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# Macroeconomic crises and housing

Examining the impact of the global financial  
crisis and COVID-19 on housing expenditure  
and house prices

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Examining the impact of the global financial crisis and COVID-19 on housing expenditure and house prices

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# Contents

- Executive summary ..... 1**
- 1 Housing expenditure as a proportion of total household consumption..... 2**
- 2 GDP and housing price developments during the GFC and the pandemic-related downturn..... 6**
- 3 Conclusions and outlook ..... 8**
  - 3.1 Housing consumption .....8
  - 3.2 House price developments.....8



# List of figures

Figure 1 Housing and other important consumption items in European countries 2019 – Percentage of total private consumption. Source: author’s calculations on **Eurostat 2021 data**.....3

Figure 2 Housing consumption elements in the European Union 2000-19 – Percentage of total private consumption. Source: author’s calculations on Eurostat 2021 data ...4

Figure 3 Housing consumption elements in European countries 2019 – Percentage of total private consumption. Source: author’s calculations on Eurostat 2021 data....4

Figure 4 Housing consumption elements in the European Union 2000-19. Source: author’s calculations on Eurostat 2021 data .....5

Figure 5 GDP and HPI indices (2008=100). Source: author’s calculations on Eurostat 2021 data.....6

Figure 6 GDP and HPI – Dips after GFC (%) and 2020/2019 changes (%). Source: author’s calculations on Eurostat 2021 data.....7

Figure 7 House Price Indices in selected European countries 2005-2020 (2008=100). Source: author’s calculations on Eurostat 2021 data.....7





## Executive summary

In 2000, housing-related expenditure was the most substantial household consumption cost in only half of EU member states. Nearly 20 years later, only five countries give food as the largest cost, with housing now replacing it as the most substantial.

Housing price trends during the global financial crisis (GFC) differ from those during the COVID-19 pandemic period. During the GFC, both GDP and House Price Index (HPI) showed an initial decline followed by a recovery, with GDP surpassing pre-crisis levels in 2019 in nearly all European countries. In one third of European countries, HPIs were still below pre-GFC levels. In 2020, house price trends were completely decoupled from macroeconomic developments, as GDP decreased in nearly all European countries while house prices increased across Europe.

This paper assesses long-term developments in household expenditure (defined as housing and energy/utilities costs) and house prices across Europe. Figures show that housing accounts for an increasing share of overall consumer expenditure, regardless of macroeconomic developments.

The impact of the recent economic downturn on the residential real estate market cannot yet be seen. Nonetheless, the conclusions of this paper might help market participants – governments, investors and private individuals – to contextualise future developments in residential real estate markets.





# 1 Housing expenditure as a proportion of total household consumption

The significance of housing expenditure for private households can be measured through National Accounts (NA). These provide information on how GDP is produced by the different institutional sectors of the economy (households, government, corporations, non-profit organisations serving households) and how output and value added is distributed between industries. In our analysis, the focus is on final consumption by household, measured by actual monetary expenditure. However, the theoretical consumption of owner-occupied housing is captured by the concept of imputed rentals and included in the measure of household final consumption expenditure.

The output of services of owner-occupied dwellings is valued at the estimated rental value a tenant would pay for the same accommodation. This calculation takes into account factors such as location and neighbourhood amenities, as well as the size and quality of the dwelling itself.

To estimate the value of owner-occupied dwelling services, the stratification method is used as the standard method, applicable only if a sufficiently-sized rental market exists. The stock of dwellings is stratified by location, nature of dwelling and other factors that affect the rental. Information about actual rentals from rented dwellings is used.

The rental value to be applied to owner-occupied dwellings in the stratification method is defined as the private market rental value due for the right to use an unfurnished dwelling.

Rental values for unfurnished dwellings from all private market contracts are used to determine imputed rentals.

The user-cost-approach is a fallback solution. In the absence of a sufficiently large rental market, where accommodation is characteristic of owner-occupied dwellings, the user-cost method is applied for owner-occupied dwellings. These are the only two methods accepted in the methodology of National Accounts laid down in [Commission Regulation \(EU\) 549/2013](#) of 21 May 2013.

The share of household consumption signals the importance of various items of household expenditure to the total household budget. In 2019, the most substantial item costs at aggregated European level were housing (24%), transport (13%), food and non-alcoholic beverages (12%), recreation and culture (9%), and restaurants and hotels (9%).

At the aggregated level, housing has been the highest item of expenditure since 2000. This encompasses actual rentals, imputed rentals, maintenance, water supply, electricity, gas and other fuels. However, at national level the share of private household expenditure dedicated to housing varies considerably, between 12.2 % in Malta, 14.9 % in Lithuania and 15.6 % in Cyprus at the low end of the spectrum, and 28.9 % in Finland, 28.7 % in Slovakia and 28.19 % in Denmark on the high end (Figure 1).

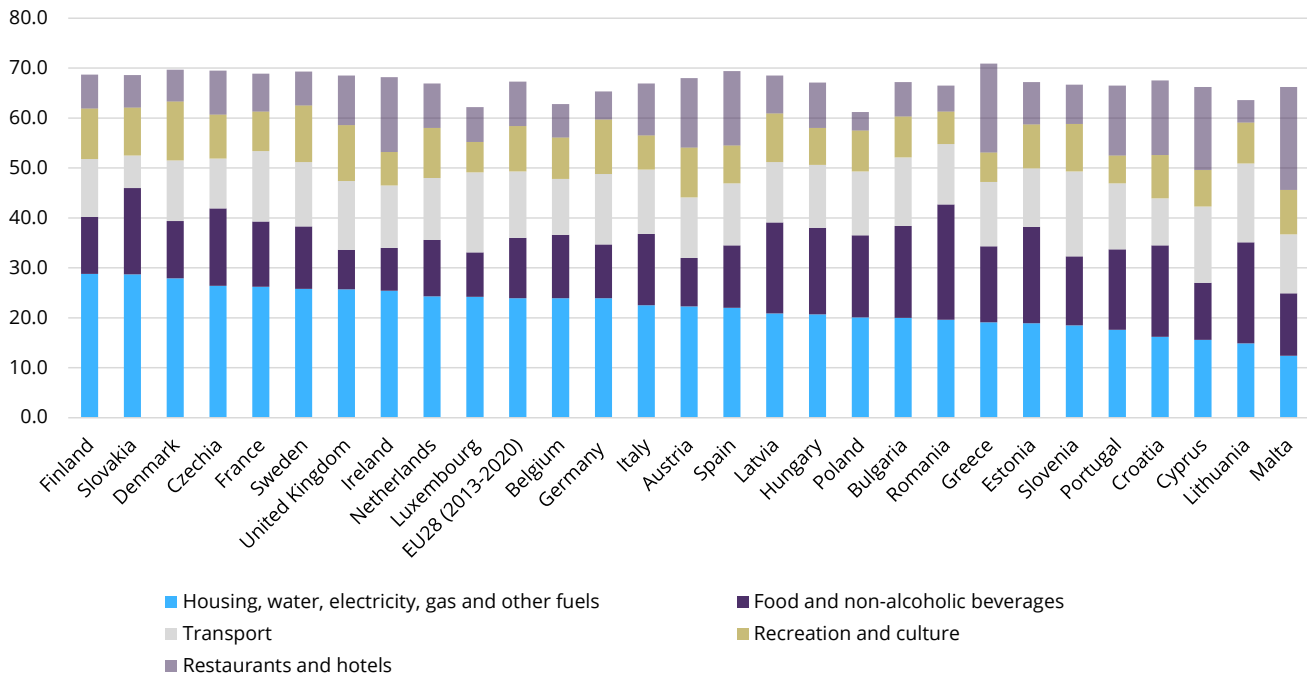


Figure 1 Housing and other important consumption items in European countries 2019 – Percentage of total private consumption. Source: author’s calculations on Eurostat 2021 data.

The increasing importance of housing is also visible in the growing number of countries where this is the largest consumption item. In 2000, nearly half of EU member states (13 countries) spent more on food than housing-related items.

Over the intervening years, in most of those countries – Poland and Hungary (from 2002), Cyprus (from 2004), Latvia (from 2005), Bulgaria (from 2008, excluding 2009 and 2016) and Portugal (from 2019) – housing has replaced food at the top of the list.

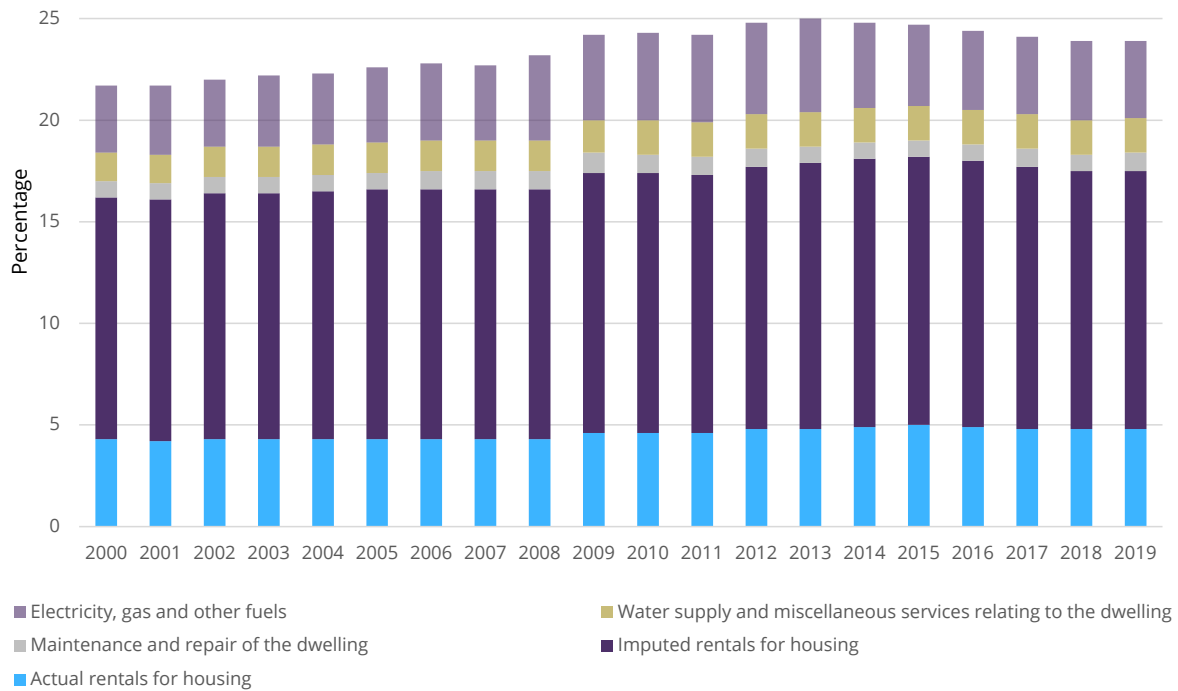


Figure 2 Housing consumption elements in the European Union 2000-19 – Percentage of total private consumption. Source: author’s calculations on Eurostat 2021 data.

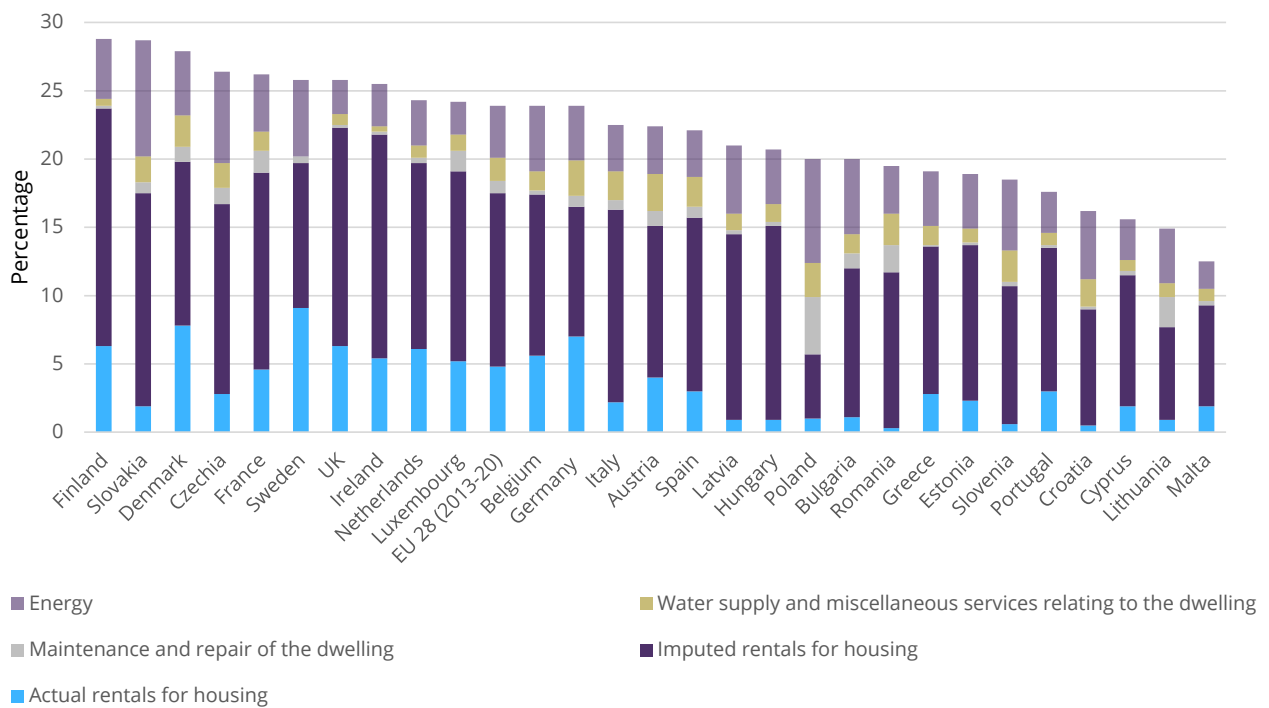


Figure 3 Housing consumption elements in European countries 2019 – Percentage of total private consumption. Source: author’s calculations on Eurostat 2021 data.





Over the past two decades, at aggregated EU level the share of housing-related consumption increased steadily between 2000 until 2013 (from 21.7% to 25%). The biggest jump, amounting to 1%, occurred in 2009. In this same year, GDP decreased in the EU by 4.3% – a stark reflection of the impact of the GFC in most European countries. It is, however, notable that overall expenditure fell slightly (-0.8%) for European households, mainly due to a 4.5% fall in the cost of energy bills during that time.

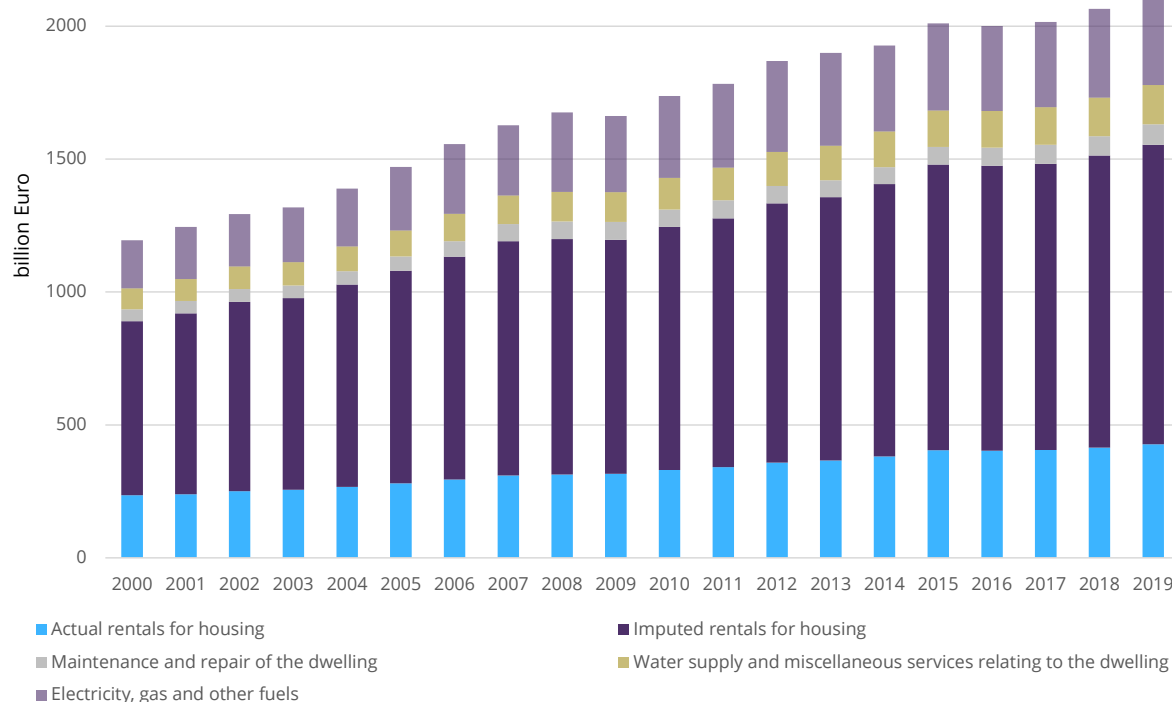


Figure 4 Housing consumption elements in the European Union 2000-19. Source: author's calculations on Eurostat 2021 data.

The main drivers of the increasing relevance of housing consumption between 2000 and 2019 (+2.2%) were imputed rentals (+0.8%), actual rentals (+0.5%) and electricity, gas and other fuels (+0.5%). The latter was the most volatile item (share between 3.3% and 4.6% over the last two decades), reflecting global energy market developments. The shares of water supply and maintenance increased only slightly (+0.3% and +0.1%, respectively).

Taking into account that in 2020 GDP decreased by 5.9% – much more than in the first year of the GFC (-4.3%) – it could be expected that the quotas for both actual and imputed rentals within household expenditure might have increased. Housing expenditure is a rather stable item that cannot easily be reduced when household income is decreasing. Contractual obligations in the rental market prevent swift fluctuations, which are more common for transport and similar expenses.



## 2 GDP and housing price developments during the GFC and the pandemic-related downturn

At the aggregated level, GDP returned to pre-crisis levels only in 2014. Belgium, Malta, Slovakia, Sweden and Switzerland enjoyed the fastest economic recovery, experiencing just one year of recession. At the other end of the spectrum are Italy and Greece, where GDP in 2019 was still below the pre-crisis levels of 2008 (Italy -3%, Greece -23%).

This GDP downturn affected almost all 28 EU member states in 2009 and the following years, with only Poland reporting no decline at all in GDP. Similarly, the vast majority reported decreasing house prices in 2009, with only Germany, Austria, Finland and Sweden as the exceptions.

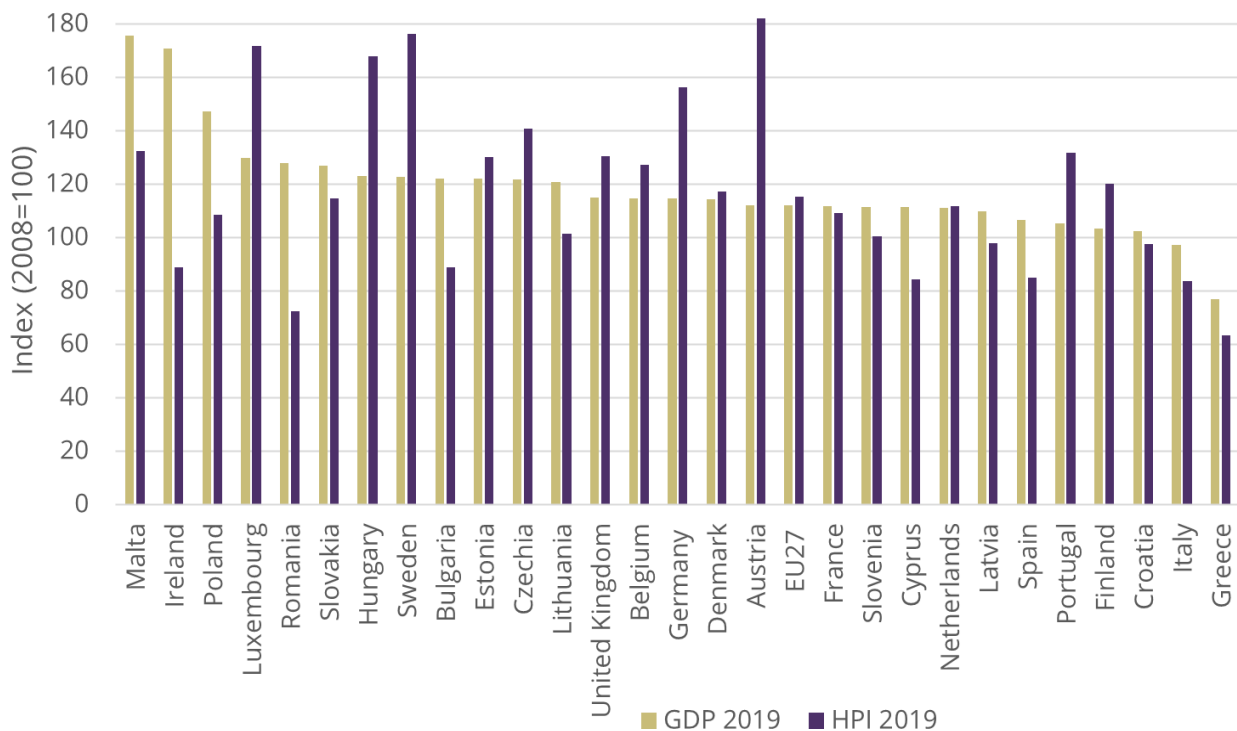


Figure 5 GDP and HPI indices (2008=100). Source: author’s calculations on Eurostat 2021 data.

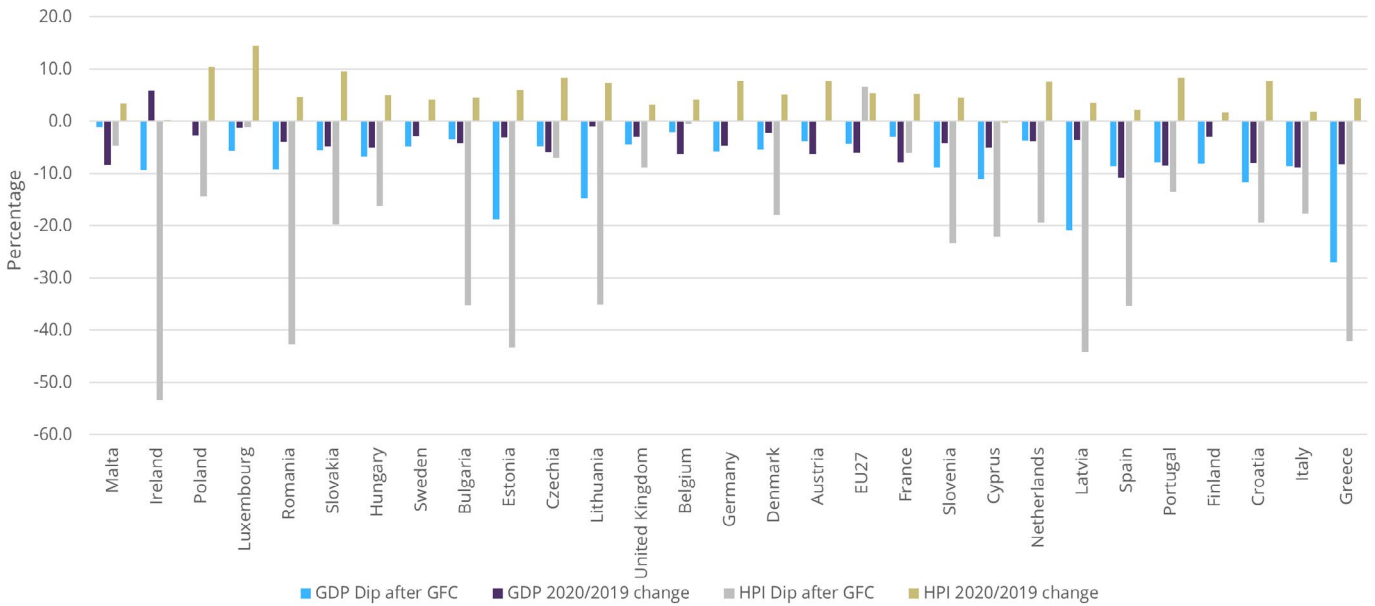


Figure 6 GDP and HPI – Dips after GFC (%) and 2020/2019 changes (%). Source: author’s calculations on Eurostat 2021 data.

At the aggregated level, housing prices in the European Union showed an upward trend only from 2014 onwards.

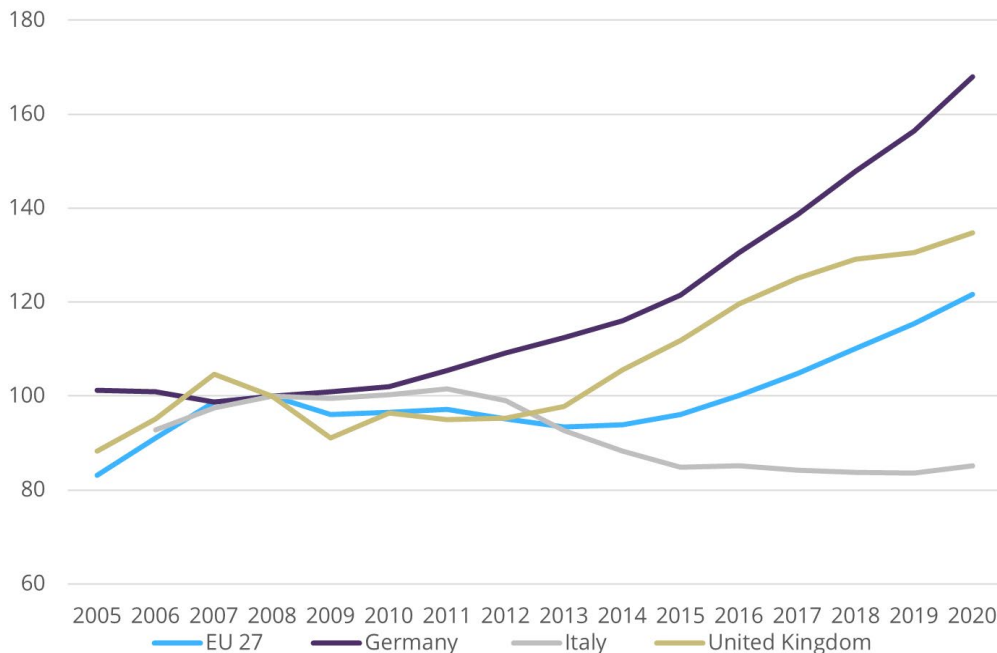


Figure 7 House Price Indices in selected European countries 2005-2020 (2008=100). Source: author’s calculations on Eurostat 2021 data.

Despite the decrease in GDP in all EU member states (excepting Ireland) and the UK, all countries (except Cyprus) reported increasing housing prices in 2020.





## 3 Conclusions and outlook

### 3.1 Housing consumption

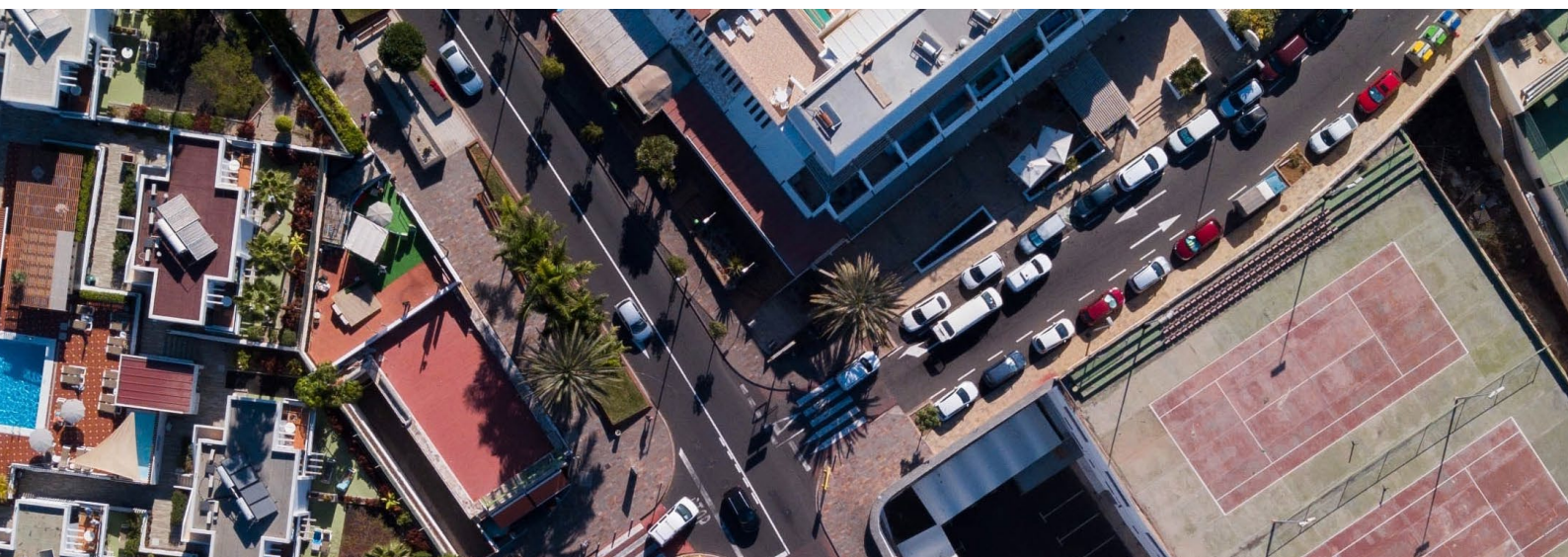
Looking back over the past two decades, baseline housing-related expenditure grew during periods of both growth and decline, even if it has slightly fallen back as a percentage of overall expenditure year-on-year since 2013. A downturn as severe as that which occurred in 2020 might trigger a spike in housing-related expenditure as a proportion of overall household expenditure in the future. Contractual obligations mean most people are unable to reduce this expenditure, which in most countries remains the most substantial household cost.

### 3.2 House price developments

Price increments at aggregated EU level in 2020 encompassed (with the exception of Cyprus) all European countries. The last quarter of 2020 (+5.7%) and the first quarter of 2021 (+6.1%) were the strongest quarterly increases at European level since 2007. This contrasts with the GFC triggering price decreases in most of countries, except Germany and Austria.

In comparison to the economic measures launched after the GFC, lessons seem to have been learned. National governments and the European Commission quickly launched huge economic recovery programmes after the COVID-19 crisis. When the expectations of fast economic recoveries in the European countries nurtured by these recovery packages become reality, the residential real estate markets could remain in robust shape and continue to avoid a period of decline as observed after the GFC a decade ago.

An additional factor might be the shift in work patterns as many companies adopt remote or hybrid working. The market for conventional office workspace might be negatively affected, while the residential real estate market could get an additional boost.



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