Real Estate
Sector Report

2nd Semester 2022

The upward trend in house prices will tend to moderate

How long can the real estate sector's upward trend last?

Where are house prices growing the most in Spain?

The strength of foreign demand for housing in Spain and its long-term outlook

Assessing the risk of a real estate bubble in developed markets

CaixaBank Research

SECTOR REPORT

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CaixaBank Research

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Summary 2022

«Have nothing in your house that you do not know to be useful or believe to be beautiful».
WILLIAM MORRIS

Real Estate

CAIXABANK RESEARCH FORECASTS FOR SPAIN'S REAL ESTATE SECTOR

	2021	2022	2023
House prices (% change)	2.1	6.0	2.2
Housing sales (thousands)	566	550	491
New building permits (thousands)	108	100	110

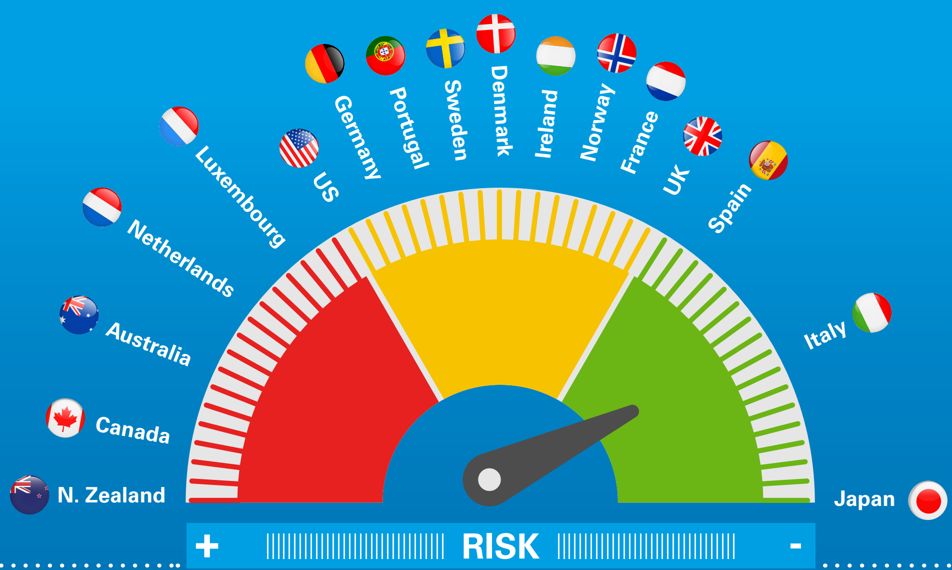
THE UPWARD TREND IN DEMAND AND PRICES BECAME STRONGER IN S1 2022

- Sales exceed 600,000 homes for the first time since 2008.
- House prices are growing more rapidly.
- Construction costs are rising.

BUT GROWTH IN THE MARKET IS EXPECTED TO SLOW DOWN

- Due to loss of momentum from temporary factors related to the pandemic.
- Due to rising interest rates.

Interest rate hikes are increasing the risk in some overheated real estate markets, although the absence of imbalances means that Spain is unlikely to see any abrupt corrections



Purchases by foreigners are boosting the real estate market in tourist areas

PRICES ARE RISING MORE SHARPLY IN THOSE PROVINCES WITH A LARGER SHARE OF PURCHASES BY FOREIGNERS

Year-on-year change observed in Q1 2022

10.2% TOURIST MUNICIPALITIES

6.3% NON-TOURIST MUNICIPALITIES

FOREIGN DEMAND FOR SPANISH HOUSING LOOKS PROMISING

- Due to the ageing of Europe's population.
- Because Spain is the most competitive tourist destination.

Executive summary

The upward trend in house prices will tend to moderate

In the first half of 2022, the Spanish economy remained on a positive course despite the adverse environment, largely thanks to the boost provided by tourism. This favourable trend will continue over the summer months as we anticipate a tourist season that could already be very similar to the one before the pandemic. Another positive note are the latest real estate market data, indicating that the upward trend in housing demand and prices became stronger in the early stages of 2022: more than 600,000 homes have been sold in the past 12 months, a figure not equalled since 2008, while house prices accelerated from 6.4% year-on-year growth in Q4 2021 to 8.5% in Q1 2022, according to data from Spain's National Statistics Institute.

We believe this growth in prices may continue in the short term, especially due to rising construction costs, exacerbated by the war in Ukraine and bottlenecks in global value chains. But the outlook is for a slowdown in the real estate market over the medium term. The spike in inflation is proving to be bigger and more persistent than predicted, leading to an earlier and faster tightening of monetary policy than expected. The ECB ended its net purchases of financial assets on the 1st of July and will soon embark on a new cycle of interest rate hikes. Financial markets put benchmark rates in the 0.75%-1.25% range by the end of this year, with hikes at all ECB meetings.

Given this context of tighter financial conditions and the decline of the temporary factors that had been driving demand, a certain cooling of the real estate market is likely with a view to 2023. Specifically, we expect the number of sales to fall from the 550,000 forecast in 2022 to 490,000 in 2023, and house prices to slow from the 6.6% growth forecast in 2022 to 2.2% in 2023. Such price moderation will limit the deterioration in affordability caused by higher interest rates. The absence of imbalances in Spain's housing market will also reduce the possibility of a hard landing.

However, the situation is quite different in other advanced economies whose house prices have risen steadily since before the pandemic, resulting in a certain risk of real estate bubbles forming. This Sector Report reviews the situation of the real estate markets in these countries, as well as the macroprudential measures implemented in each of them to address the situation.

It also examines the house purchases made by foreigners in Spain, a demand that was severely affected by the pandemic but which has since recovered surprisingly quickly. In fact, the strength of foreign demand is a factor that is contributing to the unequal growth observed in house prices across different regions, as prices are rising more sharply in those provinces with a relatively higher proportion of purchases by foreigners. Nevertheless, CaixaBank Research's municipal house price forecast models, based on big data and machine learning techniques, point to a certain slowdown in house prices over the coming quarters, with this reduction being somewhat more marked in tourist areas.

The last article looks at the other Mediterranean countries in which the main nationalities that buy homes in Spain also tend to acquire a residence, noting that the British and Swedes have a particular fondness for Spain whereas Croatia and Turkey also benefit from a relatively large number of German nationals. We also analyse the long-term prospects and conclude that, if we take into account the demographic trends in Europe and the high competitiveness of Spain's tourism industry, the future for foreign housing demand in Spain looks promising.

Situation and outlook

How long can the real estate sector's upward trend last?

Despite the worsening economic situation there is a marked upward trend in the real estate sector with very strong demand and a notable rise in prices. For its part, the supply of new housing is being affected by the war in Ukraine as this has pushed up construction costs even further and aggravated the material supply problems due to bottlenecks in global value chains. Consequently, the misalignment between the demand and supply of housing has intensified, with the result that house prices are likely to continue rising. However, there are several counteracting factors that should help to curb the growth in demand and prices over the medium term, including the impact of inflation on real household income and the ECB's interest rate hikes.

A less favourable economic situation

The war in Ukraine has brought about a change of scenario for the Spanish economy. When the conflict broke out, CaixaBank Research revised downwards its forecast for GDP growth in 2022, from 5.5% to 4.2%, while its inflation forecast has gradually been revised upwards, to 7.5% on average for the year. The Spanish economy has mainly been affected by these factors through higher energy and raw material costs, putting pressure on business margins and eroding the purchasing power of households.

Nevertheless, in spite of the worsening economic outlook Spain's economy performed reasonably well in the first half of 2022, thanks mainly to the revival in tourism following the end of almost all restrictions associated with the pandemic, reflected in the good figures posted by the labour market. However, the inflation shock is becoming stronger and more persistent, resulting in an earlier and faster tightening of monetary policy than previously expected. This context has weakened the outlook for the end of this year and 2023, leading to a downward revision of the GDP growth forecast for 2023 (2.4%) and an upward revision of the inflation forecast (2.5%).

There is an upward trend in the real estate sector despite the worsening economic scenario but we expect this trend to moderate as interest rates rise

For the time being, the impact of this change in scenario on the real estate sector has been very limited, mainly affecting the supply of new housing (due to higher construction costs and greater uncertainty). On the other hand, growth in demand and prices has accentuated its upward trend that began in 2021, although we expect these figures will moderate over the coming quarters due to the exhaustion of demand and as a consequence of the normalisation of monetary policy being carried out by the ECB to curb rising inflation.

Demand for housing remains strong but could be peaking

Sales grew strongly again in April (12% year-on-year), although this is the first sign of demand dropping off, given that growth in sales had been closer to 30% year-on-year in previous months. The cumulative figure for the last 12 months reached 606,000 homes, a figure not equalled since August 2008. Since the beginning of 2021, a large number of factors have boosted demand for housing: the change in preferences following the pandemic (working from home, more spacious homes located further from urban centres, etc.), the «forced» savings during lockdown that have partly been invested in real estate, good employment figures, very favourable financing conditions, the rapid recovery in foreign demand, etc.

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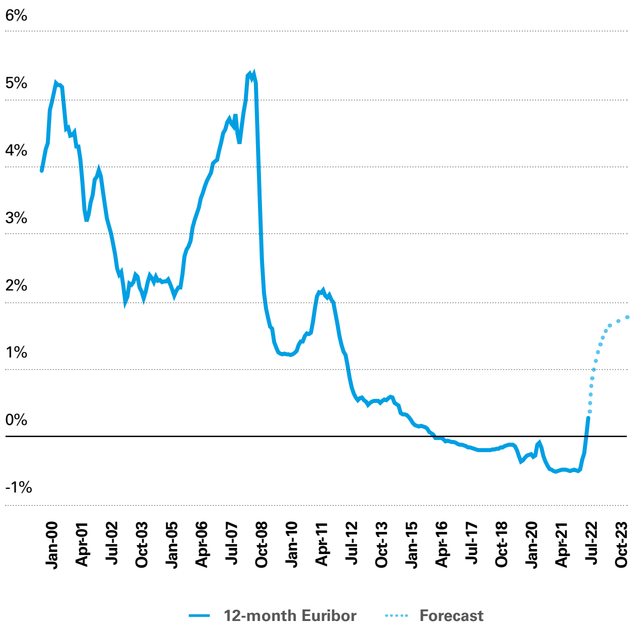
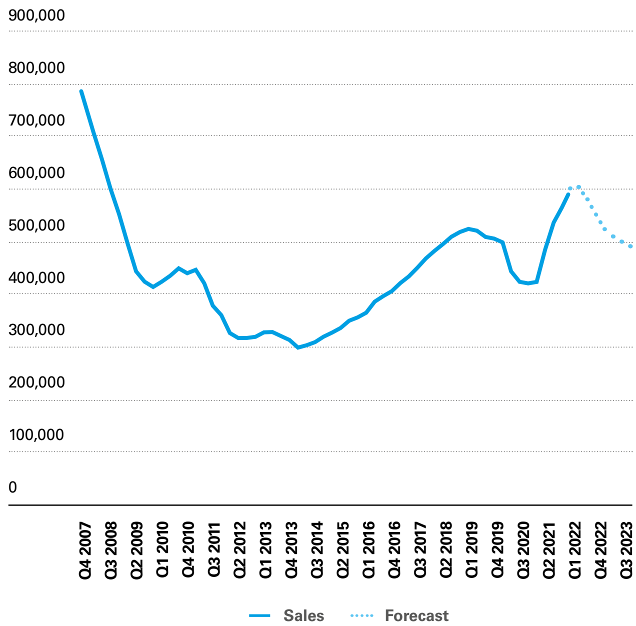
However, looking ahead to the coming quarters, we expect house sales to moderate to 550,000 in 2022 as a whole and 490,000 in 2023 (down from 566,000 in 2021). On the one hand, some of the factors that have recently supported demand are of a temporary nature and will tend to dissipate. On the other, several contrary factors have appeared on the scene which, although their impact may be delayed, should help to curb the growth in demand over the coming months, especially the impact of inflation on real household income and the ECB's interest rate hikes.

Rising interest rates will help to curb housing demand

12-month Euribor interest rate



Number of sales (cumulative over 12 months)



Source: CaixaBank Research, based on data from Bloomberg and the National Statistics Institute.

In fact, growing inflationary tensions in the euro area have triggered a major shift in monetary policy.[1] In mid-April, the 12-month Euribor was positive for the first time in six years, posting a significant increase from last year's record low levels (around –0.50% on average in 2021). At CaixaBank Research, we predict this upward trend will continue over the coming months, although we expect the increases to be somewhat more gradual than those currently discounted by the financial markets and, moreover, we should remember that the starting point for interest rates is very low. Specifically, we forecast that the 12-month Euribor could reach 1.5% by the end of this year and rise to 1.75% by the end of 2023. Given this context of rising interest rates, investment in real estate assets could be diverted in the face of higher yields from fixed-income financial assets, such as Treasury bonds.

1 The ECB ended its net asset purchases (APP) on the 1st of July and is expected to begin a new cycle of interest rate hikes in July.

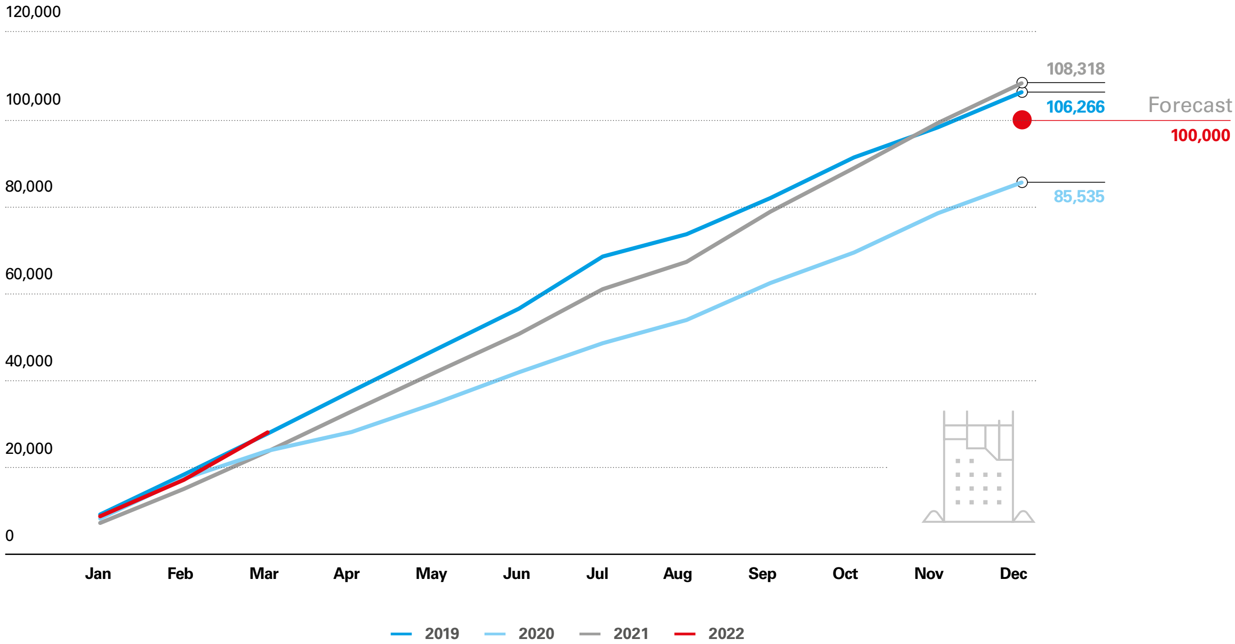
Foreign demand, on the other hand, may also be affected by the economic slowdown in the countries of nationals that are most likely to buy property in Spain (the United Kingdom, Germany and France). However, the most recent data are extraordinarily positive (foreigners bought around 21,600 homes in Spain in Q1 2022, a total that far exceeds the pre-pandemic figures). In addition, indicators for purchase intent, especially in the Nordic countries, continue to point to high numbers of foreign purchases this year. For more details, see the article «The strength of foreign demand for housing in Spain and its long-term outlook» in this *Sector Report*.

The supply of new housing is being affected by rising construction costs

In 2021, the number of new building permits (108,000) returned to the levels of 2019, after the slump caused by the pandemic in 2020 (86,000). Data for the first three months of 2022 suggest this recovery in supply is continuing, with 28,000 building permits being granted, 18.4% more than in Q1 2021 but only 1% above the figure for Q1 2019.

New building permits

Number of dwellings (cumulative over the year)



Source: CaixaBank Research, based on data from the Ministry of Transport, Mobility and Urban Agenda.

> **Rising prices in global markets for energy and industrial metals are limiting growth in the supply of new housing**

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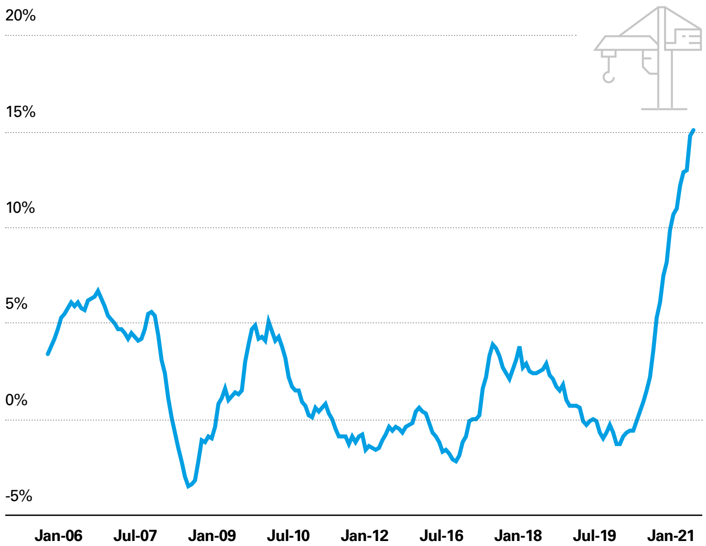
However, it should be noted that these figures do not yet reflect the impact caused by the Ukrainian conflict on energy and construction material prices, which had already been on an upward trend since the second half of 2021 and have merely accelerated (see the chart and table below). A more uncertain economic outlook, difficulties in finding skilled labour and the trend in prices are also negatively affecting the start of new real estate developments. As a result, we expect new building permits to eventually decline moderately in 2022 as a whole (100,000 homes) but recover slightly in 2023 (110,000), as the pressure on construction costs dissipates. In addition to new construction, the renovation of existing housing should gain momentum over the course of this year, as projects linked to the European NGEU reconstruction funds are implemented.

Construction costs are going up sharply

Year-on-year change (%)



The 10 most expensive construction materials in Q1 2022

	Change 2020	Change 2021	Change 2021 (vs. 2019)	Change Q1 2022
Steel	-8.6	39.1	27.1	50.8
Lime	-0.3	6.8	6.5	31.6
Plaster	-0.3	6.8	6.5	31.6
Flat glass	-0.6	10.7	10.0	28.8
Synthetics	-2.4	16.2	13.5	25.9
Plastic tubes	-2.4	16.2	13.5	25.9
Copper pipes	1.4	43.8	45.7	24.0
Wood	0.1	5.8	6.0	17.6
Wood carpentry	0.1	5.8	6.0	17.6
Detectors, alarms	4.1	-8.3	-4.5	15.3
Total	-0.3	8.6	8.2	15.5

Note: Construction costs of residential buildings.
Source: CaixaBank Research, based on data from the Ministry of Transport, Mobility and Urban Agenda.

House prices are rising in a context of buoyant demand, higher construction costs and slow-growing supply

The upward trend in house prices, which started in 2021, accelerated in Q1 2022 according to the three main price indicators. For example, according to the National Statistics Institute's index, based on transaction price, house prices rose from 6.4% year-on-year in Q4 to 8.5% in Q1. New builds saw the biggest growth (10.1% year-on-year) but second-hand housing also advanced significantly (8.2% year-on-year).[2] In the short term, the dynamism of demand relative to supply and rising construction costs will continue to push up prices, especially the price of new builds.

2 In fact, this trend has already been observed since the pandemic: the price of new builds grew much more steadily (18.4%) than second-hand housing (9.5%) in cumulative terms between Q4 2019 and Q1 2022.

The dynamism of demand compared with supply and increasing construction costs suggest that house prices will continue to rise to some extent, although higher interest rates will tend to curb this upward pressure

Nevertheless, as demand drops off, construction costs stop rising and interest rates increase, we also expect the growth in house prices to slow to some extent,[3] specifically to around 2.0% in 2023 after advancing by more than 6.0% in 2022.

Looking at the different autonomous regions, this upward trend in prices is widespread among the country's largest residential markets and in the most tourist-oriented areas. In particular, in Q1 2022 and according to data from the National Statistics Institute, the highest growth rates were recorded in the Balearic Islands (10.5%), the Community of Madrid (9.5%) and the Community of Valencia (8.2%), the most notable case being that of the Balearic Islands as, thanks to the boost provided by foreign demand, it has set a new record for the available series for the fourth consecutive quarter. In contrast, the most modest price increases were recorded in Asturias and Cantabria (both up by 1.6% year-on-year), regions that had already looked less dynamic in terms of their house prices before the pandemic. We take a closer look at this heterogeneous trend in house prices by zone in the next article in this *Sector Report*: «Where are house prices growing the most in Spain?».

3 According to our semi-structural model for the Spanish economy, the sensitivity of house prices to increases in the interest rate is –0.51; i. e. an increase of 100 bp in the interest rate implies a reduction of 0.51 bp in the rate of change of house prices.

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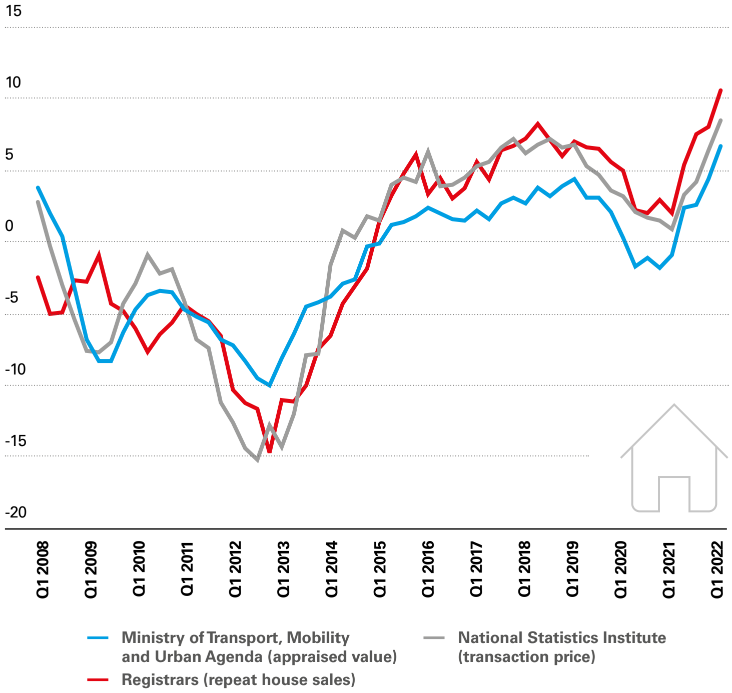
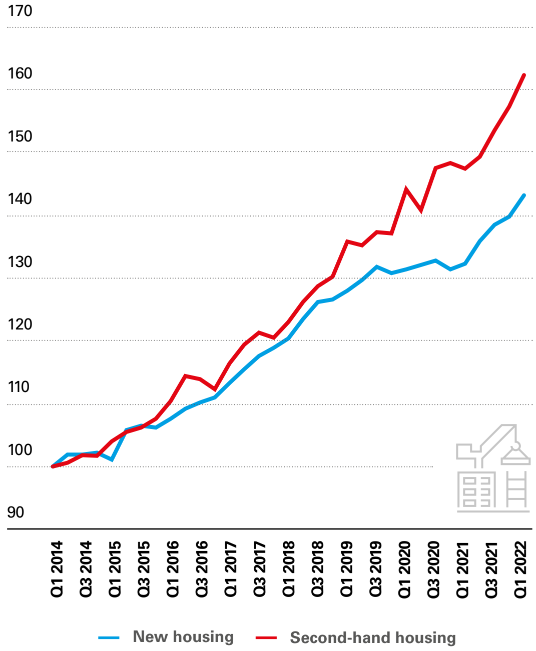
House prices are growing more rapidly
Year-on-year change (%)



The price for new housing is growing more steeply
index (100 = Q1 2014)



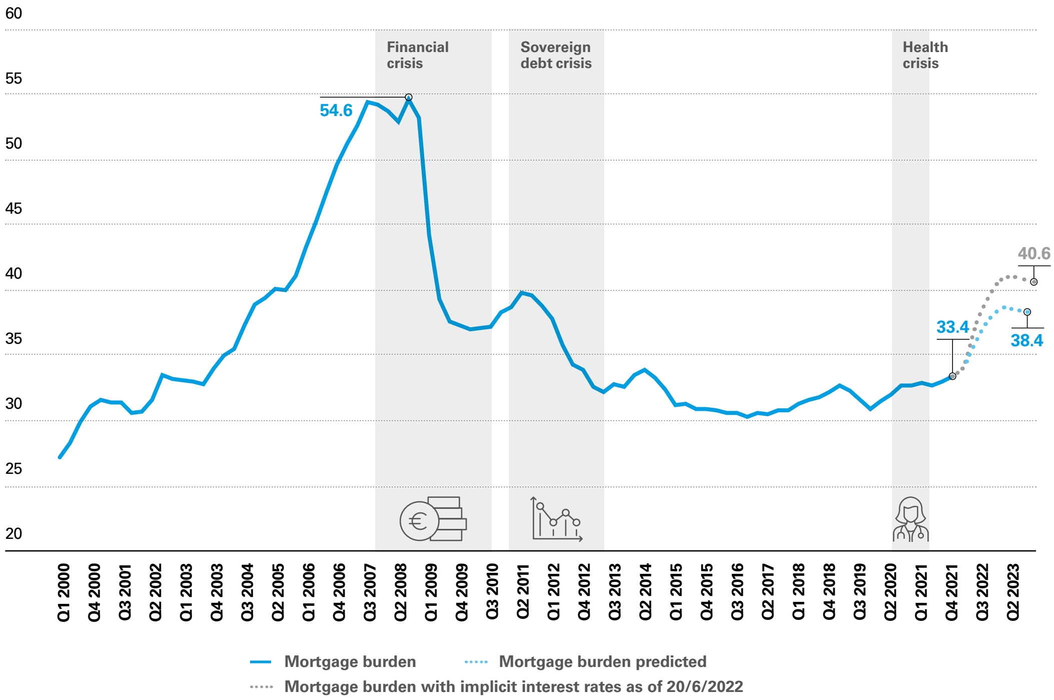
Source: CaixaBank Research, based on data from the Ministry ofTransport, Mobility and Urban Agenda, National Statistics Institute and College of Registrars.

Some people believe that the house price increases recorded recently are very high, bringing the risk of a real estate bubble in Spain once again into the spotlight. The article «Assessing the risk of a real estate bubble in developed markets» in this *Sector Report*, analyses this issue in detail and, although we conclude there is a risk of a real estate bubble in several developed economies, this does not appear to be the case for Spanish properties. Consequently, our scenario envisages a certain slowdown in the rate of house price growth but we believe there is little risk of an abrupt correction in the housing market.

In any case, more moderate price growth will keep in check the deterioration of the mortgage burden caused by rising interest rates. According to our estimates, the rise in mortgage interest rates will increase the stress ratio by about 5 pp in 2 years (from 33.4% of household income in Q4 2021 (latest available data) to 38.4% in Q4 2023). This is a considerable increase, although the ratio is still a far cry from the levels reached during the housing crisis. Nevertheless, financial markets are currently anticipating somewhat more aggressive action by the ECB. In particular, the implicit 12-month Euribor interest rate as of 20 June 2022 is 2.1% by the end of this year and 2.5% by the end of 2023. Consequently, if we use the implicit market interest rates as of mid-June, the increase in the mortgage burden ratio is much steeper, up to 40.6% by the end of 2023.

Theoretical mortgage burden

(% of gross disposable income of the median household)



Note: Amount of the median household's mortgage repayments in the first year after buying a typical dwelling financed by a standard loan for 80% of the property's value, as a percentage of the household's annual disposable income.
Source: CaixaBank Research, based on data from the Bank of Spain.

Finally, it is also worth commenting briefly on the rental market. The rental price indicators available on real estate portals also show an upward trend, although this is generally somewhat more moderate than the growth observed in sale prices. According to Idealista, rents increased by 3.1% year-on-year in May 2022 although they are still 3.9% below their pre-pandemic level. However, there are substantial geographical differences, with very significant increases of 17.1% in Barcelona city and 17.3% in the Balearic Islands, precisely in those areas where rents are already higher and where sale prices are also rising steeply, a situation that is exacerbating the problems of housing affordability.

Forecast models

Where are house prices growing the most in Spain?

House prices have risen sharply since the middle of last year but the trend is very uneven across different municipalities and regions. One factor contributing to this geographical heterogeneity is the recovery in foreign demand: house prices in the most tourist-oriented municipalities are growing more vigorously than in non-tourist areas. CaixaBank Research's house price forecast models, based on big data and machine learning techniques, point to a moderate slowdown in house prices over the coming quarters.

House prices are growing across the board but at different speeds

The general trend in house prices is upward throughout Spain but the rate of this growth is very uneven.[4] In Q1 2022, almost all provinces recorded a year-on-year rise in house prices (only Soria, Zamora and Álava saw a slight decline), while more than half the provinces recorded increases in excess of 5%. Tarragona, with a year-on-year increase of 11.1%, is the province where prices rose the most. As a result, house prices are already above their pre-pandemic levels (Q4 2019) in 80% of the provinces, and the remaining 20% are very close to achieving this.

The vast majority of municipalities with more than 25,000 inhabitants also posted widespread growth (only 10% saw a moderate decline in Q1 2022) and nearly 20% of towns recorded gains of more than 10%. This growth at different speeds is increasing the spread of house prices: the gap between the most expensive province (or municipality) and the cheapest continues to widen.[5]

> **The price per square metre in San Sebastian (the most expensive municipality with over 25,000 inhabitants) is 7.5 times higher than in Puertollano (the cheapest). This is the biggest gap observed since 2005, the first year such data became available**

4 In this article we use the house prices published by the Ministry of Transport, Mobility and Urban Agenda (the appraised value of free housing), as these are published broken down by province and for municipalities with over 25,000 inhabitants.

5 Other measures of this spread, such as the standard deviation for house prices, are also at their highest levels since the start of the data series (Q1 2005), both at a provincial and municipal level.

CaixaBank Research's house price forecast models, which use large amounts of information (big data) and are based on machine learning techniques,[6] point to these growth rates easing over the coming year. Specifically, according to these models the average price in municipalities with over 25,000 inhabitants will increase by 5.8% year-on-year in Q1 2023 (compared with 8.1% in Q1 2022).[7] Housing is expected to appreciate by more than 10% in 16% of the municipalities (compared with 20% today). And it is also worth noting that the lower portion of the spread has grown: the percentage of municipalities for which a decline in house prices is expected one year from now is 14%, compared with the current figure of 10% (see the last column of the chart below).

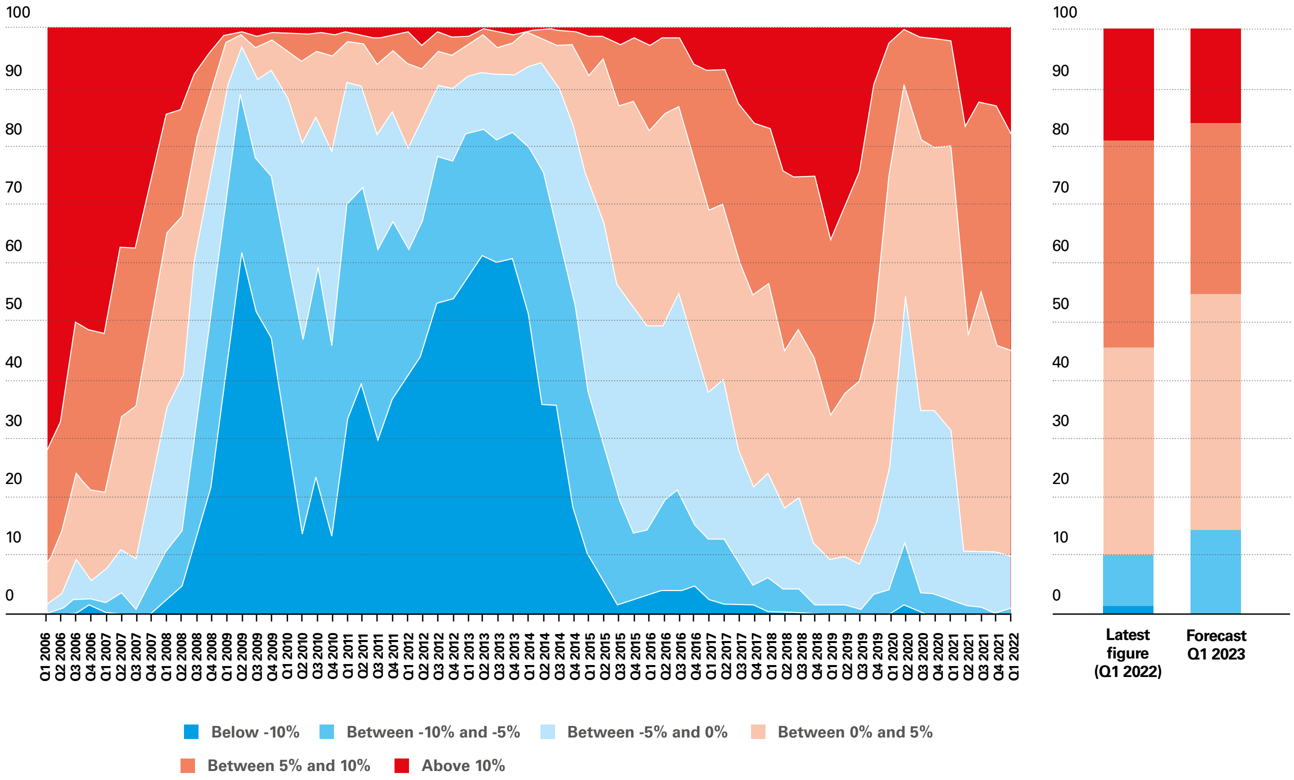
Our forecasts point to a generalised moderation in house price growth over the coming year

6 These models use GDP forecasts by autonomous region as the main macroeconomic factor and a large number of socio-demographic and real estate sector indicators (based on internal CaixaBank data and external data from reliable sources) to capture the different trends in the real estate market for each location.

7 The average house price in each municipality, weighted by its population (2021).

Distribution of Spanish municipalities by the year-on-year change in house prices

Percentage of municipalities



Note: In each quarter, municipalities are classified according to whether the year-on-year change in their house price is less than 10%, between –10% and –5%, etc.
Source: CaixaBank Research, based on data from the Ministry of Transport, Mobility and Urban Agenda.

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Foreign purchases: a decisive factor

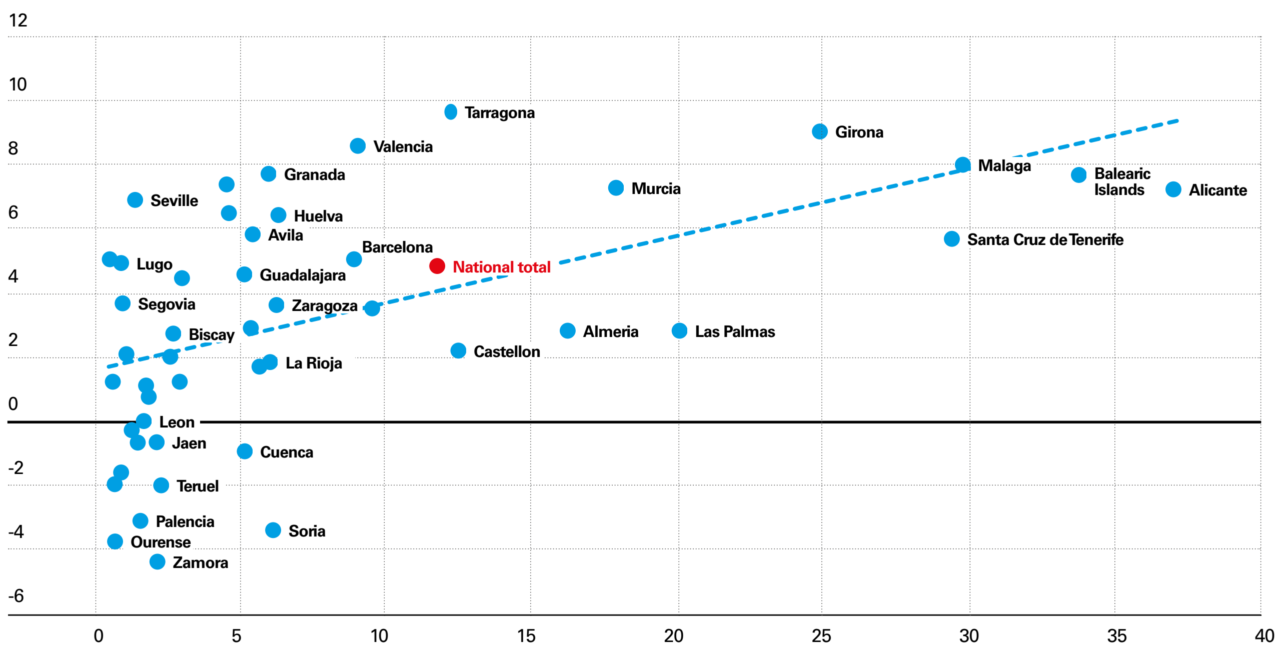
The remarkable appreciation in housing that has occurred over the past year has been supported by underlying factors, common throughout Spain, which have driven the increase in housing demand at an aggregate level (including the end of pandemic-related restrictions, job creation, favourable financial conditions, etc.). At the same time, more local factors are pushing up the demand for housing in certain areas. This is particularly the case of foreign demand, responsible for a large part of the sharp rise in sales recorded on Spain's Mediterranean coast and islands since mid-2021.

The chart below shows that the price of housing is rising more steeply in those provinces where the relative share of purchases by foreigners is greater. Alicante, the province with the largest share of foreign purchases (37%), posted a cumulative increase in house prices of 7.4% between Q4 2019 and Q1 2022 (this fell by 2.2% in 2020 but has recovered strongly since then). The Balearic Islands, Malaga, Santa Cruz de Tenerife and Girona are other tourist provinces that have also seen a sharp rise in house prices.[8]

8 Note that this correlation between foreign demand and price growth does not imply causation. The article «The Impact of the COVID-19 Health Crisis on the Housing Market in Spain» (Bank of Spain, 2021) finds that, once population growth is taken into account, the effect of net purchases by non-resident foreigners on house prices is not statistically significant.

Growth in house prices is greater in those provinces with the largest share of foreign buyers

Cumulative change in house prices between Q4 2019 and Q1 2022 (%)



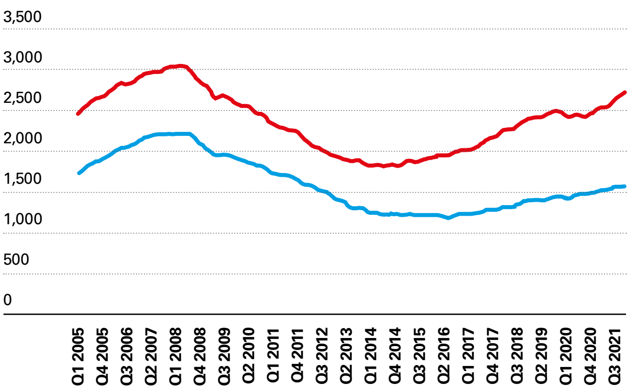
Note: cumulative sales data over four quarters.
Source: CaixaBank Research, based on data from the College of Registrars and the Ministry of Transport, Mobility and Urban Agenda.

A similar pattern can be seen at a municipal level. The chart below shows the trend in house prices in municipalities classified as tourist and non-tourist based on the percentage of expenditure via CaixaBank POS terminals using foreign cards.[9] In 2020, tourist municipalities saw a sharper correction in house prices (–2.1% year-on-year in Q4 2020 vs. 3.4% in non-tourist municipalities) but the rise since then has also been sharper (10.2% year-on-year in Q1 2022 vs. 6.3% in non-tourist municipalities). If we look at the cumulative house price increase between Q4 2019 and Q1 2022, their growth is very similar (9.8% vs. 9.5%).

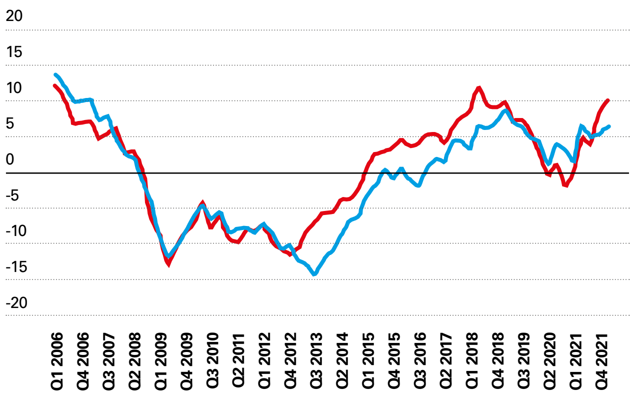
9 Official data on housing sales by municipality do not break down the data by origin of the buyer, so we have used internal CaixaBank data to classify the municipalities into tourist municipalities and the rest. Specifically, if expenditure using foreign cards via CaixaBank POS terminals accounted for more than 10% of the total in 2019, we have classified this as a tourist municipality.

House prices in tourist municipalities are picking up after falling during the pandemic

Euros per square metre



Year-on-year change (%)



Tourist municipalities — Non-tourist municipalities

Notes: A municipality is considered to be tourist (or non-tourist) when the share of payments via CaixaBank POS terminals using foreign cards was higher (or lower) than 10% of the total in 2019. The charts show the average house price weighted by the number of inhabitants in each municipality.
Source: CaixaBank Research, based on data from the Ministry of Transport, Mobility and Urban Agenda.

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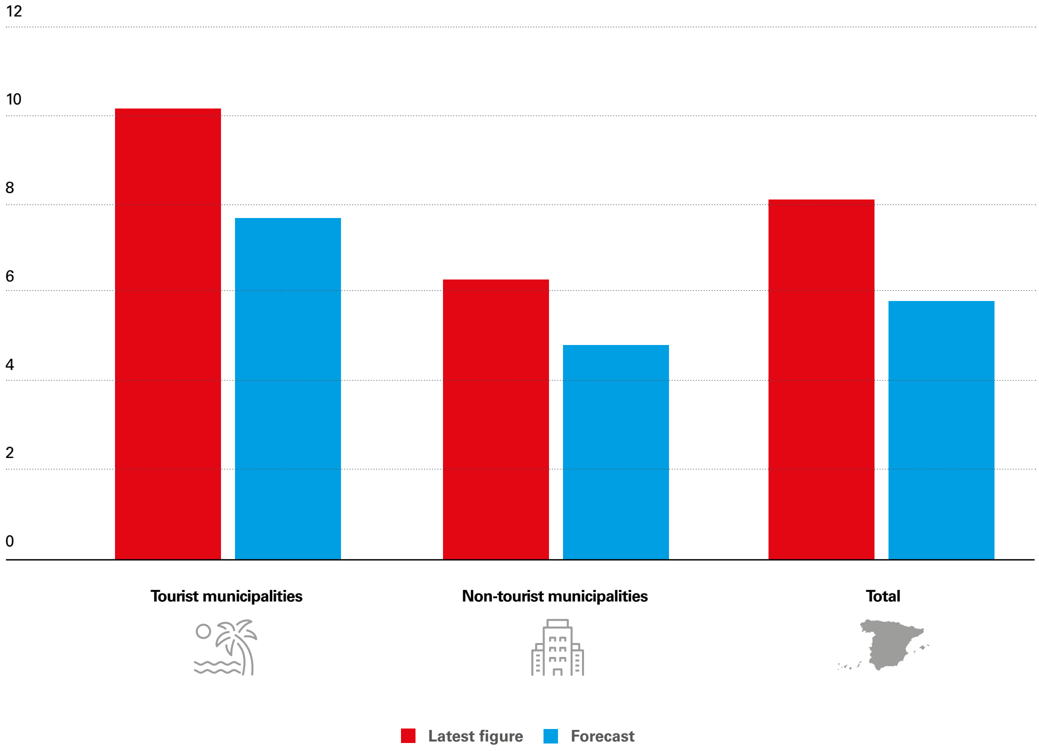
House prices are growing more strongly in tourist areas but a somewhat more marked slowdown is expected in these areas over the coming year

Looking ahead to the next few quarters, forecasts regarding the trend in house prices at a municipal level[10] show the growth rate easing, both in tourist and non-tourist municipalities. In particular, the model predicts an average house price increase of 4.8% in non-tourist municipalities and a slightly higher increase of 7.7% in tourist municipalities. These forecasts, although still positive, are more contained than the growth figures recorded in Q1 2022.

(10) **Obtained from the machine learning models of CaixaBank's real estate big data tool.**

Trend in house prices in tourist and non-tourist municipalities

Year-on-year change (%)



Note: The latest figure corresponds to Q1 2022 while the forecast corresponds to the year-on-year change expected in Q1 2023.
Source: CaixaBank Research, based on internal models and data from the Ministry of Transport, Mobility and Urban Agenda.

Foreign demand

The strength of foreign demand for housing in Spain and its long-term outlook

Foreign purchases in Spain have made a surprisingly strong recovery after the pandemic-induced restrictions were lifted. Indicators related to purchase intent suggest that this positive trend will continue in the short term, especially among the German and Nordic populations. The long-term outlook for foreign demand is also promising considering the demographic trends in Europe: the imminent retirement of a large generation of Europeans points to a significant increase in potential demand, especially between 2026 and 2030. Although Spain has considerable strong points to attract this demand, such as the high competitiveness of its tourism industry and the country's perceived safety, the importance of creating an attractive regulatory and fiscal environment, whilst also adopting appropriate housing policies to mitigate its impact on the local population, should not be underestimated.

The purchase of housing in Spain by foreigners now exceeds its pre-pandemic level

Foreigners bought more than 70,000 homes in Spain in the cumulative figure for one year up to Q1 2022. This figure exceeds the pre-pandemic peak by more than 5,000 homes, with the share of foreign purchases rising to 13.2% in Q1 2022 (see the chart below). It can therefore be assumed that foreign demand for housing is recovering strongly after the decline experienced in 2020.

> **Foreigners bought more than 70,000 homes in Spain in the cumulative figure for one year up to Q1 2022, over 5,000 homes more than the peak reached before the pandemic**

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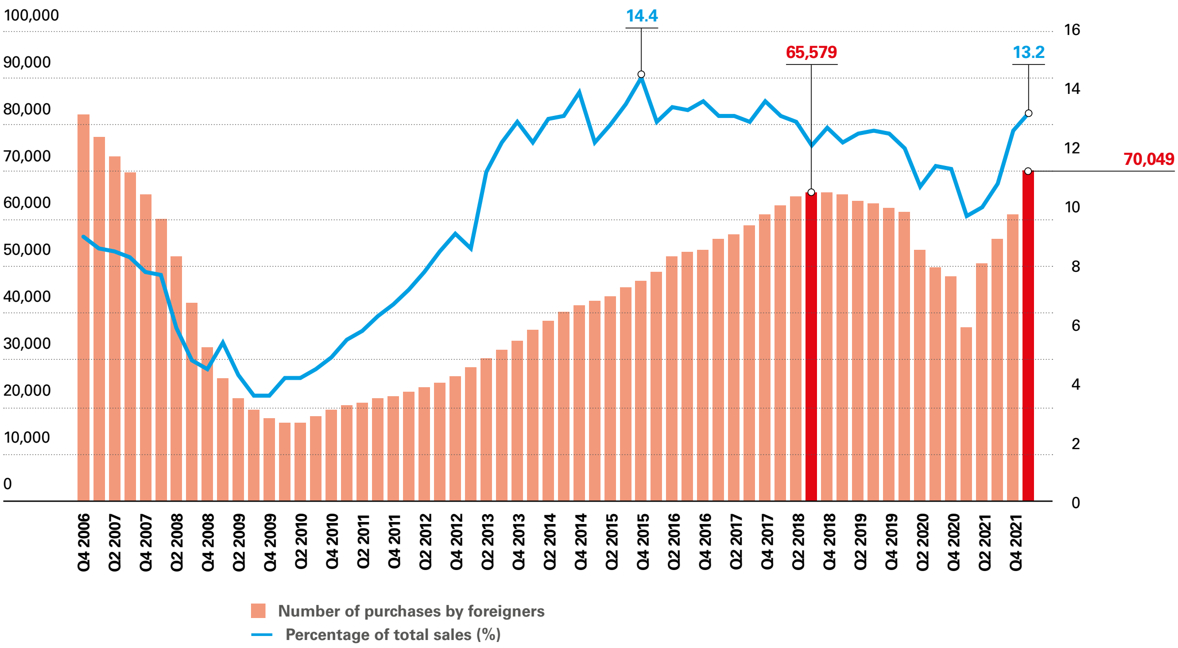
Housing purchases by foreigners in Spain are rising steeply

Number of sales and percentage of total sales (%)

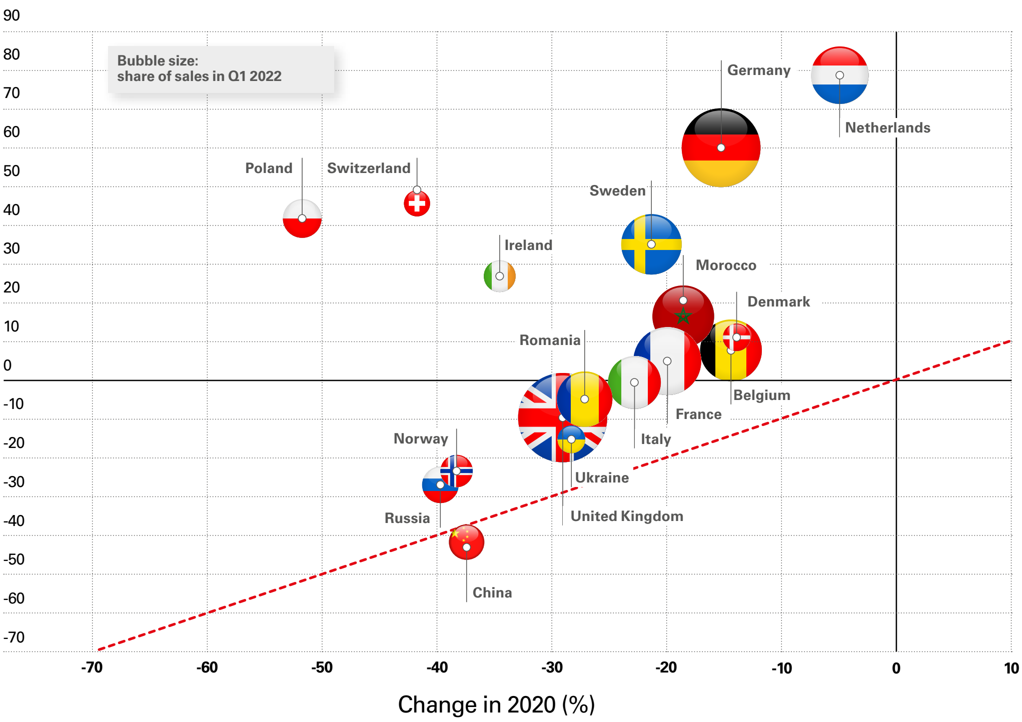


Source: CaixaBank Research, based on data from the College of Registrars.

This recovery is widespread across nationalities although growth is strongest among buyers from the Netherlands, Germany and Sweden, countries whose domestic real estate markets are showing clear signs of heating up. Even so, the British still top the ranking in terms of total purchases with around 7,800 homes bought in the past year, albeit still below the level reached in 2019. The Germans, on the other hand, are far exceeding this total and, whilst still in second place, are edging ever closer to the British.

Purchases by foreigners: an uneven recovery across nationalities

Change Q1 2022 vs. 2019 (%)



	2019	2020	Q1 2022
United Kingdom	8,641	6,129	7,796
Germany	4,369	3,700	6,998
France	4,906	3,923	5,138
Morocco	3,885	3,160	4,517
Belgium	3,639	3,112	3,907
Sweden	2,763	2,172	3,731
Romania	3,741	2,723	3,559
Italy	3,183	2,454	3,160
Netherlands	1,698	1,613	3,035
Russia	2,015	1,215	1,469
Poland	1,036	500	1,468
China	2,509	1,571	1,456
Ireland	814	533	1,033
Norway	1,173	724	897
Ukraine	985	706	834
Denmark	607	523	674
Switzerland	419	244	610
Rest	16,149	12,954	19,768
TOTAL	62,533	47,955	70,049

Note: Data from Q1 2022 cumulative over four quarters.
Source: CaixaBank Research, based on data from the College of Registrars.

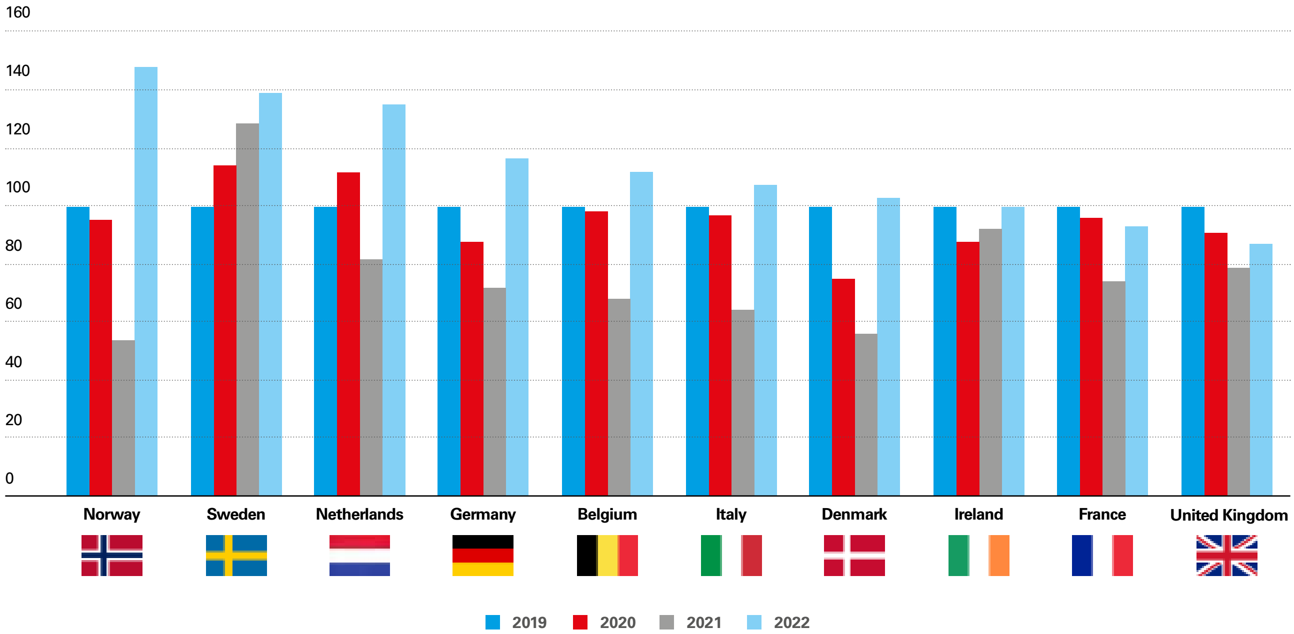
> **Foreign demand has recovered remarkably well from the shock of the pandemic and Google searches for buying a home in Spain point to this good trend continuing**

We expect this positive trend to continue over the coming quarters, as suggested by the number of Google searches for buying a home in Spain made by people in other countries (see the chart below). In the first few months of 2022, coinciding with the end of the wave of the omicron variant and with a notable relaxation in the restrictions on international travel and business in European countries, there was a strong upturn in foreign purchase intent, especially in Sweden, Norway, the Netherlands, Germany and Belgium. In contrast, searches from the UK and France are still somewhat depressed compared with their 2019 levels while, Italy, Denmark and Ireland occupy the middle ground.

Real Estate

Google searches for buying a home in Spain, by search country

Index (100 = 2019)



Note: For each year, the average number of searches between the first week of January and the first week of May is used.
Source: CaixaBank Research, based on data from GoogleTrends.

In which other countries do the main nationalities that buy in Spain also purchase a residence?

In order to understand whether Spain's boom in home purchases by foreigners is a phenomenon that is also occurring at other tourist destinations, we have gathered information on the number of purchases by nationality in Portugal, France, Turkey and Croatia. While the data are somewhat incomplete,[11] they do seem very reliable given the high correlation observed between the most relevant homebuyer countries of origin and international tourist arrivals (see the chart below). This correlation reflects, in part, the repeated trips made by European tourists to second homes located in other countries.

From the data on purchases by nationality in the different destinations, we can draw several conclusions, such as:

1) The presence of foreigners in the real estate markets of European countries that receive tourism is remarkable and has grown significantly in the last five years. This phenomenon is therefore quite widespread.

2) If we take the year 2021 as our benchmark, the percentage of foreign purchases in Spain (10.8%) is much lower than in Croatia (25%) but is relatively high compared with other nearby countries such as Portugal (8.5% in 2019) and France (5.8%). In fact, the number of foreign purchases in Spain and France is similar in absolute terms although in percentage terms it is practically double in Spain. In Turkey, only 3.9% of purchases are made by foreigners.

11 **Italy and Greece would also be two Mediterranean countries with a large proportion of second homes owned by foreigners but we have found no official data for these countries. Data for Portugal by nationality are extrapolated from total foreign purchases and the breakdown by nationality in Lisbon.**

3) The breakdown by nationality shows that the British have a particular predilection for buying property in Spain, a trend that is also observed in tourist flows (Spain accounts for almost a quarter of all international arrivals from the United Kingdom). However, the largest number of purchases by Britons occurs in France, perhaps in many cases for work reasons and not only for holidays.

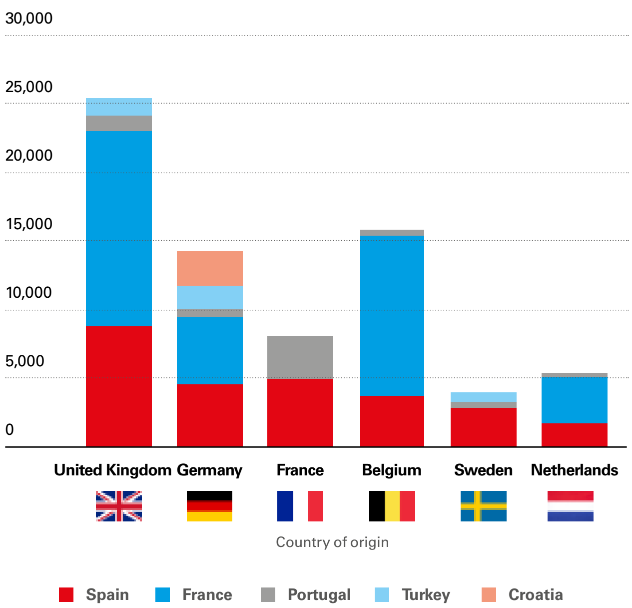
4) The purchasing pattern of Germans is much more diversified than for the rest of the countries analysed and includes Croatia and Turkey, a fact that is also consistent with tourist flows.

5) The French, in addition to Spain, also buy a significant number of homes in Portugal (these data have been extrapolated from purchases made in Lisbon).

6) The Belgians and Dutch stand out for the large number of homes they have purchased in France.

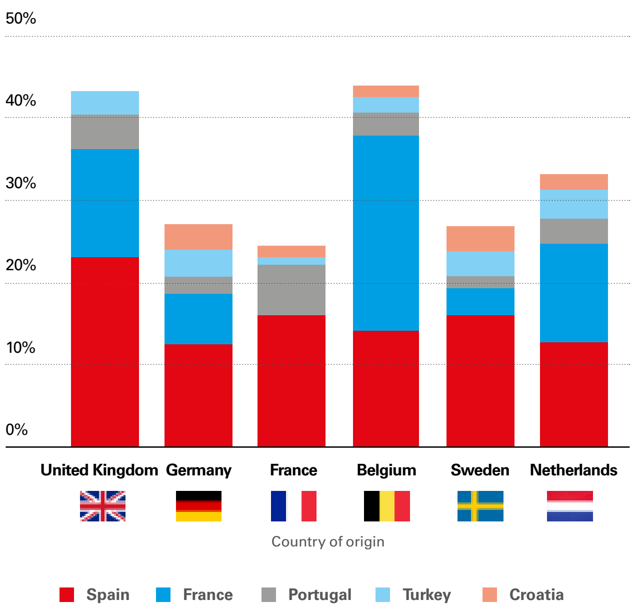
7) Finally, the Swedes, like the British, have a particular fondness for Spain while the rest of the destinations are quite diversified, although their presence in Croatia and Turkey is not insignificant.

In which other Mediterranean countries do the main nationalities that buy property in Spain purchase homes?
Number of sales



Notes: Data for Portugal extrapolated from foreign purchases by nationality in Lisbon. Data for 2019 (except Croatia, 2021).
Source: CaixaBank Research, based on various national data sources.

International tourism flows, by country of origin and destination
Percentage of international overnight stays out of the total for the tourist's country of origin (%)



Notes: UK data are from the traveller statistics provided by the Office for National Statistics. Data from 2019.
Source: CaixaBank Research, based on data from Eurostat and the Office for National Statistics.

Real Estate

What is the long-term outlook for foreign demand in Spain?

The current boom in foreign purchases in Spain is due partly to cyclical factors, such as the pent-up demand during the pandemic being released, the use of the savings accumulated to invest in property and an environment of highly favourable financial conditions. In addition, house prices are rising sharply in many European countries and it is possible that buying a home in Spain is becoming more attractive from an affordability point of view.[12]

But beyond these factors affecting the current situation, there are at least three of a more structural nature which suggest that, in the medium and long term, growth in this demand could potentially be considerable. First, demographic projections in Europe point to a significant increase in the population of retirement age, with Spain being a very attractive market for Europeans looking to retire in a place with warm temperatures, competitive prices, a high degree of safety and good quality healthcare. Secondly, Spain is a very competitive tourist destination and preferred by many European citizens, so we are very well placed to continue attracting people looking to buy a holiday home. Finally, new work patterns accelerated by the pandemic, such as working from home, will allow European workers to stay in Spain for longer periods of time, to enjoy the Mediterranean climate while working remotely.

(12) In this *Sector Report*, we have analysed the situation of real estate markets in the main developed economies and concluded that many of them are showing signs of overheating.

> **The long-term prospects for foreign demand are promising if we take into account the demographic trends in Europe and the fact that the Spanish tourism industry tops the international competitiveness ranking**

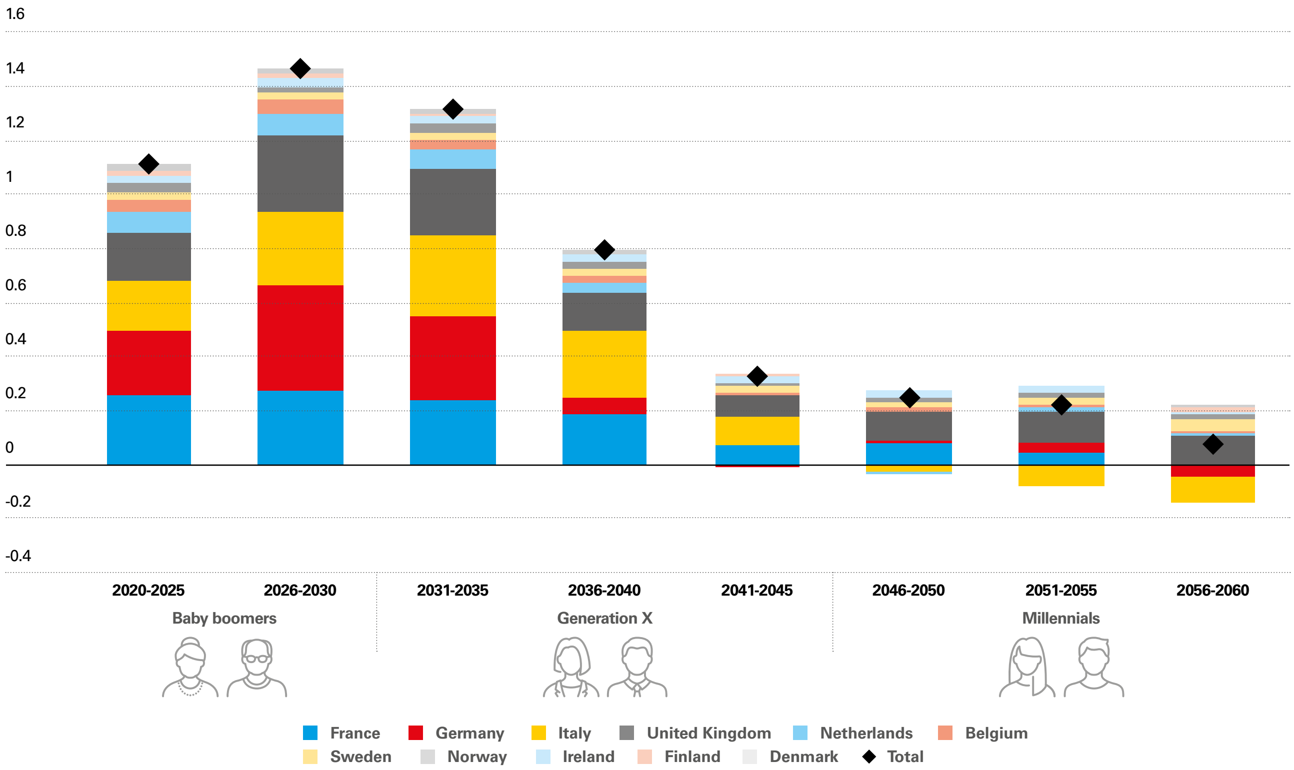
According to OECD population projections, the percentage of the population over 65 years of age, who are more likely to purchase housing abroad to spend long periods there after retirement, will increase significantly in the European countries that tend to buy property in Spain. Specifically, the number of people aged 65 and over in these countries[13] will increase by 1.1 million per year until 2025 and will reach about 1.5 million per year between 2026 and 2030, coinciding with the retirement of the last baby boomers. After 2031, when members of Generation X (those born between 1965 and 1980) begin to retire, demographic trends suggest that the ageing of the population will continue but at an ever slower rate (see the chart below).[14]

(13) We have looked at the following 11 European countries, which are the main nationalities of homebuyers in Spain: the United Kingdom, France, Germany, Italy, Netherlands, Belgium, Sweden, Norway, Ireland, Finland and Denmark.

(14) Specifically, 1.3 million per year between 2031 and 2035, 0.8 million per year between 2036 and 2040 and only 0.3 million per year between 2041 and 2045.

Europe's population aged 65 and over will grow significantly in the next few decades

Average annual increase (millions of people)



Source: CaixaBank Research, based on data from the OECD and Office for National Statistics (UK).

Real Estate

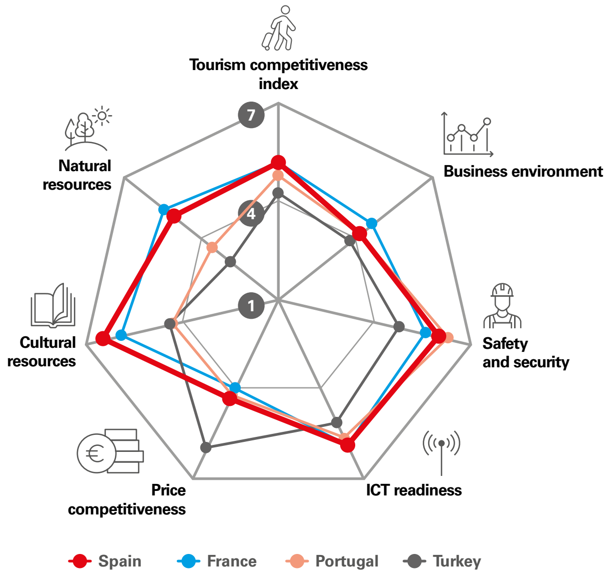
Spain's highly competitive tourism industry is a strong point for the holiday home sector

Regarding our second structural factor, competitiveness in tourism, it should be noted that Spain is indeed a favourite destination for many European tourists who find our country to be very competitive in tourism terms, offering a combination of climate and quality of life that is difficult to beat, as well as good air transport connections with their countries of origin. Not surprisingly, the Spanish tourism industry tops the international ranking of tourism competitiveness produced by the World Economic Forum.

If we compare Spain's position with other Mediterranean tourist destinations such as Portugal, France, Italy and Turkey, we can see that the Spanish tourism sector stands out especially for its cultural resources (similar to those of France) and its perceived safety. Its score is also high in terms of ICT readiness (communications and connectivity) and price competitiveness (in this case, similar to Portugal). As Spain is a very competitive destination, it is in a privileged position to foster loyalty among international tourists coming here on holiday, increasing the likelihood of them buying a second home in our country.

Travel and tourism competitiveness index and its six dimensions

Index (min. 1 - max. 7)



	Spain	Mediterranean rivals
Tourism competitiveness index	5.2	4.7
Business environment	4.2	4.1
Safety and security	6.0	5.5
ICT readiness	5.9	5.5
Price competitiveness	4.4	4.4
Cultural resources	6.5	4.8
Natural resources	5.1	4.0

Notes: The following 17 rival countries have been considered: France, Italy, Turkey, Greece, Portugal, Croatia, Morocco, Egypt, Tunisia, Albania, Cyprus, Israel, Slovenia, Malta, Montenegro, Lebanon and Bosnia and Herzegovina. Indicator weighted by the share of international tourism in each country.
Source: CaixaBank Research, based on data from the Travel & Tourism Development Index 2021.

Final remarks

Spain's ability to continue attracting foreign demand for housing will also depend on the development of a favourable environment for this type of investment. This encompasses many areas, from matching the supply of real estate to the preferences of foreign demand (e.g., residential complexes with medical facilities or housing with networking spaces for digital nomads) to creating an attractive regulatory and fiscal environment. In this respect, it is important to establish stable and predictable regulations for the rental market (many foreign buyers rent out their properties during some months of the year when they do not need them), harmonised international taxation (for example, in the case of inheritance) as well as facilitating healthcare for foreigners in Spain, among other aspects.

Last but not least, it is crucial to bear in mind that the large presence of foreign buyers, who tend to have a much greater purchasing power than resident households, may generate tension in real estate markets in some districts of the country's major cities as well as in tourist spots. In such areas, high demand by foreigners could aggravate existing housing affordability problems for some locals, making it even more necessary to adopt appropriate housing policies, for instance by creating a larger supply of publicly subsidised affordable housing.

International residential markets

Assessing the risk of a real estate bubble in developed markets

The interest rate hikes being implemented by central banks in order to combat inflation are leading to concerns regarding the impact such tighter financial conditions may have on real estate markets. In many developed economies, house prices have risen considerably in recent years, a trend that accelerated during the pandemic, fuelling fears of real estate bubbles. Given this situation, the authorities in several countries have implemented a series of macroprudential instruments to cool down their market. However, in Spain the risk of a real estate bubble appears to be contained.

The continued rise in prices is fuelling fears of overheating in developed residential markets

During the pandemic, housing demand and prices increased in the real estate markets of a large number of advanced economies. In many cases, this upward trend was already occurring before the pandemic but accelerated afterwards due to the savings accumulated during confinement and changing housing preferences. The aggregate indicator for house prices in developed countries therefore grew by 13.9% year-on-year in Q4 2021, a notable acceleration compared with its pre-pandemic growth (4.1% on average over the period 2015-2019).[15]

15 Data based on the Federal Reserve Bank of Dallas's house price indicator, which aggregates prices from 25 developed countries.

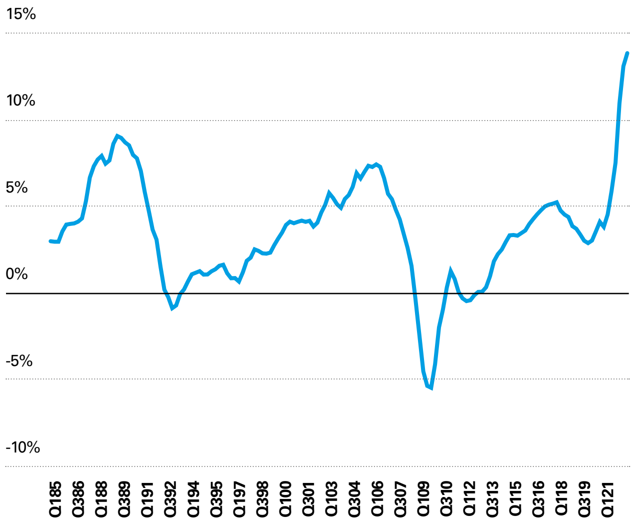
> **The shift in central bank monetary policy could cool down some developed residential markets that are showing signs of overheating**

However, this situation might be about to change as a result of tighter monetary policies. In fact, central banks are raising interest rates faster and more sharply than previously expected, raising concerns regarding the impact this may have on real estate markets which, in some cases, could be overheated. The Exuberance Index produced quarterly by the Federal Reserve Bank of Dallas[16] indicates that the number of economies with an overvalued residential market is approaching the highs of 2006 (the peak of the housing boom in the previous cycle).

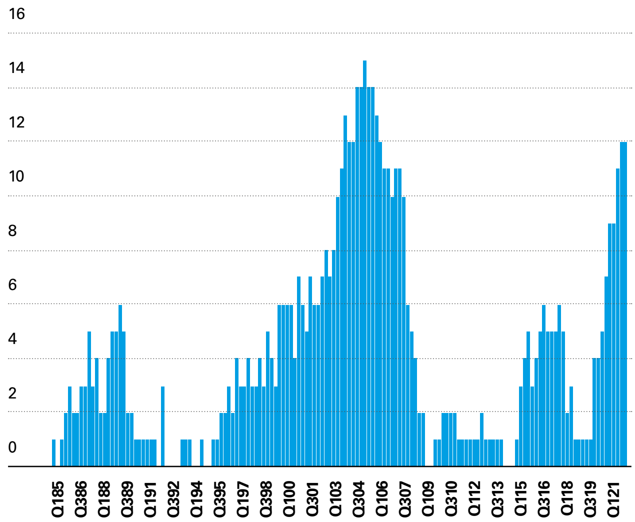
16 This indicator attempts to identify periods in which the growth in house prices does not seem to be based on housing market fundamentals. For more details on its construction and estimates, see the work by Mack, A. and Martínez-García, E. (2011), «A Cross-Country Quarterly Database of Real House Prices: A Methodological Note».

The Dallas Fed's Exuberance Index shows that the number of economies with an overvalued housing market is approaching the peak reached in 2006

Overall aggregate house prices
Year-on-year change (%)



Number of countries with overvalued housing according to the Federal Reserve Bank of Dallas's Exuberance Index*



Note: (*)The Federal Reserve Bank of Dallas publishes a quarterly house price valuation model for several developed markets. Housing is deemed to be overvalued when the ratio of price to household income exceeds a critical threshold.
Source: CaixaBank Research, based on data from the International House Price Database, Federal Reserve Bank of Dallas.

Which residential markets might be overvalued?

In order to assess the current residential market situation in different developed countries, we analysed several relevant indicators: (i) house price growth (since the start of the pandemic plus an indicator of whether the upward trend in prices was pre-pandemic), (ii) residential investment (as a percentage of GDP and its growth since the pandemic), (iii) household indebtedness (as a percentage of gross disposable income), and (iv) housing valuation models by the Dallas Fed and the European Systemic Risk Board (ESRB). The results for the economies in question are summarised in the table below.

Real Estate

Indicators of the residential real estate market in several developed economies

	House prices		Residential investment		Household debt	Housing overvalued?	
	vs. Q4 2019 %	Upward trend before the pandemic?	latest figure % of GDP	vs. Q4 2019 pp	latest figure % of disposable income	Dallas Fed	ESRB
N. Zealand	42%	YES	7.3%	1.3	119%	YES	-
Canada	40%	YES	7.5%	2.1	186%	YES	-
Australia	33%	YES	5.1%	0.3	203%	YES	-
Netherlands	29%	YES	4.9%	0.5	230%	YES	YES
Luxembourg	28%	YES	11.6%	1.5	187%	YES	YES
US	25%	NO	3.8%	1.0	101%	YES	-
Germany	22%	YES	7.7%	1.3	99%	YES	MEDIUM
Portugal	20%	YES	3.1%	0.7	125%	-	MEDIUM
Sweden	17%	YES	4.7%	0.7	201%	YES	YES
Denmark	15%	NO	5.0%	0.5	241%	NO	YES
Ireland	15%	NO	2.2%	0.3	124%	NO	MEDIUM
Norway	15%	NO	5.3%	-0.9	247%	NO	YES
France	13%	YES	6.5%	0.3	127%	YES	MEDIUM
UK	13%	NO	3.8%	0.4	148%	NO	-
Spain	8%	NO	5.4%	-0.5	107%	NO	NO
Italy	6%	NO	4.0%	1.1	91%	NO	NO
Japan	5%	NO	3.9%	0.0	115%	NO	-

Source: CaixaBank Research, based on data from Eurostat, the Federal Reserve of Dallas, the Office for National Statistics (UK) and the OECD.

The markets of most concern are those where the upward trend was already present before the pandemic, as this would reflect longer-term currents and an accumulation of imbalances over a greater period of time (see the table's second column). New Zealand, Canada and Australia stand out in this group of countries, in which there was also a significant rise in house prices during the pandemic, an increase in the share of residential investment and high levels of household indebtedness. In Europe the most worrying cases would be the Netherlands, Luxembourg and Sweden, as all the indicators show clear signs of overheating.

However, in some of these countries, such as Australia, Canada, Sweden and New Zealand, we are already beginning to see signs of a change in the real estate trend (prices are already adjusting downwards) as a result of tighter monetary policy and years of macroprudential policies. The vital question is whether it will be possible to engineer a soft landing for these markets or whether the imbalances they have accumulated over the years will lead to a sharp correction, impacting the wealth of households and the financial sector.

The most worrying cases in Europe are the Netherlands, Luxembourg and Sweden. Among the non-European developed countries, New Zealand, Canada and Australia stand out

A second group would consist of countries where some of the indicators are of concern but with more reassuring signs in other areas. In this group we find Germany, Portugal and France, countries in which the upward trend in prices pre-dates the pandemic but whose levels of household indebtedness are not worrying.[17] In this group we would also place three countries whose upward trend is of concern, namely Denmark and Norway, in this case because of high household indebtedness, and the US[18] because of the country's sharp rise in house prices during the pandemic. Nevertheless, US household wealth show an overall sustainable level of debt, there is no indication that the construction sector is too large and no evidence of excessive growth in credit or a relaxation of credit standards, which could fuel a real estate boom in the US. In fact, it is precisely these aspects that radically distinguish the current situation from that of 2008, when the real estate bubble burst. Moreover, the signs of overheating are from the last few months, due to the effects of the pandemic, and therefore seem to be temporary factors that will tend to dissipate. All in all, it is to be expected that higher financing costs will tend to slow down housing demand and prices (in fact, this can already be seen in the latest figures) but any sharp correction is unlikely.

17 The European Systemic Risk Board (ESRB) classifies these three European countries, along with Ireland, as having a medium risk of overvaluation. Note that already in 2016 the ESRB issued its first warnings after detecting systemic imbalances in the real estate markets of Austria, Belgium, Finland, France, Germany, Luxembourg, the Netherlands and Slovakia.

18 See «Real-Time Market Monitoring Finds Signs of Brewing U.S. Housing Bubble», March 2022.

Although the US housing market has recently started showing signs of overvaluation, there is no evidence of excessive growth in mortgage or developer credit and a sharp 2008-style market correction is unlikely

Finally, at the bottom of the table we find countries such as Spain and Italy where, for the moment, there are no signs of overvaluation or excessive imbalances in their real estate markets. In fact, the ESRB classifies these two countries as having a low risk of overvaluation.

What measures have the monetary authorities taken to avoid a bubble? What are macroprudential policies?

Macroprudential policies emerged as a consequence of the severity of the 2007-2008 global financial crisis, when monetary authorities realised it is not enough to ensure the solvency of financial institutions and markets on an individual (or microprudential) basis to maintain a secure and stable financial system, but that an aggregate (macro) approach is also necessary to prevent macrofinancial imbalances from accumulating in the form of systemic risks that could potentially have a very negative effect on the economic cycle.

Systemic risks can have a number of different dimensions but, broadly speaking, there are two main types: (i) a time or cyclical dimension, related to how this risk develops throughout the financial cycle, and (ii) a transversal or structural dimension, in the sense that it may apply to various financial intermediaries due to the structural characteristics of the financial system itself. Given these dimensions of risk, macroprudential instruments can be applied to (i) lenders, generally by requiring a capital buffer,[19] or to (ii) borrowers, by establishing conditions for new loans (e.g., limits to the amount of the loan in relation to the value of the property).

[19] Capital buffers are additional requirements to microprudential capital requirements, designed both to curb the growth of systemic risk and to improve the solvency of institutions so they can absorb any losses that would occur in the event of such risks materialising.

How are macroprudential policy instruments classified?

		The instrument affects...	
		Lenders	Borrowers
Risk dimension...	Cyclical	Countercyclical capital buffer (CCB)	-
	Transversal	Buffers for systematically important institutions	-
	Mixed	Systemic risk buffer (SRB)	Loan-to-value ratio (LTV)
		Sector countercyclical buffer	Loan-to-price ratio (LTP)
		Limits to sectoral concentration	Loan-to-income ratio (LTI)
			Limits to maturity

Source: CaixaBank Research, based on information from the Bank of Spain.

At a European level, the European Systemic Risk Board (ESRB), together with the national macroprudential authorities (the central banks of each Member state) and the ECB are responsible for preventing the emergence of vulnerabilities in the region's residential markets. The ESRB monitors a number of industry variables in order to observe trends with the potential to cause systemic risks and, on that basis, has the mandate to issue warnings and make recommendations to EU countries. In addition, in its 2021 report the ESRB conducted a two-fold exercise in which it assessed (i) the appropriateness of the measures put in place, taking into account not only the vulnerabilities accumulated but also the point in the cycle reached by each residential market, and (ii) the adequacy of the measures, assessing whether the measures implemented are capable of reducing such vulnerabilities (see the last two lines of the table below).

The ESRB monitors a number of industry variables in order to observe trends with the potential to cause systemic risk

Real Estate

Macropudential policies in economies receiving an ESRB warning or recommendation in 2019

Status	Type	Measures	BG	CZ	DE	DK	FI	FR	IS	LU	NL	NO	SE
SITUATION BEFORE ESRB VALUATION (SEP. 2019)	Limits on new loans	Repayment requirements		R								LB	LB
		Debt service to income (DSTI)		R							LB		
		Debt to income (DTI)		R		R						LB	
		Loan to income (LTI)				R							
		Loan to value (LTV)		R		R	LB		LB		LB	LB	LB
		Limits on maturity		R							LB		
		Limits on credit growth										LB	
		Stress tests		R			R					R	
	Capital buffer	Countercyclical capital buffer (CCA)											
		Systemic risk buffer (SRB)											
	other	Art. 458 (RRE)*											
		Capital surcharge on banks applying IRB models											
SITUATION AS FROM ESRB RECOMMENDATIONS	Limits on new loans	Repayment requirements										LB	
		Debt service to income (DSTI)	R	LB				LB	LB				
		Debt to income (DTI)	R	LB								LB	
		Loan to value (LTV)	R	LB			LB		LB	LB		LB	
		Limits on maturity						LB					
		Limits on credit growth										LB	
		Stress tests										R	
	Capital buffer	Countercyclical capital buffer (CCA)											
		Systemic risk buffer (SRB)											
	other	Art. 458 (RRE)											
		Is it appropriate?	YES	YES	NO	NO	NO	YES	YES	NO	YES	YES	YES
		Is it sufficient?	YES	YES	NO	NO	NO	YES	YES	NO	NO	YES	NO

Introduction · Recalibration · Loosening · End · Extension · Tightening

Notes: «LB» indicates measures that are legally binding while «R» means they are just recommendations.
The countries in question are Belgium (BG), Czech Republic (CZ), Germany (DE), Denmark (DK), Finland (FI), France (FR), Iceland (IS), Luxembourg (LU), Netherlands (NL), Norway (NO) and Sweden (SE).
(*) Includes a variety of measures that can be adopted to address systemic risks that pose a threat to financial stability.
Source: ESRB, «Vulnerabilities in the residential real estate sectors of the EEA countries». February 2022.

On balance, although it is true that a multitude of measures have been implemented in Europe, the standstill caused by COVID-19 and the increase in imbalances following the initial impact of the pandemic suggest that, currently, the measures implemented are not enough. Among the economies highlighted by the ESRB in 2019 (Denmark, Luxembourg, the Netherlands, Norway and Sweden), only Norway is implementing adequate and sufficient macroprudential policies to curb the systemic risk associated with the vulnerabilities accumulated in its residential market. On the negative side, the most notable cases are Denmark (mainly due to its high household indebtedness, which exceeds 220% of disposable income) and Luxembourg (in this case high household indebtedness is coupled with looser credit standards), countries in which the ESRB considers the risks to be high and where the current policy is neither appropriate nor sufficient.

The case of the Spanish residential market: no signs of overheating

The ESRB has issued no warnings or recommendations for the Spanish economy. In principle, the risk of a sharp correction in its real estate market is low. On the one hand, the current upward trend in prices can be explained by the considerable misalignment between a stable supply and very strong demand, which in many cases is replacement demand and, most importantly, there is no evidence of a boom in purchases due to expectations of property appreciating in value. On the other hand, there is no excessive growth in credit, no loosening of credit standards and banks are not excessively exposed to the sector (see the table below). In addition, given the growth observed in fixed-rate mortgages (60% in 2021 compared with less than 3% between 2003 and 2007), interest rate hikes will have a limited impact on newly mortgaged households.

Spain's residential market indicators

	LATEST FIGURE	LAST BUBBLE
SUPPLY		
No oversupply	108,000 new homes and 172,000 households created	865,000 new homes (x2 households created)
Residential investment below previous cycle (% of GDP)	5.4%	11.6%
FINANCIAL SECTOR		
Less bank exposure to developer + builder credit (% of all credit)	7.5%	23.6%
Despite the rise in new mortgage loans, the outstanding balance has barely grown (mortgage loans as % of GDP)	46.0%	63.6%
Mortgage credit standards have not been relaxed (loans with LTV>80%)	8.5%	18.0%
Higher percentage of fixed-rate mortgages	60%	3%
FINANCIAL SITUATION OF HOUSEHOLDS		
Low household indebtedness (household indebtedness as % of GDP)	58.4%, below euro area average (60.1%)	85.6%, above euro area average (64.2%)
Lower mortgage burden for households (annual payments/salary)	33.4%	52.5%
Lower household debt burden (debt interest repayments as % of gross disposable income)	0.34%	5.6%
Mortgage loans to households to purchase a home (% of GDP)	46.0%	63.6%

Notes: The latest available figures correspond to Q4 2021 or Q1 2022, depending on the indicator. The data from the last bubble correspond to the maximum for each indicator in the previous expansionary cycle. In particular, the data correspond to the years 2006-2010, depending on the indicator.
Source: CaixaBank Research, based on data from the Ministry of Transport, Mobility and Urban Agenda, National Statistics Institute and Bank of Spain.

Real Estate

The Bank of Spain also considers that, at an aggregate level, house prices are close to their long-term equilibrium values with no clear signs of overvaluation as yet. However, it recommends keeping an eye on trends in the Spanish real estate market.[20] In fact, Spain's regulatory body has just completed the development of macroprudential tools for credit institutions, with the aim of acting more effectively and precisely in the event of any systemic risk building up in the Spanish financial system. Since the end of 2021 (it was based on European legislation beforehand), it has had three new macroprudential instruments: the sectoral component of the countercyclical capital buffer (CCA), limits to sectoral concentration and limits to any new loans granted. The particular feature of these instruments is that they will make it possible to address risks that are concentrated in specific sectors, for which aggregate macroprudential tools were less effective as they were applied to all sectors equally.

20 **Financial Stability Review, April 2022.**

It is too early to assess the effectiveness of the macroprudential policies

Experience regarding the use and effectiveness of macroprudential policies is limited, given that monetary authorities began to consider using them after the severe global financial crisis of 2007-2008 and, therefore, they were first implemented during the current period. In fact, the Bank of Spain itself believes that the current scenario should be used to draw conclusions regarding the usefulness and effectiveness of this type of instrument.

The greater persistence of the inflationary shock has resulted in a profound change in financial market sentiment and monetary policy implemented by the main central banks

The very design of macroprudential policies suggests their effects on residential markets are more medium to long term. The fact that those European economies which were issued ESRB warnings as early as 2019 have continued to increase their vulnerabilities to date should not serve to undermine the work of such measures, as ultra-loose monetary policy in recent years and the consequences of the pandemic have distorted the part they play in reducing systemic risk in these economies. In addition, the economic literature is full of papers that demonstrate the effectiveness of this type of policy in moderating or stopping sharp rises in house prices.[21]

In any case, it does not seem appropriate to leave the correction of this type of macroeconomic imbalance exclusively to macroprudential policy. Rather it seems evident that reforms are required in the residential markets of some economies where imbalances between supply and demand persist. The ESRB itself points out that macroprudential policies should be introduced to improve market resilience but they are not designed to correct structural weaknesses, at least not directly.

Finally, it is important to note that the greater persistence of the inflationary shock has resulted in a profound change in financial market sentiment and the monetary policy of the main central banks. It is likely that widespread hikes in interest rates will cool down real estate markets more directly and decisively, leading to corrections of a greater or lesser extent depending on the vulnerability of each market. As a result, it will probably be necessary to relax macroprudential policy in some cases, given this new economic scenario.

21 The recent work by Bhupal Singh, published by the IMF, «House Prices and Macroprudential Policies: Evidence from City-level Data in India» (WP/20/291), provides evidence of the empirical relationship between the trend in house prices and credit standards or limits to the LTV ratio.

Real Estate

Indicators and forecasts

Annual change (%), unless otherwise specified

	Average 2000-2007	Average 2008-2014	Average 2015-2019	2020	2021	Forecast 2022[1]	Forecast 2023[1]	Trend
Economic activity indicators								
Total GDP	3.4	-1.3	2.6	-10.8	5.1	4.2	2.4	
GVA construction	3.1	-9.8	3.4	-11.3	-3.4	3.2	3.0	
Investment in construction	5.4	-9.4	6.2	-9.6	-2.8	2.4	4.3	
Residential investment	5.4	-8.5	10.5	-11.2	-5.3	5.6	5.6	
Investment in rest of construction	3.1	-9.8	3.4	-11.3	-3.4	-1.4	2.7	
New building permits (thousands)	642	94	80	86	108	100	110	
New building permits	2.8	-28.7	20.9	-19.5	26.6	-7.7	10.0	
Certificates of final completion (thousands)	482	230	57	86	91	95	105	
Certificates of final completion	8.3	-34.9	14.9	9.1	6.3	4.0	10.5	
Confidence in the construction sector (level)[5]	13.1	-41.7	-20.9	-17.4	-1.9	8.8	-	
Labour market								
Total workers registered with Social Security	3.5	-2.4	3.1	-2.1	2.5	3.9	2.1	
Registered workers in construction	6.1	-13.5	5.1	-1.7	4.5	2.8	1.9	
Construction of buildings	-	-14.4	7.1	-2.2	5.4	3.8	2.1	
Civil engineering	-	-16.4	1.2	-1.6	2.6	3.8	1.7	
Specialised construction	-	-8.9	4.3	-1.5	4.1	2.1	1.8	
Registered workers in real estate activities	10.3	2.1	6.3	-1.5	2.3	4.9	1.5	
Total employees (LFS)	4.1	-2.7	2.6	-2.9	3.0	3.2	1.3	
Employees in construction (LFS)	6.7	-14.0	4.5	-2.6	3.8	3.0	1.2	
Temporary employment rate in construction (%)[5]	57.6	39.6	41.4	36.7	35.0	31.4	-	
Unemployment rate in construction (%)[5]	7.5	22.8	12.4	11.0	9.3	8.1	-	
Demand for housing								
Sales[2] (thousands)	886	388	450	420	566	550	491	
Sales[2]	-0.1	-8.7	9.2	-16.9	34.7	-2.8	-10.8	
New housing[2,5]	12.1	-13.4	4.8	-10.1	37.4	13.9	-	
Second-hand housing[2,5]	-7.8	-5.0	10.3	-18.4	34.0	30.3	-	
Foreign sales[3]	-	11.3	5.5	-25.6	43.8	5.0	-7.6	
Second home sales[4]	-	-8.5	8.5	-20.4	43.8	1.5	-7.8	
Prices								
House prices (MITMA)	12.9	-5.7	2.7	-1.1	2.1	6.0	2.2	
House prices (INE)	-	-6.8	5.7	2.1	3.7	6.6	2.2	
New housing[5]	-	-5.7	6.5	6.5	4.6	10.1	-	
Second-hand housing[5]	-	-7.7	5.5	1.4	3.6	8.2	-	
Land prices	17.5	-8.7	1.3	-9.4	3.7	7.5	2.7	
CPI rent[5]	4.3	0.8	0.8	1.1	0.6	1.3	-	
Affordability ratios								
House prices (% gross disposable income)	6.5	7.5	6.6	7.2	8.3	8.3	8.2	
Theoretical burden (% gross disposable income)	35.1	37.7	29.6	30.5	33.4	36.5	38.4	
Return on rent (%)[5]	4.5	3.5	4.2	3.7	3.7	-	-	
Financing[5]								
Number of mortgages	5.8	-20.9	10.0	-6.5	23.8	16.3	-	
Outstanding balance of credit to purchase housing	14.1	-1.6	-2.2	-1.8	0.4	1.5	-	
New loans, housing	17.7	-24.9	12.4	-2.1	39.4	19.2	-	
Outstanding balance of credit for property development and construction	23.6	-12.8	-11.0	-5.4	-3.6	-5.7	-	
NPL ratio of credit for housing (%)	0.5	3.5	4.6	3.4	3.1	3.0	-	
NPL ratio of credit for property development and construction (%)	0.5	20.2	20.4	5.8	5.2	5.1	-	

Notes: 1. Forecasts at 30 June 2022. 2. The 2000-2007 average for house sales corresponds to the period 2004-2007 and the data come from the Ministry of Transport, Mobility and Urban Agenda (MITMA). The sales figures from the National Statistics Institute (INE) are as from 2007. 3. Foreign sales according to Mitma. 4. Sales of second homes are estimated based on the sales carried out in a different province than the buyer's residence. 5. The data in the column «Forecast 2022» correspond to cumulative data up to the latest data available for 2022.

Source: CaixaBank Research, based on data from the National Statistics Institute (INE), Ministry of Transport, Mobility and Urban Agenda (Mitma), Ministry of Employment and Social Security and the Bank of Spain.

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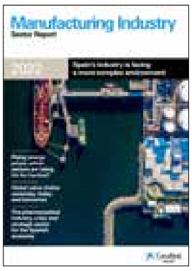

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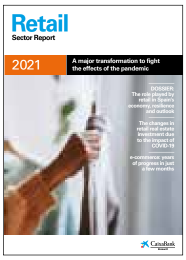

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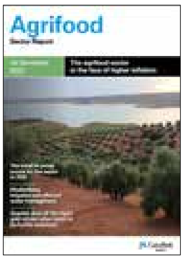

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