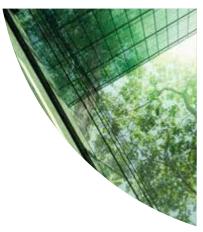
Deloitte.











Property Index

Overview of European Residential Markets

12th edition, August 2023

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Introduction

We are pleased to present you with the 12th edition of the Property Index - Overview of European Residential Property Markets. Since the first edition of the Property Index was published, it has become one of the most influential and comprehensive reports, providing an accurate overview of Europe's residential property markets and a valuable source of information for real estate professionals, institutions, and the general public.

The main purpose of the Property Index is to analyse the important factors that contribute to shaping housing markets, based on different national development perspectives, and to compare residential property prices in different countries and cities across Europe.

The aim of this report is to provide regular updates on the European housing market as it aims to capture how European citizens live and what it costs them.

Even though the aim of this publication is to provide readers with a comprehensive overview of the European housing markets over the past year, it is important to take into account the ongoing geopolitical situation as a result of the Russian invasion of Ukraine. This invasion has undoubtedly exacerbated the energy crisis in a number of European countries. In addition, it is also worth mentioning that the rise in interest rates for newly issued mortgages has had a significant impact on the residential market, leading to a fall in the number of sales. Finally, sustainable investment, known under the acronym ESG, has made a significant difference to the national housing market, as it has been noticeably put into practice by the governments of each country.

The writers of this year's edition of Property Index hope that you will find this publication interesting and that it provides in-depth insight and information.

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

Austria (AT);

Belgium (BE);

Bosnia and Herzegovina (BA);

Bulgaria (BG);

Croatia (HR);

Czech Republic (CZ);

Denmark (DK);

Estonia (EE);
France (FR);

Germany (DE);

Greece (GR);

Ireland (IE);
Israel (IL);

Italy (IT);

Latvia (LV);

Lithuania (LI);

Norway (NO);

Poland (PL);

Netherlands (NL);

Hungary (HU);

Serbia (RS);

Slovakia (SK);

Slovenia (SI);

Spain (ES); and

Portugal (PT);

Romania (RO);

United Kingdom (UK)

This edition of the Property Index continues the tradition of a relatively stable number of participating countries, but compared to the last edition, new countries - Estonia, Greece, Israel, and Lithuania have joined this year's edition.

Most of the indicators presented are calculated on a year-on-year basis. Several economic factors may affect the volume of supply and demand on the housing market or the exchange rate in 2022 as a result of fiscal measures.

The Property Index has been compiled by an established international and cross-functional team of Deloitte experts in the property development, mortgage, and real estate markets. This publication is based on information from Deloitte's offices in each country.

Property Index provides you with independent and credible information, drawing on Deloitte's extensive knowledge of the real estate, investment, property and development industries.



Copenhagen

This is the only capital city to record a decrease in transaction prices for new dwellings between 2021 and 2022

5,701 EUR/sqm

Israel ranks as the most expensive country to buy a new home for 2022.

The highest annual percentage change

percentage change in the price of a new dwelling is recorded in Maribor between 2021 and 2022.

1,237 EUR/sqm -

Bosnia and Herzegovina once again recorded the most affordable prices for residential property at the national level.

High lights

14.1

Residents in Slovakia must pay the highest multiple of their gross annual salary to buy a new 70 sqm dwelling.

14,740 EUR/sqm

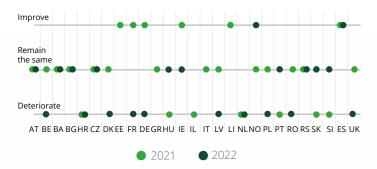
Tel Aviv, ahead of Paris and Munich, is the most expensive city in Europe to buy a square metre of flat. **32.8** EUR/sqm

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

What is next for residential markets in Europe?

In general terms, the year 2022 has been different from a number of perspectives as compared to the last two years. The last year, which can be marked as "the year of sustainable transformation", has also faced up to several unprecedented challenges that have influenced the development of the European residential market.

For the coming months (H2 2023 - H1 2024), we expect the overall economic climate will



Throughout 2022, we have witnessed the removal of all pandemic lockdowns and travel restrictions as international borders among most countries have been re-opened as a result of the successful campaigns focusing on COVID-19 vaccinations.

The year 2022 has also been marked as the post-pandemic economic recovery, following the relatively strong economic growth in 2021. This period, characterized as "economic overheating," has led to a dramatic surge of inflation, which was further exacerbated by the geopolitical conflict between Russia and Ukraine.

For the coming year (H2 2023 - H1 2024), we expect that construction activity on residential market will



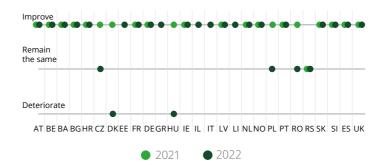
At the beginning of 2022, the combination of skyrocketing consumer prices and still relatively low interest rates on mortgages have accelerated the high demand for residential properties in most European countries. This has also led to soaring residential prices, resulting in the affordability deterioration of owner-occupied housing.

For the coming year (H2 2023 - H1 2024), we expect that prices of residential dwellings will



After a period of upward economic trend, the national economies have also embarked on tightening monetary policies to bring inflation "under control". By raising short-term interest rates at the national levels, residential properties have become less affordable for a larger group of buyers. This has further fueled the shift towards rental living concepts in many European countries.

For the coming year (H2 2023 - H1 2024), we expect that interest rates for mortgages on residential dwellings will



In 2022, the European residential market has also been facing an energy crisis caused by the Russian invasion of Ukraine. European countries, in an effort to achieve energy self-sufficiency from external sources, have been prompted to seek more sustainable and cost-effective solutions.

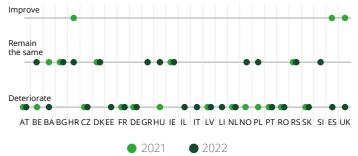
For the coming year (H2 2023 - H1 2024), we expect that residential market rents will



Residential developers have been compelled to explore alternative energy solutions to be implemented into their projects. This same status quo applies to homeowners, who upgrade their homes with solar panels, geothermal systems, or other renewable energy technologies.

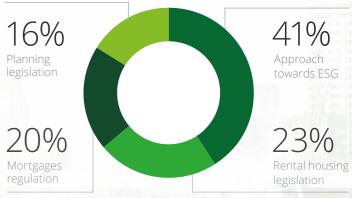
Without any doubt, year 2022 has been very turbulent and remarkable at the same time, embraced by a strong economic pace, resulting in skyrocketing inflation, high energy prices, and very strong demand for residential properties. This has led to a reshaping of the residential sector by worsening the affordability of owner-occupied homes and emerging the "Built-to-Rent" market across eastern part of European continent.

For the coming 2-3 years (up to 2026), we expect the affordability of own housing will:



Looking ahead to 2023, the European housing market is expected to experience strong demand, with a focus on shifts in housing preferences towards rental housing and its sub-concepts for various population groups. It will also emphasize sustainable and energy-efficient housing and integrating technology into residential properties

In the coming year (H2 2023 - H1 2024), we expect changes in residential market in



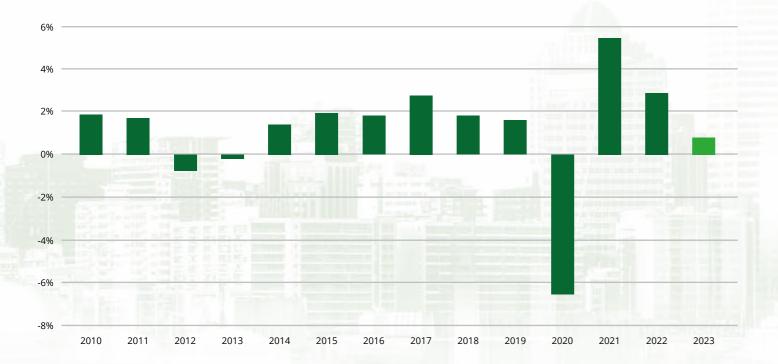
Economy outlook challenges ahead for property markets

The economy of the Eurozone has been growing for 6 years since the 2012 – 2013 Eurozone Sovereign Debt Crisis. However, this economic boom has recorded a strong impact by the Covid-19 pandemics. The pandemic resulted in economic recession as GDP fell by 6.6% in 2020 with Spain and Italy exhibiting the sharpest declines of GDP. Economy of the Eurozone partially recovered in 2021 as it grew by 5.4%. In 2022 the economy grew by 3.5% and surpassed the pre-pandemic level.

As the disruptions caused by the war in Ukraine and the energy crisis worsened the outlook for the Eurozone economy, and monetary authorities around the world embarked on a forceful tightening of monetary conditions, a winter recession in the Eurozone appeared inevitable last year. However, the latest data

show that the Eurozone economy "only" stagnated in Q4 2022 and there was no deeper recession thanks to sharply lower than anticipated energy prices and numerous local government relief measures. According to Eurostat's preliminary flash estimate, in Q1 2023 GDP grew by 0.1%. For the second quarter, survey indicators suggest continued expansion, with services clearly outperforming the manufacturing sector and consumer confidence continuing its recovery from last autumn's historical low. For this year, International Monetary Fund forecasts growth of the Eurozone economy by 0.8%. Risks to the forecast are skewed to downside. Failure to contain financial stability risk could lead to crisis and lower growth as well as higher inflation than expected which could lead to a further tightening of monetary conditions.

Growth of real GDP in the Eurozone



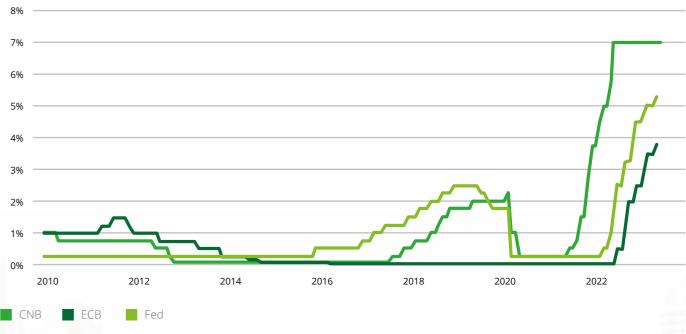
Source: Eurostat, IMF, Deloitte forecast

Sharply lower natural gas prices on energy markets are making their way to retail prices of gas and electricity, though at varying speeds across Eurozone Member States. At the same time, all other major inflation components (unprocessed food, non-energy industrial goods and services) have seen their annual inflation rate increase between December and May. Consequently, core inflation (headline CPI excluding energy and unprocessed food) continued to rise in early 2023, to a historical high of 7.5% in March, and core goods and services replaced energy as the primary driver of headline inflation in the Eurozone. Core inflation is projected to

decline gradually as profit margins absorb higher wage pressures and tighter financial conditions prove effective.

Central banks around the world got under pressure to tackle growing inflation by raising interest rates. At the time of writing, the Fed has already raised its main rate by cumulative 500 basis points and the ECB has raised its main rate by a cumulative 375 basis points. None of these central banks has announced a peak in monetary tightening.

Interest rates development by individual central banks



Source: www.cbrates.com

The housing market is usually sensitive to economic conditions, especially GDP growth and interest rates. Correlation between lagged GDP growth and house prices in the EU is positive and very high. GDP growth in the following quarters could be supportive for 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. Until high inflation can be tamed, interest rates cannot be expected to fall, and the housing market cannot grow significantly.

Comparison of Residential Markets – Housing Development Intensity

Completed dwellings

The introductory chapter of this year's Property Index focuses primarily on the indicator of housing development intensity. This refers to the number of completed dwellings per 1,000 inhabitants of the countries concerned.

Fewer than two completed dwellings per 1,000 inhabitants were recorded in the following three countries: Bosnia and Herzegovina (0.88), Spain (1.69), and Portugal (1.92).

On the other hand, France (7.09) had the highest number of dwellings supplied per 1,000 inhabitants, followed by Poland (6.31), and Denmark (5.92).

In terms of absolute numbers of dwellings completed in 2022, France has consistently maintained its position as the European leader in dwelling completions, with 482,200 dwellings being completed last year. Germany and Poland were next with 295,300 and 238,600 units respectively.

On the basis of data collected by Deloitte's national offices, only 2,900 dwellings were completed in Bosnia and Herzegovina in the last year. This can be translated into the lowest number of dwellings completed per 1,000 inhabitants of any of the European countries monitored, as mentioned above. Estonia followed the same pattern, completing 6,500 dwellings.

In terms of year-on-year percentual comparison of completed dwellings, Lithuania and Ireland witnessed an immense increase of 46.7% and 45.2% respectively. Additionally, strong annual growth was also observed in the Czech Republic (+14.0%), Israel (+11.0%), Denmark (+10.4%), Bulgaria (+10.0%), and Bosnia and Herzegovina (+9.9%).

Looking at negative tendencies of completed dwellings over last two years, there are also a few countries that observed a decrease in new completions – Belgium (-5.7%), Spain (-4.9%), Estonia (-3.2%), Slovakia (-2.1%), and Norway (-1.4%).

Housing Development Intensity

Index of number of completed dwellings per 1,000 citizens



Source: Deloitte national offices



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Initiated dwellings

In a similar way, the parameter of initiated dwellings was calculated to present a comparison between the countries of Europe.

The country with the highest number of dwellings initiated per 1,000 inhabitants last year was Israel (6.95 dwellings initiated per 1,000 inhabitants). This was followed by Austria and Lithuania with 6.47 and 5.81 new housing initiated per 1,000 inhabitants respectively.

In contrast, the lowest level of new initiated dwellings was registered in Italy (1.02 housing initiated per 1,000 inhabitants). This was followed by Bosnia-Herzegovina and Slovenia, with 1.44 and 1.48 dwelling initiated per 1,000 inhabitants respectively in the last year.

Furthermore, with less than 10,000 new dwellings initiated in 2022, Slovenia, Bosnia and Herzegovina, and Estonia appear to have the lowest total volume of initiated dwellings.

In terms of the absolute number of dwellings initiated, the highest volumes of dwellings initiated were recorded in France (376,200), Germany (217,600) and Poland (200,300). Simultaneously, these three European countries were the only ones to exceed 200,000 initiated dwellings last year.

The intensity of newly initiated dwellings increased year-on-year in only 11 of the 25 countries analysed, whereas construction of new dwellings was higher in 20 of the 21 countries in the last edition of the Property Index.

The highest increase in initiated dwellings compared to 2021 was noted in Serbia (+27.6%), Bulgaria (+20.5%), and Hungary (+16.9%). On the contrary, the largest drop in initiated dwellings in 2022 was recorded in Poland (-27.8%), Estonia (-22.9%), Austria (-22.5%), and Denmark (-20.5%).

Housing Stock

In addition to the number of dwellings initiated and completed in individual European countries, the size of the total housing stock is often perceived as a key indicator of the quality of life and level of economic development in those countries.

According to data collected by Deloitte's national offices in Europe, Bulgaria has the largest housing stock per capita, with 624 dwellings per 1,000 inhabitants. Portugal and France come next with 585 and 552 respectively.

At the opposite end of the scale, Greece (285 units per 1,000 inhabitants), Israel (295), and the UK (371) had the lowest housing stock per 1,000 inhabitants in 2022.

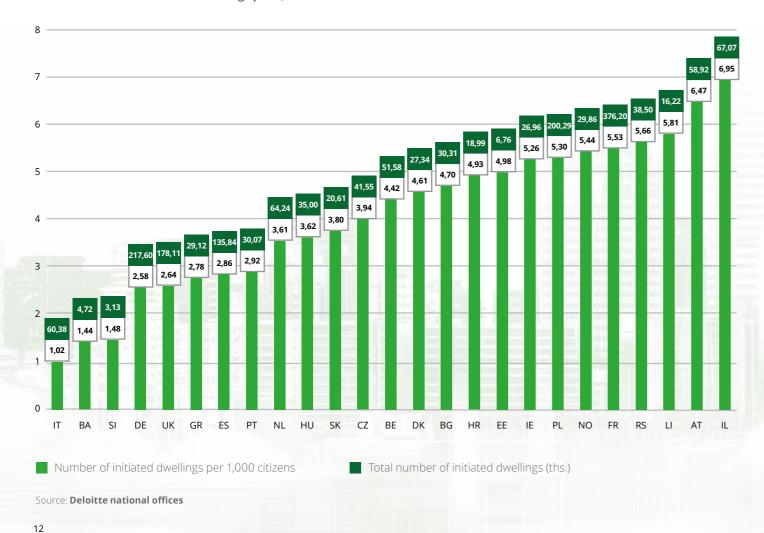
In absolute terms, Germany has the largest housing stock with 43.4 million dwellings. France, with 37.6 million dwellings, is the country with the second largest housing stock. The country with the third largest housing stock is Spain, with 26.1 million dwellings.

On the contrary, the smallest housing stock was in Estonia, with a total of 0.74 million dwellings, followed by Lithuania (1.45 million dwellings), and Ireland (2.12 million dwellings).

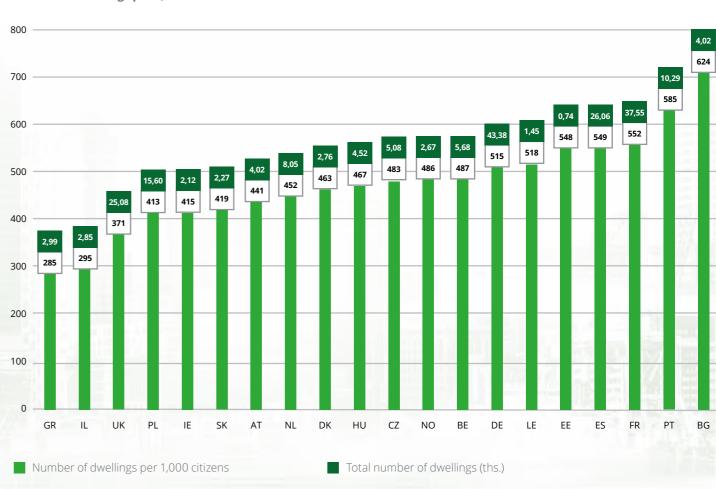
In this year's edition of the Property Index, the average size of the housing stock amounts to 473 dwellings per 1,000 inhabitants in the countries under consideration. In 10 of the 20 European countries surveyed, the size of the housing stock is above average.

Housing Development Intensity

Index of number of initiated dwellings per 1,000 citizens



Housing Stock Number of dwellings per 1,000 citizens



Source: Deloitte national offices

Comparison of Residential Property Prices in Selected Countries and Cities

In this year's edition of the Property Index, statistics from 27 European countries and 76 individual cities are included. All price statistics collected are converted into Euro to provide complex and harmonised results in the publication.

At this point, it is worth noting that the annual price changes in the markets analysed were affected by the evolution of exchange rates in selected European countries. This is shown in the graph below.

A depreciation of the euro against the national currency was recorded in a number of countries as following: Israel (-5.96%), the Czech Republic (-4.21%), Norway (-0.60%), and Serbia (-0.26%).

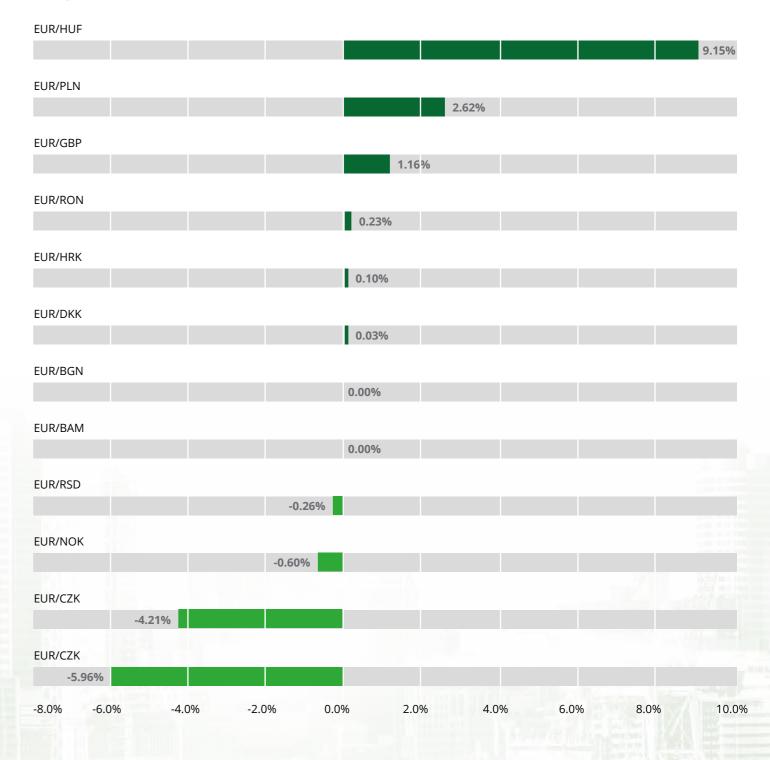
On the other hand, the euro appreciated against the national currency in Denmark (0.03%), Croatia (0.10%), Romania (0.23%), UK (1.16%), Poland (2.62%), and Hungary (9.15%).

Finally, in Bulgaria and Bosnia and Herzegovina, the Euro remained at the same level as their local currencies are fixed against the



Euro exchange rates changes

average 2022/2021



Source: European Central Bank

Average Transaction Price of a New Dwelling in Selected Countries (EUR/sqm), 2022

Since the last Property Index was published, almost all European countries have faced new challenges that seem quite unprecedented. In addition to the war in Ukraine, European countries have faced rapid increases in energy costs, building material prices and interest rates. Each of these has impacted average transaction prices of new dwellings over the past year.

With its return to the Property Index survey, Israel took the lead as the most expensive country with a price label of 5,701 EUR/sqm in 2022. Austria, with transaction prices of 4,925 EUR/sqm, defended the position of the second most expensive country from the previous edition. Austria was followed by Germany with a price tag of 4,800 EUR/sqm.

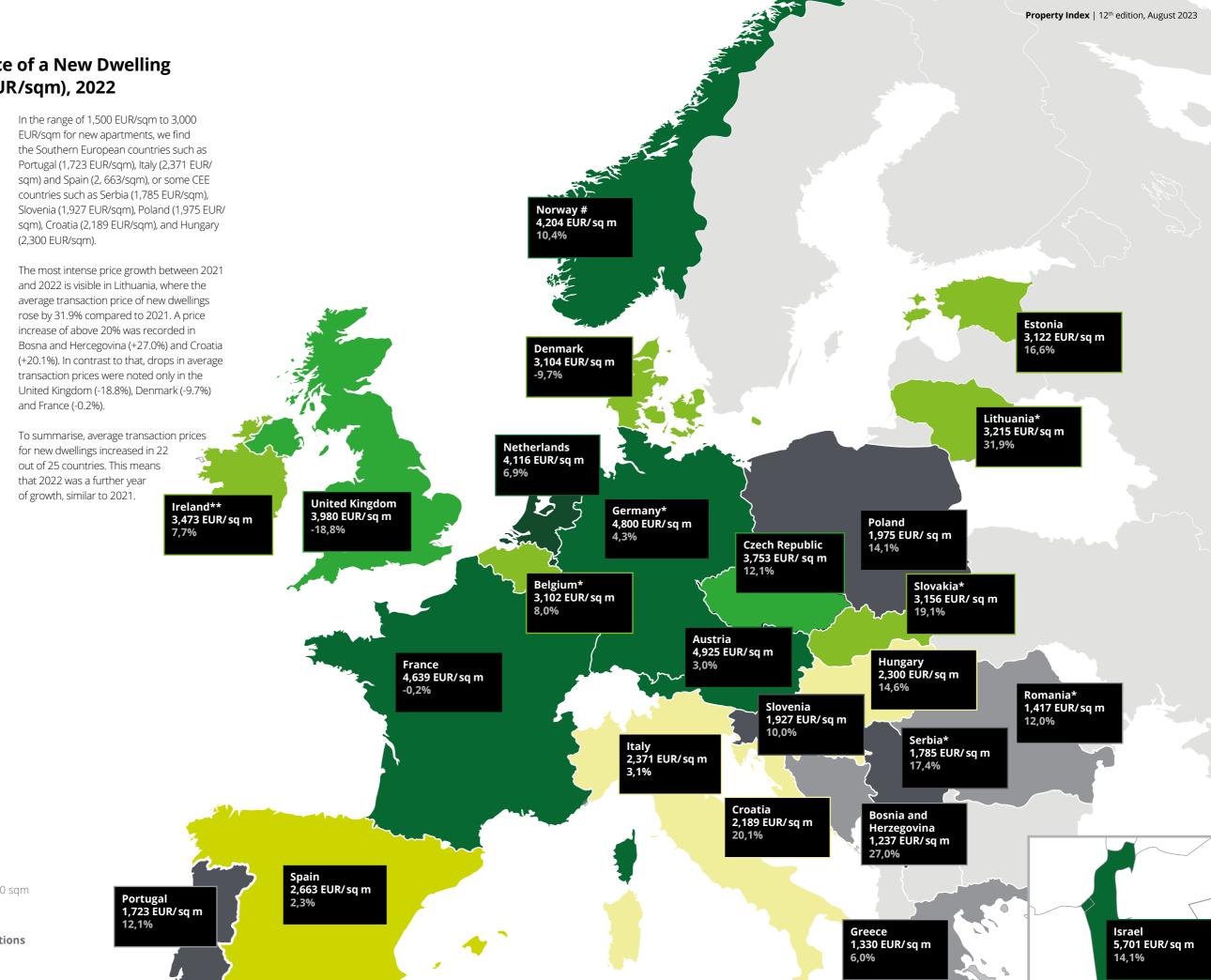
Furthermore, with prices of 4,639 EUR/sqm and 4,204 EUR/sqm respectively, France and Norway complete the top 5 most expensive countries in 2022.

At the other end of the price scale, the lowest average transaction price for new dwellings was recorded in Bosnia and Herzegovina, at 1,237 EUR/sqm. This was followed by Greece with an average transaction price of 1,330 EUR/sqm. Romania, with a price tag of 1,417 EUR/sqm, recorded the third lowest level of transaction prices. In fact, in comparison with the previous edition of the Property Index, there was no European country with a transaction price below 1,000 EUR/sqm.

Average transaction price of a new dwelling in selected countries, annual change (%)

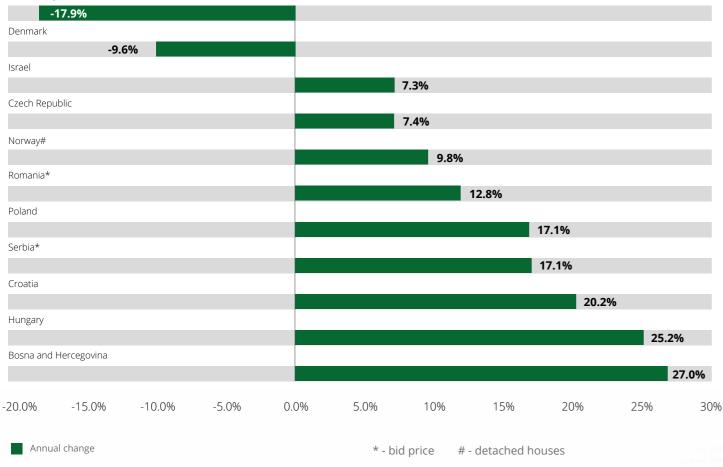
- 1,000-1,499
- 1,500-1,999
- 2,000-2,499
- 2,500-2,999
- 3,000-3,499
- 3,500-3,999
- 4,000 <
- * bid price
- ** average new house price divided by 120 sqm (average size)
- # detached houses

Source: **Deloitte national offices calculations**



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



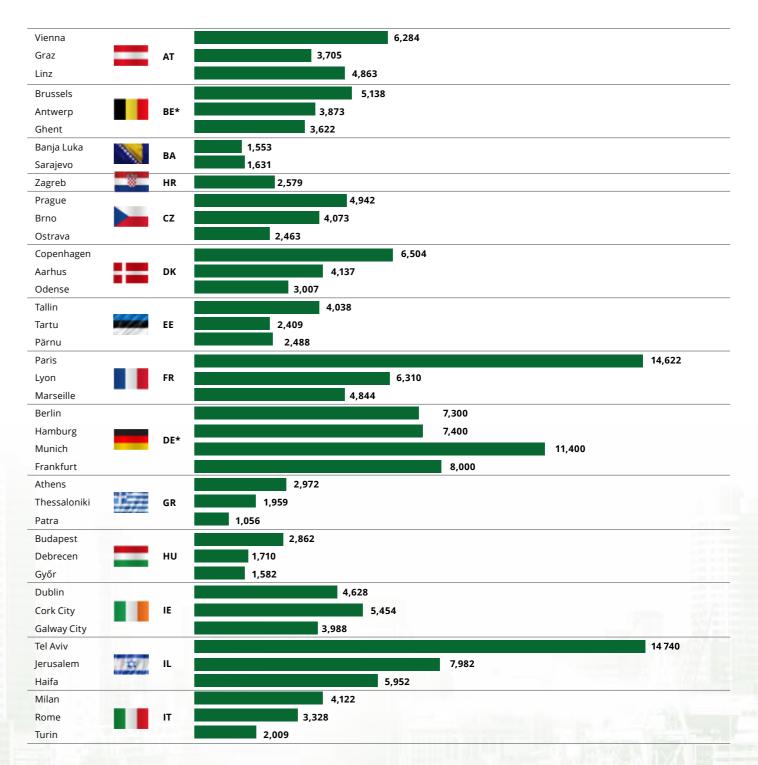


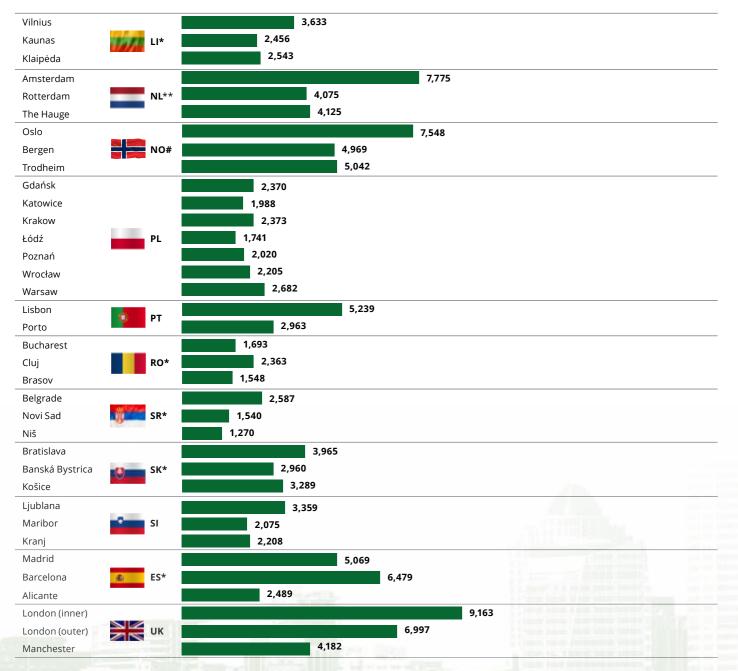
Conversion into the selected national currencies would allow for a more accurate comparison of the annual change in the average transaction price for a new dwelling.

The largest annual change was recorded in Bosnia and Herzegovina, where prices increased by 27.0%. The second highest increase (25.2%) was recorded in Hungary. An increase of more than 20.2% was also observed in Croatia, followed by Serbia and

Poland, both with an annual change of 17.1%. On the other hand, Denmark and the United Kingdom registered decreases by 9.6% and 17.9% respectively.

Average Transaction Price of a New Dwelling (EUR/sqm)





* - bid price

Source: Deloitte national offices

Comparing European cities, Tel Aviv has replaced Paris as the most expensive city in 2022. The average price of a new dwelling in Tel Aviv is EUR 14,740 per square metre.

In addition, only Paris (14,622 EUR/sqm) and Munich (11,400 EUR/sqm) were above 10,000 EUR/sqm.

The range between 7,500 to 9,999 EUR/sqm was recorded in inner London (9,163 EUR/sqm), Frankfurt (8,000 EUR/sqm), Jerusalem (7,982 EUR/sqm), Amsterdam (7,775 EUR/sqm) and Oslo (7,548 EUR/sqm).

Interestingly, there are also expensive cities that are not capital cities. Some examples are Tel Aviv (Israel), Cork City** (Ireland), Milan (Italy), Cluj (Romania), and Barcelona (Spain).

On the contrary, there is not a single European city among 76 cities in the survey with an average transaction price below 1,000 EUR/sqm. However, the lowest average transaction prices were recorded in Patra (1,056 EUR/sqm; Greece), Niš (1,270 EUR/sqm; Serbia), and Novi Sad (1,540 EUR/sqm;Serbia).

* - bid price

The highest annual growth rates in average transaction prices were recorded in Maribor (+38.2%; Slovenia), Sarajevo (+30.6%; Bosnia and Herzegovina), Zagreb (+30.3%; Croatia), Ostrava (+27.1%; Czech republic), Niš (+25.7%; Serbia), Banja Luka (+25.6%; Bosnia and Herzegovina), Cork (+24.9%; Ireland), Vilnius (+24.9%; Lithuania), Brussels (+24.0%; Belgium*), Banská Bystrica (+22.9%; Slovakia), Kaunas (+22.9%; Lithuania), Tallinn (+22.7%; Estonia), Tel Aviv (+22.5%; Israel), Cluj (+21.8%; Romania), and Pärnu (+20.0%; Estonia).

In contrast, the average transaction price for a new dwelling fell in 3 of the cities surveyed in this year's publication. These are three out four cities from Denmark - Copenhagen (-10.7%), Odense (-9.5%), Aarhus (-8.6%).

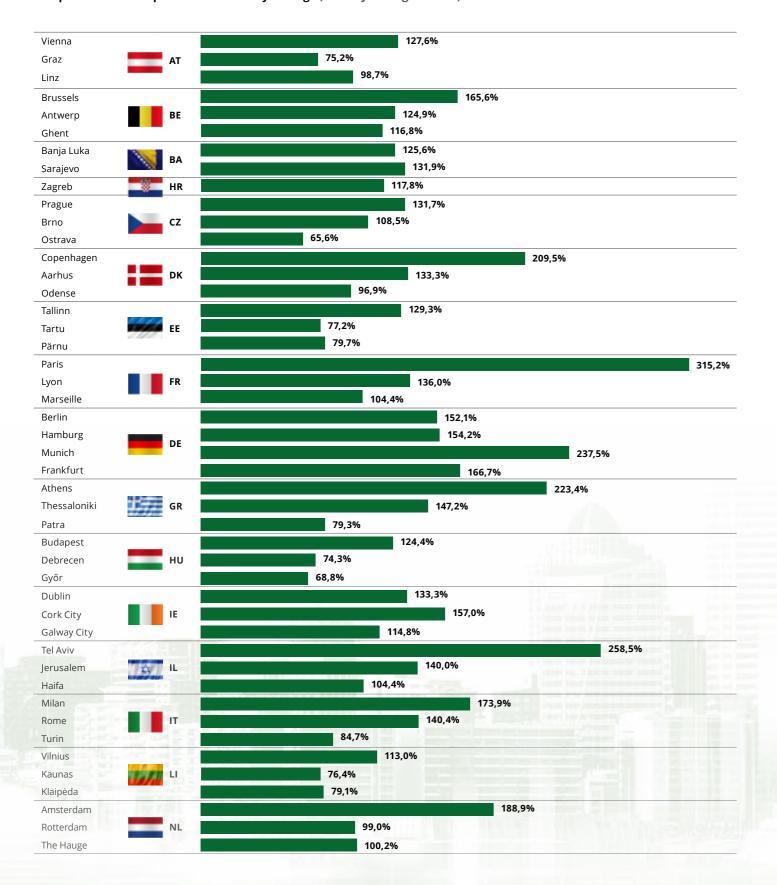


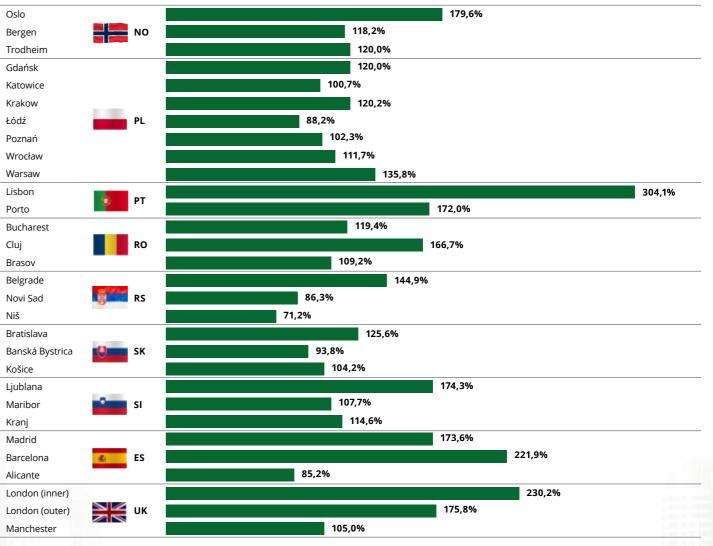
^{** -} older dwelling

^{# -} detached houses

^{** -} limited number of new dwellings

Comparison of the capitals to the country average (country average = 100%)





Source: Deloitte national offices

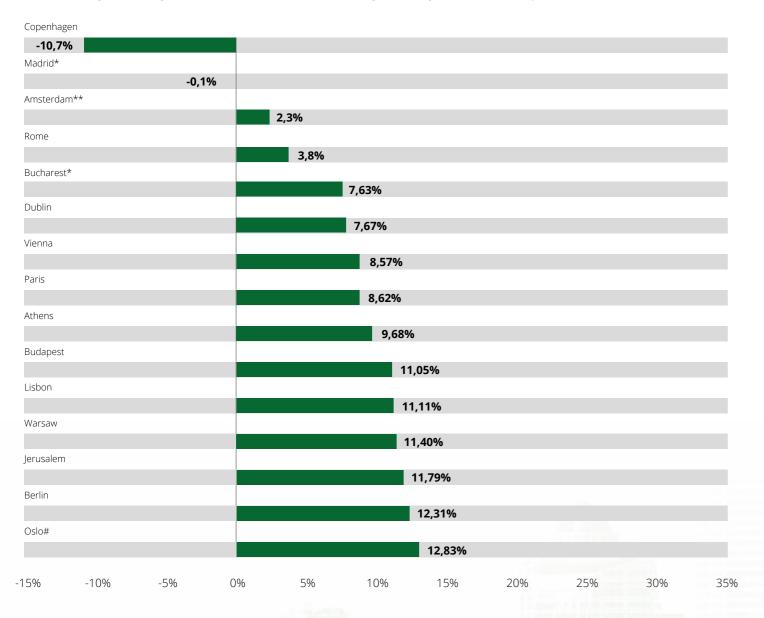
The following section of this year's Property Index looks at how the prices of the cities under review compare with the national average.

The largest gap over the past year was observed in France, where the price level in Paris was 315.2% of the national average. In addition, Lisbon was also a city where prices were more than three times higher than the national average, at 304.1%.

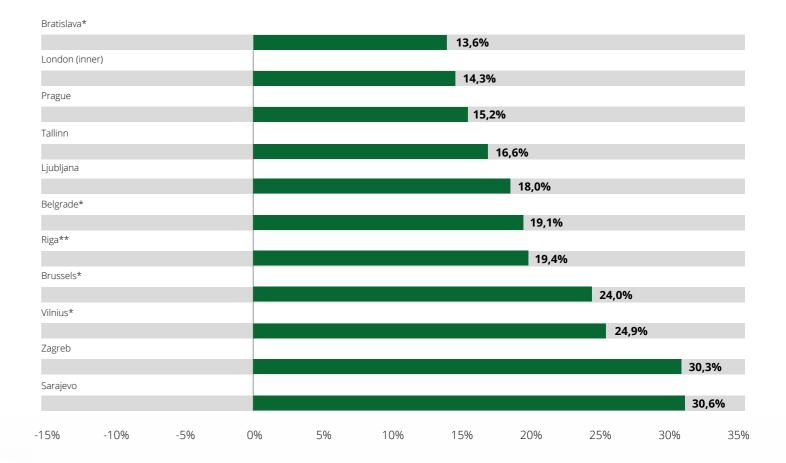
The capitals, which exceeded the national average more than twice time, are Tel Aviv (258.5%), London inner (230.2%), Athens (223.4%), Barcelona (221.9%), and Copenhagen (209.5%).

At the other end of the spectrum, there are a number of cities where the average transaction price is lower than the national average. For example, Ostrava (65.6%; Czech Republic), Niš (71.2%; Serbia), and Graz (75.2%; Austria) have the lowest transaction prices in relation to the respective national average.

Annual Change of Average Transaction Price of a New Dwelling in the capital cities (EUR/sqm)







- * bid price
- ** older dwelling
- # detached houses

Source: Deloitte national offices

On the basis of the above, it can be concluded that the capital of most nations is without a doubt the most important and largest market. We have examined in detail the annual price changes in each capital city separately in order to show the development of transaction prices in the European countries observed.

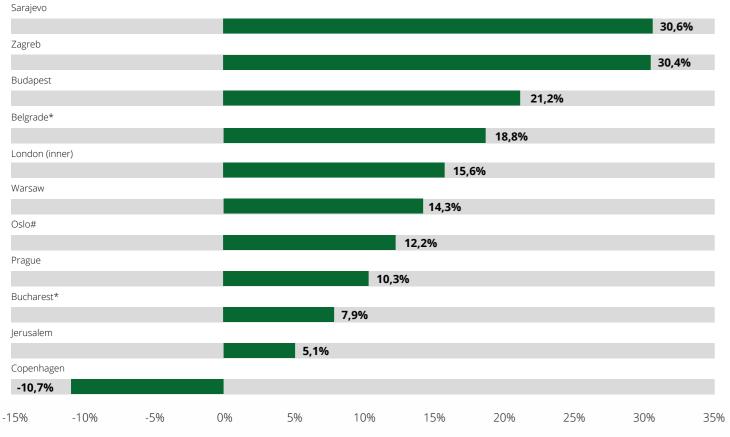
According to available data from Deloitte's national offices, property prices rose sharply in most of the European capital markets monitored over the past year. There is only one capital city where a negative trend is observed. This is Copenhagen (-10.7%).

Based on a review of the European capital cities, Rome witnessed an increase of 3.8% compared to the previous year when the price had declined (-3.1%).

The largest percentual annual change in dwelling prices was recorded in Sarajevo (+30.6%), Zagreb (+30.3%), and Vilnius (+24.9%).

A strong increase was also noted in Brussels (24.0%), Riga (+19.4%), and Belgrade (+19.1%).

Annual Change of Average Transaction Price of a New Dwelling in the Capital Cities, Calculated in Local Currency



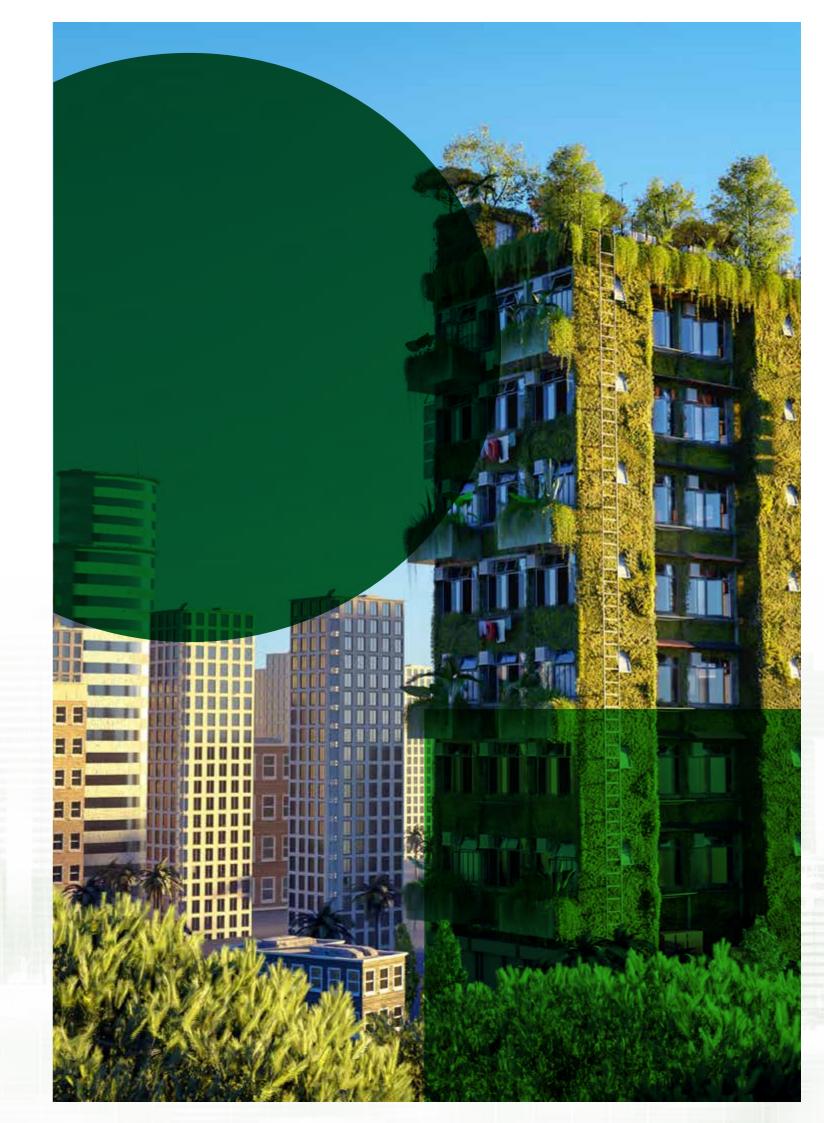
* - bid price

- detached house

Source: Deloitte national offices

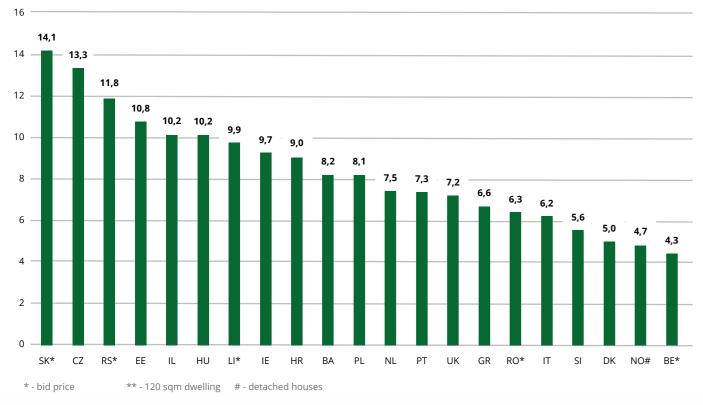
The average transaction price of dwellings in capital cities was affected by changes in the average exchange rates of selected currencies over the last two years.

The most significant increase was recorded in Sarajevo, where the transaction prices rose by 30.6 %. At 30.4%, the second highest increase was recorded in Zagreb. The next three were Budapest with 21.2%, Belgrade with 18.8 %, and London (inner) with 15.6%. Copenhagen, on the other hand, saw prices fall by 10.7% over the last two years.



Affordability of Own Housing

Multiple of annual gross salaries to purchase a 70 sqm dwelling



Source: Deloitte national offices

Affordability of Own Housing - Countries

The most representative indicator for the publication of the Property Index is the affordability of owner-occupied housing in each European country. In line with previous editions, the affordability of owner-occupied housing is calculated as the number of average gross annual salaries required to purchase a standardised new home with an average size of 70 square metres in each country.

Recent data show that Slovakia is the least affordable country among 21 surveyed European countries in terms of homeownership. On average, Slovakians need 14.1 gross annual salaries to buy a new home. Compared to last year, the affordability of homeownership has decreased by an equivalent of 1.4 gross annual wages.

The Czech Republic, ranked first last year, is the second least affordable country for homeownership. In order to buy a new standard home, Czechs need about 13.3 gross annual salaries. This is the same level of gross annual salary needed for home ownership as in the previous edition.

Serbia followed, where 11.8 average gross salaries are needed to buy an average new home. Serbia remains the third least affordable country, as in the previous publication.

Residents of Estonia, Israel, Hungary, Lithuania, Croatia, Bosnia and Herzegovina, Ireland and Poland must set aside the equivalent of 8 and 11 gross annual salaries to buy a new home.

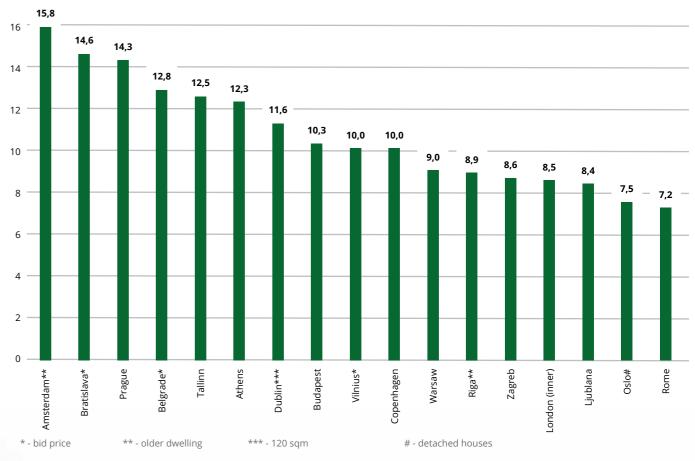
In the Netherlands, Portugal, the UK, Greece, Romania, and Italy, the required amount to buy a new house is an equivalent of 6 to 8 gross annual salaries.

In Slovenia, and Denmark, purchasers would need to save between 5 and 6 equivalents of gross annual salary to afford a new home.

Finally, the best affordability for the purchase of a new home of one's own can be found in Norway and Belgium, where citizens need less than five gross annual salaries to buy their own home. Those living in Norway need to save around 4.7 gross annual salaries, while those buying in Belgium need to save 4.3 gross annual salaries.

Affordability of own housing

gross annual salaries for a standardised new dwelling by city



Source: Deloitte national offices

Affordability of Own Housing - Selected cities' markets

This chapter considers the affordability of owner-occupied housing from the perspective of European capitals for which both price and salary data were available, similar to earlier issues of the Property Index. This is done using a similar methodology to that used for affordability in previous chapter.

Looking across Europe's capital cities, the least affordable city to buy a new standard home is Amsterdam, the same city ranked first last year. Compared to last year, when buyers needed to save 1.9 average gross annual salaries more, Amsterdam residents need to save an equivalent of approximately 15.8 average gross annual salaries to afford their own home.

In this ranking, Amsterdam is followed by Bratislava, and Prague. The citizens of Bratislava must save 14.5 gross annual salaries on average, compared to 13.7 gross annual salaries last year. In addition, those living in Prague have to save 14.2 gross annual salaries (compared to 15.3 in the previous edition).

If citizens from Belgrade, Tallinn, Athens, Dublin, Budapest, Vilnius, and Copenhagen intend to buy a new apartment, it is necessary to save up an equivalent of between 10 and 13 average gross annual salaries in their capital city.

The cities of Warsaw, Riga, Zagreb, London (inner), and Ljubljana have more affordable housing, with the average gross salary needed to buy a new standard home being between eight and ten times the average gross salary.

Among the most affordable cities to buy a new home are Oslo and Rome, where residents have to save between 7 and 8 equivalents of average gross annual salaries.

Rental market

Following a tradition, the publication of the Property Index examines the comparison of the level of rental prices between selected cities in the European countries that take part in this survey.

Based on the available data, Dublin, with a price level of 32.8 EUR/ sqm/month, was ranked as the most expensive European city in terms of rental prices.

Dublin was followed by Paris with prices at 28.5 EUR/sqm, and by Oslo with rents at 28.0 EUR/sqm.

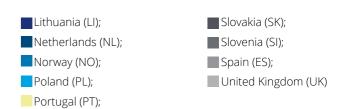
There are nine other cities above the 20 EUR/sqm mark. These are Inner London (26.6 EUR/sqm), Amsterdam (25.8 EUR/sqm), Barcelona (25.7 EUR/sqm), Trondheim (22.5 EUR/sqm), Galway City (22.4 EUR/sqm), Madrid (21.5 EUR/sqm), Copenhagen (21.3 EUR/sqm), Bergen (20.7 EUR/sqm), and Cork City (20.2 EUR/sqm).

At the other end of the scale, Bulgaria repeatedly recorded the lowest average rental prices. Those who live in Burgas can expect to pay on average 3.1 EUR/sqm, in Sofia around 4.6 EUR/sqm, and in Varna around 4.7 EUR/sqm. Other cities with the lowest rents include Patra (5.5 EUR/sqm), Thessaloniki (6.6 EUR/sqm), Kranj (6.9 EUR/sqm), Turin (6.9 EUR/sqm), and Győr (7.1 EUR/sqm).

From another point of view, the highest annual change in the prices of rented dwellings was recorded in all surveyed Slovenian cities - Maribor (+66.5%), Kranj (+40.8%), and Ljubljana (+37.7%). Other significant annual changes were observed in Polish cities - Łódź (+32.4%), Warsaw (+30.6%), and Gdańsk (+27.8%).

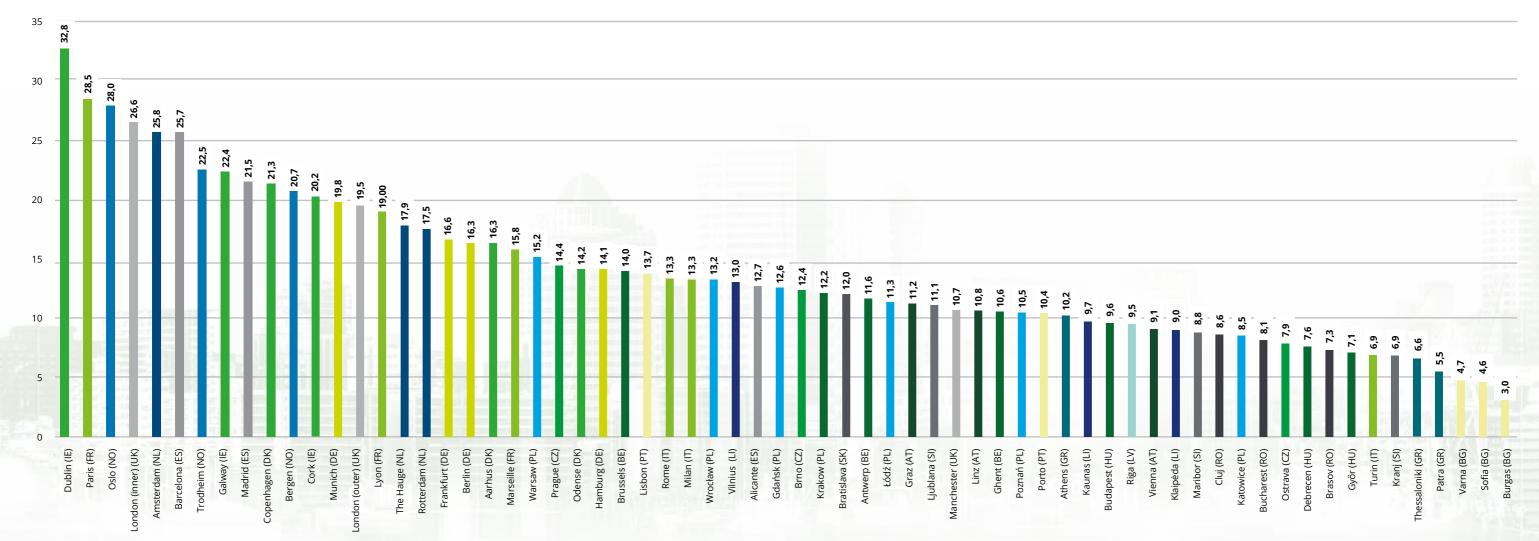


In the survey, only two European cities recorded a fall in the level of rental prices. These are Paris, which fell by 0.5 per cent, and Manchester, which saw rents fall by 9.7 per cent.



Romania (RO);

Average Monthly Rent (EUR/sqm)



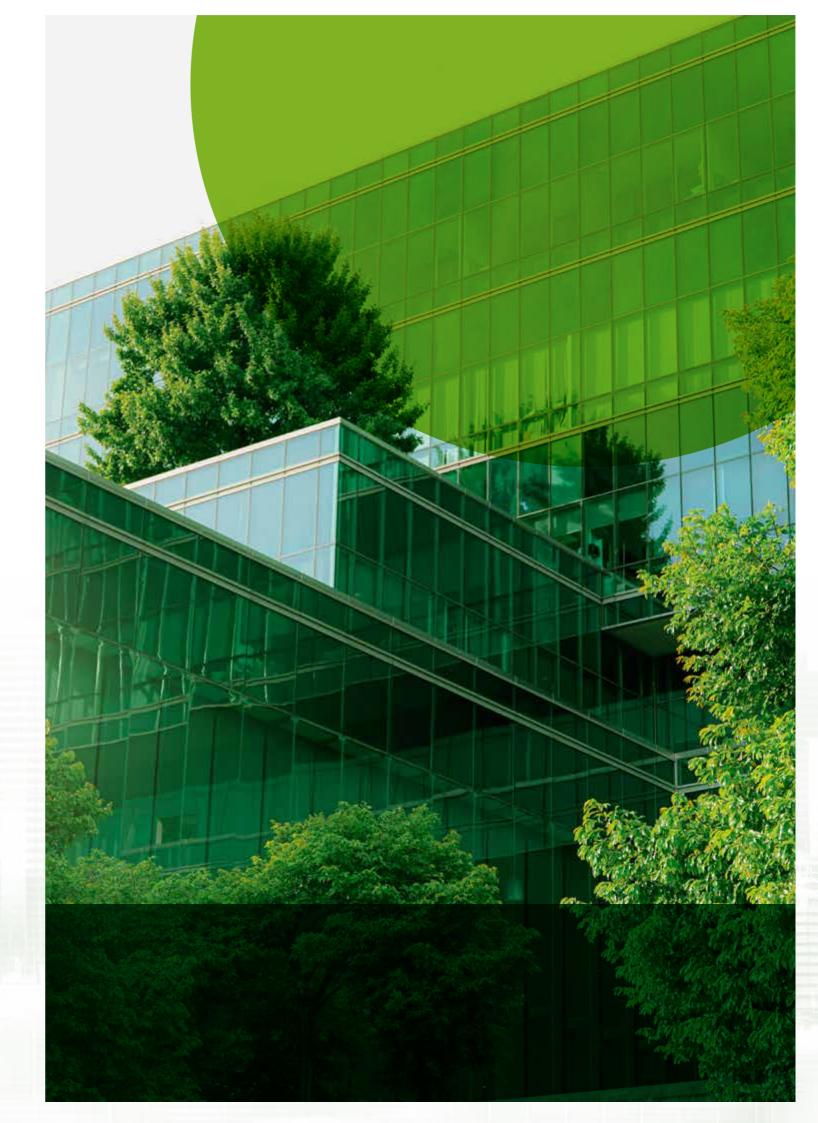
Source: Deloitte national offices

Residential prices general overview

	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
Austria	NA	4,925	NA	3,737
Belgium	3,102	NA	NA	2,341
Bosna	NA	1,237	NA	NA
Bulgaria	NA	NA	NA	NA
Croatia	NA	2,189	NA	NA
Czech Republic	4,508	3,753	2,921	2,570
Denmark	3,260	3,104	2,593	2,469
Estonia	NA	3,122	NA	2,097
France	NA	4,639	3,537	3,489
Germany	4,800	NA	3,400	NA
Greece	1,478	1,331	1,183	1,064
Hungary	2,415	2,300	1,097	1,045
Ireland	NA	3,473	NA	2,978
Italy	2,243	2,371	2,135	1,896
Israel	NA	5,701	NA	5,812
Latvia	NA	NA	NA	NA
Lithuania	3,215	NA	2,111	NA
Netherlands	NA	4,116	NA	3,572
Norway#	NA	4,204	NA	5,045
Poland	2,048	1,975	1,903	1,732
Portugal	4,662	1,723	2,580	1,436
Romania	1,417	NA	NA	NA
Serbia	NA	1,785	NA	1,360
Slovakia	3,156	NA	2,663	NA
Slovenia	NA	1,927	NA	1,593
Spain	2,920	2,663	1,749	1,786
United Kingdom	NA	3,980	NA	3,898

- detached houses

Source: Deloitte national offices





Mortgage Markets in Europe

As part of the publication of the Property Index, attention must also be paid to the mortgage market in the European continent. Therefore, one of the most representative indicators of the housing market is the household indebtedness. In other words, the ratio of the outstanding volume of all mortgage loans granted to households to their disposable income. As a result, the ability of households to take on new debt is one of the determinants of residential prices.

On the basis of the available data, the level of indebtedness is very different across the European countries. Broadly speaking, this can be attributed to several factors: the share of mortgage holders in the population of each country, the maturity of the mortgage markets and the historical development of the national residential market.

European countries such as Hungary, Latvia, Slovenia, Greece, and Lithuania, had a relatively low rate of indebtedness - less than 30 % of total outstanding residential loans to household disposable income

Central European countries such as Poland, or Czech Republic, managed to keep their level of indebtedness less than 50%. France, Germany and the UK, Europe's largest residential markets, are characterised by debt ratios below 80%.

At the other end of the scale, the highest debt levels were found in Denmark, Norway and the Netherlands. In all three countries the debt level was above 170%.

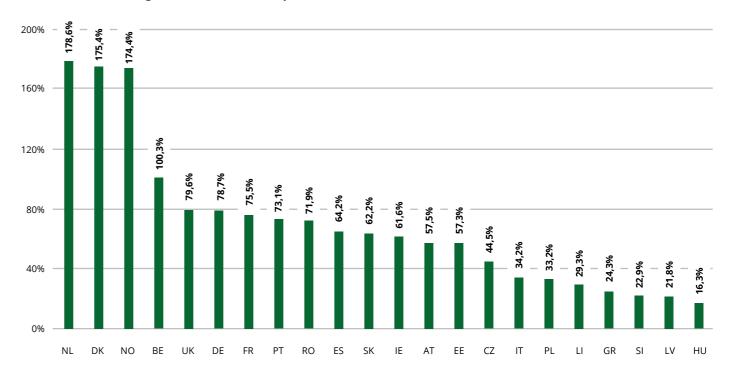
A comparison of housing loan rates shows that the highest rates were recorded in Hungary (9.3%), followed by Poland (9.0%). Notably, both of these countries saw a very strong increase in average mortgage rates in absolute terms. In Hungary, the interest rate was recorded at 4.50% in 2021. In Poland, it stood at 4.70% in the same year.

At the other end of the scale, the lowest average mortgage rates were recorded in Portugal (1.1%), Austria (1.9%), Slovakia (2.0%), Belgium (2.0%), and France (2.1%). Only two European countries recorded a fall in interest rates between the last years monitored. Interest rates in Bulgaria fell by 0.8%, while in Croatia they decreased by 3.8%.

Comparing the last two years, it is worth noting that the highest percentage increases in interest rates were recorded in the United Kingdom (+157.7%), Italy (+134.7%), Slovenia (+111.8%), Hungary (+105.6%), and Germany (+97.7%).

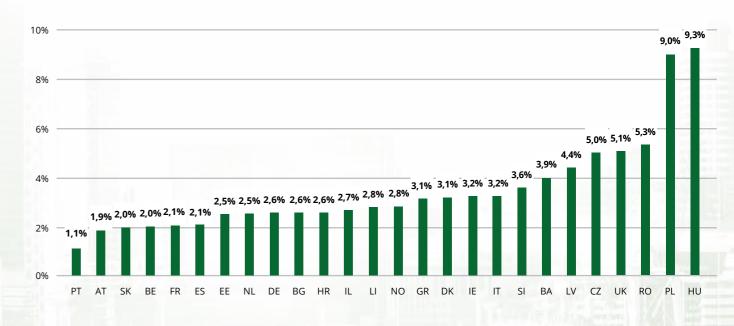
In a nutshell, we can see that there has been a relatively strong increase in the average mortgage rates in the European countries that take part in this year's edition of the Property Index.

Ratio of total outsanding residential loans to disposable income of households (%), 2021



Source: Hypostat 2022

Average Mortgage Rate (%), 2022



Source: Deloitte national offices

Europe's Residential Market Undergoes Sustainable Revolution with ESG Focus

In recent years, Environmental, Social, and Governance (ESG) investing has gained significant momentum as investors seek to generate positive impact alongside financial returns. ESG issues are especially relevant in the real estate sector, where buildings and infrastructure have significant impacts on the environment, social conditions, and governance systems.

In Europe, ESG considerations are increasingly being incorporated into the development and management of residential real estate. Green building, renewable energy production, waste reduction, and sustainable materials sourcing are just a few of the practices being implemented. Developers are also focusing on promoting community-building, health, and wellbeing in their projects.

Investors are now scrutinizing the management practices of real estate companies, with transparency, tax practices, and ethical behavior becoming increasingly important factors. An increasing number of investors are looking to allocate their capital towards

real estate companies that prioritize ESG factors, creating a demand for sustainable buildings and infrastructure.

This trend is expected to continue driving growth in the residential real estate sector in Europe, as investors recognize the financial returns generated by responsible investment practices. In conclusion, ESG considerations are becoming increasingly important in the residential market in Europe, with developers and investors adopting green building practices, integrating social features, and scrutinizing management practices of real estate companies to generate positive impact and drive financial returns.

Based on the detailed information provided by each country of the Property Index, there are certain trends and changes in the residential markets due to ESG/Taxonomy measures in various countries. Let us summarize the key takeaways and extrapolate potential emerging topics for the next 2–3 years.





Energy efficiency and green building certificates:

Across all regions, energy efficiency is one of the most dominant factors that has changed in the residential markets. Green building certificates are becoming more important, with an increased number of projects aiming to comply with ESG criteria, such as using environmentally friendly materials and energy-efficient appliances, installing solar panels, or improving insulation.



Regulations and financial incentives: Governments and financial institutions are playing a key role in driving these changes. We observe numerous countries implementing stricter building regulations and certifications related to ESG, such as Belgium, Czech Republic, Estonia, and Germany. Also, 'green loans' and tax incentives for energy-efficient buildings or renovations are increasingly offered in countries like Norway, Hungary, and Denmark.



Market differentiation: A disparity in rent levels and market values between green and non-green buildings is emerging, as noted in Belgium, and likely in other markets as well.



Renewable energy: The energy crisis has shifted attention to renewable sources of energy. Projects that utilize solar panels or other renewable energy sources are increasingly popular, especially in countries like Croatia, Estonia, Lithuania, and Slovakia. Social and governance factors: While the 'E' in 'ESG' is well-addressed, the 'S' (social) and 'G' (governance) factors are also gaining traction. For instance, the Netherlands and Denmark hint towards a focus on social and community aspects in the residential sector, while Norway points out new regulations focusing on human and labor rights.

Looking forward to the next 2–3 years, we observe that potential emerging topics will be:



Further stringent regulations and standards: As countries continue to strive for their climate goals, regulations related to energy efficiency and sustainability

of buildings are likely to become more stringent, pushing the residential sector to adapt accordingly.



Financial innovations: The notion of 'green mortgages' and similar financial incentives is likely to become more common and diversified, pushing both developers and buyers towards more sustainable choices.



Advancements in renewable energy: The focus on renewable energy will likely continue to grow, with new technologies and solutions emerging for the residential sector.



Increased awareness and demand: With increasing awareness and knowledge about climate change, there might be a greater demand from buyers for energy-efficient and sustainable homes.



Holistic ESG approaches: While the 'E' aspect has been the main focus so far, the 'S' and 'G' aspects will likely gain more attention, resulting in a more comprehensive approach to ESG in the residential sector.

Europe's Residential Market Adapts to Energy Crises with Sustainable Solutions

Europe is currently facing energy crises that have greatly impacted the residential market. These crises result from increasing energy demand, supply disruptions, and the shift to renewable energy sources. Consequently, homeowners and tenants are encountering numerous challenges.

A significant issue arising from these energy crises is the escalating cost of energy in the residential sector. Traditional energy sources are becoming scarcer and more expensive, leading to higher electricity and heating bills for households. This financial burden particularly affects individuals and families with lower incomes, who struggle to afford basic energy needs. Additionally, the volatility in energy prices hampers effective budgeting and future expense planning for homeowners.

The transition to renewable energy sources has also affected the residential market in Europe. Homeowners are required to invest in renewable energy systems, such as solar panels or heat pumps, to meet regulatory standards and reduce their carbon footprint. However, the substantial upfront costs pose barriers for some homeowners, despite the potential long-term savings.

Energy efficiency has emerged as a crucial factor in addressing energy crises in the residential sector. Governments and organizations are implementing energy efficiency programs to reduce consumption and combat rising energy demands. These programs promote the use of energy-efficient appliances, enhance insulation, and encourage behavioral changes among residents. However, the adoption of these measures has been uneven due to factors like cost, awareness, and infrastructure limitations.

In response, policymakers and stakeholders are working towards solutions that balance energy security, affordability, and sustainability in the residential market. These include increasing renewable energy capacity, improving infrastructure, offering financial incentives for energy-efficient upgrades, and promoting energy conservation practices.

Despite the challenges, Europe views these energy crises as opportunities for innovation, job creation, and a greener future. Through collective efforts and investments, Europe aims to effectively address energy crises while ensuring a stable and affordable energy supply for its residential sector.

Below we present a compilation of the most prevalent topics mentioned by from Deloitte's national offices in the survey:



Energy crisis: The ongoing energy crisis caused by the war in Ukraine is a central theme stated by the surveyed country, impacting various aspects of the residential real estate markets in different countries.



Rising energy prices: The surveyed countries frequently also mentioned the increase in energy costs as a result of the energy crisis and its effects on households, construction, and overall inflation.



Energy efficiency: The importance of energy-efficient properties and the growing demand for such homes is highlighted, with mentions of energy-saving features, grants for energy-efficient installations, and the premium effect on property prices.



Impact on house prices: The participated countries mentioned how the energy crisis has influenced residential property prices, with varying effects across different countries. Despite the pressures from energy markets, some countries experienced significant price increases, while others saw cooling markets and decreased transaction numbers.



Government measures and subsidies: Several countries mentioned government initiatives, programs, or subsidies aimed at mitigating the impact of the energy crisis. These measures include support for low-income households, retrofit schemes, grants for energy-efficient installations, and temporary price caps on utilities.



Construction costs: The energy crisis's influence on construction costs, particularly the increase in prices for materials and their impact on overall housing prices, is discussed in some countries.



Market demand and consumer behavior: The surveyed countries mentioned changes in market demand and consumer behavior due to the energy crisis. Topics include tenants opting for co-living arrangements or smaller living spaces, increased interest in energy-efficient properties, and the emphasis on energy conservation and efficiency.



Inflation and economic impact: Several countries mentioned the inflationary effects of the energy crisis, as well as the broader economic impact on countries' economies, including the slowdown in sales.



Rising Interest Rates Reshape European Housing Markets: Mortgage Demand Declines and Affordability Challenges Arise

The housing markets in several European countries have experienced significant shifts and challenges in recent years due to the impact of rising interest rates. As global economic conditions change, central banks and financial institutions have adjusted their monetary policies, resulting in increased borrowing costs for individuals and businesses alike. This chapter delves into the effects of rising interest rates on housing markets across Europe, exploring the implications for mortgage demand, housing affordability, price dynamics, and the overall trajectory of the real estate sector.

Below we provide a brief overview of the most important aspects and trends surrounding interest rates across the European region, as reported by the Deloitte national offices surveyed:



Impact of rising interest rates: Several European countries experienced a significant impact on their housing markets as a result of rising interest rates. Countries like Austria, Belgium, Bulgaria, Croatia, Czech Republic, Estonia, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, and the United Kingdom all saw changes in their housing markets due to increased interest rates.



Decreased demand for mortgages: The increase in mortgage rates resulted in a decline in the number of mortgages issued in several countries. For example, Belgium saw a 45% decline in mortgages in January 2022 compared to the same month the previous year. Similarly, Hungary witnessed a decrease in the volume of new mortgages by around one-third in the beginning of 2023 compared to 2021.



Housing affordability challenges: Housing affordability deteriorated in many European countries due to inflation and rising interest rates. This led to a shift in buyer behavior within these countries, with households becoming more reluctant to acquire properties and turning to the rental market instead. In countries like Austria, the interest in property acquisition decreased, while in the Netherlands, rising interest rates worsened the affordability of houses, resulting in less demand for dwellings in 2022.



Development of residential market in Europe as whole in beginning of 2023: The housing market
slowdown and decreased interest in property acquisition
resulted in a slight price correction and slower price
growth in various European countries. Austria saw a



decreased interest in the acquisition of properties, and a slight price correction is expected. Germany witnessed stagnating purchase prices, especially in existing properties, while the United Kingdom experienced a slowing mortgage market with lower mortgage commitments compared to previous quarters.



Varying impacts across countries: The impact of rising interest rates varied across countries, with some experiencing a significant decrease in new mortgages and transactions, while others saw a more moderate decline. For example, in Bosnia and Herzegovina, interest rates on housing loans increased, resulting in lower demand for residential real estate and a slight decrease in prices. In contrast, countries like Estonia and France witnessed a slowdown in new housing loans and a decline in loan production, respectively, but still recorded some growth in mortgage volume.



Uncertain future trajectory: The changing interest rate environment has affected housing market sentiment and buyer confidence. The future trajectory of housing prices remains uncertain in light of these developments. While some countries expect a moderate decrease in housing prices towards the end of 2023, others anticipate stabilization or even a slight increase. Factors such as supply constraints, inflation, energy crises, and overall economic uncertainties contribute to the uncertainty in the housing market's future performance.

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Austria



Annex:

Comments on Residential Markets

In 2022, there was an average increase in purchase prices for residential properties in Austria. Overall, the prices have increased by approx. 10% compared to 2021. This corresponds to the average price increase for Austrian properties in 2021 compared to 2020, which was approx. around 11%. However, contrary to the first three The consumer price index has changed by 12.8% in the period quarters of 2022, we saw a decrease in prices in Q4/22 throughout the country by approx. 2% compared to Q3/22 (and by 2,4% for Vienna). This development is due to the increase in interest rates and the more stringent legal requirements imposed on banks in respect of granting loans.

Due to the high inflation in 2022 and the first half of 2023, rents under existing lease agreements increased above average. This follows from the fact that rents can be increased in line with the consumer price index as agreed in most of the existing lease agreements. The price increase did not only affect freely agreeable rents, but also regulated rents (which apply for flats in a building constructed prior to 1945). In April 2023, the Austrian government has increased the regulated rents by 8.6% due to the high inflation. The year before, such rents have only been increased by 5.85%, as

the increase was ceased during COVID. Nonetheless, some cities did not increase the rents for city-owned premises by 8.6%, but only by 2% (e.g., Innsbruck).

01/22 to 3/23. However, the prices for newly concluded lease agreements appear to remain stable or are only slightly rising. Since energy prices increased due to the war in Ukraine, the Austrian government subsidized energy prices by distributing energy cost

Due to the significantly increased energy prices and the planned phase-out of fossil energy resources, there is a focus on the replacement of heating systems by sustainable heat supply systems, as well as other energy saving measures (e.g. isolation, photovoltaics). To accelerate this process, the installation and replacement of sustainable and energy saving heating and power supply systems is subsidised in Austria as well. Furthermore, energy efficient and sustainable properties are more attractive for investors and buyers. Property Index | 12th edition, August 2023

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Belgium



In 2022, the Belgian real estate market experienced a 2 percent decline in activity compared to the previous year, with fewer transactions and rising prices. Belgian investors continue to dominate, but private investors were deterred by increased registration fees in Flanders to 12 percent, leading to fewer transactions, although registration fees were reduced to 3 percent for the acquisition of the first and sole house. Professional investors identified the increase in interest rates as the most challenging point, leading to more hesitant behavior in the market and a decompression in residential yields (prime yield for block sales ranging between 4.5 - 5.0 percent).

Housing demand is expected to increase given the population growth explained by a net positive international migration, but accessibility and affordability have deteriorated due to purchasing power inferior by 6 percent and high mortgage rates. In fact, in 2022, the 20-year fixed mortgage rate has reached a rate of 3.7 percent, leading to a decline of 45 percent in mortgage lending in January 2022 compared to last year. Co-housing is, as a result, gaining popularity due to its affordability and increasing urbanization. From a developer's perspective, the regulatory burden of this asset type is considerably lighter than the traditional multifamily market, resulting in faster redevelopment and return on investment, as well as higher capital values.

Energy efficiency in buildings, and in particular the EPB certificate, has also become a topic of interest due to energy costs and regulatory compliance.

The sale of housing in Belgium remained fairly stable during the first quarter of 2022 and dropped from the summer onwards. This is due to the price of construction materials, rising interest rates and the importance that potential buyers attribute to energy efficiency. Thus, the buyer's market has taken over the seller's market.

If house prices have continued to rise (more strongly than appartements) in 2022 across the three different regions, with an average house price of EUR 290,000, this trend might be reversed. Indeed, due to higher interest rates, rising mortgage rates, the inflation and the energy crisis, it is reasonable to think that the housing market is expected to cool down in 2023, resulting in a slight price correction of half a percentage point this year and a price increase of only 1 percent next year. Adjusted for inflation, the real correction in house prices between 2022 and 2024 could therefore be as much as 11 percent.

However, it is not expected that prices in Belgium will experience the same significant drop as in neighboring countries. First, the real estate market in Belgium has a history of being more stable. Second, the rate of new housing supply on the market is expected to slow down in the upcoming years, coupled with a growing number of households, which will result in a shortage of housing and a subsequent rise in prices. Third, the postponement or cancellation of new construction projects (due to the low number of building permits granted, rising mortgage rates, and the rising cost of building materials) stabilizes prices, as demand for quality, sustainable housing remains strong. The combination of more expensive mortgage loans, energy prices, inflation and high housing prices makes it challenging for many households to buy an affordable home, especially in Brussels and large Flemish cities. As a result, households are increasingly turning to the rental market as a more affordable alternative.

As discussed, a general trend of increasing rent levels and apartment prices has been observed. Also, the average rent for rooms and studios is steadily increasing; this can be attributed to a shortage of student housing.

Although there are more people looking on the rental market, the rent levels are still not increasing as much as the sales prices, which means there is still room for improvement on the market.

As energy prices continue to rise due to the ongoing war in Ukraine, and inflation remains high with no end in sight, tenants may choose to

As energy prices continue to rise due to the ongoing war in Ukraine, and inflation remains high with no end in sight, tenants may choose to shift towards co-living arrangements or smaller living spaces to reduce their expenses.

Along the same lines, buyers are increasingly turning to energy-efficient buildings, to (i) attract tenants, and (ii) be compliant with forthcoming regulations. These buildings offer several advantages, including higher sales prices and faster selling times. On average, homes with an EPC index between 100 and 199 are sold at prices 10.9 percent higher than comparable homes with a less performing EPC rating and will sell on average 25 percent faster. However, acquiring such assets present challenges due to economic conditions that limit households' purchasing power and the lack of supply of energy-efficient properties.





Residential real estate prices in Bosnia and Herzegovina recorded an increase of 27% in 2022, compared to 2021. The rising real estate prices were mainly driven by the increase in prices of construction materials, which averaged 30% in the same period, as a result of overall rising energy prices and disruptions in supply chains, as well as the increased demand for apartments in order to channel savings into real estate purchases under the inflationary conditions. However, by the end of 2022, the real estate prices exhibited a slight decrease, primarily due to the increase in interest rates on housing loans as a result of the increase in Euribor and the decrease in the cost of iron and other construction materials.





While demand is still outpacing supply in the residential market in Bulgaria, the market is cooling down with number of deals falling in 2022 as compared to the previous year, particularly in the second half of the year. The slowdown continued this year with number of deals continuing to fall in Q1'2023 albeit at a slower pace as compared to the drop in Q4'2022. Number of deals has fallen in the four major cities in the country - Sofia, Varna, Plovdiv and Burgas with Varna experiencing the largest drop in Q1'2023 as compared to the same period of previous year (-19% against a national average of -9%). Selling prices were steadily on the rise for the year of 2022 with average prices for flats in Sofia advancing by more than 25% according to major players on the market. Varna saw the largest appreciation (more than 30%). No major decrease in prices is expected in the short run as demand is still outpacing supply, and at the same time mortgage rates have not risen substantially yet.

The market outlook in the medium term is largely dependent on interest rates path on the local market. While inflation is taking its toll on households' purchasing power and respectively ability to repay mortgages, inflation is also provoking investment interest in the purchase of real estate. That is accompanied by very solid weight of bank deposits in total financial wealth which, on its side, stimulates demand, particularly amidst inflation as people will be searching for alternatives to hedge against inflation.

The rental market has lagged behind sales, as measured by average rental levels in Sofia in 2022 but has demonstrated more distinct appreciation in the first months of 2023. The expectations for increase in mortgage rates might delay plans for home purchase for some participants on the market and thus support rental prices. The trend for Build-to-rent projects has started to emerge in Bulgaria as well but remains very niche with first projects now under development.

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Teneral Seria Croatia



When analyzing key figures in the Croatian real estate market, annual transaction volumes were down approx. 20% and 15% in Croatia and Zagreb, as potential home buyers struggled with affordability and/or lower value for money due to lack of supply. Based on the number of issued building permits in the first 11 months of 2022, 15.499 new apartments are planning to be built, up to 11% yoy. Nevertheless, development activity has still not recovered from the last recession. From 2004 to 2008, on average 22.000 apartments were built per year. Lower number of transactions in the real estate market can be perceived as a future indicator of real estate prices dropping but that still wasn't the case in 2022

In 2022, residential real estate prices increased by 14.8% compared to the previous year – almost double the EU average increase of 7.7% for the same period and in this segment, Croatia ranked first in the EU. For Zagreb, there was an average 17.9% price increase between 2021 and 2022, while properties along the Adriatic coast – the second most dynamic real estate market in the country after Zagreb – saw a 12.3% increase over the same period. This increase in prices which represents an abnormal growth in relation to evident economic slowdown and inflation worries on a global scale can be explained by the implementation of the Euro as a big proportion of residents decided to invest their excess savings in HRK into the real estate market which is typically viewed as a safe haven asset for the majority of Croatians.

Some of the factors which had an affect on the property prices:

- I. lowest interest rates in the EU 2022 which were not impacted by the restrictive policy of the ECB (CNB had expansive monetary policy in 2022)
- II. increased interest among foreign buyers;
- III. joining the Schengen Area and the adoption of the Euro;
- IV. subsidized residential mortgages.

There is an evident rise in demand in the rental segment which can be explained due to transaction volumes being down and prices being relatively higher as a proportion of the residents decided to delay their purchase of a home and instead decided on renting. As a result, there has also been an increase in rent prices especially in the bigger cities.

Impact of the energy crisis on the residential market can be viewed through added demand for buildings which have heat isolation, electric heating or heat pumps due to the increase in gas prices.









The Czech residential market has experienced a rapid drop in sales of dwellings as a result of the tightening monetary policy set by the Czech National Bank. The mortgage market in the Czech Republic has started to slow down, and as a result, 50,243 mortgages were signed in 2022, which is 80,010 fewer than in 2021. The total volume of mortgages in 2022 exceeded CZK 151 billion, a 63% decrease compared to 2021. In recent years, the market has been characterized by low supply on both the primary and secondary markets in the largest cities. Since April 2022, the Czech National Bank has tightened the rules for obtaining a mortgage. Similar to 2021, 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 throughout 2022.

Due to the decreasing affordability of owning an apartment, over the past year, many households have turned to the rental segment in order to solve their housing situation for the foreseeable future. Prices in the rental segment stayed relatively stable over the course of the year but started to recover to pre-pandemic levels during the last few months. Additionally, rental housing has been booming across all regional cities, and in parallel, it has attracted more investors and developers to shift into developing rental projects. In line with that, the private sector, especially banks and insurance companies, works on programs for affordable housing for selected groups of citizens, such as doctors, firefighters, or teachers. These programs are also prepared in cooperation with the public sector. Apart from that, as a result of the increase in energy costs, there are several grant programs unveiled by the national government to enhance energy sufficiency in the household sector.

During the past year, the residential real estate market in Denmark has experienced a rapid decline in activity, both in terms of transaction volume and construction activity. Leasing activity, however, is still fairly high, leading to slight rent increases in Copenhagen. Slight increases in vacancy in selected provinces are observed.

A rapid increase in interest rates and escalating constructions costs among other things due to an increase in energy prices has lowered the transaction volume and caused a decline in pricing. Furthermore, a tightening monetary policy set by the Danish National Bank and that mortgage institutions have tightened their loan options have collectively exerted pressure on market pricing.

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

Throughout 2022, the Danish real estate market in general has experienced a slowdown and the residential market has been decimated substantially as it has been the preferred area for property investors the last 10 years.

Estonia



According to the Bank of Estonia, the housing market has been very active in the past couple of years. However, the uncertain economic climate, together with a rise in prices and interest rates, has made people cautious. In December 2022, banks issued 20% less in new housing loans compared to the same month in 2018 and 2019 for example, prior to a period of increased market activity. The war in Ukraine has also brought some changes to the real estate market and increased the risk level in the rental business, due to an increase in the number of people with unknown background and no prior history in Estonia.

Altogether, the real estate market experienced great turbulence: for the first time in 10 years, the number of offers decreased in the beginning of 2022, and the shock from the start of the war in Ukraine halted the number of transactions.

After the initial shock, the market started slowly recovering but in the second half of the year, the energy crisis and growing interest rates reverted the recovery and transaction numbers decreased sharply yet again .

As a consequence of the energy crisis, more emphasis has been put on energy-efficient buildings and tenants' preferences have shifted towards dwellings with district heating due to higher cost stability.

Overall, compared to 2021, the number of apartment sales transactions decreased by 30.6% and prices increased by 16.4%.





The French residential market has registered decreases in both transactions and new loan production across 2022. Over 1.1 million transactions were recorded in 2022, representing a total of 5.6 billion €; and -5% from 2021. Monthly new loan production as of September 2022 reached 18 billion €. New loan production had previously ranged between 19 and 24 billion euros monthly since April 2021.

The residential market for new dwellings is marked by structural difficulties (rise in construction costs, decrease in the number of permit construction) therefore resulting in a decline of the construction activity.

From a household perspective, the 2022 real estate context is judged as negative. The rise in mortgage interest rates, while sharp in France, was much less marked than in other European countries, fixed rates in France being among the lowest in Europe. Nevertheless, the rise in rates has impacted both the behaviour of the French people and market dynamics with a significant number of households deciding to give up or to postpone properties acquisition. The average interest rate on mortgages reached 2.05% in October 2022 (vs. 1.05% recorded in Q3 2021), rising up by +1%.

As of Q3 2022, prices were still growing strongly at rate of 6.4% per year, further illustrating the asymmetry in growth between large cities and more regional areas of France.

Average prices remain on the rise (+4.7% on average over one year) in 2022 in France. The average price of old housing in France outside of the Paris region is up by +7.6% and +9% over one year for apartments and houses respectively. Many investors believe that prices will continue to rise and still consider real estate at the forefront of their favourite investments.

The implementation of constraints in accordance with the DPE (energy performance diagnosis) has resulted in a drop in appetite for assets graded F or G.

The strong acceleration of inflation observed throughout 2022 has had a limited impact on the evolution of rents, despite the indexation mechanism in place. This is explained by the government's decision to cap the increase in the reference rent index (IRL) at +3.5% until the second quarter of 2023.





Overall, the housing market in Germany is characterised by its heterogeneity with a multicentric and federal structure. This is evident in the cities and metropolitan regions, some of which are very highly priced and contrast to the more affordable peripheral parts of the country.

The increase in bid prices of recent years, especially the high increase of the previous year, did not continue; instead, bid prices rose only in some cities, while they stagnated or even fell in other cities. It should be mentioned that the price growth of the previous years continued until Q2 2022 and then declined gradually over the year; accordingly, the annual average values are often at a similar level to the previous year. In contrast, rents continued to rise steadily, in some cases even stronger than in the previous year.

Market conditions have changed considerably compared to the previous year. The only aspect that remains unchanged is the shortage of affordable housing space, especially in the metropolitan regions, which continues to drive the growth in rents. The shortage of space is further exacerbated by the war in Ukraine and the increased demand for space, especially in the area of social housing. In 2022 roughly 1.0 - 1.2 Mio refugees from Ukraine entered the German housing market. The government is trying to counteract this effect by increasing social housing construction.

Apart from that, the most drastic change in the market is the significant increase in financing costs resulting from the adjustment of interest rates due to persistently high inflation in Germany, which has more than doubled (in some cases even tripled) within one year. From the point of view of project developers, this considerably increases the cost and financing risk of developing new flats and significantly reduces the developers' returns. From the view of the investors, stagnating and even falling sales prices (compared to the market phase of the previous year) can be expected. In addition, classic "safe" asset classes (e.g. bonds) have become more attractive due to the changed interest rate environment.

In addition to rising net rents, tenants and users of residential property are burdened above all by the high increase in ancillary costs in the wake of the energy crisis. This sharp rise in energy

costs, as well as the ESG regulation target, have an impact on the urgency of implementing ESG measures in residential construction which will increase construction costs for developers and lead to a wider price spread between new construction and older buildings. For the latter, correspondingly larger price reductions are to be expected than in previous years.

In summary, the market environment for residential real estate in Germany will remain challenging due to various exogenous factors, but at least a stabilisation on the investment market could be expected from the end of the year 2023.

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Greece



2022 was a year of significant growth for the Greek real estate market, despite the turmoil caused by the war in Ukraine and the adverse effects on cost of borrowing, energy and construction materials in general. Consistently positive expectations for the market and undiminished investment interest, especially from abroad, maintained the high growth rates of residential real estate prices, mainly in prime locations. The dynamics of the residential real estate market during 2022 was significantly strengthened, due to strong external investment demand and tourism, which positively affected housing through short-term leases, as reflected in the inflow of capital from abroad for purchase of real estate. The dynamics of the market is confirmed by investment in housing, which increased by 36.1% in 2022 (compared to 27.3% in 2021), although it remained at a low level in terms of GDP (1.7%). At the same time, the recorded slowdown in construction activity, due to sharp increases in energy and construction costs, is estimated to have contributed, and will continue to contribute, to further strengthening of prices, as the demand for high-end real estate specifications is not sufficiently covered by the existing offer in the market.





The extraordinary increase in domestic housing market prices continued in 2022 in Hungary. Based on the house price index of the Hungarian National Bank, house prices rose at an annual rate of 24.8% on a national average in 2022 Q2. However, in 2022 Q3 there has been a turnaround in the Hungarian housing market and demand in the Hungarian housing market fell sharply. The number of transactions has fallen by 40-50% in the second half of 2022. Buyers became uncertain because of very high loan rates of around 9.25% and rising European energy prices. The rise in interest rates had a significant impact on the liquidity of the residential market as proportion of people buying property with loans was above

As the typical mortgage interest rate in Hungary increased from 4.5% to 9.25% therefore loan financing became very expensive more people turned to the rental market. While many of the currently ongoing large-scale residential projects could potentially contain a built-for lease element, only a very few local developers are currently exploring the rental market. Until most recently the current prices and the solid demand for housing made exit more viable for most developers than building-for lease, especially as 27% VAT applicable for rent while only 5% is applicable for sale. While the rents increased by around 22% in 2022 in local currency, the majority of this increase was offset by the weaker Hungarian Forint

The Hungarian households enjoy the most favourable energy prices in Europe: While energy prices in Europe skyrocketed in 2022, Hungarian government maintained the caps on gas and electricity prices for households that consume under the average level. In July 2022 the Hungarian government ceased the price caps on gas and electricity prices for households that consume over the average level. Since the second half of 2022 it became more difficult to sell the residential real estates with poor energy efficiency.





The residential market within Ireland continues to be characterised by supply/demand challenges. Despite an improvement in the volume of new homes which completed construction in 2022, the output remains short of annual demand. A total 29,851 new homes completed construction in the twelve-month period, reflecting an annual increase of 45%. However, annual demand is estimated to be between 40,000 – 60,000 units, depending on sources. Construction output in 2023 is anticipated to be lower than the twelve months prior, as commencements fell to just under 27,000 units in 2022. However, surprisingly, commencements data for the first

5 months of 2023 show an improvement once more, with just under 13,000 units commencing construction between January and May.

Planning, viability, and infrastructure are consistent themes when discussing challenges within the supply side of the market. Rising construction costs, substantial planning delays and rising interest rates all played a role in the market's performance in 2022 and will continue to do so in 2023. The volume of planning permissions granted will need to be monitored, following a fall of the volume of units granted planning permission in 2022 to 34,177 units. This reflects an annual decrease of 21%. Worryingly, this represents the first annual decline since 2012 and is the lowest volume of planning permissions granted since 2018.

Supply/demand dynamics placed upward pressure on prices in 2022, with the peak of this growth experienced in the early months of the year. Nationally, price growth peaked at 15.1% in March 2022. This growth eased during the remainder of the year, with the December all property index returning annual inflation of 7.7%.

With monthly declines now evident in the prices, 2023 is expected to see a very different path for price inflation overall. On a headline basis, stagflation or a moderate decline is anticipated, however delving below the headline data, trends diverge for new homes and second-hand homes price inflation.

The same cannot be said for the rental market. Chronic supply shortages, coupled with strong demand has led to rental growth continuing at pace, showing little signs of slowing down. This is evident across all regional markets. The private rental market is experiencing a loss in many traditional small private landlords. Meanwhile, notable concerns for the continued investment by large private institutional investors in the market see's constraints on stock continue. Government initiatives, such as a Cost Rental Scheme, will attempt to ease rental affordability challenges for some, however the lack of availability of rental accommodation will remain a discussion point across government and business groups who fear it is already or will impact economic expansion going further.

🂹 Israel



The Israeli residential market started 2022 on a strong note, witnessing sharp price increases in most regions and rapid transaction closures. In terms of asking prices and transactional activity, a significant number of deals were even closed above the asking price during the early part of the year. Land Prices of residential rentals significantly increased and even reached parity with prices of lands for sale.

However, towards the end of the year, due to the rise in interest rates and the increased costs of mortgages, the price increase came to a halt. In the residential rental market, high interests overcame the rent yieldstransactions became non-profitable, and the market decelerated.





,In 2022 the volume of Real Estate investment in Italy was around 12€bn, that represents an increase of around 20% with respect to 2021. In the last 3 months of 2022 volumes were around €2.2 billion and were characterized by a contraction if compared to the same period of 2021.

With respect to the residential Real Estate market 2022 results reported the best performance since 2007 with the number of transactions approximately equal to 576.000 for the first 9 months of the year, an increase of 7,4% if compared to the same period of 2021. The results for the remaining months of the year showed a more stabilized situation, with an increase of 1.7%, with respect to the previous year.

The major institutional report analyses the average of the condition on the 13 biggest Italian cities. The increase in the mortgage interest rates lead to a reduction in the demand for residential property over the last months of 2022. Indeed, the time on market and the average discounts on asking prices increased slightly over 2022 and consumer price inflation developments in the 2023 will negatively affects housing demands and selling prices.

Short term rental investments remain one of the most attractive in the real estate world, indeed the houses sellings for investment use have been increasing in the last few years.

The most immediate impact of the increasing consumers' inner demand, together with the conflict in Ukraine, in Italy had been the increase of the inflation and consequently in the energy prices in 2021, which in turn feeds into the general cost of living. This is still a big consequence in 2023 and the impact on the residential development sector has been the rise of construction raw materials which is expected to reduce the constructions and the restructurings in 2023. Eventually, the rising energy costs induced people to increase their care about ESG regulations to make their assets more energy efficient.









In the beginning of 2022, in the context of high future inflation expectations, the demand for residential real estate was high and consumers were ready to purchase real estate at above market prices. However, around the second half of 2022, the market cooled down, which is evident in the growing average time required to sell the real estate and falling number of transactions.

The transaction prices developed in line with the sentiment, with strong growth in the first half of 2022 and stagnation in the second half of the year. The economic uncertainty and increasing interest rates played a major role in the decreased activity in the market.

Overall, there is some growth in average rental rates as affordability of housing is decreasing. The rental rates were supported by seasonal renters, such as students, and an influx of Ukrainian nationals fleeing the war in Ukraine.

Due to a high reliance on piped natural gas from Russia, the heating and electricity costs in Latvia have experienced an unprecedented increase. Accordingly, the demand for energy efficient housing and housing in newly built projects has significantly increased in 2022.

In 2021 all conditions were in place for a hot housing market. Low mortgage rates coupled with a shortage of new housing supply, growing incomes, and a need to protect savings in a high inflation environment led to a 22.4% increase in the average apartment prices in five major cities of Lithuania. After the housing demand reached the peak in 2021, the market began cooling down in 2022 due to the rising interest rates and deteriorating affordability.

In the first quarter of 2022, the rate of house price growth slowed slightly to 19.1%. The annual growth rate of house prices slowed down further to 16% in the fourth quarter of 2022, while more recent data from the Bank of Lithuania and market participants show that the prices are stabilising at the new higher level.

Rental prices peaked in the middle of 2022 driven by the overall increase in the housing prices and the influx of Ukrainian refugees fleeing the war. However, the prices later declined to the level barely higher than before the start of the war in Ukraine. This was driven by a threat of expensive heating season coupled with tenants migrating to cheaper rental segments or their relatives' apartments.

Incentives to invest in energy efficient housing can be seen both in the public and private sectors. In 2023 the government allocated €40m in subsidies for households choosing to install their own solar power plants. In addition, a state-owned Public Investment Development Agency (VIPA) plans to provide soft loans for the modernisation of multi-apartment buildings under the European Union Investment Funds for the period 2021 - 2027. Furthermore, major banks started offering "green mortgages" - mortgages which offer better financing terms for energy efficient housing.

Netherlands



In 2022, the average house price in The Netherlands was ca. €429,000, which is ca. 10% higher than in 2021 and the highest recorded price since the recording of house prices started in 1995. However, in the fourth quarter of 2022, for the first time in nine years, Dutch house prices decreased by 2.4% compared to the previous quarter. This is mainly driven by increased interest rates and an increase of supply of existing stock. At the end of Q3 2022, a total of 30,000 houses were for sale, which is 22% higher compared to Q2 2022 and more than 80% higher than Q3 2021 (17,000 houses for sale). Nevertheless, as a result of increasing mortgage rates, inflation and energy bills, it is still difficult for first-time buyers to buy a house. In 2022 the average mortgage rate increased by almost 2% from 1.63% in January to 3.52% in December. Furthermore, financing norms are tightened. For receiving mortgage on an average starter home, banks require a Dutch buyer to earn almost 1.5 times the average Dutch yearly salary of ca. €50.000.

The housing shortage in 2022 was 315,000 units. Approximately 74,000 new dwellings were completed, which is the highest number of newly built houses since 2012 but still lower than the targeted yearly supply of 100,000 per year. Relatively, growth of the housing stock through new construction is ca. 9%. Amsterdam added the newest dwellings to the housing stock, nearly 6,800.

Due to the growing population and the slowdown in construction, the housing shortage is expected to further increase in 2023. In the Netherlands there are several reasons for the delay in construction such as the shortage of land, building materials, construction workers and most of all granted building permits. Realising positive project development returns is harder driven by increased interest rates, higher construction costs and increased regulations. In addition, environmental and climate issues play a major role in housing construction. The Dutch government is struggling to meet nitrogen emissions targets (in Dutch referred to as the "stikstofcrisis"), which has led to restrictions on construction projects resulting in fewer building permissions granted.

Rental prices increased on average by 3% in 2022 which is the strongest increase since 2014. The Dutch government plans to introduce rent control for middle-income housing, which will limit rents to around €1,100 per month for new rental contracts from 2024. This aims to increase the availability of affordable housing, but some critics argue that it could lead

to investors leaving the market and the sale of rental properties. Primarily in larger cities, the supply in the rental segment is decreasing as the planned governmental regulations is enticing private investors to sell their real estate.

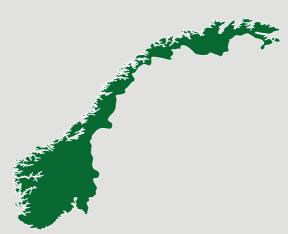
Due to the energy crisis, prices of raw materials and building materials have increased. The increased construction costs are potentially causing construction delays or even cancellation of projects. In addition, brokers notice an increased demand for energy-efficient homes. Dutch research has shown that sustainable homes perform better due to the energy crisis. For instance, the value spread between a dwelling with an energy label E (relatively high use of fossil energy sources) and an energy label B (relatively low use of fossil energy sources) is ca. 10% in 2022. The value spread between an energy label E and energy label B was 8% in 2021 and 7% in 2020.

We expect that there are several factors which will drive the housing market in 2023, which overall have a negative net impact on the housing prices:

- The increasing interest rates will have a negative impact on the housing prices
- It is expected that less new houses will be added to the market as it is harder to generate positive project development returns
- Dutch inflation for 2023 is projected at 4.2% which will have a positive impact on the housing prices
- Increased supply as private investors are projected to sell part of their real estate portfolio due to regulations

Expectations for 2023 are that the housing market will cool down partially and that house prices will stabilise and decrease. However, due to the rising interest rates and overall high inflation, supply of affordable houses for Dutch home buyers and especially first-time buyers will maintain at a low level.







The overall increase in housing prices in 2022 was 1.5% compared to 5.2% in 2021. As of April 2023, the housing prices has increased by 6.8% in 2023. The housing market has been less sensitive to the interest rate increase than expected. Norwegians in general have high mortgages and increased interest rates are expected to affect the housing prices in the longer term. This is somewhat offset by a softening in the mortgage regulation as of January 2023, decreasing people's required capability of interest rate increase from 5% to 3%. Prices are expected to decrease in the second half of 2023.

91.417 dwellings were sold in 2022 country wide, which is 10.2% less than in 2021. Less than 20,000 new dwellings were sold in 2022, which represents a decrease of 26% compared to 2021 and is the lowest number since the financial crisis in 2008. Increased building material prices and delivery delays have led to cancellations and postponements of new dwelling projects. In 2022, the average monthly deviation between transaction price and asking price was 1.9%, which is lower than the 2021 average of 2.5% (Eiendom Norge, FINN og Eiendomsverdi AS). The overall price increase for the rental segment was 7.5% in 2022. Bergen and Trondheim experienced the biggest price increase of 13.6% and 13.5%, respectively. The price increase in Oslo was 6.5%.

Due to the record high energy costs, the Norwegian government has implemented several temporary support measures, including subsidies to all households when the power price is above a certain threshold. Housing prices declined in the last four months of 2022 which to some degree can be attributed to the increased energy cost, together with the increased interest rates. The price level has however been recovered in the first months of 2023, and the price development in the last twelve months (as of April 2023) shows an overall increase in housing prices of 0.5%.

,In 2022, a significant slowdown was observed in a residential market in Poland. Unstable economic and political situation, including Russian aggression against Ukraine, high inflation and worsening economic situation of the society had a strong negative impact on the sentiment of market participants. Increase of interest rates resulted in a decrease of creditworthiness of potential buyers and limited availability of debt finance to developers. Due to limited demand and exceptionally high financial costs, number of commenced developments dropped by nearly 30% y/y. Although some market participants expected decreases, in most cases prices of residential properties increased or remained stable. Considering skyrocketing construction costs, developers were not willing to offer price discounts, but other buyer incentives (for example parking lots or additional finishing) were available more often than before. Depending on city, annual increase of average transaction and asking prices varied between 3-15% (in EUR) and was slightly higher (in the range of 5-18%) considering prices in a local currency due to the PLN depreciation in 2022. Because of lower demand from individual clients, some developers decided to enter PRS market, offering whole buildings for sale to institutional investors or establishing their own operators for lease management.

2022 brought a shock in rental market. Huge inflow of refugees from Ukraine, tight mortgage criteria and rising costs of energy caused a sharp increase of flat rents, reaching up to 20-35% y/y in major cities. Although in the beginning of 2023 a slight correction was observed in the market (estimated on 5-10% y/y), rents remain relatively high compared to average monthly salaries.





Following a period of recovery from the pandemic crisis, growing geopolitical uncertainty and energy crisis, inflation and interest rates have risen, leading to a fall in families' purchasing power and consumer confidence. Nevertheless, the Portuguese residential market outperformed in 2022, surpassing all records of both the number of units sold - overall, around 159 thousand houses (+1.3% YoY) - and the total volume - approx. €38 billion (+13.4% YoY). In 2023, the residential market is expected to experience a slowdown in sales, as a result of the continued growth in interest rates and reduced levels of development in key regions.

Despite the positive performance of the sector, there is a structural shortage of supply, while the volume of demand remains high. This mismatch between supply and demand has generated a generalised increase in prices and once again, in 2022, average purchase prices recorded unprecedented levels in Portugal - estimated to be around €240,202 (+11.9% YoY; +30.6% vs. 2020). Algarve is the Portuguese region presenting the greatest average purchase price in 2022 - approx. €310,920 (+10.9% YoY; +35.8% vs. 2020) -, followed by Lisbon - approx. €299,873 (+12.4% YoY; +32.6% vs. 2020) - and Porto - approx. €229,921 (+13.5% YoY; +40.2% vs. 2020).

The rental market is experiencing a momentum, exhibiting average monthly rents of dwellings in Lisbon and Porto of €13.7/sqm and €10.4/sqm in 2022, respectively. High interest rates are likely to inhibit borrowing and might postpone buyers' decision to purchase and increase demand for the rental market, which combined with the shortage of supply should continue to trigger rental price increases and contribute to the increasingly important role of build-to-rent projects in the national panorama.

The conflict in Ukraine, initiated in February 2022, led to a global energy crisis and contributed to the rise of inflation, affecting Portugal with a rate of 7.8% in the same year. To address the issue of inflation, the European Central Bank (ECB) raised interest rates, resulting in higher borrowing costs and a slowdown in the residential property market in the last quarter of the year - there was a deceleration in both the number of transactions and mortgage amounts.





With respect to the Romanian residential market, we observed a fluctuating trend throughout the year. The first quarter initially started in a market inertia trend which was then impacted by the geopolitical crisis in a rapid manner. The geopolitical crisis, paired with the increased inflation, increased financing costs, and the energy crisis, led to a decrease in the demand for residential properties.

On the other hand, the residential rental segment encountered a slight increase in demand of approximately 6% in the last year, while the properties available for rent in the major cities of Romania experienced a continuous decrease during this time and a consequent increase in rents.

Based on the available data, the average price for dwellings increased by close to 12% in 2022 compared to 2021.





The real estate market in the Republic of Serbia ("RoS") continues to grow for the fourth year in a row, both in terms of number of completed transactions as well as total value. Unlike the real estate market in most European countries which, under the influence of interest rates and inflation, record a significant slowdown in growth or even a drop in prices and volume of transactions, the level of real estate prices in the RoS recorded a strong growth in the past year. The number of executed transactions in 2022 at the country's level continued to increase, however the increase rate is at lower level comparing to previous years. The total number of sales in 2022 is 140,561, i.e., this number is increased by only 1.8% compared to 2021 - sales of dwellings is increased by 3% compared transaction. to 2021, garage spaces by 23%, business spaces by 2%, while the number of houses sold remained at the same level as the previous year. The total value of the real estate market reached 7.5 billion euros in 2022, which is 22% more compared to 2021.

The average price of older dwellings has increased by 16 % while the price of new dwellings is up to 20% higher than in 2021. Therefore, it seems that expectations and predictions stating that the market should enter a slight stagnation at late 2022/ beginning of 2023, while the turnover should decrease and the prices should stabilize, did not come true. In terms of housing loans within 2022, the use of credit funds for financing the purchase of real estate recorded a slight decrease (by 2% less) compared to the previous period i.e. 11% of all real estate in the RoS was financed from loans, compared to 13% in 2021, which is mainly caused by increase of interest rates on housing loans and tightening of the credit policies.

The impact of increased demand caused by Ukrainian conflict and growing interest of Ukrainian and Russian citizens and companies which are moving their businesses to Serbia is still notable. The arrival of foreigners, primarily Ukrainian and Russian citizens, as well as their companies has contributed to decrease in availability of rentable spaces in Belgrade. Experts say that office space sector's demand has doubled, as well as that there is a positive trend on the supply side as well. Reportedly, there are about 1,100.000 m2 of office space in Belgrade and about 200,000 m2 in various stages of construction.

Regarding changes due to ongoing energy crisis, increased emphasis is on energy conservation and efficiency which is supported by implementation of amendments of laws governing construction and renewable energy sources. On practical side, houseowners are encouraged to become prosumers and adopt renewable energy solutions at the residential level, such as solar panels. On administrative side, evidence on energy certificate for real properties should be acquired after obtaining construction permit and provided within the process of execution of property purchase agreement. i.e., energy certificate is now obtained in earlier phase and represent a vital part of every real estate transaction.

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Slovakia



Asking price development: residential property asking prices increased by 8.5% in Q1 2022 compared to the Q4 2021 and increased by 6.44% in Q2 2022 compared to the Q1 2022. After years of growth, the trend started to reverse in the middle of the year 2022. The growth of offer prices of residential properties slowed down to 1.6% in Q3 2022 and for the first time fell by 1.94% in Q4 2022 compared to the previous quarters. Expectations regarding the price turnaround were confirmed, with asking prices peaking in summer 2022.

New dwellings: It is important to note, that price development was slightly different for the new dwellings. Offer prices of new dwellings were constantly increasing throughout the whole year 2022, however, in the second half of 2022 developers started to offer various discounts to potential buyers, e.g. free parking lot, discount of several thousand euros for first 10 buyers, bonuses for furnishing or other advantages to attract the buyers. This eventually can be considered as some kind of price correction, although nominally price increase has not slowed down.

Completion of new dwellings: Compared to the end of 2021, more dwellings have been completed, but the number of housing projects started decreased (as has the number of building permits issued). Mortgages: The most significant factor causing stabilization of the prices was increase of interest rates. Higher interest rates and resulting higher mortgage instalments reduced the appetite and ability of buyers to take out new mortgages. The volume of mortgages provided fell significantly at the end of 2022 and beginning of 2023. Interest rates on new mortgages climbed towards 3.5% at the end of the year 2022. The NBS forecasts growth up to 5% in 2024-2025. It is worth noting that Slovak banks are among the few in Europe that have not yet tightened lending standards for mortgages. By the end of 2025, up to half of housing loans (mortgages) are facing the end of interest rate fixation.

Unfortunately, overall price stabilization at the second half of the year 2022 did not translated into higher affordability of housing. Combination of lower asking price and wage growth were not able to offset the effect of higher interest rates (and higher mortgage instalments).

Rental market overview: Challenging situation in the real estate market currently favors rental housing market, even though some of the pressures in rental housing have eased (specifically refugee crisis). With interest rates rising, paying rent may become more affordable solution compared to new mortgage. Anticipated drivers for the rental prices include factors such as volatile future energy costs, circumstances surrounding Ukrainian refugees, and diminished affordability in property ownershin

State-supported housing: In 2022, parliament approved initial legislation regarding the future construction of state-supported rental housing. State supported rental housing should provide housing at more favourable terms compared to market rental prices. The intention is to address the current problem of housing affordability for broad groups of the population. The government will determine the maximum rent, which will not include the cost of operation, maintenance repairs of the apartment building or the cost of energy in the apartment. The investors should take care of the construction or purchase of rental housing from developers, state will consequently support the lower cost rental price. The legislation also allows employers to contribute a certain amount to the employee's housing (these contributions should be tax exempt). These apartments should not be possible to sell.

Energy for households: Throughout 2022, household energy bills were capped at the same level as in previous several years. In Slovak Republic, the end price of gas and electricity for households are calculated by regulatory body for a specific regulatory period (usually 4 years). As for year 2023: the government of Slovakia has decided to cap the increase in energy prices for households in 2023 with a €6bn package, keeping residential prices for electricity unchanged and raising prices for natural gas and heat by 15%.





The overall sentiment on the residential market in Slovenia in 2022 remained positive despite the ongoing economic uncertainty caused by the COVID-19 pandemic. The demand for residential properties continued to rise due to low-interest rates, which was at the end of 2022 halted by interest rakes hikes, where transaction volume decreased. There was an increase in construction projects at the begging of 2022, which rapidly decreased in the second half of 2022, due to the macroeconomic and credit conditions. In addition, bank lending sentiment for loans decreased, and loan issuance process extended, due to uncertainty. Compared to 2021, there was a slight increase in demand for properties in suburban and rural areas.

The asking prices for residential dwellings in Slovenia were generally higher than transaction prices throughout 2022. In the second half of 2022 the asking price remained the same, however the demand for residential dwellings decreased significantly, where the gap between ask and transaction price widened.

market. However, the forecast for 2023 shows lower figures due to the pressure created by the increasing interest rates.

In addition, there is a positive forecast regarding both population and household creation, mainly based on the arrival of foreigners,

In Slovenia shortage of affordable rental properties persisted throughout 2022, particularly in urban areas where demand was highest. In 2022 several real estate projects were initiated or completed, mainly in the residential building segment. In addition, an increase of interest of project in non-residential properties increased, mainly in the segment of logistic centres and office spaces - with several project initiated or completed in 2022.

With the transaction prices data of past months of 2023 and 2022, we noticed a slowdown in residential real estate price growth. In the second half of 2023 the price level is expected to remain the same or even decrease, primarily due to interest rates. The ongoing energy crisis did not have a significant impact on the real estate market, but mainly on the cost of living (heating costs, communal services). Although the energy crisis did not have a significant impact on the real estate prices change, there was a change in demand for more energy-efficient properties, with many individuals and companies going into the direction of solar panels and heat pumps installation.



Spain



Spain is undergone an upward RE cycle since 2013 which has resisted both the Covid-19 and the war in Ukraine. In fact, peak housing transactions were reached in 2022 with 718k units sold (+6.5% in comparison with 2021). Meanwhile, new housing development remains at a historically low level, accounting for less than 10% of the total sales. These new developments are mainly concentrated in great urban aeras, where there is a huge ready to build land scarcity, fact which is leading homebuilders to invest in lands pending of urban management.

Current Spanish residential market is characterized for a huge supply and demand imbalance which is pushing new housing prices up sharply and hamper access of the middle class to the housing market. However, the forecast for 2023 shows lower figures due to the pressure created by the increasing interest rates.

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. At the same time as ESG is becoming a commodity for the main investors.

United Kingdom



The Nationwide House Price Index showed that December 2022 was the fourth consecutive monthly decline in the annual house price growth, with growth slowing down to 2.80% year-on-year. They state that all regions recorded a slowdown in the annual house price growth in Q4 2022. Prices declined 0.1% month-on-month, after taking account of seasonal adjustments - the worst run since 2008. The price of a typical UK home is now at £262,068, up £7,246 over the previous year.

Nationwide note that whilst the financial market conditions have settled, mortgage rates are taking longer to stabilise. Having regard to the current economic backdrop and the increased mortgage rates, Nationwide expect potential buyers to adopt a ,wait and see' approach to see how the mortgage rates evolve in 2023. They state that the longer-term interest rates underpinning the mortgage rates have returned to pre-mini-budget levels, and if sustained these should feed through to the mortgage rates, improving the affordability position for prospective buyers. However, the primary factor that would help achieve a ,soft' landing for house prices is if forced selling could be avoided. Nationwide remain optimistic as household balance sheets remain in good shape, with 85% of mortgage balances on fixed interest rates - providing protection against increased cost of borrowing, at least for a period in time. They state that the housing market remained buoyant in the first three quarters of 2022, despite a turbulent economic outlook, weak consumer confidence, falling real incomes and almost tripling of mortgage rates, which provides some reassurance that there will be a pick up in the activity in 2023, although likely to remain subdued until broader economic outlook improves.

The December 2022 RICS UK Residential Survey results showed a further weakening in the sales market activity as at end 2022. At the national level, new buyer enquiries plummeted, signalling a weakness in the new buyer demand across the country. This was exacerbated by a fall in the volume of fresh listings coming onto the sales market. Going forward, they expect national house prices to maintain a downward trajectory. Having regard to the heightened energy costs, the December 2022 survey included an additional set of questions studying the impact of energy efficiency ratings on sales market behaviour. They found that 40% of the respondents agreed that there is greater interest from prospective buyers for homes that are more energy efficient.

On the lettings front, tenant demand increased in December 2022, albeit it was the lowest percentage increase since February 2021, suggesting that the pace of demand growth is softening across the rental market. With new landlord instructions continuing on the downward trend, they expect an upward pressure on rents.



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