austria — Belgium — Bosnia and Herzegovina  
Bulgaria — Croatia — Czech Republic — Denmark  
France — Germany — Hungary — Ireland — Italy  
Latvia — Netherlands — Norway — Poland — Portugal  
Romania — Serbia — Slovakia — Slovenia  
Spain — United Kingdom



## Austria

Since the end of 2020, residential prices in Austria have risen by double digits, most recently by more than ten percent in the end of 2021. These prices are fuelled by the highest inflation since the early 1980s and negative real interest rates on bonds. Persistently low borrowing rates have made investments in residential property attractive even at rental yields of less than 4%.

The COVID-19 crisis and the historically low interest rates unleashed a veritable flight into "concrete gold". At the same time, except for some Viennese districts and small towns across Austria, the supply of new dwellings is scarce. The result is a double-digit increase in residential property prices from 2020 onwards. During 2021, the boom increasingly shifted to markets that were still affordable, mostly in rural areas, which is also related to home office. Based on the above mentioned, and the preferences for single-family dwellings that have been observed since 2020, a shift of the boom to suburbs and into the

surrounding countryside continues to emerge. Rural areas close to cities are experiencing a proper price upswing. At the same time, building sites are becoming increasingly scarce.

The rents including operating costs have risen by an average of about 8 per cent in the last five years. However, actual rents depend on flat size, region as well as duration. The private sector is significantly more expensive than cooperative and council dwellings. In the west of Austria rents are significantly higher, Vienna is also slightly above the average.

## Belgium

Due to multiple lockdowns, a major drop-in transaction activity was observed after the most active year in Belgian history in 2019. In 2021 the transaction market recovered well with an increase in number of transactions of 17%. Furthermore, the Belgian residential market maintained its rising trend in transaction prices with an increase of ca. 7%, almost double the growth of last year. The pandemic still had an impact on the development activity in Belgium. The number of completed dwelling decreased by almost 13%.

The high demand for product remained during the year 2021. This supported the ever-increasing housing prices and is decreasing the affordability of housing in Belgium. This is pushing more and more households to the rental market and obliges them to stay there for a longer period in time.

This results in demand for more qualitative products in this segment. A major part of the Belgian housing stock can be considered as outdated and requires substantial sustainable renovation. Institutional investors and developers are responding to this urgent need by developing and investing in built-to-rent projects.

Although the Belgian real estate market experienced a very strong performance of the sales market, less impact was observed on the rental market. Apartment rents in most large Belgian cities maintain their steady growth. With the increasing construction costs and more strict sustainability requirements, the question remains if institutional investments in the rental segment will not result in an upward pressure on the rents and lead to a similar trend as in the transaction segment.

## Bosnia and Herzegovina

In the course of 2021, the residential retail market in Bosnia and Herzegovina saw steady growth rates, after lower volume of sales due to pandemic restrictions in 2020.

At the start of the pandemic, residential property transactions fell significantly due to the introduced uncertainty. Asking prices of new dwellings have seen double-digit year-on-year growth in the biggest cities (Sarajevo and Banja Luka) and transaction prices closely followed this trend.

The rental sector, after significantly reduced in 2020, followed the similar trend as residential property transactions in 2021. It is worth noting that exact and relevant data is difficult to collect currently, with multiple government agencies compiling separate reports collecting data on transaction history only by property type, price, and area.

## Bulgaria

According to real estate professionals across Bulgaria, the overall view is that the market will remain on the same level as at end of 2021 and the beginning of 2022. Key elements, which would determine the overall shape of the market, would be the interest rates on mortgages, which had risen in the last quarter of 2021, savings and how the inflation rate would affect the demand. The market currently is experiencing a slight downturn in the number of deals of residential dwellings, as people are willing to postpone their decision to observe what the current situation with Ukraine would mean for the region and long-term relations with the EU.

It must be noted that the market is particularly active in the main cities - Sofia, Varna, Plovdiv and Burgas and stagnant in the rest of the country. Sofia dwellings are on average 10 % higher,

and in some neighbours even 30 % yearly increase in offer prices, which would indicate that the demand for residential real estate is still high, as people are investing to diversify or try to escape high inflation. In contrast as purchase prices continue to increase, the rental market has remained rather stable, which makes buying and then renting apartments even less attractive than 2020 and 2021.

On the other hand, more young people, who in the past would have considered buying an apartment, are forced to rent at a much higher age due to immense increase in prices. A significant increase in mortgage rate might bring a needed cooling in the residential market, but not a decrease in offer prices.

## Croatia

When analysing supply of residential real estate, it is obvious that the development activity increased in the last couple of years, but it is still below pre-Global Financial Crisis levels.

Demand for residential properties is mainly driven by three factors:

- i. local population looking for permanent residence
- ii. foreigners interested in properties on the coast and in high-end Zagreb projects
- iii. short-term rental apartments demand relating to tourism

Asking prices for dwellings increased when compared to 2020 in all larger cities except for Dubrovnik. Additionally, residential real estate price index typically follows the movement of GDP, with a lag of about two quarters. It is also worth mentioning the government measures to subsidize housing loans that have

impacted the price growth. Price growth on the Croatian real estate market was also noticed by EU who has sent Croatia a warning regarding the financial stability risks related to residential property market growth, growth of housing loans and household indebtedness. According to the estimates of the Croatian National Bank (CNB/HNB), property prices are increasingly deviating from their long-term basis. To some extent, this dynamic has been driven by the state housing subsidy system, with an increase in the share of subsidised loans from 18% in 2019 to 35% in 2020. The ESRB also states that there is potential for serious negative consequences for the economy in Croatia regarding the Croatian property market.

Strong development activity in Zagreb and tourist destinations is expected to continue. Downward pressure on prices is not expected until greater supply comes to the market.

## Czech Republic

Following lower volume of sales due to pandemic restrictions in 2020, residential market in the Czech Republic has gained a significant momentum in 2021. Key characteristic of the market in recent years have been low supply both on primary and secondary markets in the largest cities. Borrowing costs for future homeowners remained relatively low for better part of the year and resulted in record-breaking number and principal volume of mortgages issued. Asking prices of new dwellings have seen double-digit year-on-year growth in almost all regional cities and transaction prices closely followed this trend.

Due to decreasing affordability of own housing, over the past year many households have turned to rental segment to solve its housing situation for the foreseeable future. Prices in rental segment stayed relatively stable over the course of the year but started to recover to pre-pandemic levels during last months. There is general expectation that following conflict in Ukraine, which have seen large number of refugees coming into Czech Republic, prices in the rental segment will grow in the next few months.

## Denmark

Throughout 2021, the Danish residential real estate market has remained highly attractive for domestic and international investors resulting in decreasing yields and a record high annual transaction volume. To secure attractive investment opportunities both international and domestic investors have increased their focus on regional growth cities with strong underlying fundamentals.

The continued strong market development has been supported by attractive Danish mortgage financing and a continuously strong Danish economy which has proven resilient to the COVID-19 pandemic. Furthermore, the private Danish housing market has seen significant price increase across all of Denmark continuing the development from 2020.

From the beginning of 2022 high inflation, significant increase in interest rates and market uncertainty due to Russia's invasion of Ukraine has started to impact the Danish residential real estate market. General contractors and real estate developers are seeing significant increases in construction prices and a shortage in supply of materials affecting the profitability of ongoing project and halting construction start of new projects. Meanwhile investors have seen a drop in yield spreads due to the large increase in mortgage interest.

## France

This year 2021, the market in France has been attractive overall with disparities according to the sectors and 1,200,000 transactions averaging 4,639 €/sqm. Following the health crisis, demand is focused on secondary cities and more specifically on houses assets, looking for a better quality of life. Paris remains the most expensive city in France where apartments concentrate most of the transactions. The transaction prices of new dwellings and older residential dwellings remained stable overall compared to the previous year. However, the bid price of older dwellings decreased by 13% whereas bid price of new dwellings increased by 1%. Purchase power remains flat after COVID-19, with inflation on the rise. In an ascending phase since the beginning of 2022, the credit rate has accelerated sharply in recent weeks. OAT premium increased (from 0,35% to 0,75%), therefore the cost of debt should increase also during the year 2022. The rent might record a relatively small increase, mainly due to rent control laws in tense sectors. The new Rental Benchmark (IRL) was published on April 15<sup>th</sup> 2022 by the National Institute of Statistics and Economic Studies (INSEE). The new rent index for Q1 2022 is now 133.93 and has gained 2.48% (vs. +1.61% in Q4 2021). The future of real estate

in France is worrisome with the increase in construction costs due to the war in Ukraine. The scarcity of builders solicited by the 2024 Olympic Games and moreover, the rising interest rates may lead investors to have lower future margins. French housing market has experienced low supply both on primary and secondary markets in the largest cities. Borrowing costs for future homeowners remained relatively low for better part of the year and resulted in record-breaking number and principal volume of mortgages issued. Asking prices of new dwellings have seen double-digit year-on-year growth in almost all regional cities and transaction prices closely followed this trend. Due to decreasing affordability of own housing, over the past year many households have turned to rental segment in order to solve its housing situation for the foreseeable future. Prices in rental segment stayed relatively stable over the course of the year but started to recover to pre-pandemic levels during last months. There is general expectation that following conflict in Ukraine, which have seen large number of refugees coming into France, prices in the rental segment will grow in the next few months.

## Germany

Compared with previous years, a steadily growing trend can be observed. The upward price trend, which has been in place for years, intensified further in 2021. A new 20-year high was reached with a temporary average price increase of 11% across Germany. This effect was particularly strong in the metropolitan areas (top 7 major German cities), where the price increase was almost 15% in some cases. A rising trend can be seen in both purchase and rental prices.

The particularly strong increase of the prices in 2021 can be attributed primarily to persistently low interest rates, a general shortage of housing and increased demand from immigration. The government is trying to counteract this effect by increasing social housing construction.

A general upward trend in property prices can also be observed at the beginning of 2022. However, this is somewhat lower than in the previous year. The already existing shortage of raw materials due to the Covid pandemic and the resulting breakdowns in supply chains have been further exacerbated by the war in Ukraine. As a result, the prices of the materials still available have risen sharply. Inflation, which has been rising steadily since 2021, has meant that interest rates for construction loans have almost tripled since the beginning of 2022.

The precarious situation in the housing market due to the increased demand is further intensified by the war in Ukraine and the resulting refugee flows. To alleviate the situation, new buildings need to be built. All in all, it appears that the real estate market in Germany will see more pronounced changes.

## Hungary

After the experienced depressed housing market in 2020 the Hungarian housing market started to recover in the beginning of 2021. The new housing subsidies available from the beginning of 2021 made a major contribution to boosting housing demand, therefore the Hungarian house prices rose significantly during 2021. Especially the house prices in the rural towns increased sharply in 2021. In 2021 due to the shortage in free capacity on the construction market and rise of construction costs significant amount of the ongoing housing project have been delayed in 2021, which resulted in a decrease in the number of completed dwellings compared to 2020. However, as a result of the temporary reintroduction of the preferential VAT rate on housing market in early 2021 the number of newly issued building permits increased significantly.

On 4 October 2021, the Hungarian National Bank (MNB) also launched the Green Home Programme (GHP). The new program boosted the construction of environmentally sustainable new residential properties in Hungary. Rental fees in the Hungarian housing markets started to increase significantly during the first months of 2022 and the residential real estate rental prices grew faster than the inflation rate in 2021 in Hungary. Based on the data of Hungarian Central Statistical Office, asking rental fees have already surpassed the pre-Covid levels on a country level.

Increasing number of Ukrainian citizens arrived to Hungary since February 2022, their rental needs needed to be satisfied, which boosted the rise of rental fees. Although their rental demand is expected to be material in a short to medium term the rental fees in the housing market would probably increase further throughout 2022.

## Ireland

Property prices have continued to rise in 2022 with prices up 15.2% on this period last year. There is also an acute shortage of rental properties available which is maintaining upward pressure on rents. The Residential Tenancy Board (RTB) Index for Q4 in 2021 noted a 9% increase in the average rent across the country entirely, the highest growth since the fourth quarter of 2017.

The ending of Covid restrictions has seen an increase in new home completions with the Central Statistics Office reporting that the first quarter of 2022 saw the highest level of any first quarter since the CSO series began in 2011 (5,669 new dwelling completions in the first three months of this year). This marked a 44.5% increase on 2021 when COVID-19 restrictions were in place, and a 15.1% increase on the first quarter of 2020, before the pandemic. Completions still have some way to go to meet existing and pent-up demand for housing, however.

Demand remains high, however, affordability is a major concern and large cohorts of the population are having difficulty accessing mortgages. Construction cost inflation, increased cost of living coupled with anticipated interest rate increases could see price inflation slow as noted by the ECB in their May 2022 Financial Stability report. Additionally, the Residential Property Price Index (RPPI) showed a 0.6% gain in March, the slowest rise in 12 months. Ireland has taken in 30,000 people from Ukraine which has prompted debate about how to rapidly increase available housing stock through utilising unoccupied holiday homes or modular homes.

## Italy

In 2021 the volume of Real Estate investment in Italy was around 9,8 € bn., that represents an increase of around 6% with respect to 2020. The last 4 months of 2021 proved to be critical for the whole year when 4,4 € bn. of investments were made, an increase of 32% with respect to the same period in 2020.

With respect to the residential Real Estate market 2021 results reported a strong performance with the number of transactions exceeding 748,000, an increase of 34% over 2020 and about 24% over 2019. In the first few months of 2022 this trend has continued to increase showing better perform than pre-covid conditions.

The exuberance of demand that is pouring on the market has had an impact not only on the transactions, but on all the main indicators of the industry residential. To the contraction of sales times and discounts, there is an increase in prices, more marked

in correspondence with the cities that had towed the ascent through 2019, with Milan once again to lead the ranking. The rental segment in Italy is expected continue to grow in the size as institutional investor see the long-term opportunities in the buy to let sector.

The reverberations of the conflict in Ukraine have had an immediate effect on the cost of energy that feeds into the cost of living generally. The rise of construction raw materials that was a phenomenon visible at the end of 2021 is also likely to reflect additional increases if the situation continues over a protracted length of time. Together these issues will affect the whole real estate sector including the rental market.

## Latvia

After an economic downturn in 2020, 2021 showed signs of economic recovery. Number of started dwellings increased in 2021, however number of completed dwellings decreased. A vaccination campaign kicked off in 2021, reducing uncertainty and improving the mood of homebuyers and investors. There was a positive trend in prices in Riga, specifically for older dwellings. Demand for cheap old housing is still high in Riga, which causes an overall increase in apartment prices. In rural areas with low economic activity, prices were very low.

In the rental segment, prices are expected to rise, as the supply of low-cost apartments is still under demand. The impact of the conflict in Ukraine may be marginal, although Latvia's inflation has been one of the highest in the EU due to sanctions against Russia. Rising utility bills could increase demand for cheap old housing. Due to the uncertainty in the economy, there is a possibility of an increase in mortgage rates, which could reduce housing affordability and drive rental segment.

## Netherlands

In 2021, because of high demand, low supply and low interest rates, the trend of increasing transaction prices on the Dutch housing market continued. Overall, the Dutch housing supply was at a historical low. In Q4 2021, the housing supply was 23% lower compared to Q4 2020, while the average transaction price of older dwellings rose by almost 21% from approx. €363,000 in Q4 2020 to approx. €438,000 in Q4 2021. The average transaction price of newly built dwellings rose with 13.8% from approx. €410,000 in Q4 2020 to approx. €466,000 in Q4 2021.

In 2021, the number of added houses to the housing supply (including redevelopment projects) was approx. 77,000. House prices are rising more outside of the major cities. Namely in Drenthe and Groningen prices increased with more than 27%. In 2020, the absence of expats caused by the COVID-19 pandemic had a decreasing effect on rental prices in Amsterdam. In 2021, rents started to increase again. As rental levels in Amsterdam are already at a historically high level, rents only increased with 1.7% in Amsterdam whereas in The Hague and Rotterdam rent increases accumulated to 6.7% and 9.7%, respectively.

The current war in Ukraine has a significant effect on the economic growth and inflation rates. Although the market remains strong in June for the first time in months we saw an increase in supply (more existing houses on the market), smaller buyer pools for houses and an increase of the average time that houses are on the market.

## Norway

The overall increase in housing prices in 2021 was 5.2% compared to 8.2% in 2020. Although 2021 was the first full pandemic-year, the number of transactions in the housing market was record high with more than 100,000 transactions for the first time (excluding new dwellings). Total volume for 2021 was 101,887 transactions, compared to 99,044 in 2020. This can partly be explained by low cost of borrowing and low unemployment rates but also by changes in regulations. "Avhendingsloven", which became effective on January 1st, 2022 can hold a seller reliable for shortcomings of a property even after the sale sold in "as-is condition". Despite increasing interest rates, price increase in Q1 2022 has been the highest on record. This might be explained by the significantly lower transaction volumes compared to 2021.

In 2021, the average monthly deviation between transaction price and asking price was positive 2.5%, considerably higher than 2020 average of 0.6% which were negatively affected by the initial COVID-19 outbreak.

The overall price increase for the rental segment was 1.4% country wide. Price development in Oslo, Bergen and Trondheim was 1.2%, 4.3%, and (3.0%), respectively. Low growth in Oslo is a result of the pandemic with more flexibility in working from home and less labour immigrants.

The conflict in Ukraine can impact the accessibility to raw materials, energy, and increased prices on imported goods, in addition to a higher focus on anti-money laundering, terror financing and sanctioned individuals or organizations in the Norwegian real estate market.

Labour shortages, increasing construction costs and supply chain disruptions, together with bureaucratic urban licensing process have been delaying construction and increasing the asking and transaction prices of dwellings in Portugal. Prices have risen by 40% over the last 5 years, reaching the highest average purchase price ever in Portugal - estimated to be around €158,000 (4%YoY; +12% vs. 2019).

Regarding the rental segment, it is expected that many families will have less access to mortgage loans and will be prevented from buying a house. For such families, the rental market is becoming a viable solution. Moreover, several Portuguese municipalities have been launching affordable rental

programmes and a diploma was published that establishes the reduction of VAT from 23% to 6% in the construction or rehabilitation of dwellings for affordable rental.

Russia has played an important role in property investment in Portugal over the recent years, through golden visas. In fact, in 2021 Russian investors were responsible for investing almost €34 million in Portugal - and more than €37 million in 2020 -, being one of the top 5 countries investing in Portugal. Combined with the macroeconomic impacts that indirectly affect the residential market, we expect to shortly begin to see the impact of the ongoing conflict in Ukraine.

## Poland

2021 brought another historical record in terms of completed dwellings. Moreover, developers have not lost their pace, as the number of commenced investments and issued building permits grew by ca. 24% y/y. Except individuals looking for the flat for themselves, the demand was driven by individual investors searching for an alternative to bank deposits due to low interest rates and increasing inflation. Also, the private-rented sector has grown in popularity and is currently being perceived by developers and investors as one of the most attractive and most competitive though it is still at the early stage of development.

High demand accompanied by rising costs of construction material, labour, and energy as well as limited availability of attractive investment plots, leads to the increase of prices. Considering Warsaw and major regional cities, transaction prices in primary market increased on average by 11% year-on-year (between 8.1% and 13.9% depending on the city) and among older dwellings the increase reached 9.1% year-on-year (from 2.3 to 14.3%).

The revival has been also observed at the rental segment. After significant deterioration noted in 2020, in 2021 rental rates increased in all analysed cities, from 3.3% in Katowice to above 21% in Warsaw. The unprecedented influx of refugees after the outbreak of Russian aggression against Ukraine caused a demand shock. In April 2022, the number of available flats has shrunk by ca. 80% compared with the corresponding period of the previous year and rental rates continued to rise sharply.

In general, overall market sentiment has worsen at the beginning of 2022, due to rapidly increasing inflation and significant uncertainty caused by the war in Ukraine. An increase in construction costs may become the biggest concern for the construction sector in 2022. Moreover, increases of interest rates and new mortgage regulations have led to visible decrease in sales in Q1 2022. Nevertheless, as for now new supply remains relatively stable.

## Portugal

Against all expectations, the Portuguese residential market stood out in 2021. The unemployment has remained low, mostly due to government measures, and interest rates for mortgage loans continued to fall, making the residential market more attractive. Indeed, in 2021, the market has

surpassed all records of both the number of units sold - overall, around 190,000 houses (+11% YoY; +5% vs. 2019) were sold - and the total volume - approx. €30 billion (+18% YoY; +12% vs. 2019).

## Romania

In 2021, the residential market continued its slow upward trend, with a slight increase in average dwelling price. As in the previous years, there are significant differences between the national average price of dwellings and the price in large cities.

We notice that prices of dwellings in large cities increased by 7% y-o-y. The number of potential buyers remained at quite stable levels compared to the previous year, however, the total number of transactions decreased compared to 2020.

The residential rental segment encountered a slight increase in demand, while the properties listed for rent in the major cities of Romania decreased significantly during this time.

The prices that could be observed on the market encountered an increase of approximately 7% in 2021 compared to the 2020 average, while, in the same period of time, the mortgage rate decreased from 4% to 3.03%. However, the mortgage interest rates are expected to increase in 2022 and it is unclear how much this would affect the demand for residential space.

## Serbia

Although the COVID-19 pandemic was a global problem throughout 2021, based on the analysis of real estate market data, COVID-19 pandemic did not have a negative impact on the real estate market in Serbia. Market reports for 2021 indicate the growth of real estate turnover and a historic high level in value of property transactions on Serbian real estate market.

Total value of transactions on the real estate market in Serbia in 2021 has reached the record high amount of 6.1 billion euros, which compared to 2020 is an increase of 47% or almost 2 billion euros.

On the other hand, average price of the new dwellings has increased by 7.1% in 2021, compared to the prices from Q2 of 2020. While it has long been predicted that the "bubble" would burst and the prices will stabilise in Q1 of 2022, we are seeing

further price increase. Reportedly, the price increase is mainly caused by strong demand and lower supply of flats and houses for sale on the market. In addition, significant factor in the growth of housing market prices are interest rates on housing loans, which are now twice lower compared to 10 years ago.

However, part of the increased demand is caused by Ukrainian conflict and growing interest of Ukrainian and Russian citizens and companies which are moving their businesses to Serbia. Serbia has not imposed sanctions against Russia, therefore significant number of Ukrainian and Russian companies and their employees are seeking to rent or purchase a dwelling or a business premises in Serbian capital. This has also affected the rental segment in Belgrade where, depending on the type and location of the dwelling, the prices have increased between 5 to 10 % comparing to the H2 of 2021.



## Slovakia

Property prices rose in the last quarter of 2021 by c. 22% (year-on-year growth rate), far outpacing the increase in incomes, and thus leading to a worsening housing affordability. Pace of house price growth according to National Bank of Slovakia has entered a high risk of correction. Fast growth of house prices has been somewhat dampened by rising wages. Residential construction was 9% higher in last quarter of 2021 compared to the end of 2020. The number of building permits issued is increasing. The number of dwellings under construction at the end of last quarter is continually rising and has been the highest in many years.

Rents in last quarter of 2021, for the first time since the beginning of 2020, recorded year-on-year growth (2.6%). Compared to pre-pandemic levels, it is still 15% behind. Buying own property therefore looks relatively more expensive than in the past comparing to rental.

Slovakia, as one of the neighbouring countries, logically provided a refuge to high number of Ukrainians fleeing war. Many incoming people subsequently sought temporary or longer-term accommodation (independently or with state assistance), what according to real estate experts creates and will create pressure on the rental prices.



## Slovenia

Like the trend observed in the rest of the region, the prices of the Slovenian residential real estate rose in recent years. In 2021, prices increased by 15.7% compared to the year before. This represents the highest price increase since 2007. In 2021, approximately 16% more residential real estate was sold than in 2020, when sales were the lowest in seven years due to the covid-19 pandemic.

In early 2022, there were emerging signs that the growth in residential real estate prices began to slow down, primarily due to a slight deterioration in consumer sentiment resulting from macroeconomic uncertainties and increase in the interest rates on mortgage loans. In April 2022, numerous leading Slovenian banks hiked their interest rate on mortgage loans, with rates on some 30-year, fixed mortgages climbing to as high as 3%. This was partially offset by the recent relaxations

of macroprudential restrictions on household lending by the Slovenian central bank. Experts estimate that the measures could amount to as much as 50 million euros increase in consumer lending in the coming year.

The rents have followed the real estate prices higher, climbing in 2021 compared to 2020 by 10%, 11%, and 5% in Ljubljana, Maribor, and Celje, respectively. The expectation is that the rents will continue to increase in 2022 and begin to slow down in 2023.

The ongoing conflict in Ukraine has weighted on the consumer sentiment as prices of retail oil, gas, and electricity have climbed sharply. So far, there are no signs that the conflict has had any significant impact on the residential real estate market.



## Spain

Spain is undergone an upward real estate cycle since 2013 which has not been particularly impacted by the Covid-19. In fact, peak housing transactions were reached in 2021 with 674k units sold. Meanwhile, new housing development remains at a historically low level, but also reaching in 2021 its peak level of the present cycle with only c. 72k units sold. These new developments are mainly concentrated in great urban areas and have much better quality than the second-hand product. Consequently, the sale price gap between new and second-hand housings is increasing.

No signs of RE bubble within the short / mid-term are forecasted due to the high professionalization of the sector, the limited production of new construction which is concentrated in relevant markets and the tightly financing conditions for both developers and private buyers. In fact, residential demand in primary markets is expected to continue, due to the economy improvement: Spain is showing one of the faster recovery

prospects across Europe, with unemployment reaching pre-pandemic levels and salary conditions levels improving, but also impacted by the inflation (CPI). In addition, there is a positive forecast regarding both population and household creation, mainly based on the arrival of foreigners, internal migratory movements, market concentration, and the reduction of the household size.

In parallel to traditional residential, new emerging markets such as Built to Rent, Co-Living and Senior Housing are attracting new equity and institutional players.

Ready to build land scarcity together with the increase of the construction costs are the main challenges of the sector.



## United Kingdom

The Nationwide House Price Index showed that annual house price growth remained in double digits in December at 10.4%, making 2021 the strongest calendar year performance since 2006. Prices rose by 1% month-on month, after taking account of seasonal adjustments. The price of a typical UK home is now at a record high of £254,822, up £23,902 over the year - the largest rise seen in a single year in cash terms. Prices are now 16% higher than before the pandemic struck.

Nationwide report that demand has remained strong in recent months, despite the end of the stamp duty holiday in September. Mortgage approvals for house purchase have continued to run above pre-pandemic levels, despite the surge in activity seen earlier in the year. In the first 11 months of 2021 the total number of property transactions was almost 30% higher than over the same period of 2019. At the same time, the stock of homes on the market remained extremely low throughout the year, which has contributed to the robust pace of price growth.

The December 2021 RICS UK Residential Survey results showed that new buyer enquiries rose modestly, but a lack of listings remains challenging and its the shortage of stock that continues to underpin price growth. Looking forward to 2022, commentators report that it is likely that the housing market will slow next year, since the stamp duty holiday encouraged many to bring forward their house purchases in order to avoid the additional tax. Even if wider economic conditions remain resilient, higher interest rates are likely to exert a cooling influence. House price growth has outpaced income growth by a significant margin over the past 18 months and, as a result, housing affordability is already less favourable than before the pandemic struck. That said the outlook remains extremely uncertain.





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