# HYPOSTAT 2021

HYPOSTAT **2021** | A REVIEW OF EUROPE'S MORTGAGE AND HOUSING MARKETS

**European Mortgage Federation**
November 2021

## DISCLAIMER



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NOTE: The views and positions expressed in this publication are of the authors alone, and should not be interpreted as necessarily being those of the institutions to which they are affiliated.

# Residential Mortgages: standards of reliability, drivers of change

The year 2020 was a turning point for all of us. Europe and the rest world underwent profound, long-lasting changes that are still ongoing as Hypostat 2021 is published.

In March 2020, as a new virus hastily spread across the world, many European countries began implementing strict lockdown and social distancing measures, disrupting the lives of many households and pressing businesses to halt their most essential activities. This critical scenario saw EU27 GDP contract by more than 12% y-o-y in Q2 2020 alone, eventually leading to a 4.5% GDP contraction for the year 2020, the sharpest decline since the financial crisis of 2008-2009. At the same time, the rate of unemployment in the EU27 reached 7.1%, while public expenditure and public debt increased to record levels, as the need for a social safety net became increasingly apparent.

The pandemic shock has been deep, widespread and costly. However, despite the many challenges brought forth by the pandemic and the pessimistic near-term outlook, individuals, households and businesses have all proven resilient in the face of adversity, overcoming several obstacles over the past year and half. A prime example of this is the European mortgage industry.

The EU witnessed an unprecedented mobilisation of resources through the comprehensive EUR 750 bn-worth NextGen EU recovery fund, which aims at securing the Union's green and digital future. Moreover, from a monetary policy standpoint, the ECB's efforts to curtail the financial impacts have been significant. In addition to keeping interest rates low, the Central Bank, building on its previous policies, put forward new non-standard accommodative measures, seeking to restore a degree of certainty in the financial and banking sectors, ensure liquidity in markets and increasing the level of risk tolerance. To this end, the ECB topped up its 2019 asset purchase programme with additional funds – a total of EUR 120 bn – and introduced the so-called Pandemic Emergency Purchase Programme (PEPP), a scheme endowed with EUR 1.85 tn which will run until March 2022. It also eased its requirements for long-term refinancing operations and collateral.

In this context, European mortgage banks made a significant contribution to the real economy by facilitating access to new credit in spite of the overall economic contraction and by supporting families in coping with the social fallout of the pandemic through payment holiday schemes. Mortgage lenders have also been instrumental in advancing key policy issues, namely in the field of sustainable finance – through the Energy Efficiency Mortgage Initiative (EEMI) – which lies at the core of the EU's green transition and is seen as a fundamental element of the recovery from the economic crisis.

As this new edition of the Hypostat shows, European mortgage market trends in 2020 were generally positive. The combined EU27-UK outstanding mortgage volumes increased to EUR 7.83 tn (a 3.0% increase against 2019 values), while gross EU27 mortgage lending reached EUR 1 tn, marking a 4.5% yearly growth. The latter expansion of net and gross lending took place in a monetary policy landscape that still favours bank lending, with low interest rates and a diversity of asset-purchasing programmes put forward by the ECB and other central banks. Furthermore, the European housing market, as the latest figures show, underwent significant changes that may open new business opportunities for credit entities.

But European mortgage banks efforts go well beyond their traditional business of residential lending.

Mortgages are an essential instrument to ensure financial stability, accounting for 46.1% of EU GDP. Thus, as the Union endeavours to lay the foundations of a new post-pandemic economy, mortgages will continue to provide substantial macroeconomic leverage.

The EMF-ECBC and its members have become the cornerstone of a broad network that brings together business, stakeholders and policymakers from all levels, in an effort to tackle the most pressing political challenges facing the Union. The post-pandemic recovery is one of these. Since the onset of the pandemic, the EMF-ECBC involved the European mortgage industry in the public debate on the political, social and economic impact of the current crisis. It did so by identifying, monitoring and analysing its impacts on consumers and the market, and in turn, sharing its insights and expertise with public authorities at all levels, from the European Commission to national finance ministries, in efforts to support the recovery.

Today, mortgage banks are also playing a crucial and leading role not only in funding the recovery of our continent, but also in shaping it. Mortgage banks are at the forefront of efforts to finance the transition towards a zero-carbon economy, continuously improving market practices through an assortment of ESG initiatives and projects, the most well-known of which is the Energy Efficient Mortgages Initiative (EEMI) mentioned above. As action to improve the energy performance of the EU's aging building stock in a bid to reduce energy consumption and CO2 emissions becomes ever more urgent, banks are fast becoming one of the key drivers of green finance, shaping and subsequently implementing new energy efficient financial products to support wide-spread building renovation. Indeed, the 'green Renaissance' in Europe will not come about without proper financing. That is why banks, through ground-breaking market initiatives, are designing and deploying tangible, real-life solutions to deliver the cleaner, more efficient housing stock, and one that improves the quality of lives of households, that the EU badly needs.

Once such example of a market initiative is the EMF-ECBC's Energy Efficient Mortgage (EEM) Label. A key component of the broader EEMI, the EEM Label is a new quality instrument allowing for the transparent identification of energy efficient mortgages in banks' mortgage portfolios by market stakeholders. The Label was launched in February 2021, with the support of the European Commission, and is the clearest demonstration of the mortgage industry's commitment to scaling-up private market support for the NextGenerationEU vision, the EU Renovation Wave Strategy and the EU Green Deal, by acting as a catalyst for consumer demand and a driver of the qualitative upgrade of the energy profile of lending institutions' portfolios and of enhanced asset quality. Through a harmonised disclosure template (HDT), the Label is intended to provide information on the portfolios of energy efficient loans as assets to be included in green covered bonds and green securitisation, allow for enhanced evaluation and tracking of their financial performance relative to alternatives and provide greater transparency regarding climate risks and resilience. At the time of writing, the EEM Label brings together 30 financial institutions from 13 different jurisdictions, covering 37 labelled Energy Efficient Mortgage products.

All in all, mortgage markets not only remain a fundamental source of access to housing finance, a driver of economic growth and a pillar of financial stability, vital in periods of economic turmoil, but also show that they can enable and ultimately drive the most intricate societal changes.

As the industry transitions to a post-pandemic, seemingly greener (and certainly not less complex) scenario, we are delighted to bring you the Hypostat 2021, the EMF's annual statistical publication on Europe's housing and mortgage markets. Since the publication of the first edition in 1998, Hypostat has established itself as an industry benchmark for quantitative and qualitative analysis in this area.

It is the result of intense cooperation between financial market analysts, national banking associations and the most eminent mortgage and housing market experts in Europe, especially considering the circumstances in which it was written, a year into a public health crisis that fundamentally transformed how we work, exchange ideas and undertake common projects such as this one.

Hypostat brings together over 30 contributors, commenting on annual data series of 30 indicators, covering, where data is available, the 27 Member States of the and an additional twelve jurisdictions beyond the EU's borders. Besides the country chapters of the EU27 Member States, which make up the bulk of the publication, Hypostat includes specific articles on the UK, Iceland, Norway and, for the first time, Switzerland. These chapters offer the most comprehensive and accurate source of data available on the respective markets and outline developments observed over the past year. Moreover, the country chapters have been complemented with a new section on green finance which provides insights into the most important initiatives developed at national level, confirming the relevance of this asset class in every single country.

Additionally, as it is now tradition, this year's Hypostat includes an overview on the Energy Efficient Mortgages Initiative as well as three external articles focusing on some key, relevant market developments in a year:

- Amid the pandemic, the European DataWarehouse analyses the effects of payment holidays on Europe's securitised mortgages, especially in terms of mortgage delinquency

- This year's report also includes an EBA study on ESG risks in the banking prudential framework, where the Authority considers how to implement environmental, social and governance considerations into the three pillars of the banking prudential framework, as this new type of risks can have potentially systemic consequences.

- Lastly, an article written by our partners at Copenhagen Economic, which outlines a transition risk scenario around the mortgage business, in line with the Energy Efficient Mortgage initiative, and sheds light into the potential capital costs derived from the implementation of the new European sustainable policies.

On behalf of the EMF Research & Data Committee and its Chairman, Paul de Vries, we would like to thank most sincerely all contributors for making the publication of Hypostat possible.

We trust you will find this publication interesting and useful.

**Luca Bertalot, EMF-ECBC Secretary General**

## MACROECONOMIC SITUATION

- In 2020, EU27 GDP fell by 4.5%, the sharpest yearly contraction since the Great Financial Crisis (4.3%). The main driver of the deceleration was the COVID-19 pandemic, which began in Europe in March 2020, and the subsequent containment measures implemented by national authorities across the continent. The pandemic shock quickly disrupted business activities and greatly curtailed private demand. This economic slowdown breaks a decade-long period of economic expansion.
- The Euro area contracted by a steeper 5%. Most of the EU27 Member State also reported decreasing GDP levels, save for Luxembourg, Lithuania and Denmark.
- Labour markets also deteriorated significantly in 2020. The EU27 unemployment rate was, at year end, 7.1%, marking the first increase since 2013. Unemployment levels also increased in all EU27 countries, save for Greece, France, Italy and Poland.
- EU27 public spending increased by a significant 9.2% in 2020, reaching EUR 7.1 tn. In the meantime, total public sector debt represented 90.7% GDP, the highest ratio to date.
- Inflation decreased to 0.7% in 2020 from an average of 1.4% in the previous year, as output and household demand decreased. In the UK, consumer prices fell to 0.8%. Amid the public health crisis, the ECB maintained and expanded its accommodative monetary policy, by extending its 2019 asset purchase programme and establishing a new temporary asset-purchasing scheme to counteract the monetary risks of the pandemic.

## HOUSING MARKET

- The European housing market also endured a significant adjustment due to the pandemic. Investment in the dwellings sector decreased in EU27, as aggregated volumes dropped by 2.1% in 2020. This tightening marked the end of a six-year period of consistent growth.
- Residential building production generally decreased in 2020 on a yearly basis, while sectoral business confidence worsened as the economic situation deteriorated. During the second half of 2020, however, business confidence began to improve while production still recorded negative growth. In the meantime, construction costs, and particularly labour costs linked to construction activities, increased on a yearly basis.
- On average, the total number building permits decreased by 5% in the EU. Most of the jurisdictions also report a decreasing number of licenses, although there are noticeable exceptions to this, which outlines a somewhat diverse landscape for construction prospects in Europe. On a longer term, most countries in the Hypostat sample report an increased issuance of building permits over the last 10-year period (2011-2020). Residential transactions fell by 2.9% in 2020, the first contraction since 2013.
- In 2020, newly issued building permits represented 0.74% of the combined EU27 and UK building stock, 0.04 pps less than in 2019. This figure also remains clearly below the 2000-2007 1% average. The total EU+UK stock of residential was 250 mn units. The bulk of EU houses dates to the 1946-1981 period, although significant national differences can be seen, as explained in the report. Moreover, the EU dwelling type structure is predominantly composed of single-family dwellings or multifamily dwellings.
- As the scope of European sustainable policies expands, pushing forward the so-called green transition, new opportunities arise for the housing sector. The complex European housing stock, as described above, must now adapt to new environmental requirements and criteria, in order to be more energy efficient and thus contribute to the Union's climate goals. In this scenario, renovations will play a crucial role, together with environmentally minded financial solutions.
- The house price index in 2020 increased by 4.8%, after a 5.8% growth in 2019. This continued an upward trend that began in 2014, but the pace of growth peaked in 2018, as reported in the previous edition of this report.
- Between 2011 and 2020, house prices increased at very different rates in the majority of the Hypostat sample, yet some southern European countries diverge from this latter trend, namely Cyprus, Greece, Italy and Spain, as they all saw house prices decrease on average over the course of a decade.
- Across the EU, capital prices increased by 3% in 2020, 4.2 pps less than in 2019. Moreover, capital city prices grew at a slower pace than aggregated EU27 house prices. However, from a country standpoint, the picture is mixed, as the evolution of both metrics varied significantly, outlining a rather heterogenous landscape.

## MORTGAGE MARKETS

- The latest figures from 2019, the last year for which there is full data available, suggest that 69.3% of the EU27 population were homeowners. Furthermore, 25% of European households reported having a mortgage o similar financial product. Mortgage markets, however, are more developed in certain regions, while other, such as Eastern Europe, are still catching up.
- Over the last decade, the proportion of European homeowner with a mortgage has decreased and while mortgage funding tended to expand significantly.
- On average, a European adult has an average mortgage loan of nearly EUR 17,000, equivalent to 46.1% GDP, an increase of 4 pps since 2019, the largest increase this century, albeit due to the drop in GDP. Luxembourg has the highest mortgage debt per capita at nearly EUR 76,000.
- Adjusting the average mortgage per capita for the proportion of homeowners with mortgages shows that the average mortgage loan for those that have one is nearly EUR 68,000 with four countries showing over EUR 100,000 outstanding per mortgage holder Luxembourg, Denmark, Sweden and Romania.
- In 2020, EU27 outstanding mortgage loans reached EUR 6.17 tn, a 4.5% y-o-y increase and the largest since 2008. Adding the UK, Norway and Iceland to the stock, the figure reached EUR 7.83 tn outstanding, a new all-time high for the region.
- The EU mortgage market is dominated by a handful of countries, the UK, Germany, France, the Netherlands and Spain which, considered altogether, represent nearly 75% of the outstanding mortgage market of the EU 27 and UK.
- The average interest rates fell slightly more rapidly in 2020, as the average rate reached 2.11%, 26 bps lower than in 2019.
- In the EU27 and UK, variable interest rate mortgages were just under 20% continuing, ten-year-long declining trend since 2010, when it was over 60%. In absolute terms, new variable interest gross lending was around EUR 240 bn continuing to fall.
- The proportion of variable interest rates (with an initial fixated period of up to 1 year) varies considerably by country. In Poland, all mortgages are on a variable rate while in Croatia, Hungary and Slovakia only a small percentage of new mortgages are. Variable interest rates decreased both in absolute and relative terms in 2020.

# NOTE

Hypostat, published by the European Mortgage Federation – European Covered Bond Council (EMF-ECBC), presents annual statistics on EU mortgage and housing markets, as well as data and information on a number of non-EU countries. The present edition, "Hypostat 2021", focuses on developments that took place in 2020, therefore considering the effects of the pandemic.

In the Statistical Tables, data is presented in EUR. This may, however, introduce exchange rate distortions for countries outside the euro area. Please see the exchange rates used in this edition in Table 30 of the Statistical Tables section.

Finally, although Hypostat aims to publish consistent data across countries and over time, not all data can be fully compared between countries, owing to some methodological differences present at the source. The EMF-ECBC strives, through Hypostat, to provide a comprehensive and comparable source of data and information on the mortgage and housing markets of the EU (and beyond). For further information on the definitions and sources used, please refer to the Annex: "Explanatory Note on Data".

Below please find a list of the abbreviations and stylistic conventions used throughout the publication:

| | |
|---|---|
| **bn** | billion |
| **bps** | basis points |
| **mn** | million |
| **pps** | percentage points |
| **q-o-q** | quarter on quarter |
| **td** | thousand |
| **tn** | trillion |
| **y-o-y** | year on year |
| **BGN** | Bulgarian Lev |
| **BTL** | buy to let |
| **CHF** | Swiss Franc |
| **CZK** | Czech Koruna |
| **DKK** | Danish Krone |
| **DTI** | Debt to Income |
| **EC** | European Commission |
| **ECB** | European Central Bank |
| **EU** | European Union |
| **EUR** | Euro |
| **FTB** | First time buyer |
| **GBP** | British Pound |
| **GDP** | gross domestic product |
| **HICP** | Harmonised Consumer Price Index |
| **HRK** | Croatian Kuna |
| **HUF** | Hungarian Forint |
| **LGD** | Loss Given Default |
| **LTI** | Loan to income |
| **LTD** | Loan to deposit |
| **LTV** | Loan to Value |
| **MFI** | Monetary and Financial Institution |
| **NPL** | Non-Performing Loan |
| **PD** | Probability of Default |
| **PLN** | Polish Zloty |
| **RMBS** | Residential Mortgage Backed Security |
| **RON** | Romanian Leu |
| **SEK** | Swedish Krone |
| **USD** | United States Dollar |
| **VAT** | Value-added Tax |

# Monitoring Moratoria Through COVID-19 – The Impact of Payment Holidays on Europe's Securitised Mortgages

By Ludovic Thébault and Usman Jamil, European DataWarehouse

From mid-March 2020, most European governments enacted social distancing measures to limit the spread of the COVID-19 pandemic. These measures, as well as changes in consumer behaviour[1], led to severe economic disruption. Hotels, restaurants, entertainment/leisure industries, and retailers were particularly affected. Governments thus stepped in to mitigate the effects of social distancing on the economy, in many cases encouraging lenders to temporarily grant moratoria[2] (or payment holidays) to borrowers in an effort to prevent defaults[3]. In some countries, regulation even made the granting of moratoria mandatory to borrowers who faced repayment difficulties due to the crisis.

In this article, we use EDW's loan-level database of securitised European mortgages to explore the effects of COVID-19 -related moratoria. We found that:

- Despite the severity of the crisis, delinquencies barely increased in 2020. This is most likely due to loans benefitting from moratoria that would otherwise have become delinquent.
- Moratoria levels differ widely from one country to the next. Crisis severity and conditions for obtaining moratoria partly explain these differences.
- Most first-time moratoria occurred in spring 2020, receding back to pre-crisis levels afterwards.
- Loans most likely to have obtained a moratorium also had higher credit risk prior to the crisis in terms of Current Loan to Value, Debt to Income Ratio, and Debt Service to Income Ratio.
- As per other asset classes, self-employed borrowers were more likely than pensioners and civil servants to need and obtain moratoria.
- The borrowers exposed to the most severely affected economic sectors were more likely to temporarily see their income drop, but credit risk prior to the crisis still played a key role in explaining the use of moratoria.

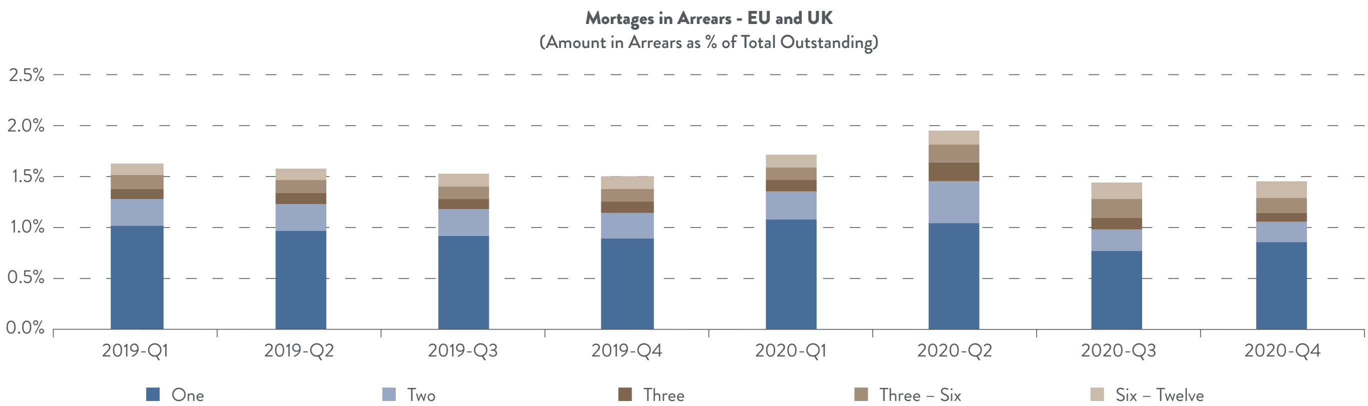
Despite the severity of the COVID-19 crisis, European mortgage delinquencies increased only moderately in Q1 and Q2 2020, receding to pre-crisis levels in most countries afterwards. Exhibit 1 demonstrates that delinquencies generally returned back to pre-crisis levels in Q4 2020[4]. To a large extent, this apparent performance improvement is due to the immediate and substantial policy response to the crisis, as well as the widespread use of moratoria to avoid a wave of defaults.

Although delinquencies remained low, the COVID-19 crisis clearly had an impact on mortgage amortisation patterns.

Exhibit 2 shows the proportion of loans (by amount) that amortised compared to the previous period. The chart represents only those loans that reported consistently over the last two years and had amortised regularly prior to the crisis.

In most countries we observed a dip in Q2/Q3 2020, indicating that some of these loans did not amortise in that period. The proportion of amortising loans

EXHIBIT 1 | A MODERATE AND TEMPORARY INCREASE IN MORTGAGE ARREARS IS VISIBLE IN Q2 2020




*Source: European DataWarehouse; weighted average delinquencies from securitisations that reported consistently to our database from 2018-Q1 to 2021-Q1.*

[1] Consumers spontaneously postponed medical appointments, stockpiled soap, toilet paper, pasta, flour, disinfectant, latex gloves… resulting in a visible supply disruption.

[2] By moratoria, we mean a change to a borrowers' payment schedule temporarily reducing or fully suspending the instalments due. This typically results in loan modifications, such as increases in maturity, capitalisation of interest, or reduced instalment amounts.

[3] See European Banking Authority (EBA) report "Notifications on general payment moratoria by country".

[4] Please refer to our regularly updated RMBS COVID-19 TRACKER for more details regarding arrears levels, and moratoria in European securitisations.

increased again in most countries, but in Spain, Portugal, and Italy, improvements have occurred at a slower rate.

In Portugal, 83% of the loans amortised from Q3 2020 to Q1 2021, implying that 17% of these loans were still subject to moratoria at the time. In the UK and Ireland, a clear dip is visible in Q2 2020, but the loans gradually resumed amortising afterwards. Despite only 45% of the relevant data for Q2 2021 being available in EDW's database when this analysis was conducted, preliminary results suggest a slow return to amortisation in Spain and Portugal. Given that both delinquencies and moratoria played a role in explaining the dip seen in Exhibit 2, we also explored how widespread moratoria have been.

When a loan benefits from a moratorium, we expect to find the following changes to its amortisation characteristics in our loan-level data:

- At least a 50% drop in instalment due
- An increase in maturity
- An interruption of amortisation, with current balance stagnating or even increasing

In the case of a loan becoming "interest-only" we expect it to stop amortising, but when no interest is paid either, we expect to see the accumulated interest capitalised (i.e. added to the outstanding loan amount).

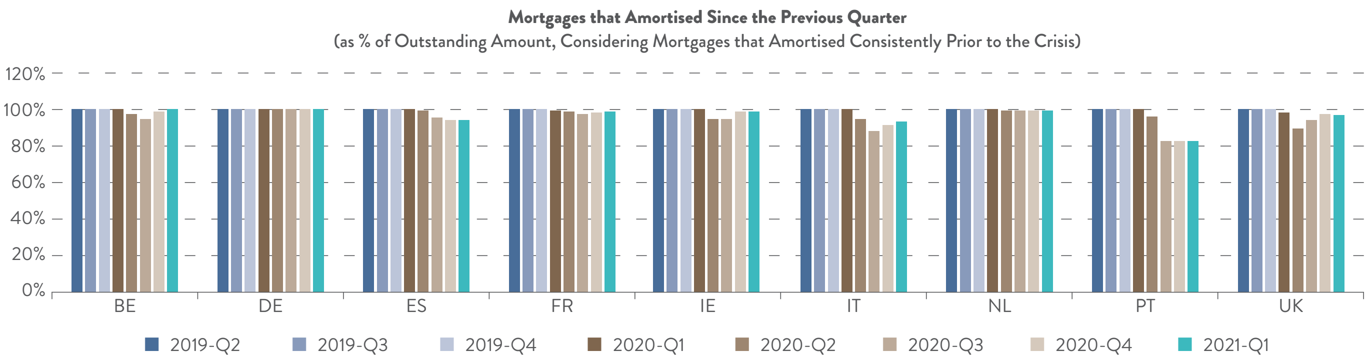
To exclude loans that were already underperforming prior to the COVID-19 crisis, we flagged as "moratorium due to COVID-19" the loans where we saw:

- Any of these three loan modifications since March 2020, and
- None of these modifications in the six periods before March 2020

In Exhibits 3 to 5 we count the modified loans once, in the period of first modification and for their amount at that time.[5] In Exhibits 3a and 4a we show the occurrence of the three criteria separately as well as their combined frequency as "any of three" (i.e. implied moratoria). The two combinations are as follows:

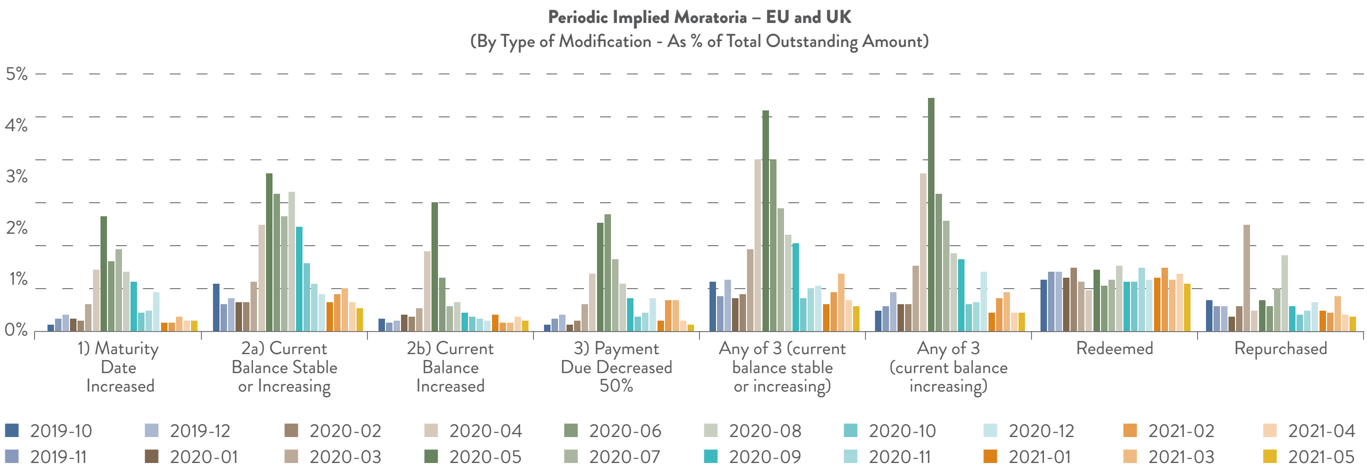
- A – with a loan balance that remains static or increases from one period to the next
- B – with a current balance increasing from one period to the next (implying capitalisation of interest).

## EXHIBIT 2 | COVID-19 HAD A VISIBLE IMPACT ON LOAN AMORTISATION




*Source: European DataWarehouse; Based on a sample of loans that had amortised consistently from 2019-Q1 to 2021 Q1.*

## EXHIBIT 3a | FIRST-TIME MORATORIA PEAKED IN SPRING 2020 AND RECEDED AFTERWARDS[6]

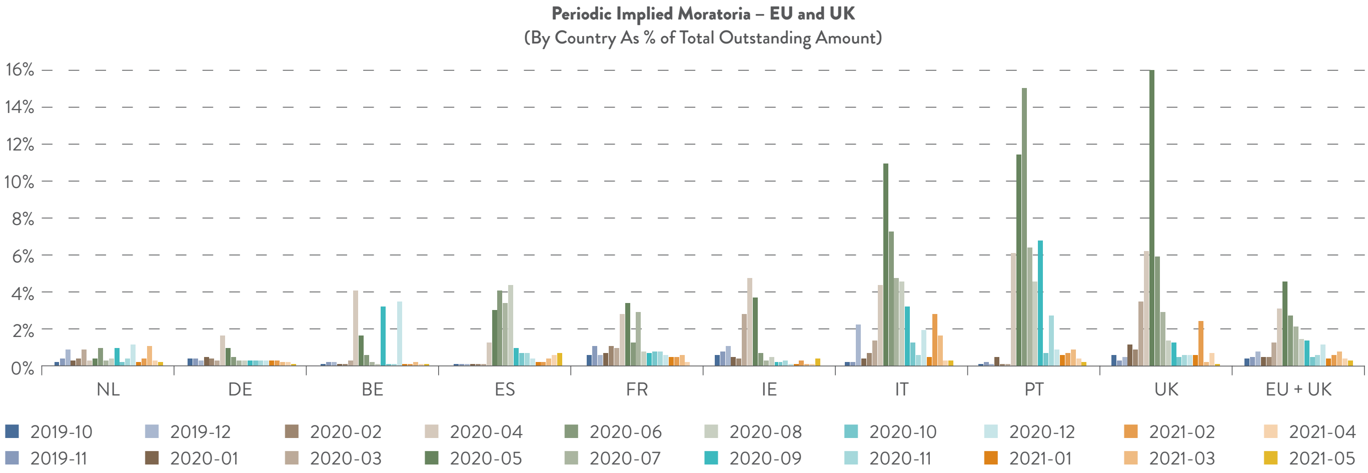



*Source: European DataWarehouse*

[5] We note however, that some of these loans may have been modified several times subsequently. We thus found cases of loans whose maturity had been extended several times.

[6] Please note that because the reporting is often quarterly, the cumulative moratoria cannot simply be calculated by adding the monthly values in Exhibits 3a and 3b. For each month we use the data received with an "as of" date in that month. A deal reporting quarterly is therefore reflected in the statistics once every three months.

**EXHIBIT 3b** | FIRST-TIME MORATORIA OCCURRED IN SPRING/SUMMER 2020 IN MOST COUNTRIES




*Source: European DataWarehouse*

Although the results in case B are clearly less than in A (2a vs 2b in Exhibit 3a and 4a), the combined effects of both options are similar. The advantage of using "current balance increasing" as a criterium, is that only loans that were sufficiently altered to bear visible consequences are flagged. This provides a clearer sign of moratorium compared to "current balance stable," which can also occur when a loan first goes into arrears. For Exhibits 3b, 4b, 5, 7, 8, 9, 10, and 11, we therefore use the criteria "Any of 3 (current balance increasing)" as our indicator of COVID-19 moratoria.

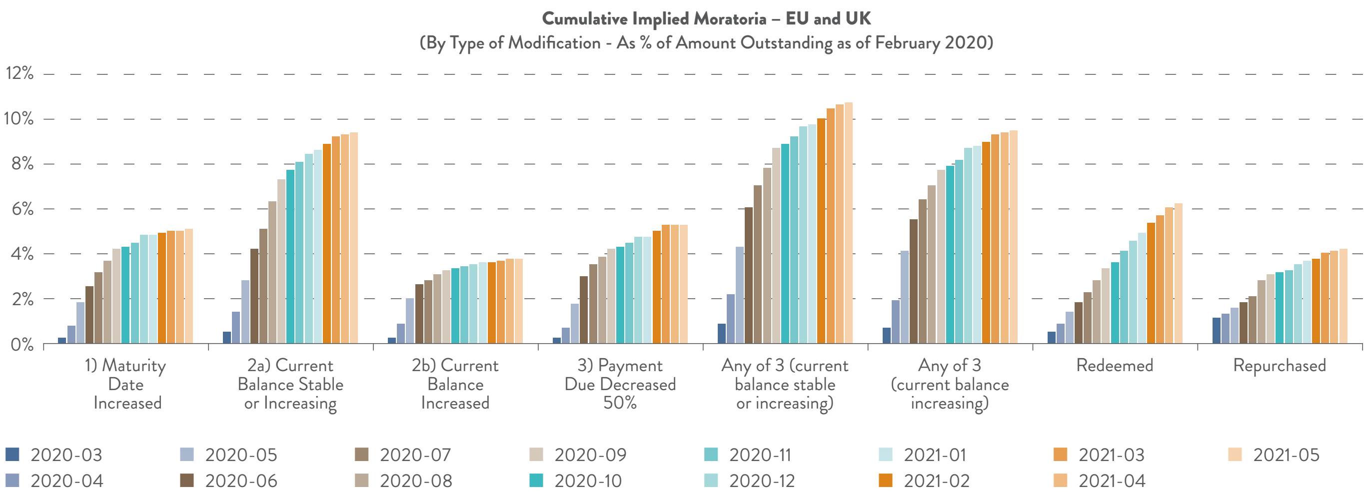
Periodic first-time loan modifications peaked in spring 2020 and decreased over the summer (Exhibits 3a and 3b). While there were several waves of infections, there was only one main wave of moratoria.

We note that lower levels of loan modifications were already happening before March 2020 in most countries, as part of the normal course of business.[7] After a peak in new moratoria in spring/summer 2020, loan modifications trended back towards pre-pandemic levels.

It is possible that some loans, no longer complying with securitisation documentation following modification, had to be repurchased[8] but loan redemption does not seem affected by the crisis and repurchases barely increased during the summer 2020.

The cumulative moratoria reported in Exhibits 4a and 4b can be compared with those mentioned in the European Banking Authority's (EBA's) report "Moratoria and public guarantees in the EU Banking Sector".[9] According to EBA, 7% of residential mortgages had a moratorium by June 2020. The values quoted in the EBA report for cumulative mortgage moratoria in June 2020 are at times higher than EDW's, for example in Spain and Portugal. This could be due to two main reasons:

**EXHIBIT 4a** | IMPLIED MORATORIA USING VARIOUS LOAN MODIFICATIONS AS INDICATORS



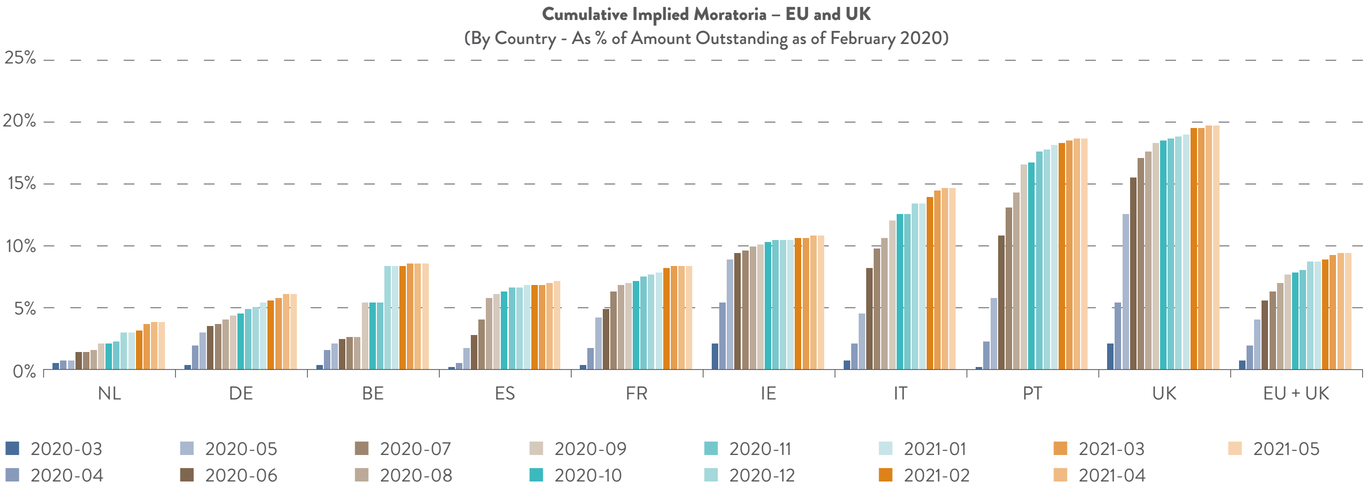

*Source: European DataWarehouse*

[7] European regulation encourages lenders to apply reasonable forbearance in favour of their borrowers facing payment difficulties.

[8] In securitisations, there are typically limitations on loan modifications in terms of yield, maturity, or risk. Modified loans may thus have to be repurchased by the originator when they no longer comply with these limits. The spike of repurchases visible in.

[9] See EBA "First evidence on the use of moratoria and public guarantees in the EU banking sector".

## EXHIBIT 4b | MORATORIA HAVE BEEN MORE WIDELY USED IN SOME COUNTRIES THAN OTHERS




*Source: European DataWarehouse*

- The use of less restrictive criteria to flag the modified loans, would highlight more moratoria, albeit at the risk of flagging loans that are actually not in moratorium.[10] Our methodology also excludes loans that had modifications in the periods prior to the crisis to avoid flagging loans that had performance issues prior to the crisis.
- Securitised mortgages are generally known to be of somewhat better quality than non-securitised mortgages.[11]

This means also that our statistics are likely to somewhat understate the true extent of the moratoria for the mortgage markets. We nevertheless expect that the trends and rank orderings observed for our securitised loans would still apply for non-securitised loans, and that our selection criteria have identified loans that were indeed modified due to COVID-19 moratoria.

Moratoria levels differ substantially across European countries, as shown in Exhibit 4b. These differences most likely mirror the severity of the crisis and the measures used to counter it. Italy and Portugal, for instance, enacted prescriptive legislation on moratoria so that borrowers facing an income reduction specifically due to COVID-19 could demand a moratorium. The Netherlands, on the other hand, did not enact legislative moratoria but used other means of mitigating the effects of the crisis.

In Exhibit 5, we compare the 2020-Q1 cumulative implied payment holidays shown in Exhibit 4b, with several possible explanatory factors. We see that:

- Germany and the Netherlands had the least moratoria and were also less impacted than other countries in terms of casualties and GDP.
- In contrast, Portugal and Italy combine some of the highest figures in terms of casualties, GDP impact, and cumulative moratoria.
- The UK, with the highest cumulative moratoria and a high number of casualties, was impacted by the crisis less than other countries, such as Belgium and Italy where casualties were higher and moratoria lower.

All these factors could explain the extent of the use of moratoria, but the most crucial indicators relate to whether moratoria were offered, how easy they were to obtain, and if they were needed.

## EXHIBIT 5 | CUMULATIVE MORATORIA AND INDICATORS OF SEVERITY OF CRISIS

| | IMPLIED MORATORIA (CUMULATIVE) | COVID-19 DEATHS PER 100,000 INHABITANT | GDP CHANGE 2019-Q4 TO 2021-Q1 | RELIANCE ON TOURISM | LEGISLATIVE MORATORIA FOR MORTGAGES |
|---|---|---|---|---|---|
| NL | 3.7% | 101.5 | -1.0% | 3.7% | Non-legislative |
| DE | 5.8% | 107.3 | -2.3% | 4.4% | Yes (limited to 3 months) |
| ES | 6.9% | 169.5 | -9.0% | 10.9% | Yes (non mandatory) |
| FR | 8.4% | 164.0 | -1.7% | 7.0% | Non-legislative |
| BE | 8.5% | 217.8 | -1.7% | 2.3% | Yes |
| IE | 10.8% | 99.6 | 7.2% | 3.4% | Non-legislative |
| IT | 14.7% | 210.2 | -5.2% | 6.0% | Yes |
| PT | 18.7% | 165.5 | -5.9% | 9.2% | Yes |
| UK | 19.7% | 190.7 | -2.9% | 3.8% | No (public + private initiative ) |

*Source: European DataWarehouse; Eurostat; European Centre for Disease Prevention and Control; *World Tourism; ** EBA; *** ukfinance.org (public-private initiative)*

[10] Please note that using different criteria to identify "implied payment holidays" would yield different results. For instance, using a decrease of 30% at least of the instalment amount, we would have found higher levels of loan modifications. Had we only looked for loans where the instalment amount had been reduced to zero, we would have found lower values instead.

[11] Typically, mortgages must be performing at the time they are included in a securitised portfolio and must not have been restructured for performance reasons either.

In the UK for instance, moratoria were offered as part of an industry-led initiative with governmental sponsorship. Although not a legislative moratorium, lenders were very strongly encouraged to take part, and moratoria were liberally granted with minimal verifications. We believe that this was the determinant factor in the UK.

The length of the first-time maturity extension changed during the crisis. Whereas most maturity extensions were either short or long term before the crisis, most maturity extensions since March 2020 are concentrated in the 4 to 12 months range as shown in Exhibit 6.

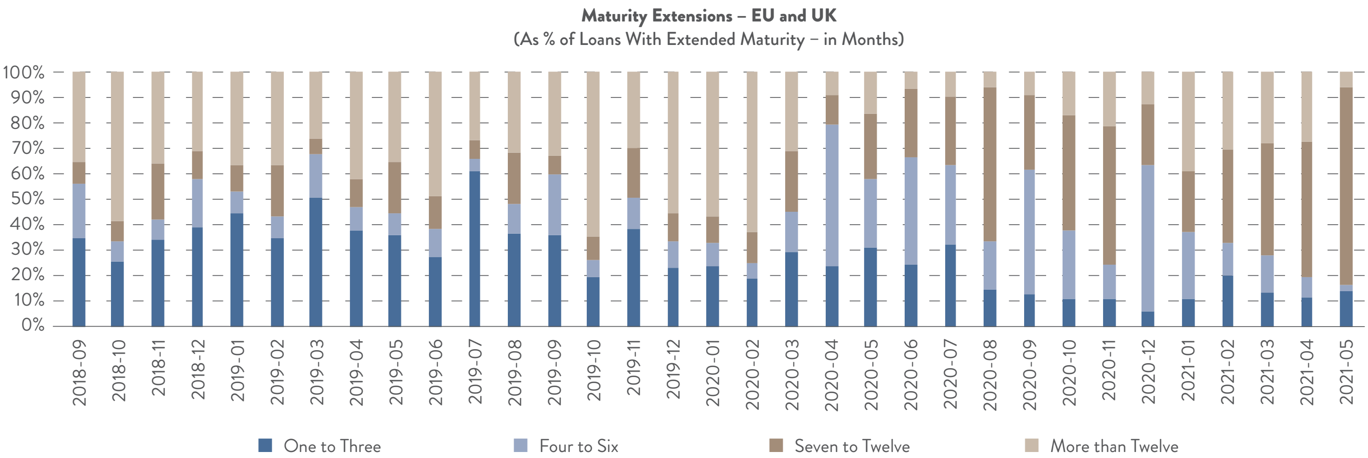
EDW data shows that some categories of borrowers were struck harder than others. When analysing the employment type of the borrowers whose loans identified as moratoria (Exhibit 7), we observe that the self-employed relied on them more often than civil servants or pensioners whose incomes are more stable. This was also the case for other asset classes in our database[12].

We then looked at the pre-crisis credit risk profile of the loans we identified as moratoria, using the following key credit-risk indicators:

- Current Loan-To-Value ratio (CLTV – The ratio of the outstanding loan amount to the current value of the property); the higher the CLTV, the greater the default risk[13]
- Debt-To-Income Ratio (DTI – Loan amount divided by the yearly income); a higher DTI, implies a greater credit risk
- Debt Service-To-Income ratio (DSTI – The ratio of the monthly instalment to the borrower's monthly income); a higher DSTI indicates a greater loan service burden

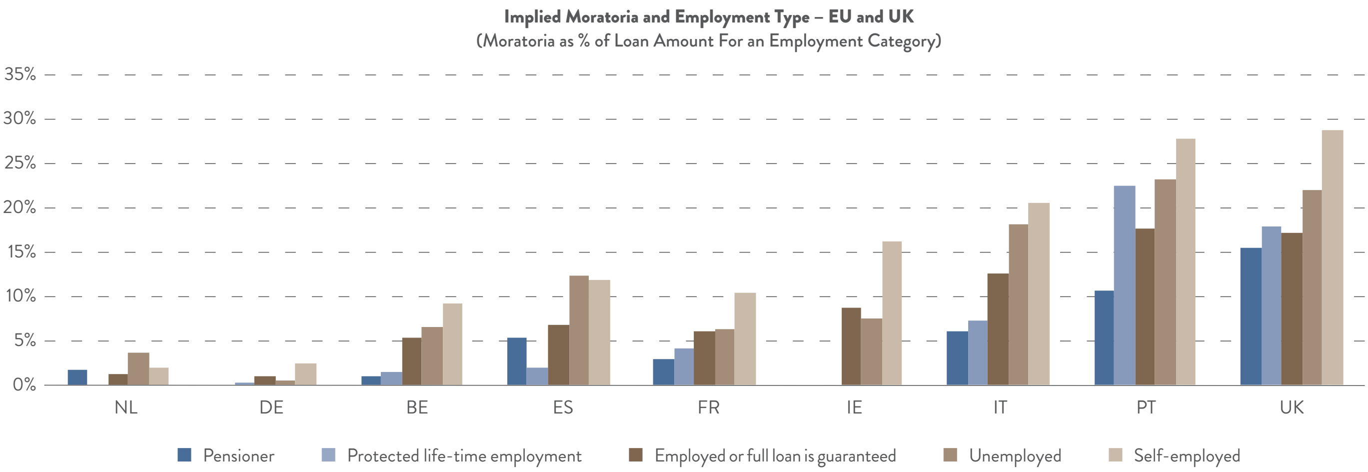
For these statistics, we considered the last income and instalment values provided prior to the crisis.[14] We find that if the borrowers exposed to the most severely affected economic sectors were more likely to temporarily see their income drop, credit risk prior to the crisis still played a role in explaining the use of moratoria.

## EXHIBIT 6 | MORTGAGE MATURITY EXTENSION MOSTLY IN 4-12 MONTHS RANGE SINCE MARCH 2020




*Source: European DataWarehouse*

## EXHIBIT 7 | THE SELF-EMPLOYED ARE MORE LIKELY TO HAVE BENEFITTED FROM MORATORIA



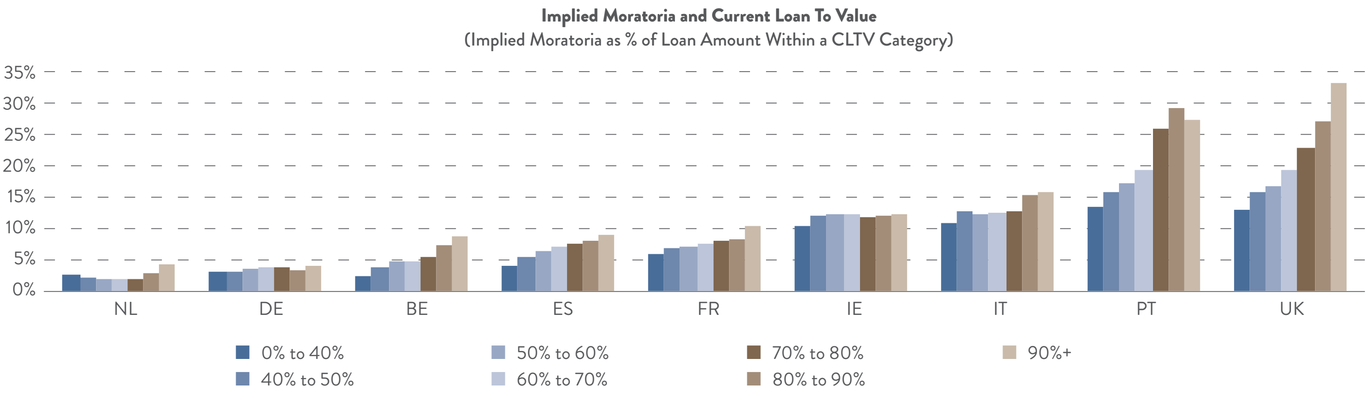

*Source: European DataWarehouse*

[12] See in particular "SME and the self-employed have been the main beneficiaries of auto loans extensions".

[13] On this topic see for instance "The V in LTV and Why it matters".

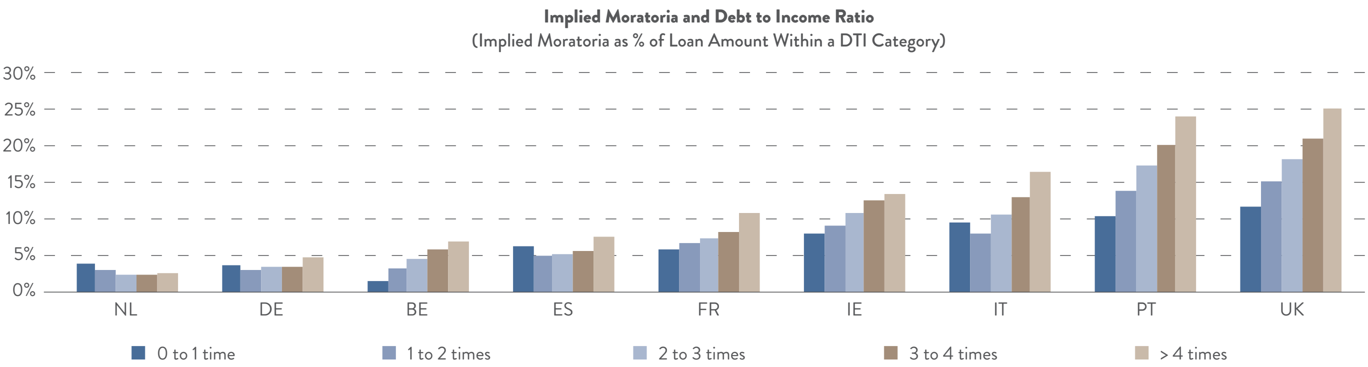
[14] We would indeed expect a drop in income due to the crisis to trigger a moratorium and therefore a temporary decrease of the instalment due.

### EXHIBIT 8 | MORATORIA ARE MORE COMMON FOR LOANS WITH A HIGH CLTV



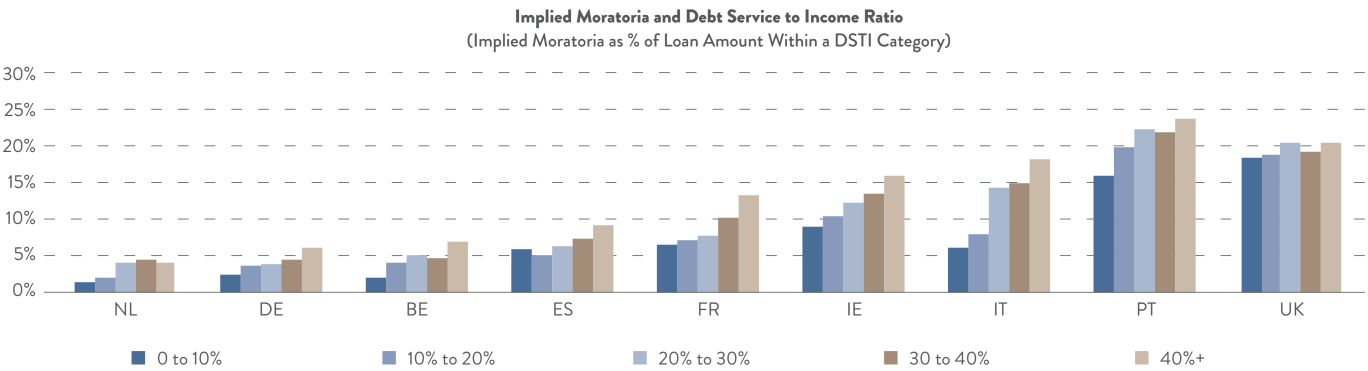

*Source: European DataWarehouse*

### EXHIBIT 9 | MORATORIA ARE MORE COMMON FOR LOANS WITH A HIGH DTI




*Source: European DataWarehouse*

### EXHIBIT 8 | MORATORIA ARE MORE COMMON FOR LOANS WITH A HIGH DSTI




*Source: European DataWarehouse*

In most countries, we see that loans with a higher CLTV prior to the crisis are indeed more likely to have been in moratorium. A similar observation can be made for the DTI ratio (Exhibit 9) and DSTI ratio (Exhibit 10).

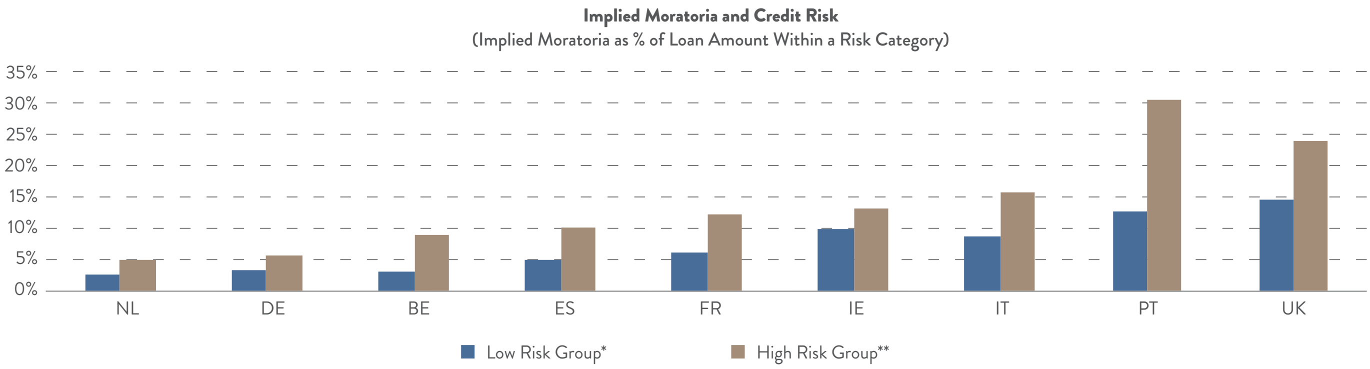
In Exhibit 11, we created two groups of loans combining all three credit risk indicators in each country.

- Low risk group: DSTI below 30%, DTI less than 3 times, and CLTV below 70%
- High risk group: DSTI exceeds 30%, DTI more than 3 times, and CLTV exceeds 70%

Indeed, Exhibit 11 shows that moratoria are less common in all countries for loans with a low credit risk than for those with a high credit risk.

Moratoria thus complemented government-sponsored measures (furlough, Kurzarbeit etc.) in preserving the purchasing power of borrowers throughout the crisis. In cases where borrower incomes were not fully preserved by state support, not having to repay their loan instalment over the period was also certainly helpful.

## EXHIBIT 11 | MORATORIA ARE MORE COMMON FOR RISKIER LOANS




*Source: European DataWarehouse*

As we saw in Exhibit 2, loans have slowly started amortising again in most countries. We expect that the phasing out of moratoria will remain flexible until the economy recovers. It is likely, however, that some of the borrowers currently benefiting from moratoria will eventually default if they cannot recover their pre-crisis incomes.

EDW will continue monitoring the effects of moratoria, particularly towards the end of 2021, when some of these special measures are likely to be lifted.

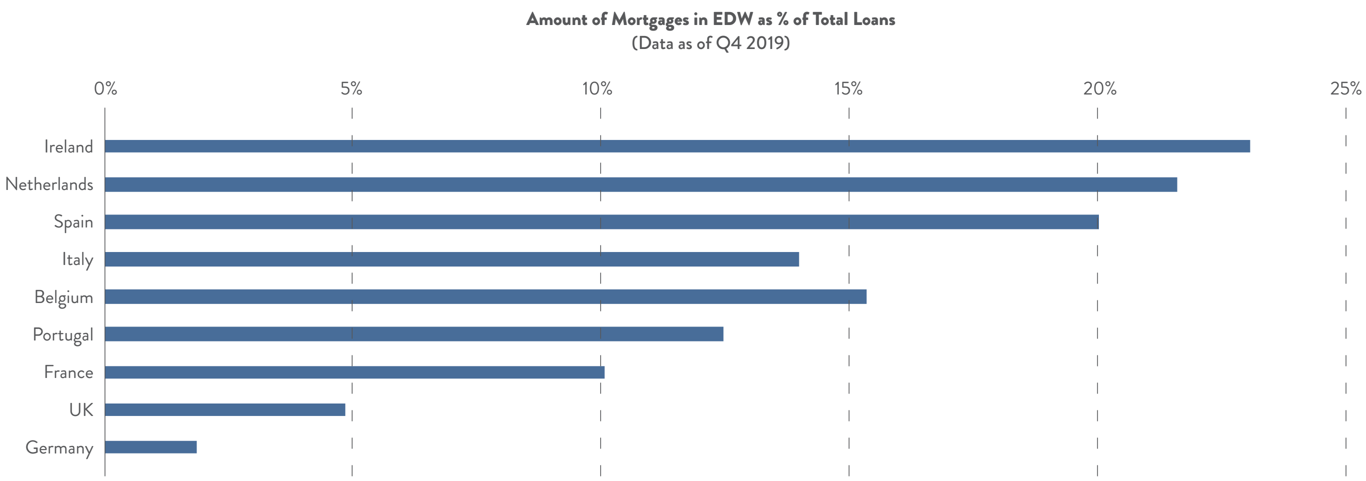
### APPENDIX 1: DATA AVAILABILITY

PLEASE NOTE: our results are based on securitisation data, which does not necessarily fully represent lenders' assets:

- Securitised loans tend to be of better quality than non-securitised loans.
- Securitisation is not equally important in all countries and to all lenders.
- Large securitisations may disproportionately affect the overall statistics

Pleas see https://eurodw.eu/ for more details regarding our database. The data on RMBS follows the ECB RMBS template. Please refer to our Data Availability Report for an overview of the data available by country and asset class. Also, for more details on the impact of COVID-19 on securitisations, please also refer to our other publications such as RMBS COVID-19 Tracker. Please click on the link to download the full report.

## EXHIBIT 12 | EUROPEAN DATAWAREHOUSE DATA COVERAGE




*Source: European DataWarehouse*

# ESG risks in the banking prudential framework

By Lievijne Neuteboom[1], European Banking Authority

## 1. INTRODUCTION

It is increasingly being recognized in the financial sector and beyond that environmental, social and governance (ESG) matters may have a positive or negative impact on households, corporates and financial institutions. Notably, scientific evidence[2] suggests that climate change and environmental degradation, and the associated need to transition towards an environmentally sustainable economy, will lead to changes in the real economy that will in turn impact the financial sector through new risks and opportunities.

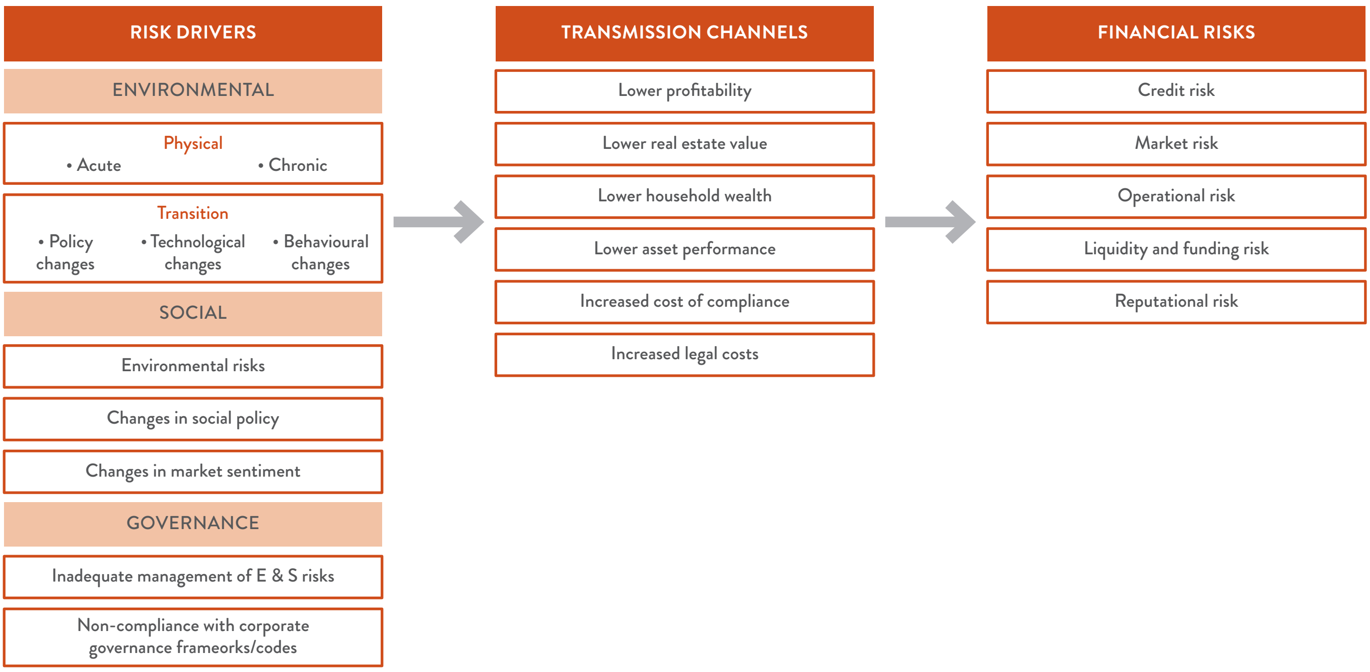
Through their core business activities, i.e. their lending and investing activities, banks and investment firms ('institutions') can be impacted by ESG risks through their counterparties or invested assets. For example, counterparties can be affected by environmental risks through physical events such as increased floods as a consequence of climate change impacting properties, or through transition risks, such as policy implementation, technological advancement and changing market sentiment leading to certain economic activities being phased out. Similarly, social factors – such as inequality, health or labour relations – and governance factors – such as executive leadership or bribery and corruption – can have negative financial impacts on counterparties, and in turn on institutions.

Next to being able to manifest themselves at the level of counterparties, ESG risks can also impact the financial system and economy as a whole because of their scale, breadth and complexity, with potential systemic consequences. To reflect this, the banking regulatory framework (CRR2/CRD5) has been revised and several mandates have been extended to the European Banking Authority (EBA) to assess how to include ESG risks into the three pillars of the banking prudential framework[3]. The following lays out the content of these different mandates and zooms in on the important role analysis on housing and real estate portfolios, energy-efficient mortgages and energy performance certificates play in the fulfillment of these mandates.

## 2. ESG RISKS MANAGEMENT AND SUPERVISION

The first mandate (Article 98(8) of the CRD5) relates to Pillar 2 and calls on the EBA to develop a report assessing the potential inclusion of ESG risks in the supervisory review and evaluation process performed by competent authorities. Following this mandate, in June 2021 the EBA published its Report on ESG risks management and supervision[4].

FIGURE 1 | ESG RISK DRIVERS, THEIR TRANSMISSION CHANNELS AND HOW THESE CAN IMPACT FINANCIAL RISK CATEGORIES




1 With comments from Fabien Le Tennier and Katrin Weissenberg.

2 See e.g. reports from the Intergovernmental Panel on Climate Change (IPCC) e.g. IPCC (2018), 'Global Warming of 1.5°C – Summary for Policymakers'.

3 This article focusses on the mandates given to the EBA in the CRR2/CRD5 package. Additional mandates are expected to be given as part of the upcoming review of the CRR/CRD package, following the Commission's Renewed Sustainable Finance Strategy published on 6 July 2021.

4 See here (link).

The report provides common definitions of ESG risks, elaborating on the arrangements, processes, mechanisms and strategies to be implemented by institutions to identify, assess and manage ESG risks, and recommending how ESG risks should be included in the supervisory review and evaluation performed by competent authorities. The report focuses on the resilience of institutions to the potential financial impact of ESG risks across different time horizons, which needs to be carefully assessed and ensured by institutions taking a comprehensive and forward-looking view, as well as early, proactive actions.

**Definitions and assessment methodologies.** ESG risks to institutions are defined as risks that stem from the current or prospective impacts of ESG factors on their counterparties or invested assets, i.e. the risks arising from the core activities of institutions. ESG risks materialise into the traditional categories of financial risks through a variety of transmission channels, as depicted in Figure 1.

Various methods for the assessment of ESG risks exist in the market and these are rapidly evolving. The EBA has identified three types: (i) the portfolio alignment method, which focuses on how aligned an institution's portfolio is with global sustainability targets; (ii) the risk framework method (including scenario analysis), which focuses on how sustainability-related issues affect the risk profile of an institution's portfolio and its standard risk indicators; and (iii) the exposure method, which focuses on how individual exposures and counterparties perform on ESG factors. These approaches serve the objective of assessing the alignment of institutions' portfolios with global or regional sustainability goals and/or offer insights into the risks caused by exposures to (including investments in) certain activities. The EBA does not prescribe the use of one particular approach and sees merit in the application of a combination of results.

### ENERGY-EFFICIENT MORTGAGES, HOUSING AND REAL ESTATE IN THE CONTEXT OF ESG RISK ASSESSMENTS

In the context of the risk framework method, asset-based evidence such as the performance analysis on energy efficient mortgages is often used as a method (under development) for the assessment of environmental risks specifically[5]. In the same context, climate stress tests are increasingly being developed and applied to assess the resilience of institutions' balance sheets to climate risks. Such tests feature fully fledged scenarios that map out possible future development paths of transition variables (e.g. carbon prices) or physical variables (e.g. temperature increases) and the related changes in macro variables (e.g. output in different sectors, GDP, unemployment) and financial variables (e.g. interest rates). These scenarios are then translated into changes in portfolio (risk) attributes. In such tests, housing and real estate sectors are often in scope when assessing physical risks stemming from climate change. Examples of this include the exercise run by Acclimatise and 16 participating UNEP FI banks[6], where physical risk in the form of climate events and extreme weather events and their impact is modelled for the agricultural, energy and real estate sectors. For the real estate sector, the likelihood of extreme weather events and mortgage terms are combined to derive revised loan-to-value ratios (LTVs). Another analytical example for the real estate sector is PwC's Carbon Value Analyser[7], which allows a quantitative assessment to be made of the effects of climate change policy on property values.

**Management of ESG risks by institutions.** The EBA sees a need to enhance, in a risk-based and proportionate manner, the incorporation of ESG risks into institutions' business strategies, internal governance arrangements and risk management frameworks.

Business strategies. While institutions are, and should remain, responsible for setting their strategies, the impacts of ESG risks should be taken into account in order to ensure the resilience of business models over the short-, medium- and long-term. The EBA recommends that institutions achieve this by: i) incorporating ESG risk-related considerations when setting business strategies, in particular by extending the time horizon for strategic planning to a minimum of 10 years, at least qualitatively, and by testing their resilience to different scenarios; ii) setting, disclosing and implementing ESG risk-related strategic objectives and/or limits, including related key performance indicators, in accordance with the institution's risk appetite; iii) engaging with borrowers, investee companies and other stakeholders; and iv) assessing the potential need to develop sustainable products or to adjust features of existing products, as a way to contribute to and ensure alignment with strategic objectives and/or limits.

### INSTITUTIONS' GREEN PRODUCT OFFERING: ENERGY-EFFICIENT MORTGAGE LOANS AND GREEN COMMERCIAL BUILDING LOANS

With regards to the development of sustainable products, the EBA market practices survey[8] found that 83% of participating institutions had already entered or were planning to enter the green finance space. In the survey, 29% of institutions were originating or developing green and energy-efficient mortgage loans, while 23% were granting or developing green commercial building loans. For the origination of such green loans, institutions have either developed internal standards or use established market standards, for example the Energy Efficient Mortgages Action Plan (EeMAP) for residential mortgages developed by EMF/ECBS. As a market-led initiative, EeMAP creates a standardised energy-efficient mortgage label in order to incentivise building owners to improve the energy efficiency of their buildings or acquire an already energy-efficient building through preferential financing conditions.[9]

**Governance.** The EBA recommends that institutions integrate ESG risks in their governance structure, establishing clear working procedures and responsibilities for business lines, internal control functions, the relevant committee(s) and management body, with a view to ensuring a sound and comprehensive approach to the incorporation of ESG risks into business strategy, business processes and risk management. This should cover the management body and its 'tone from the top', allocation of tasks and responsibilities related to ESG risks in the decision making process, adequate internal capabilities and arrangements for an effective management of ESG risks, and remuneration policies that are aligned with the institution's long-term interests, business strategy and objectives.

**Risk management.** The EBA sees a need for institutions to incorporate ESG risks into their risk management framework, taking into account an assessment of their materiality over different time horizons, by: i) embedding material ESG risks in the risk appetite framework; ii) managing ESG risks as drivers of

5 See for instance the EeMAP's Final Report on the correlation between energy efficiency of mortgages and the probability of default.

6 Navigating a New Climate: Assessing credit risk and opportunity in a changing climate: Outputs of a working group of 16 banks piloting the TCFD Recommendations, Part 2: Physical Risks and Opportunities – UNEP FI and Acclimatise (July 2018).

7 https://www.pwc.de/de/pressemitteilungen/2020/energie-und-klimaperformance-von-immobilien-carbon-value-analyser-berechnet-chancen-und-risiken.html

8 EBA (2019) Sustainable Finance – Market practices.

9 https://eemap.energyefficientmortgages.eu/services/

financial risks, in a manner consistent with the risk appetite, and as reflected in both the ICAAP and ILAAP frameworks; iii) identifying the gaps they are facing in terms of data and methodologies and take remedial action; iv) setting out appropriate policies taking ESG risks into account for the assessment of the financial robustness of counterparties; v) developing risk monitoring metrics at exposure, counterparty and portfolio level; and vi) developing methodologies to test their resilience to ESG risks, with a view to improving understanding on the robustness of their business model and investment strategies.

**Supervision of ESG risks.** To further enhance the supervisory review and evaluation process (SREP) towards better reflecting ESG risks, the EBA sees a need to extend the time horizon of the supervisory assessment of the resilience of institutions' business models, applying at least a 10 year horizon to capture physical risks, relevant public policies or broader transition trends. The EBA proposes a phase-in approach, starting with the inclusion of climate-related and environmental factors and risks into the supervisory business model and internal governance analysis, whilst encouraging institutions and supervisors to build up data and tools to develop quantification approaches to increase the scope of the supervisory analysis to other elements.

The report and its recommendations will be used by the EBA as a basis for the development of EBA Guidelines on the management of ESG risks by institutions and an update of the SREP Guidelines to include ESG risks in the supervision of credit institutions. The EBA will take a sequential approach on investment firms, by leveraging on the output of this report to further enrich in due time the SREP Guidelines for investment firms.

## 3. ESG DISCLOSURES

Transparency is a key driver of market discipline in the financial sector: it reduces the asymmetry of information between financial institutions and their stakeholders. In the context of ESG, market discipline can be seen as a tool to drive change. Comparable disclosures by institutions would allow all stakeholders – shareholders, customers, government and society – to understand how institutions are contributing to the objectives of climate change mitigation and adaptation, how they are managing ESG risks and how these risks may drive financial risks on their balance sheets.

A second mandate given to the EBA (Article 434a and Article 449a19 of the CRR2) aims to enhance such transparency and disclosure. It relates to Pillar 3 and requires the EBA to develop technical standards for including ESG risks in the prudential disclosure requirements. Earlier this year, the EBA published draft technical standards for public consultation[10] and it will publish the final standard towards the end of 2021. The proposals described below are based on these draft standards, which may be subject to change.

The draft technical standards provide a framework for ESG disclosures to ensure stakeholders are informed about institutions' ESG-related exposures and strategies and can make informed decisions and exercise market discipline. In line with the requirements laid down in the mandate, the draft technical standards propose comparable **quantitative disclosures on climate change-related transition and physical risks**, including information on exposures towards carbon-related assets and assets subject to chronic and acute climate change events.

### DISCLOSURE ON ENERGY PERFORMANCE FOR LOANS COLLATERALISED BY IMMOVABLE PROPERTY

As part of the quantitative disclosures on climate change-related transition risks, the EBA proposes for institutions to disclose for their real estate portfolios, including loans collateralized by commercial and residential real estate, and for their repossessed real estate collaterals, information on the energy efficiency of the underlying real estate collaterals, including distribution of collaterals by energy performance certificate (EPC) label. When disclosing the EPC distribution of the collaterals, institutions are expected to disclose separately those exposures for which they do not have the EPC information of the collateral. Institutions will need to disclose this information with a breakdown by country of location of the collateral, and provide information on the meaning of each EPC label in each country, in order to promote comparability of disclosures, as the same EPC label may have a different meaning in terms of energy consumption, depending on the country of location of the collateral.

The EPC was introduced by the Energy Performance of Buildings Directive 2010/31/EU (EPBD)[11], as an instrument that should help improve the energy performance of buildings. It is defined as a certificate recognised by a Member State or by a legal person designated by it, which indicates the energy performance of a building or building unit, calculated according to a methodology adopted in accordance with the EPBD.

The draft technical standards also include **quantitative disclosures on institutions' mitigating actions** supporting their counterparties in the transition to a carbon neutral economy and in the adaptation to climate change. In addition, the standards include a **Green Asset Ratio (GAR)**, which identifies the institutions' assets financing activities that are environmentally sustainable according to the EU taxonomy, such as those consistent with the European Green Deal and the objectives of the Paris agreement. Such GAR will be aligned with the GAR institutions will be required to disclose under Article 8 of the Taxonomy Regulation[12].

### DISCLOSURE ON TAXONOMY-ALIGNMENT FOR RESIDENTIAL REAL ESTATE EXPOSURES

The GAR for retail exposures to residential real estate or house renovation loans shall be calculated as a proportion of loans to households collateralised by residential immovable property or granted for house renovation purposes that is taxonomy-aligned in accordance with the technical screening criteria for buildings, namely renovation and acquisition and ownership in accordance with the Climate Delegated Act[13], compared to total loans to households collateralised by residential immovable property or granted for house renovation purposes. This GAR shall apply only to investments relevant for climate change mitigation. For the acquisition and ownership of buildings built before 31 December 2020, in order to taxonomy-aligned the building shall have at least an EPC class A or, as an alternative, the building is within the top 15% of the national or regional building stock, demonstrated by adequate evidence.

[10] See here (link).

[11] https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildingsdirective_en

[12] See here (link).

[13] See here (link).

Finally, the draft technical standards provide recommendations for **qualitative information** to be disclosed on how institutions are embedding ESG considerations in their governance, business model and strategy and risk management framework. The EBA has integrated proportionality measures that should facilitate institutions' disclosures, including transition periods where disclosures in terms of estimates and proxies are allowed.

## 4. PRUDENTIAL TREATMENT

A third mandate that has been extended to the EBA (Article 501c of the CRR2) relates to Pillar 1 and requires the EBA to assess whether a dedicated prudential treatment of exposures related to assets or activities that are substantially associated with environmental and/or social objectives would be justified. The EBA intends to focus on environmental objectives first, and to follow a two-step approach to fulfill this mandate, by developing a discussion paper in order to receive stakeholders' feedback, before issuing its final report.

Analysis for the first phase of the work has been initiated, focusing initially on environmental aspects only. The EBA takes a risk-based approach to assessing the potential justification for a dedicated prudential treatment, rather than an economic policy approach using prudential treatment as a policy tool with the objective of channeling more financial flows towards certain activities. The analysis will firstly seek to investigate the riskiness of exposures and potential evidence of a risk differential, on the basis of currently available data and research, while also assessing current gaps and challenges in these.

### TARGETED ANALYSIS USING REAL ESTATE EXPOSURES

As part of the work on investigating the riskiness of exposures and potential evidence of a risk differential, the analysis will look into real estate exposures, among other exposure classes. The choice of including real estate exposures in the analysis is at this point driven by the availability of common classification standards for identifying green and environmentally harmful exposures, through the EPC label. The EPC label can be regarded as a classification system for retail mortgages, depending on the energy efficiency of the underlying property. Whilst EPCs are not homogeneous across all EU Member States, they can provide for at least a proxy classification of mortgages according to their energy performance. Targeted analysis is envisaged for this exposure type, including a meta-analysis on existing studies on energy efficiency and collateral values.

Secondly, the first phase of the work will explore the range of prudential tools which may ensure a risk-based treatment through assessing to what extent these tools already capture environmental risks, identifying gaps within the existing framework and exploring which additional aspects in the prudential framework might be needed to capture these environmental risk drivers.

## 5. CONCLUSIONS

The needed transition towards a more sustainable economy will spur new business opportunities but will also expose financial institutions to risks stemming from the transition. At the same time, financial institutions' assets will be exposed to changing physical conditions. Although these risks are likely to fully materialise over the long-term, action is needed now to identify what institutions' and supervisors' responses should be and to progressively start implementing the necessary steps. Given the potential of ESG risks to fundamentally change the way EU economies work, a strategic approach must be taken.

The above described actions taken by the EBA to support the full incorporation of ESG risks by institutions and supervisors aim to safeguard the resilience of the financial sector in the short-, medium- and long-term and ensure that banks and investment firms are well-equipped and -positioned to effectively address ESG risks and to support the transition to a sustainable economy.

In that endeavour, and given their weight in banks' balance sheets, real estate portfolios will play an important role from both the transition and physical risks perspectives. Forward-looking assessment methodologies, transparent and meaningful disclosures, and a risk-based prudential treatment capturing environmental risk drivers are necessary ingredients for achieving robustness and resilience on the sustainability front.

# Transition risk for mortgages: aligning sustianability with core risk management

By Jonas Bjarke Jensen and Astrid Leth Nielsen, Copenhagen Economics

## 1. BACKDROP: ASSESING CLIMATE RISKS INCENTIVISE GREEN LENDING

The important role of credit institutions in the transition to a carbon neutral economy has been made abundantly clear during the past decade. The EU Commission estimates that investments of around EUR 180 bn per year are required during the coming decade to finance the green transition. Of this, Copenhagen Economics estimates that roughly half could be credit-financed, based on how similar investments currently are being financed. This corresponds to some EUR 90 bn of new green loans per year.

Consequently, various both public and private initiatives – which are far too many to list here – set out guidelines and roadmaps on how strategies, regulation and supervision need to adapt to enable financing of this massive investment need.

At the same time, it has become clear that this transition to a carbon neutral economy, entail risks for credit institutions, that needs to be assessed and managed. A cornerstone in the green transition is that the costs of emitting greenhouse gases need to increase in order to incentivise green investments either from a direct tax on carbon, quotas as the expanding EU ETS system[1], or indirect increasing the costs through emissions restrictions and regulations. This means higher risks associated with holding assets dependent of fossil fuels and lower risks for green assets.

For us, these two agendas – 1) financing the investment needs and 2) assessing the associated risks – are closely intertwined. By adequately incorporating the climate risks into risk management framework e.g. stress testing, it could decrease the relative capital costs of green assets and increase the relative capital costs of fossil-fuel dependent assets.

Thus, assessing climate risks could help the integration of sustainability considerations into core banking credit decisions; credit institutions favour financing of energy efficient investments and carbon-neutral technologies and are cautious about financing fossil-fuel based investments, simply because it is prudent banking practice to do so.

Against this backdrop, we in this article present an example of a transition risk scenario analysis for mortgages, as part of the Energy Efficient Mortgage initiative and the Nordic Energy Efficient Mortgage hub. In the example, we estimate a transition risk for a generic portfolio of mortgages, corresponding to EU average values, and analyse which implications it has for cost of capital for different levels of energy efficiency.

## 2. OUR APPROACH: CONCRETISATION OF PRINCIPLES IN BIS, TCFD AND NGFS

On a high level, the dynamics behind our transition risks for mortgages can be explained as follows: For energy inefficient buildings, the higher price for carbon emissions increases the cost of heating and cooling, thereby increasing the costs of living in the building. This reduces the housing value – and thereby the collateral of the mortgage. The lower collateral value increases risk-weights and thereby capital costs for the given mortgage. For energy efficient mortgages (EEM's), the relative performance will be better, since the heating costs for the underlying asset (house) will not increase as much – capital costs for EEM's will thus increase less.[2]

Our transition risk focuses on the direct transition risks, i.e. impact of increased cost of carbon emissions. In turn, credit institutions could be faced by indirect transition risks, where higher carbon prices have macroeconomic implications, which in turn impacts the credit risk for mortgages. For example, an increase in carbon prices could lead to unemployment in some sectors, which could increase default risk for mortgages. Assessment of these indirect transition risks are more similar to standard macroeconomic stress test of credit institutions, and we there focus on the direct transition risk in this article.

Obviously, the importance of analysing transition risks has dawned on regulators, supervisors, the sector and more or less all major financial regulatory institutions, including BIS, ECB, EBA and NGFS, which have set out principles and guideless of how to approach these risks. Our transition risk analysis is a concretisation of these principles:

- ECB notes how stress testing will be an important tool to shed light on climate risks still not accounted for in financial/prudential regulation.[3] The stress test currently conducted by ECB assesses the exposure of euro area banks to future climate risks by analysing the resilience of their counterparties under various climate scenarios. This analysis captures both physical risks and transition risks. They note that measuring entities carbon emissions is a commonly used approach to assess transition risks and further that the majority of the transition risk found in the banking sector stems from credit risk. ECB also addresses the substantial data lack the world is experiencing within sustainable finance (we will get back to how to address this).
- EBA recently published results of an EU-wide pilot exercise on climate risk.[4] Here they highlighted two estimation techniques which are used to assess the greenness of banks' exposures – banks' bottom-up estimates and a top-down tool – and have differences in outcomes. We follow a bottom-

[1] See EU's fit for 55: https://ec.europa.eu/commission/presscorner/detail/en/IP_21_3541

[2] The impact of energy renovations (and thereby a lower future energy bill) if not fully factored into sales prices. Copenhagen Economics (2016) – Do homes with better energy efficiency ratings have higher house prices? finds that house prices in-crease by only around 60% of the discounted future energy savings stemming from energy renovations. Another analysis (presented during the third EEMI Bauhaus event in February 2021) found that around 80% of energy savings are reflected in house prices i.e. a lower irrationality factor, than what we will apply.

[3] ECB (2021), "Climate related risk and financial stability"

[4] EBA (2021), "Mapping climate risk: Main findings from the EU-wide pilot exercise"

up approach where the carbon tax is levied on the individual buildings given their energy usage and source, whereas EBA, as regulators, takes a top-down approach, i.e. on sector level.

- BIS discusses both direct and indirect climate risks.[5] We focus on direct risks, i.e. impacts on banks operations and ability to fund themselves, arising from bank's individual counterparties (e.g. mortgages given to houseowners) resulting in financial risk to the financial system. BIS focus their analysis of transition risk on scenario analysis given its forward looking nature – we follow this approach and evaluate the performance of EEM's in a scenario with increasing costs of emitting carbon, to fully understand their risk properties.
- The Network for Greening the Financial System (NGFS)[6] work with forward-looking scenario analysis as well, when analysing transition risks. They create one such scenario, the baseline scenario, by introducing a carbon tax immediately and assuming it to increase by $10 per tonne of carbon emitted per year until 2050, to keep global warming below 2 degrees – assuming a one-size-fits all scenario for all EU countries. We base our analysis on this scenario, which corresponds to a smooth transition path.
- TCFD lays out high-level principles for performing transition risk analysis.[7] They have a forward-looking perspective, based on different scenarios. Here a number of principles should be followed e.g. principles for selecting climate-related metrics, setting climate-related targets and making climate-related transition plans. Their paper serves as an example of how to manage transition risks within companies.

Also note the clear distinction between the outlined transition risks and then physical risks. Physical risk drivers are related to extreme weather events or chronic risks associated with a gradual shift in climate.[8] The level of physical climate risk for a given asset, is not related to transition risk. For example, you can have a very energy efficient asset, that happens to be placed in a region that is likely to be flooded with rising sea levels.

On a macro-level, transition and physical risks can have a somewhat reversed relationship: if policy makers sufficiently manage to implement measures to ensure a transition to a carbon neutral economy, such as carbon taxes, this will likely avoid the worst physical risks due to rising temperatures but at the same time it may increase the impact of transition risks, i.e. fossil fuel based assets becoming stranded.

### 2.1. A FIVE-STEP APPROACH TO ANALYSE TRANSITION RISKS

With the principles behind set in place, we can now dive into the actual transition risk scenario analysis of mortgages. We perform the scenario, using the following five-step approach:

1. **Choosing our scenario:** Which type of transition risk scenario is it we want to analyse? A sudden increase in carbon prices or a gradual orderly transition?
2. **Estimate energy costs:** Based on our defined scenario, we can then analyse implications for future energy costs: Higher carbon prices will imply higher user costs for energy inefficient buildings with fossil-fuel based heating.
3. **Estimate collateral values:** It is well-known within housing economics, that user costs of a building and housing prices are closely correlated. Thus, higher energy prices will translate into lower collateral value.
4. **Estimate capital ratio:** We feed the updated collateral values into our credit risk framework: we assess impact on risk weights based on updated loss given default (LGD) and probability of default (PD), which in turn gives a capital shortfall (similar to the outcome of typical macroeconomic stress tests).
5. **Robustness of analysis and impact of energy efficiency:** Finally, we check the robustness of the assumptions used in our scenario analysis and impact on different levels of energy efficiency.

The transition risk impact is obviously very portfolio specific, i.e. sensitive to energy efficiency of the buildings in the portfolio, source of energy as well as already existing implicit carbon taxes on heating.

To demonstrate our approach, we go through the above-mentioned steps using a generic mortgage portfolio resembling EU average values, see Figure 1.

**FIGURE 1** | OUR CASE: AVERAGE EU MORTGAGE PORTFOLIO

Initial housing value is EUR 200k with an LTV of 70%

LTI is around 200%

Average PD and LGD in Europe (based on paper by ECB)

Energy mix of heating: average in EU

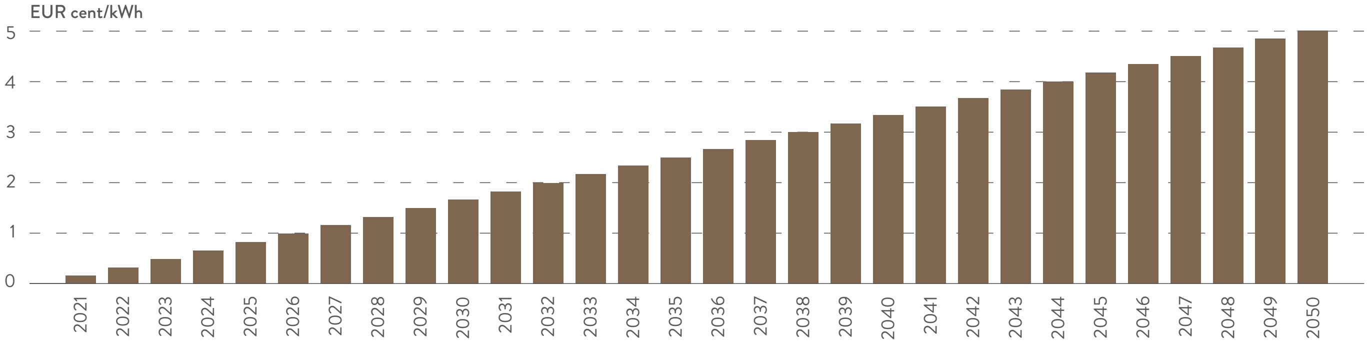
*Source: Copenhagen Economics*

## 3. STEP 1: CHOOSING THE SCENARIO – WHAT IS IT YOU WANT TO LEARN FROM THE TRANSITION RISK?

The first step is to define the objectives of the analyses and find a suiting scenario resembling these objectives. That is, what is it we want to learn from our scenario analysis: Impact of a sudden increase in carbon taxes or an orderly gradual transition the next decades? A new tax on top of existing carbon taxes or a harmonised level of carbon taxes across different types of emissions?

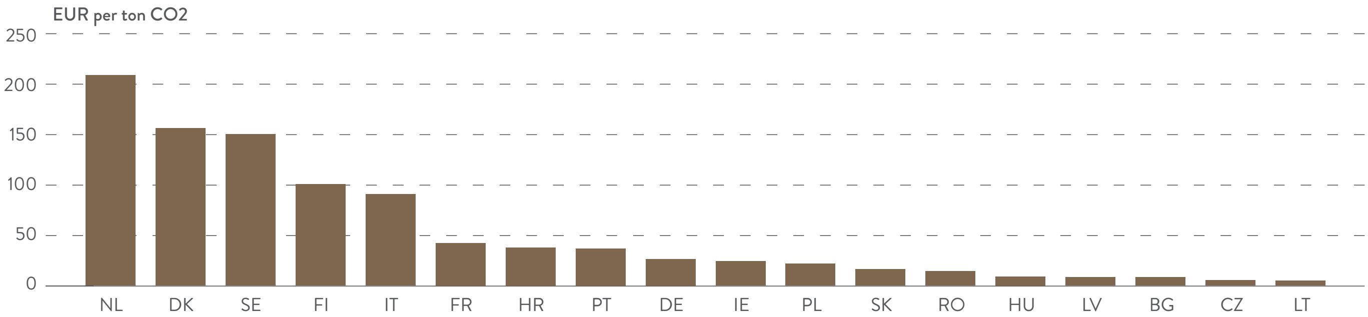
[5] BIS (2021), "Climate-related risk drivers and their transmission channels"
[6] NGFS (2020), "Climate scenarios for central banks and supervisors"
[7] TCFD (2021), "Proposed guidance on Climate-related metrics, targets, and transition plans"
[8] BIS (2021), "Climate-related risk drivers and their transmission channel"

## FIGURE 2 | SCENARIO IMPACT: AVERAGE ENERGY PRICE INCREASE



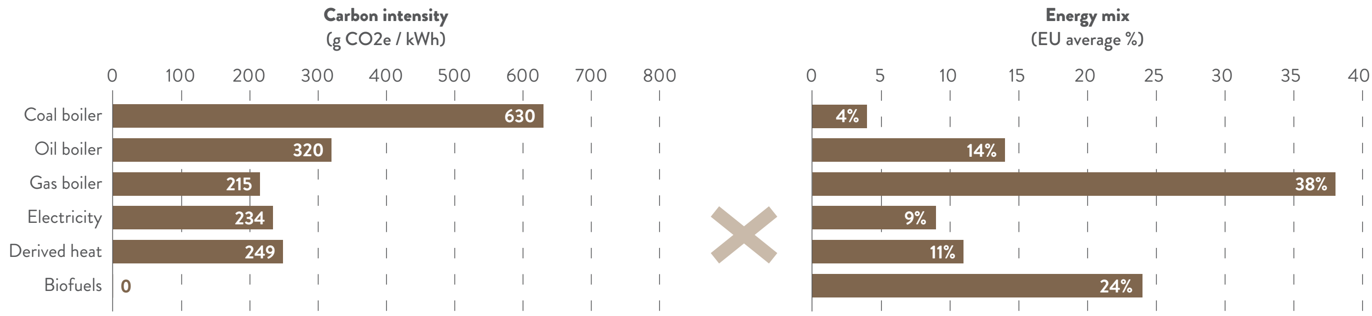

*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

## FIGURE 3 | IMPLICIT CARBON TAX ON ENERGY ACROSS EU (SELECTED COUNTRIES)




*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

## FIGURE 4 | SCENARIO ANALYSIS: CARBON INTENSITY AND ENERGY MIX, EU AVERAGE




*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

In our case, we use Network for Greening the Financial System's (NGFS) benchmark scenario, the "orderly transition", with an introduction of a carbon tax, which increases by $ 10 per tonne of carbon emitted per year until 2050, on top of other taxes. As mentioned by BIS[9] these risks can indeed be represented by the risk of direct taxes on carbon emissions, but also by indirect costs, such as carbon quotas on energy production, taxes on heating, etc.

The assumption of a carbon tax on top of existing taxes is however not a clear cut: At this moment there is no explicit carbon tax in the EU, but many implicit carbon taxes on for example heating, cf. Figure 3. For example, in Netherlands, there is currently an implicit tax of EUR 200 per ton CO2, which is higher than what IEA expect the long-run carbon tax should be in order to ensure a green transformation. This begs the question whether an additional carbon tax on top of the EUR 200 per ton CO2 is plausible.

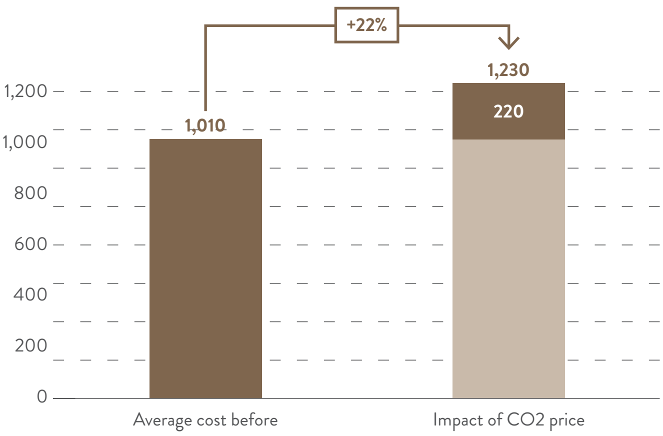
## 4. STEP 2: ESTIMATE ENERGY COSTS

Once the scenario of increasing carbon prices is defined, the increase in energy costs, and therefore user costs can be estimated.

[9] See BIS (2021), "Stress-testing banks for climate change – a comparison of practices", which refers to a number of ap-proaches taking by public authorities

In our case, we consider the carbon intensity of different heating methods as well as the average energy mix in EU. This creates our scenario impact and gives us average energy price increases when the C02 price scenario is fully priced in, see Figure 4 and Figure 5.

**FIGURE 5** | IMPACT ON ENERGY COSTS WHEN CO2 PRICE SCENARIO IS FULLY PRICED IN EUR, FOR AVERAGE LABEL D HOUSE IN EUROPE




*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

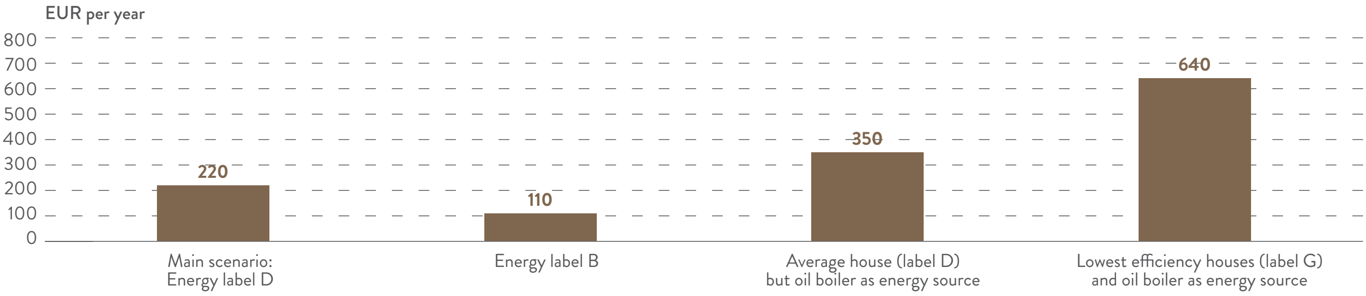
For an institution specific portfolio, the increase in user costs would however vary greatly depending on 1) the energy efficiency of the building, 2) what energy sources are used for heating, e.g. district heating or an oil boiler and 3) the geographical location (buildings that have low consumption of heat because they are located in warmer climate are less exposed to carbon taxes). For example, the main scenario, label D, being the EU average, shows manageable increases, whereas for a house with the lowest energy efficiency and an oil boiler as energy source the increase is user costs is almost threefold, see Figure 6.

In estimating the impact on energy prices, we simply add the carbon tax on top of the energy price, depending on the carbon intensity of the source of heating. However, in a more sophisticated approach, one could model the impact on energy prices in a transition to a carbon neutral economy. Such modelling could reveal that also heating entirely based on renewables could be impacted: a disorderly scenario with a ban on coal and a strong increase in carbon prices, could lead to a general energy supply shortage increasing prices for all types of energy.

## 5. STEP 3: ESTIMATE IMPACT ON COLLATERAL VALUES

It is widely accepted that higher user costs in the form of a higher energy bill (due to increased carbon tax) leads to lower collateral values, cf. Figure 7.

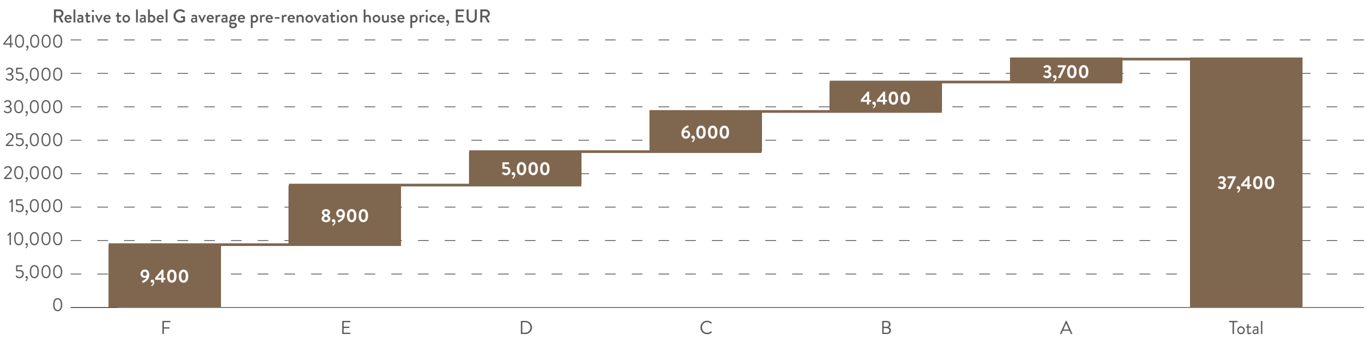
**FIGURE 6** | INCREASE IN ANNUAL COST OF HEATING FROM A HIGHER CARBON TAX




NOTE: All cases are based on an average European house

*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

**FIGURE 7** | INCREASE IN PROPERTY PRICES BY REACHING THE NEXT BETTER ENERGY LABEL




*Source: Copenhagen Economics*

[10] See for instance An and Pivo (2020), "Green buildings in Commercial Mortgages backed securities: The effects of LEED and Energy Star Certification on Default risk and Loan Terms" or Billio et al. (2020), "Buildings' Energy Efficiency and the Probability of Mortgage Default: The Dutch Case"

The reason being that when buying a new house people will take into account the future discounted user costs of living in that house. Concretely, we use a 30-year investment horizon and a discount rate of 2.6% to calculate a future discounted increase in the energy bill – in our case of EUR 6,600 for a representative European household, see Figure 8.

Theoretically, the impact on housing prices would correspond to the future increase in user costs. However, empirically it is observed that households only partly price in energy related costs when purchasing a house.[11] Therefore, we downgrade the impact on collateral values by 40%, based on a Copenhagen Economics study from 2016 on the impact of energy efficiency on housing prices.[12] Consequently, we find that the housing price in our case declines with some 3% due to the higher energy price for the average household.

In this context, note that the impact on housing prices, can never go above the cost of renovating the house into a higher energy standard. The impact is thus the lowest of either 1) all future adjusted and discounted energy bill increases, or 2) the net costs of energy renovations plus the new (lower) increase in user costs. The lowest of the two is then subtracted from the current collateral value, see Figure 9.

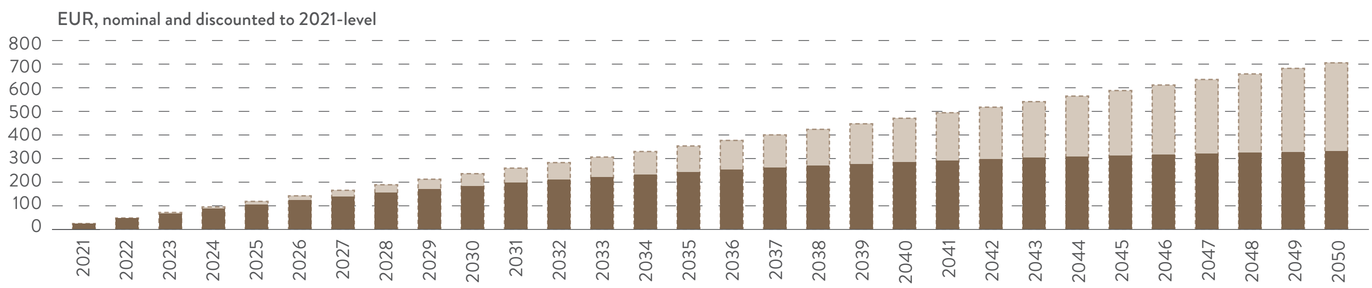
## 6. STEP 4: ESTIMATE IMPACT ON CAPITAL RATIOS

We then arrive at the point where we estimate the impact on solvency. We use the impact on collateral, gained in step 3, to update the LTV ratio. In our case, we use a generic IRB model, based on EU average values, to estimate the impact on PD and the LGD, which eventually allows us to estimate impact on risk weights.[13] If the standardised approach is used, mortgages can instead be placed into new risk buckets based on the LTV impact.

In this context, note that the only impact on PD, we model, is due to a higher LTV, i.e. moral hazard effect as a consequence of the houseowner having a lower equity share. The increase in the energy bill also leads to a lower disposable income. However, based on our estimated relationship between disposable income and PD, the impact would be minuscule – even if the entire energy bill were removed, the impact on PD will still be limited.

This also shed light on how transition risk, in more general terms, are likely to affect the mortgage portfolio. Since the direct impact on PD from higher

**FIGURE 8** | AVERAGE HOUSEHOLD ENERGY BILL INCREASE




**EUR 6,600**
Energy price increase over thirty-year horizon from today's perspective for a representative European household

Real value    Nominal value

*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

**FIGURE 9** | ESTIMATION OF COLLATERAL VALUES, AVERAGE EU MORTGAGE PORTFOLIO

**EUR 6,600** Average theoretical price impact × **58%** Adjustment factor = **EUR 3,900** Average actual price impact

**EUR 128,700** Collateral value pre-scenario – **EUR 3,900** Average actual price impact = **EUR 124,800** Collateral value post-scenario

NOTE: Note that Figure 9 shows the impact of increased energy costs, not the costs of energy renovations – the reason being that in our European average case and for the chosen scenario, the cost of relevant energy renovations exceeded the increase in energy costs for all energy labels.

*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

[11] Copenhagen Economics (2016) – Do homes with better energy efficiency ratings have higher house prices? Here we find that house prices in Denmark reflected only around 60% of differences in energy costs across houses. We apply this "irrationality factor" in this report to estimate the impact of changes in the energy bill on the property value.

[12] Copenhagen Economics (2016) – Do homes with better energy efficiency ratings have higher house prices?, see further

[13] In an ECB study, the authors find that, evaluated at the mean of all variables, a percentage point increase in the LTV ratio increases the probability of default by 0.02 pps. An increase in the LTI ratio by 1 is estimated to increase the probability of default by around 0.001 pps. In a Bundesbank discussion paper, the authors find that the LGD increases by around 0.3 pp. for every increase in the LTV ratio. See full description in the appendix.

energy is limited, it is less likely, that direct transition risks, at least viewed in isolation, works as a trigger effect of a crisis on the housing market.

Concretely in our case, we find that risk weights increase some 1.3%-point, where the effect some-what equally comes from higher PD and LGD, see Figure 10.

Ultimately, the impact on capital ratio can then be calculated based on the updated risk weights, thereby arriving at the capital shortfall, i.e., the impact of the scenario. In our case, with a mortgage portfolio made up entirely of Label D buildings, the CET1 impact is an increase of 0.9%-point. Thus, for the average case, the risk from climate transitions is significant, although manageable. Given that most IRB banks operate with a stress test buffer larger than the 0.9%-point, the impact should not warrant a capital need for the average portfolio.

## 7. STEP 5: ROBUSTNESS OF ANALYSIS AND IMPACT OF ENERGY EFFICIENCY

Our transition risk scenario also highlights differences in impact from different level of energy efficiency. With a portfolio made up of entirely label B houses, the impact would be only half of the impact of the label D houses (with the same energy mix). On the other end of the scale, a portfolio of label G houses, with an oil boiler as energy source, would experience a capital shortfall of 3.1%-point, thus surpassing a typical stress test buffer, see Figure 11.

In general, the European building stock exhibit a large heterogeneity in energy efficiency, indicating that impact could vary significantly between different regions.

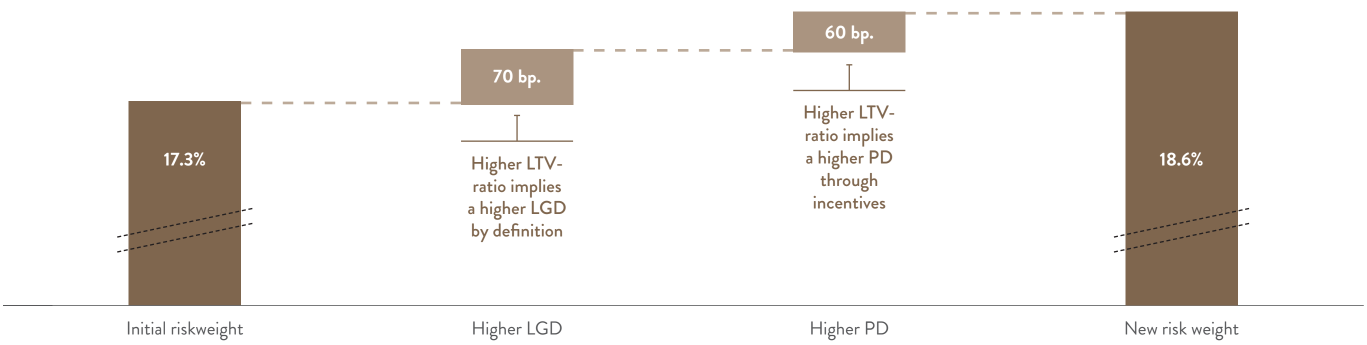
Overall, our scenario indicates that the direct transition risk for the mortgage portfolio is manageable for the average case, but buildings with low energy efficiency and reliance entirely on fossil fuel-based heating could be exposed.

## 8. THE ELEPHANT IN THE ROOM: DATA!

A recurrent topic within the sustainable finance is the need of non-financial data, to make accurate predictions. Indeed, to make a transition risk analyses for mortgage, we do need building specific indications of energy efficiency, at least for part of the portfolio.

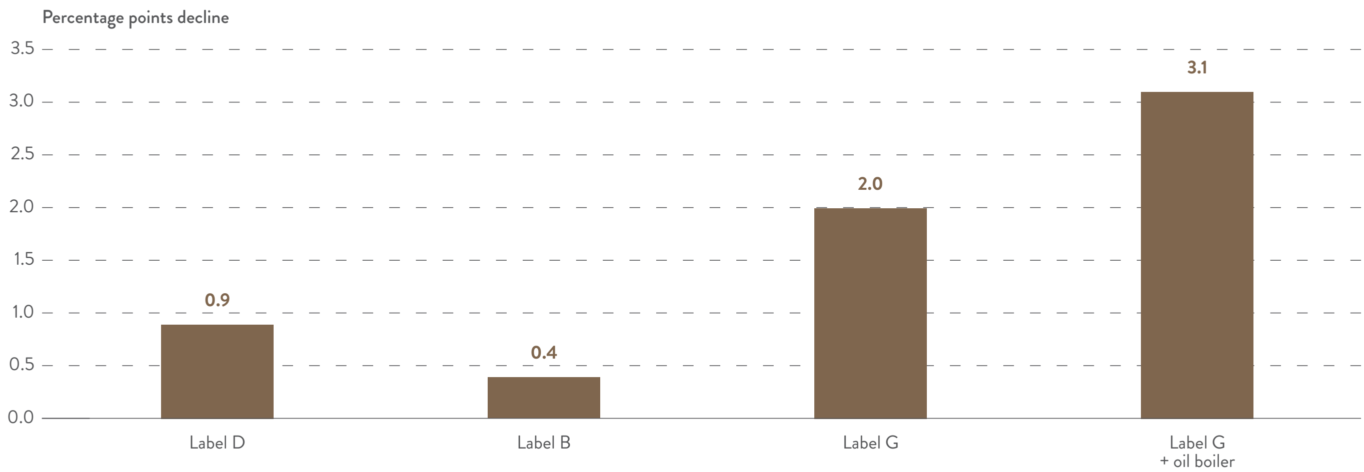
We are not talking about a massive new data gathering exercise: What we have been going through in this paper is an *estimation* – and we can indeed

**FIGURE 10** | IMPACT ON RISK WEIGHTS




*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"*

**FIGURE 11** | DECLINE IN CET1 RATIO FOR A GENERIC MORTGAGE INSTITUTE IN TRANSITION RISK STRESS




*Source: Copenhagen economics (2021), "Blueprint – transition risk for mortgages"* get far with fair estimations and reasonable assumptions. But we do need a way to either estimate or retrieve data on energy efficiency for the buildings in the portfolio:

*First step* is to explore the possibilities of retrieving EPC data, from national energy efficiency data centres, which has been put up in several countries. For example, in Denmark, all EPC data is readily available from a national register. In Sweden, the National Board of Housing, Building and Planning can provide EPC data, although there are currently some regulatory and technical problems, only allowing retrieving data for specific buildings and not portfolio wide coverage.

Even if it is possible to retrieve all available EPC data, this will only get us so far, as most houses do not have an EPC label – the reason being that, in most countries, it is only when having to sell single family houses, it is required to obtain one.

*Therefore, second step*, is to estimate energy efficiency based on data on energy consumption and basic characteristics of the building, e.g. number of square meters, type of building, etc. For this, we need to retrieve data on energy consumption for individual buildings. This is already possible in a number of European countries – one example is Center Denmark, a cooperation between DSO's and TSO's in Denmark, which have built a data platform harvesting data from across the energy sector – e.g. district heating, electricity production, water supply etc. and connecting this with e.g. public housing data and building specific characteristics. Here utility companies and others can also share consumption and energy data, implying that the data transfer goes two ways.

Once data has been identified for a sufficient share of the portfolio, energy efficiency for the remainder of the portfolio can be approximated, through an extrapolation, based on building basic characteristics.

## 9. IMPLICATIONS

As discussed initially, we see conducting this kind of transition risk scenario analysis as a way to integrate sustainability considerations into core banking operations. Not only does a transition risk analysis help shedding light of risk aspects, previously unexplored. It can also provide incentive to financial institutions to lend to energy renovations if it implies a lower relative capital impact in a transition risk scenario. Or it could incentivise energy renovations directly if these lower capital costs are passed on to consumers.

The discussion around incentivising green lending through lower capital costs has previously been centred around implementing a green supporting and brown penalising factor. The idea being that green transition can be speeded up by political allowing lower capital requirement for green assets as this will incentivise credit institutions and consumers as described above.

We would argue that letting prudential regulation becoming a delivering mechanism for climate policies could contradict financial stability concerns: The purpose of prudential regulation is to guard against unexpected losses and unforeseen events – no matter the "colour" of the asset. We have other, better, and more direct methods to ensure transition, i.e. a tax on carbon, the ETS system, etc.

Thus, we see climate risks analysis as a better alternative to align banking operations with sustainability considerations. It gives credit institutions an incentive to rebalance their portfolio in a greener direction – not due to a discount in the capital charge – but simply because it is sound banking practice to do so.

# Energy Efficient Mortgage Initiative: The future is in our hands and together we must make the difference

By Luca Bertalot, European Mortgage Federation – European Covered Bond Council

The latest Report of the United Nations Intergovernmental Panel on Climate Change, published in August 2021, is simply and shockingly a wakeup call to the world. The Report reiterates that the clock is ticking ever louder and that we are about to reach the point of no return with regards to mitigating the human activity-related causes of climate change. Since the Paris Agreement of 2015, which set out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C, it has been argued that it will take time for societies to adapt and put in place the mechanisms needed to achieve these objectives. We are now almost six years further down the road, edging ever closer towards the cliff edge, and this argument is beginning to lose credibility. As the IPCC makes clear, there is no longer scope for further hesitation and postponement of the decisions that must be taken. Every stakeholder in our societies and our economies, whether as a private consumer and citizen, or as a representative of an organisation or business must act now to put in place the tools to reach the Paris Agreement's goals. There is ever-strengthening consensus that whatever the forecasted financial costs of taking the actions required now are, the costs – financial and societal – of further delay far outweigh these. As the voice of the mortgage credit and covered bond industries, we are acutely aware that the prospects for future generations are in our hands today and that we have a moral obligation to play our part in limiting climate change.

The EMF-ECBC seeks to be part of the solution here and, together with our Energy Efficient Mortgage Initiative (EEMI), from the onset of the pandemic activated the mortgage industry's best resources to monitor, analyse and guard against potentially negative impacts on mortgage, housing and funding markets in Europe. Over recent years, the EMF-ECBC has sought to channel the industry's reflections on sustainability to national, European, and global authorities, including its concerns regarding the potential impact of sustainability related issues, such as the taxonomy, and made concrete proposals regarding possible ways forward. As a community, we are committed to providing economic impetus towards a transition economy, encouraging countries to move from a pandemic mind-set towards a more sustainable capital markets infrastructure, and supporting consumers and borrowers in turning the current challenges into opportunities. The spaces we occupy need to be able to adapt to different social uses, to new functions over time, without the need to constantly destroy and then rebuild them.

We need to use our imagination, to develop visions and ideas of what the European private and public space should look like. This is clearly an opportunity to change not only finance and banking, but urban planning, construction, manufacturing – in short, to change the way we live. But this needs to be a comprehensive cultural project. This is a unique opportunity to bring attention and momentum to the European Green Deal.

During the COVID-19 pandemic, we have come to accept that remote working really is both possible and effective in many sectors. As a consequence, many people are now looking at ways to leave cities to find a greener, more open and more socially distanced space to live and work in. This does not mean that we will completely abandon cities – not everyone will or can leave, but things will change. More importantly, this tells us that people are thinking more profoundly about what it really means to have a good place to live, what are the attributes of a home that really matter to them. Healthy homes, healthy cities, greener spaces where trees absorb CO2, the way in which we build, the materials we use and how we maintain our buildings – these are increasingly the factors that count.

We are entering a new age of banking, of constructing and operating buildings where digitalisation is changing everything. We talk about and start to see autonomous cars. What about autonomous houses with sophisticated sensors that can adapt to ambient temperature, humidity, to the presence of people, adapting spaces and minimising energy consumption? What about intelligent neighbourhoods or villages where communities share energy or other resources? This is an age where we need to combine high tech and no tech, artificial intelligence and nature.

We believe that a green market ecosystem, with ESG covered bonds, Energy Efficient Mortgages, green European Secured Notes (ESNs), is paving the way for a green Industry roadmap.

If Europe and the world really want to achieve net zero emissions, we need to reduce buildings' emissions, transform the way we inhabit our homes and our cities, and rethink mega infrastructures, energy infrastructures and mobility infrastructures. The way we finance these activities can influence this shift.

Whilst we could close our eyes and wait for the world to go back to its pre-pandemic norms, in reality we cannot ignore the strength of the winds of change blowing through our lives, our societies and our economies. We have all witnessed radical shifts in our daily life and business activities, some have been negative and others positive, and there is now a broad acceptance that we are in the midst of a generational turning-point. Indeed, we all know that more changes must come as the full impacts and consequences of the pandemic continue to reverberate.

We believe that changing residential energy demands can play a key role in transitioning to a greener and more sustainable economy. Environmental psychology suggests that behavioural changes regarding energy use are affected by knowledge, awareness, motivation and social learning. Data on various behavioural drivers of change can explain energy use at the individual level.

Consequently, an environmental, social and governance (ESG) revolution in the financial sector can help to stimulate a green mentality in consumers and stakeholders. In the same way, the building of a new ecosystem of energy efficient financial tools can have significant implications for macro-energy demands at a regional and national level.

There are a number of actions households can pursue individually which impact their energy footprint. We categorise these into three main types of energy-related behavioural changes: 1) investments; 2) energy conservation; and 3) switching suppliers. A household could make an investment: either large, such as the installation of solar panels and/or insulation etc., or small, such as buying more energy efficient electrical appliances. The latest research indicates that today, on average, the level of investment required in order to make an improvement of two notches in a house's energy rating is in the range of €20,000-€30,000. This would be expected to result in an energy bill saving of somewhere in the range of 50%-70%. Alternatively, households may seek to reduce their energy consumption by changing their daily routines and habits: by adjusting their heating thermostats downwards or by systematically completely switching off unused electrical appliances. Finally, households could change to an energy supplier that provides independently certified green electricity. We believe that a new housing market ecosystem featuring a collaborative effort from multi-sectoral suppliers, utilities and banks, could provide all of these solutions to consumers.

Indeed, the nexus between our private interests and civil society is our home. The Ancient Greek word "*oikos*" (home) is at the heart of the word "*oikonomia*" (economy). Drawing inspiration from this, we believe that a sustainable economy has to be built around the concept of the home and centred on an ecosystem that promotes green values and raises environmental, social and governance awareness.

At this unprecedented time, civil society is called to action to design and shape a better future for the next generations. Climate change indiscriminately affects every region of the planet and therefore calls for a global and comprehensive approach, one that the EU can help to lead. Despite the challenge represented by the COVID-19 pandemic and the resulting economic crisis, which has required gigantic efforts of both national and European policymakers over the last two years, the European Institutions have set highly ambitious targets to fight climate change, seeking to turn the Old Continent into the first carbon-neutral economic area by 2050.

In this context, the EU is committed to reduce its own primary energy consumption by 32% by 2030, as witnessed with the adoption of the Green Deal in 2019, further complemented in October 2020 with the Renovation Wave Strategy and in April 2021 with the EU Taxonomy. Both the latter provisions encompass the building sector, globally identified as one of the main producers of $CO_2$ emissions. Nevertheless, these legally enshrined efforts need to be supported by adequate funding schemes, as the scale of investment required to meet the energy savings targets alone is estimated to be in excess of EUR 200 bn per year, three-quarters of which is accounted for by energy efficiency in buildings.

Moreover, within this framework, the financial services sector covers a non-secondary position considering that the achievement of the sustainability of the industry must play a crucial role in the transition to a climate-neutral economy. In particular, the mortgage credit and covered bond sectors have the potential to play a transformative role in relation to the attainment of the 2050 emissions targets for both the building and financial sectors.

This is precisely what the EU-funded Energy Efficient Mortgages Initiative (EEMI), launched five years ago, has been doing, by establishing a comprehensive ecosystem around Energy Efficient Mortgages through a pan-European market-led initiative, bringing together lending institutions, investors, utilities, and public authorities. The Initiative covers the whole scope of action in the energy efficiency improvement process, for the benefit of citizens, enterprises, and broader society.

Indeed, since 2016, the EEMI, which comprises of three inter-linked EU-funded Horizon 2020 Projects (*see below*) and is coordinated by the European Mortgage Federation-European Covered Bond Council (EMF-ECBC), has been leading market efforts together with a consortium of expert partners[1]. With the EU's households and businesses at its heart, the Initiative delivers the capabilities to support the financing of the renovation of the EU's building stock, 35% of which is over 50 years old and almost 75% of which is energy inefficient.

More specifically, the EEMI is divided into three projects, comprehensively matching the European Commission's own framework for climate and energy policies. The Initiative began with the Energy efficient Mortgages Action Plan (EeMAP), was followed by the Energy efficient Data Protocol and Portal (EeDaPP) and continues today with the Energy efficient Mortgage Market Implementation Plan (EeMMIP). Together, these projects represent the kingpins of EMF-ECBC's mission: to finance the greening of the aging European building stock. This goal will be reached by providing, respectively:

- an effective and functional ecosystem aimed at creating an energy efficient mortgage through which homebuyers are incentivised to improve the energy efficiency of their home or acquire an already energy efficient property by way of favourable conditions linked to the mortgage;
- a large-scale, financial standardised data protocol related to energy efficient mortgages, accessible through a common, centralised portal, which allows empirical demonstration of the negative correlation between energy efficiency and risk; and
- an implementation plan aimed at permitting the project to be operational by delivering an integrated market in energy efficient mortgages and a blueprint for established and emerging markets around the globe.

Alongside the EEMI, the Energy Efficient Mortgage (EEM) Label is a new quality instrument allowing transparent identification of energy efficient mortgages for market stakeholders. The Label was launched in February 2021, with the support of the European Commission, and denotes a further effort that the EMF-ECBC is making towards the sustainable finance and real estate/building sectors, in compliance with the EU legal framework. Indeed, the Label allows easier access to energy efficiency financing, green bond markets, better tracking of EEM performance, provides greater transparency in relation to climate risks and portfolio resilience, and fights greenwashing. The Label enables lending institutions that are committed to continuous progress and improvement initiatives to disclose energy efficiency related data through the Label's Harmonised Disclosure Template (HDT) at least every quarter, and thereby jumpstart the investment and mortgage market for energy efficiency finance.

[1] https://eemap.energyefficientmortgages.eu/02-the-consortium-2/ & https://eedapp.energyefficientmortgages.eu/02-the-consortium/

Amongst other relevant datapoints necessary to assess the credit quality of a mortgage issued by a financial institution to improve or to acquire residential or commercial real estate, the HDT also seeks to collect data which will allow assessment of the loan's ESG quality. For the time being, data requirements on EPC, age structure of the relevant real estate, energy demand data, type of dwellings and the amount of new or existing real estate the portfolio covers are collected. Several of these datapoints have only just started to be collected by the financial institutions themselves and often there is little temporal depth available. Thanks to the EEMI, through the EEM Label, for the first time a transnational effort to produce comparable data via a harmonised template exists. Currently this covers 30 financial institutions from 13 different jurisdictions, providing 37 labelled Energy Efficient Mortgage Products. Amongst these, at the time of writing some institutions are already publishing initial ESG data and more are expected to do so shortly, with the bulk being expected to have some form of data disclosure available by the end of the year.

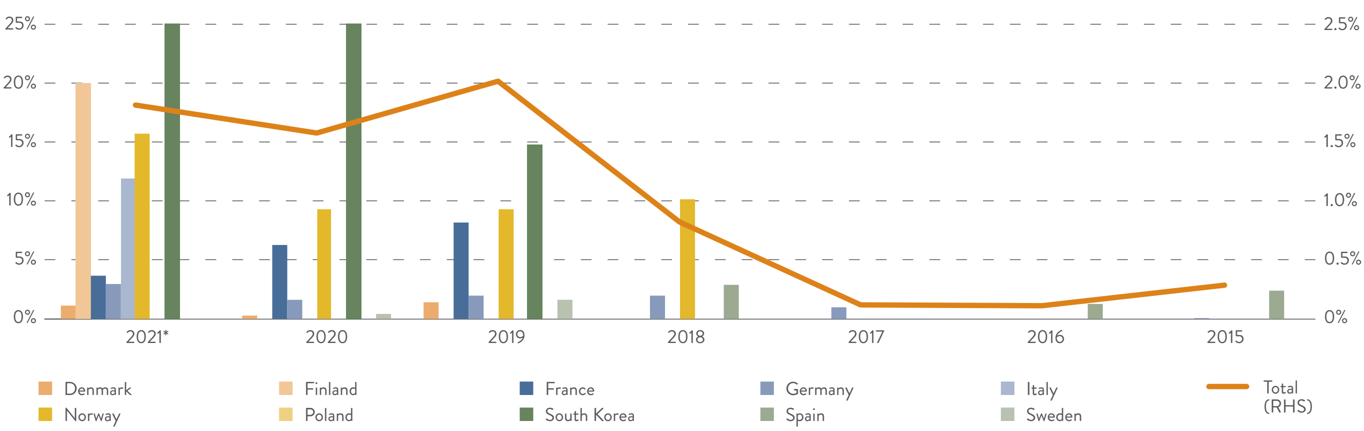
Ultimately, drawing on the extensive experience of the Covered Bond Label, the EEM Label is proposed as a market intervention to support recognition of and confidence in energy efficient mortgages and facilitate access to relevant, quality, and transparent information for market participants. The Label relies on the EeDaPP data protocol to develop a harmonised transparency template for the disclosure of mortgage products compliant with the Label criteria. The effort in creating a standardisation would, in due course, facilitate a revolution in investors' ESG due diligence and enhance overall transparency in the EEM and bond markets.

What does an ESG revolution imply for the financial sector? Well, we know that we can play a fundamental role in changing market best practices and in providing the real-life answer to this question. The answer could be simply that the banking sector is pivotal to helping fund the renovation wave through a systemic ESG approach, providing the cathartic boost for properties and the basics for accessing capital markets via green covered bonds and securitisations. We could say that every renovated home will pollute less, be less risky as an investment/asset, increase the disposable income of borrowers, enhancing the quality of our lives. All of this is feasible provided that we take the opportunity before us to build an ecosystem capable of delivering on citizens' expectations. In parallel, we must develop a more efficient capital market infrastructure optimising the use of private capital and investments, thereby allowing public resources to be focused on those other social needs where only the State can act.

With a holistic approach looking at the entire value chain from the asset-side (the green property and loan) through to liabilities (the green covered bonds or securitisations), we can build a green catalysing mechanism on the balance sheets of banks and in investors' portfolios. Potentially, every mortgage and loan can contain a seed that will germinate into part of the green recovery, motivating and helping consumers to improve the energy performance of their homes. This will trigger a cascade effect throughout the entire value chain, giving rise to a new, green ecosystem.

We have long witnessed steadily growing attention being paid by our members to the issuance of ESG and green bonds, which are becoming an increasingly important feature of the European financial landscape. This is evidenced by the Covered Bond Label website, which now provides detailed transparency on green liabilities and cover assets. What started in 2017 as a simple self-certification[2] operation by labelled covered bond issuers to highlight (shown by a green leaf on the Covered Bond Label website) those of their bonds which are considered sustainable has now reached significant proportions: around 50 outstanding bonds in 10 jurisdictions[3] coming from 23 banks account for over EUR 30 bn of issuance. This volume equates to roughly 1% of the total number of covered bonds outstanding at the end of 2020, and to 1.5% in terms of new issuances during the same period. For 2021, the figures available on the Covered Bond Label website suggest that around 1.8% of new issuances are sustainable covered bonds. In particular it is interesting to see that the Nordics, together with South Korea, are especially keen on this type of product. This being said, a number of other core covered bond countries as well as newer players, like Poland, have now also started to issue sustainable covered bonds as can be seen in the graph below.

**FIGURE 1** | ISSUANCE OF SUSTAINABLE CB AS % OF TOTAL ISSUANCE




NOTE: 2021 data are referring to year-to-month July 2021

*Source: Covered Bond Label, Fact Book*

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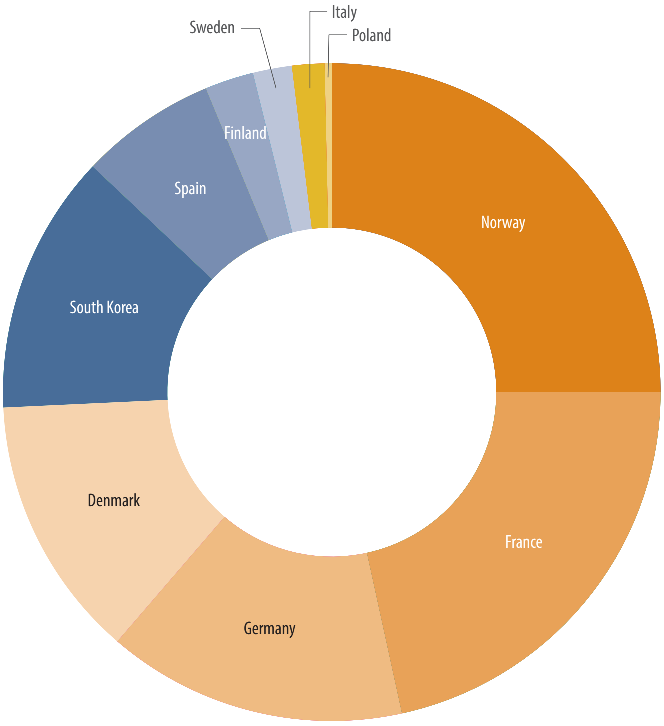
[2] Through said self-certification the issuer declares that the bonds presenting a green leaf on the covered bond label website is *"…a covered bond that is fully compliant with the Covered Bond Label Convention, and also includes a formal commitment by the issuer to use an amount equivalent to the proceeds of that same covered bond to (re)finance loans in clearly defined environmental (green), social or a combination of environmental and social (sustainable) criteria. Covered Bond Labelled sustainable covered bond programs are based on their issuer's sustainable bond framework which has been verified by an independent external assessment. The issuer strives, on a best-efforts basis, to replace eligible assets that have matured or are redeemed before the maturity of the bond by other eligible assets.*

*[Against this background, please note that the EMF-ECBC is currently working on market initiatives which will ultimately define European criteria for energy efficiency covered bonds and sustainability standards]"*

[3] Denmark, Finland, France, Germany, Italy, Norway, Poland, South Korea, Spain and Sweden

**FIGURE 2** | OUTSTANDING SUSTAINABLE CB (STATUS JUL 2021 - CBL)




*Source: Covered Bond Label*

Together with the Covered Bond Label, the EEM Label will not only facilitate compliance with the EU Taxonomy but, in the light of the EEMI's demonstrated negative correlation between energy performance and credit risk, will help to reinforce financial stability and secure quality and transparency for market stakeholders in the gathering, processing and disclosure of EEM and ESG data. This will be key to further stimulating both EEM and ESG market developments and demonstrating the efforts that our sector is making to play its part in the fight to limit climate change.

Join us and help to build an energy efficient housing finance ecosystem suitable for future generations. To find out more about the role that housing finance can play in this transition, watch our video.

# Housing and Mortgage Markets in 2020

By José Ignacio Díaz and Daniele Westig, European Mortgage Federation - European Covered Bond Council

## DISCLAIMER

*The following review focuses on European housing and mortgage markets up to the end of 2020, therefore covering the period of significant economic turmoil of the COVID-19 pandemic. The different sets of data included in this report register for the most part the effects of the public health crisis in the EU and the Hypostat country sample[1], leading to significant variations in data which will be commented on here. The post-pandemic economic landscape will not be considered in this report. For further information on the current state of European housing and mortgage markets, please refer to the most recent edition of the EMF Quarterly Review.*

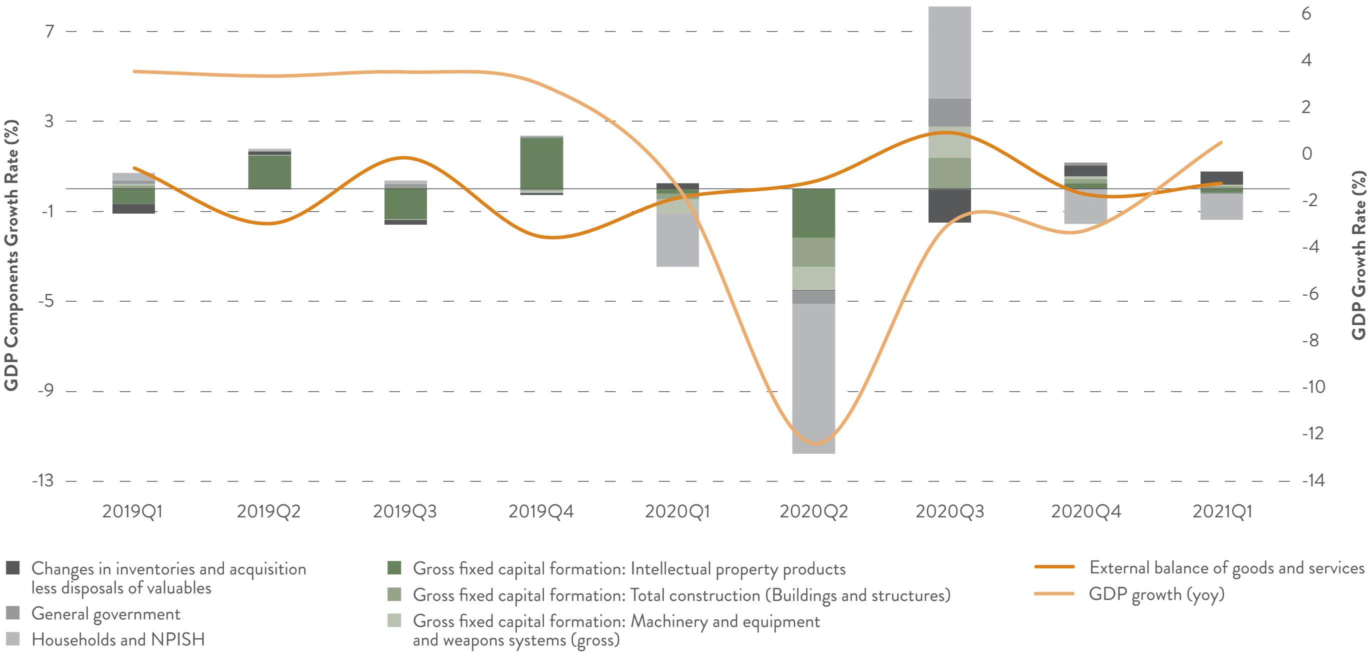
## MACROECONOMIC OVERVIEW

**One key factor has driven the economic trends in 2020: the global COVID-19 public health crisis (henceforth, the pandemic). After successive lockdowns and the implementation of social distancing measures aimed at containing the number of cases, the Euro area GDP decreased by -6.6% according to the latest European Commission figures (Spring 2021 forecast, published in May 2021). GDP levels also decreased significantly in the United States, where overall production fell by -3.5%, and Japan, which saw a -4.8% decrease against 2019. The United Kingdom recorded a -9.8% GDP drop on the same basis. In terms of prices, the latest data shows a slight yearly increase of around 0.3% in the Euro area harmonised price levels. A similar trend of slow or flat growth in prices was also visible in other developed economies, some of which registered periods of deflation, especially during the strict lockdown periods. Lastly, the effects of the pandemic on unemployment have also been significant in the Euro area, reaching 7.8% (up from 7.5% in 2019). Overall, the pandemic-led downturn is clearly visible in all key macroeconomic indicators, yet, as will be explained further below, the sectoral performance of European housing and mortgage markets contrasts significantly with this narrative.**

According to the latest available Eurostat figures, European (EU27) GDP fell by -4.5% in 2020, the sharpest yearly contraction since the Great Financial Crisis (GFC) (2008-2009), then recording a drop of 4.3%. The latest slowdown also marks the end of a continuous 10-year period of moderate expansion that followed the GFC. In the Euro area, the decrease was slightly steeper, registering -5% rate.

The main cause of the deceleration of the broader economic activity in Europe is the onset of the pandemic in March 2020, which shocked and subsequently

CHART 1 | QUARTERLY CONTRIBUTORS TO GDP IN THE EURO AREA, IN PERCENT




*Source: Statistics Data Warehouse – European Central Bank*

[1] The Hypostat country sample is made up of 31 individual jurisdictions, comprising the 27 EU Members States (AT, BE, BU, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SK, SL) and 4 neighbouring, non-EU countries, namely the United Kingdom, Switzerland, Norway and Iceland. References to EU27 are aggregated or total scores of the 27 Member States.

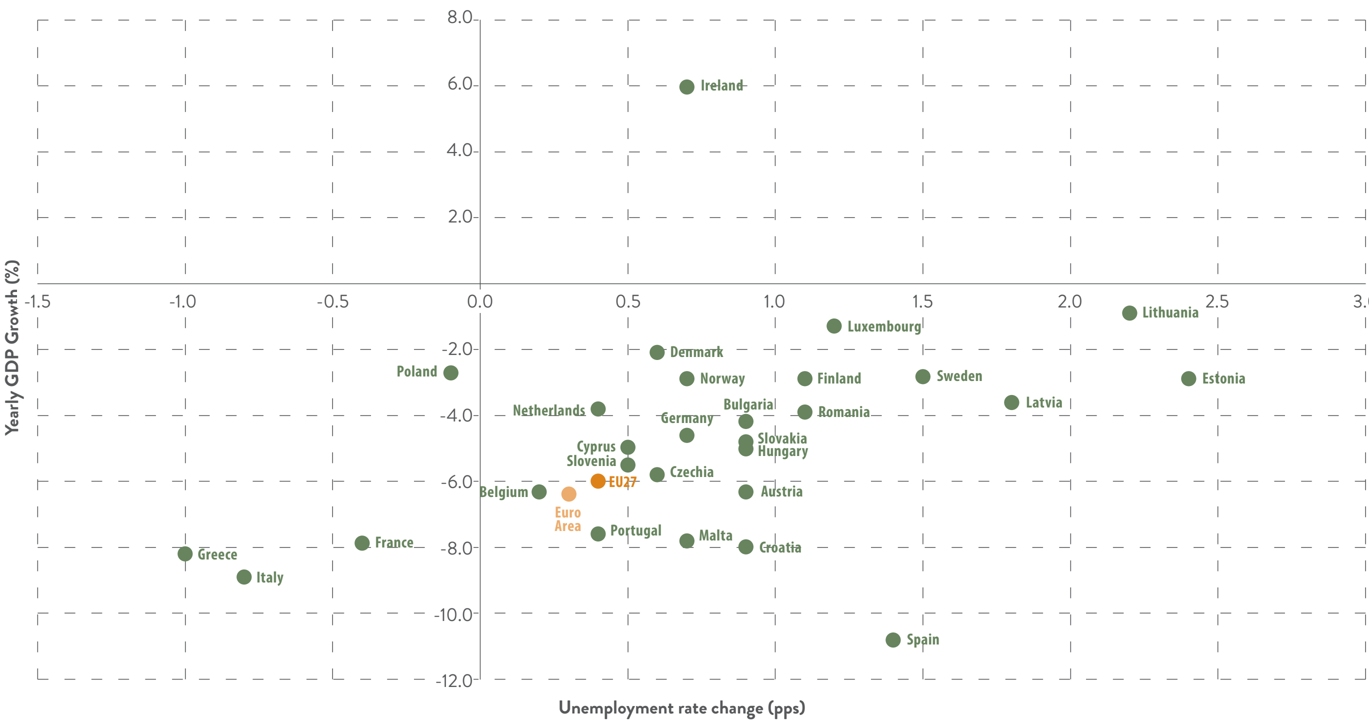
distorted production, trade and investment flows across the world. From a macroeconomic standpoint, the pandemic generally had a negative impact on all relevant Euro area GDP components, from manufacturing and investment in capital goods to services. Initially, the Eurozone economy contracted by -1.5% in Q1 2020 against Q1 2019 values. This worsened in Q2 2020 amid the implementation of strict lockdown measures to -12.4%, the steepest year-on-year contraction ever recorded. During these two quarters, as chart 1 shows, private consumption was one of the components that slowed down economic activity the most, costing Euro area GDP 2.4 pps in Q1 and almost 7 pps in Q2. Investment in construction also registered cutbacks in this period, leading to a negative contribution of 0.25 pps in Q1 2020 and 1.27 pps in Q2 2020.

In the third quarter, the economic outlook improved in the Euro area, due in great part to the easing of pandemic-containment measures, which marked the end of the first wave of the pandemic. GDP of eurozone countries contracted further on a yearly basis, by 3.1%, a slower pace than in the previous quarter. This partial rebound is the result of the improvement in investment in construction, which contributed 1.38 pps, government expenditure,1.26 pps and the eurozone's external balance, 2.5%. However, the main variable that drove the apparent economic restart was private demand, which provided almost 8 pps to quarterly GDP.

Pent-up demand of household and individuals allowed businesses to resume after a period of subdued spending. However, the improvement was short-lived. By Q4, a further round of lockdowns led to a new contraction. Quarterly GDP fell by 3.4% y-o-y, similar to that of the previous quarter. Investment in construction made a positive contribution, despite the overall contraction of the economy, yet the share (0.18%) was significantly smaller. Private demand cut1.54% from the economy.

2020 saw a significant deterioration in the labour market, mainly due to the pandemic. As per the latest Eurostat figures, the EU27 unemployment rate, as a percentage of the total active population, was 7.1% in 2020, up from 6.7% in 2019. It is the first increase in unemployment since 2013. Furthermore, EU 27 employment decreased to 72.4%, similar to 2018's yearly score. Despite this EU27 aggregate unemployment in 2020 was below that in 2009 (9.2%) or 2013's peak of 11.4%.

CHART 2 | UNEMPLOYMENT CHANGE AND GDP GROWTH IN 2020, PERCENT

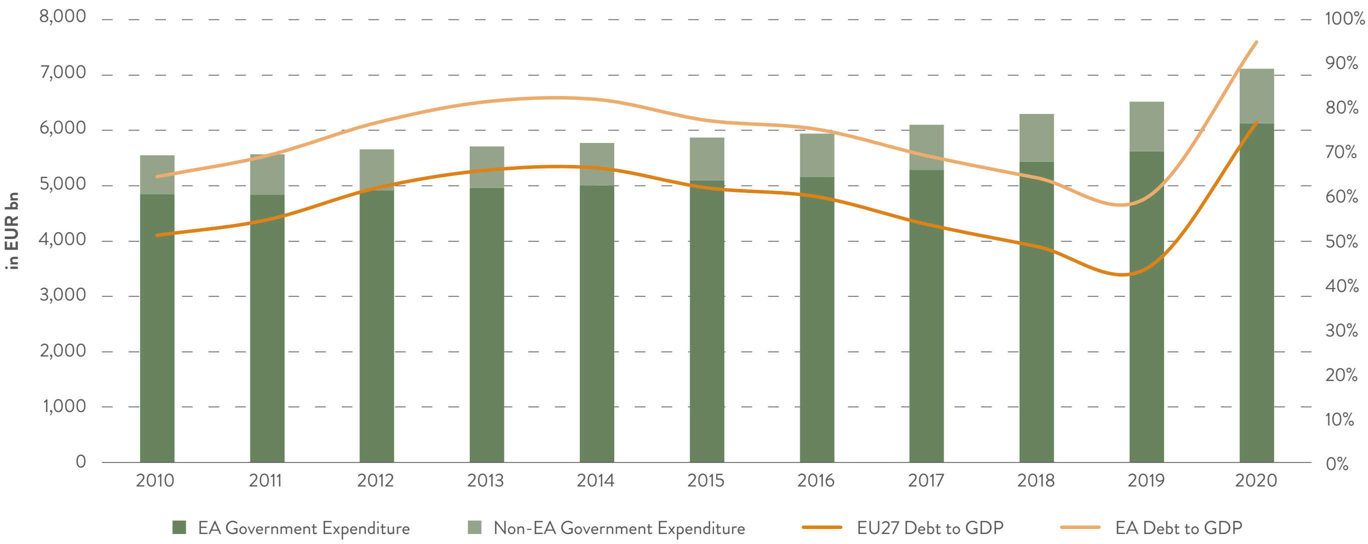



*Source: Eurostat*

Unemployment levels increased in all EU countries in 2020, save for Greece, France, Italy and Poland, as chart 2 shows. The highest increases in unemployment were in the Baltics (Estonia +2.4 pps, Lithuania +2.0 pps and Latvia +1.8), Sweden (+1.5 pps) and Spain (+1.4 pps), which illustrates the heterogenous economic effects of the pandemic. Nevertheless, the differences between European countries in terms of unemployment remain in place, as those with high unemployment levels still record notable yearly rates, such as Greece (16.3%), while others, like Poland (3.2%), have rates below the EU27 average.

Public expenditure increased significantly in 2020. In the entire EU aggregate public expenditure was EUR 7.1 tn by the end of year, up from EUR 6.5 tn in 2019 (a 9.2% y-o-y increase). In the Euro area, it increased at a similar pace (9.1% yearly), reaching EUR 6.1 tn at year end. As public spending increased total European public debt also expanded in 2020. European total public sector debt represented 90.7% of GDP in 2020, up from 77.5% the previous year. In the Euro area, the ratio jumped to 98% by the end of 2020, an increase of 14 pps. This interrupts a five-year downward trend that saw EU27 and Euro zone debt-to-GDP ratios decrease consistently, leading to the highest public debt to GDP ratio to date for both the eurozone and the European Union as a whole.

## CHART 3 | GOVERNMENT SPENDING EVOLUTION IN THE EURO AREA AND IN THE NON-EURO AREA COUNTRIES




*Source: Eurostat*

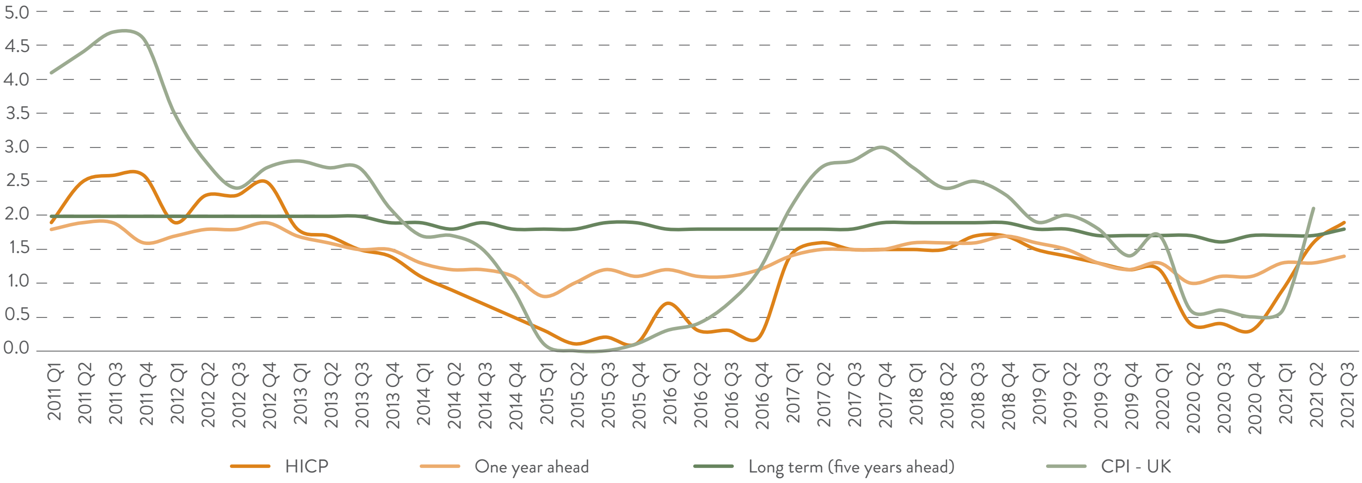
Government expenditure generally increased in all EU Member States albeit at different paces. For instance, in the two largest economies, France and Germany, government expenditure levels grew by 5.5% and 9.3%, respectively. In Lithuania, however, total government expenditure increased by 25.5%. Other countries, such as Greece, Ireland, Spain, Austria and the Netherlands, all registered increases above 12%. In terms of public debt to GDP, 11 countries out of 27 had debt-to-GDP ratios below 70%, 11 were above 80% GDP, 7 of which were above 100%. Only 5 countries registered a ratio below 40%. Southern European countries all have high public debt to GDP ratios and some of the highest increases in terms of percentage points of the EU27 (above 20 pps each). However, other countries have also gone through a significant deterioration of this ratio, such as France or Belgium, whose debt volumes grew above 110% GDP in 2020.

Inflation, as measured by the Harmonised Index of Consumer Prices, or 'HICP', decreased to 0.7% in 2020 from an average of 1.4% in 2019. This is mainly due to dwindling output levels and a subdued household demand. It is the first time since 2016 that the average European inflation rate was below 1.5%. As Chart 5 shows, inflation is expected to remain below the 2% legal threshold in 2021, while the ECB forecasts the HICP to pick up in the long term, varying between 1.7 and 1.8%. In the UK, consumer prices decreased from 1.7% in 2019 to 0.8% in 2020, following a path similar to that of the EU.

## CHART 4 | PUBLIC DEBT TO GDP RATIO


*Source: Eurostat*

CHART 5 | HICP AND INFLATION EXPECTATIONS ONE AND FIVE YEARS AHEAD IN THE EURO AREA AS MEASURED BY THE ECB AND CPI IN THE UK, IN PERCENT




*Source: European Central Bank and Bank of England*

The European Central Bank (ECB), as part of its so-called accommodative, non-standard monetary policy, maintained its 2019 monthly asset purchase programme, which received an additional EUR 120 bn endowment in March 2020 for the specific purpose of tackling the pandemic. Moreover, the ECB rolled out the pandemic emergency purchase programme (PEPP), a standalone, temporary asset-purchasing scheme aimed at counteracting monetary risks brought about by the pandemic in the Euro area. By December 2020, the PEPP size was EUR 1.85 tn, following two successive increases, it is expected to run until end March 2022. The programmes cover various asset classes and countries. The ECB also conducted long-term refinancing operations (LTROs), which provide banks with liquidity, and significantly eased the conditions for targeted longer-term refinancing operations (TLTROs). The ECB endeavoured to incentivise bank lending to offset the economic burdens of the pandemic.

The pandemic has severely disrupted international supply chains world and severely hampered growth prospects of both industrialised and emerging economies. The US, Japan and the UK all registered significant GDP decreases and saw investment levels contract in 2020[2]. China was the only major world economy to grow, reporting a 2.3% real GDP increase.

## HOUSING MARKET

### SETTING THE WIDER CONTEXT: CLIMATE, BUILDING AGE AND TYPE OF DWELLINGS

The economic and social shock of the pandemic has been profound and costly. However, it has also served as a catalyst of several market trends that were already occurring. Perhaps the most notable example is the development of sustainable financial instruments or the adaptation of assets, whether financial or not, to new energy-related requirements or criteria, as established by EU legislation. Mortgage and real estate markets are both at the centre of this "green transition", especially in Europe. Buildings are responsible for approximately 40% of energy consumption and 36% of CO2 emissions in the EU. Moreover, almost 35% of European buildings are over 50 years old, while 75% of the total building stock is not energy efficient. Renovations are therefore warranted Furthermore, climate events, such as floods, storms or heatwaves, which can damage infrastructure, are becoming more common.

Housing energy demands vary significantly across Europe. To measure this Cooling and Heating Degree Days are an indicator of the severity of cold and hot days annually[3]. Heating needs are over 96% of the aggregate indicator for the EU27. The options to heat a dwelling use different material such as wood, gas, coal, electricity, nuclear etc, whereas in order to cool it only air conditioning through electricity is of use.

The amount of heating/cooling degree days has changed over time. Global warming influenced both the need for heating and for cooling. Taking into account data between 1979 and 2020 heating degree days in 2020 decreased by 14% whereas cooling ones increased by over 36%. Regarding the heating days, Cyprus and Malta recorded the most significant decreases with respectively 20% and 25%, while for cooling degree days especially the Benelux countries recorded a significant increase. This raised two important issues with regard to the climate impact of dwellings. First this impact is heavily dependent on the location and secondly climate change directly impacts the conditions the dwelling needs to withstand.

This challenge will require market actors to adapt buildings, including residential ones, to specific climate-focused technical requirements and more environmentally minded consumer demands and preferences. As Europe tries to recover from the pandemic, options such as sustainable investments or energy efficient housing could not only help lift the European economy, but also ensure its long-term competitiveness.

[2] As reported by Eurostat and the European Commission (Spring 2021 Forecast, cited above), US real GDP fell by a yearly rate of 3.5%, while the Japanese economy shrank by 4.8% on the same basis, as the pandemic disrupted social and business activities in both countries. Investment levels fell 0.8% in the US and by a sharper 4.1% in Japan. In the UK, the effect of the pandemic was more significant: the broader British economy rolled back by 9.8% while investment levels contracted by 8.8%.

[3] For more information on the methodology and for further statistics please find them on this link: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Heating_and_cooling_degree_days_-_statistics

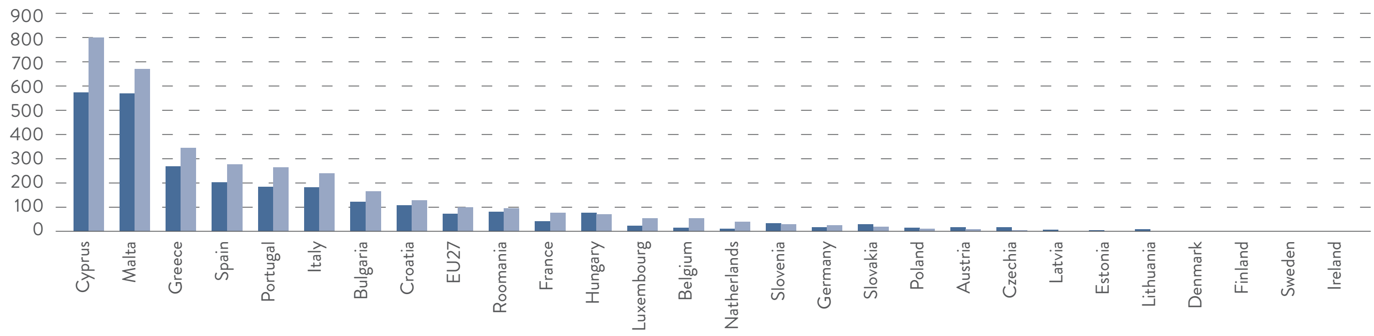
The environmental challenges of EU housing are clear if the age of European houses is considered.

The results of the 2013 EU census, the most recent one conducted for the whole union shows that the bulk of houses in most countries date to the 1946-1981 period. The age structure, besides this, varies across Europe.

In Belgium, the United Kingdom, France or Denmark, between 30 and 40% of total houses before 1945. Conversely, countries such as Ireland, Portugal, Greece or Spain, which saw a rapid expansion of the housing stock in the period leading up to the GFC, all have more housed from either the latter years of the 20th century or during the 2000s. The different shares can be seen in detail in the chart 7.

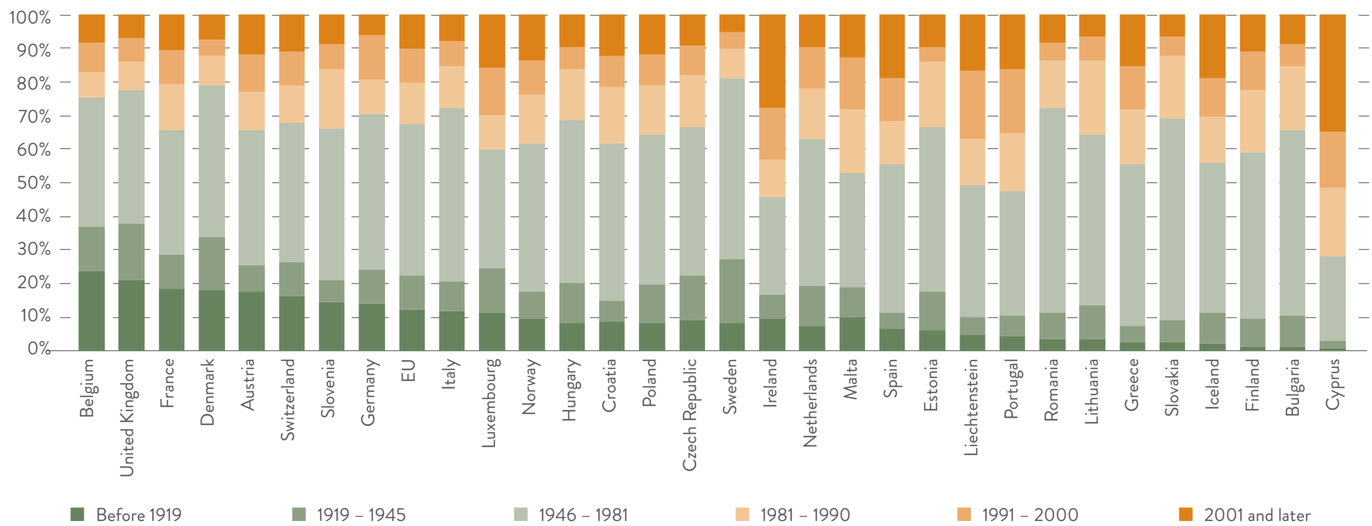
## CHART 6A | HEATING DEGREE DAYS COMPARISON LONG TERM AVERAGE AND 2020


## CHART 6B | COOLING DEGREE DAYS COMPARISON LONG TERM AVERAGE AND 2020




*Source: Eurostat*

## CHART 7 | HOUSE AGE STRUCTURE



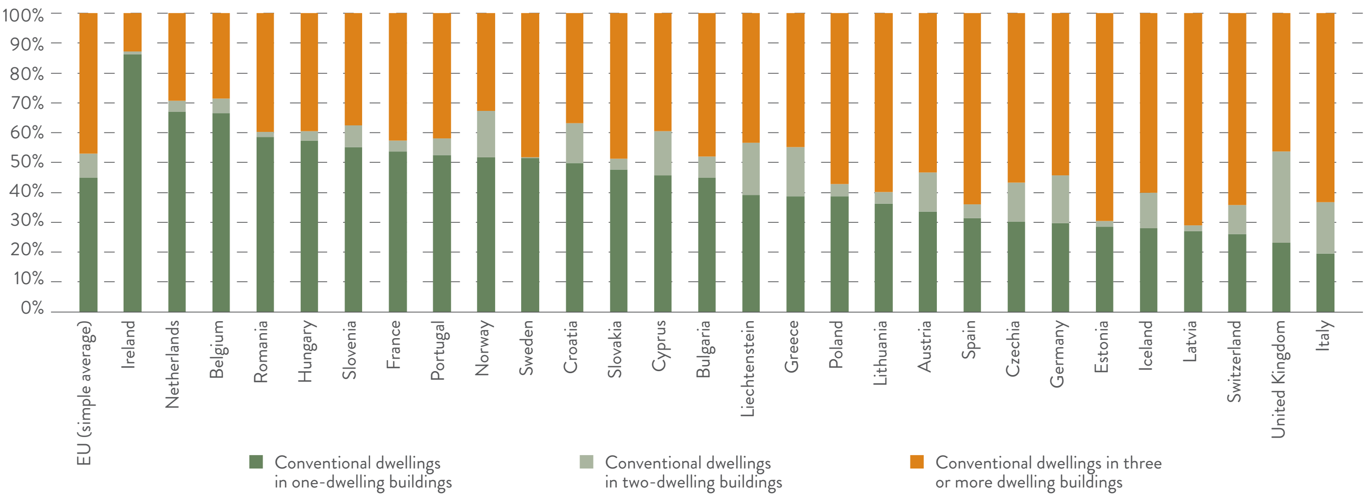

*Source: European Union Housing Census Hub*

This diversity shows that energy efficiency and sustainability goals related to housing are complex, houses in countries with more buildings built during the first four decades of the 20th century require different types of adjustments than houses built over the past 30 years.

The predominant type of dwellings per country also adds to the intricacy. According to the 2013 EU Census cited above, the two most common types of residential housing are one-dwelling buildings, with 43.5% of the share, and those with three or more dwellings, representing 47.6%. From the countries considered in this European-wide survey, nine (9), as Chart 8 shows, are predominantly those with single family dwellings, with a share of above 50%. The Netherlands, Belgium, Hungary, France, Portugal and Sweden mainly have this type of residential buildings. Ireland in contrast has the largest concentration of detached houses, with 86.1% of the country's buildings consisting of one single dwelling. The remaining countries generally have a dwelling stock composed of buildings that comprise three or more dwellings, or multifamily residential buildings. Several Eastern European countries, as well as Germany, Austria, Spain and Italy, to name a few, all report a concentration above the 50% threshold in this category.

Thus, as the technical or physical features of buildings vary from country to country, the approach to improving European housing energy efficiency should also be diverse. Although there is no clear-cut regional pattern for the distribution of types of houses or age structure, and despite the limitations in terms of availability of data, a cross-sectional look shows that the needs of countries like France or Belgium, countries where residential building are more commonly single detached units, often constructed at the beginning of the previous century, will have different environmental needs (and technical constraints) from countries like Germany or Spain, where a significant part of the housing stock, mainly composed of multifamily units or condominiums, dates back to the post war period or to 1990s or 2000s.

CHART 8 | DWELLING TYPE STRUCTURE




*Source: European Union Housing Census Hub*

## HOUSING SUPPLY DEVELOPMENTS

European housing supply underwent a general adjustment in 2020, matching the broader macroeconomic trends. Construction investment decreased, as sectoral sentiment and business prospects deteriorated. European construction output recorded its first significant contraction in more than two years, while construction costs continued to increase despite dwindling activity. The market also registered noticeable drops in the number of building permits issued and transactions. However, as the pandemic has shown, this overall scenario was not the same across all jurisdictions, since various countries saw investment and market-level operations increase despite the negative outlook.

New investment in buildings, measured in terms of **gross fixed capital formation** (GFCF) in the dwellings sector, decreased on aggregate level in Europe, according to Eurostat. EU27 volumes dropped by 2.1% in 202, and the Euro are fell by 3%0. Total dwelling investment volumes were EUR 719 bn, around 24.5% of total EU27 GFCF. This is the first yearly contraction since 2013, ending a six-year period of consistent growth in dwelling GFCF levels. However, the pandemic had diverse effects in different countries: investment levels declined significantly above the EU27 average in Spain (13.5%), France (11.2%), Italy (8.3%) and Belgium (6.1%), for example, but expanded at sharper rates in countries such as Hungary (17.1%), Greece (15.5%), Denmark (11.3%), Sweden (5.7%) and Germany (5.1%).

The **business sentiment**[4] of the European construction sector, as calculated by Eurostat's Business and Consumer Confidence Survey, shows that business expectations went through a significant negative period during 2020. EU27 construction companies generally went from a moderately confident outlook about the sector's near-term performance to a more negative assessment, as Chart 9 shows. In January 2019, the confidence score stood at 8% on average, marking five consecutive months (starting in September 2018) with companies

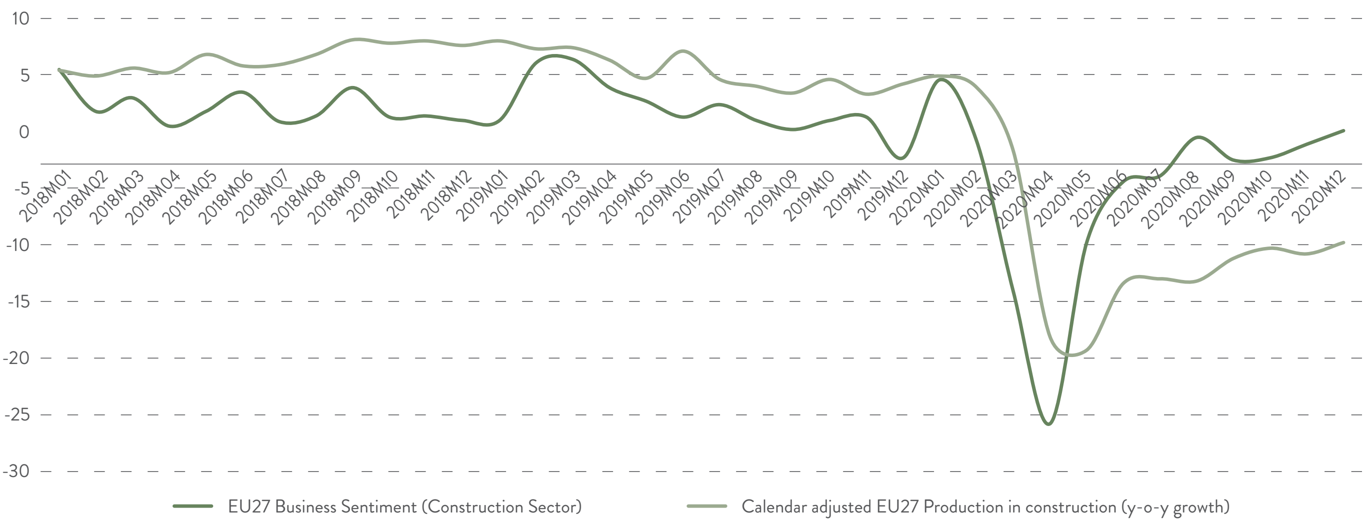
[4] The economic sentiment indicator, according to Eurostat, is composite indicator which aims at tracking GDP growth at different levels in Europe (i.e. EU27, EA or Member States). The scores published each quarter are weighted averages of the balances of replies to selected questions addressed at companies of five different economic areas: industry (with a 40% weight), services (30%), consumers (20%), retail operations (5%) and construction (5%). For the purpose of this report, only the results that concern the construction sector have been considered. Regarding the balances, or net scores, shown here, they are the difference between the percentages of positive and negative replies. A positive balance would indicate growth potential, whereas a negative net score would point to a contraction. The scores are seasonally adjusted.

reporting the highest confidence score in the series. From January 2019 onwards, however, construction business sentiment would slowly deteriorate in the broader EU27, finishing the year with a 5% confidence score. As 2020 began, the outlook remained more or less the same. By March 2020, as the COVID-19 virus spread and the social distancing measures were put in place, business sentiment turned negative, dropping to -5% that month, eventually decreasing to -19%, the lowest point that year, in May 2020, amid the widespread lockdown. March 2020 was the end of a 29- month long period of net positive results.

The second half saw a relative improvement in confidence matching the partial Q3 economic restart but business sentiment remained subdued for the rest of the year, closing at -10%.

The 2020 deterioration of business sentiment in construction was less substantial than between 2008 and mid-2016. During this almost 8-year span, construction businesses in Europe reported, amid the GFC and its aftermath, consistently negative net results, with values clearly above the May 2020 score cited above.

## CHART 9 | CONSTRUCTION SECTOR BUSINESS SENTIMENT AND PRODUCTION IN CONSTRUCTION




*Source: Eurostat*

German and Irish construction managers showed a more confident outlook relative to their European peers. Although business sentiment deteriorated in line with the European trend, the most critical period March 2020, was nonetheless positive with Germany and Ireland reporting monthly readings of 8% and 12.5% respectively. Both countries would eventually record negative confidence results in the coming months, but in Germany, expectations would be comparatively more positive. At the opposite end, business confidence deteriorated notably in Greece, where construction companies' confidence, already negative since mid-2008, recorded a net result of -30% in March 2020 and subsequently to-76.3% in April 2020, the lowest reading since September 2011, outlining an increasingly pessimistic outlook for the sector, heavily influenced by the pandemic developed in its initial stages

The chronically low confidence levels in Greece are not unique to the Greek market. Most southern European countries show similar declining confidence albeit at varying degrees. Moreover, the countries with a more stable macroeconomic environment, both in terms of production and investment levels, such as the Nordics also showed weakened sectoral business sentiment.

Regarding **production in construction**, calendar adjusted monthly output levels show that building production went through two distinct cycles.

According to Eurostat EU27 building output increased each month between February 2017 and November 2019. However, from February 2020, output began to decrease on a yearly basis, slowing down further as the spread of the coronavirus gained speed across Europe. In February 2020, output levels went down by 0.9%, falling a further 14.2% the following month. In April, as national lockdown policies were being implemented, building production contracted by almost 26% y-o-y, the highest single-month contraction ever (beating the 11.8% in February 2012). Production would remain subdued throughout most of 2020, netting an average 12-month yearly negative growth rate of 5.1%. Contrary to the GDP developments production did not benefit from the mid-year restart but remained negative. Recent data shows that EU27 building production improved significantly as of March 2021, after a slow start to the year. By country, most have been negative with a few exceptions. The highest average contraction took place in France, with a 14.4% drop, followed by Spain, whose output volumes fell by 13.3%. Building production also fell at noticeable rates in Belgium (8.6%), Czechia (8.2%), Hungary (6.5%) and Austria (4.3%), for example. However, in Denmark and Germany despite the pandemic containment measures and months with negative growth average 12-month yearly building production grew by 4.5% and 2.7% respectively.

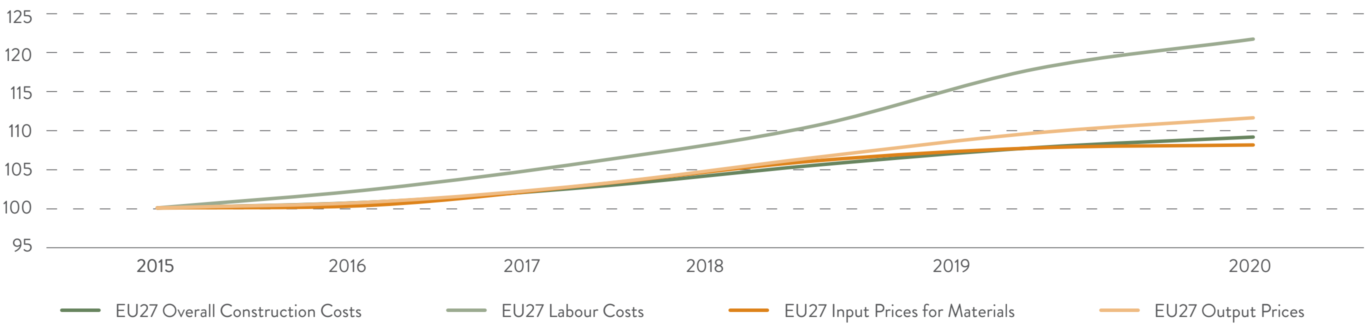
Comparing building production with the business sentiment there is a clear correlation. As production levels decrease, sectoral confidence in the economic situation deteriorates at a similar pace, especially when production data is stripped of seasonal effects (as seen in the chart). Construction production underwent a significant correction in April and May 2020, whereas as business sentiment began to deteriorate as of March that year. Moreover, following this confidence levels began to improve during the second half eventually reaching a net zero score in December 2020. Construction production, however, although recovering still showed negative growth by year end, indicating that growth prospects improved faster than actual sectoral output.

Amid the decrease of output, **construction costs of residential buildings**, increased by 1.3% in 2020, (from 2.2% in the previous year). Despite the output slowdown building costs continued the upward trend that began after the GFC. At a national level, most EU countries experienced cost increases, with for example Romania (2%), Portugal (1.9%), Germany (1.8%) and most of all Hungary, (11%) above the average. Conversely, costs decreased in some key countries namely Sweden (0.2%), Finland (0.2%) and Spain (0.9%).

Labour costs generally increased in most EU countries, in line with previous trends, and at a higher level than other key components in construction such as input materials, as seen in chart 10. While it is difficult to measure a European average, due to incomplete data[5], approximate figures indicate labour costs in construction (specifically for residential buildings) in the EU27 increased by 3.3% in 2020. Expenses linked to labour have expanded consistently since before the GFC, as well as other categories, such as materials or output prices, although the rates of growth moderated significantly in 2009, in the aftermath of the financial downturn, and more recently in 2020, amid the pandemic, after recording a peak growth rate of 6.6% in 2019.

Significant labour cost increases occurred in Denmark (1.9%), Portugal (3.2%), Germany (3.4%), the Netherlands (4.1%) and Czechia (7.8%). In Spain, however, labour cost fell by 0.7%, while Sweden saw a 1.3% contraction.

## CHART 10 | EU 27 CONSTRUCTION COSTS INDICES (OVERALL, LABOUR COSTS, INPUT AND OUTPUT PRICES), INDEX 2015=100




*Source: Eurostat*

The rise in construction labour costs took place in an unchanged total construction labour force. In 2020, EU27 construction sector employees were 6.5% (roughly 13.5 mn workers) of the entire European workforce, as shown in chart 11. This is the highest share since 2012, after 8 years of continuous contraction (2008-2015) and a period of relatively flat growth (2016-2019). Despite the increase the workforce is still smaller today that in the pre-GFC period, when, at its peak (2007), it represented 7.7% of total European employment. This 1.2 pps difference in share, added to the social distancing measures imposed to curtail the coronavirus pandemic, might have contributed to labour costs. Nevertheless, this is speculation that further, more focused research could evaluate.

## CHART 11 | TOTAL NUMBER OF EMPLOYEES (CONSTRUCTION) & SHARE OF CONSTRUCTION EMPLOYEES OF EU27 TOTAL WORKFORCE


*Source: Eurostat*

5 The labour cost index in construction (for residential buildings) dataset does not report a combined EU27 score. For this report, a simple average was calculated on the basis of the national figures of the 20 Member States for which data is available (i.e. BU, CZ, DK, DE, EE, EL, ES, IT, CY, LV, LT, HU, MT, NL, AT, PT, RO, SL, FI and SE). Data reported by Eurostat is unadjusted (neither calendar nor seasonally).

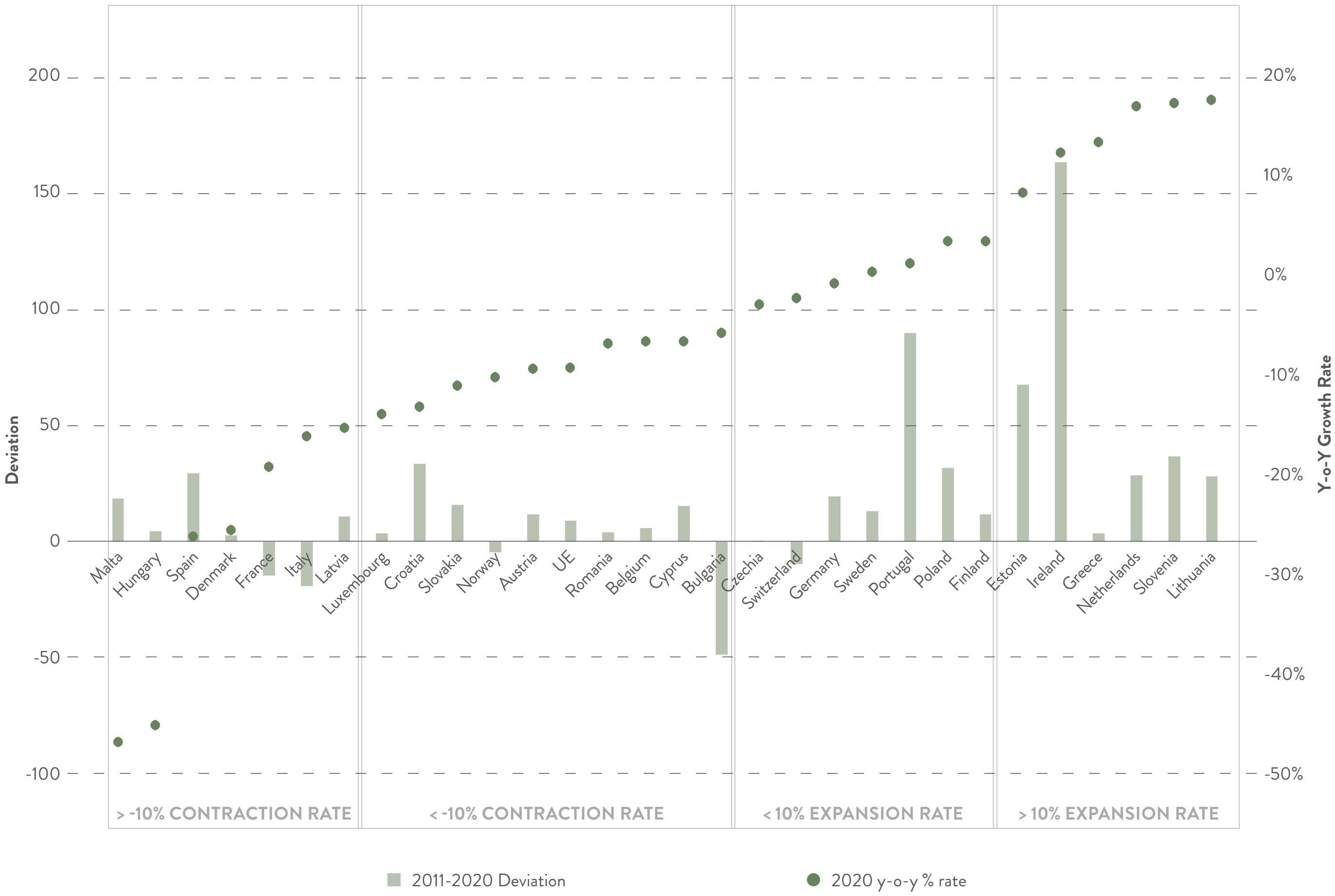
Overall, there has been a combination of decreasing sectoral investment and output levels and moderately increasing construction costs, but with wide national variations.

The number of newly issued **building permits** in the Hypostat country sample fell by 5% after a small growth of 0.1% in the previous year. Despite this, the total number of issued permits in the EU was still above the 2011-2020 average (more than 1.43 mn licenses). Over the course of this period, overall EU building permits increased by 7.1%.

The number of newly issued permits fell against 2019 values in most jurisdictions, albeit with noticeable exceptions (Charts 12) There was no clear geographical pattern, countries within the same region had different trends, for instance, the number of new permits fell in France, Austria and Belgium, but grew in Germany and the Netherlands. A similar mixed picture can be seen in Northern, Southern and Eastern Europe.

Permits expanded moderately (up to 10%) in Czechia, Finland, Germany, Poland, Portugal and Sweden. More significant, double-digit expansions occurred seen in Estonia, Greece, Ireland, Lithuania, Netherlands and Slovenia.

CHART 12 | BUILDING PERMITS EVOLUTION (2011-2020)



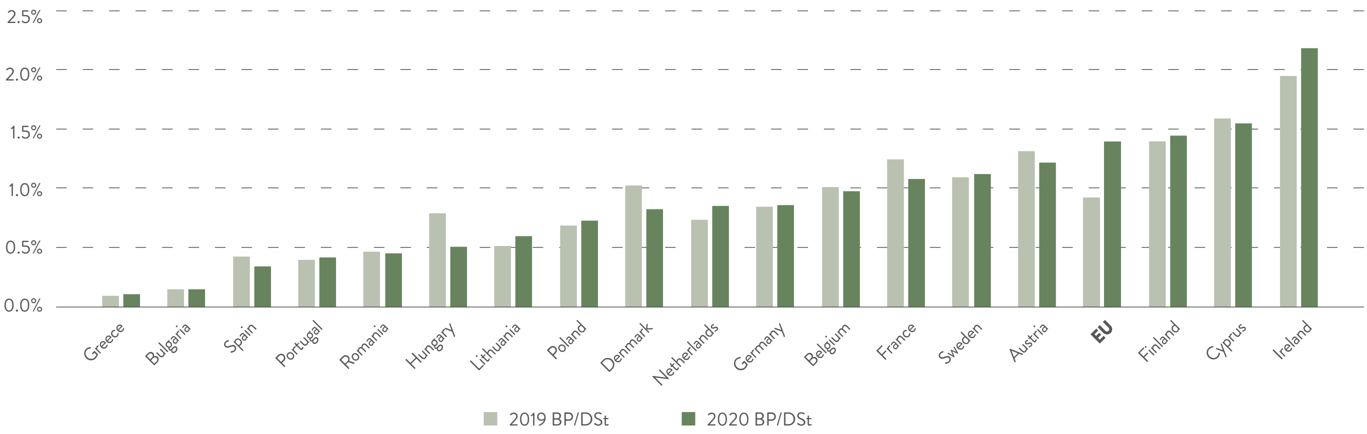

*Source: European Mortgage Federation*

A number of jurisdictions with moderate or significant declines in permits still had levels above the 2011-2020 average. Even in countries with less permits issued in 2020, Austria, Belgium, Denmark, Croatia, Romania, Latvia or Spain all still have permit levels above that average. In Ireland, for example the number of newly issued permits was almost double the decade-long average.

On a longer term, most countries in the Hypostat sample report an increased issuance of building permits over the last 10 years. The lowest rate of growth was in Croatia and Romania, where building permits grew by 4.6% and 4.8% per year on average. The fastest-growing markets were Sweden, as issuance almost doubled in one decade (90.7%), and Estonia and Ireland, two jurisdictions that both increase permit levels by over 200% threshold. Conversely, permit issuance contracted over a three-year period in Czechia, France, Bulgaria and, most notably, in Greece and Italy, which reported a dwindling in issuance by more than 50% on average.

Relative to the **dwelling stock**, newly issued building permits represented in 2020 0.74% of the combined EU27 and UK building stock, 0.04 pps less than in 2019. This remains clearly below the 2000-2007 1% average. The total EU+UK stock of residential buildings was more than 250 mn. Nationally, the permit to stock ratio decreased in Austria, Belgium, Cyprus, Denmark, France and Spain, with more significant drops in Denmark and Hungary. Conversely, they increased in Finland, Germany, Greece, Portugal, Poland and Sweden. Ireland had an increase of more than 0.20%, the largest of the country sample, indicating a continuation of the upward trend already described in the 2020 edition of Hypostat.

## CHART 13 | BUILDING PERMITS AS A PERCENTAGE OF DWELLING STOCKS




*Source: European Mortgage Federation*

The number of **residential transactions** for new and existing properties at EU27 level fell by 2.9% in 2020, following a 1.9% increase the previous year. It is the first fall since 2013. More than 5 million transactions were completed in 2020. In Northern Europe, transactions increased on a yearly basis at significant rates in Sweden, Finland and mostly notably Denmark, where residential transactions grew by 16%. In Central Europe, the picture is mixed; transactions increased in Germany while in Belgium and Luxembourg, residential purchases dropped by 18.2% and 6.3%, respectively. In the East, transactions increased slightly in the Baltics and Hungary, but fell in Romania. In Southern Europe, the market generally remained quiet as transactions fell in Portugal, Italy, Spain and Cyprus. The latter jurisdiction in particular recorded the largest contraction of the sample (23.1%). Lastly, transactions also fell significantly in Ireland and the UK.

### HOUSE PRICE TRENDS

There was a significant increase in house price levels in Europe. EU27 house prices grew by 4.8%, after 5.8% growth in 2019. The Euro area saw an increase in nominal house price of 3.8%, down from 4.8% the previous year. This continued an upward trend that began in 2014, but the pace of growth peaked in 2018 (6.6%).

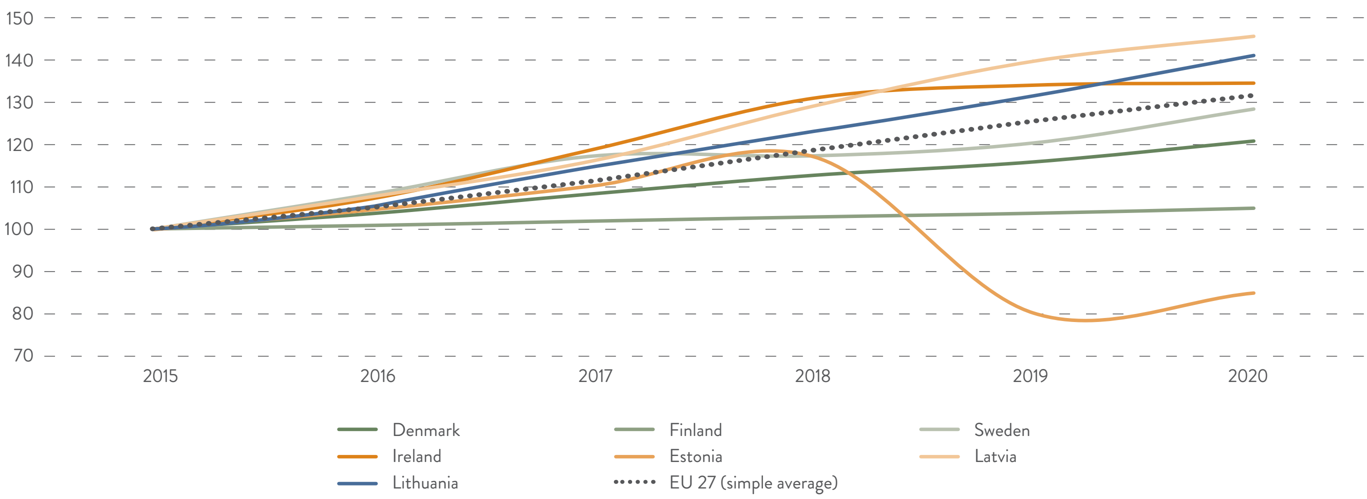
In 2020 average house prices increased in most Hypostat jurisdictions, albeit at different rates of growth. Some specific cases, though, saw nominal price falls.

House prices in all four Nordic countries grew in 2020 on a yearly basis. In Sweden, prices rose above the EU average, with a 6.7%. Denmark also registered a significant growth, as the average national price index increased by a yearly 4.3%. These latter increases are more substantial if compared to the 2019 growth rates. In the case of Sweden, house prices increased by 4 pps in 2020 versus 2019, whereas Denmark gained 1.5 pps.

In Finland, the national average HPI rose by 1.6, while in Ireland, overall price levels increased by 0.4%, down from a 2.4% increase the previous year.

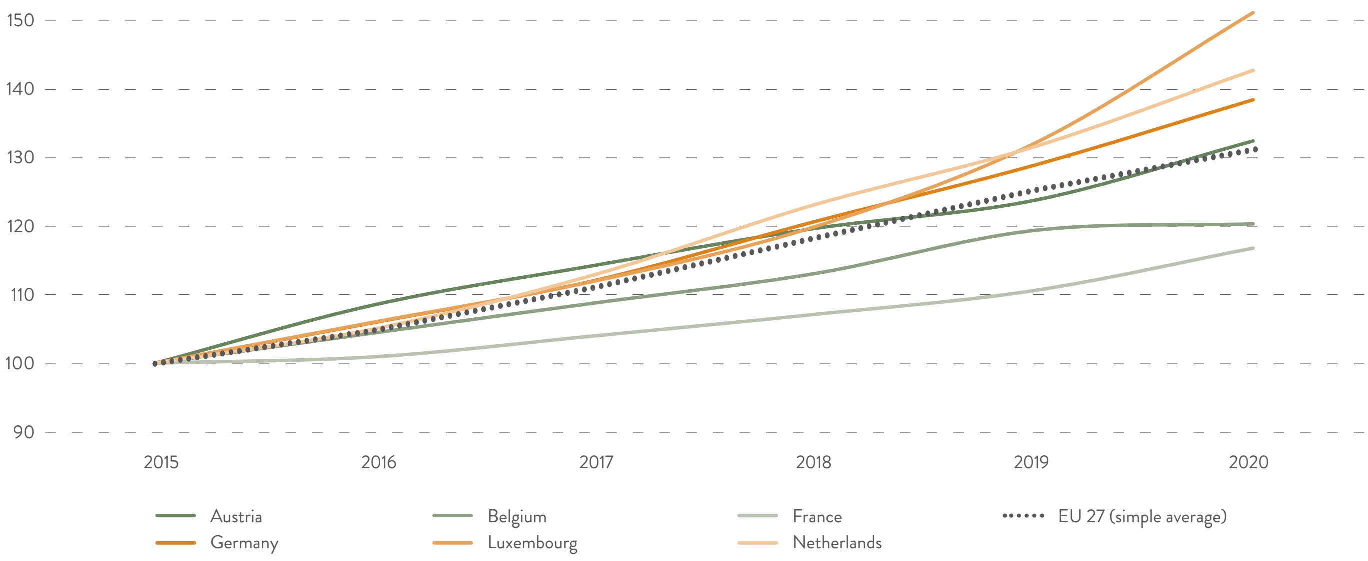
Prices also rose in the Baltics, especially in Lithuania and Estonia.

## CHART 14 | NORTHERN EUROPE HOUSE PRICES, INDEX 2015=100




*Source: European Mortgage Federation*

## CHART 15 | CONTINENTAL EUROPE PRICES, INDEX 2015=100



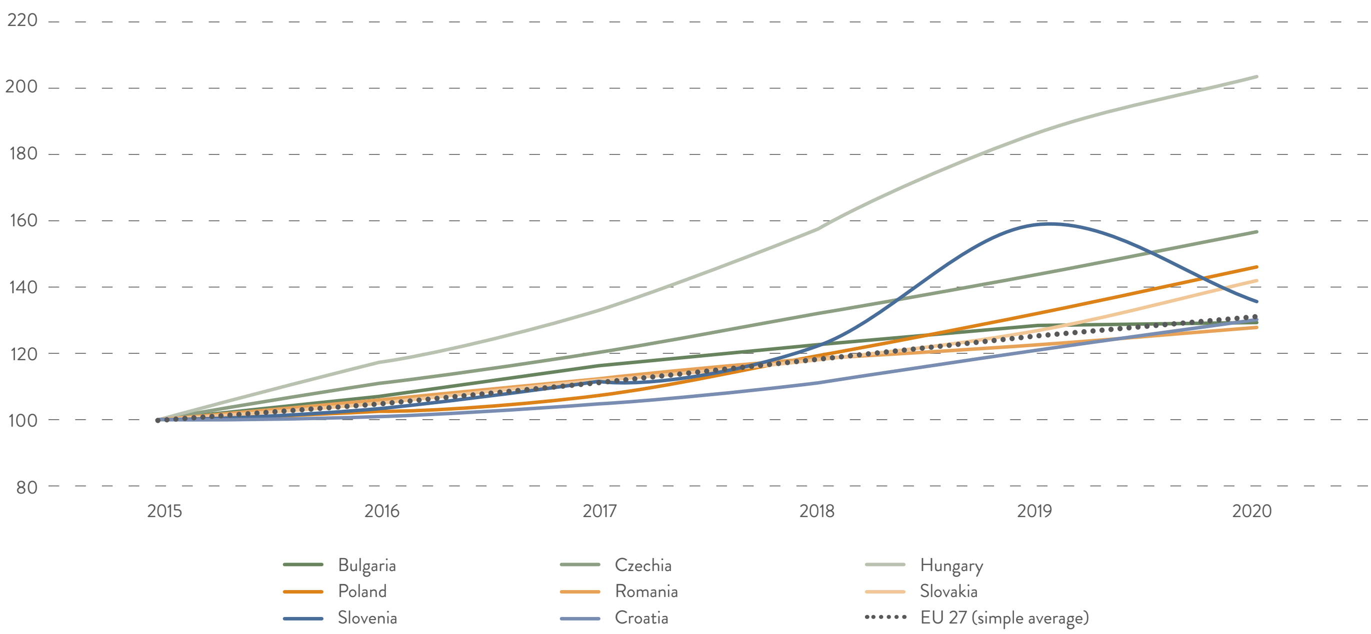

*Source: European Mortgage Federation*

In Continental Europe, house prices generally increased in 2020 with above average yearly changes, yet country variations can be spotted.

In Austria and Germany, house prices grew by 7% and 7.4%, respectively, while France reported a 5.6% increase.

In neighbouring Belgium, prices increased slightly at 0.8%, the lowest rate of growth in the continental Europe region. The Netherlands, however, saw higher increases s as the price increased by 8.5% y-o-y. But the fastest growth rate was in Luxembourg where they increased by 14.5%.

## CHART 16 | CENTRAL AND EASTERN EUROPE PRICES, INDEX 2015=100

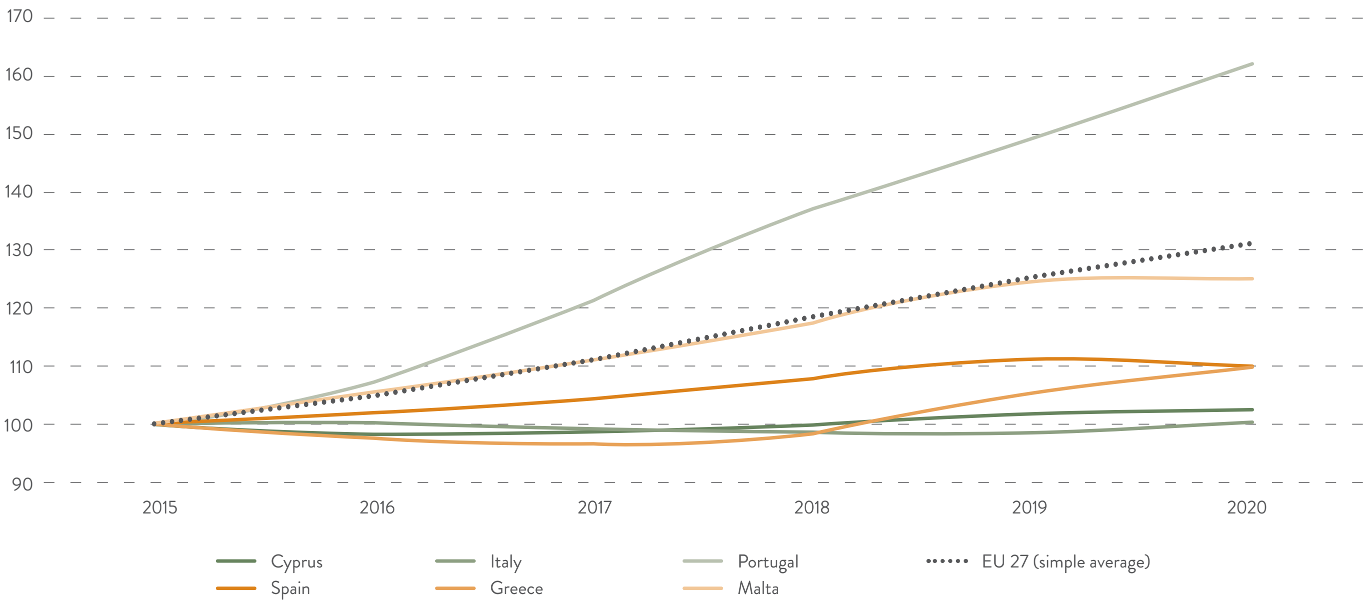



*Source: European Mortgage Federation*

House prices also grew in eastern Europe over the course of 2020 largely at higher rates than elsewhere in the EU27.

For instance, Hungary and Czechia both saw residential prices increase at a pace of 9%, while in neighbouring Poland house prices increased by 10%. Slovakia reported an increase of almost 12%. Prices in Bulgaria increased at the slower pace of 0.8%. Slovenia was the only outlier where house price contracted by 14.7%.

**CHART 17** | SOUTHERN EUROPE PRICES, INDEX 2015=100

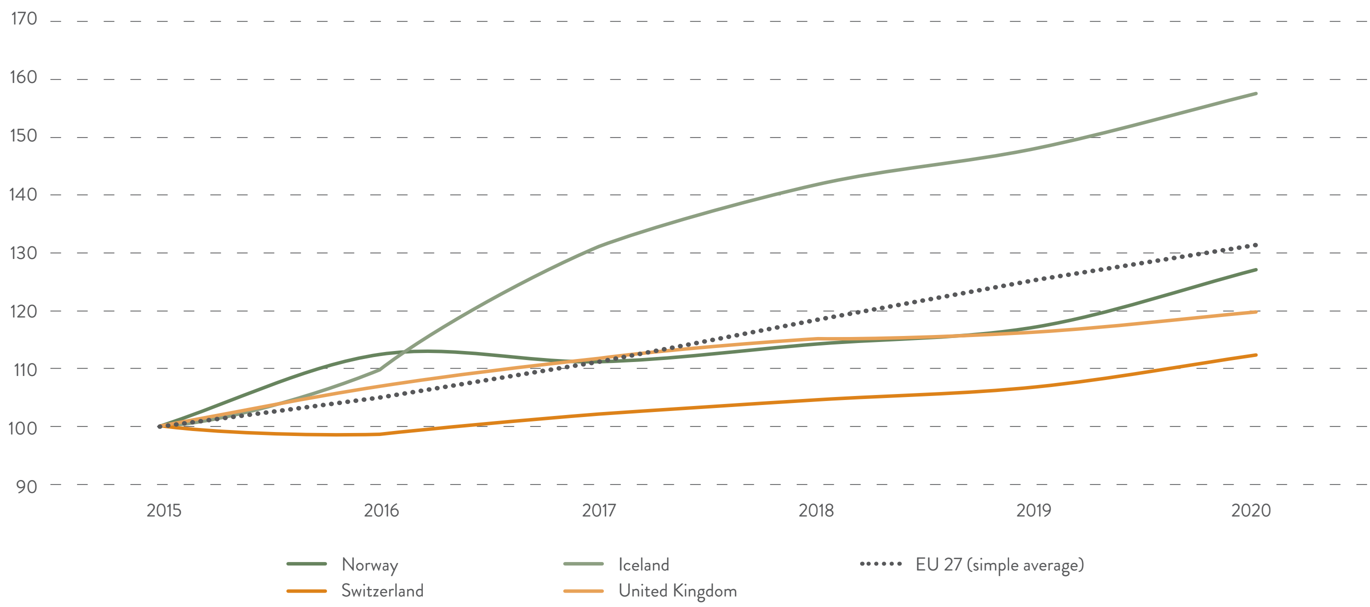



*Source: European Mortgage Federation*

Lastly, in Southern Europe, nominal house prices also increased in most jurisdictions, although at comparatively slower paces. Portugal, however, saw residential dwelling prices increased by 8.6%. Greek prices also expanded at a significant pace, by 4.3%.

Italy, in the meantime, has a 1.9% growth rate in the year, the first time in a decade, prices grew more than 0.5%. In Malta and Cyprus, house prices increased more slowly. The only exception in the Mediterranean region is Spain, as average national prices fell by 1.1%.

**CHART 18** | NORWAY, ICELAND, SWITZERLAND & UK HOUSE PRICE INDICES, INDEX 2015=100

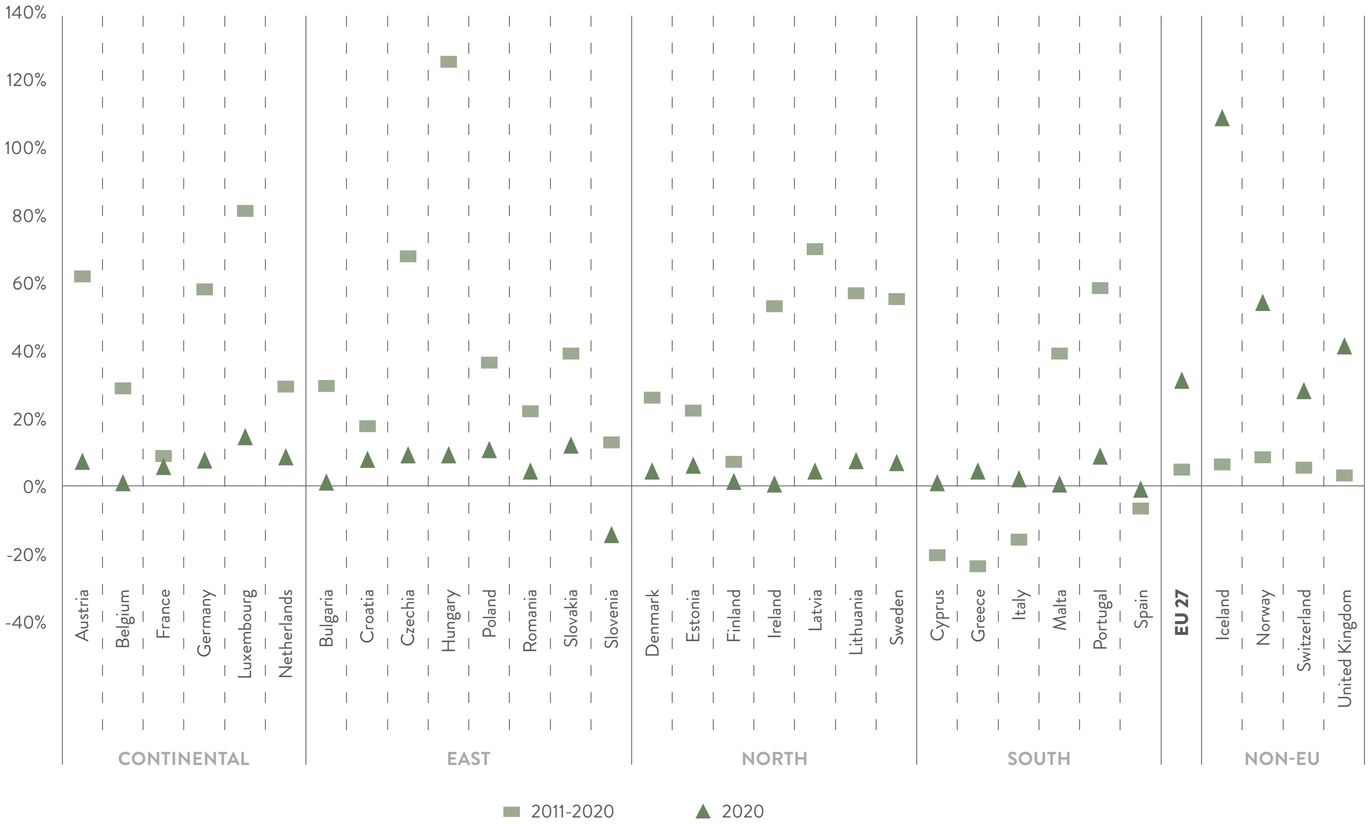



*Source: European Mortgage Federation*

Overall house price levels also increased at a significant pace in other relevant non-EU markets.

In the UK, residential prices rose by 3% in the year, while in Switzerland, the increase was more noticeable, as the price index increased by 5.3% against 2019 data. In Norway, house prices rose by 8.5% in 2020. Iceland saw residential prices go up by a yearly 6.4%.

**CHART 19** | HOUSE PRICE INDEX GROWTH (2020 YEARLY GROWTH RATE & 2011-2020 GROWTH)




*Source: European Mortgage Federation*

In terms of the long-term trend, the narrative described above varies somewhat. Over the course of the 2011-2020 period (Chart 14), average European HPI increased by slightly more than 31%.

In the meantime, Swedish prices increased by more than half (around 55%), while Denmark prices grew by 26.2% and in Finland, by 7%. Prices in the Irish market rose by 54% over the same period. Latvia and Lithuania saw local house prices increase by more than 55%.

In all of the jurisdictions ascribed to continental Europe, house prices increased over the 2011-2020 period. The most significant increases took place in Luxembourg, where prices rose by 82%, Austria and Germany, where prices grew by 62.3% and 58.5% respectively. The remainder of central European jurisdictions had correspondingly below-average grow rates, with Belgian and Dutch prices approaching 30%. French house prices grew by only 8.8% during this ten-year cycle.

In the East, the yearly increases described above are in line with the 10-year change. In one decade, nominal house prices grew at different rates across all relevant jurisdictions, many at a pace above the EU27 average. Czechia, Latvia and Lithuania stand out, where prices increased by more than 55%. The most noteworthy increase is that reported by Hungary, where house index values grew more than twofold during the last ten years, rising by a 126.3%.

The 10-year evolution in southern Europe depicts a more diverse landscape, one that contrasts with the rest of the regions. Between 2011 and 2020, HPI prices decreased in Cyprus (down by 20.7%), Italy (16.1%) and in Spain (6.7%). The price tightening in these jurisdiction contrasts with a parallel expansion that took place in Croatia or Malta. The contrast is slightly more noticeable if Portugal is taken into account, as residential prices grew by almost 59%.

On to non-EU jurisdictions, since 2011, house prices increased by more than 50% in Norway and by 42% in the UK. In Switzerland, the HPI rose 28.1% over a decade. In Iceland, lastly, house prices have fundamentally doubled in a decade.

## CITY HOUSE PRICES: A LOOK AT THE "CAPITAL PREMIUM"

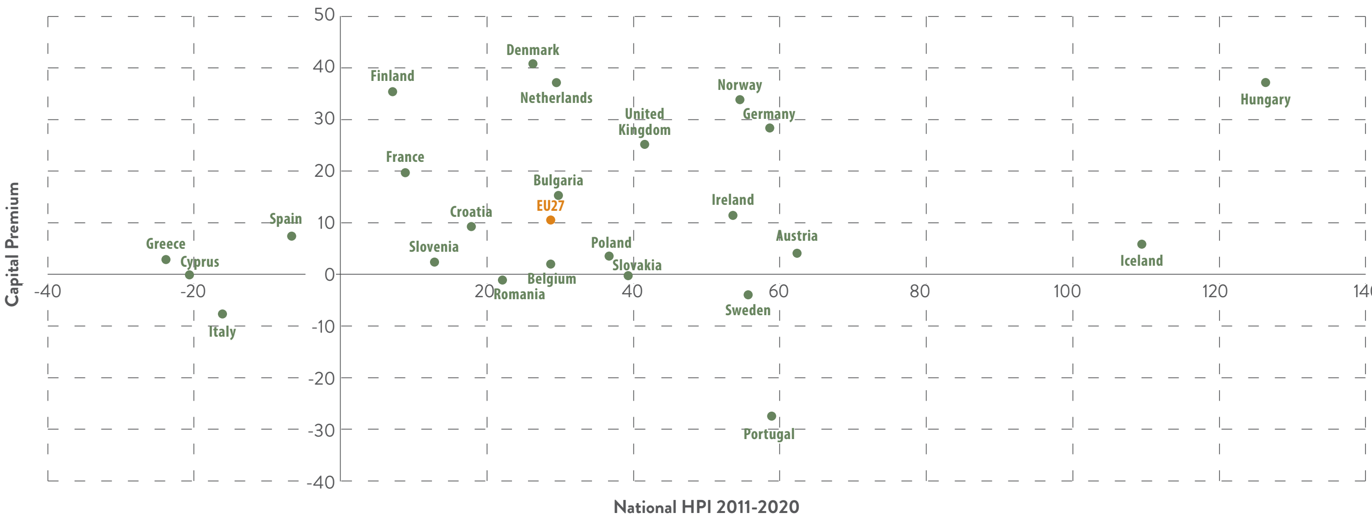
Looking at city house prices in 2020, diverse developments can be seen.

Starting off with the so-called *capital premium*[6], the additional price for dwellings in capitals, across the EU prices in capitals increased again in 2020, however, at a yearly rate of 3%, 4.2 pps less than in 2019. Moreover, average capital house prices grew at a slower rate than aggregate house prices.

There has been, therefore, a slowdown, whether compared to average national levels or prior years for capital. However, the picture is mixed with some countries still showing capital house prices rise faster than the country average.

[6] The capital premium is the difference between a country's average national HPI and that of its capital city. This difference can be calculated both as an index value or as a growth rate. A positive score would indicate that house prices in the capital are higher (or increased at a faster pace) than those of rest of the country, whereas a negative reading would suggest that house prices in the rest of the country are higher (or changed at a comparatively faster pace) than those reported in the capital. The scatter plot chart in this section considers the different rates of growth between the two metrics.

**CHART 20** | CAPITAL CITY HOUSE PRICE VS NATIONAL COUNTRY PRICES (2011-2020 % CHANGE)




NOTE: the city index for Germany is an average value of the seven largest cities.

*Source: European Mortgage Federation*

There is no clear regional distribution that can explain the trends, as in other topics discussed in this article, it is an example of greater diversity during the pandemic-ridden period.

Denmark and Finland both saw house price increases (4.4% and 1.2% respectively), but prices in their capitals grew at significantly faster rates than the broader market; in Denmark at a rate 2.6 pps higher than the average, in Finland by 3.2 pps. Similarly in France and Croatia, where significant national price increases were outstripped by greater increases in prices in the capital. In Belgium, with growth of just 0.8% nationally, prices in Brussels increased by 8.2%, a 7.4% pps difference, one of the largest recorded this year.

In a majority of countries capital house prices grew slower than the average but at rates varying significantly. For instance, capital house prices were marginally slower (below 1 pp) than average, in the United Kingdom, Austria, Sweden and Slovakia. In other countries capital house prices fell whilst those elsewhere rose, for example in Italy, and Ireland. In Bulgaria, residential prices increased by 0.91% against 2019, but in Sofia, house prices went down by 6.7%.

Lastly, in Spain, house prices in the capital decreased by 1.4%, a slightly faster rate of contraction than that seen at national level (1.1%).

These differences show the difficulty of generalising the market situation during the pandemic. However, the long-term price cycle sheds light on more consistent trends.

Over the long-term, comparing figures to those of 2011, trends are rather different. Across the EU, house prices in capitals have grown by 39% since 2011, 10.3% higher than average house prices.

In Denmark, Finland and Norway, capital house prices increased faster than the national average by at least 30 pps. In Sweden, however prices grew slower than the national average; Stockholm prices grew 4 pps less than the national average.

In other countries, for example Austria, Ireland, the Netherlands and the UK, capital house prices grow by an average of 66%. However, the capital premium in Amsterdam and London increased (by an additional 24 pps in London and 37 pps in Amsterdam). Similarly, the German compound city index increased by almost 87% between 2011 and 2020, with the city premium standing at 28.3 pps above the average national HPI growth rate.

In Southern Europe, the picture is mixed. Of the five countries for which there is data, only in Croatia did capital house prices expand faster than the rest of the country. In Portugal, national house prices increased by more than 50% over the decade but in Lisbon they grew by 27 pps less than the national average. In Spain, the reverse is true, overall prices fell by 7%, but in Madrid they rose at a 0.6% growth rate over 10 years.

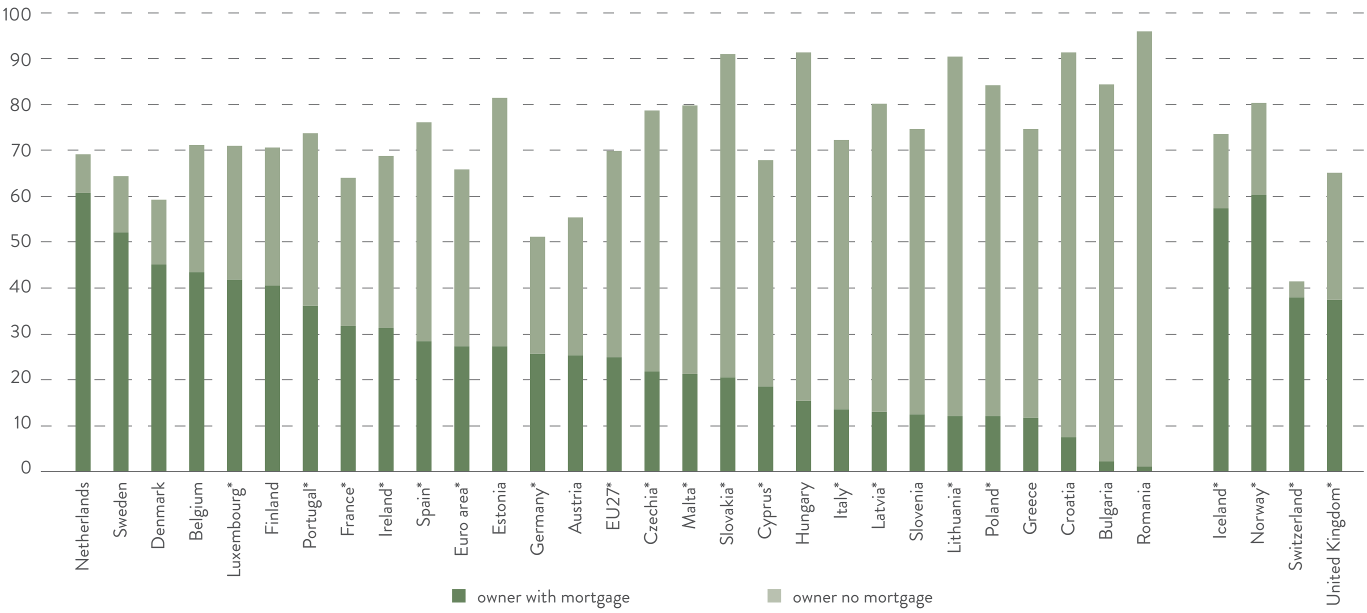
In the other countries in the region house prices fell both nationally and in the capital. in Cyprus both fell at a similar rate (20%). The Athens premium remains positive value, as prices there fell more slowly than the national average. In Rome prices fell faster than the national average resulting in a "negative" capital premium.

## MORTGAGE MARKET

### SETTING THE SCENE – HOMEOWNERSHIP AND MORTGAGE INDEBTEDNESS

The share of Europeans owning their home slightly decreased by 0.1 pps to 69.8% in 2019, the latest year for which we have full data. This in turn was a slight decrease from the 71% in 2012. One in four households have a mortgage or similar loan. Home ownership is still the preferred choice of Europeans, but with wide variations; nearly all Romanians own their homes, closely followed by other countries in Eastern Europe, whereas in Germany only slightly more than half do. The mortgage market remains less developed in Eastern Europe, although a significant catch-up can be seen throughout the regions, whereas especially in the Nordics and in continental Europe the majority of homeowners are also mortgage-holders.

## CHART 21 | HOMEOWNER SHARE AND MORTGAGE HOLDERS IN 2020, IN PERCENT




NOTE: *data refers to 2019

*Source: Eurostat*

Trends in homeownership and mortgage funding have diverged over the last decade. Overall, the proportion of European homeowners with mortgages has fallen by around 1 percentage point.

n Denmark over the last 10 years saw a 10 pps reduction in homeownership and in the share of the population with a mortgage but at the same time there was an increase of over 16% in outstanding mortgage values Fewer homeowners and fewer mortgage holders were also seen in various Nordic countries as well as in Germany, Italy, Spain and Switzerland. However, in most Eastern European countries, France, the Netherlands, Luxembourg and Austria the numbers of both mortgage holders and homeowners increased. In Hungary there was an increase in homeownership but a reduction in mortgage holders. Conversely in the Baltics the number of mortgage holders increased by 5-10 pps, but homeownership fell by around 2 pps. Romania has moved the least on most measures with less than 1% of households having a mortgage but over 95% of households owning their dwellings.

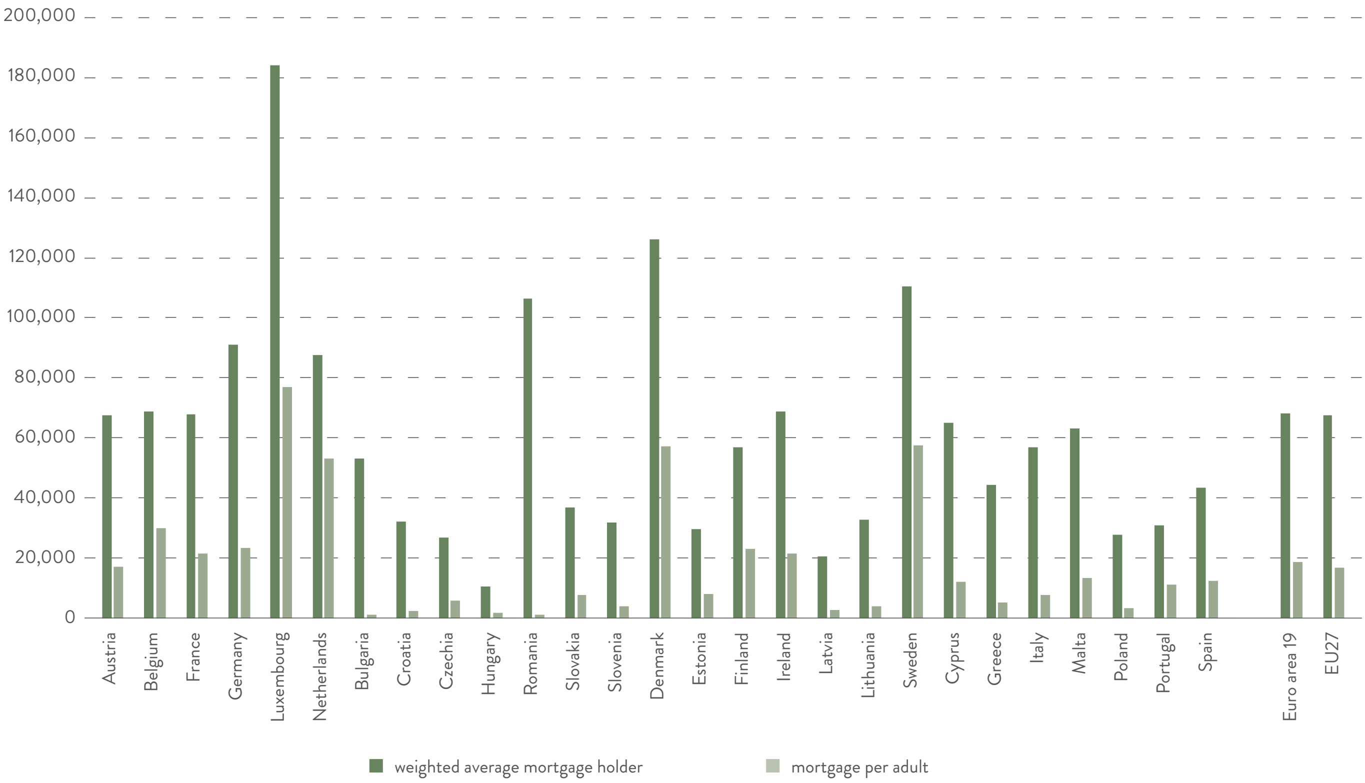
## CHART 22 | EVOLUTION OF HOMEOWNERSHIP AND MORTGAGE HOLDERS 2011-2019*, IN PERCENTAGE POINTS


NOTE: The homeownership data of a series of countries refers to 2019 their latest data. More information can be found on Table 11 of the Statistical Annex.

*Source: Eurostat, European Mortgage Federation*

The average European adult has a mortgage loan of nearly EUR 17,000, equivalent to 46.1% of GDP, an increase of 4 pps since 2019, the largest increase this century, due mostly to the drop in GDP. Luxembourg has the most mortgage debt per capita at nearly EUR 76,000. In the Netherlands, where over 87% of homeowners are also mortgage borrowers the average mortgage per capita is EUR 53,000. Denmark, Sweden, Iceland and Norway are the only other European countries with more than EUR 50,000 of mortgages per capita. At the other side of the spectrum Bulgaria and Romania have around EUR 1,100 per capita outstanding and, together with Croatia, less than 10% of homeowners have a mortgage. Adjusting the average mortgage per capita for the proportion of homeowners with mortgages shows that the average mortgage loan for those that have one is nearly EUR 68,000 with four countries showing over EUR 100,000 outstanding per mortgage holder (Luxembourg, Denmark, Sweden and Romania).

CHART 23 | COMPARISON OUTSTANDING MORTGAGE PER ADULT AND PER MORTGAGE HOLDER




*Source: Eurostat, European Mortgage Federation*

## RESIDENTIAL MORTGAGE LENDING

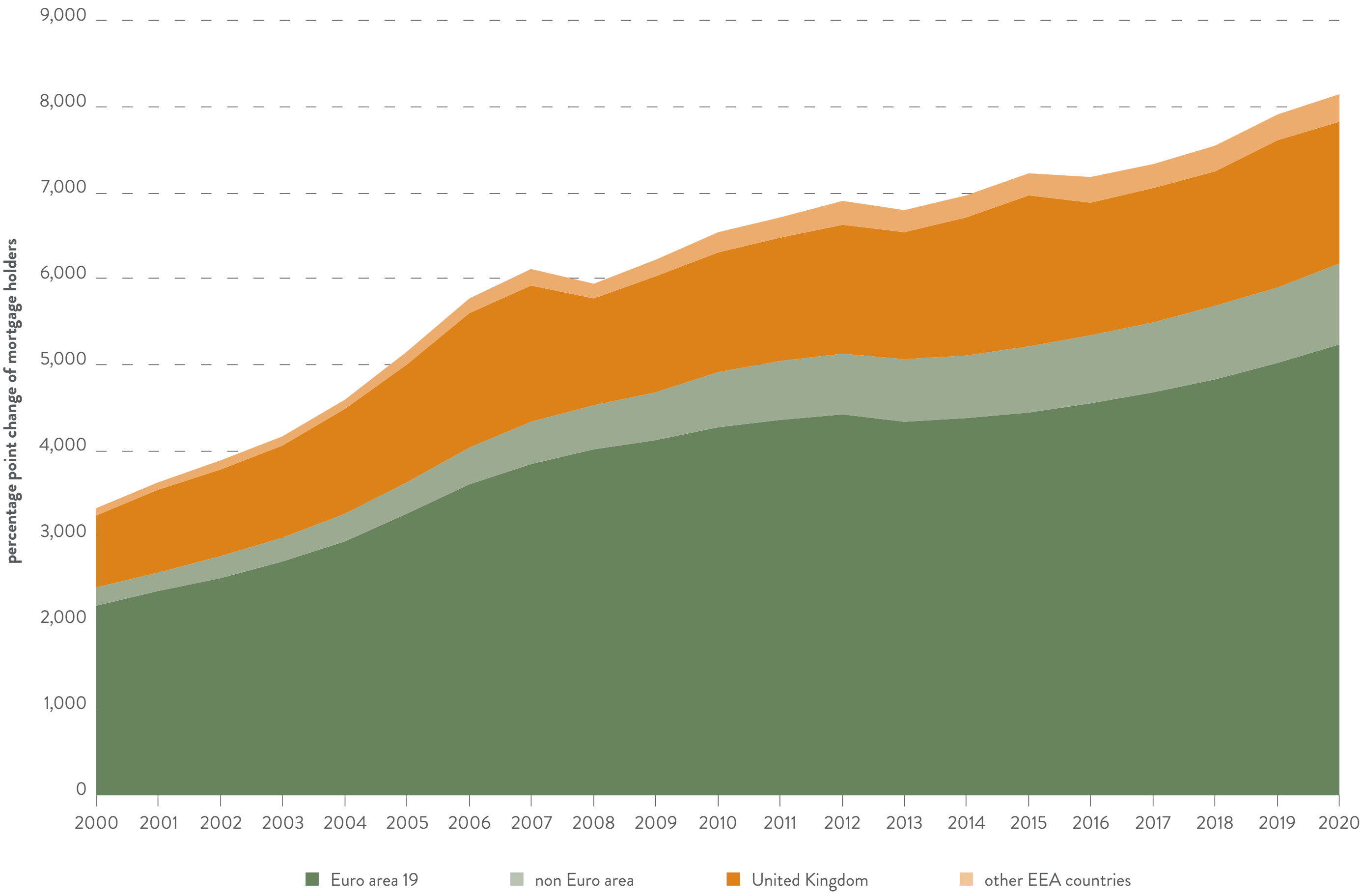
The total EU mortgage market surpassed EUR 6 tn for the first time in 2020. Adding the UK, Norway and Iceland the figure reached EUR 7.83 tn outstanding, a new all-time high for the region[7]. In the EU this was a 4.5% year-on-year increase – to Belgium's or Denmark's mortgage market – the largest increase since 2008. This growth is mainly down to two factors, more and larger mortgages have been taken out to invest in new homes and second homes and mortgage moratoria in 2020 reduced the amortisation of existing mortgages.

Outstanding mortgages in the Euro area increased by 4.2%, the largest increase since 2008 and a 30 bps acceleration compared to 2019. The non-Euro area, not considering the UK, increased by 6.6% (in EUR terms) the largest increase since 2015. The non-Euro area's relative share in the EU27 increased by nearly half a percentage point to 17.9%, the first noteworthy change in the past five years. The appreciation of the Swedish Krona of 3.95%, was counterbalanced in part by the depreciation of the Polish Zloty and Hungarian Forint of respectively 7% and 10%. The 6% depreciation of the Norwegian krona offset the mortgage market growth there when converted into EUR terms. Similarly in the UK where outstanding mortgages in EUR terms decreases by 2.4% due to the 16.6% depreciation of sterling to EUR.

There has been little change in the identity of the largest mortgage markets, Germany, France, the Netherlands, Spain and the UK together have 75% of the outstanding mortgages in the reference region. The Dutch mortgage market, for example is equivalent to the total of the 19 smallest EU mortgage markets. The UK and German markets in 2020 were almost identical in size at EUR 1,667 tn and EUR 1,629 tn respectively. Spain, despite shrinking remains the largest mortgage market in Southern Europe. Sweden is the largest market in the Nordics and Poland the largest in Eastern Europe.

7 In the statistics at the end of the publication we also report the figures from Switzerland, which are not included in the analysis here as they represent an aggregate figure of commercial and residential mortgage loans, which would bias the analysis.

## CHART 24 | OUTSTANDING RESIDENTIAL MORTGAGE LOANS IN EU27 AND UK, IN EUR BN



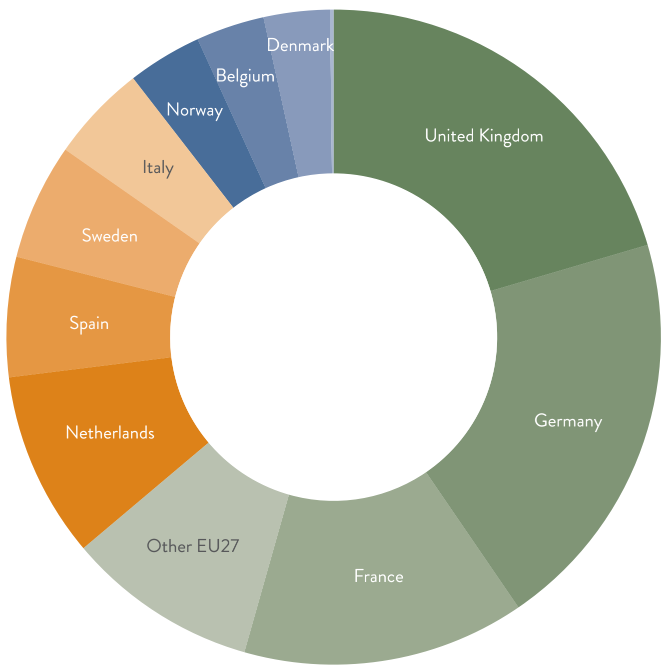

*Source: European Mortgage Federation*

There has been little change in the identity of the largest mortgage markets, Germany, France, the Netherlands, Spain and the UK together have 75% of the outstanding mortgages in the reference region. The Dutch mortgage market, for example is equivalent to the total of the 19 smallest EU mortgage markets. The UK and German markets in 2020 were almost identical in size at EUR 1,667 tn and EUR 1,629 tn respectively. Spain, despite shrinking remains the largest mortgage market in Southern Europe. Sweden is the largest market in the Nordics and Poland the largest in Eastern Europe.

Over the past 10 years mortgages in the EU27 grew by 22%, 5% of which was in 2020. This is supported by growth in the majority of Member States, especially in Western Europe and who last joined the EU – wherein several cases the market doubled over the decade. A different picture is found in Southern Europe, where, besides Malta and, to a lesser extent, Italy, none had a growing mortgage market over the decade. In 2020 the mortgage markets grew in Cyprus, Portugal, Italy and Malta.

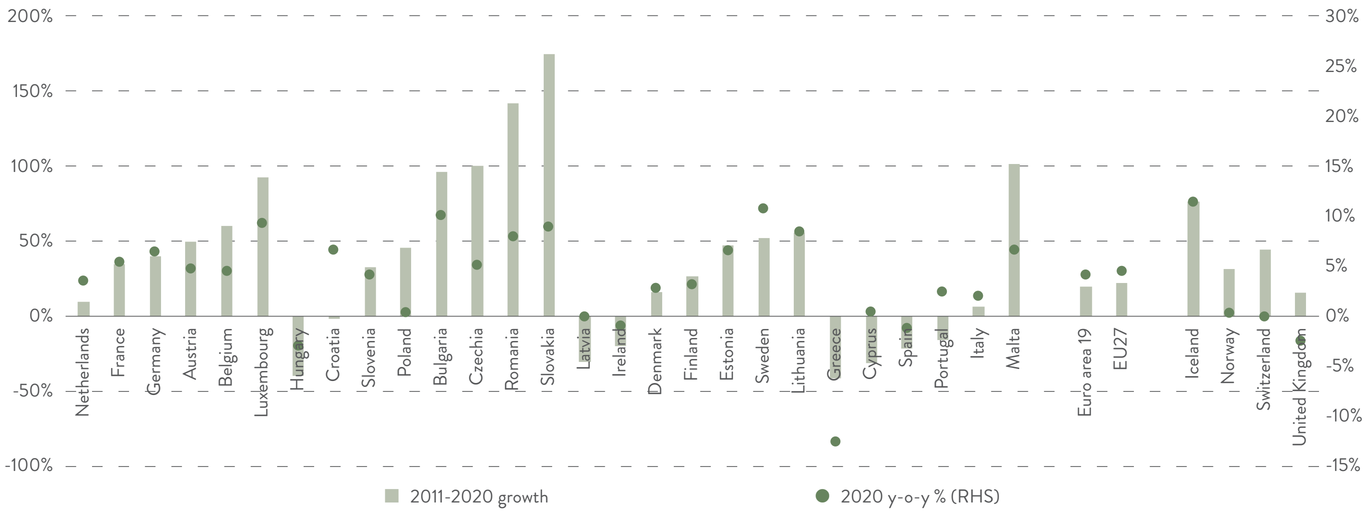
Furthermore, during this ten-year cycle, In Eastern Europe all markets grew except for Hungary, which shrank significantly over the last decade. Steady growth occurred throughout continental Europe over the past decade, with mortgage markets nearly doubling in Luxembourg and increasing by approximately 50% for most of the rest, except for the Netherlands where the increase was around 10%. In the North Europe the market grew by 50% in Estonia, Sweden and Lithuania over the decade but decreased in some countries such as Latvia and Ireland.

## CHART 25 | OUTSTANDING MORTGAGE MARKET IN EUROPE 2020




*Source: European Mortgage Federation*

## CHART 26 | OUTSTANDING MORTGAGE LOANS EVOLUTION 2011-2020

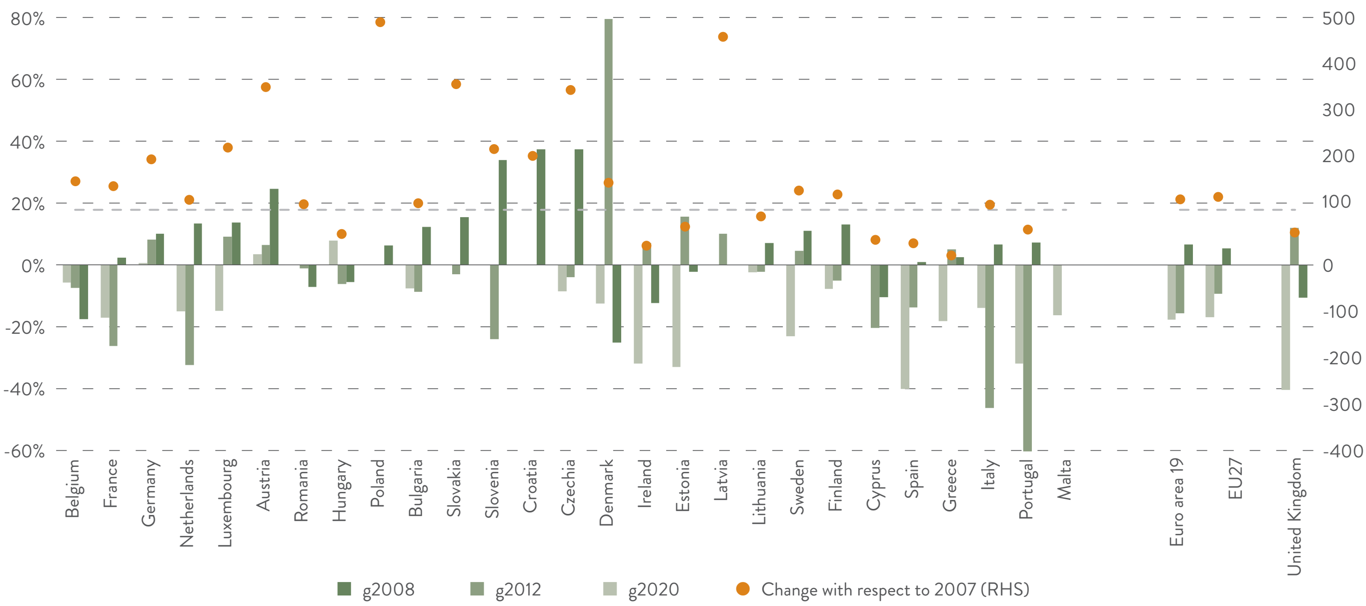



*Source: European Mortgage Federation*

Gross lending grew by over 5% in the EU27 in 2020, surpassing the all-time high of 2019 and reaching nearly EUR 1.1 tn, showing that despite COVID-19 the mortgage market recovered within the year d. Comparing 2020 to the GFC in 2008 and the sovereign debt crisis in 2012 in the pandemic caused a less severe contraction in mortgage lending than the financial crises. In most countries gross issuance of mortgages in 2020 was greater than in 2007. Germany saw gross lending double, in Austria the increase was over 3.5 times and in Poland it increased 5 times. The increase in lending was also a reason why mortgage specific measures, such as the relaxation of LTV or LTI provisions, where mostly not lifted during the pandemic and why, in some cases, such as in Luxembourg, new ones were introduced. Some countries on the other hand still have gross lending below the 2007 level, especially where there was volatility in the mortgage markets before 2007 such as Ireland and Spain.

Breaking this down by region, there is again a mixed picture. In Western Europe only Germany and Austria increased levels of gross lending, whilst in Belgium there was the largest decrease, over 17%. Among the new Member States, in Romania gross lending slowed down in 2020 due to the drop in foreign investors, whereas in Hungary there was a 2% increase in HUF terms, but the exchange rate move changed this to a decrease in EUR terms. Other countries in the region grew their gross lending with Czechia having the highest annual growth rate of over 36% due to consumers buying housing as a safe investment in the pandemic. In the Nordics the picture is mixed. In Denmark gross lending fell heavily compared to the all-time high in 2019, which was due to a significant remortgaging wave. In Finland and Sweden, meanwhile, new loans expanded at a significant rate over the same period. In Southern Europe everywhere except Cyprus showed a modest increase in new mortgages. 2020 gross lending was however quite distant with respect to new mortgages issued in 2007, except for Italy where volumes were similar to those before the GFC.

## CHART 27 | GROSS LENDING EVOLUTION COMPARISON BETWEEN 2008, 2012 AND 2020




*Source: European Mortgage Federation*

## MORTGAGE MARKET INTEREST RATES

Aggregate mortgage interest rates fell slightly more rapidly in 2020. The proportion of variable interest rates (with an initial fixated period of up to 1 year) varies considerably by country; in Poland all mortgages are on a variable rate while in Croatia, Hungary and Slovakia only a small percentage of new mortgages are. Variable interest rates decreased both in absolute and relative terms in 2020.

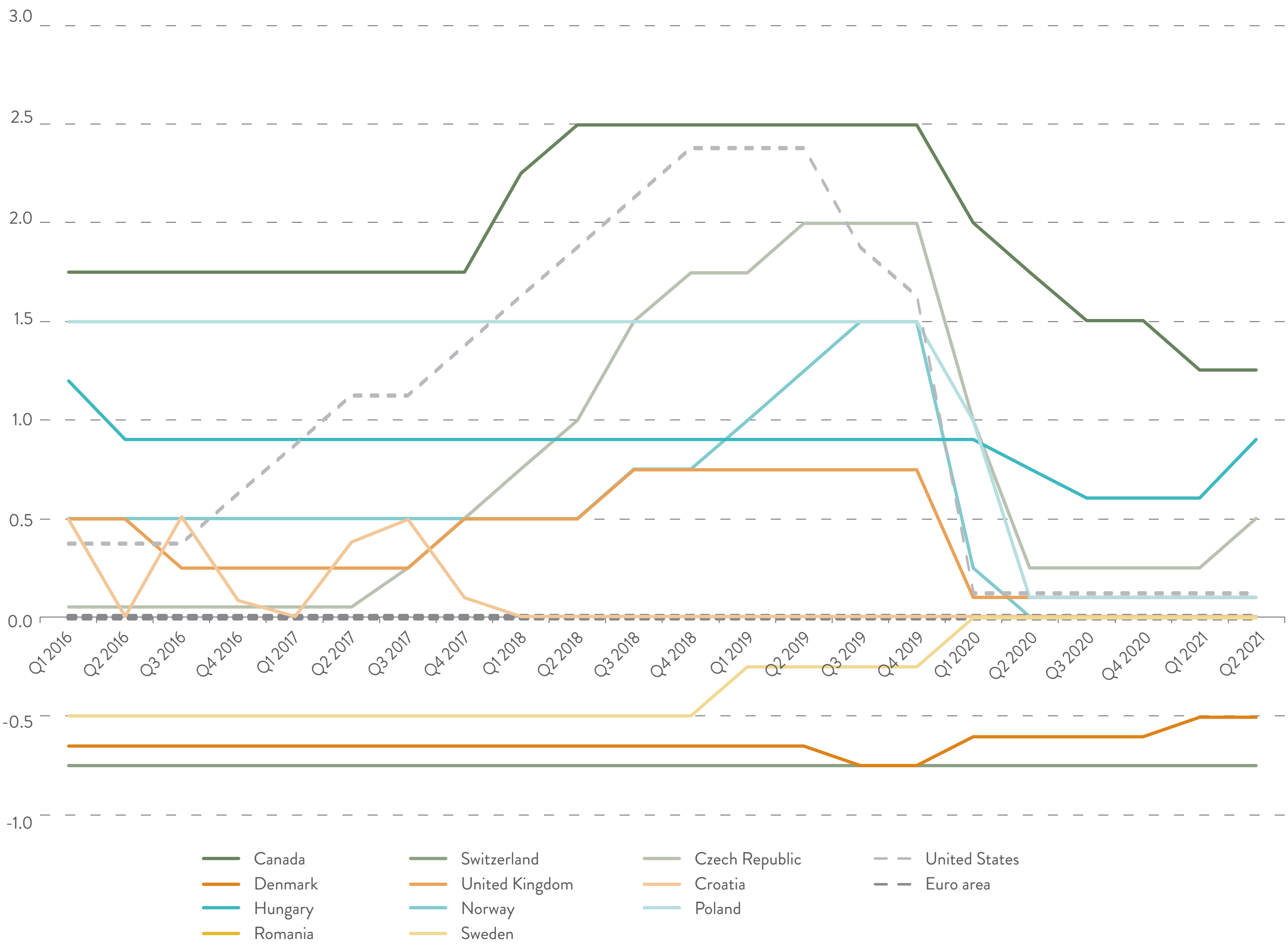
Central Banks intervened significantly with extraordinary measures to counteract the effect of COVID-19 on the real economy. In March 2020, ECB President Lagarde announced that the Bank would do "everything necessary within its mandate" to counter the crisis. A Pandemic Emergency Purchase Programme (PEPP) was launched and by December 2020, reached a total of EUR 1,850 bn. It is expected to last at least until March 2022. Besides this programme, the eligibility criteria of the corporate sector purchase programme (CSPP) were expanded. The existing Asset Purchase Programmes will remain at EUR 20 bn net purchase per month without a specified maturity date for the programme.

In April 2020 a new series of non-targeted pandemic emergency longer-term refinancing operations (PELTROs) were introduced to support liquidity and were extended in December 2020. The TLTRO III set up in 2019 continues.

The ECB did not change policy rates which have been at a constant 0% since March 2016, echoed only by the Swiss Central Bank, which has kept its rates constant at -0.75%, the lowest rate amongst central banks. The other European central banks, the Federal Reserve and others have, to various degrees and from various starting rates had begun to increase policy rates until Q1 2020 at the onset of the pandemic. The start of 2021 saw the central banks in Hungary and Czechia cut their reference rates. Sweden and Denmark on the other hand are continuing to gently increase their reference rates, actions which began respectively at the beginning of 2019 and the beginning of 2020.

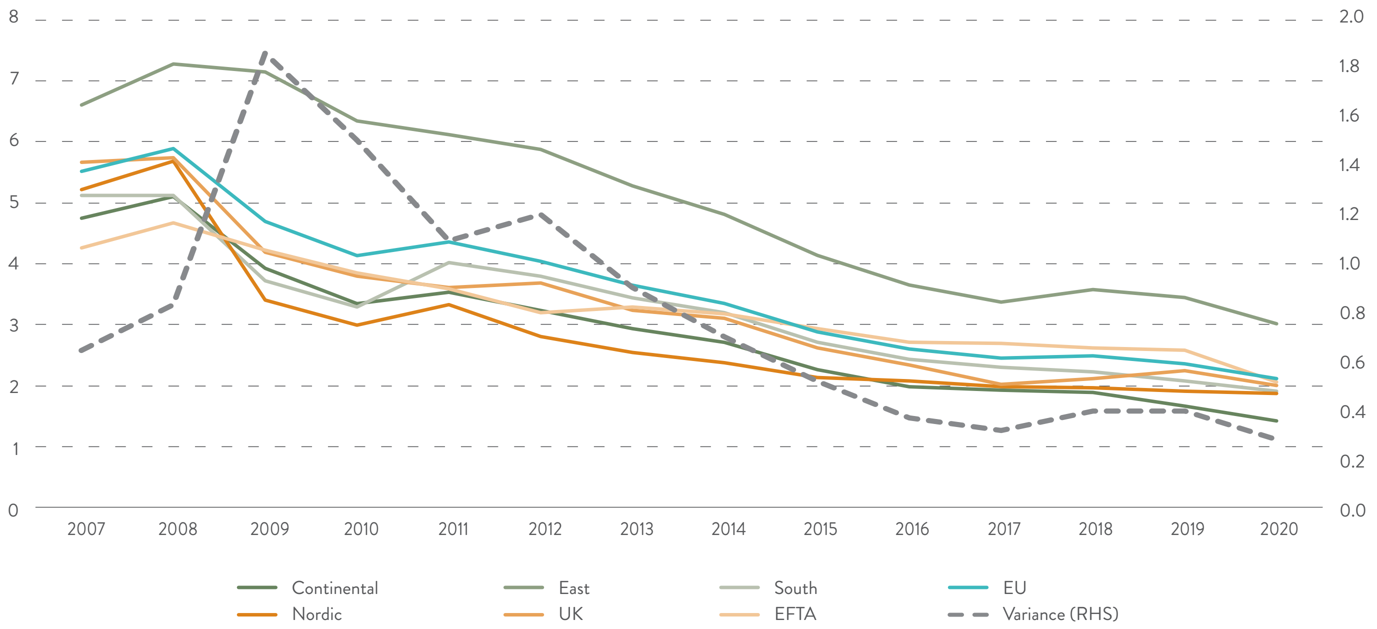
Average European interest rates on mortgages (EU27, EFTA and UK) resumed their downward path to an average 2.11%, a new all-time low, 26 bps lower than in 2019. Only 3 countries, Bulgaria, Denmark and Malta, reported very marginal increases in rates. Despite the overall decrease in rates there is still heterogeneity, as can be seen in Chart 29 interest rate changes follow a similar pattern but from different levels. In the north-west of Europe mortgages, have the lowest rates closely followed by the Nordics – in Denmark and Finland rates have reached their lowest recorded level at 0.69% – and also by South European Member States where the average rate is 1.91%. Eastern European has had the largest decrease in 2020 with 42 bps reaching 3%, less than half the level in 2008. In Europe, outside the EU, interest rates also decreased reaching on average 2%.

CHART 28 | BENCHMARK POLICY RATES FOR SOME EU CENTRAL BANKS AND THE FED, PERCENT P.A.




*Source: Bank for International Settlements*

**CHART 29** | MORTGAGE INTEREST RATES IN AGGREGATED EU REGIONS, IN PERCENT



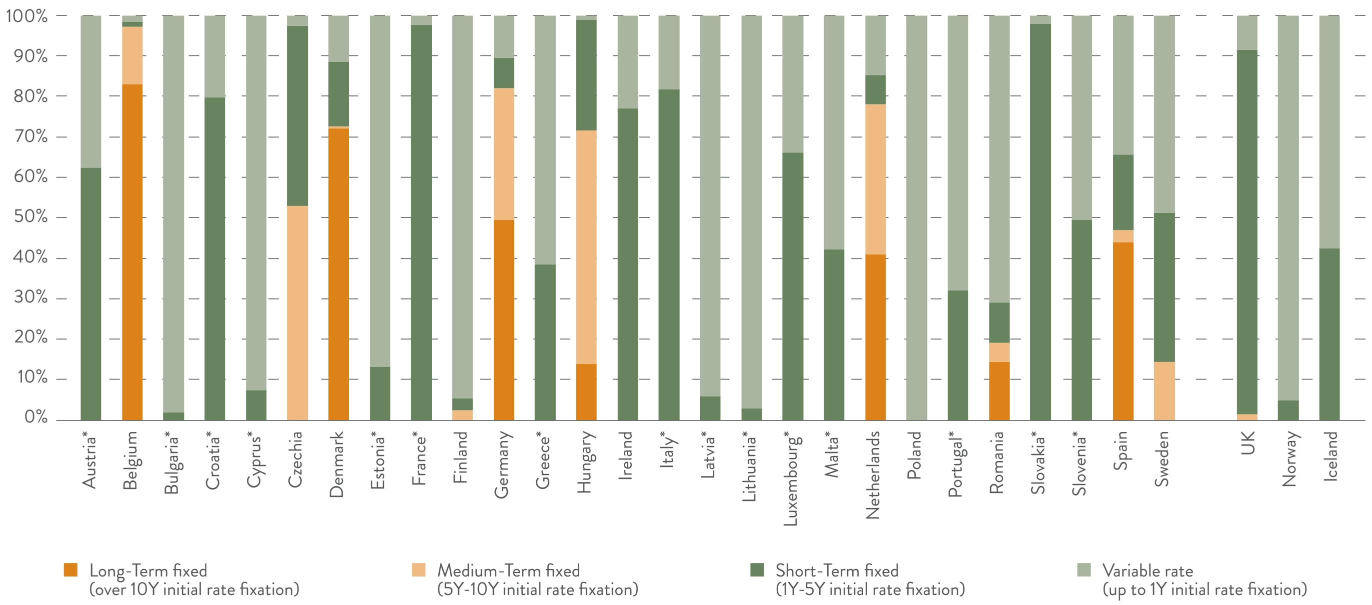

*Source: European Mortgage Federation*

## DIFFERENT TYPES OF INTEREST RATES

In most countries there is a shift towards longer initial fixed rate periods as borrowers seek to lock in favourable rates. This trend is evident across very diverse traditions for variable interest rates as shown in breakdown of new lending in various countries. As can be seen, France, Belgium and the Netherlands in general prefer more fixed rates together with Czechia, Denmark and Spain. At the other end of the spectrum, lenders in Bulgaria, Finland and Poland almost exclusively provide variable interest rates.

Chart 31 shows how the preference for a variable interest rate has shifted over time by country. Variable interest rates were more popular in 2011 than in 2020 in the majority of countries. Since then, fixed rate mortgages have become more widespread almost everywhere, in all countries except Croatia, Denmark and Malta the decrease in take up of variable rates has been substantial. In the Baltics, Finland and Bulgaria on the other hand the already large majority of variable interest rate mortgages increased further. In Poland there are only variable mortgage rates.

**CHART 30** | MORTGAGE MARKET GROSS ISSUANCE BREAKDOWN BY INTEREST RATE TYPE IN 2020



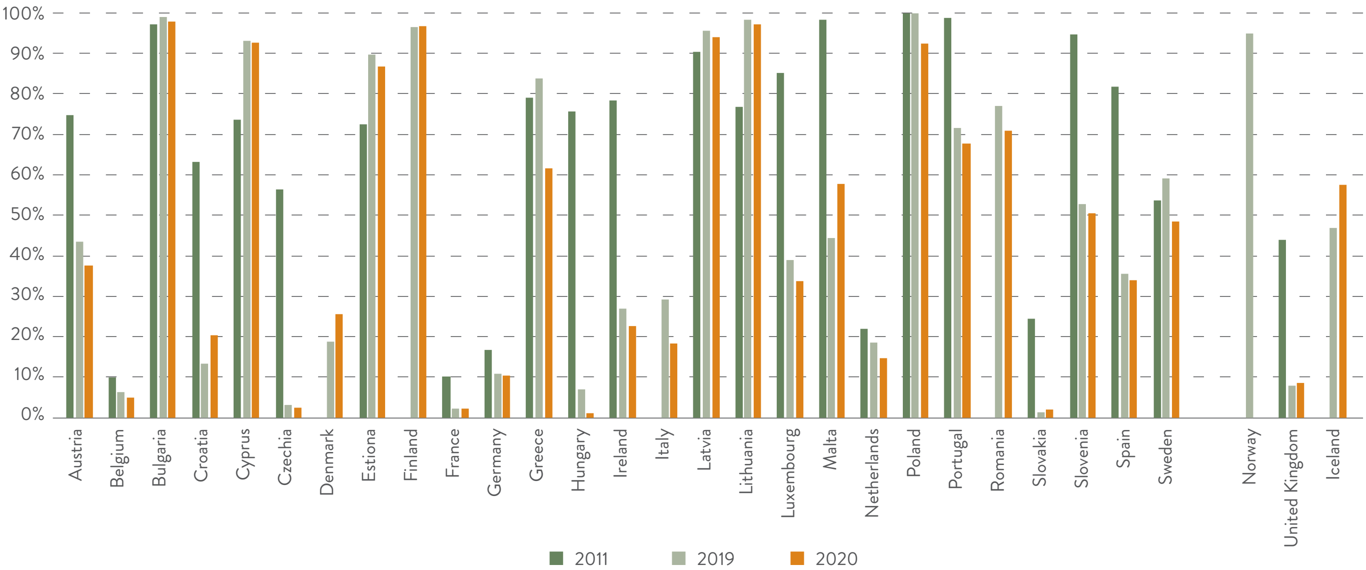

NOTE: *for these countries all mortgages with a fixed rate over 1 year are combined.

*Source: European mortgage Federation*

Chart 31 shows how the preference for a variable interest rate has shifted over time by country. Variable interest rates were more popular in 2011 than in 2020 in the majority of countries. Since then, fixed rate mortgages have become more widespread almost everywhere, in all countries except Croatia, Denmark and Malta the decrease in take up of variable rates has been substantial. In the Baltics, Finland and Bulgaria on the other hand the already large majority of variable interest rate mortgages increased further. In Poland there are only variable mortgage rates.

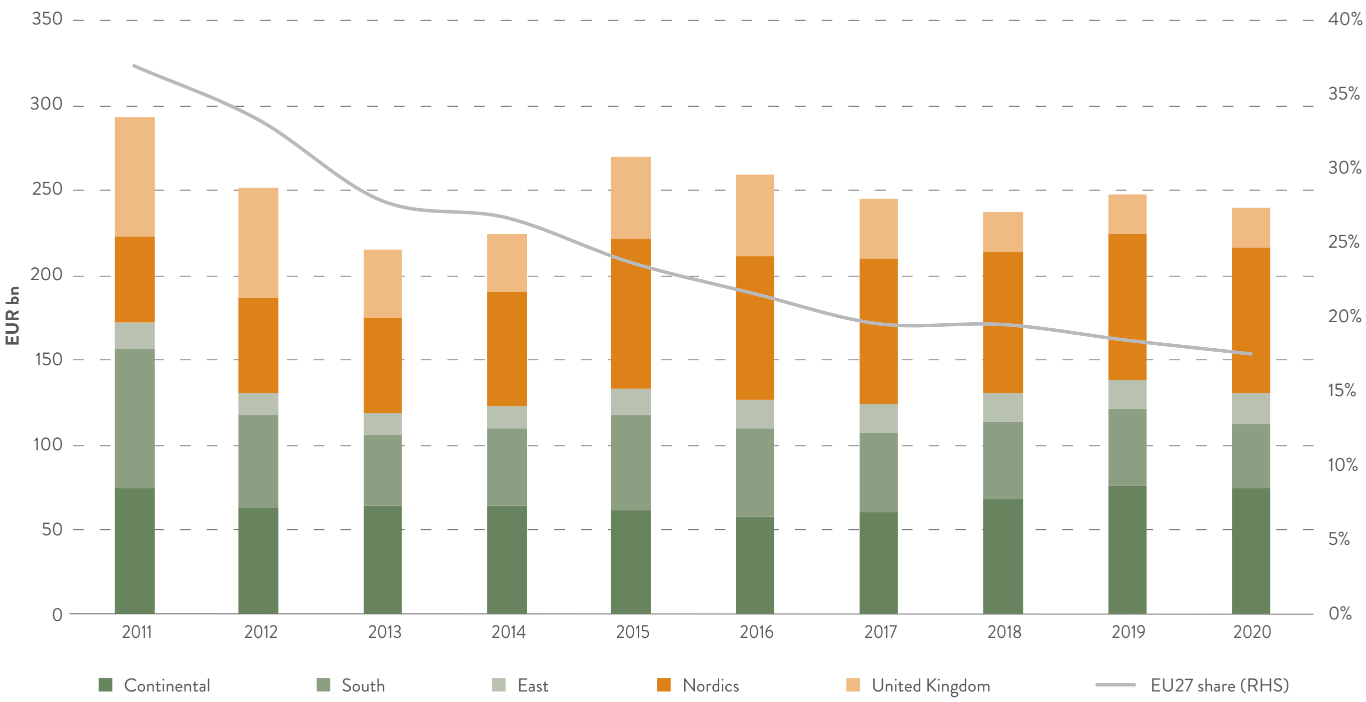
In the EU27 and UK, variable interest rate mortgages were just under 20% continuing a ten-year-long declining trend since 2010, when it was over 60%. In absolute terms, new variable interest lending was EUR 240 bn continuing to fall in absolute terms. The biggest recent change was in the UK where until 2012 most mortgages were variable rate, a proportion which subsequently declined to 8.7% On the other hand, in the Nordic countries starting from 2013 variable interest rates became more popular, with these countries not representing r over 35% of all the variable mortgages in the EU27 and UK.

**CHART 31** | SHARE OF VARIABLE MORTGAGE RATES IN NEW LENDING IN SELECTED YEARS




*Source: European Mortgage Federation*

**CHART 32** | EVOLUTION OF GROSS LENDING MORTGAGES WITH VARIABLE INTEREST RATES




*Source: European Mortgage Federation*

# Austria

Dr. Karin Wagner, OeNB
and Dr. Wolfgang Amann, Associate Professor, IIBW

### IN A NUTSHELL

- → After a decline in real GDP of 6.7%, the Oesterreichische Nationalbank (OeNB) expects the economy to grow by 3.9% and 4.2% in 2021 and 2022, respectively.
- → Residential property proved to be more resilient than other sectors of real estate. Rental markets depend on regulated sub-markets which were hardly affected by the crisis. For commercial rents, a slight decrease is expected.
- → Real residential construction investment fell by 4% year-on-year in 2020. In contrast, the number of real estate transactions increased by 5.1%.
- → The year-on-year growth in home loans to households grew by 6.0%.
- → Subsidised housing continues to be significant in multi-apartment new construction although below 50% in recent years. Financing mainly relies on the housing subsidy schemes of Austrian Länder ("Wohnbauförderung"). Despite this state expenditure on housing is below 0.5% of GDP.
- → As in the Global Economic Crisis of 2008/09, subsidised and limited-profit housing worked as a shock absorber during the pandemic.

## MACROECONOMIC OVERVIEW

The withdrawal of containment measures and vaccination progress, will lead to strong growth in the economy by mid-2021. After a decline in real GDP of 6.7% in 2020, the OeNB expects growth of 3.9% and 4.2% for 2021 and 2022, respectively. The catch-up with pre-pandemic output levels will be completed in 2023 and economic growth will move towards the long-term average growth rate of 1.9%. The HICP inflation rate is forecast to rise to 2.0% in 2021 and decrease to 1.8% in both 2022 and 2023. The budget balance is predicted to be -6.9% of GDP in 2021 and will improve to around -2% of GDP by 2023. After a further increase in 2021 (85.1% of GDP), the debt ratio is expected to decline again from 2022 onwards and to just below 82% of GDP in 2023. Exports are expected to grow by 7.1% in 2021, by 6.4% in the next and 3.4% in 2023.

The re-opening in mid-May 2021 largely lifted the supply-side restrictions on consumption. As a result, a strong recovery in private consumption and a rapid decline in the sharply increased savings rate are expected. After a notable decrease of 9.4% last year, private consumption is expected to grow by 4% in 2021 and by 5.8% in 2022. The pre-crisis level of consumer spending should be reached in the first half of 2022. The savings rate is forecast to decrease from its high of 14.4% in 2020 to below 8% in 2023. The unemployment rate is expected to fall from 5.2% in 2021 to 4.6% in 2023, only slightly above the pre-crisis level.

## HOUSING MARKETS

The growth of residential property prices has accelerated further, reaching a year on year growth rate of 12.3% in the first quarter of 2021, after 10.0% in the fourth quarter of 2020. In Vienna, year-on-year price growth was similarly strong at +10.9% in the first three months of 2021 (fourth quarter 2020: 9.4%). Considered altogether, prices in the remaining provinces rose by 14.0% in the same period compared with the previous quarter (10.7%). The overall pick up in prices was above all due to the pronounced increase in single-family house prices since the onset of the pandemic, which might be related to the implementation of telework schemes and the lockdowns in general. The OeNB fundamentals indicator for residential property prices reached 18.8% in the first quarter of 2021, signaling an increasing activity in the real estate market.

The residential property sector has shown to be more resilient during the pandemic than the commercial property sector. The significant stock of social and affordable housing – municipal housing, limited-profit housing associations (LPHA) and rent-regulated private apartments – represent one third of the total housing stock and three quarter of all rental apartments and was not affected by the public health crisis, as rent increases are linked to the CPI.

## MORTGAGE MARKET

After the onset of the pandemic, the growth of bank lending to households subsided slightly. In the twelve months to March 2021, the annual growth rate of bank loans to households slowed from 4.3% to 3.9% y-o-y (adjusted for reclassifications, valuation changes and exchange rate effects). This moderation reflected uncertainties among households about the impact of the pandemic on their disposable income and employment prospects.

Moreover, the decrease in repayments, driven by the moratoria programme for persons who suffered substantial income cuts amid the pandemic, supported the increase of outstanding loans to household. In line with the decrease in consumption of durables and the extraordinary fall in consumer confidence in 2020, consumer loans were down 5.4% in the year to March 2021.Other loans, which include loans to sole proprietors and unincorporated enterprises (which were eligible for loan guarantees), rose by 1.4%. As in past years, the main contribution to loan growth came from housing loans, not only because the latter are the most important loan category for households – accounting for more than two-thirds of the outstanding volume of loans to households – but also because they registered the highest growth rate of all loan purposes, reaching 6.1% year-on-year in March 2021.

Due to supervisory measures, foreign currency loans have declined further. By January 2021, the volume of outstanding foreign currency loans extended to domestic households had fallen to EUR 11.4 bn, down by 13.7% y-o-y and exchange rate adjusted. Most (96%) of these loans are denominated in Swiss francs. The share of foreign currency loans in total loans to households shrank by 1.5 pps y-o-y to 6.6%. (for more details see Financial Stability Report 41, June 2021).

## MORTGAGE FUNDING

According to data from the first quarter of 2021 60.2 % of loans to nonbanks are secured by mortgages. Almost half of the loans to the corporate sector were granted to companies active in the real estate sector (construction, real estate and housing). More than half of the loans (54.4 %) to the nonbank sector are used for financing real estate projects.

## HOUSING POLICY

The key characteristics of Austria's housing policy are still its focus on regulated rental housing and its financing tools. The Limited-Profit Housing sector continues to flourish, with more than 19,000 completed apartments in 2020 (2.1 units per 1,000 inhabitants), the highest rate for the past 20 years. A new trend is seen in municipal housing, with Vienna reviving its own construction activities after more than 20 years of no new construction of social housing. Initiatives to liberalise private rental markets seem to be postponed. Social housing supply follows a generalist eligibility approach with high income limits. Hence Austrian housing policy still promotes integrated rental markets.

Financing of affordable housing mainly relies on the housing subsidy schemes of Austrian Länder ("Wohnbauförderung"), who spent approx. EUR 2.0 bn in new construction, refurbishment and housing allowances in 2020. Other tools, such as tax subsidies, a minimum income scheme, subsidies on financing products or for green investments, play a subsidiary role. The financing system of the "Wohnbauförderung" gains its efficiency through the close interaction with the system of limited profit housing construction and tailor-made capital market financing instruments. Altogether, public expenditure on housing is below 0.5% of GDP, nevertheless, the results are significant in terms of the quantity and quality of housing, affordability and aspects of social integration.

A COVID-19 act from April 2020 also included housing policy measures, amongst them a temporary ban on evictions for non-payment of rents, or suspended prosecution for default payment of utilities. Similar to the Global Economic Crisis of 2008/09, subsidised and limited-profit housing worked as a shock absorber during the CORONA19 crisis.

| | AUSTRIA 2019 | AUSTRIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 1.4 | -6.3 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 4.5 | 5.4 | 7.1 |
| **HICP inflation (%) (1)** | 1.5 | 1.4 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 55.4 | 55.2 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 3.4 | -4.0 | -3.9 |
| **Building Permits (2015=100) (2)** | 122.0 | 115.8 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 123.7 | 132.4 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 116.3 | 124.1 | 135.2** |
| **Nominal house price growth (%) (2)** | 3.4 | 7.0 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 119,774 | 125,528 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 16,356 | 17,059 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 50.7 | 54.5 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 8.8 | 24.5 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.6 | 1.3 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## AUSTRIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Mortgage lending is mainly financed via banks and Bausparkassen. |
| **The market share of the mortgage issuances:** | Not available |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Bausparkassen hold the biggest proportion of residential mortgages in Austria. In combination with the Saving Banks Group, Bausparkassen represent the largest market share of the mortgage market. |
| **Typical LTV ratio on residential mortgage loans:** | According to Oesterreichische Nationalbank's 2014 Financial Stability Report, the average LTV of private households is around 60% (based on survey data). |
| **Any distinction made between residential and non-residential loans:** | Not available |
| **Most common mortgage product(s):** | Both variable rate loans and foreign currency loans are common mortgage products in Austria, but variable rate loans remain the most popular choose. However, there is a falling trend in their share in total loans over many years (in 1Q2019 around 11% of mortgage loans were foreign currency loans and around 45% of new issued mortgage loans were variable rated loans). |
| **Typical maturity of a mortgage:** | Mortgages typically have a maturity rate of 25–30 years. |
| **Most common way to fund mortgage lending:** | Mortgage funding in Austria is mainly deposit-based. According to the IMF covered bonds only made up 7.1% of the outstanding mortgages in 2008, meanwhile securitisation as a way of funding is even less popular making up only 3.1%. |
| **Level of costs associated with a house purchase:** | In addition to the cost of borrowing, one should add a mortgage fee, VAT, notary fees and taxes. In total, around 10% of the purchase price are to be added as costs at the house purchase. |
| **The level (if any) of government subsidies for house purchases:** | Government housing subsidies accounted for 0.6% of the GDP in 2018. The subsidy scheme of the "Länder" predominantly supports supply side. i.e. low interest loans, grants and guarantees to housing developers, mostly Limited Profit Housing Associations. They provide rental, rent to buy and a small share of affordable owner-occupied apartments. Additionally, refurbishment is subsidized and housing allowances are granted. |

# Belgium

By Zoë Delhaye, Union Professionnelle du Crédit (Febelfin)

## IN A NUTSHELL

- → Decrease of 6.3% in GDP
- → Inflation down from 1.2% (2019) to 0.4% in 2020, but house prices rose by 5.2%
- → Implementation of moratoria for mortgage loans
- → Tightening of the LTV ratio as from 1 January 2020
- → New rules obliging lenders to collect information on the energy efficiency of buildings.

## MACROECONOMIC OVERVIEW

As a result of the pandemic and the government measures taken to reduce the spread of the virus, namely the restraints on cross-border movement of goods; the closure of the hospitality industry and non-essential activities and the suspension of personal services, cultural and sporting events or tourism, etc., **GDP** fell by 6.3% in 2020.

In order to limit the economic recession, public authorities extended temporary unemployment schemes and replacement income granted to the self-employed. Additionally, support allowances were also granted to those most affected by the pandemic. In all, EUR 9 bn of public aid (2% of GDP) were spent to help contain **unemployment to** at 5.6% at year-end 2020.

In particular, **private consumption**, which is considered the most stable component of GDP, decreased by 8.6%. This is not linked to a reduction in disposable income, which remained constant, but to reduced spending opportunities. In addition, 21% of disposable income was saved (compared to 13% in 2019) an increase of more than EUR 20 bn in additional savings. Finally, purchasing power was also favourably impacted by the decrease in inflation from 1.2% (2019) to 0.4% (2020), mainly due to the fall in oil prices.[1]

## HOUSING MARKET

Investment in housing fell by 9% due in particular to the slowdown or interruption of residential construction and renovation during the first wave of the pandemic. Despite real estate activity restarting between the two waves (from mid-May to October 2020), the number of transactions registered a 20% decrease in the first three quarters with respect to 2019.

In addition, the abolition of the "housing bonus", a regional tax reduction on mortgage to buy, renovate or build a dwelling, in the Flemish region from 1 January 2020 served to encourage investments before this date, contributing to a decrease in transactions in early 2020.

In contrast, house prices **increased**, in the first three quarters of 2020, by 5.2%. This increase can be explained by the reduction in the supply of housing due to the pandemic and economic uncertainty, while demand remained strong. In addition, the acquisition of real estate for investment purposes contributed to this trend.

In 2020, the median price for a row house or semi-detached house is EUR 216,500 and EUR 315,000 euros for a detached house.

The Brussels-Capital Region is the most expensive, where terraced houses and semi-detached houses cost on average EUR 435,000. The average price of detached houses is EUR 960,000. The Walloon region is the least expensive with a median price of EUR 155,000 for terraced houses and semi-detached houses and EUR 254,000 for detached houses. Finally, prices in the Flemish Region fall between these two extremes: terraced and semi-detached houses cost EUR 249,000, detached houses EUR 349,000.[2] (Statbel).

## MORTGAGE MARKET

The abolition of the housing bonus (*woonbonus*) in Flanders at the end of 2019 and the fact that, as a result, a large number of borrowers brought forward their financing projects (purchase, construction and renovation) led to an exceptionally high lending in 2019 and, consequently, a sharp drop in the first quarter of 2020.

As a result of the pandemic and related government measures, such as the ban on non-essential travel, closure of non-essential sectors, etc., mortgage lending decreased sharply in the second quarter. In the third quarter, however, the housing market and mortgage demand recovered, and this increased demand was fully reflected in the lending figures for the last quarter of 2020.

In 2020, borrowers enjoyed favourable lending conditions. Based on figures published by the National Bank of Belgium, rates varied in December 2020 between 1.37% (for variable rate loans with an initial rate fixed period of more than 5 years) and 2.03% (for loans with an initial rate fixed period of up to 1 year). In 2020, 9 out of 10 borrowers opted for either a fixed interest rate or a variable interest rate with an initial fixed rate period of at least 10 years. About 8.5% of borrowers chose a variable interest rate with an initial fixed rate period of between 3 and 10 years. The number of borrowers who chose a variable rate annually was just 1.5%.

Based on the figures from *Union professionnelle du crédit*, the number of credit applications in 2020 (excluding those for refinancing) was 11% lower than in 2019, but just over 3% higher than in 2018. But the amount was just 0.6% lower than in 2019, and 16% higher than in 2018. Thus, almost 368,000 credit applications were submitted for a total of almost EUR 60 bn.

In total, almost 234,000 mortgage loans were granted in 2020 (excluding refinancing) for a total amount of almost EUR 33.5 bn. The number granted fell by more

1 Banque Nationale de Belgique, rapport annuel 2020

2 Statbel, "Le prix de l'immobilier"

than 24%, but just 7.5% compared to 2018. The amount decreased by 20%, but only 1% compared with 2018.

The decrease in the number of credits granted occurred in all categories. The biggest decreases were for the purchase of a home (-44,000, i.e. -27%), construction credits (-14,750, i.e. -34.5%) and for home renovation(-12,600, i.e. -18%). The number of loans for the purchase with conversion of a dwelling (-1,150, i.e. -9%) and for other purposes (-3,000, i.e. -14.5%) showed a less marked decrease

Because of the pandemic, financial institutions granted moratoria on mortgage loan payments under certain conditions to avoid defaults by creditworthy borrowers temporarily facing difficulties. At the peak of the first wave of moratoria in August, 124,000 deferrals had been granted for a total outstanding amount of EUR 13.1 bn. In addition, since 2013, macroprudential capital buffers of EUR 2 bn have been built up in case of a shock to the housing market. If at the end of the moratoria borrowers still cannot make their loan repayments , these cushions can be released to help banks find solutions and to guarantee financial stability in Belgium.

Since 1 January, new tighter rules for the LTV ratio have come into force, causing banks and insurers to be more cautious when granting very high LTV loans. More specifically, the total number of loans with an LTV of more than 90% that a bank is allowed to advance has been reduced from 45% to 35% for first-time buyers and from 28% to 21% for other own home loans.

## MORTGAGE FUNDING

The financial sector in Belgium has been advocating access to databases of the energy performance of private homes, which are managed by the regions (Flanders, Wallonia and the Brussels-Capital Region). At the end of 2020, the Flemish region enacted a decree that will make such access possible in the short term , for new loans for real estate or energy-saving purposes. Meanwhile, the sector, with the support of the National Bank of Belgium, continues to call for such access in the other regions. This should enable them to develop products that, in line with the EMF-ECBC's Energy Efficient Mortgage Initiative, will encourage consumers to make energy-saving investments.

In Flanders, as of 2021, an interest-free renovation loan will also be offered through lenders, linked to the purchase of a home and a related purchase credit. For homes with a low energy performance rating and depending on the intended improvement, will be possible for consumers to borrow up to EUR 60,000 at the same maximum interest rate as that for the main loan. The Flemish Government repays the interest on the renovation loan to the borrower annually in the form of an interest subsidy.

The National Bank of Belgium (NBB) encourages financial institutions to increasingly consider a the energy efficiency of the houses that are financed or serve as collateral for loans in their risk policy. From the beginning of 2021, lenders must also report on this to the NBB or keep this data available.

| | BELGIUM 2019 | BELGIUM 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 1.8 | -6.3 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 5.4 | 5.6 | 7.1 |
| **HICP inflation (%) (1)** | 1.2 | 0.4 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 72.3 | 71.3 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 4.8 | -7.4 | -3.9 |
| **Building Permits (2015=100) (2)** | 120.9 | 117.5 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 119.4 | 120.4 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 112.7 | 121.9 | 135.2** |
| **Nominal house price growth (%) (2)** | 5.6 | 0.8 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 263,419 | 275,378 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 28,814 | 29,925 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 94.8 | 96.5 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 25.5 | -17.6 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.8 | 1.6 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

***Sources:***
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## BELGIUM FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Banks, insurance companies and other types of lenders that have been authorised (licence) or registered by the supervising authority FSMA to grant mortgage credit according to Belgian law on mortgage credit. |
| **The market share of the mortgage issuances:** | Based on the membership of our Association (UPC), representing around 90% of the total Belgian market, the following market shares can be approximatively given in amount:<br>• Banks: ca 94.5%<br>• Insurance companies: 1.5%<br>• Other types of lenders: 4.0%<br>N.B.: These figures do not take into account the social credit lenders. However, their market share is rather low. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | The list of mortgage credit lenders and the end-of-year outstanding amount of mortgage loans was published until 2013 on an annual basis by the supervising authority FSMA. This publication has been stopped since then. On the basis of our membership, the following market shares can be approximatively given in amount:<br>• Banks: ca 95.4%<br>• Insurance companies: 1.4%<br>• Other types of lenders: 3.2% |
| **Typical LTV ratio on residential mortgage loans:** | According to the Financial Stability Review issued by the National Bank of Belgium, the average loan-to-value ratio was about 80% in the period 1996-2006. It dropped to about 65% (and even below that) in the years 2007-2014. However, this average loan-to-value ratio has to be interpreted with caution, as the data are the result of a very wide distribution of loan-to-value ratios at origination. For the first half of 2020 vintage, about 53% of the volume of new mortgage loans was made up of loans with an LTV ratio above 80%. |
| **Any distinction made between residential and non-residential loans:** | Residential purposes means that it is for private housing (consumers).<br>The Belgian mortgage credit law applies to mortgage credit as funding for acquiring or safeguarding immovable real rights granted to a natural person chiefly acting for a purpose deemed to lie mainly outside the scope of his commercial, professional or crafting activities and having his normal place of residence in Belgium, at the moment when the agreement is being signed:<br>a) either by a lender having his principal place of business or chief residence in Belgium<br>b) or by a lender having his principal place of business or chief residence outside Belgium, provided a special offer or publicity had been made in Belgium before the agreement was signed and the actions needed for signing the agreement have been undertaken by the borrower in Belgium. |
| **Most common mortgage product(s):** | The most common mortgage credit product is a loan with a term of 20 - 25 years, a fixed interest rate throughout the full loan term and a fixed amount of monthly instalments. |
| **Typical maturity of a mortgage:** | The median maturity of a mortgage loan at origination is about at 20 years. Since 2007, lenders have continued to tighten customers' access to mortgage loans with long maturities. The percentage of loans granted with a maturity of more than 25 years has plummeted from 23% in 2007 production volumes to only 2% in 2015 and 2016. At the same time, the share of loans with a maturity between 20 and 25 years in mortgage loan vintages remained relatively stable until 2016 while the share of loans with a maturity between 15 and 20 years clearly increased. These trends seem to have influenced the average maturity level of total outstanding stock as from 2013; by the end of 2015, 11% was associated with initial maturities above 25 years, down from 20% in 2012. From 2017 on, the situation seemed to be changing again: whereas in 2016 only 29.0 % of mortgage loans was granted with a maturity of over 20 years, this number rose to almost 40% in 2018 and 2019. In the first half of 2020 the part of new mortgage loans granted with a maturity of over 20 years decreased substantially to about 33%. This was due to the fact that in the first half of 2020, far fewer mortgages were granted for the purchase or construction of a home. |
| **Most common way to fund mortgage lending:** | Most funding still comes from deposits. A few major lenders issue covered bonds. |
| **Level of costs associated with a house purchase:** | The registration duty in **Flanders** is 10% of the purchase price. For the own and only home as the main residence, this duty is lowered to 6% of the purchase price. It only amounts to 5% in case of a deep energetic renovation in the first 5 years after the purchase. Application of an additional reduction of EUR 5,600 (or EUR 4,800 in case of deep energetic renovation) in case the purchase price does not exceed EUR 200,000 (EUR 220,000 in the main cities and some cities around Brussels). Moreover, the principle of "portability of registration duties" applies in Flanders: upon the purchase of a new housing property intended to replace the previous principal residence, registration duties up to EUR 12,500 may be "transferred", meaning these duties will not have to be paid a second time.<br>In **Wallonia**, the registration duty amounts to 12.5% of the purchase price. However, in case of a main residence, the first EUR 20,000 of the purchase price is exempt from registration tax.<br>In 2020, the registration tax amounts to only 6% on the first slice of EUR 171,000 in case of small properties in some cities and on the first slice of EUR 163,125 in more rural areas. The tax on that slices is even lowered to 5% in case of social mortgage credit.<br>In the **Brussels region**, the normal registration duty amounts to 12.5% of the purchase price. However, buyers can benefit from an "abattement" (= exemption on which the buyer is not required to pay registration duties) on the first slice of EUR 175,000. This exemption is only applicable to properties of under EUR 500.000 and provided that it concerns the buyer's own and only home as his main residence.<br>There is also a registration duty on the amount of the mortgage loan covered by a mortgage registration. |
| **The level (if any) of government subsidies for house purchases:** | Across the regions (Flanders, Wallonia and Brussels) the schemes differ, with each region pursuing its own policy:<br>**Flanders** no longer provides a tax reduction. The "housing bonus" system, which allowed the owner of a single house to obtain deductions (40% tax relief) for construction/ purchase/ renovation up to the total amount of EUR 1,520 (and even EUR 2,280 during the first 10 years of the mortgage) has been replaced since 01.01.2020 by a reduction of the registration duty.<br>In **Wallonia**, a new system, the so-called "Chèque habitat", applies from 2016 on. More information is available on http://lampspw.wallonie.be/dgo4/site_logement/index.php/aides/aide?aide=chequehabitat<br>The **Brussels region** also no longer provides a tax reduction. It was replaced by a higher tax relief on registration duties (first slice of EUR 175,000) to buyers purchasing their own and only home as their main residence.<br>The **federal state** still provides a tax reduction if one buys a second house : a deduction of up to EUR 1,520 (tax relief of 40%) is still possible. |

# Bulgaria

By Petar Ivanov, Tsvetkova Bebov Komarevski

## IN A NUTSHELL

- → The economy declined for the first time since 2009, with a GDP decrease of 4.2% resulting in, inter alia, an increase in unemployment and a fiscal deficit of 3.4%
- → This did not cause a decline in gross residential lending or average house prices. Instead, both the lending activity and the house prices more or less retained their pre-COVID-19 levels
- → 2020 was marked by two legislative initiatives of the Bulgarian Government, to improve issuance conditions of securitisations and covered bonds.

## MACROECONOMIC OVERVIEW

The economy was substantially impacted by COVID-19, GDP decreased by 4.2% following several years of continued growth (3.4% growth in 2019). Nonetheless, this decrease in GDP was well below the EU average decrease of 6.0% (6.4% in the Eurozone). This is partly due to the public support provided by the Bulgarian government to businesses and individuals affected by COVID-19, but also a result of the country's more relaxed lockdown measures, which left large portions of the Bulgarian economy and public life (at least partly) functioning at a time when most of Europe was under strict lockdown.

The effects of COVID-19 on the Bulgarian economy also led to a significant rise in unemployment from the historic low of 4.2% at year-end 2019 to 5.1% at year-end 2020, which is still lower than the EU27 average of 7.1% (7.9% in the Eurozone). Increased government spending due to the pandemic also resulted in a fiscal deficit of 3.4% (opposed to a 2% fiscal surplus in 2019), which is below the EU average deficit of 6.9% (7.2% deficit in the Eurozone).

Despite the pandemic, average wages continued their expansion throughout 2020 and marked an 8.4% increase compared to 2019 and nearly 22% against 2018 values. The HICP marked a yearly decrease of inflation from 2.5% to 1.2% (0.7% EU average). At the same time the Bulgarian banking sector offered a robust response to the economic stress and in July 2020 Bulgaria joined the Exchange Rate Mechanism (ERM II) and the Banking Union, which further boosted international confidence and brought Bulgaria a step closer to introduction of the Euro.

All this coupled with an expected increase in government spending, including funds from Next Generation EU, raises hopes for a speedy economic recovery and a positive economic outlook. Consequently, the European Commission's 2021 macroeconomic forecasts for Bulgaria envisages a 3.5% growth in GDP.

## HOUSING MARKET

Despite the shock caused to the real-estate market by the imposition of an initially strict lockdown from mid-March to mid-May 2020, the housing market's performance remained close to 2019 levels:5,860 building permits were issued compared to 5,980 in the previous year, while a total of 4,116 housing starts were registered compared to 2019's 4,223 reading. There was also a 10% increase in the completion rate of new residential buildings – from 3,052 in 2019 to 3,376 in 2020 –, which was due to the less restrictive anti-pandemic measures adopted in Bulgaria after May 2020. This trend can partly explain why building permits request volumes remain nearly three times lower than those of the 2015-2016 period, whilst gross residential lending reached BGN 3.9 bn (ca. EUR 2 bn) in 2020, which would signal a 12.3% increase compared to 2019 and an overall 106.8% increase when compared with the 2015 borrowing levels.

Against this background, the average house price retained its upward trend and marked an increase of 4.55% y-o-y, recording a 2020 score of 137.4% (2015 = 100). The housing market, however, continues to show regional differences, with the South-east having 50% lower average price increase compared with the country wide index, which is likely a result of the slowing of the market activity on the southern Black Sea coast before and around 2015. At the opposite end is Sofia, where HPI growth is nearly 15% higher than the national average and the index has increased from 142.5 (2015 = 100) in 2019 to 152.2% in 2020. Similar trends are also observed in Plovdiv – Bulgaria's second city (nearly 5% growth y-o-y to an average of 148.4%) with a more moderate growth around the country average in the other large cities. These discrepancies are underpinned by the fact that the larger cities (and their suburban metropolitan areas) continue to be the most desirable places to live, when considering their higher average wage – for instance, the average wage in Sofia was 36% higher than the national – and the lower unemployment rate (2.8% in Sofia vs. 5.4% average).

Similarly, regarding the housing market, the rental market continues to display discrepancies with a steady increase of prices and demand in Sofia when compared with the other regions for the same reasons.

## MORTGAGE MARKET

### MARKET DYNAMICS

Bulgaria's mortgage loan market has seen a decade of sustained growth of lending volumes and lowering of interest rates on residential mortgage loans. This process started in 2010, as the domestic market slowly recovered following the 2008/2009 financial crash and the subsequent global economic crisis. In 2020 the residential mortgage market grew by 10% to BGN 13.75 bn (ca. EUR 7 bn). The amount of gross mortgage lending has grown at a similar pace – 12%. Still, Bulgaria's residential mortgage market remains among the smallest in the EU with outstanding residential loans per capita of EUR 1,220 compared to an EU average of EUR 16,860. Interest rates continued to fall to an annual average of 2,88% for BGN denominated loans (3.1% in 2019) and 3.52% for loans in EUR (3.57% in 2019). Although these figures remain above the EU average, they are well below the highest levels reached in 2009 (10.09% for loans in BGN and 8.59% for loans in EUR).

With regard to new lending, the most popular products remain floating interest rates (nearly 98% of new loans), with the large majority of mortgage loans being BGN denominated (88% of all outstanding loans and 94% of new loans) which is despite the country's medium-term aspirations of joining the Eurozone, following its entry into ERM II in July 2020. The maximum maturity term for new mortgage loans in the country is up to 35 years with an average of 20-25 years. The typical borrowed amount on new loans ranges between BGN 100,000 – BGN 150,000 (ca. EUR 51,000 – EUR 76,700) with an LTV of 70-80%, which is comparable with pre-COVID figures.

The increased demand for housing loans in 2020 can be attributed to the favourable funding conditions and the desire to convert savings into a housing investment, which is perceived as secure amid concerns over the post-pandemic economic recovery.

The economic stress caused by the COVID-19 pandemic did not translate into a rise of NPLs in the country, which decreased further in 2020 to 5.5% (BGN 727 mn) of all outstanding mortgage loans (6.17% or BGN 770 m in 2019). This is likely due to the continuing effect of the loan payment moratorium introduced by Bulgarian banks in the Spring of 2020 to relieve borrowers from the economic effects of COVID-19 and thus prevent a large-scale reclassification of loans as non-performing.

On the supply side, the pandemic has not led to a drastic tightening of credit conditions for households for house purchases in 2020 compared to 2019. This is likely due to the overall stable condition of the housing market and expected speedy economic recovery.

### NON-MARKET LED INITIATIVES AND FURTHER IMPORTANT EVOLUTION

Initial fears about the potential impact of the pandemic on the mortgage market did not materialise and the market expanded throughout 2020. Although the pandemic hit hard the local tourism and hospitality sectors, which traditionally employ many seasonal workers, other sectors of the economy, such as the highly paid IT sector, have prospered. The asymmetric impact of the pandemic coupled with the low interest rates on mortgage loans resulted in sustained demand.

At the same time, the effect of COVID-19 on NPLs has been successfully held back by the private moratorium on loan repayments initiated by the Association of Banks in Bulgaria (the sectorial body of the local banking sector) under the auspices of the Bulgarian National Bank. This initiative allows borrowers affected by the economic fallout of the pandemic to reschedule loan repayments for up to 9 months. This moratorium scheme follows guidelines on the capital treatment of payments moratoria issued by the European Banking Authority in April 2020 and is aimed at preventing the large-scale requalification of credit exposures from performing to non-performing as a result of the short-term effects of the pandemic. As of December 2020, loans extended to Bulgarian households (incl. consumer and mortgage loans) for the gross amount of BGN 1.7 bn (ca. EUR 874 m) have successfully been included in the scheme. The moratorium is to expire on 31 December 2021. It remains to be seen whether and to what extent NPL levels will rise following the moratorium's expiry.

## MORTGAGE FUNDING

Bank funding in Bulgaria is by far dominated by deposits. By the end of 2020, the Bulgarian banking sector had accumulated BGN 105.7 bn (ca. EUR 54 bn) in deposits (2019 – BGN 97.2 bn), which compares to 89% of Bulgaria's 2020 GDP and 85% of the banking system's total assets. Household deposits account for BGN 62.6 bn (EUR 32 bn) or 59% of the total amount, followed by deposits of non-financial entities – BGN 31.7 bn (EUR 16.2 bn) or 30%, and deposits of financial entities – BGN 8.4 bn (EUR 4.3 bn) or 7.9%.

This dominance is mainly due to the well-established preference of households and non-financial entities to invest their funds in bank deposits but is also probably a consequence of the underdevelopment of the Bulgarian capital market. The growth in deposits is also a result of the improvement of the macroeconomic environment and the strengthening of consumer confidence in the banking system in recent years.

On the other hand, typical wholesale funding tools such as securitisations and covered bonds are practically non-existent in Bulgaria. Whereas the lack of appropriate legal infrastructure has so far hindered the successful issuance of securitisations, mortgage bonds – a type of covered bonds – did not manage to establish themselves as successful and marketable product despite the issuance of several programmes and stand-alone issues in the late 00s and early 10s. The last mortgage-backed bonds issue by a Bulgarian bank matured in September 2019. Recently, the Bulgarian government set out to change this status quo and has engaged in an EBRD funded project for the implementation of the EU's Covered Bond Directive (EU) 2019/2162. In addition, in March 2021 a new law on special purpose and securitisation companies has entered into force, which established a legal framework for securitisations in Bulgaria.

## GREEN FUNDING

The most prominent programme of the Bulgarian Government in the field of green funding is the National Programme for Energy Efficiency of Multifamily Residential Buildings (henceforth, the Programme). The Programme was initiated by the Bulgarian Ministry of Regional Development and Public Works in 2015 and renovation works under it are still ongoing although the application term expired in 2017. Its main objective is to address the high average age of residential buildings in Bulgaria, the majority of housing units were built between the 70s and 80s, and, concurrently, increase their energy efficiency to match modern sustainability standards. The Programme seeks to achieve these goals by providing support to homeowners in renovating residential buildings, including co-financing through the Bulgarian Development Bank in a total amount of BGN 2 bn (EUR 1.02 bn).

From its start in 2015 to the end of 2019, the number of residential buildings renovated under the Programme is 1,930, which include over 125,000 apartments.

The improvement of energy efficiency of buildings is also one of the main goals in the recently adopted National Long-term Strategy for Support of the Renewal of the National Building Fund of Residential and Non-residential Buildings by 2050. Under this strategy, 60% of the residential and 17% of the non-residential buildings in Bulgaria should be renewed by 2050.

In the short term this renewal should be supported also by the National Recovery and Resilience Plan as part of Next Generation EU. Proposals envisage the allocation of more than BGN 2.5 bn (EUR 1.28 bn) for projects in the field of energy efficiency during the 2021-2026 period. Currently, the completion of the National Recovery and Resilience Plan is delayed due to political instability following the Bulgarian parliamentary elections in April 2021.

| | BULGARIA 2019 | BULGARIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 3.7 | -4.2 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 4.2 | 5.1 | 7.1 |
| **HICP inflation (%) (1)** | 2.5 | 1.2 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 83.6 | 84.1 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 6.6 | -6.4 | -3.9 |
| **Building Permits (2015=100) (2)** | 34.6 | 33.9 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 128.5 | 129.7 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 141.7 | 133.6 | 135.2** |
| **Nominal house price growth (%) (2)** | 4.8 | 0.9 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 6,384 | 7,031 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 1,099 | 1,220 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | n/a | n/a | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 4.9 | 12.3 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 3.5 | 3.5 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

***Sources:***
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## BULGARIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | In Bulgaria there are no specialised mortgage banks. Therefore, all licensed commercial banks (credit institutions) can provide mortgage loans. The largest and most active lenders of residential mortgage loans are 'tier 1' banks DSK Bank (DSK), UniCredit Bulbank (UCB), Eurobank Bulgaria (Eurobank), United Bulgarian Bank (UBB), First Investment Bank (FIB), as well as 'tier 2' banks Raiffeisenbank Bulgaria (RBB), Central Cooperative Bank (CCB) and Allianz Bank Bulgaria (Allianz). |
| **The market share of the mortgage issuances:** | From 31.03.2020 to 31.03.2021 the total nominal (principal) value of residential mortgage loans issued by Bulgarian banks has increased by BGN 1,26 bn from BGN 12.76 bn to BGN 14.02 bn. The 8 most active banks on the Bulgarian residential mortgage loan market account for around 93% of this increase – DSK (18.25%), Eurobank (18.25%), UBB (13.5%), RBB (12.7%), UCB (11.9%), Allianz (8%), CCB (6.75%), FIB (3.65%).<br><br>* EUR 1 = BGN 1.95583 |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | As of 31.03.2020 the total nominal (principal) value of residential mortgage loans issued by Bulgarian banks is BGN 14.02 bn. The 8 banks mentioned above form BGN 13.46 bn (ca. 96%) of this amount, of which DSK holds BGN 3.46 bn (ca. 24.65%), UCB – BGN 2.42 bn (ca. 17.26%), Eurobank – BGN 2.30 bn (ca. 16.4%), UBB – BGN 1.59 bn (ca. 11.35%), RBB – BGN 1.56 bn (ca. 11.15%), FIB – BGN 933 m (ca. 6.65%), CCB – BGN 674 m (ca. 4.8%), Allianz – BGN 517 m (ca. 3.7%).<br><br>* EUR 1 = BGN 1.95583 |
| **Typical LTV ratio on residential mortgage loans:** | The average LTV ratio is 70-80%. |
| **Any distinction made between residential and non-residential loans:** | The official statistics of the Bulgarian National Bank (BNB) provide information only on residential mortgage loans extended by Bulgarian banks (and Bulgarian branches of foreign banks) – reported at nominal (principal) value before deduction of provisions, without fees and currently accrued interest.<br><br>BNB defines "residential" or "housing" loans as loans granted to households for the purpose of investing in dwellings for their own use or for letting out, including for the construction and improvement of dwellings, which can be secured by various types of assets. |
| **Most common mortgage product(s):** | The most widely used mortgage products in Bulgaria are BGN denominated housing loans with variable rates, which are generally defined in the banks own lending policies. The average size of loans is between BGN 100,000 and BGN 140,000, with BGN 108,000 being cited as market average for 2020.<br><br>Interest rates have been decreasing over the last years. As at 31.03.2021 the average interest rates on BGN denominated housing loans is around 2.75%. Despite the COVID-19 pandemic interest rates continue to decrease y-o-y. |
| **Typical maturity of a mortgage:** | The average maturity of mortgage loans in Bulgaria is around 20-25 years with maximum term of any mortgage being 35 years. |
| **Most common way to fund mortgage lending:** | Funding of mortgage loans is based largely on deposits. Alternative funding sources are uncommon in Bulgaria. There is practically no mortgage bond market in Bulgaria, with last mortgage bond issuance dating back to 2014 and all issues being redeemed since, the latest in September 2019. |
| **Level of costs associated with a house purchase:** | A variety of taxes and fees are associated with purchasing properties in Bulgaria, most of which vary according to the property's price, but which may also depend on whether the property has land attached, whether it is being bought through an agent (as opposed to directly from the vendor), or whether there are other consultants involved (e.g. lawyer, surveyor or translator).<br><br>In particular, a purchaser should be aware of the following related costs: municipal tax (up to 3% of the purchase price depending on municipality involved, no cap); notary expenses for the purchase and for the establishment of a mortgage (each notarisation costs between BGN 500 and BGN 6,000 depending on the price of the property); state fee for registration of the purchase and the mortgage in the Bulgarian Property Register (each registration costs 0.1% of the property price, no cap); potential VAT implications of the purchase must also be considered. |
| **The level (if any) of government subsidies for house purchases:** | Not available, other than limited tax benefits for young families (spouse not elder than 35 years), which can deduct from their taxable income interest payments on loans (or the part of loans) up to BGN 100,000. |

# Croatia

By Edin Karakaš, ŽURIĆ i PARTNERI, OD d.o.o.

## IN A NUTSHELL

- → Negative economic conditions in 2020 due to pandemic;
- → The government-subsidised housing loans programme that started in 2017 contributed to growth of the real estate and mortgage market;
- → Real estate transfer tax rate was reduced from 4% to 3% at the beginning of 2019, which caused some transactions to shift from 2018 to 2019, slightly artificially inflating the number of transactions in 2019;
- → While the pandemic was expected to negatively influence the housing market, a series of earthquakes in central Croatia rendered a number of properties unusable, creating demand for non-damaged properties and new developments which helped to partially offset the negative impact of the pandemic.

## MACROECONOMIC OVERVIEW

While hit with the COVID-19 pandemic, Croatia maintained a stable economic outlook. In December 2020, Fitch affirmed its Long-Term Foreign-Currency Rating at BBB-, with Positive Outlook. Standard & Poor's credit rating remains BBB-, while Moody's is Ba2 with positive outlook.

After recording a2.9% growth rate in 2019,well above the EU average, the economy contracted by 8% in 2020, dropping to HRK 372 bn (ca EUR 49 bn). Unemployment stood at around 7.5%, similar to the EU average, while the employment rate reached 47.2% (a 0.5% decrease from 2019).

Croatia joined the Exchange Rate Mechanism and the Croatian National Bank (CNB) established a close cooperation framework with the European Central Bank. In light of this, the central rate of the Croatian kuna is set at 1 euro = 7.53450 kuna.

Government debt decreased in absolute numbers to EUR 40 bn, however, as a share of GDP, it grew to 81.3%, reversing the positive trend seen over the previous years. The currency (HRK) registered an average annual exchange rate of about 7,5331 HRK per 1 EUR.

The average annual inflation rate dropped from 0.8% in 2019 to 0% in 2020, continuing the relatively calm period since 2017. The Croatian government put forward a set of new fiscal measures to contain the fallout of the pandemic, amounting to almost 8% GDP. These measures included employment subsidies and shortened working hours schemes. Additionally, the national government, by means of the aforementioned European package, drafted the so-called National Recovery and Resilience Plan (NRRP), endowed with EUR 6.5 bn worth of grants, around 12% GDP, the highest share in the EU. This new plan focused mainly on the green and digital transitions, where are meant to be implemented through a combination of reforms and long-term investments.

## HOUSING MARKETS

On an annual basis, the average price per square meter in 2020 was HRK 12,724 (ca EUR 1,689), up from 12,338 (ca EUR 1,665) in 2019. The calculation includes prices of new dwellings in the private market (HRK 12,869, ca EUR 1,708), as well as those constructed under the government supported "Publicly Subsidized Residential Construction Program" (HRK 7,703 on average, ca EUR 1,022).

In Zagreb, annual average price of new dwellings per square meter was HRK 14.013, almost a 10% increase from HRK 12.834 in 2019 *(Croatian Bureau of Statistics, Construction).*

The house price index (which considers new and existing dwellings together) increased by 9%. Zagreb's average house price indexes increased by more than the national rate, while the Adriatic coast residential dwelling prices grew at a slower rate. In the meantime, other key urban areas, despite recording below average price levels, began catching up to the national average.

There were 9,403 building permits issued in 2020, a 5.3% decrease. In the meantime, the planned value of works linked to these permits decreased by 23.9% against 2019. Furthermore, as per the latest permits figures, there are 14,083 dwellings planned to be built, an 8.4% decrease compared to 2019. By types of constructions, 83.0% of permits were issued for buildings and 17.0% for civil engineering works. By types of works, 75.3% of permits were issued for new constructions and 24.7% for reconstruction purposes. *(Croatian Bureau of Statistics: BUILDING PERMITS ISSUED, 2020)*

## MORTGAGE MARKETS

### MARKET DYNAMICS

While the financial sector is becoming more diversified, banks still play a predominant role. Commercial banks' assets rose to a record high of HRK 462.5 bn (EUR 61.4 bn) at the end of 2020. Housing banks' assets amounted to HRK 5.3 bn, that is, only 1.2% of total credit institution assets. *(CNB Annual Report)*

High capitalisation and liquidity continue to be features of the banking sector. The total capital ratio averaged 24.9%. The average Liquidity Coverage Ratio was 181.9%. Both figures represented increases from 2019.

Credit granted to the domestic (non-state) sector slightly decreased from 4.2% in 2019 to 3.9% in 2020. Consumer lending slowed significantly, from a 7.4% yearly increase in 2019, to a 2.1% contraction in 2020. Commercial lending grew by 5.6%. Growth in subsidised housing loans did not compensate sufficiently for the decline in consumer credit, and total lending to households slowed down noticeably.

Interest rates on new loans to enterprises and the broader population, which include the first contracted and re-contracted loans, continued to fall. Thus, for example, interest rate on new housing loans in HRK decreased from 2.9%

at the end of 2019 to 2.5% at the end of 2020, and on new consumer loans in HRK from 6.1% to 5.7%. *(CNB Annual Report)*

In light of the general pandemic economic shock, which also impacted the banking sector, the CNB laid out a series of monetary and supervisory policies which sought to maintain favourable financing conditions, while ensuring a certain degree of liquidity for household and businesses alike. In this vein, the CNB postponed certain supervisory activities (such as stress-testing and the direct supervisions of financial operation operations). The central bank outlined a series of instructions as the use of liquidity reserves and the classification of exposures, whether new or already existing. In this context, it is also possible to suspend payment obligations, restructure liabilities or grant new loans, in an effort to maintain jobs and income or to finance additional, pandemic-related costs. Said measure were meant to last until 31 March 2021.

Lastly, the CNB allowed banks to make a decision as to the initiation of forced collection measures from debtors (households or companies) who, in the period of three months, as of April 2020, failed to meet three instalments of their credit liabilities.

As to non-performing exposures, this type of loans increased in 2020. However, due to the increase of new lending activity, their share in total loans slightly decreased, reaching 5.4% (Non-performing loans ratio, share of NPLs). The increase in non-performing loans is mostly a consequence of reduced household capacity, the share of non-performing loans in this sector increased to 7.1%. *(CNB Annual Report)*. Banks continued to clean their balance sheets by selling non-performing assets. Non-performing loans from commercial companies dropped to 12.5%.

### NON-MARKET LED INITIATIVES

Over the last three years, two major legislative changes have influenced the mortgage market. First, the introduction of the Subsidised Housing Loans Act, and second, the reduction in real estate transfer tax.

In 2017, the Government introduced the subsidised housing loan programme, whereby Croatian citizens under 45 years of age may get a subsidy for buying a house for residential purposes. Under this programme, the state will subsidise between 30% and 51% of monthly instalment for the housing loan. While there are many factors to consider when determining the persons and loans that qualify, the programme has helped expand and further develop the real estate and housing markets. *(Subsidised Housing Loans Act)*

In 2019, the real estate transfer tax was reduced from 4% to 3%. This is a second reduction of the real property in recent years, as the tax rate was already reduced in 2017 from 5% to 4%. This decrease in the tax rate might have enticed some of the transactions that were negotiated in 2018 to complete in 2019. *(Real Estate Transfer Tax Act)*

### ANY FURTHER IMPORTANT EVOLUTION

The real estate market was shaken by two extraordinary events at the beginning of 2020.

First, the pandemic and the consequent economic slowdown is expected to have a negative effect on real estate prices, as well as on bank credit activity, especially considering the loan moratoria introduced by public authorities.

Second, Zagreb was hit by a series of earthquakes in March 2020, which rendered a significant number of properties in the city centre unfit for use. Consequently, a number of residents and firms operating from the city centre were forced to look for replacement housing or business premises elsewhere. That development might offset to an extent the effects of COVID 19 pandemics on the real property market.

## MORTGAGE FUNDING

According to the Croatian National Bank Annual Report for 2019, credit activity of the Croatian banks was chiefly financed by residential deposits. Under the influence of low interest rates, the structure of deposits is undergoing a structural change: shifting from term deposits to deposits on transactional bank accounts. Croatia is still in the process of adopting a specific legislation on covered bonds.

## GREEN FUNDING

With the aim of increasing the energy efficiency of existing family houses, reducing energy consumption and $CO_2$ emissions and reducing monthly energy costs, along with an overall improvement in quality of life, the Government adopted, on 27 March 2014, the Programme for the renovation of family houses, which spanned the 2014-2020 period. The Fund for Environmental Protection and Energy Efficiency (Energy Efficiency Fund) is charged with the implementation of the programme.

Energy renovation programmes were accompanied by the co-financing schemes of the Environmental Protection and Energy Efficiency Fund, and the EU funds under the Operational Programme Competitiveness and Cohesion, depending on the use of buildings. Many energy renovation projects were implemented in the period 2014-2020, and the recorded rate of renovation of the building stock was 0.7% or 1.35 million $m^2$/year.

In the period leading up to 2030, the aim is to increase this rate to 3%, and to this end the Long-term Strategy for National Building Stock Renovation by 2050 was drafted. Renovation programmes have been envisaged in the Integrated National Energy and Climate Plan for the period 2021-2030.

To achieve the strategic goals of reducing energy consumption in buildings, three key energy programs are foreseen for the 2021-2030 period targeting apartment buildings, family houses and public buildings.

| | CROATIA 2019 | CROATIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 2.9 | -8.0 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 6.6 | 7.5 | 7.1 |
| HICP inflation (%) (1) | 0.8 | 0.0 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 90.1 | 89.7 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | n/a | n/a | -3.9 |
| Building Permits (2015=100) (2) | 221.2 | 202.6 | 117.1 |
| House Price Index – country (2015=100) (2) | 121.1 | 130.4 | 131.3** |
| House Price Index – capital (2015=100) (2) | — | — | 135.2** |
| Nominal house price growth (%) (2) | 9.0 | 7.7 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 7,720 | 8,233 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 2,290 | 2,450 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 23.0 | n/a | 70.8* |
| Gross residential lending, annual growth (%) (2) | 19.0 | 37.3 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 3.1 | 2.9 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## CROATIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Commercial banks and housing saving banks. |
| **The market share of the mortgage issuances:** | Commercial banks dominate the market. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Commercial banks hold 94.5%, and housing saving banks hold the rest 5.5%. |
| **Typical LTV ratio on residential mortgage loans:** | Between 70 and 80%. |
| **Any distinction made between residential and non-residential loans:** | The 'Consumer Housing Loans Act' defines "housing loan" as a loan: a) collateralised by a security on residential immovable property or a transfer of ownership of residential immovable property for the purpose of securing the loan; or b) the loan the purpose of which is for the consumer to acquire or retain the ownership of residential immovable property.<br>Loans not falling within this description would not be residential. |
| **Most common mortgage product(s):** | Housing loans |
| **Typical maturity of a mortgage:** | Between 20 and 30 years |
| **Most common way to fund mortgage lending:** | Deposits |
| **Level of costs associated with a house purchase:** | Real estate transfer tax (3% of market value); transaction costs (fees and commissions): up to 2% of market value; and other costs (agency intermediation, public notary, etc.): 2-4% of market value. |
| **The level (if any) of government subsidies for house purchases:** | Low (in the part of government supported "Publicly Subsidised Residential Construction Programme", through the governmental incentives for housing savings and through the limited government financial support for first housing property purchase). |

# Cyprus

By Ioannis Tirkides, Bank of Cyprus

## IN A NUTSHELL

- → Despite Cyprus' reliance on tourism, the recession in 2020 was milder than the Eurozone average owing to strong policy support and also to the structure of the productive base.
- → The economy is expected to recover in 2021 with real GDP to return to pre-pandemic levels in 2022 aided by policy support and Next Generation EU funds.
- → Residential property prices continued to rise, but at a slower pace, and demand for residential properties recovered strongly in the second half of the year after slowing in the first half.
- → Conditions for mortgage loans remain favourable with floating interest rates near their lowest levels for more than a decade and supported by government schemes subsidising interest costs.

## MACROECONOMIC OVERVIEW

The economy declined by 5.1% in 2020 according to Eurostat, as a result of pandemic-induced disruptions particularly in the travel and hospitality sectors. However, this was better than initially anticipated and better than most other EU countries, the result of strong fiscal measures and the structure of the economy.

The fiscal measures included income support for households, wage subsidies for businesses and grants to small businesses and the self-employed. The budget moved from a surplus of 1.5% of GDP in 2019 to a deficit of 5.7% in 2020 and gross public debt rose from 94% of GDP to 118.2%. The budget position is expected to improve and the deficit to gradually shrink in the medium term as the economy recovers and spending is scaled back.

Unemployment increased modestly to 7.6% from 7.1%. The Harmonised Index of Consumer prices declined by 1.1% driven by a drop in energy costs and the prices of services related to the travel and hospitality sectors.

In the banking sector Non-Performing Exposures (NPEs) dropped steeply and their ratio to gross loans was 17.7% at the end of December 2020, from 22.3% at the end of 2019.

Cyprus will benefit from the EUR 750 bn Next Generation EU programme as it will receive EUR 1.0 bn in grants and an additional EUR 0.2 bn as loans over 2021-26. The effectiveness of the funds in the medium and long-term will depend on the implementation of long-delayed structural reforms, such as improving the efficiency of the judiciary and of the public and local administration.

Real GDP is forecast to grow by 4.3% in 2021 and by 3.8% in 2022 according to the European Commission (European Economic Forecast, Summer 2021). Thus, real GDP can be expected to recover to pre-pandemic levels during 2022.

## HOUSING MARKET

Home ownership has been declining since the financial crisis of 2012-14 reflecting the deep recession in the period, high non-performing loans, and tighter credit conditions. Ownership declined the most between 2013 and 2019, dropping by 6.1 pps to 67.9%. This is lower than the EU average at 69.8% and was the lowest among the peer group of southern European countries. In 2021 ownership rose to 68.6%.

New construction of residential and non-residential buildings including civil engineering projects, dropped from EUR 3.0 bn in 2008, to EUR 0.92 bn in 2014. Since then, new construction increased and reached EUR 2.0 bn in 2018 and EUR 2.5 bn in 2019.

Absolute gross value added of the construction sector started to recover in 2016. The share of the sector's value added rose from 4.0% in 2015 to 6.3% in 2020 in nominal terms (4.8% to 7.3% in real terms).

The recovery in the construction sector reflects the demand for housing and property prices. New sales are still considerably below their 2007 peak but have been rising since 2014. At the end of 2019, new sales were 48.8% of the peak year but dropped by 23% in 2020 due to the pandemic. Sales started to rise from about the middle of 2020 and accelerated in the first half of 2021. New sales rose by 37.6% in the first half of the year from the same period the year before.

Prices as measured by the Central Bank's residential property index, rose from 2017-20 following a steep cumulative decline of 30.6% between 2008 and 2016. The cumulative increase in the period 2017-20 was 7.6% for residential properties, driven by apartments (up 16.3% as opposed to houses which rose by 4.5%). Residential property price increases were greater in Limassol (up 12.7%) followed by Famagusta (up 7.4%), Larnaca (up 5.9%), Nicosia (up 5.3%) and Paphos (up 3.6%). In 2020, residential property prices increased by 1.5% on average.

Regional differences in price developments reflect differences in the composition of demand. In Limassol there is higher demand from non-residents related to the city's international business orientation. There is a high proportion of vacation and second homes in the Larnaca, Paphos and Famagusta regions where prices have been more volatile in both the contraction and the recovery phases. Nicosia is the largest region by population and the country's capital and featured demand from locals, diplomatic representations and students.

The number of completed new dwellings in 2019 (latest available data) was 4,420 compared with 3,866 the year before and a peak of 18,195 in 2008. The total stock of dwellings at the end of 2019 was 460,000 having risen by 16.8% since 2008.

## MORTGAGE MARKET

### MARKET DYNAMICS

The mortgage market shrank in relation to GDP after years of restructuring and deleveraging in the banking sector. Total outstanding loans for house purchase at the end of 2020 were EUR 8.6 bn or 41.3% of GDP. Loans for house purchase corresponded to 34.5% of all outstanding loans to residents excluding the government and 69.5% of all outstanding loans to households. In comparison, at the end of 2012, outstanding loans for house purchase reached a peak at 64.4% of GDP, 23.9% of loans to residents excluding the government, and 53.3% of all outstanding loans to households. Loans for house purchase declined since the end of 2012, stabilised in 2020 and dropped again by 5.5% year-to-date in July 2021 reflecting loan sales.

New mortgage loans in 2020 amounted to EUR 947 mn and EUR 783 mn excluding renegotiated amounts. This was slightly lower than new mortgage loans in 2019 (EUR 972 mn, EUR 874 mn excluding renegotiated amounts). New mortgage lending has been rising since 2015 but remains significantly lower than in the first seven months of 2021, to 2.16%.

Mortgage rates for new loans have been declining since 2008-09. The floating rate for up to one year for house purchase dropped from a yearly average of 5.97% in 2008 to 2.41% in 2018, and further to 2.12% in 2019 and 2.10% in 2020. Mortgage lending rates stabilised in the first five months of 2021, to 2.16%.

Loan performance of households and non-financial corporations deteriorated markedly in the aftermath of the deep recession from the second half of 2011 to the end of 2014. Nonperforming exposures, as defined by the European Banking Authority, rose sharply in the period, and dropped significantly in its aftermath. The resolution of the Cyprus Cooperative Bank and the sale of a package of loans by Bank of Cyprus in the second half of 2018, led to a steep decline of on-balance sheet non-performing exposures. Whilst there are no separate statistics for the performance of mortgages themselves, the performance of household loans, more than half of which are mortgages, is indicative of the performance of mortgages as well.

Non-performing exposures of the household sector have been declining steadily. At the end of 2020 non-performing exposures were EUR 2.8 bn or 23.7% of gross loans. This compares with EUR 4.6 bn or 35.2% of gross loans respectively in 2019. Non-performing exposures of the household sector were EUR 13.1 bn or 52.3% of gross loans at the peak in early 2015. Mitigating this large ratio of non-performing exposure, is a high provisioning ratio of 44.0% at the end of 2020 and a high ratio of restructured facilities in non-performing exposures, of 43.6% of the non-performing exposures of the household sector.

### NON-MARKET LED INITIATIVES

The property market in Cyprus is being affected by tax and legislative changes. The property tax payable was reduced in 2016 and abolished in 2017. It has not been re-introduced since then. A new law that came into force on 2 January 2018 introduced a 19% VAT on building land and on the leasing of commercial property for business purposes.

As part of policies to attract foreign investors through the 'Scheme for Naturalisation of Investors in Cyprus by Exception', the Council of Ministers in March 2014 established relevant new financial criteria. The scheme remained in place with its financial criteria periodically revised, up until November 2020 when it was abolished under the weight of implementation problems which exposed flawed procedures.

To aid low-income households with non-performing loans and primary homes as collateral, the government introduced a subsidy programme named ESTIA, in July 2019. Eligibility was subject to specific income criteria. The scheme expired at the end of July 2020.

In March 2020, in response to the pandemic the government introduced a series of measures that indirectly had a bearing on the mortgage market. A moratorium was introduced on loan repayments including on mortgages. Also, the government introduced an interest subsidy programme for mortgage loans effective for eligible mortgage loans as from March 1, 2020. The programme expires at the end of the year and provides for an interest subsidy of 150 bps for the first four years of the loan.

## MORTGAGE FUNDING

Bank funding in Cyprus is primarily from customer deposits. Funding conditions are comfortable as reflected in the gross loans (not including provisions), to deposits ratio at 65.9% at the end of 2020. Cyprus banks have access to ECB funding.

The securitisation legislation which has been enacted in July 2018 provides an additional tool for banks to obtain funding.

## GREEN FUNDING

Cyprus will receive EUR 1.0 bn in grants and an additional EUR 227 mn in the form of loans, from the Next Generation EU funds in the period 2020-26. Cyprus' Recovery and Resilience Plan submitted to the European Commission consists of 134 measures structured around 13 components and grouped in five policy areas. Policies and projects for greening the economy will comprise 41% of the recovery funds, and policies and projects for the digital transition will comprise 23% of the recovery funds. Key investments include improving the energy efficiency of buildings and incentives to use renewables.

| | CYPRUS 2019 | CYPRUS 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 3.1 | -5.1 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 7.1 | 7.6 | 7.1 |
| **HICP inflation (%) (1)** | 0.5 | -1.1 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 70.1 | 67.9 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 21.8 | -7.9 | -3.9 |
| **Building Permits (2015=100) (2)** | 144.0 | 140.1 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 101.9 | 102.6 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 101.5 | 102.7 | 135.2** |
| **Nominal house price growth (%) (2)** | 2.0 | 0.7 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 8,605 | 8,649 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 12,177 | 12,055 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 58.9 | 61.8 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 0.6 | -10.4 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 2.1 | 2.1 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## CYPRUS FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Financial institutions (banks and the Housing Finance Corporation HFC). |
| **The market share of the mortgage issuances:** | 100% |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Banks: 97% and HFC: 3% |
| **Typical LTV ratio on residential mortgage loans:** | 70%-80% |
| **Any distinction made between residential and non-residential loans:** | Depending on the use of the house, then the loan is classified as residential or not i.e. residential is for primary home or holiday use |
| **Most common mortgage product(s):** | Euro-denominated loans. Most of the loans are floating rates i.e. ECB base rate + spread. Fixed rate housing loans are also offered. |
| **Typical maturity of a mortgage:** | The average maturity is 22 years. |
| **Most common way to fund mortgage lending:** | Customer deposits. |
| **Level of costs associated with a house purchase:** | The costs associated with house purchase include: a transfer tax; the costs of title deeds, stamp duty, a mortgage fee and, lastly, a land tax. |
| **The level (if any) of government subsidies for house purchases:** | Due to Covid-19, the government is currently subsidising mortgage loans for 4 years, if the purpose of the house is for own use. |

# Czechia

By Martin Kotek, Komerční Banka

## IN A NUTSHELL

→ Despite the pandemic, the housing and mortgage markets expanded during 2020.

→ Declining confidence in the economy accelerated demand for real estate.

→ The Czech National Bank, relaxed credit indicators for LTV, DTI and DSTI.

→ Housing demand, low interest rates and relaxed credit indicators resulted in the highest production of housing loans ever recorded.

## MACROECONOMIC OVERVIEW

The year 2020 was difficult for the Czech economy, which was hit by two waves of the pandemic. As a result, the overall economy declined the most in its history, the gross domestic product was 5.8% lower than in 2019. The main reasons for the decline were drops in investment activity and household consumption.

Trade in goods and services, transport, accommodation, and food service sectors suffered the most from closure of the economy. Industrial production fell by 8.0% year in 2020.

The drop in sales was recorded mainly in stores with products for culture, sports and recreation (by 10.9%), as well as clothing and footwear (by 29.6%). For the whole of 2020, retail trade excluding motor vehicles fell by 0.9% y-o-y. The motor vehicle segment decreased by 15.4% Revenues in services fell by 11.9%, revenues of travel agencies by 74% y-o-y. Revenues in air transport fell by 72%, and in accommodation, food and beverage services by 40%.

The unemployment rate was 2.6% at the end of 2020, an increase of 0.6 pps against 2019, which is a very low number considering coronavirus crisis. This quite low impact was because the Czech Republic entered the crisis with an extremely tight labour market. Government programmes, which support employment by contributing to the payment of wages while maintaining the jobs in companies, have played an important role too.

For the whole of 2020, the average inflation rate reached 3.3%. This was 0.7 pps higher than in 2019. It was also the highest average annual inflation rate since 2012.

The government addressed the epidemic's effects on the economy on several fronts. It allowed requests for deferral of bank loan payments for 3 to 6 months in both the corporate and retail segments. It introduced a rent ceiling, limited the possibility of terminating rental contracts for a short time and created a programme to support rental payments. It deferred the payment of certain taxes and health and social insurance. The government also introduced an employment support programme that contributes to the payment of wages while maintaining jobs in companies. The self-employed were provided one-off support. Furthermore, the government prepared several rounds of support programmes for entrepreneurs.

## HOUSING MARKETS

There was no change in housing market trends in 2020. Still low supply of real estate and growing accessibility of financing led to a price increase of 9%. Moreover, negative consumers' expectations concerning the economy increased the attractiveness of real estate as the form of investment.

The number of completed or started houses, have remained stable for many years, while housing needs are changing. Decreasing average number of family members (one-member households, divorces, families without children, low interest in multi-generation housing) and demand for high-quality housing are natural drivers of growing housing demand. Secondary demand is accelerated by investors who keep a smaller portfolio of dwellings for renting or as a store of value. 2020 saw the acceleration of these factors, due in great part to the pandemic.

## MORTGAGE MARKETS

The market had all-time high sales figures in 2020. New production grew by 40% on a yearly basis. The drop of interest rates in Q2, together with generally decreased consumers' confidence, led to exceptionally high demand for residential real estate and thus for housing financing. Housing was perceived as a safe investment in an uncertain economic environment – that is, it was considered both as an investment that can ensure a stable source of rental income and as means of wealth protection.

Real estate supply remained insufficient, leading to housing prices increases and growing lending needs. Besides the number of sold loans, the average loan size increased significantly as well. This was supported by low interest rates too. At the end of Q3 interest rates of mortgage loans dropped below 2%.

Sales results and low interest rates were also the result of bank competition; especially when the price of funds started growing (end of Q3). In Q3 and Q4 mortgage providers tried to gain the highest possible market share under condition of temporary low margins.

The upward trend in house financing was not interrupted or hampered by the first wave of strict measurements against the spread of the pandemic between March-May2020, or during the second wave in October-December 2020. Between April and June2020, banks allowed postponements of the loan instalments and, at the same time, granted new loans without any visible drop.

These postponements were given by law and were terminated in October 2020. Thus customers had to restart repaying their loans from November onwards. As per the latest available information, n there is no record of significant issues connected to unpaid instalments that could threaten the stability of banks' portfolios.

### NON-MARKET LED INITIATIVES

During the year (in Q2), the Czech National Bank relaxed credit indicators given in their recommendations. Income indicators DTI (Debt to Income) and DSTI

(Debt Service to Income) were completely cancelled, while the LTV indicator was relaxed. This measure accelerated housing loans granting as well, as the number of loans with higher LTV (>80%) increased. It also drove the increase in the average size of residential loans.

Lastly, the measures laid out by the government which aimed at reducing the impact of lockdown and social distancing policies, namely the legally-sanction payment moratoria, had a minor impact on the market, as the production of new loans growth rate shows.

| | CZECHIA 2019 | CZECHIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 3.0 | -5.8 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 2.0 | 2.6 | 7.1 |
| HICP inflation (%) (1) | 2.6 | 3.3 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 78.7 | 78.6 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | 2.0 | 7.2 | -3.9 |
| Building Permits (2015=100) (2) | 109.4 | 109.9 | 117.1 |
| House Price Index – country (2015=100) (2) | 143.9 | 156.8 | 131.3** |
| House Price Index – capital (2015=100) (2) | n/a | n/a | 135.2** |
| Nominal house price growth (%) (2) | 8.9 | 9.0 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 48,658 | 51,174 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 5,609 | 5,886 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 40.7 | 41.9 | 70.8* |
| Gross residential lending, annual growth (%) (2) | -9.9 | 37.3 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 2.6 | 2.3 | 2.1 |

* The aggregate EU figure is from 2019.

** Please note that this value is the simple average of the available values in 2020.

*Sources:*

*(1) Eurostat*

*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## CZECHIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | In the Czech Republic, housing finance is mainly raised by banks. |
| **The market share of the mortgage issuances:** | Banks represent almost 100% of the mortgage market. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | There are 3 big retail banks, which together hold almost 75% of the mortgage loans outstanding volume in the Czech Republic. |
| **Typical LTV ratio on residential mortgage loans:** | The Recommendations of the Czech National Bank defines the maximum LTV on 90%.<br>Typical mortgage loan is the loan with LTV 80 – 90% |
| **Any distinction made between residential and non-residential loans:** | More than ¾ of the housing loans were provided for residential purposes. |
| **Most common mortgage product(s):** | The most common mortgage loan in 2020 was the loan for house/flat purchase secured by financed property with interest rate fixation period 7–10 years and maturity 25–30 years. |
| **Typical maturity of a mortgage:** | The Recommendation of Czech National Bank defines the maximum mortgage loan maturity 30 years.<br>Typical mortgage loans have maturity from 25 to 30 years. |
| **Most common way to fund mortgage lending:** | Combination of deposits and covered bonds. |
| **Level of costs associated with a house purchase:** | Taxes and fees when buying/selling a property in the Czech Republic are the following:<br>1. Fee for record of the ownership change and mortgage lien establishment to Real Estate Cadastre (state database)<br>2. Real estate agency fee (only for purchase intermediated by RE agency) |
| **The level (if any) of government subsidies for house purchases:** | Under the current landscape of low interest rates and generally positive macroeconomic development, a limited amount of subsidies is available:<br>• Tax-deductible paid interests: The amount paid in interest on a mortgage loan to finance housing needs can be deducted from the tax base of physical entities' income, up to CZK 300,000 per year.<br>• Support for establishing social housing for disadvantaged people due to their age or health |

# Denmark

By Sandie Wrona, Finance Denmark

## IN A NUTSHELL

→ The Danish economy performed better than the EU on average in 2020
→ Housing markets were not affected by the COVID-19 situation
→ Many houses and apartments were sold and prices continued to increase
→ Fixed rate mortgages are still the Danes preferable mortgages

## MACROECONOMIC OVERVIEW

The economy shrunk in real terms by 2.1%, approximately the same rate that it grew in 2019. The GDP fall is mainly driven by a fall in exports and imports of goods and services of 7%, and 4.1%, respectively. Compared to the European Union, which fell 6%, the Danish economy performed better than average. This is particularly due to a smaller decline in private consumption, which decreased by 1.3%, and an increase in investment. Also, consumer prices increased by 0.3% in 2020.

The employment rate decreased after the first lock down in March 2020. In total, employment fell by 0.7% resulting in an employment rate of 74.7%. Unemployment rose 0.6 pp. in 2020 from 5 % to 5.6%

The Danish government had a budget surplus of 4.1% of GDP. Gross government debt was 42.2% of GDP. This is low in a European context. The deposit rate at the Danish central bank, Danmarks Nationalbank, remained at -0.75% the first two months of 2020, whereafter deposit rate increased to -0.6%.

## HOUSING MARKETS

The Danish housing market is characterized by relatively low owner occupancy, which is even lower in larger cities. The rate was 60.8% by the end of 2020, which is a minor increase of 0.3 pp. over the year.

Due to the pandemic many expected that house prices would fall. However, nominal house prices increased by 4.1% (y-o-y), higher than in the previous year. Prices have increased more in the capital region, and by the end of 2020 house prices in Copenhagen were 8.5% higher than the year before, and prices on owner occupied apartments were 10.2% higher.

In total, 82,263 houses and owner occupied flats were sold in 2020, 16.2% more than in 2019, and the highest level since 2005. Both increasing housing prices and other developments in the real economy have continued to stimulate transaction activity in all parts of the country. The number of transactions involving detached and terraced houses is up by 17.2% in 2020, and 13.5% more owner occupied flats were sold.

Construction activity continued to be high in 2020, and housing completions improved by 7.8% in 2020. Housing starts and number of building permits issued have dropped 5% and 19% from 2019.

## MORTGAGE MARKETS

### MARKET DYNAMICS

By year end 2020, outstanding mortgage loans from mortgage banks amounted to DKK 2,944 bn, of which app. DKK 1,715 bn was for owner occupied housing. On top of this housing loans for households from commercial retail banks amounted to DKK 266 bn. In total mortgage credit growth was 2.4% in 2020. The mortgage credit growth remains modest, and still much lower than in the mid-2000's where growth rates were between 10% and 17%.

Mortgage lending activity in 2020 has repeated previous years' developments. Danish households' prefer fixed interest rates which have gained market share. Outstanding mortgage loans issued by mortgage banks are split between fixed rate mortgages (43.1% by year end 2020), interest reset mortgages with interest reset under 1 year (28.5%) and interest reset mortgages with interest reset intervals above 1 year (28.5%).

Gross lending activity by mortgage banks continued at high levels. However, it was much less than in 2019, were it reached its all-time high. Total gross lending reached DKK 645.3 bn. Residential mortgages accounted for 64.5% of gross lending, is 3.3 pp. more than in 2019. Overall, gross lending activity is down by 29% compared to 2019, because of lower remortgaging. Loans with a value of DKK 477 bn were remortgaged approx. 35% less than in 2019.

Fixed rate mortgages (typically fixed for 30 years) accounted for 69.4% of gross lending in 2020, a decrease of 7.5 pp. compared to 2019. Adjustable rate mortgages and interest reset mortgages accounted for 30.1%, and adjustable rate mortgages with an interest rate cap accounted for 0.5% of gross lending in 2020. The interest rates on fixed mortgage loans continued at an historically low level in 2020. 30-year fixed rate mortgages were in the beginning of 2020 issued with a coupon 0.5%. The outbreak of COVID-19 and as a result, the lockdown in March, led to uncertainty related to the economic outlook. This briefly affected the Danish mortgage market, and the coupon rate rose to 2%. However, the long-term fixed interest rate stabilized quickly and reached the same levels as in the beginning of 2020. The short-term interest rate to borrowers was on average 0.69% in 2020.

### NON-MARKET LED INITIATIVES

Interest rates have been low for several years, and other possible reasons for borrowers preferring fixed rate mortgages and mortgages with longer interest rate fixation could be their expectations of future interest rate increases. Also, the possibility to fix the interest rate to 0.5% or 1% in 30 years and thereby knowing the total cost of the loan may incentivize borrowers to choose fixed rate mortgages.

## ANY FURTHER IMPORTANT EVOLUTION

Although it was expected that the COVID-19 situation would affect the housing market negatively, this was not the case. Danish mortgage banks were able to provide loans as usual during the lockdown. The funding of the loans by covered bonds continued as normal, though with a temporary spike in interest rates. Furthermore, most homeowners were able to service their loans as a large proportion of Danish households were financially unaffected by the lockdown. Part of the reason for this, was the various stimulus measures introduced by the Government for the private sector shortly after lockdown. Measures such as salary compensation, compensation for turnover losses for self-employed and deferral payment deadlines for various taxes, VAT etc. limited demand for financial assistance to customers from banks.

Activity in the housing market continued to be high throughout the year and prices have risen. The increasing prices have been debated heavily in 2021, and whether is necessary to tighten rules regarding mortgage lending for certain mortgages, such as interest only mortgages, in order to avoid a situation like the Financial Crisis in the 2000's. However, the increases are much lower than during the years before the crisis and the economy and households are more robust today.

## MORTGAGE FUNDING

Mortgage loans issued by mortgage banks are solely funded through the issuance of covered bonds. Mortgage banks continuously supply extra collateral on a loan by loan basis if the value of cover assets (properties) deteriorates.

The funding mix – for the main part bullet bonds or callable long-term bonds – adjusts continuously according to borrower demand. Bonds are tapped and bullet bonds behind interest reset loans are refinanced by month end in March, June, September and December. December remains traditionally the largest refinancing date, however new bullet bonds have not been issued with maturity in December for the past years, spreading refinancing activity and hence spread risk more evenly across the year.

Over the course of 2020, long-term callable bonds, which fund the fixed rate mort¬gages, were issued with a coupon of 0.5% to 2% matching the rate on the loans. However, mortgages with a coupon of 1.5% and 2% were only issued for a limited amount of because of the temporary spike in interest rates during the lockdown in March 2020.

## GREEN FUNDING

Danish mortgage and commercial banks fully support the transition to a sustainable economy and fully acknowledge the financial sector's role and responsibility in underpinning this transition. Several mortgage and commercial banks have issued green bonds which fund green activities such as energy efficient buildings. And in 2020 Danish mortgage and commercial banks financed green assets with a value of more than DKK 460 bn, where the majority is funding of properties with EPC label A or B. Also, banks and mortgage lenders engage to a higher degree in dialogues with their customers about possible energy improvements when choosing property financing.

| | DENMARK 2019 | DENMARK 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 2.1 | -2.1 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 5.0 | 5.6 | 7.1 |
| HICP inflation (%) (1) | 0.7 | 0.3 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 60.5 | 60.8 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | 4.7 | 10.1 | -3.9 |
| Building Permits (2015=100) (2) | 123.2 | 99.9 | 117.1 |
| House Price Index – country (2015=100) (2) | 116.0 | 121.0 | 131.3** |
| House Price Index – capital (2015=100) (2) | 125.5 | 134.1 | 135.2** |
| Nominal house price growth (%) (2) | 2.8 | 4.3 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 258,799 | 266,256 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 55,707 | 57,055 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 170.5 | 173.8 | 70.8* |
| Gross residential lending, annual growth (%) (2) | 90.5 | -25.0 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 0.7 | 0.7 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## DENMARK FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Retail banks and mortgage banks. |
| **The market share of the mortgage issuances:** | Not available – data for residential reflect mortgage banks issuance only (not available for retail banks). |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Over the past twelve months, the proportion (for owner-occupied housing) has been the following:<br>• Retail banks 15%<br>• Mortgage banks 85% |
| **Typical LTV ratio on residential mortgage loans:** | For new loans for owner-occupied housing the LTV will normally be up to 80%.<br>For other new residential loans the LTV will normally be 60%. |
| **Any distinction made between residential and non-residential loans:** | The difference is whether you live in the house or not. |
| **Most common mortgage product(s):** | We have three typical types of loans:<br>• Loans with Fixed rate;<br>• Interest reset loans;<br>• Loans with variable rate with and without cap. |
| **Typical maturity of a mortgage:** | For new housing loans the maturity is normally 30 years. For business loan the maturity is typically 20 years. |
| **Most common way to fund mortgage lending:** | Covered bonds |
| **Level of costs associated with a house purchase:** | For new loans at DKK 1 mn (EUR 134,000) with fixed rate the following apply:<br>• Taxes going to state: Approximately DKK 17,000 (EUR 2,280);<br>• Costs going to the Mortgage bank: Approximately DKK 10,000 (EUR 1,340). |
| **The level (if any) of government subsidies for house purchases:** | The government doesn't have any role in house purchases. |

# Estonia

By Kaire Husu, Luminor Group

## IN A NUTSHELL

- GDP fell 2.9%, one of the smallest downturns in Europe
- The mortgage market continued to grow, outstanding housing loans increased by 6.6%
- Housing prices continued to rise
- Covered bonds worth EUR 850 mn were issued.

## MACROECONOMIC OVERVIEW

The economy contracted by 2.9% in 2020. The downturn was less than originally forecast, and, compared to other European countries, is one of the smallest decreases. IT and communications fared better than other sectors, their added value grew. The construction sector registered a similar result, although construction volumes decreased as a consequence of the outbreak but recuperated later in the year. Tourism, transport and entertainment registered significant decreases. The manufacturing sector performed surprisingly well during the year despite the decline in demand and complications in supply chains.

Consumer prices decreased by 0.6% partly driven by a fall in global oil prices, which put pressure on the prices of motor fuels. In addition the government lowered the excise duty rates for diesel, gas and electricity. Upward pressure resulted mainly from higher food prices.

Unemployment was 6.8% in 2020. Despite the growth in unemployment due to the pandemic, gross monthly wages increase by 2.9%.

In 2020 the Estonian government also provided the economy with support in the form of cheap loans. Government debt increased to 18% of GDP from 8% in 2019.

## HOUSING MARKETS

The housing market recovered rapidly from the initial shock of the pandemic and ensuing economic uncertainty. By the second half of 2020, the volume and average price of real estate transactions began to increase. Activity in the housing market and higher prices were driven by several factors, including demand for new houses, increased savings and rising income, low interest rates and the purchase of apartments for investment purposes. Despite the pandemic, household confidence, especially those with above average income, recovered in the second half.

At the end of 2020, Estonia had 730,000 dwellings marking a 0.8% increase from the 724,000 dwellings from the previous year.

Construction volumes decreased by 3%. The construction of dwellings had been rising since 2012. The number of completed dwellings was 7,579 units, a growth of 8% y-o-y. The majority (61%) of new dwellings are blocks of flats according to data of Statistics Estonia. The number of building permits issued increased by 10% compared to the previous year to 8,833. The number of transactions increased by 1.7% to 60,180.

House prices recovered rapidly after their temporary fall in spring. The average price is affected to some extent by the structure of transactions, where a larger share of new properties increased the average price. Data from Statistics Estonia shows that the dwelling price index increased by 6%. The price of apartments increased by 6.8% and of houses by 4.1%. The average price per square meter for an apartment in Tallinn increased by 4.9%. In the fourth quarter of 2020 the prices of apartments increased by 2% in Tallinn, by 9.1% in areas bordering Tallinn such as Tartu and Pärnu cities and by 5.4% in the rest of the country.

## MORTGAGE MARKETS

Increased activity in the real estate market and rising prices are reflected in the strong growth in housing loans. The mortgage market grew, by 6.6% to EUR 8,659 mn, the highest ever. This represented approximately 32% of GDP at year end. The average outstanding loan grew by 4.8% to EUR 45,802. Total housing loans grew at a faster rate than both GDP and household incomes, meaning that the debt burden of households increased.

Housing loans are offered in Euro and have a maturity of up to 30 years. The average interest rate fell to 2.48% by year end a 6 pps decrease from 2019. Borrowers can ask up to 85% of a property value with a standard contact structure and up to 90% if they qualify for the housing guarantee programme supported by government.

Mortgages are mainly granted by commercial banks, housing loans account for approximately 43% of the aggregate loan and lease portfolio of those banks, accordingly to Bank of Estonia. The banking sector is well capitalised and the quality of the housing loans remained good according to Bank of Estonia. Only 0.2% of housing loans are overdue by more than 60 days at yearend. The importance and volume of this type of loan reflects the preference of households for homeownership over renting.

### NON-MARKET LED INITIATIVES

The Estonian-FSA and Bank of Estonia continued to apply a risk-weight floor for mortgage portfolios in their entirety in banks which use internal ratings-based (IRB) approaches for credit risk. The 15% floor came into effect in September 2019. The weighted average risk weight on mortgage loans of those banks who use IRB has fallen over the past five years, and it was 12.8% by the end of 2020, according to data from Bank of Estonia.

To guide risk-taking lending activity of banks, the Bank of Estonia introduced requirements for local banks residential loans advances. These requirements which have been in place since 2015, set the maximum loan-to-value (LTV) of 85% – with the exception of the above-mentioned government support scheme which allows for 90% – , debt service-to-income (DSTI) of 50% and a maximum maturity of 30 years. The rules require banks to assess the borrowing capacity of the household in the event of interest rates of at least 6%, thus reducing the risk from rising interest rates. The Bank of Estonia has set up a limit of 50% of the DSTI ratio calculated in this way.

The Bank of Estonia applies macroprudential measures to prevent risks to the financial sector and to increase its resilience. It adjusts those measures regularly in response to financial and economic conditions. Credit institutions must comply with the following macroprudential requirements: (1) systemically important banks must maintain additional capital buffers of between 1% and 2% of risk-weighted assets; (2) banks using internal ratings-based method must apply the minimum risk weight floor for mortgages in their capital calculations; and (3) all banks must comply with borrower-specific requirements for issuing housing loans. In March 2020 the Bank of Estonia reduced the systemic risk buffer rate from 1% to 0% but maintained the countercyclical buffer, which is assessed mainly from the alignment of growth in the debt of the non-financial sector with that of the economy, at 0% and it does not consider it likely that the rate will be raised in the near future.

The Bank of Estonia monitors systemic risk in the housing market and can if necessary tighten the rules on issuing housing loans. More housing loans were issued last year than previously with a high loan-to-value ratio (LTV) of between 85% and 90% as the Bank of Estonia permits an exception where KredEx guarantees (government support) can be used to borrow up to 90% of the value. If the systemic risk from borrowing increases, it may limit this exception. Another suitable measure would be to limit the target groups for KredEx guarantees.

## MORTGAGE FUNDING

The lending policy of banks for housing loans did not change particularly in 2020. The most important source of funds for the Estonian banking sector continues to be deposits. As deposits have grown strongly in recent years, they have been sufficient to finance the demand for credit. The ratio of loans to deposits was 89% at the end of 2020.

The share of market-based funding increased slightly during the year. At year end in 2020, Estonian banks had EUR 850 mn worth of covered bonds outstanding, which were issued for the first time this year.

| | ESTONIA 2019 | ESTONIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 5.0 | -2.9 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 4.4 | 6.8 | 7.1 |
| **HICP inflation (%) (1)** | 2.3 | -0.6 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 82.4 | 81.7 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 11.5 | 14.9 | -3.9 |
| **Building Permits (2015=100) (2)** | 143.6 | 158.1 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 80.0 | 84.8 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | n/a | n/a | 135.2** |
| **Nominal house price growth (%) (2)** | -31.8 | 6.0 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 8,119 | 8,656 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 7,585 | 8,075 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 52.4 | 55.8 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 6.4 | -2.2 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 2.5 | 2.5 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## ESTONIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | No limitation to issuers, financial and non-financial entities can offer loans, however, the small market in Estonia means that there have always been few suppliers of housing loans. |
| **The market share of the mortgage issuances:** | Mortgage market consists mainly of commercial banks. In this context, competition among them has been always quite weak. In 2019, LHV Pank acquired private loan portfolio from Danske Bank and therefore increased its market share in the mortgage market. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Commercial banks hold the majority of outstanding mortgage loans. |
| **Typical LTV ratio on residential mortgage loans:** | Eesti Pank has set a LTV limit of 85%. |
| **Any distinction made between residential and non-residential loans:** | Not available |
| **Most common mortgage product(s):** | 30 year mortgage loan with floating interest rate. |
| **Typical maturity of a mortgage:** | Eesti Pank has set maximum mortgage maturity of 30 years. |
| **Most common way to fund mortgage lending:** | Commercial banks lending activities are covered mainly with domestic deposits. |
| **Level of costs associated with a house purchase:** | Not available |
| **The level (if any) of government subsidies for house purchases:** | KredEx offers loan guarantees with state guarantee for purchasing and renovating homes. Additionally, interest payments on loans can be partly subtracted from income tax payments. |

# Finland

By Mariia Somerla, Finanssiala

## IN A NUTSHELL

- → When the pandemics broke out, construction levels slumped but recovered rapidly and even surpassed pre-crisis levels in late 2020
- → Housing price levels fairly stable
- → New macroprudential tools under consideration for household debt

## MACROECONOMIC OVERVIEW

GDP fell 2.9% as a result of the COVID-19-induced financial crisis, less than the average euro area fall of 6.6%. It was affected especially by the services sector's falling value added due to the economic restrictions and cautious behaviour of consumers.

In the early weeks of the crisis, consumer confidence decreased, with private consumption decreasing by 5%. Consumers' confidence in their personal economy recovered faster from the first wave of the pandemic and maintained a relatively good level through the second wave later that year. As consumers spent less money on garments and services and were unable to travel abroad, they had more to save, invest and spend on domestic consumption. The aggregate amount of households' savings rose from EUR 1bn in 2019 to EUR 6.9 bn in 2020. Households' saving rate climbed to 5.7%.

According to preliminary data, exports totalled EUR 85 bn in 2020, a decrease of 11% and imports decreased by 12% compared to the previous year at current prices. The volumes of export and import both decreased 7%. The pandemic was reflected especially in diminished export and import of services.

When the pandemic broke out, the number of temporary lay-offs soared, rising most in April 2020 with 164,000 persons. After April, the number of lay-offs began to fall rapidly and levelled out at 60,000 persons at the end of the year. The employment rate was on average 71.6%, one percentage point less than the previous year.

The wages and salaries received by households fell in nominal terms by 0.4% to EUR 92.8 bn. Unemployment benefits paid in Finland increased by 38% to a total of EUR 5 bn.

In addition to central banks' monetary policy stimulus, many countries around the world resorted to lending to finance their economies during the global coronavirus-induced financial crisis. Finnish public sector entities' deficit was EUR 12.9 bn compared with EUR 2.4 bn in 2019. General government deficit was even bigger with EUR 13.4 bn (EUR 2.7 bn the year before). The aggregate deficit-to-GDP ratio of public sector entities was 5.4%. General government EDP debt, or consolidated gross debt, was 69.2% relative to GDP at the end of 2020.

## HOUSING MARKET

The majority of Finns (72%) live in homes that they own. More than half of those households have a housing loan. Around one third of households (28%) rent their houses, 14.8% of them at reduced rates due to government subsides and 13.6% at market rates.

The average size of a housing loan is EUR 102,240 (EUR 148,500 in greater Helsinki, EUR 81,700 elsewhere). A typical maturity for a new housing loan is 25 years and the average maturity is 20.8 years.

The effects of the pandemic were reflected in the housing market. When the crisis broke out, construction levels slumped but recovered rapidly and surpassed pre-crisis levels in late 2020. According to Statistics Finland, construction started on 40,900 new dwelling units, 8% more than in 2019. Slightly over 32,200 building start permits were granted, 4% more. A total of 39,600 building permits were granted, up 6%. The highest number of new building permits was granted in 2017 with close to 49,100 permits. The number of completed dwelling units was 10% smaller in 2020 with 39,000 units.

The number of apartments sold through estate agents was similar to 2019, but the coronavirus crisis affected the market's seasonal variation. Restrictions on foreign travel resulted in a highly active market for holiday homes in Finland. Strong polarisation continued, with big cities attracting more, especially young people, from rural areas, and also most immigration, both of which are reflected in house prices. In Helsinki metropolitan area, prices rose 3.5% y-o-y, while in the rest of Finland they went down by 0.7%. This averaged an increase of 1.4% for the whole country. In many rural areas the housing market is at a standstill and the transactions are almost non-existent.

## MORTGAGE MARKET

### MARKET DYNAMICS

New housing loans increased by 4.5% relative to 2019. At the end of 2020, total housing loans were EUR 103.6 bn (43.6% of GDP) a growth of 3.2%.

Compared with the rest of Europe, Finland has a particularly high proportion of variable interest rate residential mortgage loans. As much as 97% of new loans are linked to Euribor, most often to the 12-month rate. Due to the low level of Euribor indices, interest rates on housing loans are lower than average for the euro area at 0.69 % at year end, an all-time low.

Households' debt-to-income ratios rose and was 133% at the end of the year, low compared to other Nordic countries but above the EU average. Therefore, discussion about household indebtedness continues and new macroprudential tools – such as a ceiling for Debt-to-Income ratios and maximum maturities for mortgages – are being considered. The growth rate of debt is moderate, but the overall level of debt concerns authorities. The government is expected to present it's legislative proposal in autumn 2021.

The number of repayment holidays, in particular, swiftly increased in early 2020. In the course of the year, households and businesses applied for a total of more than 300,000 loan grace periods. The number of temporary lay-offs and the fast growth of unemployment were reflected in the number of applications. Unlike in some other EU countries, Finland has not had moratoria required by legislation or mutually agreed by the entire sector, and the granting of loan payment extensions has been left at each bank's own discretion. The average length of a repayment holiday was six months. Nearly all applications were accepted. During the second wave of the pandemic in the second half of 2020, the demand for new repayment holidays was significantly lower and returned to near normal levels. Extension applications to existing moratoria were also relatively few.

The quality of Finnish banks' credit portfolio has remained clearly higher than the European average throughout the crisis. Its ratio of non-performing loans (NPL) is still among the lowest in Europe. In the households sector it was 1.6% in 2020, 0.3 pps more than the previous year. In the corporate sector, the NPL ratio dropped 0.1 pps to 2.5%. Housing company loans' NPL ratio has stayed significantly smaller at about 1%.

### NON-MARKET LED INITIATIVES

The year was characterised by the pandemic and the supervisory responses it spurred. The Finnish Financial Supervisory Authority (FIN-FSA) made decisions to lower credit institutions' capital buffer requirements and to restore the maximum loan-to-capital (LTC) ratio for residential mortgage loans other than first-home loans to 90%. In addition, the FIN-FSA discontinued the minimum risk weight for residential mortgages for credit institutions using the Internal Ratings Based Approach tocapital calculations. The risk weight floor requirement expired on 1 January 2021.

## MORTGAGE FUNDING

Although deposits from households are the largest single source of funding for domestic banks, the sector's funding is also heavily dependent on market sources. Market-based funding accounted for 53% of the total after Nordea's move to Finland. However, the dispersion is high between credit institutions: some fund their operations almost entirely with deposits, whilst others, especially mortgage credit institutions, only issue covered bonds. The ratio of loans to deposits was 138% at the turn of the year, lower as a year earlier. The Euro area average is 96,3%. In Finland, there is no active RMBS market.

The Finnish banking sector stood well-capitalised in the face of the risks caused by the pandemic. The easing of macroprudential requirements had only a moderate influence on Finnish banks' capital adequacy, lending capacity and liquidity ratios. For example, Finnish banks were unable to apply EBA's guidelines regarding moratoria on loan repayments, because the grace periods granted voluntarily and independently by the banks did not fulfil the conditions specified in EBA's guidelines. As a whole, the Finnish banking sector has shown the adequacy of its capital and liquidity buffers as well as its strong resilience against crises.

| | FINLAND 2019 | FINLAND 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 1.3 | -2.9 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 6.7 | 7.8 | 7.1 |
| HICP inflation (%) (1) | 1.1 | 0.4 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 71.6 | 71.1 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | -4.2 | -2.5 | -3.9 |
| Building Permits (2015=100) (2) | 117.9 | 124.9 | 117.1 |
| House Price Index – country (2015=100) (2) | 103.9 | 105.1 | 131.3** |
| House Price Index – capital (2015=100) (2) | 126.9 | 132.5 | 135.2** |
| Nominal house price growth (%) (2) | 0.9 | 1.2 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 100,354 | 103,610 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 22,502 | 23,147 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 72.7 | 74.5 | 70.8* |
| Gross residential lending, annual growth (%) (2) | -0.8 | 13.0 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 0.7 | 0.7 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

***Sources:***
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## FINLAND FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Credit institutions |
| **The market share of the mortgage issuances:** | Credit institutions 100 % |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Banking groups hold 100% of the housing loan stock (Banking groups include mortgage banks as subsidiaries). |
| **Typical LTV ratio on residential mortgage loans:** | Loan-to-Collateral (LTC): First time buyers 80% (median, new loans) others 60% (median, new loans). |
| **Any distinction made between residential and non-residential loans:** | Not available |
| **Most common mortgage product(s):** | Housing loan |
| **Typical maturity of a mortgage:** | 25 years |
| **Most common way to fund mortgage lending:** | Deposits and covered bonds |
| **Level of costs associated with a house purchase:** | 2% transaction tax for apartments, 4% transaction tax for real estates (first time buyers are exempted from both). |
| **The level (if any) of government subsidies for house purchases:** | First time buyers are exempted from transaction tax. Interest expenses on housing loans are tax deductible up to 15 % (in 2020). |

# France

By Bertrand Cartier, Groupe BPCE (Banques Populaires-Caisses d'Epargne)

## IN A NUTSHELL

- → High level of transactions on existing properties with further house price increases.
- → Sharp drop in construction and new home sales, due to the pandemic.
- → Key role of low interest rates for the housing market.
- → At the end of 2020, the Haut Conseil de Stabilité Financière (HCSF) slightly relaxed its recommendation concerning credit standards. This measure will become binding during the second half of 2021.
- → Mortgage market remained dynamic and low risk, with low levels of Non-Performing Loans.

## MACRO-ECONOMIC OVERVIEW

During the pandemic, GDP decreased by 7.9% in 2020 (vs. an increase of 1.8% in 2019), which has impacted firm investments (-8%), household consumption (-7%) and investment (-12%), as well as imports (-16%) and exports (-12%). Inflation slowed to just 0.5% (vs. 1.3 % in 2019) and the unemployment rate fell slightly to 8% in 2020 (vs. 8.4% the previous year).

The public deficit jumped to 9% of GDP (vs. 3% in 2019), fueled by extraordinary measures taken by the government to support various economic sectors affected by the pandemic, avoid massive unemployment (wages were partially paid by the French state in case of partial unemployment), help households experiencing financial distress and, overall, spur the economy by means of specific economic, social and sanitary measures.

In the context of the pandemic, marked by falling investment and consumption, the household savings rate grew from 15% in 2019 to 21.4% in 2020.

With the health crisis, people spent more time at home with travel restrictions and the implementation of teleworking schemes encouraging a large part of the population to reinvest in their homes, leading to a large increase of renovation works, aimed at improving comfort, as well as lowering the energy bill.

## HOUSING MARKETS

House sales and prices remained dynamic for existing homes (more than 83% of the total number of annual transactions), due in part to low interest rates and changes in lifestyle choices of households. Conversely, new building sales and real estate developers were negatively impacted. The year was marked by very contrasting developments linked to the impact of the health crisis.

The number of transactions for second-hand dwellings fell by only 4% from the 2019 record level, to 1,024,000, well above the long-term average and peaks reached before the subprime crisis (less than 840,000 units annually). The average annual price increase was 5.6% nationally (vs. +3.2% in 2019), with much higher growth rates in major cities (including Paris with +7% and Lyon with +10%).

The environment was not supportive of new building activity including structural factors (scarcity and high cost of land, increase in construction rules, production costs, prolongation of local elections) and cyclical factors (supply difficulties, introduction of new sanitary measures, new construction standards, rise in the price of raw materials). With the additional impact of the pandemic, the number of housing starts fell by 13.4% y-o-y (to 389,100 units in 2020) and building permits by 8.8% (to 352,700 in 2020).

Sales by Individual house builders decreased to 114,900, down 8.5%. However, their number is still above the cyclical low reached in 2013-2014. In terms of demand, traditional customers for this segment (low-income households and first-time buyers) are generally more vulnerable in times of economic crisis. In terms of supply, the public objective of combating the artificialisation of soils (a direct consequence of urban expansion and the construction of new houses on the outskirts of cities) worsen tensions, as families still pursue to live in a house (aspiration reinforced by the recent periods of lockdown and the possibility of teleworking).

The number of newly built home sales (mostly flats) by real estate developers decreased by 23%, to 101,000 units. The supply of new-built homes decreased by 27%, reaching 84,000 units, with a particular drop in areas where the demand is very strong (linked to the lack of affordable land and difficulties obtaining permits). This downward trend already existed before the pandemic but worsened with the health crisis.

Construction of social housing was below the target of 110,000 units, with 87,500 units completed, down 17% compared to 2019. This took place as "HLM" companies (entities with special status and benefiting from public funding, responsible for the construction and management of social housing for low and intermediate-income households) were forced to merge or regroup in 2019. With more than 700 social housing companies, the government wants to consolidate this sector to strengthen their capacity to finance new housing and renovation work in a more constrained financial context.

The slow but continuous return (since 2016) of institutional investors in the housing market continued in 2020, supported by falling returns on traditional assets and low long-term financing costs. They invest mainly on intermediate housing (social housing devoted to households with intermediate incomes) and senior residences, two segments that are experiencing increasing demand from households.

## MORTGAGE MARKETS

### MARKET DYNAMICS

In light of the significant increases in transactions for existing homes and in housing prices, new home loans annually increased by 2.4% to EUR 252,4 bn. Excluding loan transfers and renegotiations, new housing loans for households reached EUR 193 bn in 2020, at a level similar to their previous record of 2019.

Loan transfers and renegotiations increased by 12% compared to 2019, amounting to EUR 60 bn. However, their share in the total of new home loans and their amounts are much lower than in the previous wave of renegotiation in 2015-2017. As shown by the average interest rate at 1.65% for the outstanding home loans with an initial term beyond 5 years, most loans have already been renegotiated at very low interest rates.

The dynamism of the home loan market was supported by very low interest rates and longer initial loan maturities at origination. Unlike the years 2008-2009 when rates rose, they remained very low with an average of 1.26% for fixed rates. This can be explained by low market rates and a fierce competition between banks. The average maturity at origination for new home loans in 2020 was 21.1 years, on a slowly increasing trend. This made it possible to continue to extend more loans while reducing the average ratio of Debt-Service-to-Income (DSTI), which stood for the year 2020 at 30.6%.

Because of higher repayments in the pandemic, the annual growth rate of total outstanding home loans slowed from 6.8% at the end of 2019 to 5.4%. The year 2020 taken as a whole, the two episodes of lockdown and the various measures taken by the French government to contain the pandemic have not really impacted the mortgage market.

### REGULATION

The rapid growth of home loans since 2015 has triggered concern from bank regulators. After the two buffers of equity added in 2018, the HCSF issued new standards in December 2019 for new home loans. The HCSF recommended banks to limit maturities to 25 years and Debt-Service-to-Income (DSTI) ratios to 33%. However, the HCSF allows up to 15% of loans from any lender to exceed these limits, with a larger share devoted to purchases of the main residence, especially for first-time buyers.

In 2020, the Non-Performing Loans ratio kept decreasing at a very low level (1.06% of the outstanding home loans, -14bps vs 2019), thanks to the exceptional measures of the French government and especially because borrowers are much less vulnerable than the average worker to the risk of unemployment. So few households applied for moratoria for their home loans. In June 2020 according to EBA's statistic, only 3.3% of the total home loans were concerned by a moratorium, versus 7.1% in Euro Area. Moreover, interest rates are fixed for the whole life of the loan in 99% of the cases. Housing loans are almost always amortizing and mostly backed by some form of security (97.5%), of wich 64% by guarantees provided by credit institutions or insurance companies. This system is similar to the mortgage insurance system, but it ensures a total guarantee of the loan, as opposed to mortgage insurance that only offers a partial guarantee. With cautious underwriting practices based on the analysis of borrower's creditworthiness rather than on the current or expected value of the underlying property, the quality of lending is structurally solid in France, as shown by the low and stable level of Non-Performing home loans over a long period of time.

In December 2020, the HCSF slightly relaxed the criteria announced in December 2019. The maximum DSTI ratio went from 33% to 35% and the maximum maturity from 25 to 27 years for new-built homes. In addition, the HCSF now accepts that 20% of new home loans may exceed these criteria, with a larger share granted for first-time buyers. But these rules will no longer be considered as a recommendation and should become legally binding from the second half of 2021.

### OTHER IMPORTANT EVOLUTION

The events 2020 reinforced the intent of banks to invest in a 100% digital credit granting process. Electronic signatures for mortgage loans are becoming the norm throughout the sale process.

New players, namely digital banks, entered the market, albeit with limited effect so far. Before March 2020, they could take market share mainly on low complexity files and up-market customers. Linked to the distance business relationship and the rise of digitalisation in sales by traditional banks after March 2020, these new players have seen lower origination of new loans compared to traditional banks.

In a context of a potential increase in interest rates, usury rules applied in France may slow down the production of new home loans. A loan is considered usurious when it exceeds the average APCR (Annual Percentage Rate of Charge) of the previous quarter by 33%. As rates are nominally very low, a small increase of interest rates during the following quarter or a costly insurance may signal a loan as "unjustifiably usury" without any real financial basis. This definition is difficult to be changed because any legislative adjustment in this area is politically sensitive.

## MORTGAGE FUNDING

As home loans are mainly distributed in by retail banks, they are mostly funded by deposits. The amount of global outstanding deposits of residents (households and firms) reached EUR 2,265 bn at the end of December 2020 (+15% vs. 2019), including EUR 1,107 bn on sight deposits (+25% vs. 2019).

This very strong annual increase in the savings of non-financial agents was caused by the atypical events of the year. On the one hand, households were not able to consume as much as usual due to the two lockdowns, store closures and uncertainties leading to precautionary savings. On the other hand, firms have benefited from massive financial support from the French state, including state guaranteed loans (with zero-interest rate for one-year loans), which have been largely saved to face future economic vagaries.

However, more diversified resources were used. Around 20% of the housing loans portfolio have been funded through mortgage-backed covered bonds.

## GREEN FUNDING

The energy renovation of buildings is one of the measures of the recovery plan proposed by the government to counteract the economic impact of the pandemic.

Launched at the beginning of 2020, "MaPrimeRénov" is a household aid for the main residence, that can finance insulation, heating, ventilation or energy balance work in a single house or in an apartment.

This tool illustrates the convergence between a public policy objective (fight against climate change) and the aspirations of households (to improve their home). Its amount depends on the resources of the household and the ecological gain allowed by the work.

It can be combined with a bank loan (such as the 0% loans dedicated to energy saving works) if the household does not wish to use its savings to finance the amount to be paid. The government is urging banks to encourage their customers to make the necessary transformations to reduce energy consumption and to increase the share of low-carbon energies (of wich renewable energies).

| | FRANCE 2019 | FRANCE 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 1.8 | -7.9 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 8.4 | 8.0 | 7.1 |
| **HICP inflation (%) (1)** | 1.3 | 0.5 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 65.1 | 64.1 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 1.8 | -12.5 | -3.9 |
| **Building Permits (2015=100) (2)** | 110.8 | 95.8 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 110.6 | 116.8 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 125.4 | 134.3 | 135.2** |
| **Nominal house price growth (%) (2)** | 3.2 | 5.6 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 1,078,000 | 1,136,990 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 20,513 | 21,542 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 70.6 | 73.7 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 21.4 | 2.4 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.4 | 1.3 | 2.1 |

* The aggregate EU figure is from 2019.

** Please note that this value is the simple average of the available values in 2020

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## FRANCE FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Today, about 380 credit institutions (including banks, mutual banks, municipal credit banks and special credit institutions) are approved by the French supervisory authority (ACPR), and listed in the register of financial officers (REGAFI). |
| **The market share of the mortgage issuances:** | The three main categories of credit institutions, involved in property lending, are in France:<br>• Private banks, whose market share decreased in 2020 (34.2% vs 38.1 in 2019) ;<br>• Mutual and coopérative banks, with an increasing market share (65.3% vs 60.5% in 2019) ;<br>• Specialised institutions with a lower market share (0.5% vs ; 1.4% in 2019). |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Six groups and their subsidiaries (3 Mutual, 1 Public and 2 Private) represent most of the lending.<br>Digital lending (Tel and Internet) is emerging with new players, but with still a limited market share. |
| **Typical LTV ratio on residential mortgage loans:** | In 2020, the LTV ratio was at 83.7%, down from 84.7% at the beginning of the year. |
| **Any distinction made between residential and non-residential loans:** | French banking regulation require a distinction depending on the purpose of the loan. Thus, applicable conditions differ for every kind of financed asset. |
| **Most common mortgage product(s):** | The most common product is a fixed-rate over the total duration of the loan. In 2020, 99.4% of the new credits were fixed-rate loans. 64% of loans are not with a registred mortage but with an insurance or a collateral by a specialised financial institution. |
| **Typical maturity of a mortgage:** | In 2020, the average term of real estate loans was 21.1 years (vs 20.8 years in 2019). |
| **Most common way to fund mortgage lending:** | Traditionally, the main sources of funding real estate lending in France are the households' and companies' deposits (even term deposits or on book ones) and bonds. |
| **Level of costs associated with a house purchase:** | In France, the purchase costs depend on the new or existing nature of the purchased house:<br>• Existing properties: 7-8% for transfer duties and 4-5% for real estate agencies fees;<br>• New properties: 2% for a new house (transfer duties only), plus VAT (20% except for social sales 5.5% and for some intermediate sales 10%). |
| **The level (if any) of government subsidies for house purchases:** | As regards new housing, the VAT may be affected by standard abatement.<br>Furthermore, the first-time buyer may benefit from a zero-percent loan (supplemented by the government), which can cover up to 40% of the global cost of the operation, depending on:<br>• the area (four areas are defined by law, according to the local real estate market situation: more or less stretched);<br>• the household composition and income.<br>Several other schemes exist to support low income buyer (PSLA: renting with option to buy or a new form of community land and trust).<br>Several incentives have been eliminated (APL, Epargne Logement) and the Zero percent loans has been significantly reduced. |

# Germany

By Thomas Hofer, vdp

## IN A NUTSHELL

- → Gross domestic product fell by 4.6%, significantly less than originally expected.
- → As a result of far-reaching support measures the labour market remained largely robust.
- → Stable household incomes, in combination with the favourable financing conditions, have meant that investment in housing remains attractive for private households.
- → Gross residential lending and the volume of loans outstanding follow a steady upward trend that was not interrupted by Covid 19.

## MACROECONOMIC OVERVIEW

In 2020, the German economy contracted more sharply than at any time since the financial crisis of 2009, with real gross domestic product (GDP) declining by 4.6%. Especially in the second quarter of 2020, it plunged into a deep recession with a seasonally and calendar-adjusted GDP decline of 9.7% compared to the previous quarter. There was a rebound effect in the third quarter with growth of 8.7%, but the momentum halted in the fourth quarter (+0.5%).

Far-reaching monetary and fiscal policy support measures prevented a deeper and longer-lasting economic slump. Despite the problems at the start of the year, a strong growth of 3.7% on average is expected for 2021, but this depends on the progress of the vaccination and the lifting of restrictions.

Despite the broader economic impact of the pandemic, the German labour market remains largely robust, as preliminary estimates showing a 1.1% year-on-year decline in employment to 44.8m. The unemployment rate (according to Eurostat) rose by 0.7 pps to 3.8%. Low-paid workers and the self-employed were particularly affected by the pandemic and subsequent lockdown measures, while the labour market for white-collar workers was mainly supported by short-time work.

Consumer prices in 2020 rose by 0.4%, less than at any time since 2009.

## HOUSING MARKET

Prices of residential properties increased also in 2020. The vdp property price index for single family houses rose by 7.6% and for condominiums by 6.7%. The index for owner occupied housing, which is based on these two indices, increased by 7.4%. In the 7 largest cities (Berlin, Hamburg, Munich, Cologne, Frankfurt a.M., Stuttgart and Düsseldorf), prices for owner occupied housing (condominiums and single-family houses) increased by 4.9%. As in the previous year, the price increases were less in the large cities.

In 2020, 306,000 dwellings were completed in Germany. This was 4.6 % or 13,000 more than in the previous year. Completions of both single-family houses and multi-storey residential buildings increased compared to the previous year. The increase that began in 2011 thus continued. At 369,000, the number of building permits in 2020 rose by 2.2 % compared to the previous year and was thus still significantly higher than the number of building completions. This has now resulted in a surplus of approved but not yet completed dwellings of 779,000 dwellings.

The number of transactions of existing properties also continued to increase despite the pandemic. In total, 630,000 single- and two-family houses, multi-family houses and condominiums changed owners in 2020, +25,000 or +4.1% than 2019. The value of those sales rose slightly due to the increase in prices.

Despite the difficult economic environment caused by the pandemic, demand for residential property remained high. This is largely due to the government measures to off-set the economic consequences of the pandemic, which largely helped stabilise private households' income. Moreover, there is an additional demand impulse due to an increase in the importance of one's own home also as a place of work. Furthermore, the financing conditions improved once again.

The housing market, which remains tight in many places, and persistently low interest rates have resulted in a continued high willingness to buy on the part of both owner-occupiers and capital investors. Residential property will also remain highly attractive to institutional investors due to the lack of investment alternatives and the low risk. Accordingly, a further increase in demand for residential properties can be expected for the current year.

## MORTGAGE MARKET

For several years, the growth of construction and transactions of residential property have both led to increases in residential mortgage lending. In 2020, gross residential lending rose to EUR 269.7 bn (+10.1% y-o-y). The volume of residential loans outstanding rose to EUR 1,629 bn, an increase of +6.5% on 2019.

Growth in mortgage lending reflects the high demand for houses and apartments. The underlying conditions for home-buying continued to be favourable in recent years and are attributable, not least, to economic growth (save for 2020) and expansive ECB monetary policy since 2010. As mentioned above, the positive labour market situation leads to sustained growth in positive household income. Furthermore, the slight increase in unemployment in 2020 did not have a significant impact on household income levels. In the current year, unemployment figures declined once more. In addition, financing conditions are increasingly favourable. The interest rate (effective interest rate, averaged across all interest rate fixed periods) for loans for house purchases fell from 4.5% at the beginning of 2009 to 1.5% in 2019. In 2020, the average interest rate for a residential mortgage loan fell further, averaging 1.25%.

The Association of German Pfandbrief Banks regularly conducts surveys on the structure of home ownership financing among its member banks. A key finding of the latest study was that, although house prices rose faster than households' net incomes, home ownership remained affordable, as the steady improvement in financing conditions meant that the debt burden to income ratio remained constant.

The study also showed that borrowers and banks were security-oriented. The initial repayment was significantly extended, so that the total maturity of the loans remained the same or even decreased. Borrowers also secured favourable financing conditions over long periods of time. The average fixed-interest period rose from 10 to 15 years between 2009 and 2019.

In the Eurosystem bank lending survey, significantly more German institutions said that they had tightened their credit guidelines and credit conditions in the course of 2020 than had relaxed them. The banks justified this because of the uncertainty regarding economic developments and borrower creditworthiness. Lending standards were tightened in the second quarter but from the fourth quarter onwards, they did not undergo any further tightening.

## MORTGAGE FUNDING

In Germany, the main funding instruments for banks for housing loans are savings deposits and covered bonds (Pfandbriefe).

Germany has one of the largest covered bond markets in Europe, representing a significant share of the total market. Both Mortgage Pfandbriefe and Public Sector Pfandbriefe increased in size as Pfandbriefe worth nearly EUR 60 bn were issued (2019: EUR 55 bn). At the same time, the primary market was strongly influenced by the effects of the pandemic and the ECB's measures. Thus, slightly more than half of the issued Pfandbriefe were retained due to their possible use as collateral for central bank liquidity and very favourable refinancing conditions at the ECB.

Mortgage Pfandbrief issuance was EUR 40 bn (EUR 42 bn in 2019), Public Sector Pfandbrief issuance was EUR 19 bn (2019: EUR 11 bn) and Ship Pfandbriefe accounted for EUR 0.5 bn. Therefore, the outstanding volume of Pfandbriefe increased to EUR 372 bn (EUR 364 bn in 2019). The volume of outstanding Mortgage Pfandbriefe increased from EUR 240 bn to EUR 246 bn over the year and Public Pfandbriefe increased from EUR 122 bn to EUR 123 bn. The remainder is accounted for Ship and Aircraft Pfandbriefe (EUR 2-3 bn).

## GREEN FUNDING

An ESG (Environmental, Social and Governance) Pfandbrief was issued in Germany in 2014 for the first time (EUR 300 mn). Since then German Pfandbrief banks have been very active in both green and social lending as well as issuing Green and Social Pfandbriefe. Several Pfandbrief banks offer a discount on mortgage loans if the building is energy efficient fulfilling pre-defined requirements. In 2019 Pfandbrief issuers under the umbrella of the vdp published minimum standards for Green Pfandbriefe. They include requirements for the energy efficiency of financed buildings based on the definition developed within the Energy Efficient Mortgage Initiative of the ECBC. The minimum standards take account of the initiatives formulated at EU level regarding the taxonomy for sustainable economic activities and the introduction of the EU Green Bond Standard. Moreover, the minimum standards oblige Pfandbrief banks to provide a high degree of transparency. Issuers are required to establish their own Green Bond Framework which must be based on the ICMA Green Bond Principles.

Pfandbrief banks are committed to the 2015 Paris Agreement limiting global warming to a maximum of two degrees centigrade. At the end of 2020 the amount of outstanding Green and Social Pfandbriefe was EUR 6.3 bn by five issuers with a clear focus on Green Pfandbriefe.

| | GERMANY 2019 | GERMANY 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 1.1 | -4.6 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 3.1 | 3.8 | 7.1 |
| **HICP inflation (%) (1)** | 1.4 | 0.4 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 51.5 | 51.1 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 4.0 | 3.3 | -3.9 |
| **Building Permits (2015=100) (2)** | 115.1 | 117.6 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 128.9 | 138.5 | 131.3** |
| **House Price Index – aggregate seven largest cities*** (2015=100) (2)** | 137.4 | 144.1 | 135.2** |
| **Nominal house price growth (%) (2)** | 6.8 | 7.4 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 1,530,434 | 1,629,423 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 22,045 | 23,449 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 70.9 | 74.9 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 7.6 | 10.1 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.5 | 1.3 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.
*** Aggregate index of the seven largest German cities.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## GERMANY FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | MFI's and Life Insurers |
| **The market share of the mortgage issuances:** | MFI's: 96%<br>Life Insurers: 4% |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | MFI's: 96%<br>Life Insurers: 4% |
| **Typical LTV ratio on residential mortgage loans:** | 81% (average for purchase of existing single family houses) |
| **Any distinction made between residential and non-residential loans:** | Type of use<br>(buildings with different types of use: predominant use) |
| **Most common mortgage product(s):** | Mortgage loans with fixed interest rates for about 10-15 years |
| **Typical maturity of a mortgage:** | About 25 years |
| **Most common way to fund mortgage lending:** | Deposits, mortgage covered bonds, other bank bonds |
| **Level of costs associated with a house purchase:** | Transaction costs vary by federal state because of different land transfer tax rates and if a real estate agent is involved or not. Overall, transaction costs can vary between 5% and 15% of the house price. |
| **The level (if any) of government subsidies for house purchases:** | In 2018 a grant scheme to support families building or purchasing homes for their own use has been introduced. With the so called "Baukindergeld" the government promotes families with children who want to buy a house or a condominium for their own use with EUR 12,000 per child, paid out in 10 annual instalments of EUR 1,200 each.<br><br>In order to receive the promotion, certain conditions must be met:<br><br>• There are children under the age of 18 living in the household,<br><br>• The household income is a maximum of EUR 90,000 per year for one child plus EUR 15,000 for each additional child,<br><br>• The purchase contract or the building permit has been signed or received between 01.01.2018 and 31.03.2021,<br><br>• The new home is the only residential property on the cut-off date.<br><br>The program follows the Home Ownership Allowance, with which the government supported the creation of home ownership between 1995 and 2005.<br><br>Besides that, the German states (Bundesländer) support home ownership within the scope of publicly assisted housing. Depending on the policy and cash balance of each State, several programmes are offered.<br><br>The KfW Förderbank (KfW promotional bank) offers promotional programmes for housing construction or modernisation and for first-time buyers. |

# Greece

By Calliope Akantziliotou[1], Bank of Greece | Reviewed by Evangelia Papapetrou, Bank of Greece

## IN A NUTSHELL

- → Economic activity dropped significantly due to the pandemic and associated restrictions. GDP[2] fell by 8.2% in 2020, as both domestic and external demand contracted, following three consecutive years of increases (2019: 1.9%, 2018: 1.6% and 2017: 1.3%).
- → In the housing market, prices continued to rise but at a slower rate; the price of apartments rose by 4.3% in 2020 (from 7.2% in 2019), under the pressure of the current health crisis on the property market activity.
- → In the commercial property segment, in 2020 prime retail prices rose by 2.1% against 7.0% in 2019 and prime office prices by 1.2% (3.9% in 2019).
- → The total stock of outstanding housing loans continued to decline, in 2020 by 2.7% (-3.4% in 2019) a rate which broadly remained unchanged in April 2021 (-2.8%).

## MACROECONOMIC OVERVIEW

Due to the pandemic, **real GDP** contracted by 8.2% in 2020, after three years of growth (2019: 1.9%, 2018: 1.6% and 2017: 1.3%), mainly due to the decline in exports of goods and services and in private consumption. Tourism activity dropped sharply due to the global spread of the disease and the restrictive measures implemented by most countries[3]. Furthermore, restricted or suspended operations of companies due to the measures, especially in the second and fourth quarter of the year, negatively impacted GDP mainly on goods and services. In particular, in 2020, GDP contraction was mainly due to lower exports of goods and services (-21.7%), imports of goods and services (-6.8%) and private consumption (-5.2%). Gross fixed capital formation dropped marginally by 0.6%. In Q1 2021, GDP fell by 2.3%, y-o-y, (seasonally adjusted data) due to the third wave of COVID-19 pandemic lockdown, but increased by 4.4%, q-o-q.

According to the projections of the Bank of Greece, in 2021 economic activity is expected to increase at a rate of 4.2%[4]. Economic activity in the second half of 2021 is expected to be supported by the start of projects under the EU-funded National Recovery and Resilience Plan and by the partial rebound of tourism revenues against 2020 revenue volumes.

Residential investment[5] grew for a third consecutive year (2020: 15.6%, 2019: 0.4% and 2018: 22.6%), whereas investment in total construction, in 2020, returned to growth at 10.7% after three consecutive years shrinkage (2019: -20.4%, 2018: -15.7% and 2017: -3.7%). The difference was mainly due to investment in "other" construction (non-residential construction and civil engineering) which grew by 9.2% in 2020 (2019: -25.2%, 2018: -21.3% and 2017: -3.2%). In Q1 2021, investment in construction (seasonally adjusted data) increased by 8.6%, y-o-y.

Employment[6] decreased by 0.9% in 2020, reversing increases of the previous years due to the pandemic and lockdown (2.2% in 2019); the unemployment rate, however, declined to 16.3% in 2020 against 17.3% in 2019 (2018: 19.3%, 2017: 21.5%) as flows of unemployed out of the labour force increased. Long-term unemployment (12 months and above) increased to 66.5% of the unemployed.

Inflation (HICP)[7] was -1.3% in 2020, after remaining positive for three consecutive years (2019: 0.5%, 2018: 0.8% and 2017: 1.1%), mainly due to significant decreases in crude oil prices and tourism-related services. In April 2021, inflation was -1.1%, y-o-y. Inflation in 2021 is expected to return to near zero levels because of higher crude oil prices, the carry-over impact of indirect tax cuts in 2020, and upward base effects.

The primary fiscal outcome in 2020 came in at a deficit of 7.5% of GDP (enhanced surveillance definition activated in 2018 by the EC for Greece). According to the Stability Programme 2021[8] , the general government primary outcome is projected at a deficit of 7.2% of GDP in 2021, recovering to a deficit of 0.3% of GDP in 2022 in the baseline scenario. The projection incorporates an extraordinary one-off expansionary fiscal package of 8.3% of GDP in 2021 unwinding to 1.1% of GDP in 2022, as a policy response to address the pandemic. General government debt, after peaking in 2020, is projected to decline to 204.8% of GDP in 2021 and further to 189.5% of GDP in 2022 due to the unwinding of the expansionary package and recovering economic activity.

## HOUSING AND MORTGAGE MARKETS

Under the unprecedented conditions created by the pandemic, 2020 was a year of significant changes in the real estate market, several of which are expected to persist and have long-term effects across different market segments. Although prices proved fairly resilient during the past year, the current health crisis has already had a twofold impact on the Greek real estate market. Firstly, previous strong market growth, which stemmed mainly from external investment demand and tourism, was halted. Secondly, new investment interest emerged for formerly low-activity market segments and locations (e.g. logistics) as a result of fundamental changes in customers' and users' needs and habits.

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1 The views expressed are solely those of the author and should not to be interpreted as reflecting the views of the Bank of Greece.

2 Hellenic Statistical Authority (ELSTAT): non-seasonally adjusted data at constant prices.

3 Source: Bank of Greece – Border Survey. Revenues generated by tourism activity dropped approximately by 80% in 2020 and amounted approximately EUR 4 bn against EUR 18 bn in 2019. (https://www.bankofgreece.gr/en/statistics/external-sector/balance-of-payments/travel-services)

4 Bank of Greece: Governor's Annual Report 2020/06.04.2021: https://www.bankofgreece.gr/en/news-and-media/press-office/news-list/news?announcement=27183b77-7e27-4419-acbc-56ab03a10dd9

5 Source: ELSTAT, non-seasonally data at constant prices.

6 Source: ELSTAT - Labour Force Survey (LFS).

7 Source: ELSTAT.

8 Greece – Stability Programme 2021: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/european-semester-timeline/national-reform-programmes-and-stability-or-convergence-programmes/2021-european_en

With the prospect on the recovery on market activity levels from the second half of 2021, the market is currently on hold. However, investment activity both for prime commercial and prime residential uses is still present, as a result of attractive yields and expectations for further capital gains after the end of the pandemic.

In 2020, according to the Bank of Greece apartment prices index, there is a gradual slowing down of price growth rates, compared to the previous year. More specifically, based on residential valuation data collected from credit institutions, nominal apartment prices, country-wide, increased for a third consecutive year (at 4.3% in 2020 compared to 7.2% in 2019 and 1.8% in 2018). In each quarter of the year 2020, there was a gradual deceleration of the annual rate of price increase (6.7%, 4.3%, 3.7% and 2.5%). In particular, in Q4 2020, amid the second lockdown, a marginal decrease in nominal apartment prices for the entire country was recorded (-0.7%) compared to the previous quarter. The prices of "new" apartments (up to 5 years old) in 2020 increased at an annual rate of 4.7% enhanced more compared to those of the "old" apartments i.e. over 5 years old (4.0%). The highest annual growth rates in apartment prices were seen in Athens (7.6%) and Thessaloniki (4.8%). However, a significantly slower growth rate was recorded in other semi-urban and rural areas (1.6%), while a marginal increase (0.1%) was recorded in other cities. In Q1 2021, apartment prices increased, on average, by 3.2%, y-o-y, for the entire country (5.4%, y-o-y, in Athens, 3.7% in Thessaloniki, 1.1% in other cities and 0.5% in other areas of Greece).

The strong performance of the residential real estate market in 2019 was significantly restrained in 2020 due to the pandemic and lockdown, as reflected in the Golden Visa Programme transaction data[9], the limited net capital inflows from abroad to purchase Greek property, the reduced number of housing transactions[10] and the lower investment interest especially in short-term leases. More specifically, based on Bank of Greece data, for 2020, net foreign direct investment in real estate was EUR 874.9 mn, compared to EUR 1.45 bn for 2019, recording a fall of 39.6%. Nevertheless, real estate remains a significant beneficiary of foreign direct investment, 28.0% of the total for 2020, compared to 32.3% for 2019. In Q1 2021, net foreign direct investment in Greece for the real estate market amounted to EUR 214.0 mn, compared to EUR 230.7 mn for 2020, reduced by 7.3% compared to Q1 2020 (share in total foreign direct investment: 23.6%). According to the latest available data from ELSTAT, the number of real estate sales[11] increased for a fifth consecutive year in 2019, with a 21.5% growth rate (to 96,662 transactions), against 13.9% in 2018 and 15.3% in 2017. However, due to the pandemic, in 2020, a considerable fall in transactions is expected. Meanwhile, the index of business expectations in construction[12] turned positive in 2020 (7.9%) after remaining unchanged in 2019 (0.0%). It improved further in the first five months of 2021 (93.3%, y-o-y), yet, the index of business expectations for dwellings in the first five months of 2021 kept declining on an annual basis (-14.0%, y-o-y), continuing the negative outlook of the previous year (2020: -19.9%), although a positive trend, on a monthly basis, has been recorded in the last three months from March to May 2021.

During the pandemic, the housing market showed signs of resilience, as depicted by the annual growth rates in prices and the real estate developments as recorded in the ELSTAT data. In particular, in 2020, housing construction activity continued to increase nationwide compared to 2019, both in terms of number and of building volume (in cubic meters) of new building permits (13.2% and 18.2% respectively), while the annual growth rates in Athens were higher (27.6% and 23.0% respectively). In the first two months of 2021, construction activity in dwellings continued to increase nationwide, in terms of building volume, with an average annual equivalent increase of 4.9%, while in the region of Athens, the corresponding increases were slightly higher (6.5%). Meanwhile, residential investment (at constant prices) increased by 15.6% in 2020, compared to 0.4% in 2019, but still remains low as a percentage of GDP (1.0%). In Q1 2021, residential investment increased by 2.7%, y-o-y (0.9% of GDP).

It is expected that the impact of the pandemic will vary across different locations, types of uses and property classes and specifications, which in turn is expected to diversify medium and long-term recovery prospects across the Greek property market. The house market mainly driven, in the past three years, by prime locations and investment in residential property, is still expected to increase in coming years, although the impact of the pandemic could be heavier for the lower-quality market sector, which was less active even before the pandemic.

## MORTGAGE FUNDING

The total stock of housing loans outstanding continued to decline, by 2.7% in 2020 (-3.4% in 2019) a rate which broadly remained unchanged in April 2021 (-2.8%). Bank interest rates on new and outstanding housing loans remained unchanged up to April 2021 compared with the average rate for 2020. In particular, rates on new housing loans[13] in April 2021 were 3.1% (2020: 3.1% against 2019: 3.3%) and the corresponding rate on outstanding housing loans with an initial maturity of over 5 years stood at 2.0% (2020: 2.0% and 2019: 2.1%).

According to the latest available data of the Bank Lending Survey for Greece (Q1 2021), terms and conditions and credit standards for loans to households have been largely unchanged since a moderate tightening in Q3 2015. The proportion of rejected loan applications for housing loans decreased moderately in Q3 2018, followed by a small increase in Q4 2018, and has remained unchanged since then. For Q2 2021, banks expect credit standards for loans to households to remain unchanged and the demand for loans to households to increase slightly.

Since the Greek sovereign debt crisis in October 2009, private sector deposits have decreased by EUR 65.8 bn (end-April 2021). Deposit outflows between December 2014 and June 2015 (private sector deposits were reduced by EUR 43 bn) ended with the imposition of capital controls (end-June 2015) and the agreement on the third Economic Adjustment Programme (August 2015) and since then, private sector deposits have increased by EUR 53 bn (up to April 2021). During the pandemic crisis, private savings improved and corporate bank credit increased. In April 2021, deposits placed by the private sector increased by EUR 3.0 mn compared to the previous month; the annual growth rate increased to 14.7%. Since May 2020, deposits placed by the private sector increased by EUR 21.6 bn. Bank deposits of the non-financial private sector increased as a result of higher precautionary savings, a postponement of consumer and other spending, the use of moratoria on loan and tax obligations, direct State aid and other policy measures to support the liquidity of firms and households.

[9] The Golden Visa Programme allows the granting of residence permits to third country nationals and to members of their families, who purchase real estate property in Greece, the value of which exceeds EUR 250 td. Source: https://www.enterprisegreece.gov.gr/en/greece-today/living-in-greece/residence-permits.

[10] Source: Ministry of Finance – General Secretariat of Information Systems for Public Administration - Real Estate Transactions Valuation Register. Data are available up to May 2021.

[11] ELSTAT data collected by notaries throughout the country; including all real estate categories of residential and commercial properties (dwellings, retail, offices, building plots, etc).

[12] Source: Foundation for Economic and Industrial Research (IOBE) data, according to the Business and Consumer Survey report (http://iobe.gr/ec_situation_en.asp).

[13] Including charges.

In the last four years foreign direct investment has risen (EUR 4.5 bn in 2019, EUR 3.4 bn in 2018 and EUR 3.1 bn in 2017) with the real estate contributing significantly, especially in 2019 and 2018 (32.3% in 2019 and 33.5% in 2018, against 13.4% in 2017). However, due to the pandemic, foreign direct investment was reduced in 2020 (EUR 3.1 bn) with the real estate contributing still significantly (28.0%).

Central Bank funding of Greek banks increased from EUR 7.7 bn in December 2019 to EUR 41.2 bn in December 2020. This significant increase is attributable to the participation in the TLTRO-III operations (given their favorable terms and conditions) and the collateral easing measures adopted in response to COVID-19 (in particular the decision to render Greek Government securities eligible as collateral for Eurosystem credit operations). Moreover, Greek banks have issued EUR 1.0 bn Tier 2 instruments and EUR 500 mn MREL eligible instruments. All these have been used to decrease their cost of funding, enhanced their capital position and participate in new lending.

| | GREECE 2019 | GREECE 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 1.9 | -8.2 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 17.3 | 16.3 | 7.1 |
| HICP inflation (%) (1) | 0.5 | -1.3 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 73.5 | 75.4 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | 0.4 | 15.6 | -3.9 |
| Building Permits (2015=100) (2) | 130.9 | 149.7 | 117.1 |
| House Price Index – country (2015=100) (2) | 105.4 | 109.9 | 131.3** |
| House Price Index – capital (2015=100) (2) | 110.4 | 118.7 | 135.2** |
| Nominal house price growth (%) (2) | 7.2 | 4.3 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 52,707 | 46,133 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 5,947 | 5,204 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 43.0 | 38.2 | 70.8* |
| Gross residential lending, annual growth (%) (2) | 2.4 | 2.4 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 3.1 | 2.9 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## GREECE FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | All credit institutions authorised in Greece under the Law 4261/2014, Directive 2013/36/EU. |
| **The market share of the mortgage issuances:** | Confidential information |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Confidential information |
| **Typical LTV ratio on residential mortgage loans:** | Not available |
| **Any distinction made between residential and non-residential loans:** | The distinction is made by the reporting agents themselves. |
| **Most common mortgage product(s):** | Mortgages with floating rate |
| **Typical maturity of a mortgage:** | Not available |
| **Most common way to fund mortgage lending:** | Deposits |
| **Level of costs associated with a house purchase:** | Taxation on property:<br>• For house purchase, transaction tax is at 3%.<br>• Capital gains tax levied on property-selling owners (equal to 15% of the difference between the acquisition price and the selling price, progressively depreciated depending on the holding period of the property). Note that the application of this law is frozen up to the end of 2022 (Law 4646/2019). |
| **The level (if any) of government subsidies for house purchases:** | For house purchase, there are no government subsidies. |

# Hungary

By Gyula Nagy, Takarék Mortgage Bank Plc

## IN A NUTSHELL

- A payment moratorium was introduced in March 2020 for both for retail and corporate clients, initially until December 31, 2020 then extended until end of September 2021.
- The National Bank of Hungary (NBH) started a mortgage bond purchasing program in May in 2020,
- In November 2020, the NBH announced that it will launch a green covered bond program in 2021,
- In 2020 more than 98% of the newly issued mortgage loans had medium or long term fixed rates
- House prices increased by 9.1% in 2020.

## MACROECONOMIC OVERVIEW

GDP was 5% lower than in the previous year. From the production approach the value added fell by 6.7% in agriculture, 4.8% in industry, 9.4% in construction and by 4.8% in services. The value added of services decreased by 5.7% in total. The highest decreases were registered in accommodation and food service activities (-51.1%) and transportation and storage (-20.0%)

Based on expenditure, the actual final consumption of households fell by 2.6%, while government consumption increased by 2.0%. Gross capital formation decreased by 8.1% compared to the previous year.

In trade of goods, exports were 9.6% and imports 3.8% larger than a year earlier. Within the external trade of the economy, the exports of services (including tourism) dropped by 25.8% and imports by 13.1%.

Average gross earnings was HUF 403,600 in 2020, 9.7% higher than a year earlier.

The unemployment rate was 4.3% in 2020 in the 4$^{th}$ quarter compared to 3.4% in the same period of the previous year.

On average for the whole year, consumer prices rose by 3.4%. The main drivers of inflation were food, alcohol and tobacco.

The price of services grew by 2.9 %, consumer durables by 1.4% and household energy was 0.3% more expensive. Hungary posted a budget deficit of 9% of the GDP in 2019. The public debt to GDP ratio was 80.4% at the end of the year.

## HOUSING MARKETS

With a population of 9.79 mn Hungary had a stock of 4.474 mn housing units at the end of 2020. The home ownership ratio is around 91%, a ratio which is traditionally high compared with other EU countries. The preferential VAT rate (5% instead of 27%) on newly built dwellings was due to expire at the end of 2019, but was extended.

In 2020 the number of building permits granted was 22,556, down from 35,123 in the prior year. Besides the pandemic, this reduction can also be explained by the fact that, until the announcement of the reinstatement of preferential VAT, developers were less optimistic of the succes of new residential housing projects.

The number of housing completions peaked in 2020 at 28,158, the growth of finished dwellings was almost 33 % compared to the previous year.

As regards the housing market in Budapest, 6,341 new homes were completed in 2020. This figure represents ca. 22% of all housing completions in Hungary. The number of newly issued building permits fell significantly compared to the previous year in the capital (6,355), yet itrepresented approximatly 28% of the total issued building permits (22,556).

According to the Takarek House Price Index, house prices were 9.1 % higher compared to 2019.

In recent years prices in Budapest and the bigger cities (Debrecen, Szeged) increased above the national average. Price growth has been exceptionally high in Budapest. This trend reversed in 2020 when house prices increased by just 3.4% compared to 22% in in 2019.

A similar trend was observed in another large city, Szeged, where following 27% price growth in 2019, the growth rate fell to 4% in 2020.

According to the figures of the Hungarian National Bank the number of housing transactions was 138,700, about 15,5% less compared to the previous year.

## MORTGAGE MARKETS

### MARKET DYNAMICS

Gross residential lending grew by a moderate yearly rate of 2% in 2020 down from a 7% year-on-year increase in 2019.

The total volume of outstanding mortgage loans grew at a faster pace 7% than in the previous year (4%). This was mainly caused by the payment moratoria, that was available from March 2020 until the end of the year for private and corporate debtors. In case of residential mortgage loans, about 43 % did not amortize during the period, as the debtors could suspend their annuity payments thanks to the moratoria.

The proportion of outstanding residential loans compared to GDP is still very low in Hungary (even compared to regional neighbouring countries) at around 8.4%. Mortgage loans can only be originated in HUF (foreing currency or FX lending was banned earlier in Hungary) and around 98% of new mortgage loans were based on a fixed interest rate during the year.

The average annual interest rate on newly disbursed mortgage loans was around 4.56%. The most typical mortgage product in 2020 was the mortgage loan with interest rate fixed for a period of 5 to 10 years. Mortgage loans offered with a floating rate up to 1-year in the period represented less than 2% of all the loans issued in 2020.

According to the Financial Stability Report of the Hungarian National Bank, by the end of 2020 the ratio of household loans overdue for more than 90 days was only 3% (4.2 % at the end of 2019). This decline was supported by the expanding loan portfolio and continuous portfolio cleaning. The payment moratoria introduced in March 2020 also helped to keep th NPL ratio low.

### NON-MARKET LED INITIATIVES

Based on the Government's decision, the repayment obligation of all loan debts disbursed up to 18 March 2020 were automatically suspended from March until end of 2020, without any request, in order to mitigate the negative economic effects of the pandemic. The interest payments missed because of the moratorium were not cancelled; that is, customers must pay them in equal instalments after the expiry of the moratorium. Furthermore, the instalment to be paid must not increase following the expiry of the moratorium; instead, the residual maturity of the loans will be extended. Debtors not using the moratorium had to inform their creditors in writing or electronically. Due to the continuing effects of the pandemic on the economy, the Government decided to extend the payment moratorium by further 9 months in two steps at the end of 2020. In December 2020, all household loans outstanding under the moratorium accounted for 54% (approx. HUF 3,400 bn) of the eligible loans as of 18 March 2020.

The moratorium was a significant factor to help mortgage debtors bear the pandemic situation. In the meantine,2020 also saw the implementation of Home Purchase Subsidy and Prenatal Baby Support Schemes, which were aimed at aiding young families and maintaining housing market demand.

### ANY FURTHER IMPORTANT EVOLUTION

The pandemic had a significant effect on the housing market in the second quarter of 2020, when housing transactions fell by 34% on a yearly basis. The number of sales and purchases fell even more drastically in Budapest (49%). By summer, the number of transactions had returned to mid-2019 levels. The housing market subsequently returned to normal in the the second half. In the 4th quarter some new measures were introduced to supplement the existing home purchase subsidiy programs.

## MORTGAGE FUNDING

The largest portion of mortgage loans are deposit-funded , but covered bonds are also a commonly used source of funding. Act No. XXX. on Mortgage Banks and Mortgage Bonds, approved by the Hungarian Parliament 1997, contributed significantly to the establishment of the covered bond market and provided support to establish a mortgage bond market from the year 2000 onwards.

In April 2017 a new regulation (Mortgage Funding Adequacy Ratio) issued by the National Bank of Hungary entered into force. According to which, commercial banks are obliged to refinance at first 15% of their outstanding long-term mortgage loans with long term securities. The ratio was increased to 20% in October 2018 and later changed to 25% as of 1st October 2019. By 2022, the ratio is expected to increase to 30%.

There are 5 mortgage banks operating in the Hungarian market.

In 2020 in light of the pandemic, the Central Bank announced a covered bond purchase program. This started in May in 2020 with the aim of stimulating frozen capital markets. By means of this programme the NBH bought mortgage bonds on the primary and secondary markets at preferential rates between May and November. In November, the NBH announced the end of the bond purchase program but at the same time announced the start of its new green mortgage bond program.

## GREEN FUNDING

The Hungarian mortgage banks OTP Mortgage Bank and Takarék Mortgage Bank, both joined the Energy Efficient Mortgages Initiative (EEMI) in the autumn of 2020.

The Central Bank of Hungary , a member of the Advisory Committee of the EEMI since 2019, announced in November 2020 that it will start a Green Covered Bond Purchase Program in 2021.There were sovereign and also corporate Green Bond issues in 2020 , but the first Green Covered Bond issuance will occur most probably in H2 of 2021.

| | HUNGARY 2019 | HUNGARY 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 4.6 | -5.0 | -6.0 |
| **Unemployment Rate (LSF). annual average (%) (1)** | 3.4 | 4.3 | 7.1 |
| **HICP inflation (%) (1)** | 3.4 | 3.4 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 86.0 | 91.7 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 7.0 | 16.6 | -3.9 |
| **Building Permits (2015=100) (2)** | 280.6 | 180.2 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 186.6 | 203.6 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 213.1 | 220.3 | 135.2** |
| **Nominal house price growth (%) (2)** | 18.4 | 9.1 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 13,715 | 13,321 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 1,701 | 1,653 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 16.7 | 17.0 | 70.8* |
| **Gross residential lending. annual growth (%) (2)** | 4.8 | -5.6 | 4.9 |
| **Typical mortgage rate. annual average (%) (2)** | 4.9 | 4.6 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021. Statistical Tables.*

## HUNGARY FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Banks, specialised mortgage banks, savings cooperatives, home savings banks, financial companies (mortgage houses) can issue mortgage loans in Hungary. |
| **The market share of the mortgage issuances:** | In proportion to the total volume, commercial banks issued 57%, mortgage banks 32.2%, home savings cooperatives 10.8% of the new mortgage issuances. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Commercial banks hold 58.1%, mortgage banks 29.5%, home saving cooperatives 12.4% of the total outstanding mortgage loan portfolio. |
| **Typical LTV ratio on residential mortgage loans:** | The typical LTV ratio of the newly disbursed residential mortgage loans is around 60%. |
| **Any distinction made between residential and non-residential loans:** | In the residential loan portfolio, the so-called "housing loans", are loans that aim at financing the acquisition or purchase of a house or flat. In the residential mortgage loan portfolio, "home equity loans" are also included when the purpose is to get a loan with a mortgage on the already existing home property. "BTL mortgages" at present are included also in the residential loan portfolio, and statistically are not registered separately. |
| **Most common mortgage product(s):** | The most typical mortgage product is the housing loan granted by commercial banks and mortgage banks (purpose is the purchase of a flat or house). Home equity loans are much less popular now than before the GFC. |
| **Typical maturity of a mortgage:** | Average maturity for a mortgage loan was 15.6 years in 2020. |
| **Most common way to fund mortgage lending:** | The most common way to fund mortgage lending is funding from deposits, but since April 2017, commercial banks must adhere to a new regulation introduced by the National Bank of Hungary. The regulation prescribes that a certain proportion of all outstanding residential mortgage loans must be funded or refinanced by mortgage bonds. As of October 2019, this ratio increased to 25%, remaining at this level in 2020. |
| **Level of costs associated with a house purchase:** | A transfer (stamp duty) tax of 2-4% is to be paid by the buyer to the National Tax and Customs Administration. (The rate of duty is 2% until 4 Mio HUF than 4% up to HUF 1 bn (EUR 2.9 mn) per property. Buyers may be entitled to certain reliefs.<br><br>Legal fees may range from 0.5-1% of the property price, usually paid by the buyer.<br><br>When the property is sold through a real estate agency, a further 3-5% is generally paid by the seller.<br><br>Buying a newly built flat is again subject to preferential VAT payment of 5% (instead of the 27% VAT applied on most consumer prices and services) The easing of the preferential VAT payment was prolonged until 2023. |
| **The level (if any) of government subsidies for house purchases:** | For families with three or more children, a lump sum subsidy of HUF 10 mn and a further HUF 10 mn subsidised loan with a max 3% interest rate is available, when they purchase a new home. The purchase of homes with a previous owner in certain small settlements (about 2,500 countrywide) can also be a subject of this subsidy, up to 50% of the purchase price.<br><br>The Home Purchase Subsidy helped stimulate the house purchase possibilities for families Lastly, the "Prenatal Baby Support" program (unsecured interest free loan facility of up to HUF 10 mn) quickly became popular as well, and it also had a positive impact on the home purchase activity of First Home Buyers (mainly young couples).<br><br>The volume of subsidised home purchase loans in the outstanding housing loan portfolio increased form 14% in 2019 to 16% in 2020. |

# Ireland

By Anthony O'Brien, Banking & Payments Federation Ireland

## IN A NUTSHELL

- → Covid-19 pandemic and public health measures took a heavy toll on the economy
- → Public and private sector support measures reduced the impact on businesses and consumers
- → Housing supply remains below levels required and restrictions reduced output
- → House sales and rental prices continue to rise due to the mismatch between supply and demand
- → Mortgage lending declined during 2020 but rebounded strongly in the second half of the year driven by lending to first-time buyers (FTBs)

## MACROECONOMIC OVERVIEW

The COVID-19 pandemic and the public health restrictions aimed at limiting its spread took a heavy toll on Ireland's society and economy. The economic impact varied over time depending on the restrictions in place and on the sector of the economy.

Traditional measures of economic output show that COVID-19 had a significant but uneven impact on the economy. Gross domestic product grew by 3.4% boosted by growth in industry (especially manufacturing) and information and communication services, according to preliminary data from the Central Statistics Office (CSO).

Sectors providing services that rely on face-to-face contact were hit hard, especially the hospitality sectors (hotels, restaurants, bars and cafes), personal services (such as hairdressers or beauticians) and arts and entertainment sectors. Most of these were forced to close for much of the year with the tightest restrictions in the periods March to May and October and November.

Modified final domestic demand, which excludes globalisation effects such as trade in intellectual property and aircraft leasing, dropped by 5.4%, with personal consumption and investment down by 9% and 8.5%, respectively.

The seasonally adjusted unemployment rate rose from 5% in February to 6.8% in September before falling back to 5.7% in December. Substantial government supports, especially the employment wage subsidy scheme for employers and the pandemic unemployment payment (PUP) for workers, helped to absorb some of the impact of the reduced business activity on workers' incomes. By year end, the adjusted unemployment rate (including PUP recipients) was 20.4%. The combination of increased social protection support and reduced consumer spending resulted in a huge increase in household gross savings by EUR 13.7 bn or almost 95% to EUR 28 bn.

Consumer price inflation, as measured by the harmonised indices of consumer prices (HICP) according to Eurostat, was negative through much of 2020 ending the year at -0.5%.

## HOUSING MARKET

The housing and mortgage markets were surprisingly resilient although activity fell sharply after the initial COVID-19 restrictions were imposed in late March. Demand for housing remained strong and earnings were not affected in sectors where employees were able to continue to work from home or in businesses categorised as essential and able to continue operating.

The shortage of supply of new homes remained the key issue. The medium to long-term requirement for new building is estimated to be approximately 25,000 housing units per annum nationally, of which around 7,000 units are in Dublin.

New housing completions fell by 1.9% to 20,676, according to the CSO. Sharper declines were recorded in Dublin (down by 12.1%) and the Mid-East region, i.e. the four counties surrounding Dublin (down by 9%). There was a significant shift from scheme house building (multi-unit development with two or more houses) to apartment building. Apartment completions rose by 45.6% y-o-y in Q4 2020 and by 14.5% in the full year to more than 4,000. Dublin drove the continuing surge in apartment building, accounting for almost 80% of the increase. By contrast, scheme house completions, which are concentrated in the east of the country, fell by 6.3% year-on-year in 2020 to 11,725. Scheme house completions in Dublin and the Mid-East region fell by 29.5% and 8.1%, respectively.

Housing starts fell by 17.3%, or almost 4,600 units, to fewer than 21,700. In the Mid-East and county Cork there were about 1,800 and 1,200 fewer units commenced, respectively.

CSO annual data shows that residential property prices rose for the eighth successive year, although the rate of housing price inflation slowed further to 0.3%. Residential property prices in Dublin fell by 0.5% while prices outside Dublin rose by only 1.1%. Nationally, apartment prices grew faster than house prices at 1.6% and 0.5%, respectively.

Excluding simple property transfers, sales fell by 16% to 38,010, the lowest level in a calendar year since 2014. Dublin suffered the steepest decline, with sales down by 22.1% y-o-y to 11,305. Within that, new property sales in Dublin fell by 27.5% to 2,355.

Elsewhere, sales fell by 15.7% in the counties Cork/ Galway/Limerick/Waterford and by 14% in the Mid-East region.

Non-household buyers (such as companies, housing charities and government) increased their share of market purchases of residential properties to 23.3%, up from 21.5% in 2019 and 11.6% in 2014. Conversely, household investment in property (not for occupation) accounted for 10.6% of market purchases, down from 12.1% in 2019 and 20.6% in 2014.

The national standardised rent level rose by 2.7% year-on-year in Q4 2020 to EUR 1,256, according to the Residential Tenancies Board (RTB). The rental market is dominated by Dublin, which accounted for 45.2% of the registered tenancies at Q4 2020, up from 41.5% a year earlier. Only 9.2% of tenancies agreed were for less than EUR 1,000 per month, compared with 64.1% outside Dublin, according to the RTB.

The annual rise in standardised rent levels in Dublin was 2.1% to EUR 1,759. Legislation was introduced in 2016 aimed at slowing rent increases through rent pressure zones, where rents would only be allowed to rise by up to 4% annually. By year end, 88 of the country's 166 local electoral areas were designated as rent pressure zones.

## MORTGAGE MARKET

### MARKET DYNAMICS

Mortgage drawdown activity fell in volume terms by 16.8% to 35,617 drawdowns, and in value terms by 12.3% to almost EUR 8.4 bn. There were almost 43,200 mortgage approvals with a total value of just over EUR 10.3 bn, down 12% and 6.7% in volume and value terms, respectively. The number of approvals was the lowest since 2017.

The first-time buyer (FTB) segment was the most resilient with drawdowns falling by 12.6% to about 18,800, followed by re-mortgage or switcher mortgage drawdowns which fell by 15%. Mover purchase drawdowns fell to their lowest level since 2014.

Total residential and commercial mortgage debt outstanding to banks, including those that have been securitised, shrank to about EUR 90.5 bn at year end from about EUR 92.8 bn a year earlier, according to the Central Bank of Ireland (CBI). When non-banks are included the value of mortgage debt outstanding fell from EUR 115.2 bn to EUR 113.3 bn, while the number of accounts dropped by 2.1% to about 828,000.

Some 35.7% of the value of credit institution housing loans was on tracker rates linked to the ECB base rate by year end. The value of those outstandings had more than halved since Q4 2013. The share of outstanding mortgages on rates fixed for over one year increased from 30.2% to 36.7%. Some 77% of the value of new mortgage loan agreements were on fixed rates of greater than one year.

The number of mortgage accounts for private dwelling home (PDH) in arrears of more than 90 days fell to 5.3% of all PDH mortgage accounts by yearend, the lowest proportion since Q3 2010. Some 13.1% of buy-to-let (BTL) mortgage accounts were in arrears of more than 90 days, the lowest level since the data series began in Q3 2012.

Lenders, through Banking & Payments Federation Ireland ('BPFI'), had put in place payment breaks on about 151,000 residential mortgage, consumer credit and SME lending accounts by the time applications closed at the end of September. Some 82,000 residential mortgage accounts had payment breaks, including almost 9,000 for BTL mortgage accounts. Most payment breaks had expired by late October and returned to full repayments. BPFI data indicates that by the end of December fewer than 3,000 accounts still had active payment breaks.

Mortgage lenders actively assist borrowers who experience repayment difficulties, which is demonstrated by the fact that 10% of all PDH accounts and 11.1% of all BTL accounts had an active restructure by the end of 2020.

### NON-MARKET INTERVENTIONS

The CBI maintained its loan-to-value (LTV) and loan-to-income (LTI) limits for new mortgage lending in 2020 without changes. CBI research indicates that the average LTV for FTBs increased in to 81.9% from 81.1%, while the average LTI was unchanged at 3.1. For second and subsequent buyers (SSB), who are mostly home movers and exclude buy-to-lets, the average LTV fell to 67.8% from 68.1%, while the average LTI was also unchanged at 2.6.

The CBI permits lenders to provide a portion of borrowers with loans that have LTIs and LTVs higher than the limits where borrowers can get loans with LTVs or LTIs that exceed the limits. CBI research indicates that borrowers with these allowances were more likely to be from Dublin (especially for LTI allowances) and younger. Borrowers with SSB LTV allowances tended to have higher incomes than those without allowances, while those with FTB LTI allowances had lower incomes that those without.

The government Help to Buy (HTB) tax rebate scheme allows FTBs to use refunded deposit interest and income tax to help finance new home purchase or building, with claimants accessing up to EUR 20,000 towards the deposit for a new home. The maximum refund was increased to EUR 30,000 or 10% of the purchase value in 2020. The enhanced relief will be available until the end of 2021. By the end of 2019, almost 23,200 HTB claims had been made, of which more than 22,700 were approved. The value of approved HTB claims had reached nearly EUR 369 mn by the end of 2020. Some 24% of the approved HTB claims were for self-builds.

## MORTGAGE FUNDING

Banks in Ireland rely mainly on retail funding sources (household and corporate deposits) for mortgage lending. The surge in deposits during the Covid-19 pandemic resulted in a sharp drop in the average loan-to-deposit ratio, which fell from 111.9 in Q4 2019 to 95.9 a year later, according to the European Central Bank's ESRB Risk Dashboard, the first time it had fallen below 100. Private sector deposits (mainly from households and non-financial corporations) rose by 17% y-o-y to EUR 260 bn at the end of 2020. Household deposits alone represented almost 26% of total liabilities for credit institutions with a domestic market focus.

Some EUR 16.8 bn in mortgages outstanding were securitised at the end of 2020 according to the CBI.

Mortgage covered bonds outstanding in Ireland fell from EUR 17.1 bn in 2016 to EUR 16.4 bn in 2017. Some EUR 3.3 bn in new mortgage covered bonds was issued during 2017.

## GREEN FUNDING

Some banks in Ireland provide discounted fixed interest rates on mortgages secured on residential properties with higher energy efficiency ratings, based on the National Building Energy Rating. The availability of the discounted rates vary depending on the bank.

| | IRELAND 2019 | IRELAND 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 4.9 | 5.9 | -6.0 |
| Unemployment Rate (LSF). annual average (%) (1) | 5.0 | 5.7 | 7.1 |
| HICP inflation (%) (1) | 0.9 | -0.5 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 70.3 | 68.7 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | -1.4 | -7.2 | -3.9 |
| Building Permits (2015=100) (2) | 300.8 | 341.4 | 117.1 |
| House Price Index – country (2015=100) (2) | 134.3 | 134.8 | 131.3** |
| House Price Index – capital (2015=100) (2) | 125 | 124.3 | 135.2** |
| Nominal house price growth (%) (2) | 2.4 | 0.4 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 81,637 | 80,891 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 22,045 | 21,498 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 69.9 | 65.7 | 70.8* |
| Gross residential lending. annual growth (%) (2) | 9.4 | -12.3 | 4.9 |
| Typical mortgage rate. annual average (%) (2) | 2.9 | 2.8 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021. Statistical Tables.*

## IRELAND FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Credit institutions (mainly banks) as well as non-bank retail credit firms/home reversion firms. |
| **The market share of the mortgage issuances:** | The market shares of different entity types are not published for competition reasons. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Non-bank lenders accounted for 14.4% of the number and 18.2% of the value of residential mortgages outstanding at the end of 2020, according to the Central Bank of Ireland. They held 12.8% and 26.9% of the number of principal dwelling home (PDH) and buy-to-let (BTL) mortgages outstanding, respectively, at the end of 2020. Non-banks include retail credit firms, which are non-deposit taking regulated lenders, and unregulated loan owners. |
| **Typical LTV ratio on residential mortgage loans:** | The mean average LTV ratio for first-time buyer mortgages in Ireland was 81.9% in 2020 according to the Central Bank of Ireland, up from 81.1% in 2019. The average LTV for subsequent private dwelling home (PDH) buyers was much lower at 67.8% in 2020, down from 68.1% a year earlier. BTL LTVs rose to 60.3% in 2020 from 58.5% in 2019. Note: These figures exclude the 9% of loans that were exempt from the Central Bank of Ireland's macroprudential regulations in H1 2020, including switcher loans (with no additional lending) and loans in negative equity. |
| **Any distinction made between residential and non-residential loans:** | Residential mortgage loans include loans for residential property purchase (both for owner-occupation and buy-to-let), as well as re-mortgage or switching between lenders and top-up or equity withdrawal. Non-residential mortgages include commercial mortgages, where finance is provided for the purchase of a business premises. Where legal entities manage a number of buy-to-let properties, these may be treated as commercial entities rather than residential buy-to-let but this categorisation is at the discretion of the lender. |
| **Most common mortgage product(s):** | The standard variable rate mortgage for home purchase, based on the French amortisation profile, has traditionally been the most popular product among new customers, but the value of new mortgage agreements with fixed rates has exceeded those on floating or up to 1 year fixed rates in each of the past three years. In 2019, some 73.1% of the value of new mortgage agreements were on initial fixed rates over one year. By the end of 2019, some 39.1% of the value of mortgages outstanding were on tracker rates mainly linked to the ECB base rate while the rest was split between floating/one year fixed and greater than one year fixed rates. |
| **Typical maturity of a mortgage:** | For first-time buyers the mean term for a mortgage is about 29 years. For second-time home buyers it is about 24 years. |
| **Most common way to fund mortgage lending:** | Retail deposits are the main source of funding for mortgage lending, but covered bonds and residential mortgage-backed securities are also important. |
| **Level of costs associated with a house purchase:** | Legal fees related to the purchase of the property are estimated at EUR 1,000-2,000. Buyer surveyor fees range from EUR 250 to EUR 1,000. Estate agent fees vary between 1% and 2% of the purchase price. VAT is charged on the sale of new residential properties. Stamp duty is charged on the VAT-exclusive price and is levied at 1% on the first EUR 1 mn (1% of the total if the VAT-exclusive price is up to EUR 1 mn) and 2% any amounts above EUR 1 mn. |
| **The level (if any) of government subsidies for house purchases:** | Eligible FTBs can receive tax refunds for purchases of new properties under the Help to Buy scheme. The total value claimed under the scheme (since July 2016) reached EUR 243 mn in 2019. |

# Italy

By Marco Marino, Italian Banking Association – ABI

## IN A NUTSHELL

→ GDP fell by 8.9% due to COVID-19; according to early indications, in 2021 Italy's GDP will show a significant recovery.

→ A set of national measures have been taken to respond to the emergency caused by the pandemic and to support the economic recovery, including temporary moratoria on loans

→ The residential mortgage market continued to grow: new loans increased by 6.5% Y-o-Y

→ The number of transactions decreased, due to the spread of COVID-19 which limited the possibility of signing notarial deeds in the first part of 2020

→ The "Super bonus 110%" introduced to deal with the COVID-19 emergency, which incentivises certain energy works, including energy efficiency, has been extended in general to June 2022 (and to June 2023 for public housing).

## MACROECONOMIC OVERVIEW

GDP fell by 8.9%, its largest contraction since the Second World War, due to the pandemic. According to early indications, in 2021 GDP will show a significant recovery.

This has caused by various factors:

- The decline in global economic activity has been reflected in the drop of exports, which negatively impacted GDP by -1.4%. Firms' activity contracted significantly, but the public interventions succeeded in alleviating the repercussions on liquidity. Tourism was among the sectors hit hardest by the pandemic due to the anti-contagion restrictions and it affected GDP performance by -1.5%. As occurred during the global financial crisis and the sovereign debt crisis, firms made substantial cuts in their investments owing to the uncertainty created by the pandemic. However, unlike in the previous recessions, various surveys estimate that a large swathe of firms appears to be ready to resume investing once the health situation has improved solidly, thanks in part to very favourable financing conditions.
- The impact of the restrictions on economic activity and the strengthening of the precautionary measures on the GDP performance is estimated to have been more than -6%, mainly caused by contraction in consumption (down by 10.7%). The decline in consumption reflected the drop in disposable income and investments, but also a very significant increase in the propensity to save in a context of considerable uncertainty. These elements affected GDP by about -2%. The effects of the crisis on the financial conditions of households were mitigated by the Government's income support measures, accommodative monetary policy and debt moratoriums. The accommodative and expansionary monetary policies and fiscal measures supported GDP by more than 2%: net borrowing rose to 9.5% of GDP, from 1.6% in 2019.

The number of employees decreased by 2.1% and the total hours worked fell 11%, as consequences of the pandemic, but the recourse to the existing social safety nets and the emergency measures helped to mitigate the negative effects.

Inflation was slightly negative on average in 2020, reflecting the fall in energy prices and the repercussions of the crisis on domestic prices (food prices were an exception) and of wage stagnation.

## HOUSING MARKETS

Residential housing market transactions decreased, after the positive and ongoing trend since 2014, with a peak in 2016. Transactions amounted to about 558,000, a decrease of 7.7% on an annual basis.

This reflected the period of inactivity in the market, due to the spread of COVID-19 which limited the possibility of signing notarial deeds. In the fourth quarter of 2020, transactions grew again.

The most significant decrease in the volume of transactions was in the South (-9%) and the Islands (-9.2%), which represent together about the 25% of the market; the lowest decrease was in the North East (-6.3%).

The fall was bigger in the provincial capitals (-11.4%) than the other smaller cities (-5.7%). In particular, the contraction is over 13% in the main eight major provincial capitals. Milan, which in 2019 registered the best performance among the major cities, in 2020 recorded a decrease of 17.6%, followed by Bologna, Florence, Naples, Turin and Palermo; housing transactions decreased by about 10% in Rome and Genova.

According to preliminary estimates of the Italian National Institute of Statistics (ISTAT), the Housing Price Index increased by 1.6% y-o-y. This increase was due both to the prices of new dwellings, which grew by 1.7% and existing dwellings which increased by 1.4%.

The pandemic accelerated the widespread use of payment instruments other than cash and modified the preferences of households in the real estate market, increasing demand for larger homes, with terraces or gardens.

## MORTGAGE MARKETS

### MARKET DYNAMICS

The residential mortgage market continued to grow: outstanding residential loans reached EUR 391.5 bn in 2020 (+2.1%) and new loans (EUR 76.3 bn by the end of the year) recorded a new growth (+6.6%).

Housing transactions with a mortgage amounted to about 273,000 units. Considering the total number of houses purchased, those with mortgages represent about 51%, an increase of 1.5% with respect to the previous year.

The average mortgage amount increased to about EUR 130,000 (up EUR 4,000 with respect to the previous year): the maximum value is confirmed in the Central areas, with an average of EUR 145,000 (almost EUR 167,000 in the major cities).

The average maturity slightly increased to 23.5 years (from 23.1 years in 2019) and is similar in all areas.

Interest rates on short term loans and those with a maturity over 1 year continued to reduce from already low levels. Rates on short term loans (with maturity <1 year) decreased to 1.29% (1.37% at the end of 2019) while rates on loans with a maturity over 1 year decreased to 1.24% (1.46% at the end of 2019). The average rate on new transactions for house purchasing decreased to 1.25% (1.44% at the end of 2019). In this particular context, borrowers confirmed their preference for fixed-rate mortgages.

### NON-MARKET LED INITIATIVES

The measure introduced at the end of 2019 to encourage the renovation of the building external wall has been extended to 2021 ("Building External Wall Bonus". This consists of a tax credit equal to 90% of the expenses incurred in 2020 and 2021, without a maximum. The work can be carried out on the structures visible from street level. This incentive is applicable on existing buildings in certain zones. The deduction is divided into 10 equal annual instalments.

The "Restructuring Bonus" which provides a deduction of 50% for reformation and renovation expenses carried out on private properties and on the commonly owned parts of condominiums has also been extended to 2021. In detail, those who renovate their property can take advantage of a 50% personal income tax deduction up to a maximum of EUR 96,000 per property unit. The deduction is divided into 10 equal annual instalments, starting in the year in which the expenditure was started.

For both initiatives, instead of the direct use of the deduction, the Decree-Law no. 34 of 19 May 2020 introduced – as part of the Covid-19 recovery measures – the possibility for beneficiaries to opt alternatively for (i) an the invoice discount, consisting in a contribution of equal amount advanced by the supplier who carried out the work and recovered by them as a tax credit, that may be transferred to other parties, including banks and other financial intermediaries, or (ii) the conversion of the amount corresponding to the deduction due into a tax credit that may be transferred to other entities, including banks and other financial intermediaries.

The Italian banking sector is strongly committed to support families and companies in the realization and financing of investments which can be eligible for these measures. Italian banks have set up internal units and teams dedicated to these operations.

### ANY FURTHER IMPORTANT EVOLUTION

A set of national measures have been taken to respond to the pandemic, including temporary moratoriums on loans. The Italian banking sector is strongly committed to ensure that Italian Institutions measures to support families and companies affected by the coronavirus outbreak are correctly and quickly applied.

The scheme consists of legislative and non-legislative measures.

Important changes have been introduced to "the Mortgage Solidarity Fund for first-time buyer" (also known as the "Gasparrini" Fund) active from April 2013. This Public Fund allows borrowers to submit to the bank that provided the loan for the purchase of the first-home, the request to suspend payment of the entire instalment, for a total of 18 months, if specific events occurred (death, serious injuries, loss of job). A Decree of March 2020 also added the following events: (i) suspension of work for at least 30 days; or (ii) reduction of working hours for at least 30 days. The suspension is granted for loans up to EUR 250,000, whose holder has an indicator of the equivalent economic situation (ISEE) not exceeding EUR 30,000 (a proxy for annual income). The applicant must declare that the immovable property securing the financing is "first house" and it is not classified in the Real Estate public registry as a luxury house.

The Fund has been extended until 31 December 2021 to: (i) self-employed workers, professionals and individual company who self-certify a decrease, in the quarter after 21st February 2020 and before the suspension request, in turnover of more than 33% in the last quarter of 2019, as a result of COVID-19, (ii) those who exceed the annual income of 30,000 EUR and (iii) loans up to EUR 400,000. Furthermore, the Fund has been extended for a period of 24 months from 9th April 2020 to mortgage loans that have been originated for less than a year.

The non-legislative moratoriums have been regulated by specific agreements signed between ABI and consumer and business associations.

In particular, in April 2020 ABI signed a memorandum with consumer associations which allows borrowers to submit to the bank the request to suspend for up to 12 months, payment of the loan principal of (i) mortgages guaranteed by collateral on non-luxury properties (both residential and not residential) granted before 31 January 2020 (ii) unsecured loans with instalment repayment granted before 31 January 2020, if certain conditions are met.

In December 2020, ABI extended the memorandum. The new memorandum allows borrowers to request suspension for up to 9 months, payment of the entire instalment or of the loan principal of (i) mortgages guaranteed by collateral on non-luxury properties (both residential and not residential) (ii) unsecured loans with instalments repayment, if certain conditions are met.

According to the preliminary data from 22 October 2021, it was estimated that the existing outstanding debt moratoriums to households and NFCs amount approximately to EUR 62 bn, equal to 23% of all the moratoriums granted since March 2020 (approximately EUR 270 bn). This amount refers to approximately 560,000 applications.

The Italian banks have also launched individual voluntary measures to support families and companies damaged by the Coronavirus outbreak, such as new financing programmes to cover SMEs and self-employed cash needs, and simplify the procedures related to signatures of financing agreements.

## MORTGAGE FUNDING

Total funding (resident customers deposits and bonds) grew about 8.0% y-o-y (+4.7% in 2019). Deposits (current accounts, certificates of deposit, repurchase agreements) increased by 10.5% (+5.8% in 2019), while bond funding growth rate decreased by 8,3% (-1.9% in 2019).

A total of approximately EUR 26.1 bn of Italian covered bonds was issued. The total level of outstanding was approximately EUR 175.2 bn. Approximately EUR 1 bn of securitisations were issued.

## GREEN FUNDING

In 2020, new fiscal measures were introduced to deal with the Covid-19 emergency with incentives for certain energy works, including energy efficiency, photovoltaic and electric vehicle charging columns and for seismic risk reduction

In particular, the rate of the deduction was increased to 110%, if the expenses are incurred between July 2020 and December 2021 subject to minimum technical requirements. The Budget Law 2021 provided the extension of "Super bonus 110%" to June 2022 with some improvements to extend the scope of the benefit. Recently, the Decree Law n. 59/2021 on the measures for the Complementary Fund to the National Recovery and Resilience Plan (NRRP) has provided the extension of "Super bonus 110%" for public housing up to June of 2023, with the possibility of further extension to December of 2023 if certain conditions are met, and up to December of 2022 for condominium (apartment buildings).

The tax deduction can be converted into an invoice discount or a tax credit that may be transferred to third parties, including banks and financial intermediaries, as with the "Building external wall Bonus" and "Restructuring Bonus".

The Italian banking sector is strongly committed to support families and companies in the realization and financing of investments connected with the "Super bonus 110%". Italian banks have set up internal units and teams dedicated to these operations.

| | ITALY 2019 | ITALY 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 0.3 | -8.9 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 10.0 | 9.2 | 7.1 |
| **HICP inflation (%) (1)** | 0.6 | -0.1 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 72.4 | 72.4 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 1.7 | -8.5 | -3.9 |
| **Building Permits (2015=100) (2)** | 128.4 | 114.4 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 98.5 | 100.4 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 87.5 | TBD | 135.2** |
| **Nominal house price growth (%) (2)** | -0.1 | 1.9 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 383,515 | 391,515 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 7,633 | 7,798 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 32.3 | 33.9 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 5.5 | 6.6 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.4 | 1.2 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## ITALY FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Banks and financial intermediaries. |
| **The market share of the mortgage issuances:** | More than 95% of new mortgage loans are issued by banks. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Data no available. |
| **Typical LTV ratio on residential mortgage loans:** | Data no available. |
| **Any distinction made between residential and non-residential loans:** | Residential loans are loans granted for house purchase and renovation. |
| **Most common mortgage product(s):** | Fixed interest rate mortgage loans to purchase residential real estate. |
| **Typical maturity of a mortgage:** | 20-25 years. |
| **Most common way to fund mortgage lending:** | Given Italy's universal banking model, there is not a specific funding source for mortgage lending. That said, the most common funding technique is by means of unsecured bank bonds which, in turn, also represents the most common way for funding mortgage lending. For major Italian banking groups, covered bonds recently started to play an increasing role as a funding source for mortgage lending. |
| **Level of costs associated with a house purchase:** | Data not available. In addition to costs relating to taxation on transfer, the main costs are related to real estate brokerage agency (if present), and notary costs. The real estate taxation in Italy affects both direct (on income and capital) and indirect (on transfers and contracts) taxes and depend on the players involved (individuals or companies) and on the nature of the properties (land, buildings, commercial or residential). |
| **The level (if any) subsidies for house purchases:** | Regarding taxation, homeowners can benefit from some fiscal advantages for the "first home" purchase, which consist of smaller indirect taxes below the ordinary value. With reference to public guarantees on residential loans for house purchase, in 2014 the "First home mortgage guarantee fund" entered into force. The public Fund has a budget of about 650 million and will offer guarantees on mortgage financing for an estimated amount of EUR 14 bn. |

# Latvia

By Andrejs Semjonovs, Bank of Latvia

## IN A NUTSHELL

- → Impacted by the pandemic, the economy contracted by 3.6%.
- → Policy support (for instance, furlough benefits, tax deferrals for businesses, grants) stabilized economic confidence and disposable income and prevented a steep increase in unemployment.
- → The residential real estate market has overall been resilient with gradual recovery of price growth as of end-2020.
- → After the initial shock in April-May 2020 new residential mortgage lending increased significantly.
- → Domestic deposits dominate the funding of banks.

## MACROECONOMIC OVERVIEW

The economy contracted by 3.6% (s.a.), with uneven sectoral developments. The decrease was smaller than average for the Euro area as the first wave was relatively contained and the share of the industries worst affected by containment measures (accommodation, food services and arts and entertainment) is relatively small.

Due to social restrictions, elevated uncertainty and precautionary attitudes the decline of private consumption by 9.9% (s.a.) drove the decrease of the GDP. It also triggered a drop in imports and a build-up of savings while the policy support (for instance, furlough benefits, tax deferrals for businesses, grants) stabilized confidence and disposable income and prevented a steep increase in unemployment that picked up to 8.1% in 2020 (s.a.).

Gross fixed capital formation remained relatively close to the level of 2019 (-0.4% y-o-y, s.a.) with total investment in buildings and structures growing, while declining by 2.6% (s.a.) in dwellings. Total exports declined less than imports, exports of goods grew by 5.3% y-o-y (s.a.) supported by temporary factors in agriculture, forestry and wood-processing industries in H2and demand for electronics and electrical equipment remaining stable. Exports of services (most notably transportation and travel) posted a double-digit decline.

Annul average HICP inflation slowed to 0.1% y-o-y, mainly shaped by energy-related commodity price developments. Latvia's general government budget deficit widened reaching 4.5% as overall economic activity decreased and the EU fiscal rules' flexibility during the crisis as well as favourable borrowing conditions allowed the government to provide Covid-19-related support measures. The government debt rose to 43.5%, remaining, however, at a sustainable level.

## HOUSING MARKETS

The residential real estate market has been resilient overall to the pandemic. After a sharp drop in the second quarter, activity quickly rebounded and remained buoyant throughout the second half of the year (the number of property purchases was 11% higher than in the second half of 2019), and in Jan-Feb 2021, when the spread of COVID-19 increased and stricter containment measures were introduced, decreased much more moderately than during the first wave of the pandemic. The demand was supported by purchases postponed in spring 2020, growing total household savings, and to a lesser extent – the introduction of state subsidies for families with at least three children.

Buoyant market activity supported the gradual recovery of real estate price growth – while price growth slowed through most of 2020 it started to recover in the last months. Prices overall grew by 3.5% in 2020 (9.0% in 2019), according to the Central Statistical Bureau's data. For Soviet-era standard apartments in Riga, prices decreased moderately (by around 1%) throughout April-October 2020, while price growth for new projects remained robust.

Given the increase in the level of total household savings (household bank deposits rose by 12.9% in 2020) and the gradual recovery of economic activity this year, real estate market activity has the potential to grow further, putting upward pressure on prices. Preliminary data indicates that activity has been buoyant in March-May 2021, while price growth remained moderate (prices overall grew by 2.8% in Q1 2021 compared to Q1 2020). Overall, however, there are no clear signs of imbalances in the real estate market at this stage. House price growth has slowed in 2020, price-growth was more moderate than average wage growth, household indebtedness remained among the lowest in the EU, total household debt standing at 21.0% of GDP in 2020 (20.4% in 2019).

## MORTGAGE MARKETS

### MARKET DYNAMICS

Residential mortgages outstanding increased by 1.6% in 2020 (excluding one-offs), whilst commercial mortgages decreased. After the initial Covid-19 related shock in April-May new residential mortgage lending increased significantly. The demand for private houses and relatively expensive apartments has increased. The positive trend in mortgage lending is in line with stable or improved financial condition of relatively high-income households and is also related to high confidence of borrowers. New origination continues to be facilitated by low interest rates and the state housing guarantee program (in 2020, 47% of new residential mortgages were issued within this program).

### NON-MARKET LED INITIATIVES

After a short, but significant tightening of lending standards and conditions, the LTV of new residential mortgage loans have returned to pre-Covid levels. LTVs for 27% of new loans exceeded 90% in Q4, mainly related to the state housing guarantee program. Total residential mortgage loans still amount to only 14.0% of GDP and overall household indebtedness was low (household debt to MFIs and leasing companies was at 18.4% of GDP). Interest rates on residential mortgage loans was broadly unchanged in 2020 (2.62%).

### ANY FURTHER IMPORTANT EVOLUTION

The quality of bank loan portfolios continues to improve – as of end-2020, loans over 90 days past due comprised 2.1% of total domestic loans and 1.4% of residential mortgage loans.

## MORTGAGE FUNDING

Credit institutions in Latvia obtain funding mostly from domestic retail and non-financial corporations deposits and some banks participated in TLTRO III operations. Latvian credit institutions are not active in the financial markets as a source of funding. Domestic deposits as a source of funding continued to grow and at the end of 2020 was 62.7% (compared to 60.2% the year before) of banks' total liabilities, while the share of liabilities to foreign parent MFIs (mostly Nordic parent banks) was 3.1% (6.5% in 2019) as parent banks closed their funding gaps and domestic loan to deposit ratio reached 73.8% (84.1% in 2019). In 2020, there were no mortgage covered bonds issued by Latvian MFIs.

| | LATVIA 2019 | LATVIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 2.0 | -3.6 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 6.3 | 8.1 | 7.1 |
| HICP inflation (%) (1) | 2.7 | 0.1 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 81.6 | 80.2 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | -3.2 | -2.3 | -3.9 |
| Building Permits (2015=100) (2) | 135.6 | 121.8 | 117.1 |
| House Price Index – country (2015=100) (2) | 139.9 | 145.8 | 131.3** |
| House Price Index – capital (2015=100) (2) | n/a | n/a | 135.2** |
| Nominal house price growth (%) (2) | 8.2 | 4.2 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 4,177 | 4,178 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 2,676 | 2,699 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 22.5 | 22.0 | 70.8* |
| Gross residential lending, annual growth (%) (2) | 21.3 | 0.0 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 2.7 | 2.6 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## LATVIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Credit institutions, credit unions and non-bank financial institutions can issue mortgage loans in Latvia. |
| **The market share of the mortgage issuances:** | Not available |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | The mortgage market is significantly dominated by mortgage loans issued by banks. |
| **Typical LTV ratio on residential mortgage loans:** | According to Latvian legislation, LTV cannot exceed 90%. For the participants of the state support programme for house purchase and construction, the upper LTV limit is 95%. |
| **Any distinction made between residential and non-residential loans:** | The distinction is based on the loan issuing purpose (defined by Latvijas Banka's Regulation Compiling the Monthly Financial Position Report of Monetary Financial Institutions and Regulation for the Credit Register). |
| **Most common mortgage product(s):** | Housing loans |
| **Typical maturity of a mortgage:** | The typical maturity of a new issued mortgage is 21 years. |
| **Most common way to fund mortgage lending:** | See section on Mortgage funding. |
| **Level of costs associated with a house purchase:** | A stamp duty of 0.5-2% of the home price applies when registering the purchase. Regularly, the 2% fee applies, and the stamp duty is reduced to 0.5% under the support programme for house purchase. The reduced cost is applied only to families with children, and not for young specialists (please see question 10 on the overview of the support programmes).<br>In addition to the stamp duty, 0.1% of the mortgage loan amount should be paid for the registration of the mortgage. These are the main fees associated with house purchase, there are also some additional registration fees, but they are usually small, and their amount is fixed (that is, not dependant on the loan amount or real estate price).<br>For home purchases under the state guarantee programme buyers face additional costs:<br>• for families with children, the one-time fee is applied -2.5% of the outstanding amount of the guarantee;<br>• for young specialists, the guarantee fee of 4.8% per annum (of outstanding amount) applies. |
| **The level (if any) of government subsidies for house purchases:** | It is possible to obtain a state guarantee up to 30% of the loan amount, but not exceeding EUR 30,000 for families with children (the exact amount of the guarantee depending on the number of children). In addition, an extra 5% increase in the guarantee (but not exceeding the amount of EUR 30,000) is possible if the dwelling corresponds to the "A" energy efficiency class of buildings or is nearly zero energy building. Moreover, families with at least three children that have applied for a mortgage in the largest commercial banks in Latvia starting from July 1st 2020 are eligible as of second half of November 2020 to receive a state subsidy in the amount of 8 to 12 thousand euro (the exact amount depending on the number of children in the family and energy efficiency of the housing to be purchased/built). Although approved 17th of November, it applies retroactively to mortgages granted since July 1st 2020, and was announced already before July 1st 2020.<br>For young specialists (individuals up to 35 years old who have acquired the vocational secondary or higher education) it is possible to obtain a guarantee up to EUR 50,000. |

# Lithuania

By Jonas Grincius, AB Citadele Bankas

## IN A NUTSHELL

- → Moderate GDP decline of 0.9% despite global pandemic;
- → Record increases in number of new housing construction permits and mortgage lending;
- → Lithuanian Finance Ministry is working on a covered bond law.

## MACROECONOMIC OVERVIEW

Lithuania's economy declined by a moderate 0,9% in 2020. The reasons behind this small contraction, are government support of the corporate sector, the relatively small impact of the first wave of pandemic, stable exports and the country's low dependence on economic sectors most severely hit by pandemic (such as tourism and hospitality). According to the Bank of Lithuania's forecast base scenario for 2021, the economy is expected to grow by 2.9% and by 5.1% in 2022.

Unemployment grew to 8.5%, from 6.3% in 2019. In 2021, forecasts show a similar level of unemployment, standing at about 8.5-9.0%. According to the Bank of Lithuania's own calculations, the country's savings rate was 11% in 2020, doubling that of 2019, driven by increasing salaries( up by 12.2%) and a decline in private consumption.

Inflation fell to 1.1%, mostly driven by medical and odonatological sector from 2.2% in 2019. For 2021, forecasts show prices increase by 1.5% or 2.0%, due mostly to increased prices of energy resources.

## HOUSING MARKETS

In Q2 and Q3 , following the initial wave of the pandemic, apartment prices continued to grow in all major cities (Vilnius, Kaunas, Klaipėda, Panevėžys and Šiauliai). Prices increased by about 4.1%, considerably lower than 2019's rate of 7.2%. Growth dispersion among the cities range from 3% to 5%. Despite the uncertainty related to the pandemic, fundamental factors such as the 1.4% growth of Vilnius population, rising incomes and savings levels as well as low mortgage rates fuelled the housing market's upward trend.

The number of completed dwellings grow by 4.8%, to 6,822 units, a twofold increase compared to 2019 growth of 1.6%. Growth of savings, low mortgage rates and consumer confidence, helped construction permits increase by a 18%, from 3% in 2019. The total number of units was t9,072.

## MORTGAGE MARKETS

The mortgage market grew stably at above 8% for the fourth year in the row. According to the Bank of Lithuania, outstanding mortgage loans at year end were EUR 9,144 mn, 8.5% more than 2019 (EUR 8,426 mn). New loan issuance grew by 7.1% , from EUR 1,477 mn in 2019 to EUR 1,582 mn., The Average mortgage rates declined slightly from 2.37% in 2019 to 2.33% in 2020. Mortgage lending has again become the focus of the banks.

This expansion took place despite the enforcement of the Responsible Lending Guidelines put forward by the Central Bank of Lithuania. These guidelines set a cap on Loan-to-Value of 85%, Debt-to-Income (DTI) 40% and a maximum maturity of 30 years (10 years less than was previously available in the market). For DTI calculations banks have to use the greater of the actual interest rate and 5%, to address risks from potential rate hikes. Before the introduction of the DTI cap , the industry standard was a flat DTI amount based on the family size, which varied from bank to bank. The cap limited larger mortgages, as the previous fixed amount per resident system allowed for more income to be allocated to mortgage payments. In spite of these measures, the market adjusted to the changes in the legal framework and continued to expand.

## MORTGAGE FUNDING

As in previous years, deposits remained the primary source of mortgage funding. Despite the majority of banks offering close to zero rate for EUR term deposits, deposits continued to grow. The competitive landscape is dominated by SEB, Swedbank, and Luminor (merged DNB and Nordea banks). The above three banks together comprise 97% of mortgage market, since all of them have strong parent banks they are in good position to provide relatively cheap mortgage funding in Lithuania based on local deposits and parent funding.

The first sign of mortgage funding development was Luminor Bank's EUR 500 mn issuance of covered bonds in March 2020. Luminor Bank is owned by a US Investment Fund and operates out of three Baltic States through its HQ bank in Estonia and local branches in Latvia and Lithuania. The issue was backed by Estonian mortgages and was positively accepted by Institutional investors outside the region, the final yield of the issue stood at -0.18% and orders in excess of EUR 1.6 bn. Encouraged by investor interests, Luminor plans to add Latvian and Lithuanian assets to the covered pool. Ministry of Finance is working on Covered Bond legislation and is planning to introduce it soon.

| | LITHUANIA 2019 | LITHUANIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 4.3 | -0.9 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 6.3 | 8.5 | 7.1 |
| HICP inflation (%) (1) | 2.2 | 1.1 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 89.9 | 90.3 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | 9.3 | 3.3 | -3.9 |
| Building Permits (2015=100) (2) | 109.3 | 129.1 | 117.1 |
| House Price Index – country (2015=100) (2) | 131.6 | 141.2 | 131.3** |
| House Price Index – capital (2015=100) (2) | n/a | n/a | 135.2** |
| Nominal house price growth (%) (2) | 6.8 | 7.3 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 8,427 | 9,144 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 3,673 | 3,984 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 27.6 | 27.9 | 70.8* |
| Gross residential lending, annual growth (%) (2) | 1.3 | 7.0 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 2.4 | 2.3 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## LITHUANIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Banks and bank' branches. |
| **The market share of the mortgage issuances:** | 100% banks |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | 100% banks |
| **Typical LTV ratio on residential mortgage loans:** | No statistical data on average LTV is available. New buyers tend to max out with their LTVs, getting close to 80%. |
| **Any distinction made between residential and non-residential loans:** | Based on type of property and whether this is the first or second mortgage. A second mortgage tends to be treated as an investment for rental purposes. |
| **Most common mortgage product(s):** | 30 year, 6 month EURIBOR mortgages. |
| **Typical maturity of a mortgage:** | 30 years |
| **Most common way to fund mortgage lending:** | Deposits |
| **Level of costs associated with a house purchase:** | Low to medium level associated |
| **The level (if any) of government subsidies for house purchases:** | Not available |

# Luxembourg

By Daniele Westig, European Mortgage Federation – European Covered Bond Council

## IN A NUTSHELL

- → Notwithstanding COVID-19 the deterioration of economic fundamentals was contained in 2020, as GDP decreased by 1.3%, unemployment increased to 6.8% and inflation stood at 0.0%. Public finance had a 5.1% deficit.
- → Outstanding residential mortgages and new issuance recorded a new all-time high in 2020
- → High private indebtedness due to housing purchase and new binding LTV limits in place starting 2021.
- → Housing supply decreased with respect to 2019 due to delays in projects caused by COVID-19.
- → Plans in discussion to change urban planning laws, introduce fiscal incentives and provide technical assistance in order to improve housing supply.

## MACROECONOMIC OVERVIEW

The pandemic hit Luxembourg hard, both at economic and social terms, as GDP decreased by 1.3%, the sharpest decline since 2009, and unemployment increased to 6.8%. Nevertheless, thanks to the unprecedented support for businesses through the "Stabilisation Programme" and the "Neistart Lëtzebuerg" aid package, the effects have been more contained than initially expected. Furthermore, as a service-oriented economy, the digital infrastructures which enabled a widespread use of teleworking have also helped mitigate the negative effects of the pandemic. International trade in goods and non-financial services declined significantly in the first half of the year, whereas trade in financial services increased.

Following a surplus of 2.4% in 2019, public finances deteriorated sharply in 2020, recording a yearly deficit of 5.1%. This is due to both increased expenditures, mostly to contain the pandemic, and a significant decreased in revenues from indirect taxes, especially VAT.

Inflation dropped to 0.0%, reflecting the noticeable drop in oil prices and the introduction of free public transport in March 2020.

## HOUSING AND MORTGAGE MARKETS

The mortgage market in Luxembourg in 2020 continued to grow and reached a new all-time high both in outstanding and new lending figures, respectively EUR 38,958 bn and EUR 10,685 bn, surpassing the previous all-time high of 2019. This growth rests on sound underlying fundamentals and was not hampered by the pandemic. The continued expansion of the mortgage market is also supported by interest rates, which continued their decreasing path started in 2018 reaching around 1.34% in 2020, one of the lowest in Europe.

Low interest rates and rapidly growing house prices – which increased on average by 14.8% , the most in EU 27 – have led the country to the highest per capita indebtedness in the EU for the eighth consecutive year, reaching nearly EUR 77,000 for every resident over 18 years. It is therefore not surprising that, according to the latest Eurobarometer from Winter 2020/2021, housing remains the leading national issue , beating by 20 pps the health concerns (despite the pandemic). Potential risks in relation to vulnerabilities of the housing market can help explain why Luxembourg continued to tighten both countercyclical capital buffers and real estate instruments in 2020, contrary to most EU countries. Specifically, Luxembourg announced new measures which will become effective in 2021, such as legally binding LTV limits for mortgages set to 80% for buy-to-let to 90% for the primary residence and up to 100% first time buyers.

In the pandemic, which caused a severe economic crisis in Europe, especially during the first half of 2020, the authorities did not introduce payment holidays or moratoria. Some banks, however, offer moratoria on the repayment of existing loans to allow debtors to better weather liquidity difficulties. Furthermore, the Government introduced a ban on evictions of residential and commercial leases.

The market for mortgage loans has seen the number of fixed-rate loans further increase to over 66% of new issuance, 5pp higher than last year. The dynamism of the real estate market is driven by both demand and supply factors. Excessive demand has contributed to steep price increases exacerbated migration, the relatively strong purchasing power of resident households and bottlenecks on the supply side. A significant role is also played by socio-demographic factors such as the reduction of the size of households and the average size of dwellings. High house prices in Luxembourg City have also fostered urban sprawl to less densely inhabited areas in the country. Moreover, the tax system favours owner-occupied housing as it still allows for mortgage interest deductibility.

On the supply side, the principal factors are related to land availability, to the constraints of permit issuances due to administrative burdens and low housing density, largely a result of the lack of incentive for landowners to build new housing. Also, social housing supply seems to be insufficient and in need of further incentives. Notwithstanding the increased demand, the number of housing permits reached 5,112 in 2020, increasing by over 9% with respect to 2019, due to delays in building projects In order to foster housing supply there are plans to change urban planning laws to increase building areas and develop affordable and social housing through a new housing pact (Housing Pact 2.0), which would dedicate 10% of building land per municipality to affordable housing. Other measures, such as new tax incentives, land purchase and technical assistance for municipalities are also discussed.

## MORTGAGE FUNDING

Mortgages in Luxembourg are principally funded through deposits.

## GREEN FUNDING

The Environment Agency, through its program PRIMe House 2017, which started in January 2017, grants subsidies for energy efficiency renovations. These aim at improving the long-term sustainability of residential buildings and/or installing new technical means to enable the use of renewable energy sources. This scheme is meant to support the renovation and adaptation of the housing stock , namely that which is 10 years or older, to new energy efficiency requirements.

The Luxembourgish government applies a reduced rate of 3% to renovations of properties intended as a primary place of residence. This tax concession cannot exceed EUR 50,000 per home.

| | LUXEMBOURG 2019 | LUXEMBOURG 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 2.3 | -1.3 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 5.6 | 6.8 | 7.1 |
| HICP inflation (%) (1) | 1.6 | 0.0 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 71.2 | 70.9 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | -6.7 | 2.8 | -3.9 |
| Building Permits (2015=100) (2) | 123.3 | 112.2 | 117.1 |
| House Price Index – country (2015=100) (2) | 132.0 | 151.1 | 131.3** |
| House Price Index – capital (2015=100) (2) | | | 135.2** |
| Nominal house price growth (%) (2) | 10.1 | 14.5 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 35,633 | 38,958 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 71,839 | 76,906 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 146.6 | 152.2 | 70.8* |
| Gross residential lending, annual growth (%) (2) | 8.4 | 13.6 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 1.5 | 1.3 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## LUXEMBOURG FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Banks and bank' branches from German Bausparkassen and the "Caisse Nationale d'Assurance Pension", which lends only to private sector employees who contribute to the pension fund. |
| **The market share of the mortgage issuances:** | 100% |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Six domestically-oriented banks, hold 90% of mortgage loans. |
| **Typical LTV ratio on residential mortgage loans:** | The usual maximal LTV ratio amounts to 80%. |
| **Any distinction made between residential and non-residential loans:** | Not available |
| **Most common mortgage product(s):** | The most common mortgage contract is at a fixed rate. (55% of loans issued in 2019 = fixed, and so 45% variable) |
| **Typical maturity of a mortgage:** | The standard maturity for mortgage loans is 25 to 30 years, while some banks grant credits for up to 35 years. |
| **Most common way to fund mortgage lending:** | Mostly deposits |
| **Level of costs associated with a house purchase:** | Roundtrip transaction cost (registration tax, notary fees, real estate agent's fee, transcript tax) are between 12%-16.5%. |
| **The level (if any) of government subsidies for house purchases:** | In the case of affordable housing for sale, public support – 50% of study and infrastructure costs – is available under the condition that at least 60% of the homebuyers are people who qualify to obtain a construction subsidy from the state based on the household income. |

# Malta

By Karol Gabarretta, Malta Bankers' Association

## IN A NUTSHELL

→ COVID-19 interrupted the pattern of strong growth experienced in recent years. The economy contracted by 7.0%, mostly due to lower net exports.

→ Residential property prices continued to increase during the first three quarters of 2020 at an average annual rate of 3.9% which is significantly lower than the 6.1% recorded for 2019.

→ Mortgages for house purchases rose further in 2020, reaching around EUR 6.1 bn.

## MACROECONOMIC OVERVIEW

Unsurprisingly, as a result of the pandemic, economic activity contracted significantly, following relatively strong growth in 2019. Real GDP fell by 7.8%, after rising by 5.5% a year earlier. The decline was largely caused by lower net exports, while domestic demand contributed negatively, but to a lesser extent. Net exports shed 5.9 pps from GDP growth, reflecting a stronger decline in exports than imports. At the same time, overall domestic demand shed 1.1 pps from GDP growth, reflecting lower private final consumption expenditure and gross fixed capital formation. By contrast, government consumption and changes in inventories, had a positive contribution to GDP. Private consumption contracted by 7.6%, after growing by 4.5% in 2019, and shed 3.5% pps to GDP growth.

During the first three quarters of 2020, employment expanded at an annualised rate of 3.8%, compared to 6.8% for the corresponding period of 2019. Despite the slower pace of job creation and the impact of the pandemic, employment growth remained higher than its long-run average of 3.3%. The unemployment rate averaged 4.3% during the first three quarters of 2020, compared to 3.6% for the same period of 2019. Nevertheless, it remained below the country's historical average and also well below the average rate for the euro area, which stood at 7.9% in 2020.

Labour productivity fell by 9.4% in 2020, following a 1.0% decrease in the previous year.

For 2020, the general government registered a deficit of EUR 1,300 mn, a deterioration of EUR 1,250 mn compared to the surplus in the corresponding period of 2019. This was due to a significant increase in expenditure coupled with a drop in revenue. Most of this deterioration can be attributed to the pandemic and the related contraction in economic activity, which had a negative impact on revenue and required extraordinary government support to mitigate its economic effect.

The general government deficit-to-GDP ratio reached 10.1% for 2020. This is a significant deterioration when compared to a surplus of 0.4% of GDP as at end 2019. The impact of the pandemic was also manifest in the government debt-to-GDP ratio, which rose by 12.3 pps to 54.3%. At the same time while the increases in Malta's deficit and debt ratio were more pronounced than those in the euro area, the debt-to-GDP ratio remained well below the Euro area average.

The average rate of consumer price inflation, as measured by the HICP, was 0.8% during 2020. This was lower than the 1.5% for the previous year and above the 0.3% average in the euro area, but still significantly below the ECB's inflation target.

## HOUSING AND MORTGAGE MARKETS

The home-ownership rate fell just below 80%. The number of housing construction permits declined significantly in 2020 to 7,837 (12,485 in 2019 and 12,885 in 2018). Apartments were again by far the largest residential category, accounting for almost 86% of new building permits.

The number of residential property sales was 11,045 (14,013 in 2019) with a relative value of EUR 2.1 bn (EUR 2.7 bn in 2019).

Residential property prices continued to increase during the first three quarters of 2020. The National Statistics Office's Property Price Index (PPI) – which is based on actual transactions involving apartments, maisonettes and terraced houses – increased at an average annual rate of 3.9% during the first nine months, significantly lower than the 6.1% in 2019 as a whole. House price inflation was lower than that in the rest of the euro area, where it averaged 5.0% in the first three quarters of 2020.

Mortgages to residents for house purchases totalled around EUR 6.1 bn at the end of 2020, up from EUR 5.5 bn in 2019. The core domestic banks extended well over 90% of the credit provided to households and individuals (which includes mortgage loans). The median loan-to-value ratio was 80% (2019). The average interest rates on new residential loans fell slightly to 2.51% (2.59% in 2019).

In recent years, various factors contributed to the attractiveness of property investment such as: an increase in disposable income; the influx of foreign workers which increased demand for property and a growth in tourism which led to a strong demand for private accommodation.

Moreover, residential property prices continued to be supported by a number of factors, including low-interest rates and government schemes supporting the market, some of which were modified during the year. For example, as part of its response to the pandemic, in June 2020, the Government lowered the property tax rate and stamp duty on eligible transfers of immovable property from 9 June 2020 until 1 April 2021. In particular, the property tax and stamp duty on the first EUR 400,000 of the value of the transfer were reduced to 5.0% and 1.5%, respectively. Furthermore, the Budget for 2021 extended or introduced more favourable terms on a number of existing schemes supporting the property market.

The Malta Citizenship by Investment scheme also played a role in generating demand for local properties. It allows foreigners to acquire citizenship, subject to certain conditions:

- a significant non-refundable investment – which in the case of the main applicant – EUR 600,000 (3 year residency) or EUR 750,000 (1 year residency) to the National Development and Social Fund (NDSF) set up by the Government of Malta and run by a board of trustees;
- either purchasing property in Malta for EUR 700,000 or more and maintaining ownership for 5+ years, or leasing a property for at least five years with a minimum annual rent of EUR 16,000; and
- upon the applicant being approved in principle, he or she must donate at least EUR 10,000 to a local non-profit organization.

## MORTGAGE FUNDING

Mortgage loans are mainly provided by the core domestic banks, predominantly Bank of Valletta plc and HSBC Bank Malta plc, which account for almost 72% of the domestic retail market (as a percentage of total deposits held by the core domestic banks). They rely mainly on resident deposits for funding, which in 2020 increased to around EUR 23 bn. Local retail deposits provide ample liquidity to the core domestic banks and with a loan-to-deposit ratio as low as 59.3% (as at June 2020), they do not need to resort to say, securitisation or covered bonds for funding.

## GREEN FUNDING

During the last 2 -3 years, various banks from the core domestic banks group, launched a wide array of green energy loan products to assist customers finance the acquisition of equipment and fixtures such as solutions that generate renewable energy or increase energy efficiency including PV panels; green roof gardens; solar water collectors; space heating and hot water or cooling generation; insulation; interior and exterior apertures – double glazing and insulation; ventilation, heating or cooling and lighting systems; energy generation household storage and EV household charging stations.

*Sources: inter alia CBM Annual Report 2020, NSO website and CBM website Monetary and Banking Statistics*

| | MALTA 2019 | MALTA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 5.5 | -7.8 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 3.6 | 4.3 | 7.1 |
| **HICP inflation (%) (1)** | 1.5 | 0.8 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 81.6 | 79.8 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 0.3 | -21.9 | -3.9 |
| **Building Permits (2015=100) (2)** | 316.3 | 198.6 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 124.6 | 125.1 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | n/a | n/a | 135.2** |
| **Nominal house price growth (%) (2)** | 6.1 | 0.4 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 5,459 | 5,824 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 13,206 | 13,462 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | n/a | n/a | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | n/a | n/a | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 2.6 | 2.6 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## MALTA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Main issuers of mortgage loans within the local banking sector are the 6 core domestic banks namely: APS Bank Ltd; Bank of Valletta plc; BNF plc; HSBC Bank Malta plc; Lombard Bank Malta plc, MeDirect Bank (Malta) plc; plus 2 other banks, FCM Bank Ltd and FIMBank plc. |
| **The market share of the mortgage issuances:** | Not available |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | As an approximation, HSBC Bank and Bank of Valletta (BOV) account for 69% of domestic retail banking (total assets) in Malta. All core domestic banks' (plus the 2 other abovementioned banks') mortgage and consumer credit loans to household and individuals totalled EUR 6.5 bn as at end 2020, with almost 95% of this figure relating to mortgages. The breakdown of this figure is as follows: BOV EUR 2.28 bn, HSBC EUR 2.19 bn, APS Bank EUR 1.09 bn, BNF Bank EUR 363.09 mn, Lombard Bank EUR 115.00 mn, MeDirect Bank EUR 2.56 mn, FIMBank 75.00 mn and FCM Bank 1.80 mn.<br>The IMF's Financial System Stability Assessment Report published in 2019 revealed that at end-2017 total property-based lending (i.e. to residents and non-residents) for all banks comprised 40% of total loans to customers. For the core domestic banks in Malta, the ratio reached 56%.<br>https://www.imf.org/~/media/Files/Publications/CR/2019/1MLTEA2019003.ashx |
| **Typical LTV ratio on residential mortgage loans:** | The median loan-to-value (LTV) ratio for RRE lending (for 2019) remained contained at around 80%. |
| **Any distinction made between residential and non-residential loans:** | The banks in Malta clearly differentiate between mortgages for residents and commercial/business loans involving property development. However, the Central Bank of Malta in 2019 issued CBM Directive No. 16 – Regulation on Borrower Based Measures, as a minimum standard by means of which the resilience of lenders and borrowers could be strengthened against the potential build-up of vulnerabilities which could result in financial losses to both parties stemming from potential unfavourable economic developments. The Directive includes borrower based macroprudential measures such as caps to loan-to-value (LTV) ratios at origin, stressed debt service-to-income (DSTI) limits, and amortization requirements. These measures distinguish between Category I borrowers who comprise purchasing their primary residential property and Category II borrowers who comprise purchasing their second or additional residential property or buy-to-let properties. |
| **Most common mortgage product(s):** | In Malta borrowers can choose both fixed and variable rate mortgages, with capital and interest payable over the term of the loan. A moratorium on capital repayments can normally be agreed for an initial number of years, during which interest only is repaid. |
| **Typical maturity of a mortgage:** | The maximum maturity granted in Malta is linked to the retirement age. 40-year mortgages to Category I borrowers are only issued on condition that the mortgage is repaid before the borrower reaches the age of 65. |
| **Most common way to fund mortgage lending:** | Mortgage funding in Malta remains mainly deposit-based. Core domestic banks, with assets of about 2.12 times (in 2020) GDP, provide over 90% of bank lending to residents in Malta, and collect around 68% of total banking deposits. |
| **Level of costs associated with a house purchase:** | In Malta, there is a 5% Duty on Documents (Stamp Duty) on purchases and one final withholding tax of 8% on the value of the property when sold.<br>5% Duty on Documents calculated on the purchase price of the immovable property. If the Buyer is a European Union Citizen declaring on deed that he shall reside in the property being purchased as his sole ordinary residence, then the preferential rate of 3.5% is applied on the first EUR 150,000 of the price. In respect of transfers of immovable property, made on or after the 5th November 2013 but before the 1st July 2015, no duty shall be chargeable on the first EUR 150,000 of the aggregate value of the consideration paid for the acquisition of such property, provided that this is the first immovable property acquired inter-vivos by such person. More information is found on http://www.notariesofmalta.org/taxinfo.php<br>With effect from 1 January, 2015 the current system consisting of both a 12% final withholding tax on the sales value or 35% tax on the profit or gain was replaced by one final withholding tax of 8% on the value of the property sold subject to the following exceptions:<br>• transfers of immovable property acquired prior to 2004 are subject to a final withholding tax of 10% of the sales value (down from 12%);<br>• transfers of immovable property by non-property traders within the first five years of acquisition are subject to a final withholding tax of 5% of the Sales Value; |
| **The level (if any) of government subsidies for house purchases:** | The Maltese Housing Authority currently provides the following schemes: (a) Grant to Assist Owners in the Construction and/or Completion or Rehabilitation of their First Home; (b) Installation of lifts in Government owned residential blocks/entrances; (c) Rent Subsidy in Private Rented Residences; (d) Scheme for Persons with Disability; (e) A Scheme to encourage residents of apartments/terraced houses and maisonettes owned by the Housing Authority and the Government Property Department to become owner occupiers and continue using the property as their ordinary residence; (f) Subsidy on Adaptation Works in Residences occupied by Owners or Tenants; (g) Subsidy on Adaptation Works related to dangerous structures in Private Dwellings Held on Lease or Emphyteusis; (h) Redemption of Ground Rent, (i) Equity Sharing Scheme which applies for persons over the age of 40, who intend to buy their residence by purchasing at least 50% of the property whilst the rest will have to be purchased by them at later stage (j) a scheme which includes an allocation of funds specifically for the restoration of streetscapes that are located within Urban Conservation Areas (UCAs). As in previous years, the scheme is also open to owners of privately owned residential properties situated within Urban Conservation Areas (UCAs) and Grade 1 and Grade 2 scheduled buildings (k) a Scheme to entertain proposals from owners of vacant residential property who wish to lease their property to the Housing Authority for the purpose of social housing.<br>The Maltese Housing Authority has embarked on a EUR 50 mn project which involves a EUR 25 mn financing from the European Investment Bank. The project concerns the financing of investments in social housing in the years 2016-2020 foreseen by the country's social housing programme that will be implemented by the national housing authority. EIB funding will concern retrofitting and new construction of social housing and associated infrastructure facilities. The housing investments will need to satisfy the EIB's eligibility criteria for urban renewal and sustainable cities and communities.<br>The project will contribute to the alleviation of the current shortages in social housing supply in Malta. The project is expected to contribute to (i) the reduction of the shortage in social housing supply in Malta; (ii) improving the quality of existing social housing stock; (iii) potentially reducing energy consumption of the existing building stock; (iv) promoting social inclusion of low-income households; (v) the implementation of the housing strategy developed by Maltese municipalities. Housing construction typically generates significant employment both directly through construction and indirectly through consumables purchased by residents. The project therefore has potential to contribute significantly to sustainable growth and employment. *Source: EIB website* https://www.eib.org/en/projects/pipelines/all/20150802 |

# The Netherlands

By Marcel Klok (ING), Cas Bonsema (Rabobank), Paul de Vries (Land Registry) and Nico de Vries (ING)

## IN A NUTSHELL

→ The economy shrank by 3.8%, largely as a result of the pandemic.
→ House price development unaffected by COVID-19.
→ Low interest rates, and a housing shortage drove house prices up.
→ Housing construction hampered due to stricter environmental regulations.

## MACROECONOMIC OVERVIEW

The Dutch economy shrank by 3.8% in 2020, similar to 2009, but less than in many peer economies. Household consumption was affected by the uncertainty around the pandemic and social distancing measures, falling 6.4%. The collapse would have been worse had it not been for the support provided by the government. Government consumption was the only expenditure category to grow. While it only increased 1%, the increase in total public expenditures, which includes support for incomes and employment and liquidity, was much larger (13% year-on-year, or 6% of GDP) and unprecedented. The government has been relatively generous with tax deferral and direct employment support, such as wage subsidies. Nevertheless, private investment fell by 5%, while public investment expanded by 2%. While investment in transport equipment and to a lesser extent machinery & equipment decreased, expenditures on ICT-capital increased strongly. Exports of both goods (-2%) and services fell, services by double digits (-13%).

The travel business, hospitality, culture & recreation were the industries with the largest decreases in value added, while utilities, public administration and real estate activities expanded the most. The mining sector continued to shrink due to legal measures aimed at restricting gas production, while construction mostly suffered from a lack of building permits due to municipalities' administrative capacity and environmental regulation.

HICP-inflation was muted (1.1%) due to price falls in fuel, energy and imports. It was also much lower than the 2.7% of 2019, since the impact on the year-on-year comparison of the hike in the VAT-rate turned from positive to negative. Contractual wages increased by 3%, on the back of pre-pandemic labour market strain. The unemployment rate rose quickly after the start of the first lockdown in March, but since summer is declining again, despite the introduction of an arguably stricter lockdown in December 2020. Yet, later increases cannot be excluded, when most temporary public support measures fade in 2021 and bankruptcies may rise.

## HOUSING MARKETS

At the beginning of 2020, the owner occupied housing market was characterized by tightness, sharp price increases and too little new construction. The onset of the pandemic in February 2020 has not had an impact on the Dutch housing market. During the year, the demand for owner-occupied homes increased and prices rose on average 8.3% (2019: +6.5%). For Amsterdam, the average price increased with 3.9%, the eighth consecutive quarter of increases but below the national average. In the four big cities prices rose. In 2021, 235,000 homes were sold, an 8.5 % increase.

There is still a high demand for homes, specifically for owner-occupancy. The shortage of owner-occupied housing is because the housing stock growth (+75,000 homes) is only just keeping pace with household growth (73,000 households). The construction of new owner-occupied homes is lagging far behind demand. More building permits for new homes were issued in 2020: 66,000, compared to 58,000 in 2019. In 2020, 69,000 new homes were completed and another 23,000 homes added in other ways, for example through subdivision of existing stock and repurposing of other buildings. 10,000 homes were demolished. An important reason for the growth of household numbers is the trend towards smaller households and the increase in the number of single-person households. This trend is mainly caused by the aging population.

Investors bought a relatively large number of homes. The percentage of homes in the owner occupied housing stock owned by investors rose from 8.2% to 8.5%. This is an increase of just over 30,000 homes in one year. The share of homes bought by investors is always higher in the 4 major cities than in the rest of the country. In recent years, the share in the transactions in the largest cities stands at around 30% whereas in the rest of the country, around 15% of the sold homes are bought by investors.

## MORTGAGE MARKETS

The residential mortgage market grew to a record size in 2020. As home sales reach a near-record (particularly in the second half of the year) and particularly due to a considerable number of refinancing, total new mortgage origination volumes rose to €139bn, according to data from the Land Registry, an increase of 26.4%.

Total outstanding mortgage debt increased to EUR 748bn in 2020, a new record according to Statistics Netherlands data.

Mortgage debt as a percentage of GDP rose to almost 94% but this was exacerbated by the decline in GDP caused by the pandemic. Notwithstanding this shock, partial repayments combined with an ever increasing stock of amortising mortgage loans ensure a continued decline in the mortgage debt compared to the size of the economy.

In new origination the average LTV declined further, driven by strong house price growth outpacing lending. The high share of refinancing in particular also contributed to a lower average LTV for the entire market. Strict legal underwriting criteria, mainly concerning debt-to-income (DTI), are still resulting in relatively less debt taken on when purchasing a home whilst the DTI ratio for mortgages used to purchase a home rose last year, as they did in 2019. The usage of own funds when purchasing a home rose somewhat last year compared to 2019, but this was mostly driven by first time buyers who, unlike subsequent buyers, do not benefit from the rapid house price growth.

The statutory underwriting norms changed slightly in 2020. The LTV remained capped at 100% but the DTI rules were eased somewhat. For dual-income households the second income counted for 80%, up from 70% in 2019. The deductibility of interest payments from taxable income continues to be tapered down. Over the next years, the deduction rate decreases by 3.0 pps per annum, from the current46% of interest payments. As of 2023, the maximum deduction rate will remain stable at (roughly) 37.0%, which should be equal to the second-highest marginal tax bracket by then. The effects of this change are expected to remain moderate, as the decrease in tax subsidies will be accompanied by a general decrease in income tax.

After declining in the first months of 2020, mortgage interest rates rose as the pandemic hit. After peaking in the summer, mortgages rates started falling again and reached new lows. According to DNB, the average mortgage interest on new originations (by banks) was 1.84% in December 2020, about 16 bps lower than the year before. The average interest rate on outstanding mortgages was 2.61%, down 30 bps compared to 2019. The interest rate term fixings shifted even more in favour of longer tenors. 20 year fixings were easily the most popular option for mortgage borrowers, followed by 10 year and 30 year fixings. On the back of the mortgage reforms in 2013, the majority of new originations are amortising (i.e. full annuity or linear loans). Still, more than a third of new originations consists of interest-only loans/loan parts, the favourable tax treatment of which is still possible for borrowers who had a mortgage pre-2013. These tax benefits are still grandfathered in case of refinancing and/or relocation. The share of interest-only in new originations has risen to above one-third in 2020. One of the drivers for this is the increasing share of refinancing in new originations, which more often feature interest-only loans/loan parts. Even so, more broadly speaking, interest-only is relatively more attractive in a low mortgage rate environment as losing out on (part of the) mortgage interest tax deductibility has less impact.

## MORTGAGE FUNDING

Non-bank lenders in the market continued to be highly visible in 2020, with banks losing substantial market share. IG&H, a consulting company, on the basis of Land Registry data, reported that the market share of banks was around 53% in 2020, down from about 59% in 2019. Meanwhile, insurers roughly maintained an average market share of around 15%. Third-party originators, acting on behalf of pension funds and other (domestic or foreign) institutional investors, were responsible for approximately 20% of all new mortgage originations. Foreign and other parties comprised 12.6% of new volumes. Dutch banks continue to shift towards so-called originate-to-manage models, in which they fund new originations by money allocated by institutional investors, in addition to originations funded from their own balance sheets. From the funding side, whole-loan transfers or forward flow mandates continue to dominate, particularly for non-bank parties. Due to the pandemic, banks saw their deposits rise substantially, reducing the need for wholesale funding. Moreover, banks opted to massively participate in the ECB's Targeted longer-term refinancing operations (TLTROs), benefitting from cheap central bank funding. The latter led to partial crowding out of covered bond issuance. Nevertheless, covered bonds typically remain one of the preferred funding tools for mortgage portfolios, not only because of more favourable funding conditions, but also to raise long-term funding to match increasingly long-dated mortgage loans. The smaller banks typically have less room to participate in TLTROs and were thus more reliant on covered bond funding.

| | NETHERLANDS 2019 | NETHERLANDS 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 2.0 | -3.8 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 3.4 | 3.8 | 7.1 |
| **HICP inflation (%) (1)** | 2.7 | 1.1 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 68.9 | 68.9 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 3.4 | -2.6 | -3.9 |
| **Building Permits (2015=100) (2)** | 102.8 | 120.8 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 131.6 | 142.8 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 154.3 | 161.6 | 135.2** |
| **Nominal house price growth (%) (2)** | 6.9 | 8.5 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 722,672 | 748,572 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 51,900 | 53,202 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 181.6 | 181.0 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 14.5 | 13.3 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 2.3 | 1.9 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## NETHERLANDS FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Mortgages are mostly being issued by banks and insurance companies. But also, the government, municipalities, companies in general and private persons may issue mortgages. However, for professional issuing of mortgages a company needs a license from the Netherlands Authority for Financial Markets. There are strict regulations for license holders to protect the consumer. |
| **The market share of the mortgage issuances:** | No available |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | No available |
| **Typical LTV ratio on residential mortgage loans:** | Unknown; max LTV in 2020 is 100%. |
| **Any distinction made between residential and non-residential loans:** | A mortgage is registered at the Kadaster (Land Registry and Mapping Agency). At the time of registering the mortgage, it must be specified whether a piece of land or object is meant for residential purposes. |
| **Most common mortgage product(s):** | Annuity and interest-only. |
| **Typical maturity of a mortgage:** | 30 years |
| **Most common way to fund mortgage lending:** | No available |
| **Level of costs associated with a house purchase:** | 2% taxes; 4% other transaction costs (i.e. notary; real estate agent; taxation). |
| **The level (if any) of government subsidies for house purchases:** | There is a guarantee fund, the Nationale Hypotheek Garantie (NHG). For mortgages lower than EUR 265,000 and under certain conditions, the NHG guarantees the repayment of the remaining mortgage debt in case of foreclosure. |

# Poland

By Agnieszka Nierodka, Polish Bank Association

## IN A NUTSHELL

- → Both mortgage and construction market were booming in 2020
- → New mortgage origination was almost unaffected by the pandemic
- → The number of new buildings completed was at its highest level since the political transformation 1989/1990
- → Residential market strongly influenced by growing inflation and record low interest rates
- → Continuous growth of house prices – both on primary and secondary markets.

## MACROECONOMIC OVERVIEW

After years of intensive growth, the economy experienced a crisis in 2020, mainly caused by the Covid-19 pandemic. Eurostat estimates show that GDP fell by 2.7% compared to 2019. Domestic demand decreased by 3.7% (+3.5% in 2019), and investments in 2020 fell by 8.4% (+7.8% in 2019).Total gross value added in the economy in 2020 decreased by 2.9% versus a 4% increase in 2019. Industrial gross value added was 0.2% lower, in the construction sector the decrease was 3.7%.

The slowdown in the economy didn't affect the labor market significantly, average unemployment (BAEL) fell to 3.2% in 2020 (3.3% in 2019).

The inflation rate (HICP) was 3.7% in December 2020 (2,1% in December 2019). The increase was continual through the year – mainly due to change in prices of garbage disposal, electricity and food. This trend will most likely continue in 2021 – inflation will be strengthened by: increasing food prices (including a sugar tax), an increase in electricity prices (introduction of a capacity fee to guarantee the readiness to secure electricity supply) and an increase in fuel prices. In the opinion of the National Bank , inflation is caused mainly by factors outside the scope of influence of monetary policy (growth in administered prices and growing prices of oil on world market). As a result, the Monetary Policy Council is reluctant to increase the NBP reference rate.

## HOUSING AND MORTGAGE MARKETS

### HOUSING MARKET

Despite the impact of the coronavirus pandemic, 2020 was one of the best years in terms of mortgage lending and housing development. The number of flats completed was a record high, exceeding 222,000 units (flats and houses), a 6.7% increase on last year.

Despite the lockdown introduced in Q2 and workforce shortage (the workforce in construction sector is dominated by foreigners who, in the face of the pandemic, have largely left Poland for a couple of months) the number of new projects started was also impressive. In 2020, 223,842 apartments were started, 5.7% less than the year before. Building permits for 276,149 dwellings were issued, 2.7% more than the year before.

Annual sales of apartments and contracts for their construction in Poland at the end of the year amounted to approximately 65,400. The stock of unsold flats and contracts for their construction on the 6 largest primary markets at the end of 2020 amounted to approx. 48,000. The average sale time on the primary market in the 6 largest markets slightly increased to 3.6 quarters.

In 2020 transaction prices increased both on the primary and secondary markets. The estimated availability of flats in large cities (the number of square meters of residential property that can be purchased for an average monthly salary in the enterprise sector) was about 0.76 sq m. Compared to 2019, this fell slightly due to house prices increasing more than wages.

Throughout the year, increases in real estate prices were maintained in most regions, however in the fourth quarter 2020 this dynamics began to slow down. The fastest growing property prices were in Warsaw, where the average transaction price per square meter of a flat exceeded the psychological barrier of PLN 10,000, followed by Tri-City agglomeration (Gdańsk, Gdynia, Sopot) and Kraków.

Compared with 2019, the largest increases in the average primary market prices of flats were in: Opole (12.63%), Zielona Góra (12.43%) and Kraków (10.36%), (Warsaw prices increased by 9.11%), and in the secondary market in Rzeszów (15.3%), Lublin (14.54%), Kraków (13.91%), (in Warsaw they increased by 10.16%).

### MORTGAGE MARKETS

In 2020, over 204,000 housing loans were granted – a decrease of over 9% compared to 2019, but still the second highest since 1989. The total number of mortgages outstanding at year end was over 2,472,000 with a total value of nearly PLN 477 bn.

The average value of a mortgage loans was nearly PLN 305,000 – a record high. Loans with the highest LTV (over 80%) are the most popular and were nearly 35% of all new loans. Credit quality remained stable – the ratio of NPLs was around 2.46.

The mortgage market was still influenced by the overall good standing of the economy, but more importantly by the combination of historically low interest rates and rising inflation encouraging customers to invest in properties. While the interest on bank deposits was 0.2%, the average interest rate on mortgage loans at the end of 2020 was 2.49% (1.33 pp. lower compared to the end of 2019).

There were significant increases in the share of housing loans granted in the largest Polish agglomerations: nearly ¾ of all housing loans are granted in these areas. Warsaw, accounted for nearly half of all housing loans.

Most mortgage loans are at variable rates loans (usually a fixed margin over 3-month WIBOR). Although loans with a period (maximum 5 years) fixed rate have been offered by banks, they were not popular – interest rates were about

1-2 p.p. higher than for variable rate mortgages. However, at the end of 2020, they were gaining in popularity in new loan origination.

### NON MARKET INITIATIVES

Lockdown was introduced mid-March 2020 and in April 2020 the effects of the pandemic were clearly visible. Both the number and value of new mortgage loans decreased by about 20% in comparison to March 2020. Due to the growth of credit risk, banks temporarily strengthened their lending policies (a requirement for an at least 20% down payment was introduced). In June 2020 most restrictions were removed.

In order to help customers affected by the pandemic, on March 16, 2020, Polish banks introduced a non-statutory credit moratorium. The plan included suspension of repayment of principal and interest or principal installments for 3 months and automatic extension by the same period of the total repayment period, (as long as the security was also extended). On June 24, 2020, the statutory credit moratorium was introduced. The statutory payment holidays on loans were available for anyone who lost their job or other main source of income after March 13, 2020. The maximum deferral period was 3 months.

Moratoria covered almost 1 million individual customer accounts for the amount of nearly PLN 82 bn (both mortgage and consumer loans).

## MORTGAGE FUNDING

The main funding instrument for mortgage loans in Poland is deposits, followed by covered bonds. According to the covered bond law, only specialized mortgage banks are eligible to issue covered bonds in Poland. There were 4 issuers active in 2020: mBank Hipoteczny S.A., PKO Bank Hipoteczny S.A., Pekao Bank Hipoteczny S.A, and ING Bank Hipoteczny S.A. In 2021, the sector of mortgage banks will grow as their ranks will be joined by Bank Hipoteczny Millennium S.A.

| | POLAND 2019 | POLAND 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 4.7 | -2.7 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 3.3 | 3.2 | 7.1 |
| **HICP inflation (%) (1)** | 2.1 | 3.7 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 84.0 | 84.2 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 4.3 | -0.4 | -3.9 |
| **Building Permits (2015=100) (2)** | 140.5 | 148.8 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 132.1 | 146.2 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 145.8 | 165.3 | 135.2** |
| **Nominal house price growth (%) (2)** | 10.7 | 10.7 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 104,146 | 104,607 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 3,351 | 3,370 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 33.0 | 32.5 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 3.9 | 6.3 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 4.4 | 2.9 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## POLAND FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Banks and credit unions |
| **The market share of the mortgage issuances:** | No detailed data available, rough estimates: less than 1% of new lending is granted by credit unions, over 99% – by banks. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Around 99.9% – banks; 0,1% – credit unions. |
| **Typical LTV ratio on residential mortgage loans:** | 43.36% of new loans granted in 2020 had LTVs over 80%;<br>35.45% – LTVs between 50-80%;<br>6.19% – LTVs between 30-50%;<br>15% – LTVs below 30%. |
| **Any distinction made between residential and non-residential loans:** | Borrower's statement – the client must declare (in loan's application) for what purpose the credit will be used; bank is allowed to check whether the loan was used according to that declaration. |
| **Most common mortgage product(s):** | Variable rate mortgage credit for residential purpose. |
| **Typical maturity of a mortgage:** | Between 25 and 35 years (according to yearly data, around 63% of new lending belongs to that range in 2019). |
| **Most common way to fund mortgage lending:** | Banking deposits and interbank lending. |
| **Level of costs associated with a house purchase:** | • establishment of a mortgage – 0,1% of the secured amount;<br>• notary fee (depends on the value of property) – usually: PLN 1,010 + 0,4% over the value of PLN 60,000 (+ VAT 23%);<br>• additional notary documents – PLN 6 per page;<br>• entry to the mortgage register – PLN 200; if there's no mortgage register for the property - establishment of mortgage register costs additionally PLN 60;<br>• tax on civil law transactions (paid only if the property is purchased on secondary market) – 2% of the value of property;<br>• property valuation (sometimes covered by the bank) – usually PLN 300-600;<br>• commission for the broker (if needed) – around 3% + VAT. |
| **The level (if any) of government subsidies for house purchases:** | There are currently no government subsidies for house purchases in Poland. |

# Portugal

By Banco Montepio

## IN A NUTSHELL

- The upward trends in the housing market until the end of 2019 (in terms of credit, house prices and market growth) changed, especially from Q2 2020, because of COVID-19, despite the resilience that has been shown by the residential real estate sector;
- In 2020, the House Price Index (HPI) increased 8.4% to a new historical high;
- Loans to households for house purchase grew in 2020, despite lower growth in household disposable income and economic uncertainty;
- The credit moratoria, introduced at the end of March 2020, have helped to alleviate private debt servicing. Credit moratoriums reduced repayments after the pandemic began;
- Financing conditions remained favourable, with interest rates at historically low levels. The liabilities of resident banks increased by 8.3%.

## MACROECONOMIC OVERVIEW

The pandemic had a significant effect on the economy with GDP contracting 7.6%, after having grown 2.5% in 2019, 2.8% in 2018 and 3.5% in 2017 (the highest growth pace this millennium). This was the biggest fall since 1928: -7.9% (according to the Banco de Portugal). Domestic demand went from a positive contribution to GDP growth of 2.8 pp in 2019 to a negative 4.6 pp in 2020, private consumption fell by 5.9% (from +2.6%), investment decreased by 4.9% (+5.4%). Net external demand made a negative contribution of 3.0 pp (-0.3 pp in 2019), with exports decreasing -18.7% (+4.0% in 2019), falling more intense than in imports: -12.0% (+4.7% in 2019), highlighting the significant fall in tourism. The prospects for 2021 are for growth to resume, but with forecasts remaining uncertain, reflecting the evolution of the pandemic.

The Government debt ratio declined in 2019 to 116.8% – the third consecutive year of decline (121.5% in 2018 after the 131.5% peak of 2016), but grew in 2020, reflecting the impact of the pandemic on economic activity and public finances, reaching 133.6% in 2020. The budget balance fell to a deficit of 5.7%, after the first budgetary surplus since 1974 in 2019 (+0.1%).

The unemployment rate increased from 6.5% in 2019 to 6.9% in 2020, reversing the trend since the historic peak early 2013. However, the recorded increase is underestimated given the [temporary] inability of the unemployment rate to measure correctly the real situation of the labour market – due to the shift of many individuals directly from the employed population to the inactive population due to technical reasons (notably the fact that mobility restrictions prevent the unemployed from looking for work). The unemployment rate is expected to increase further in 2021.

Inflation, (HCPI), was -0.1% in 2020 (+0.3% in 2019 and +1.2% in 2018).

The savings rate increased from 7.1% to 12.8% largely because of economic concerns and restricted opportunities for spending.

## HOUSING MARKETS

The upward trends observed in the housing market until the end of 2019 (in terms of credit, house prices and market growth) started to change since the beginning of 2020 and, especially, from the Q2 2020, a period in which it will have been most affected by the Covid-19 pandemic, despite the resilience that has been shown by the residential real estate sector (as the data from the Q4 2020 once again demonstrated, in which the country was in partial lockdown).

In 2020, the House Price Index (HPI) increased 8.4% to a new historic high. This growth was 1.2 pp lower than in 2019. Existing dwellings rose (+8.7% compared with +7.4%). In 2020, a total of 171,800 dwellings were sold, 5.3% less than in 2019. Total sales were EUR 26.2 bn, an increase of 2.4%. New dwelling sales rose 9.3% to EUR 5.4 bn and existing dwellings by 0.7% to EUR 20.8 bn.

According to our long-term macroeconomic models (which makes the HPI depend on the evolution of macroeconomic variables such as GDP and CPI), in the beginning of 2018, there were no signs of undervaluation of house prices in Portugal, with prices of the houses to be found, since the Q3 2018, in numerical terms, slightly above the fair value given by long-term macroeconomic models.

House prices have evolved in line with economic fundamentals, the falls were mainly cyclical, with the deleveraging process being a consequence of the troika agreement of 2011. Banco de Portugal (Bank of Portugal – BoP) considers that house prices have shown aggregate overvaluation since the beginning of 2018.

The real estate market is resisting the pandemic shock well compared to the previous crisis, but the BoP does not exclude the possible of a correction in coming months. This point was highlighted by the BoP, noting that, contrary to the previous crisis, this time, the real estate market is resisting the economic shock o the pandemic well. House prices have remained stable, but the BoP has retained an alert regarding a possible downward. Among the Covid-19 uncertainty, there are two factors that will be crucial to know what might happen next: the search for houses for tourist purposes (local accommodation) and the demand for housing by foreign citizens (excluding tourism).

## MORTGAGE MARKETS

New loans to households for house purchase increased in the second half of 2020, relative to first half, after a reduction in the first half of the year, reflecting lower demand and more restrictive credit criteria. In the second half, new loan origination increased to highest rate since Q4 2008. This increase was accompanied by an increase in the value of transactions for family housing, keeping the fraction of transactions financed by new loans close to those recorded in the last four years (around 43% of the value of transactions for family housing was financed by new loans). As mentioned, house prices decelerated, but still registered an growth of 8.6% in the Q4 2020, relative to Q4 2019.

The bank indebtedness of households increased 1.5% in 2020 due to the acceleration in home loans, which rose 2%, the highest increase since 2011. Households indebtedness, measured as the ratio between loans and disposable income (unadjusted), was 93.1% in 2020, plus 0.5 pp. In the Euro area, the indebtedness of households was at 97.6%, 2.5 pp more compared to 2019.

Home loans accelerated in 2020, despite the lower growth in household disposable income and the uncertainty regarding macroeconomic perspectives. To understand this the BoP analysed the flows of credit for housing based on microeconomic data from the Central Credit Responsibility (CRC) – a database produced by the BoP. New loans and repayments were reduced at the beginning of the pandemic, but recovered in the second half, more significantly in the case of new loans. In December 2020, the total amount of new loans was higher than in the period before the pandemic, following the evolution of the value of transactions in family housing, while repayments were at an identical level.

Moratoria were initially introduced at the end of March 2020, with the percentage of total home loans covered increasing from 13% in April to around 18% in July. Covered debtors (households with mortgage loans) could choose to stop payments of principal and/or interest. Almost all loans under a moratorium were covered by a grace period for principal. In the absence of other changes, had these loans continued to be repaid as foreseen in the agreement, total repayments would have been 6% higher in the period between March and December and, in December, would have been higher than before the pandemic.

Even adjusting for the effect of the moratoria, the total volume of home loans increased over 2020 and increased the pace of growth in the second half. The net increase in home loans adjusted for the effect of the moratoria has remained positive and accelerated in the second half, to a more rapid rate than before the pandemic.

There were less repayments in the first months of the pandemic but this reversed in H2. This was common to partial repayments, total repayments associated with a refinancing and other total early repayments. The latter contributed most to the evolution of repayments due to significant variations and their high proportion of total repayments (around 40%).

After the reduction in H1 2020, the amount of new loans increased from July onwards as a result of the increase in new loans to new borrowers and to borrowers who already had loans, reaching in Q4 2020 higher values than the pre-pandemic ones.

About 65% of the new loans were granted to borrowers who had no previous home loan.

Variations in new loans and early repayments are related to the evolution of the pandemic.

Restrictions on mobility and the normal functioning of the economic activity, accompanied by the climate of uncertainty, led to a high reduction in credit flows for house purchase in Q2 2020. During this period, household deposits accelerated significantly and their savings rate peaked.

In this context, households may have postponed decisions to buy a house as well as early repayments of loans, favoring more liquid assets. From the Q3 2020 onwards, with an improvement in the health situation and a recovery in activity, there was an increase in flows associated with housing loans.

## MORTGAGE FUNDING

The ECB's accommodative monetary policy contributed to ongoing favorable financing conditions for Portuguese banks. The liabilities of resident banks increased by 8.3% over the year. Private sector non-financial deposits and financing with central banks contributed 5.5 pp and 4.0 pp, respectively. The partial replacement of market funding by targeted longer-term refinancing operations (TLTRO III) contributed to the improvement of banks' financing conditions.

The increase in deposits from private individuals reflected the increase in savings during the lockdown. The acceleration in credit granted and the issuance of debt by companies were accompanied by an increase in deposits in this sector. The favorable financing conditions of banks, complemented with support policies for companies and individuals, made it possible to face the increase in demand for credit and ensure the financing of the economy with globally favorable interest rates, despite the increase in credit risk.

According to BoP, while the total assets of the banking system increased 5.6% in 2020,holdings of debt securities increased 0.3 pp to 22.3% of total assets. The ratio of non-performing loans (NPL) continued a downward trend, reaching 4.9% of total loans in the 4th Q2020 (6.2% in 2019 and 9.4% in 2018). The actual volumes of NPL decreased by € 2,841 m (-16.4%). The net NPL ratio of impairments reached 2.2% (-0.8 pp compared to 2019). The NPL ratio for non-financial corporations (NFC) was 9.6% (-2.7 pp compared to 2019) and for private individuals was 3.4% (3.7% in 2019). The NPL coverage ratio for impairments increased (+3.9 pp) to 55.4% (+0.4 pp to 56.9% in the NFC segment and +8.4 pp to 48.0% in the private sector). The banking system's liquidity position remained at comfortable levels, with a loan-to-deposit ratio of 84.9% at the end of 2020, slightly down from 87.1% in 2019 and 89.0% in 2018, and a liquidity coverage ratio of 251.6% (218.5% in 2019 and 196.4% in 2018), benefiting from growth in holdings of highly-liquid assets. Financing obtained from central banks rose to 7.8% of assets in 2020 (4.4% in 2019 and 5.3% in 2018).

## GREEN FUNDING

The Portuguese government continues to promote the "Efficient House 2020" program, which provides loans to improve the environmental performance of private houses, with a special focus on energy and water efficiency, and urban waste management. It is co-financed by the European Investment Bank and Portuguese commercial banks.

| | PORTUGAL 2019 | PORTUGAL 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 2.5 | -7.6 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 6.5 | 6.9 | 7.1 |
| **HICP inflation (%) (1)** | 0.3 | -0.1 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 74.5 | 73.9 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 0.3 | 1.8 | -3.9 |
| **Building Permits (2015=100) (2)** | 291.8 | 303.5 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 149.3 | 162.2 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 132.8 | 144.7 | 135.2** |
| **Nominal house price growth (%) (2)** | 8.9 | 8.6 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 93,846 | 96,176 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 10,980 | 11,211 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 63.8 | 64.7 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 8.0 | 7.3 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.2 | 0.9 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

# PORTUGAL FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Credit institutions (according to Decree-Law No. 349/98 of Nov/11 and within the limits established in articles 3 and 4 of DL No. 34/86, of Mar/3 for commercial and investment banks). The types of credit institutions and respective activities are defined by the Legal Framework of Credit Institutions and Financial Companies (articles 3 and 4). |
| **The market share of the mortgage issuances:** | The home loan market grew again in 2020, despite the Covid-19 pandemic. New credit operations increased 7% y-o-y, broadly in line with 2019 growth pace (8% y-o-y) while below the two-digit growth seen in the 2016-18 period. The latest available data on market concentration (as of 2017) shows that the six largest institutions concluded 82% of new mortgage contracts, which represent 86.1% of the contracted amount, compared to 84.5% and 86.7%, respectively, in 2016. On 31 December 2017, the ten largest credit institutions had 96.7% of mortgage contracts and 95.4% of overall outstanding mortgage volumes. In 2020, the largest institutions are expected to continue representing the bulk of new mortgage production, with market shares generally reflecting the current market structure (as per question #3).<br><br>*Source: Banco de Portugal (Retail Banking Markets Monitoring Report 2018; Monetary and Financial Statistics).* |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | The seven largest institutions in Portugal are CGD, Santander Totta, Millennium BCP, BPI, Novo Banco, Banco Montepio and Crédito Agricola, which hold market shares of c. 25.0%, 21.7%, 18.4%, 12.6%, 10.5%, 5.9% and 3.3% respectively as of December 2020.<br><br>*Source: Annual Reports; Banco de Portugal (Monetary and Financial Statistics).* |
| **Typical LTV ratio on residential mortgage loans:** | Since July 2018, new residential credit agreements should observe the following LTV limits: 90% for credit for own and permanent residence; 80% for other purposes than the latter; 100% for purchasing immovable property held by the credit institutions themselves and for property financial leasing agreements. This recommendation entered into force on July 2018. In 2020, new credit operations with an LTV ratio between 80% and 90% represented around 50% of new operations.<br><br>*Source: Banco de Portugal (Macroprudential measure within the legal framework of credit for consumers).* |
| **Any distinction made between residential and non-residential loans:** | Loans for residential purpose comprise (i) mortgage loans, which include credit agreements for the acquisition or construction of permanent, secondary or for-rental housing, and (ii) other related-mortgage loans, which comprise loans celebrated with individuals that are subject to the mortgage loans rules.<br><br>*Source: Banco de Portugal (Bank Customer Website).* |
| **Most common mortgage product(s):** | The most common mortgage products are written with variable interest rate indexed to Euribor rate. |
| **Typical maturity of a mortgage:** | Mortgage loans granted in 2019 had an average maturity of 32.8 years (-7 months per contract compared to 2018, decreasing for the first time in 5 years), 1.2 months lower comparing to the contracts portfolio.<br><br>*Source: Banco de Portugal (Retail Banking Markets Monitoring Report 2019).* |
| **Most common way to fund mortgage lending:** | On the banks perspective, retail and wholesale funding are the main sources of funding of the national banking system, with deposits becoming the main source (LTD ratio of 84.9% as of December 2020). On the customer perspective, commercial banks are the most common providers of mortgage.<br><br>*Source: Banco de Portugal, Portuguese Banking System: latest developments, 4th quarter 2020* |
| **Level of costs associated with a house purchase:** | Banks usually charge commissions related to the process (study and opening), which often include asset-evaluation costs. There are also other bureaucratic charges related with the necessary procedure (at the Land Registry, Municipality Council and Notarial Office), and specific taxes related with house transaction, as the municipal taxes on real estate (IMI) and on onerous transfer of property (IMT). |
| **The level (if any) of government subsidies for house purchases:** | Since September 2012 it is not possible to hire mortgages loans with a subsidised system scheme. Currently there are special conditions for disable people with a disability grade greater than 60% and for family households in very difficult economic situation (Law 58/2012 of Nov/9). |

# Romania

By Cristian Dragoş, Alpha Bank Romania, and Ştefan Dina, Romanian Association of Banks

## IN A NUTSHELL

- → Acceleration of residential property prices compared to 2019 amid stable house completions.
- → Solid advance of outstanding housing loans as affordability improves.
- → Declining residential building permits signals lower house completions in the next year.
- → Legislative moratorium in place addressing private individuals and companies affected by COVID19 pandemic.

## MACROECONOMIC OVERVIEW

Over the past 25 years, Romania experienced two periods of economic contraction, lasting for three and two years, respectively. Throughout the first episode, between 1996 and 1999, GDP registered a 7.1% aggregated decline, whereas during the second period (2009-10), cumulated contraction stood at 9.2%. The pandemic added a third episode, as GDP declined by 3.9%, of which 0.7 pp reflected poor agricultural conditions given drought conditions across the year. However, the contraction was not homogeneous across all sectors. On the supply side, the value added in construction increased while on the demand side, government consumption and gross fixed capital formation grew, mitigating overall deterioration.

Inflation decelerated from 3.9% y-o-y in December 2019 to 2.3% at year-end, mainly reflecting the downward adjustment of oil prices. At the same time, unemployment rate increased from 3.9% to 5% while jobs vacancies across all sectors are falling, reflecting a pattern also recorded in other EU countries. Moreover, the structural adjustments triggered by the pandemic are expected to have rather permanent effects on sectors more vulnerable to automation and less adaptable to remote working schemes. The largest decreases in the number of vacant jobs were registered in accommodation & food services (-91% y-o-y) and manufacturing sector (-44% y-o-y), while sectors such as IT & public administration (including health sector) recorded the lowest declines in the number of vacant jobs.

Efforts to support the real economy amid challenging times pushed Romania's budget deficit to 9.2% of GDP, up from 4.4% back in 2019. Consequently, gross public debt to GDP surged 12 pp from 35.3% in 2019 to 47% at the end of 2020, remaining, however, significantly below EU average (90.7%).

## HOUSING MARKETS

Country-wide, total housing completions remained constant in 2020 despite sizeable regional disparities. In Bucharest-Ilfov region, the number of finished dwellings increased by 40% y-o-y, while across the North-West region, they declined by 23.5%. The number of house completion is strongly related to the number of licenses issued in the previous years. In North-West region, the number of licenses has been growing since 2017, contrary to the trend seen in Bucharest-Ilfov region. Thus, the workload exceeded the weakening building capacity amid pandemic times, thus justifying the decline in number of finished dwellings across North-West region.

Residential building permits decreased by 2.9% in 2020 despite advances reported within the North-West (+4.1%) and South (+1.9%).

Residential property prices rose by 4.8% (+3.4% in 2019), reflecting increases in prices of existing and new dwellings (+5% and +4.0% respectively). Prices of apartments grew faster outside Bucharest (+7.9% vs. +2% in 2019). Prices in urban areas reported a robust growth rate (+ 9.2%) whilst those in rural areas declined by 1.1%. Overall, higher prices were influenced by pandemic-led changes in individuals' lifestyle as a shift towards remote work led to increased demand for more spacious housing. Additionally, lower interest rates following the central bank's accommodative monetary policy improved affordability.

## MORTGAGE MARKET

### MARKET DYNAMICS

The mortgage market grew by 9.9%[1], slightly decelerating from 10.5% in 2019, accounting for 8.4% of GDP. Growth was mainly driven by local-currency denominated loans as the outstanding amount of foreign-currency loans fell by -7.7%. Hence, the currency structure of mortgages remained strongly tilted towards domestic currency accounting for 76% of total (vs. 72% in 2019). Although borrowing in local currency became slightly cheaper, as the average interest rate charged for new loans fell from 5.5% in 2019 to 5.1%, it remained more expensive than borrowing in foreign currency (the average interest rate for new housing loans in euro stood at 4.1% in 2020 flat vs. 2019). However, access to foreign-currency denominated loans is limited following the enforcement as of January 2019 of prudential measures that cap the average monthly debt-to-income ratio to 20% for foreign currency loans against 40% for loans granted in domestic currency.

The regional distribution remains unbalanced as around 41% went to borrowers in Bucharest-Ilfov region, well ahead of the other regions: North-West (12%), Centre (10%), West (9%), North-East (9%) and South-East (9%). Housing loans per capita ranged between EUR 3,200 in Bucharest-Ilfov and EUR 400 across South and South-West regions.

According to latest available data[2], the NPL ratio for housing loans stood at 2.2% (April 2020), marking a 0.35 pp decrease mainly due to higher exposures (-0.3 pp contribution) and lower foreign-currency denominated NPLs (-0.25 pp contribution). A similar trend has been seen in commercial real estate, with NPL ratio landing at 9.9% at the end of April 2020, 1.1 pp down on-year. A sectorial analysis

[1] Growth expressed in domestic currency terms

[2] National Bank of Romania – Financial Stability Report, Jun 2020

shows that NPL ratio in the construction & real estate sector also fell by 2.6 pp down to 7.9%. However, substantial differences persist, with NPL ratio for the construction sector standing at 20% against a 3.4% ratio for the real estate sector.

The average Loan-to-value in the case of new standard housing loans stood at 73% in 2020 (vs. 74% was in 2019). The average level of indebtedness (defined as debt service to income) slid for new loans to 34% in 2020 from 35% in 2019 while remaining flat for total housing loan portfolio at 43%.

### NON-MARKET LED INITIATIVES

In March 2020, the government approved a legislative moratorium for private individuals and companies affected by the COVID19 pandemic.

Referring to individuals' credit facilities, the legislative moratorium:

- offered the clients the possibility to suspend the monthly instalments provided that certain criteria were met;
- was applied to all credit products: consumer loans, mortgage loans, credit cards and overdraft facilities;
- set the payment holiday period between 1-9 months, according to client's request, but not later than 31.12.2020; the loan tenor was set to extend accordingly with the same number of months;
- established that for the number of suspended instalments, the interest will be accrued and, depending on the loan type, it was:
  - capitalised – in case of consumer unsecured loans (including credit cards and overdrafts)
  - rescheduled for 60 months – in case of loans secured with mortgage collateral (both housing and consumer loans)
- required that the suspension of the monthly payment obligations be implemented upon the borrower's request, if approved (by meeting the criteria set by moratorium), without requiring any additional addendum to the loan contract.

By the end of June 2020, 8.9% from the individuals mortgage loans and 11.6% from the commercial mortgage loans have been reported to be suspended under legislative moratorium[3].

## MORTGAGE FUNDING

Deposits are the primary source for mortgage funding. Over the past years, residents' deposits grew faster than non-government loans, pushing loan-to-deposits ratio down to 0.67 in December 2020 (from 0.73 in 2019 and an all-time high of 1.3 in 2008). Residents' deposits grew by 14.4% in 2020[4], mainly due to higher individual savings (65% of total deposits' appreciation). Banks' dependence on external financing continued to decline as the share of foreign liabilities in total fell to 5.9% (7.1% in Dec 2019).

| | ROMANIA 2019 | ROMANIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 4.1 | -3.9 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 3.9 | 5.0 | 7.1 |
| HICP inflation (%) (1) | 3.9 | 2.3 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 96.4 | 95.8 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | 17.0 | 9.5 | -3.9 |
| Building Permits (2015=100) (2) | 108.8 | 105.6 | 117.1 |
| House Price Index – country (2015=100) (2) | 122.7 | 128.0 | 131.3** |
| House Price Index – capital (2015=100) (2) | 125.6 | 126.6 | 135.2** |
| Nominal house price growth (%) (2) | 3.4 | 4.3 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 16,999 | 18,354 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 1,079 | 1,170 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 13.2 | 13.4 | 70.8* |
| Gross residential lending, annual growth (%) (2) | 0.3 | -7.1 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 5.5 | 5.1 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

[3] EBA Thematic note on moratoria and public guarantees, November 2020
[4] Growth expressed in domestic currency terms

## ROMANIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | In Romania, generally credit institutions can issue mortgage loans, with marginal input from non-bank financial institutions.<br>Currently, there are 34 credit institutions, 7 of which are foreign banks' branches. Additionally, other 65 non-bank financial institutions carry out multiple lending activities. |
| **The market share of the mortgage issuances:** | Banks are the main mortgage lenders in Romania, with marginal input from non-bank financial institutions. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Although official data is not available, the top 10 banks originate most of the country's mortgage loans. |
| **Typical LTV ratio on residential mortgage loans:** | The average LTV ratio for new loans was 73% at the end of 2020 |
| **Any distinction made between residential and non-residential loans:** | Romanian credit institutions grant:<br>• mortgage loans (including loans within the "First House" Programme, renamed in 2020 as "New House" Programme), which are dedicated to residential purposes, more specifically to the acquisition or construction of houses.<br>• consumer loans meant to address consumers' financing needs, with some of the most common product being loans for personal needs. |
| **Most common mortgage product(s):** | Since 2009, loans granted under "First House" Programme have been the main driver for mortgage lending in Romania. However, as of 2018, the penetration of "First House" loans in the new mortgage sales volumes dropped below 50%.<br>In 2020, the "First House" Programme became the "New House" Programme. One of the main adjustments concerns the increase of the maximum loan size for mortgages used to purchase new dwellings (not older than 5 years, comparing reception date vs credit request date) to EUR 140,000. Moreover, maximum LTV ratio is set at 85% and the state guarantee increased to 60%, as compared with maximum LTV of 95% and state guarantee of 50% for old residential buildings or new residential buildings with prices below EUR 70,000. |
| **Typical maturity of a mortgage:** | The maximum lending period for loans granted under the "New House" Programme is 30 years. As for standard mortgage loans, other than the ones mentioned above, the maximum lending period stands at 35 years. |
| **Most common way to fund mortgage lending:** | In Romania, the loan / deposit ratio stands at approximately 67% (Source: NBR, Dec. 2020). Thus, credit institutions mainly use funds attracted from clients to grant loans. Credit institutions have gradually reduced their dependence on 'parent' banks by increasing customer deposits. |
| **Level of costs associated with a house purchase:** | A series of costs are applicable to mortgage loans. The most important ones include:<br>• analysis fee,<br>• valuation fees of the property to be mortgaged, either by internal evaluators of credit institutions or external evaluators. The average cost range for evaluating a residential property is between EUR 80-150 plus VAT.<br>• costs related to obtaining the land book extract necessary for signing the mortgage real estate: RON 40 (approximately EUR 9).<br>• notary/legal costs related to signing the mortgage contract, varying based on several factors: transaction value, property age, etc. E.g.: The land book registration fee amounts to 0.15% of the sale price, the state tax owed by the seller amounts to 2% if the property is owned for less than 3 years and the value exceeds RON 200,000, etc.<br>• also, for mortgage loans secured, credit institutions require home insurance, which depends on the value of the home, the maturity, the types of insured risks, etc. |
| **The level (if any) of government subsidies for house purchases:** | There are no government subsidies for house purchasing, but there are specific programmes designed to assist customers who wish to either purchase a house or build one.<br>The "New House" Programme supports young people who want to purchase their first home via Romanian Government guarantees, the main benefits for the clients being a lower interest rate and down payment.<br>Also, certain credit institutions have concluded agreements with the National Housing Agency to offer loans for the acquisition or construction of homes.<br>The rental housing units for young people may be bought by the leaseholders (tenants) at the end of at least one-year continuous lease. |

# Slovakia

By Matej Bašták, Slovenská sporiteľňa

## IN A NUTSHELL

- → Domestic economic growth was affected by the pandemic, although it recovered faster than expected
- → Volume of mortgages continued to grow strongly, negative effect of recession partly mitigated by moratoria
- → Growth of real estate prices accelerated as still solid demand was met with declining supply
- → First green bonds were issued in the first half of 2021
- → Interest rates on new mortgages continued to decline, market average fell to historical low of 1.12%.

## MACROECONOMIC OVERVIEW

The economy was hit considerably by the pandemic. The second quarter of the year saw the worst impact, when severe restrictions were imposed on almost the entire economy. Although the third quarter brought an unexpectedly strong recovery, the end of the year was overshadowed by a second wave of infection. GDP fell from 2.5% growth in 2019 to 4.8% decline in 2020. The first pandemic wave affected both service sector and industrial production with an unprecedented drop in economic activity of more than 12% year-on-year. The second wave of infections cooled mainly services and sales in bricks-and-mortar shops. Household consumption remained fairly strong while net exports experienced significant swings during the year. Industrial production rebounded strongly after Q2 and was affected only little by the later anti-pandemic restrictions.

The labour market was resilient thanks to significant support from the government. Unemployment increased only modestly to an average of 6.7% for the full year with a peak expected in the first half of 2021. Nominal wage growth remained solid at 3.8%. The growth in consumer prices (measured by HICP) averaged 2% in 2020, representing a moderation in inflation compared to the year before. The fall in global oil prices was a significant factor in lower inflationary pressure.

The public debt ratio, consistently well below the Euro area average, rose significantly as a result of pandemic-related spending to 60% of GDP in 2020 with further expected increase still to come. The fiscal expansion is temporary and, especially in this adverse situation, it is vital to stabilising the economy.

Household indebtedness continued to increase as retail loans grew at solid pace while GDP shrank. Final reading was 46.4% of GDP for 2020, 4 pps above the previous year level. Certain stabilization is expected in 2021 thanks to economic recovery and moderation of retail loan growth. Corporate indebtedness increased by a more moderate 1.6 pps to 55.1% of GDP, since growth in loans to NFCs was lower than in loans to households.

## HOUSING MARKET

Slovakia has the third highest homeownership rate in Europe (behind Romania and Hungary) with 90.9% of the population owning houses, exceeding by far the EU average (69.2%). It is the result mainly of the transfer of flats from the state to the population (residents) in the 1990s for the residual value of dwelling.

In the Bratislava region, which has the country's most expensive housing, residential property prices rose by 15.9% y-o-y to EUR 2,470 per m$^2$ in 2020, after rising at a modest pace of 5.8% a year earlier. Other regions also saw extremely high house price increases.

- Two regions experienced growth of more than 30% in 2020. Kosice, after slight decline in prices in 2019, was the fastest growing region with 38.6% y-o-y to EUR 1,434 per m$^2$. Banska Bystrica (+32.7% to EUR 1,092 per m$^2$) followed.
- Double digit growth occurred also in Zilina (+14.8%), Presov (+13%) and Nitra (+10.2%).
- Regions of Trencin and Trnava grew at below 10%.

Overall, the growth of real estate prices accelerated despite the slowdown in economic activity. Naturally, such development led to a divergence of real estate prices from fundamental economic indicators. Although the central bank does not indicate a real estate bubble yet, such situation is getting increasingly probable given the recent development.

Both supply and demand pressures are driving prices up. The restrictions on the economy curbed construction significantly in 2020 and later global increase in input prices added further strain on the number of newly started real estate projects which declined by almost 23% year-on-year. Demand, on the other hand, increased as real estate is considered as a safe haven. In addition, forced increase in working from home revealed need for larger dwellings.

## MORTGAGE MARKET

Despite the anti-pandemic measures and consequent slump in the economy, the volume of housing loans continued to grow, at a strong 9% in 2020. Growing real estate prices, still solid demand for flats and houses, together with fairly robust labour market kept Slovakia among the top 5 fastest growing mortgage markets in the EU.

Thanks to persistently low and even still declining interest rates, the significant share of refinancing remained a prominent feature of the local market. In 2020, as much as 32% of new loans were changes in contractual terms, with lower interest rates being by far the most common change. Similarly, high activity was seen in the number of clients switching banks for lower rates as breakage costs are low due to local laws.

Average interest rates have been affected by two factors creating downward pressure. Firstly, the ECB's extremely loose monetary policy with no immediate prospect for normalization. Secondly, a high level of competition, mainly from smaller banks, which came with aggressive pricing below 0.5% for new loans with fixed periods of 3-5 years. As a result, average interest rates in the market went down from 1.35% in 2019 to just 1.12% in 2020.

The market is dominated by a relatively short fixed period and the average maturity was around 26 years. More than 90% of new mortgages had the rate fixed for 1-5 years, with the majority of applicants opting for either 3 or 5 years. Floating rate mortgages are virtually non-existent. Almost half of new housing loans (volume wise) in 2020 were provided with maximum possible maturity of 30 years and less than 19% chose a maturity of 20 years or less.

The volume of non-performing housing loans declined in 2020. Consequently, combined with the rapid growth of total lending, the NPL ratio fell from around 1.7% in 2019 to just 1.4% in 2020. Statutory moratoria helped significantly mainly in the early part of the pandemic. Around a tenth of housing loans by volume had payments deferred. Most of the applications occurred in April and May with the most common postponement option for 9 months (the maximum possible). As a result, most of them were due to restart paying at the beginning of 2021. However, the first indicators showed that there was virtually no deterioration in loan quality even after the moratoria ended.

The prominent feature of the Slovak mortgage market is a high share of new loans intermediated through financial advisors. In 2020, around 66% of total volume were arranged via such external sales network. The National Bank of Slovakia (NBS) considers intermediated loans as somewhat riskier and sees intermediaries as too aggressive, pushing clients to the maximum level of indebtedness allowed.

Due to the NBS's limits on maximum LTV, the average Loan-to-Value (LTV) ratio stabilized and declined only slightly from 73% in 2019 to about 71% in 2020. It remains at the higher end within the Euro area, though. The share of new loans that can have an LTV ratio between 80% and 90% is currently 20% of new production and new loans with an LTV greater than 90% are not allowed. Other measures to fight increases in household indebtedness, which are currently in place, are limits on Debt-to-income ratio (DTI) and Debt service-to-income ratio (DSTI). The former was set to 8 in mid-2018. The latter is defined as a minimum reserve which must be left aside out of monthly net income after deduction of debt repayments and minimum living costs. The reserve had to be at least 40% as of mid-2020.

## MORTGAGE FUNDING

Deposits are, for banks, one main source and for the building societies, the only source of funding for their mortgage market activities. Short-term deposits and current accounts continue to offer a stable, low-cost source of funding for the banks and building societies. Retail deposits bear virtually 0% interest costs for large commercial banks. Despite this fact, mainly retail deposits experienced a surge in volumes as lockdowns limited spending opportunities and also brought higher uncertainty about the future.

Banks also fund the lending activities through the issuance of covered bonds. Covered bonds are an attractive funding tool for Slovak banks because they are typically cheaper for banks than senior unsecured bonds on average in Europe as they are asset-backed, highly rated (triple A or slightly lower, depending on the actual over-collateralisation), therefore perceived as lower risk by investors. A new modern covered bond law applied from January 2018 and since then Slovak banks issued up to EUR 6 bn of the new covered bonds. In addition, EUR 1 bn of retained covered bonds were issued in 2020 which were directly used as collateral in TLTRO transactions by only two Slovak banks. TLTRO was utilised by three Slovak banks for a total amount of around EUR 2.5 bn in 2020 and as much as EUR 6.2 bn in total as of March 2021.

## GREEN FUNDING

Slovak banks started to explore funding through green bonds already in 2020 but the issuances came only in 2021. Two banks managed to place inaugural green bonds at total volume of EUR 400 mn.

| | SLOVAKIA 2019 | SLOVAKIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 2.5 | -4.8 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 5.8 | 6.7 | 7.1 |
| HICP inflation (%) (1) | 2.8 | 2.0 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 91.3 | 90.9 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | 2.9 | 3.1 | -3.9 |
| Building Permits (2015=100) (2) | 115.5 | 108.0 | 117.1 |
| House Price Index – country (2015=100) (2) | 126.9 | 142.1 | 131.3** |
| House Price Index – capital (2015=100) (2) | 124.1 | 137.8 | 135.2** |
| Nominal house price growth (%) (2) | 7.5 | 11.9 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 31,001 | 33,787 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 6,985 | 7,613 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 53.2 | 57.0 | 70.8* |
| Gross residential lending, annual growth (%) (2) | -8.7 | 15.5 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 1.4 | 1.1 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## SLOVAKIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Housing finance is raised from banks, building societies and State funds with only minimum volume provided. |
| **The market share of the mortgage issuances:** | The majority of new mortgages is issued by commercial banks (up to 95%), followed by building societies (~5%). State funds contributed with just marginal volumes. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Banks had a market share of 93%, Bausparkassen of 7% and the state funds just 0.1%. |
| **Typical LTV ratio on residential mortgage loans:** | In 2020, the average LTV for newly issued mortgages was about 72%. A maximum LTV ratio of 90% is possible (up to 10% of all newly provided mortgage can have an LTV between 80% and 90%). |
| **Any distinction made between residential and non-residential loans:** | Not available |
| **Most common mortgage product(s):** | Most mortgage loans taken out are loans with rates fixed for a period of 3 to 5 years. |
| **Typical maturity of a mortgage:** | The average maturity of a new mortgage loan was about 26 years in 2020. Mortgage loans can usually have a maturity of 30 years. Part of the portfolio of mortgages can have a maturity of more than 30 years. Mortgages with state subsidies (Mortgage loan for young people) must have a maturity of at least 5 years, others may have less. |
| **Most common way to fund mortgage lending:** | For banks, deposits are one main source for funding their mortgage activities, while for building societies they are the only source of mortgage funding. Banks also fund their lending activities through issuance of covered bonds. The recent legal reform made covered bonds an even more attractive funding tool for banks. |
| **Level of costs associated with a house purchase:** | Relatively low. Legal, notarial and registration costs are in the order of hundreds to thousands of euro (depending on property value and specifics of the transaction). No special taxes are payable. The round-trip transaction costs include all costs of buying and then re-selling a property – lawyers' fees (<0.1% of the property value), notaries' fees (around 0.01%) (+20% VAT), registration fees, taxes, agents' fees (3% - 6%). |
| **The level (if any) of government subsidies for house purchases:** | Subsidies are provided in two main forms:<br>• Mortgage loan for young – tax break on 50% of interest costs, up to EUR 400 per annum;<br>• State Housing Development Fund - providing loans with lower interest rates (conditions apply). |

# Slovenia

By Tobias Fromme, European Bank for Reconstruction and Development

## IN A NUTSHELL

- → National measures aimed at fighting the pandemic resulted in a 5.5% contraction of the economy and increased unemployment. However, a recovery is expected for 2021.
- → Especially during the first half of the year, house prices in Slovenia decreased on average by 15% and by even more in the capital city, Ljubljana. This in combination with low interest rates and government subsidies triggered a surge in demand in the second half of the year when a record number of construction permits were issued.
- → During the second half of the year there were a record number of transactions, and investment in housing increased significantly.
- → The Ministry of Finance initiated a EUR 500 mn-guarantee scheme, supporting young people and families to take out mortgages.
- → Initiatives to green the economy and reduce the greenhouse gas emission of residential buildings have increased and the government implemented several measures in 2020.

## MACROECONOMIC OVERVIEW

A strong recovery from the 2013 economic recession came to an end when the economy contracted by 5.5% in 2020 due to the pandemic and national restrictions, including an eight-week lockdown. Economic sentiment has recovered since and it is expected that the country's GDP will grow by around 5.7% in 2021[1], helped by strong exports and domestic demand, easier financial conditions, and extensive government support. Particularly the latter helped private investment to reach its pre-pandemic level at the end of 2020, while residential construction rose to record highs. Potential growth in the next few years will depend on how successfully the authorities implement structural economic reforms, such as the continued privatisation of the banking sector, and planned infrastructure projects.

Nevertheless, the measures aimed at fighting the pandemic adversely affected the operations of companies and reduced the overall level of employment, increasing the average level of registered unemployment to 5% compared with 4.5% in 2019. Most impacted was the service sector, including hospitality, tourism and cultural and recreational activities, while industry and construction were spared. A more drastic increase in unemployment was prevented by the adoption of a legislative package of state aid.

Inflation in 2020 significantly decreased to -0.3% from 1.7% in the previous year mainly due to the oil price slump and lower food and transportation prices. It is expected that consumer prices will increase over the next few years and level off at the ECB's target rate of just below 2%.

Slovenia's government debt, which is 81% of GDP, around one third higher than in 2019, remains a concern and limits the room for further expansionary fiscal policy. The country's debt is also significantly above its peer countries' median ratio of 40.5%. The fiscal deficit was above 8% of GDP in 2020.

## HOUSING MARKETS

House prices decreased by around 15% y-o-y due to the economic contraction, which is the first decline since the EU sovereign debt crisis, a rise in unemployment and an increase in the supply of housing through record levels of residential construction. While this comes as a slight surprise because of the inherent mismatch between the supply and demand for residential buildings, it is expected that prices will again increase in 2021 and continue to do so in the near future. In addition, long-term trends, including urbanisation and the use of residential building for tourism (i.e., Airbnb), have already resulted in significant price increases in the last three years. Particularly the rental market was negatively affected and rents rose considerably.

Responding to decreasing affordability of housing, the Parliament proposed the so-called Housing Act, which was signed into force in June 2021. The Act establishes a public rental service, which will acquire or rent apartments at a market-determined price and (sub-)let them at below market prices to low-income renters. Moreover, the regulation allows municipalities and public housing funds to borrow more for the acquisition of new rental public housing. Lastly, the reform grants the state-run housing fund a pre-emption right with regards to the sale of municipal land intended for housing construction. The Act foresees other changes that affect rental relations, non-profit housing rentals, rent subsidies, inspections, and multi-apartment buildings management.

Construction confidence indicators remained high, supported by the ongoing increase in construction activity. In 2020, Slovenia issued more than 3,600 building permits; an 18%-increase compared to 2019. In addition, more than 3,800 new housing projects were started, while around 3,500 were completed. As a result, real gross residential lending increased by around 34% compared to the previous year and stood at EUR 1.51 bn. At the same time, housing sales increased by 28.4% to more than 11,000 transactions in 2020 – their highest level in more than a decade.

## MORTGAGE MARKETS

Demand for residential real estate finance increased by 4.2% compared to 2019, with EUR 6.86 bn outstanding residential loans. Moreover, the low interest rate environment (1.82% in 2020; 2.35% in 2019 – weighted average rates on new residential loans) increased the demand for housing loans, reflected in the 35% increase in residential lending. While the proportion of homeowners with mortgages remains 8%, relatively low compared to the EU average it is in line with Slovenia's peer countries and neighbours.

In November 2019, the Bank of Slovenia tightened macroprudential measures to counteract the elevated risks associated with consumer lending. It placed

[1] Source: https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-performance-country/slovenia/economic-forecast-slovenia_en.

caps on the maturity of consumer loans and the ratio of the annual debt servicing costs to the borrower's net income, which also applied to housing loans. However, the Ministry of Finance disagreed with the measures and drafted legislation aimed at helping the population take out mortgages, by offering state guarantees on a combined EUR 500 mn worth of such loans. The guarantee is offered to young families or people up to 40 years of age who might face difficulties getting mortgages.

Due to increasing LTV figures, which on average were 77.1% in 2020, government authorities continued to closely observe the robustness of the banking system. According to the Bank Lending Survey, credit standards for housing loans remained unchanged on the year and tighter than in 2010, when the standards where tightest after the GFC, due to the recently implemented macroprudential measures. Slovenian households' financial liabilities gradually increased in absolute terms, but fell in relation to GDP and disposable income.

The continuous increase of residential loans highlights the importance of the sector in terms of all bank assets. At the same time, the non-performing exposure of banks has decreased from around 14.3% of total assets in 2015 to around 2.6% in 2020. Interest rates on mortgages in aggregate fell to 1.82%, which constituted a 53 bps reduction with respect to the previous year. This was mostly due to the expansionary monetary policy and open-market measures conducted by the ECB as well as the overall excess liquidity of the European banking sector. Interest rates on mortgages are expected to stay below 2% for the foreseeable future and until the economy has recovered.

## MORTGAGE FUNDING

While the mortgage industry in Slovenia is part of the universal banking services, its funding has changed over the past 20 years. Before the GFC in 2008 and the European sovereign debt crisis in 2013, Slovenian banks were mostly funded through international financial markets, in particular capital coming from Northern Europe, in order to provide enough liquidity to finance construction activity. Nowadays, domestic banks are mostly funded by deposits. Foreign-owned banks obtain funding through a mix of deposits and access to their parent group's balance sheets.

Although legislation allows banks to issue mortgage-backed securities and covered bonds, securitisation of residential mortgages has yet to happen.

## GREEN FUNDING

In recent years, Slovenia has aligned its strategy on greening the economy and reducing greenhouse gas emission of residential buildings to EU plans and taken advantage of European Commission funding for a number of projects. For instance, the government is currently providing subsidies and soft loans to private homeowners who wish to improve the energy performance of their homes through better insulation, installation of heat recovery ventilation and investment in renewable energy sources. Special attention is given to multi-family houses, by the preparation of new instruments to gain consensus for renovation, by subsidizing renovation for socially vulnerable people at 100% and by setting up a guarantee scheme. In addition, the country is subsidising the construction of new very energy-efficient houses and flats.

The country's building regulations, which were tightened in 2011 to elevate the minimum standard for eligible buildings, set statutory minimum energy performance requirements for new buildings and substantial changes in existing buildings. Further tightening is envisaged in the near future. Financial programmes for the energy renovation of buildings in the public sector are in place and the country's National Energy and Climate Plan sets the goal to reduce energy use in buildings by at least 20% in 2030 compared to 2005. In this regard, in October 2020, the Slovenian government unanimously adopted the law on Energy Efficiency. Under the law, obligations were laid out for measuring energy consumption and calculating energy costs together with related fines. They transpose the EU's Energy Efficiency Directive with regard to cost-sharing in buildings with several apartments. All new buildings that have a central heating or cooling source or are connected to district heating or cooling networks will have to be equipped with individual consumption meters including for hot water. The devices will need to be able to be read remotely. Moreover, instruments for stimulation of energy renovation of old buildings and for sustainable construction of new low energy and passive residential buildings were presented. The energy renovation of old buildings includes thermal insulation of buildings and replacement of energy-inefficient windows. The financial stimulation is designed to support the investment in new energy efficient buildings exceeding minimum standard level.

| | SLOVENIA 2019 | SLOVENIA 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| Real GDP growth (%) (1) | 3.2 | -5.5 | -6.0 |
| Unemployment Rate (LSF), annual average (%) (1) | 4.5 | 5.0 | 7.1 |
| HICP inflation (%) (1) | 1.7 | -0.3 | 0.7 |
| **HOUSING MARKET** | | | |
| Owner occupation rate (%) (1) | 75.1 | 74.8 | 65.8* |
| Gross Fixed Investment in Housing (annual change)(1) | 9.9 | 5.3 | -3.9 |
| Building Permits (2015=100) (2) | 142.9 | 168.3 | 117.1 |
| House Price Index – country (2015=100) (2) | 159.1 | 135.8 | 131.3** |
| House Price Index – capital (2015=100) (2) | 183.3 | 142.6 | 135.2** |
| Nominal house price growth (%) (2) | 30.0 | -14.7 | 4.8** |
| **MORTGAGE MARKET** | | | |
| Outstanding Residential Loans (mn EUR) (2) | 6,587 | 6,862 | 6,170,130 |
| Outstanding Residential Loans per capita over 18 (EUR) (2) | 3,847 | 3,979 | 16,860 |
| Outstanding Residential Loans to disposable income ratio (%) (2) | 22.6 | 22.5 | 70.8* |
| Gross residential lending, annual growth (%) (2) | 5.8 | 33.8 | 4.9 |
| Typical mortgage rate, annual average (%) (2) | 2.4 | 1.8 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## SLOVENIA FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Commercial banks, savings banks, and the National Housing Fund. |
| **The market share of the mortgage issuances:** | Data on market share is not available. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | The outstanding amount hold by commercial banks and savings banks is close to 100%, as NHF's share is negligible. |
| **Typical LTV ratio on residential mortgage loans:** | The average LTV ratio on new residential mortgages is of 67.6%. |
| **Any distinction made between residential and non-residential loans:** | Residential loans are those designated for the purchase or renovation of housing. |
| **Most common mortgage product(s):** | The two more common products are: 20-year variable rate mortgage and 15-year fixed rate mortgage. |
| **Typical maturity of a mortgage:** | Average maturity in 2020 was 20 years. |
| **Most common way to fund mortgage lending:** | Mortgage funding in Slovenia is mainly deposit-based. |
| **Level of costs associated with a house purchase:** | The cost associated with house purchase represents between 2 and 4% (2% transfer tax, up to 2% for real estate agency fee if realtor was used) of the value. |
| **The level (if any) of government subsidies for house purchases:** | No subsidies |

# Spain

By Leyre López, Spanish Mortgage Association

## IN A NUTSHELL

- → Although GDP registered a record drop in 2020 due to the restrictions on mobility, it is expected to return to growth in 2021.
- → The pandemic altered the strategy of financial institutions, with increasing focus on supporting recovery, the use of digital channels and consolidation.
- → Despite the pandemic, mortgage activity was better than expected, with a drop in the originations of 2%.
- → There is greater demand for larger homes with, outdoor and multi-purpose spaces.

## MACROECONOMIC OVERVIEW

In Spain, on 14 March 2020 a series of measures were approved to reduce mobility and close non-essential activities. Of course, these restrictions have had a very severe impact on the economy, which contracted by 10.8%, after six years of growth. Spain has been hard-hit due to its economic model, with a high proportion of SMEs, temporary workers and excessive reliance on the services sector. Thus both domestic and external demand had a negative contribution to GDP, domestic demand fell 8.8% due to a fall in private consumption; external demand fell 2.0%, with the fall in tourism and exports partly offset by a fall in imports.

The number of employed people decreased by over 622,000. The total number of unemployed was 3.7 million, not including more than 750,000 under a temporary employment regulation scheme (Spanish acronym: ERTE) at end-year. As a result, over the year the unemployment rate has risen by more than 1 pp, up to 15.5%.

As a consequence of the crisis the fiscal deficit has risen to 11% of GDP. Together with the deterioration of the economy, has resulted in an increase in public debt of almost 25 pps, to 120%. Spain's bad bank (SAREB) has recently been reclassified as part of the National Accounts following Eurostat criterion adding 3 pps to the debt.

## HOUSING MARKETS

Real estate forecasts for 2020 were for stable growth in the mature phase of the cycle with moderate prices and transaction volumes. Instead, the pandemic caused a significant slowdown in activity. The number of new construction permits decreased by 20% – although improving by year end –, from more than 106,200 dwellings in 2019 to 85,535 during 2020.

There are several trends in demand causing a 15% drop in transaction volumes (just over 487,000 sales compared to about 570,000 sales in 2019). On the one hand, existing home owners, with capacity to buy homes and lower financing needs, remained active. On the other hand, the problem of first-time buyers is deteriorating, high levels of unemployment makes it difficult for many to but their first home. Unlike other years, foreign homebuyers, have reduced their involvement in the market by more than two points (below 15%) due to the restrictions.

As seen in other countries, after the lockdowns housing demand shifted to single-family homes, larger homes and with those open spaces, rising by more than 23% y-o-y against the second half of 2019. This partly explains the minimal fall in residential prices, which have decreased just 1.1% on average. New buildings have been less affected, price growth remains marginally positive (+0.3%) due to stock shortages and high pre-sales volumes. Contrary to the price correction in the previous crisis – a cumulative fall of 30% –, it is assumed that this crisis will be transitory, so no major price adjustments are expected. In the housing rental market, by contrast, the year had weaker performance, particularly in larger cities as a consequence of remote working and online classes. Having said that, it should be noted that rental prices in large cities before the pandemic were already stressed.

## MORTGAGE MARKETS

### MARKET DYNAMICS

By the end of the year gross residential lending volumes remained close to pre-pandemic levels, with a decrease of just 2% over the year (+1% considering remortgaging activity) to EUR 41 bn. There has been a certain tightening of credit standards amid higher risk perception, partially offset by the highly competitive environment. The share of new mortgages with LTV over 80% fell to an historical low of 9%.

In contrast to the businesses sector – where credit has grown substantially thanks to policy measures – residential mortgage balances shrank 1.2% y-o-y. Financial institutions have approved almost 1.4 mn cases of principal and/or interest deferrals on mortgage and consumer loans amounting to EUR 54 bn by the end of the year (about 8.5% of total outstanding credit in the household segment).

This, along with the ERTEs, restricted housing NPLs to 3.1% in 2020 – despite figures suggesting slowing balance sheet improvements over the course of the year. NPLs in other portfolios were also favourable, to a greater or lesser extent, depending on the segment and its exposure to restriction. Refinanced exposures also slowed their pace of decline, while exposures under special monitoring increased in anticipation of deteriorating economic conditions and considering the effectiveness of the business solvency support programmes, which includes direct aids and debt restructuring amounting to EUR 11 bn.

### NON-MARKET LED INITIATIVES

In addition to the monetary policy measures, other support measures, such as the moratoria on payments on mortgage loans and public guarantees of some business credits, have consolidated the role of the financial sector.

Five moratoria have been approved throughout 2020 and have benefitted primarily households. These moratoria have suspended payments on EUR 56 bn of loans. Of which, approximately EUR 22 bn would have amortised throughout the year, leaving almost 75% of the portfolio as a performing exposure (stage 1 following IFRS 9 accounting rules).

Other measures include the approval of several lines of public guarantees to promote access to credit for companies and self-employed. Of particular relevance is a line provided of up to EUR 100 bn[1] to help companies with their cash-flow needs; in addition, two other credit lines were approved, one provided up to EUR 1 bn for vulnerable tenants and another EUR 40 bn to finance investments.

All these measures were in the package put in place to reduce the impact of the crisis, in addition to Exceptional Temporary Employment Regulations, tax deferrals and income protection mechanisms. They account for around 20% of GDP and will be in place together with the EUR 140 bn for which Spain is eligible under the Next Generation EU Programme (NGEU) and the more than EUR 79 bn expected from the structural funds and the Common Agricultural Policy.

### ANY FURTHER IMPORTANT EVOLUTION

COVID-19 has accelerated some trends that were already underway, such as the digital transformation and the reduction of operational costs by means of banks' consolidation due to very low interest rate environment. During the reference period the weighted average interest rate reached the all-time low level at 1.7%, showing a drop of 0.3 pps compared to 2019. This is adding further pressure to banks' profitability, triggering a new wave of banking consolidation.

## MORTGAGE FUNDING

Banks have almost doubled their use of TLTRO funding to a volume of EUR 261 bn. In addition they have continued to use other instruments not placed generally on the market but retained and used as collateral for ECB purposes, such as covered bonds (funding 35% of mortgages) and mortgage securitisations (15%). In total, according to Bank of Spain, the outstanding balance of these exceeded EUR 316 bn, contracting by 1% since 2019.

Deposits in the resident private sector continued to increase, rising by 9% in 2020 to EUR 1,300 bn. Despite the economic downturn, the household saving ratio has been at an all-time high, a large part of this as deposits.

## GREEN FUNDING

In terms of green finance, key banks and other financial institutions, in addition to Banco de España, have all shown their commitment to the implementation of a sustainable finance framework, in line with the policy priorities of the country's public authorities.

In late 2020, the Spanish central bank's Deputy Governor announced that the financial sector would be instrumental in achieving the full decabornisation of both businesses and household. Risk measurements in particular were deemed key in this endeavour, as they would allow the banking sector to allocate resources to projects or assets aligned with the new environmental requirements. From a sectoral standpoint, financial entities operating off the national and regional mortgage markets drew up various green projects during 2020, most of which aim at renovating the building stock and ensuring a certain degree of energy efficiency of dwellings. Furthermore, concerning bank financing, sustainable covered bonds are currently being used by Spanish financial institutions. According to the latest data from the ECBC, in 2020, total outstanding sustainable covered bonds volumes amounted to around EUR 2 bn, suggesting that the national banking sector is actively involved in an emerging market which, as the European green transition gains speed, will likely become more relevant.

| | SPAIN 2019 | SPAIN 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 2.0 | -10.8 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 14.1 | 15.5 | 7.1 |
| **HICP inflation (%) (1)** | 0.8 | -0.3 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 76.3 | 76.2 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 4.1 | -16.6 | -3.9 |
| **Building Permits (2015=100) (2)** | 213.8 | 172.1 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 111.3 | 110.0 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 126.1 | 124.3 | 135.2** |
| **Nominal house price growth (%) (2)** | 3.2 | -1.1 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 487,561 | 481,913 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 12,631 | 12,355 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 63.8 | 65.2 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 1.2 | 0.9 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 2.0 | 1.7 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

[1] Article 29 of Royal Decree-law 8/2020, of 17 March.

## SPAIN FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | In Spain, mortgage lending is always provided by financial institutions. Banks, savings banks, credit cooperatives, and financial credit establishments are the institutions allowed by law to grant mortgage loans and issue securities. It is worth mentioning that saving banks were especially affected by the recent crisis due to the high exposure to the real estate sector. Several saving banks disappeared through liquidation or acquisition, and most of the remaining transformed into banks after Law 26/2013 of 27 December was passed. Since then, only small and regional saving banks operate in the market. |
| **The market share of the mortgage issuances:** | As in previous years, in 2020, around 90% of the total volume of new mortgage loans was granted by banks. Other financial institutions, like credit cooperatives and financial credit establishments, represented the remaining 10%. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Banks and former saving banks stand for the major part of the market, representing around a 91% of total outstanding mortgage lending. The remaining 9% is covered by credit cooperatives (8%) and financial credit establishments (1%). |
| **Typical LTV ratio on residential mortgage loans:** | On average terms, in 2020, the LTV ratio on new residential mortgage loans stood at 64% (according to Bank of Spain statistics). However, the most common LTV for FTB is 80%. For second houses the maximum level is normally 70%. |
| **Any distinction made between residential and non-residential loans:** | Residential loans include loans granted to households for housing purchase or renovation. |
| **Most common mortgage product(s):** | The most common mortgage loan product in Spain was the variable rate mortgage loan reviewable every 6 or 12 months with a French amortisation system. In variable rate mortgage loans, the interest rate is linked to an official reference index (being the most common the Euribor 12m).<br><br>Since 2015, as a result of the security they offer, initial-fixed interest rate mortgage loans, with a fixation period of over 10 years, have gained momentum, representing almost 50% of gross residential lending by the end of 2020. |
| **Typical maturity of a mortgage:** | According to Bank of Spain statistics, the average maturity for new mortgage loans in Spain stood at around 24 years, with the most typical term for FTB being 30 years. As usual, the real amortisation period is usually lower, around 15 years on average. |
| **Most common way to fund mortgage lending:** | Covered bonds, RMBS/CMBS and deposits |
| **Level of costs associated with a house purchase:** | The main transactions cost associated with house purchase are VAT for new housing, which represents 10% of the value of the house, and the Tax on property transfer for second hand dwellings (with a rate normally between 6-10%, depending on the geographical area).<br><br>As of 2019, after the new *Law 5/2019 regulating Real Estate Credit Contracts* was passed, all cost linked with the constitution of the mortgage must be covered by the bank (Mortgage Stamp Duty – "AJD" Tax; notary, registry and agency fees), except the cost of the valuation of the property and the notarial copies requested by the client, which are responsibility of the borrower.<br><br>Another cost which is compulsory for the borrower when taking out a mortgage is the cost of fire insurance. |
| **The level (if any) of government subsidies for house purchases:** | In 2013,the tax deduction that had been in force for years aimed at aiding homebuyers came to an end, remaining exclusively for those homebuyers who had purchased a property before that date. In 2018, a new State Housing Plan for the 2018-2021 period came into force, which seeks to facilitate access to housing property for vulnerable young people under 35 years old, whilst trying at the same time to boost the regeneration of urban and rural areas affected by depopulation. Eligible beneficiaries must buy a home in a municipality with less than 5,000 inhabitants and the amount granted under this scheme shall not exceed 10,800 euros per dwelling, limited to 20% of the purchase price. |

# Sweden

By Christian Nilsson, Swedish Bankers' Association

## IN A NUTSHELL

- → Residential mortgage lending increased by 6.4% in 2020.
- → Construction slowed, with 9% less completions.
- → Single family home prices increased due to changing housing demand in the pandemic.
- → The share of new loans with variable rates continued to fall, by 11 pps to 48%.
- → The share of new loans that amortise has levelled out the last years and was 88% in 2020.

## MACROECONOMIC OVERVIEW

The GDP decreased by 2.8% in 2020 compared to an increase of 2% in 2019, according to Eurostat. Despite this Sweden was better off than many other countries. Due to the pandemic there was a sharp drop in household consumption, net exports and investments in Q2. The GDP recovered during the third quarter, but due to the second wave of Covid-19 during the fourth quarter the recovery levelled out. Unemployment increased to 8.3% from 6.8%.

Inflation slowed to 0.7% at year-end compared to 1.7% in 2019. Also, core inflation (Consumer Price Index with fixed interest rate) decreased to 0.5%.

Government debt[1] as a percentage of GDP grew from 35.0% to 39.9% in 2020, mainly due to government actions to support the economy from the effects of Covid-19. The rise in government debt is equivalent to EUR 28.2 bn in 2020[2]. In comparison the government debt fell by EUR 14,6 bn in 2019.

## HOUSING MARKETS

Housing completions had increased continuously since 2014 but levelled out in 2019 and decreased in 2020 to 50,500 dwellings (-9.3 %). The fall in completions will probably be temporary as the housing market recovered at the end of 2020 and continued increasing in 2021. In addition, housing starts increased in 2020 by 9% to around 53,800 dwellings and building permits by 3.2% to 56,300. Despite the uncertain conditions in the economy, levels of construction activity remain comparably high in Sweden with respect to the previous years.

Stricter amortisation rules introduced in 2018 to curb interest-only loans still influence the housing market. They limit the possibilities for some groups to enter the housing market - especially in the larger cities, where new construction is not affordable to many individuals.

However, due to Covid-19 there has been a distinctive change in demand for housing. The demand for one-family homes and larger apartments has increased, as have prices for vacation homes. Prices of single-family homes increased by 6.6% compared to 2.7% in 2019. They are most expensive in Stockholm region where prices increased by 6.3% in 2020. Single-family house prices in the Gothenburg and Malmö regions increased in 2020 by 5.1% and by 8.1% respectively. In the beginning of 2021, the prices on one-family homes increased further.

The prices for tenant-owned apartments increased by around 4.5% during 2020 compared to around 2% in 2019.

The share of tenant-owned apartments among new construction has been relatively stable around 50%. However, in 2020 the share of rental apartment among new construction has increased to 61%. Overall, 38% of all apartments are tenant owned and the rest are rented. For all dwellings (single family homes and apartments), the share is reversed: 62% owner occupied and 38% rental.

## MORTGAGE MARKETS

### MARKET DYNAMICS

Residential mortgage lending grew by 6.4% in 2020 compared to 5.2% in 2019. The growth rate increased in 2020 after having declined for four years in a row.

The demand for mortgage loans has continued and although amortisation of existing loans has increased, debt levels are relatively high. Several factors, which have been unchanged for many years, explain this. i) The population is growing due to immigration and relatively high birth rates. ii) Internal migration towards larger cities has driven housing markets in those areas. This in combination with a long period of comparably low housing construction has created a shortage of housing. iii) Dysfunctional apartment rental markets in growth regions due to rent control leaves few opportunities other than to buy an apartment. To get a rental apartment with a first-hand contract on the regulated rental market often requires many years of queuing. It is therefore common to re-rent the apartment with a second-hand contract where the rent charged is determined by the market. This is a significant problem especially when the re-renting happens without the permission of the landlord. If you move to a city in a growth region in Sweden and need a rental apartment without queuing, you normally have to pay a rent at a cost far higher than rents on the regulated first-hand market. iv) historically low mortgage interest rates.

Mortgage interest rates have been relatively stable for the last five years. The variable (3-month) rate has been between 1.3 and 1.4% during 2020, a similar range to that prevailing from 2015 to 2019. Initial fixed rates, for 1 to 5 years, have ranged from 1.3 and 1.5%, slightly lower than in previous years. Initial fixed rates over 5 years have been stable around 1.5% in 2020, slightly lower than in average during 2019.

Due to the COVID-19 outbreak in 2020 a general easing of the amortisation rules was introduced in April 2020, allowing exceptions such as interest only

[1] Government consolidated Gross Debt, Maastricht definition.

[2] Eurostat.

mortgages until August 2021. If the temporary exemption from the amortisation requirements is excluded, the proportion who amortise their mortgages (88%) in 2020 was unchanged compared to 2019[3]. Over a period of several years, amortisation has increased partly due to the stricter amortisation requirement (see below 4b).

The average LTV for new mortgage loans is 66.4% in 2020, which is slightly higher than in 2019.

The credit loss ratio on mortgage loans remained close to zero, due to high credit standards, the social welfare system, and house prices that have been almost continuously increasing for 25 years.

### NON-MARKET LED INITIATIVES

A number of measures have been taken in recent years to counteract high indebtedness. In 2010 Finansinspektionen (the Swedish Financial Supervisory Authority), introduced a mortgage cap, whereby home loans may not exceed 85% of the value of the home. They have also introduced a risk weight floor for Swedish mortgages, for bank capital purposes of currently 25%.

A further measure is the introduction of amortisation requirements. In June 2016 the Finansinspektionen's regulation on amortisation entered into force, requiring annual amortisation of at least 1-2% on mortgages with LTV (loan to value) 50% and higher. Stricter amortisation requirements entered into force from March 2018 requiring additional annual amortisation of 1% on mortgages with LTI (loan to income) from 450% or higher. Due to the COVID-19 outbreak in 2020 a general easing of these rules was introduced in April, allowing exceptions such as interest only mortgages until August 2021.

Finansinspektionen has focussed on commercial real estate in 2019, and at year end they announced additional capital requirements which apply from 2020 through Pillar II-requirements. The risk weight for the new additional capital requirements is 35% for commercial real estate and 25% for commercial residential properties[4].

### ANY FURTHER IMPORTANT EVOLUTION

Several measures have been taken to address the impact of Covid-19 on the financial markets. The Riksbank initiated purchases of covered bonds in March 2020 and which have continued also in the beginning of 2021.

The growth rate in outstanding mortgage loans increased in March 2021 to 6.5% on an annual basis compared to 5.4% in March 2020 and 5.2% in December 2019.

Prices of one-family homes continued to increase in the first months of 2021 and in the first quarter the prices increased by 13% on an annual basis.

## MORTGAGE FUNDING

Covered bonds are the most common form of mortgage funding. During 2020 the number of covered bonds outstanding increased by 1.2% (in SEK) to EUR 248 bn, compared to outstanding residential mortgages of EUR 469 bn. Gross new issuance was EUR 53 bn in 2020.

## GREEN FUNDING

Most Swedish mortgage institutions and banks offering mortgages, also offer different kinds of green mortgages. Green mortgages typically have a 0.1% interest rate discount if the residential property fulfils certain energy standards. During recent years some institutions have started to issue green covered bonds to fund the green mortgages.

| | SWEDEN 2019 | SWEDEN 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 2.0 | -2.8 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 6.8 | 8.3 | 7.1 |
| **HICP inflation (%) (1)** | 1.7 | 0.7 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 64.1 | 63.6 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | -6.5 | 3.1 | -3.9 |
| **Building Permits (2015=100) (2)** | 95.4 | 98.5 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 120.5 | 128.6 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 109.3 | 116.2 | 135.2** |
| **Nominal house price growth (%) (2)** | 2.6 | 6.7 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 423,397 | 468,966 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 52,434 | 57,562 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 176.6 | 193.5 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | -1.1 | 11.0 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.5 | 1.5 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

[3] Finansinspektionen, The Swedish Mortgage Market (2020), page 24. https://www.fi.se/en/published/reports/swedish-mortgage-reports/the-swedish-mortgage-market-2021/

[4] Finansinspektionen, Increased capital requirements on bank loans for commercial real estate https://www.fi.se/en/published/press-releases/2020/increased-capital-requirements-on-bank-loans-for-commercial-real-estate/

## SWEDEN FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | There are no specific limitations as regards issuing mortgages. 99.5% of all mortgage lending in Sweden is issued by banks and credit market institutions. New non-bank actors like mortgage credit companies and AIF (Alternative Investment Funds) have entered the market since a couple of years and made up 0.6% of the mortgage market in 2020. |
| **The market share of the mortgage issuances:** | There is an approximate share of 70% for credit market institutions (mortgage credit institutions) and 25% for banks. Other actors like mortgage credit companies and AIF (Alternative Investment Funds) had a market share of approximately 4% of new mortgages in 2019. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Mortgage institutions have approximately 75% of outstanding mortgages and banks approximately 25%. Mortgage credit companies and AIF (Alternative Investment Funds) have 0.6% of outstanding mortgages. |
| **Typical LTV ratio on residential mortgage loans:** | According to Finansinspektionen the average LTV for new mortgage loans in 2020 was 66.4%. |
| **Any distinction made between residential and non-residential loans:** | The distinction is made based on how the loan is secured. Residential loans are secured on residential property. |
| **Most common mortgage product(s):** | Ordinary mortgage loans. Variable interest used to be the most common interest rate on mortgages, however, in 2020 the share of new mortgage loans with variable interest rate fell below 50% for the first time since 2007. |
| **Typical maturity of a mortgage:** | The expected average length of a mortgage loan is 7.5 years. Contractual lengths of mortgage loans vary normally between 30 to 50 years. However, for many different reasons, mortgage borrowers either terminate their mortgage permanently or terminate and get a new one before the contractual length is reached. |
| **Most common way to fund mortgage lending:** | Covered bonds |
| **Level of costs associated with a house purchase:** | Different studies seem to indicate that the level of cost associated with a house purchase is very low in Sweden. Transaction costs in Sweden consist mainly of stamp tax (1.5%) and, if you need a loan, of a mortgage fee (2% of the new or increased mortgage). Normally you do not pay any fee to the mortgage lender. Notary is not needed in Sweden and there is therefore no notary fee. |
| **The level (if any) of government subsidies for house purchases:** | There are no direct subsidies in Sweden. However, borrowers are allowed to deduct 30% of the interest payments from their tax payments. |

# Iceland

By Lúðvík Elíasson, Central Bank of Iceland and Magnús Árni Skúlason, Reykjavik Economics ehf

### IN A NUTSHELL

→ The economy shrank by 6.6%, largely due to much lower tourism.
→ House prices and turnover increased, partly due to lower interest rates and government stimulus measures.
→ An increased proportion of houses were purchased by first time buyers, facilitated by significantly higher household savings rates.

## MACROECONOMIC OVERVIEW

GDP contracted by 14.2% in 2020, (from 0.1% negative growth in 2019), according to Eurostat. This decrease can largely be attributed to the effects of the COVID-19 pandemic. Tourism was particularly affected and it has decreased by 74.4% compared to 2019. The share of tourism in GDP is estimated at 3.5% in 2020, compared with 8.0% in 2019.

The rapid growth during the preceding years had been largely driven by the expanding tourism sector, which had overtaken fisheries and aluminium as the country's main export. Growing tourism services had been supported by immigration, which in recent years surpassed the levels seen before the financial crisis of 2008. Both immigration and tourism has put pressure on the housing market in recent years. Demand from the tourist sector subsided in 2020 whilst lower interest rates and increased savings by households spurred added demand for housing by first time buyers and investors. While house prices increased in 2020, the rental market stabilised due to a shift from tenants to home-ownership.

Unemployment as percentage of the labour force is estimated at 5.5% in 2020 compared to 3.5% in 2019, according to Eurostat.

The economy was already starting to cool down from an expansionary period when the pandemic started and the global economy was hit by unparalleled closures of businesses and borders. At the start of the pandemic both the government of Iceland and the Central Bank of Iceland committed strongly to support the economy. Monetary policy was eased, liquidity of banks was increased and the government provided generous transfers to companies and the unemployed. Despite limited development of the disease in Iceland so far and milder responses, than elsewhere, the negative effects on the tourism industry weighs heavily on the economic outlook. By mid-2021 most estimates were for a full recovery of the tourism sector no later than 2024.

Iceland has historically experienced higher inflation rates than the EU-27 countries on average. Over the past half-decade inflation has been stable and within the monetary policy objectives of the Central Bank of Iceland. The reasons are less volatile exchange rates and more efficient transmission of the monetary policy. Inflation in 2020 was 1.2% on CPI level, as per the latest Eurostat reading.

## HOUSING MARKETS

The housing market in 2020 in Iceland, like in many other OECD countries, was very active during the pandemic. Prices and turnover increased and the share of first-time buyers was the highest on record. According to OECD data, house prices increased by 7.20% and 3.75% in real terms from Q4 2019 to Q4 2020. Turnover increased by 27% and number of transactions increased by 16%.

Housing completions in 2020 were the highest since records began in 1930. A total of 3,816 units (10.4 units per 1,000 inhabitants) were completed, of which 2,527 were in the Reykjavik Capital Region. Despite this, demand outstripped supply partly explaining the prices increases. In addition, the Central Bank of Iceland lowered its policy rate to the lowest nominal level in history, 0.75%, due to the pandemic. In addition, the bank reduced its counter cyclical capital buffer for the banking sector. The Government lowered the so-called banking tax imposed on bank's total debt as a contribution to the restructuring of the sector after the International Financial Crisis. All of these actions increased the lending capacity, which resulted in lower mortgage rates and increased demand for housing. Higher saving enabled record number of first-time buyers to buy. First-time buyers were over 30% of all purchases.

Housing starts in 2020 were 2,406 down from a peak of 3,792 in 2019. This low number will probably put continuing constrains on the housing market in the coming 18-24 months.

## MORTGAGE MARKETS

The total mortgage debt of the household sector increased as a percentage of GDP to 68 % from an average of 58% over the preceding five years. Interest rates on mortgages in 2020, both nominal and indexed, were lower than ever before. Average interest rates on new mortgages (banks and pension funds) were 4.16% for nominal mortgages and 2.6% on indexed ones. The market share of banks increased substantially at the cost of pension funds. Many pension funds had focussed on growing the share of mortgages in their portfolios in recent years but that trend abated in 2020.

LTVs were unchanged from 2019 to 2020. The highest LTV was 85%, or 90% for first-time buyers. The average LTV for new mortgages in December of 2020 was 59.3% down from 65.4% a year earlier, largely due to increased household savings during the pandemic.

The share of household debt at the three largest banks which was held by households with arrears over 90 days, was 2.9% at the end of 2020, up from 2.1% a year earlier. The modest increase during the pandemic reflects that banks and the Government of Iceland provided generous support to household and firms.

In late 2020 legislation for a help-to-buy programme was introduced. This programme had limited effect on the housing market in 2020. It is likely though to increase the supply of affordable housing in the coming years.

## MORTGAGE FUNDING

Covered bond issuance started in 2006 and legislation on covered bonds was introduced in 2008. Issuance of covered bonds for financing mortgages is, however, still developing. According to data from the Central Bank of Iceland covered bond issuance by systemically important banks amounted to ISK 58.4 bn in 2019 and ISK 70.8 bn in 2020 or about a third of net new mortgage lending. Other funding comes mostly from deposits and directly from pension funds. The main buyers of covered bonds are pension funds and insurance companies. Deposits by households and companies increased substantially during the pandemic. It is expected that covered bond issuance will become normal post the pandemic when short term interest rates are expected to increase.

The Central Bank of Iceland implemented a bond buying programme, a monetary instrument that was hardly used.

## GREEN FUNDING

Icelandic banks have been providing green funding for example for cars that run on electricity, methane or hydrogen.

The Icelandic housing stock is almost entirely heated with renewable energy, e.g. geothermal heating (about 90%) or electricity generated with hydro or geothermal power plants (7%). In addition, all housing is well insulated and with double glazing. Green mortgages and green financing in respect to CO2 emission and other environmental effects is therefore not a pressing matter in the sense that it would be if changes to heating and insulation would reduce emissions. However, green funding in general is gaining popularity and foreign funding partners of the Icelandic banks are encouraging green lending and want the balance sheet of banks to be categorized like that.

| | ICELAND 2019 | ICELAND 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | -0.1 | -14.2 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 3.5 | 5.5 | 7.1 |
| **HICP inflation (%) (1)** | 2.3 | 1.2 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 73.6 | n/a | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 30.8 | -1.2 | -3.9 |
| **Building Permits (2015=100) (2)** | n/a | n/a | 117.1 |
| **House Price Index – country (2015=100) (2)** | 148.3 | 157.8 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 144.8 | 152.8 | 135.2** |
| **Nominal house price growth (%) (2)** | 4.4 | 6.4 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 13,104 | 14,604 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 47,430 | 51,647 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | n/a | n/a | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | n/a | n/a | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 3.6 | 2.8 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

***Sources:***
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## ICELAND FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Deposit taking corporations (banks), Pension Funds, the Housing and Construction Authority. |
| **The market share of the mortgage issuances:** | In the year 2020 the market share of deposit taking banks was 56% and the pensions fund's share was 44%. |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | At year-end 2020, as in the previous year, the deposit taking banks held 55% of the total outstanding mortgages to households, the pension funds 29% and IL – Fund (in winding-up) 16%. |
| **Typical LTV ratio on residential mortgage loans:** | The maximum LTV is 85%, but up to 90% for first time buyers (limit to price). |
| **Any distinction made between residential and non-residential loans:** | The Central Bank currently makes a clear distinctions between those loans in its accounts. Banks and pension fund require a pledge in the underlying property for a new mortgage. |
| **Most common mortgage product(s):** | Indexed residential mortgage loans for 25 to 40 years (statistics needed) |
| **Typical maturity of a mortgage:** | 25 to 40 years |
| **Most common way to fund mortgage lending:** | Covered bonds and deposits in the case of banks. Members funding in terms of pension funds. |
| **Level of costs associated with a house purchase:** | Stamp duty – 0.8% of the official property valuation (fasteignamat) for individuals and 1.6% for rental companies/legal entities. |
| **The level (if any) of government subsidies for house purchases:** | The government has introduced help-to-buy programme and pays interest expense benefits to low income households. First time buyer pay half of the stamp duty. |

# Norway

By Michael Hurum Cook, Finance Norway

## IN A NUTSHELL

→ Strong house price growth was fuelled by a record low key policy rate
→ Continuation of the temporary mortgage regulation
→ Negative effects from Covid-19 – dampened by measures from the authorities
→ Increase in green covered bond issuers and outstanding amount.

## MACROECONOMIC OVERVIEW

The Covid-19 situation has had a significant impact on economic activity. GDP-growth reached its lowest level since WWII in 2020. A rate of decrease of 2.9% for Mainland-Norway and unemployment has increased (registered unemployment at 4.4% year-end 2020). The effect on economic development has however not been as negative as in many other European countries.

The authorities launched several measures to counteract the negative consequences including a temporary compensation scheme for companies covering substantial losses in turnover, and public guarantees on loans granted to companies by credit institutions. Furthermore, the central bank (Norges Bank) were able, after four hikes in 2018 and 2019, to decrease the key policy rate from 1.5% to a record low 0%. Norges Bank has indicated that it expects to increase the key policy rate gradually, starting in the second half of 2021.

## HOUSING MARKETS

Going in to the COVID-19 situation, house prices had been relatively stable for some time, in contrast to previous periods. After an initial decline in spring of 2020, prices have increased fueled by a record low key policy rate. Prices for residential property grew by 8.5%. Oslo experienced the largest growth with a rate of 12%. The price level in Oslo continues to be well above the levels in other large cities in Norway.

Prices of apartments grew by 4.2% on average. 2.2% more apartments were put on sale and 7.5% more were sold. For single homes the price growth was 3.8% on average with a 6.6% increase in units sold. 6.3% fewer single homes were put out for sale. Prices for a semi-detached house, terrace house etc. grew by 4.1% on average. 3.6% fewer were put out for sale whereas 4.7% more were sold.

Housing starts peaked (at approx. 32,500 annually) in the beginning of 2017 after a period of high growth in house prices. Since then starts have declined to less than 25,000 annually. Housing completions have naturally lagged starts and ended with a total of almost 30,000 in 2020. The number of building permits has been above 30,000 for some years but fell just below this mark in 2020. Number of transactions (newbuilds and secondary market) increased by 4.5% to 125,302 last year.

## MORTGAGE MARKETS

Around 76% of the adult population (16 years or older) live in a home which the household owns itself. This, together with factors such as increase in income, low interest rates and urbanization has influenced Norwegians strong demand for housing over the years.

New mortgages are typically written with 25-year maturity. In Norway there is no prepayment penalty on floating interest rate loans, and it is also easy to move the mortgage to another institution. Almost all loans to households secured on dwellings are granted by banks and mortgage credit institutions. The mortgage market is dominated by floating rate mortgages.

The demand for mortgages remained fairly stable in 2020. After a small decline in the growth level similar to the development in house prices, growth increased somewhat from the summer to year-end. According to an annual survey by the FSA conducted each autumn the LTV for new mortgage loans remained stable at 65% on average.

To ensure a sustainable development in household debt, the Ministry of Finance (MoF) introduced a regulation on requirements for new residential mortgage loans in 2015. The regulation is temporary and has been reviewed on several occasions. In December 2020 the MoF announced that the mortgage regulation will be merged with similar requirements on unsecured debt. The joint regulation applies until 31 December 2024 but will be re-assessed in the autumn 2022. For mortgages the following apply:

- Loan-to-value (LTV) requirement of maximum 85%
- Stress test: Households must be able to service their debt in the event of a five percentage points increase in mortgage rates
- Maximum debt-to-income (DTI) ratio requirement of five times gross annual income
- A minimum principal payment requirement (2.5%) if the LTV ratio exceeds 60%
- Interest-only periods on mortgages and home equity lines of credit may only be granted when LTV is below 60%
- Flexibility quota: Up to 10% of the value of new loans granted by any one bank can deviate from one or more of the requirements in each quarter

For mortgages located in Oslo, the deviation limit is set to 8% of the value of new loans each quarter. In addition, there is an LTV requirement of maximum 60% for secondary homes in Oslo.

After the COVID-19 situation escalated there was a growing concern related to the effect of these rules on the housing and mortgage market, due to higher unemployment etc. To reduce the possible negative effect the Ministry of Finance amended the regulations allowing for more flexibility. It included an increase in the flexibility allowance to 20% regardless of whether a dwelling is located in Oslo or elsewhere. It was also specified that the temporary measures already existing in the regulation implies that banks can allow for postponement of interest and installments up to 6 months. The amendments came into force in Q2 and were later extended to Q3. As the activity in the housing market remained solid and the uncertainty surrounding household's financial situation decreased the Ministry of Finance decided not to extend the amendments further.

Defaults on mortgages have been very low for a long time. Even during the banking crisis in the early 1990s, the losses on mortgages were not severe for Norwegian banks.

## MORTGAGE FUNDING

Norwegian banks and covered bond companies (separate legal entities which main purpose is to fund appropriate assets with covered bonds) are on aggregate funded by 9% equity, 45% deposits and 46% wholesale funding. The latter consists of approximately 54% covered bonds as well as senior, unsecured bonds and short term-funding. Covered bonds are hence a very important source of funding of residential mortgages. Today there are 24 issuers of covered bonds in Norway. In 2020 a total of approximately EUR 30.1 bn of covered bonds was issued. The total level of outstanding bonds was close to EUR 134.3 bn 48% of the outstanding bonds are denominated in NOK, 47% in EUR, and the remaining 5% in other foreign currencies.

According to figures from the FSA the development in banks' funding has been quite stable for some time. Since the introduction of covered bonds in 2007 senior, unsecured bonds have gradually been replaced by covered bonds. This has also contributed to longer maturities within wholesale funding.

## GREEN FUNDING

The focus on sustainable finance within the Norwegian financial industry has been prominent for several years. In 2015 the Oslo Stock Exchange ("Oslo Børs") became the first stock exchange in the world to introduce a separate list for green bonds. Since then numerous initiatives in the financial industry have been taken and several green bonds issued.

Since the start of 2018 a total of 8 Norwegian issuers have issued green covered bonds based on residential mortgages. Issuances have been in NOK, SEK and EUR with a total outstanding volume of approximately EUR 7.3 bn at year-end 2020.

Several banks offer green mortgages to their customers, some even with a discounted interest rate. Green mortgages may be linked to the EPC-system or specific initiatives such as installing solar panels. On the regulatory side Norway will implement all EU-legislation on Taxonomy etc. Going forward, it needs to be ensured that related Norwegian legislation is adapted to the EU regulation on sustainable finance. This includes for instance the definition of the NZEB-standard (Near Zero Energy Building) which will affect newbuilding after 1 January 2021 in terms of the requirements in the taxonomy. At this point in time there has not been issued a public consultation on NZEB in Norway.

| | NORWAY 2019 | NORWAY 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 1.1 | -2.9 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 3.7 | 4.4 | 7.1 |
| **HICP inflation (%) (1)** | 0.4 | -0.8 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 81.3 | 80.3 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | -1.7 | -4.0 | -3.9 |
| **Building Permits (2015=100) (2)** | 102.7 | 96.8 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 117.3 | 127.3 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | n/a | n/a | 135.2** |
| **Nominal house price growth (%) (2)** | 2.6 | 4.8 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 298,318 | 299,365 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 70,932 | 70,456 | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 169.0 | 178.5 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 0.0 | 0.0 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 2.8 | 2.1 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## NORWAY FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Banks, credit institutions (such as covered bond companies) and state lending institutions. |
| **The market share of the mortgage issuances:** | Not available |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Banks and (partly or fully owned) covered bond companies have granted almost all mortgage loans. State lending institutions have a marginal share. |
| **Typical LTV ratio on residential mortgage loans:** | 65% for new mortgages according to a survey conducted by the FSA. |
| **Any distinction made between residential and non-residential loans:** | Not available |
| **Most common mortgage product(s):** | Floating rate mortgage |
| **Typical maturity of a mortgage:** | The standard maturity for mortgage loans is about 25 years. |
| **Most common way to fund mortgage lending:** | Covered bonds and deposits. |
| **Level of costs associated with a house purchase:** | Roundtrip transaction cost (registration fee, real estate agent's fee, transfer stamp duty) are between 3,75%-5,6%. |
| **The level (if any) of government subsidies for house purchases:** | Vulnerable households may receive loans with a favourable interest rate or direct support from the government bank "Husbanken". The amount under the latter option is calculated based on income and housing expenses. |

# Switzerland

By Fredy Hasenmaile, Credit Suisse AG and Remo Kübler, Swiss Bankers Association

## IN A NUTSHELL

- → After a sharp economic contraction in the first half of 2020, the Swiss economy recovered relatively well, closing the year with a total GDP decline of 2.6%.
- → The pandemic did not have a significant impact on the residential market. The owner-occupied housing market experienced a surge in demand due to the crisis-related extension of the low-interest rate environment, and the rental housing market proved to be stable.
- → The renewed tightening of banking regulation slowed Swiss banks' mortgage lending activities. Nevertheless, due to the pandemic-driven increase in demand for real estate, growth rates reached the level of the previous year.

## MACROECONOMIC OVERVIEW

Switzerland's gross domestic product (GDP) fell by 2.6%, similar to the decline during the financial crisis of 2009 (-2.1%). Last year's economic developments varied notably. After a strong start in 2020, the pandemic and the measures taken to contain it led to a drastic drop in economic growth in the 1st and 2nd quarters. Due to the temporary closing of numerous plants during the first lockdown (from mid-March through end of April 2020), the economy experienced a very large supply shock. This was compounded by an even greater demand shock, as uncertainty spread through the domestic market and the economic situation across relevant international trading partners deteriorated. The lowest-ever drop in GDP occurred in the second quarter followed by a very rapid recovery in the third quarter, which then lost momentum in the fourth quarter when the country was hit by the second wave of infections and authorities consequently imposed another lockdown in December, albeit only partial.

The government's swift and prompt response to the outbreak of the pandemic was of crucial importance for the economy's performance in 2020. The support measures included short-time work compensation, hardship assistance for companies and the self-employed as well as, in cooperation with the banking sector, bridging loans for small and medium-sized enterprises (COVID-19 credit programme). These helped prevent an even deeper slump in value creation. Unemployment therefore only rose to 5.3% (ILO definition) by the third quarter of 2020 and then fell again. On average, unemployment for the year was 4.8%, compared to 4.4% in 2019. Due to the gloomy growth outlook induced by the pandemic and the drastic plunge of oil prices, inflation was negative for practically the entire year, resulting in negative annual inflation rate of -0.8%.

## HOUSING MARKETS

The pandemic not only caused a significant degree of uncertainty but also led to the conviction that mortgage interest rates would remain at very low levels for some time to come. Consequently, the pandemic only briefly paralysed the owner-occupied housing market and interest in owning residential real estate reached a new high by the end of 2020, especially as the lockdown recalled the importance of good-quality housing. With the prospect of more remote working in the post-pandemic era, households are increasingly interested in peripheral (non-urban) and thus more affordable residential property. The higher demand explains the strong price growth of residential property in 2020. As of the end of Q4 2020, the prices of single family dwellings rose by a high 5.5% year-on-year, while those of condominium apartments by 5.1%. Another factor supporting price growth is the continuous decline in construction activity. Building permits for condominiums fell by 2.9% in 2020 compared to the previous year; for one-family dwellings, the decrease was of 0.8%. Home ownership therefore remains a scarce good and vacancy rates, in contrast to the rental housing market, persist at low level. Only in nine out of 110 Swiss regions does the vacancy rate of owner-occupied properties exceed 1%. Nevertheless, a slight slowdown in price growth to 4% (single family dwellings) and 3% (condominiums) might be expected in the current year since financing requirements (e.g. imputed interest rate of about 5% to calculate affordability ratios[1] as well as minimum requirements regarding the down payment and amortisation) are becoming an insurmountable hurdle for an increasing number of households, as real estate prices continue to rise. The home ownership rate has therefore been declining for years and is now only 36%.

The rental housing market was more affected by the pandemic than the owner-occupied housing market. However, the effect of the economic downturn in the market remained weak. The level of uncertainty was quickly limited by short-time work and bridging loans. The expected decrease in net immigration also failed to materialise. The annual additional demand for rental flats in 2020 is therefore likely to have been only slightly smaller than in the previous year. Across Switzerland, construction activity[2], which has been booming for years, has passed its peak and gradually fewer residential units are likely to be completed. However, measured against demand, construction activity remains slightly too high. Accordingly, the vacancy rate for rental flats rose further to 2.75% as of mid-2020 and is expected to reach 2.80% in 2021. Consequently, the pressure on rental prices is likely to increase again. Nevertheless, the yields generated by multi-family houses remain attractive for investors. Multi-family houses will therefore remain in high demand, especially in large centres and conurbations, continuing to record valuation gains, albeit less than in recent years.

## MORTGAGE MARKETS

### MARKET DYNAMICS

On 1 January 2020, the Swiss Bankers Association's (SBA) amended self-regulation on minimum requirements for mortgage financing entered into force. This new supervisory minimum standard requires the borrower to make a down payment of at least 25% of the lending value (previously 10%) for investment properties. The so-called "lowest value principle" continues to apply, according to which any difference between a higher acquisition price and a lower lending value must be

1 https://www.moneyland.ch/en/affordability-definition
2 Credit Suisse Real Estate Monitor (figure 20 on page 15).

fully financed by the borrower with his or her own funds. Furthermore, mortgages for investment properties must now be amortised to two thirds of the lending value within a maximum of 10 years (previously 15 years). The tightened rules for investment properties supplement the self-regulation already enacted in 2012 and revised in 2014, which both focused on the residential property market.

As a result of this new regulation and the pandemic, mortgage volume growth fell from 3.2% at the beginning of 2020 to just under 3% in August 2020, before returning to 3.2% by the end of 2020 due to an improved economic situation and stronger demand for residential property. The development of mortgage interest rates had a temporary negative impact on growth. In the wake of the distortions on the capital markets, 10-year mortgages rose by over 40 bps in mid-March 2020. Shortly afterwards, the rise in interest rates slowed and averaged around 1.05% by the end of the year. Despite this very favourable mortgage interest rate level, mortgage volume growth (3.2%) was far below the long-term average of 5.1% since 1985. Mainly because of the repeatedly tightened banking regulation regarding the mortgage market. Nonetheless, with a market share of almost 94.7%, banks are still the dominant actors. The rest of the market is shared by insurers (3.4%) and pension funds (1.8%). The latter, however, recorded around three times higher growth rate than any other player in recent years. Within the banking sector, cantonal banks achieved higher market shares in 2020. They now account for 37.5% of the market, followed by the two global systemically important banks (UBS and Credit Suisse) with 25.7% and Raiffeisen with 17.8%. Online mortgages grew by 22.0%, which is significantly higher than the growth of the overall market, yet the share of online mortgages in the annual mortgage volume only accounts for about 3.7%.

### NON-MARKET LED INITIATIVES

On 27 March 2020, the Federal Council approved the SNB's proposal to deactivate the (sectorial) countercyclical capital buffer (CCB), which had been set in 2014 at 2% of the risk-weighted positions secured by residential real estate located in Switzerland, in order to curb alleged excessive mortgage lending. This emergency measure freed up additional capital, allowing banks to better meet the credit and liquidity needs of households and businesses. The impact of the CCB deactivation on both the real economy and the mortgage market cannot be assessed individually. However, it is worth noting that the credit market continued to function during the pandemic and that there were no signs of liquidity or credit crunches that could not be mitigated by the aforementioned COVID-19 credit programme and hardship assistance (see paragraph 2).

## MORTGAGE FUNDING

Traditionally, Swiss banks finance their mortgage lending to a large extent through customer deposits, albeit the specific share varies from bank to bank. According to the Swiss National Bank (SNB), mortgage loans account for approximately 50% of Swiss banks' domestic assets, while customer deposits amount to approximately 65% of their domestic liabilities (as of 2019). On an aggregated basis, SNB data further indicates that, in recent years, customer deposits have amounted to roughly 100% of the Swiss banks' mortgage-related funding needs.

Covered bonds collateralised by real estate mortgage loans provide banks with another important funding source. In 2019, this category accounted for about 13% of total outstanding mortgage loans. Historically, the Swiss covered bond market has been mainly driven by two dedicated institutions, namely the "Pfandbriefzentrale der schweizerischen Kantonalbanken AG" and the "Pfandbriefbank schweizerischer Hypothekarinstitute AG", both with the right to issue Swiss Pfandbriefe for their member banks under the so called Pfandbrief Act. Lately, three institutions, namely Credit Suisse (Schweiz) AG, Valiant Bank AG, and Crédit Agricole next bank (Suisse) SA, have launched their own covered bond programmes based on contractual private law, thus diversifying their funding sources. Yet, as with the legacy covered bond programmes of UBS AG and Credit Suisse AG, these are structured programmes that are not subject to the aforementioned Pfandbrief legislation.

In addition to customer deposits and covered bonds, banks resort to interbank loans, other bonds, and equity to refinance their mortgage lending business.

| | SWITZERLAND 2019 | SWITZERLAND 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 1.1 | -2.6 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 4.4 | 4.8 | 7.1 |
| **HICP inflation (%) (1)** | 0.4 | -0.8 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 42.5 | 41.6 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | -2.6 | n/a | -3.9 |
| **Building Permits (2015=100) (2)** | 86.0 | 86.8 | 117.1 |
| **House Price Index – country (2015=100) (2)** | 106.9 | 112.5 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | n/a | n/a | 135.2** |
| **Nominal house price growth (%) (2)** | 2.2 | 5.3 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR)[3] (2)** | 960,608 | n/a | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 136,950 | n/a | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 243.6 | n/a | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | n/a | n/a | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 1.4 | 1.3 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Eurostat*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

[3] Outstanding residential loans data shown in this table includes commercial/non-residential outstanding loan volumes. It is not possible to break down the figures into separate categories. For any questions as to the sources and/or methodology, please contact the authors.

## SWITZERLAND FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Mainly banks, insurers, and pension funds issue mortgage loans. However, from a legal perspective, private individuals can grant mortgages too. |
| **The market share of the mortgage issuances:** | Not available |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | Banks account for about 94.7% of the total outstanding mortgage loans. The rest of the market is shared by insurers (3.4%) and pension funds (1.8%). |
| **Typical LTV ratio on residential mortgage loans:** | According to SNB data, the median LTV for mortgage loans granted in 2020 stood at 67%, which is roughly equivalent to the LTV of a first mortgage. A second mortgage can cover the missing loan amount up to typically an LTV of 80% (self-occupied residential real estate). |
| **Any distinction made between residential and non-residential loans:** | The Capital Adequacy Ordinance (CAO) differentiates between loans for residential properties and loans for other properties. Residential properties are defined as properties that are self-occupied and / or rented out by the borrower. |
| **Most common mortgage product(s):** | Fixed-rate mortgages are the most common mortgages in Switzerland and their maturity typically ranges between 2 and 15 years. However, money market mortgages (with different maturities) are also widespread. |
| **Typical maturity of a mortgage:** | Most of the mortgages offered on the market have a maturity between 3 and 10 years. |
| **Most common way to fund mortgage lending:** | Customer deposits and Swiss Pfandbriefe. |
| **Level of costs associated with a house purchase:** | The additional costs (e.g. property transfer tax, registration fee and notary fees) vary from canton to canton and can range from 2 to 5% of the purchase price. |
| **The level (if any) of government subsidies for house purchases:** | There are no specific subsidies for purchasing residential real estate. However, the Swiss scheme to promote home ownership allows the early withdrawal and the pledging of pension assets for the purchase, the construction, and the modification of owner-occupied residential property as well as the repayment of mortgage loans and the purchase of shares in a housing association, or similar participations. |

# United Kingdom

By Joseph Thompson, Building Societies Association

## IN A NUTSHELL

- → The government introduced a Stamp Duty Land Tax holiday to help support the housing market during the pandemic
- → House prices increase significantly, particularly outside major cities, as people look for more space
- → Higher LTV market dries up as major lenders pull out
- → Payment deferrals introduced, and a moratorium on repossessions introduced in response to pandemic
- → Remote valuations used to help restart market.

## MACROECONOMIC OVERVIEW

GDP fell by 9.9%, the largest yearly fall on record. Much of the economy was shut down during extensive periods over the year as the UK Government attempted to stem the spread of covid-19. This included the closure of entertainment, hospitality, non-essential shops and indoor premises.

The Government introduced a range of measures to help households and businesses through this period including direct grants for small firms, and firms in the most affected sectors, such as hospitality. A number of loans schemes were also introduced via the British Business Bank with an 80% guarantee for loans up £300 mn for larger firms. In addition, the Bounce Bank loan scheme was introduced for smaller companies with 100% guarantee for loan amounts up to £50,000.

For households, the government introduced the Job Retention Scheme (JRS) which was initially intended to run from March 2020 until the end of May, but has currently been extended to the end of September 2021.This scheme allowed companies to 'furlough' their workers, whilst the government paid 80% of their usual monthly wage up to £2,500 per month. This fell to 70% in September, and 60% in October, with companies expected to make up the different to 80% of wages.

Employees using the JRS are not counted in the unemployment figures and so despite a pickup in redundancies over the year the UK unemployment rate remained relatively low at 5.1% in the three months to December 2020. This was up from 3.8% in the three months to December 2019.

Faced with a net deflationary impact from the Coronavirus pandemic, the Bank of England introduced a number of inflationary policies to ensure inflation did not fall too far below the 2.0% target, and support the economy. This included reducing the Bank Rate by 65 bps to 0.10%, expanding their quantitative easing programme, and providing cheap funding to lenders. Consumer prices (measured by CPI) increased by just 0.6% in 2020 compared to 1.3% in 2019. However the Bank of England expect inflation to pick up and reach its 2.0% target by the end of 2021. By the end of 2020, annual CPI inflation was just 0.6%.

## HOUSING MARKETS

Housing market activity was extremely volatile in 2020. Following a period of high uncertainty over Brexit in 2019, confidence returned to the market at the start of 2020, and activity began to pick up. In the second quarter of the year the housing market was effectively shut due to restrictions put in place to curtail the pandemic. Once the market reopened in July a significant amount of pent-up demand was released. A Stamp Duty Holiday was also introduced in July, where no tax is due on the sale of properties GBP 500,000 or under until 31 March 2021, which caused further increases in demand for property. The pandemic has caused people to reassess their housing needs, believing that home working would be a more permanent feature from now on. This meant the demand for larger properties with more outside space, further away from city centres had increased.

Home ownership increased to 65% in 2019/20 from 64% in 2018/19, the highest since 2013. Many first time buyer products at higher LTVs were removed from the market due to uncertainty around the pandemic. This may have affected the ability of some first-time buyers to buy houses. Consequently, home ownership rates are unlikely to have risen by the end of 2020.

The number of properties being marketed was relatively low compared to the level of demand for housing. Some sellers have not wanted people to enter their home due to the risks associated with COVID-19. Consequently, this has put upward pressure on house prices, which increased by 8.5% in 2020. By the end of the year the average house cost GBP 252,000, a record high. This follows two years of modest house price rises.

In previous years, UK house price growth was driven by price growth in London and the South East, however in 2020, house prices in London have grown by just 3.5%, the lowest growth in any region in the UK. London remained the most expensive region with average house prices of GBP 496,000. The North West was the region with the highest annual house price growth in 2020, with average prices increasing by 11.2%, but has the lowest average house price of GBP 141,000. The relatively low growth in prices in London compared to other regions could reflect buyers increased demand for outside space, and larger properties. The average price of detached properties increased by 10% in 2020 compared to 5% for flats and maisonettes.

In 2020 the number of housing starts and completions fell significantly reflecting UK government COVID-19 national restriction measures in early 2020. In the second quarter of the year, there were just 18,000 and 16,000 starts and completions respectively, around half the normal level. This was followed by a sharp recovery in the third and final quarter of the year as restrictions eased. In total there were 128,000 housing starts in 2020, down 16% on the 152,000 in 2019. There were 149,000 completions in the year, down 17% on the 178,000 in 2019.

## MORTGAGE MARKETS

Mortgage lending was severely affected by restrictions on the housing market in 2020. Consequently, average gross lending in the second quarter of 2020 was a third lower than in the same period in 2019. Following the announcement of the stamp duty holiday gross lending in the second half of the year returned to levels similar to those in 2019. In total, there was GBP 244.0 bn of gross lending in 2020, 9% lower than the GBP 269.0 bn in 2019. At the end of 2020 there was GBP 1,499 bn worth of residential loans outstanding, up 3% on the GBP 1,454 bn at the end of 2019.

Average mortgage interest rates fell in 2020 to 2.00% from 2.25% in 2019. This largely reflect the reduction in the Bank Rate from 0.75% to 0.10% in March 2020. However, whilst both average fixed and variable rates fell following the cut in bank rate, by the end of the year they were back to levels seen before the rate cut. The main driver behind this is the repricing of riskier, higher LTV loans. Some larger lenders exited these riskier markets in the wake of the coronavirus pandemic due to the uncertain outlook for the housing market and house prices. Average 2-year fixed loans at 95% LTV were priced at 3.02% in March 2020, but had increased to 4.20% by December 2020.

A number of measures were introduced to help homeowners during the covid-19 pandemic. Firstly, a three month moratorium on re-possessions was introduced in March 2020, meaning no lenders would take an owner occupied home into possession during this period to last three months. This was later extended until 31 May 2021. Secondly, homeowners were able to defer mortgage repayments for up to six months, almost 2.9 million mortgagors took advantage of this. As a result, the level of arrears and repossessions remained near record low levels. There were just 60,600 new arrears cases in the year, down 7% on the number in 2019, and just 2,800 possessions, down 68% on the number in 2019. Nearly a third of these repossession took place in the first quarter of the year before the moratorium was introduced, and the remainder reflect cases where the customer requested the repossession to go ahead or where the property was vacant.

## MORTGAGE FUNDING

The Bank of England launched a Term Funding Scheme with additional incentives for Small and Medium sized enterprises (TFSME) in March 2020 in direct response to the coronavirus pandemic. This scheme eased pressures on lenders who would otherwise struggle to reduce deposit rates when interest rates are very close to zero, and helps reinforce the transmission of the reduction in Bank Rate to the real economy. The scheme offers four-year funding of at least 10% of participants' stock of real economy lending at interest rates at, or very close to, Bank Rate. Additional funding was made available to lenders that increase lending, especially to smaller firms. At the end of December 2020 £68 bn had been drawn from the scheme from participating banks and building societies.

There was a strong inflow of funding from retail sources in 2020. With incomes supported by the JRS, households were able to save significantly more from their household income with less opportunities to spend. Household balance increased by GBP 178 bn in 2020, over three times the average of GBP 52 bn over the previous three years. The average rate on fixed rate savings fell from a year high of 1.13% in March 2020 to just 0.42% in December. Instant access rates fell to just 0.12% in December, just marginally higher than the Bank Rate at 0.1%.

The launch of the TFSME which offered funding at rates close to 0.1% together with strong inflows from retail sources meant the requirement for wholesale funding diminished in 2020. Just GBP 8bn of covered bonds were issued in the year, the majority of which were issued in the first quarter before the pandemic. GBP 20 bn matured during the year, meaning the total amount outstanding fell from GBP 98 bn at the start of 2020 to GBP 86 bn by the end of the year.

## GREEN FUNDING

In 2020 the Green Finance Institute continued to advance a number of its work-streams ahead of demonstrating these at the delayed COP 26. In particular, progress has been made on Building Renovation Passports and understanding what information homeowners need to be confident in retrofitting their properties.

The Green Home Finance Retrofit Principles were launched in September 2020 with the aim of strengthening the integrity of the retrofit finance market. Their goal is to align global capital behind industry-accepted standards for green buildings and retrofits by providing a consistent and transparent framework for financial institutions to use when allocating lending for energy-efficiency work in UK homes.

The number of mortgage lenders offering green mortgage products continued to steadily increase, including five building societies. Unfortunately, the UK's Green Homes Grant scheme was less successful, with the GBP 2.5 bn scheme halted after six months. There is currently a debate about longer-term grant funding. The Government is also looking to boost its green credentials in other ways, by launching the first Green Gilt and starting work on a green taxonomy.

| | UK 2019 | UK 2020 | EU 27 2020 |
|---|---|---|---|
| **MACROECONOMIC VARIABLES** | | | |
| **Real GDP growth (%) (1)** | 1.4 | -9.8 | -6.0 |
| **Unemployment Rate (LSF), annual average (%) (1)** | 3.8 | 5.1 | 7.1 |
| **HICP inflation (%) (1)** | 1.3 | 0.6 | 0.7 |
| **HOUSING MARKET** | | | |
| **Owner occupation rate (%) (1)** | 65.2 | 64.6 | 65.8* |
| **Gross Fixed Investment in Housing (annual change)(1)** | 0.1 | -12.9 | -3.9 |
| **Building Permits (2015=100) (2)** | n/a | n/a | 117.1 |
| **House Price Index – country (2015=100) (2)** | 116.5 | 120.1 | 131.3** |
| **House Price Index – capital (2015=100) (2)** | 164.1 | 168.6 | 135.2** |
| **Nominal house price growth (%) (2)** | 1.0 | 3.8 | 4.8** |
| **MORTGAGE MARKET** | | | |
| **Outstanding Residential Loans (mn EUR) (2)** | 1,709,024 | 1,667,526 | 6,170,130 |
| **Outstanding Residential Loans per capita over 18 (EUR) (2)** | 32,518 | n/a | 16,860 |
| **Outstanding Residential Loans to disposable income ratio (%) (2)** | 100.9 | 98.9 | 70.8* |
| **Gross residential lending, annual growth (%) (2)** | 0.9 | -10.5 | 4.9 |
| **Typical mortgage rate, annual average (%) (2)** | 2.3 | 2.0 | 2.1 |

* The aggregate EU figure is from 2019.
** Please note that this value is the simple average of the available values in 2020.

*Sources:*
*(1) Office for National Statistics (ONS)*
*(2) European Mortgage Federation - Hypostat 2021, Statistical Tables.*

## UNITED KINGDOM FACT TABLE

| | |
|---|---|
| **Entities which can issue mortgage loans:** | Monetary and Financial Institutions (MFIs), which includes banks and building societies.<br>Other specialist lenders (non-bank, non-building society UK credit grantors, specialist mortgage lenders, retailers, central and local government, public corporations, insurance companies and pension funds).<br>Other (anything not covered elsewhere). |
| **The market share of the mortgage issuances:** | MFIs – 91%<br>Other specialist lenders – 7%<br>Other – 2% |
| **Proportion of outstanding mortgage loans of the mortgage issuances:** | MFIs – 89%<br>Other specialist lenders – 7%<br>Other – 4% |
| **Typical LTV ratio on residential mortgage loans:** | 72% (NB, now presented as mean statistic, formerly median. This results in a downward shift in LTV figures, although underlying trends are unchanged). |
| **Any distinction made between residential and non-residential loans:** | *[We have taken non-residential loans to mean commercial in this context]*<br>The distinction is based on the property being purchased and the purpose it will be used for.<br>A residential loan is used to purchase a property that a person will live in.<br>A commercial loan is one that is used to purchase commercial land or buildings. |
| **Most common mortgage product(s):** | Initial fixed rate products |
| **Typical maturity of a mortgage:** | 25 years |
| **Most common way to fund mortgage lending:** | Retail deposits and wholesale funding |
| **Level of costs associated with a house purchase:** | Stamp Duty Land Tax – ranges from 0% to 12%, depending on property value<br>Valuation fee – ranges from GBP 150 to GBP 1,500, depending on property value<br>Surveyor's fee – ranges from GBP 250 to GBP 600<br>Legal fees – ranges from GBP 500 to GBP 1,500<br>Electronic transfer fee – around GBP 40 to GBP 50 |
| **The level (if any) of government subsidies for house purchases:** | There are no subsidies which apply to house purchase on the whole, there are however some subsidies for specific parts of the market, such as those who live in social housing. |

# A — THE MORTGAGE MARKET

## 1. Total Outstanding Residential Loans

Total Amount , End of the Year, EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 73,455 | 80,008 | 83,960 | 86,281 | 87,622 | 90,710 | 96,925 | 101,169 | 107,354 | 112,666 | 119,774 | 125,528 |
| BELGIUM | 151,738 | 161,723 | 172,049 | 183,615 | 189,484 | 196,877 | 207,117 | 220,114 | 233,224 | 246,528 | 263,419 | 275,378 |
| BULGARIA | 3,798 | 3,714 | 3,589 | 3,573 | 3,507 | 3,499 | 3,522 | 3,700 | 4,190 | 4,715 | 6,384 | 7,031 |
| CROATIA | 7,663 | 8,258 | 8,363 | 8,293 | 8,059 | 7,865 | 7,734 | 6,947 | 7,101 | 7,290 | 7,720 | 8,233 |
| CYPRUS | 10,388 | 11,921 | 12,545 | 12,679 | 11,854 | 11,655 | 11,661 | 11,515 | 11,123 | 8,670 | 8,605 | 8,649 |
| CZECHIA | 20,942 | 24,128 | 25,556 | 27,851 | 27,222 | 28,732 | 32,085 | 34,940 | 40,555 | 43,984 | 48,658 | 51,174 |
| DENMARK | 216,697 | 224,036 | 228,743 | 230,741 | 231,850 | 234,518 | 238,848 | 243,751 | 248,776 | 251,705 | 258,799 | 266,256 |
| ESTONIA | 6,111 | 5,973 | 5,882 | 5,846 | 5,896 | 6,064 | 6,323 | 6,661 | 7,107 | 7,603 | 8,119 | 8,656 |
| FINLAND | 71,860 | 76,747 | 81,781 | 86,346 | 88,313 | 89,762 | 91,955 | 94,056 | 96,129 | 97,781 | 100,354 | 103,610 |
| FRANCE | 730,500 | 795,200 | 843,200 | 870,040 | 814,627 | 833,120 | 866,401 | 899,358 | 954,226 | 1,009,562 | 1,078,000 | 1,136,990 |
| GERMANY | 1,146,969 | 1,152,195 | 1,163,783 | 1,184,853 | 1,208,822 | 1,237,410 | 1,279,456 | 1,326,901 | 1,378,810 | 1,445,987 | 1,530,434 | 1,629,423 |
| GREECE | 80,559 | 80,507 | 78,393 | 74,634 | 71,055 | 69,408 | 67,593 | 61,397 | 58,812 | 56,766 | 52,707 | 46,133 |
| HUNGARY | 22,463 | 24,659 | 21,950 | 19,985 | 18,499 | 17,146 | 14,943 | 14,024 | 13,602 | 13,604 | 13,715 | 13,321 |
| IRELAND | 147,947 | 103,043 | 100,588 | 97,462 | 94,862 | 90,593 | 87,898 | 86,195 | 84,045 | 83,301 | 81,637 | 80,891 |
| ITALY | 280,337 | 352,111 | 367,645 | 365,588 | 361,390 | 359,137 | 362,332 | 369,520 | 375,425 | 378,966 | 383,515 | 391,515 |
| LATVIA | 6,870 | 6,559 | 5,991 | 5,334 | 5,062 | 4,703 | 4,503 | 4,412 | 4,362 | 4,102 | 4,177 | 4,178 |
| LITHUANIA | 6,027 | 5,983 | 5,866 | 5,811 | 5,836 | 5,996 | 6,168 | 6,584 | 7,173 | 7,758 | 8,427 | 9,144 |
| LUXEMBOURG | 17,077 | 18,591 | 20,255 | 21,715 | 23,389 | 25,038 | 26,599 | 28,314 | 30,656 | 33,064 | 35,633 | 38,958 |
| MALTA | 2,458 | 2,666 | 2,893 | 3,088 | 3,278 | 3,592 | 3,905 | 4,204 | 4,548 | 4,949 | 5,459 | 5,824 |
| NETHERLANDS | 648,399 | 668,651 | 682,116 | 688,105 | 678,913 | 680,529 | 685,084 | 695,440 | 704,792 | 714,367 | 722,672 | 748,572 |
| POLAND | 52,545 | 67,526 | 71,883 | 79,434 | 80,812 | 82,555 | 88,390 | 89,592 | 93,111 | 96,728 | 104,146 | 104,607 |
| PORTUGAL | 110,685 | 114,515 | 113,916 | 110,520 | 106,585 | 102,469 | 98,516 | 95,377 | 94,093 | 93,952 | 93,846 | 96,176 |
| ROMANIA | 5,733 | 6,763 | 7,596 | 8,767 | 9,257 | 10,105 | 11,522 | 12,893 | 14,262 | 15,785 | 16,999 | 18,354 |
| SLOVAKIA | 9,469 | 10,849 | 12,320 | 13,701 | 15,304 | 17,364 | 19,714 | 22,508 | 25,383 | 28,271 | 31,001 | 33,787 |
| SLOVENIA | 3,933 | 4,844 | 5,164 | 5,259 | 5,307 | 5,348 | 5,525 | 5,717 | 5,976 | 6,239 | 6,587 | 6,862 |
| SPAIN | 611,813 | 620,433 | 612,657 | 594,405 | 569,692 | 552,613 | 526,105 | 511,253 | 497,711 | 494,459 | 487,561 | 481,913 |
| SWEDEN | 238,424 | 292,263 | 308,498 | 334,922 | 340,379 | 339,152 | 375,277 | 387,000 | 401,977 | 409,859 | 423,397 | 468,966 |
| EURO AREA 19 | 4,116,595 | 4,272,519 | 4,371,004 | 4,415,282 | 4,347,292 | 4,382,389 | 4,453,780 | 4,550,695 | 4,680,948 | 4,834,991 | 5,021,926 | 5,232,188 |
| EU 27 | 4,684,860 | 4,923,864 | 5,047,181 | 5,128,848 | 5,066,877 | 5,105,960 | 5,226,102 | 5,343,540 | 5,504,522 | 5,678,661 | 5,901,747 | 6,170,130 |
| ICELAND | 6,393 | 7,966 | 8,289 | 8,061 | 8,941 | 9,167 | 9,688 | 11,851 | 12,091 | 12,351 | 13,104 | 14,604 |
| NORWAY | 187,720 | 209,586 | 227,272 | 260,725 | 245,449 | 241,128 | 242,633 | 274,257 | 270,151 | 280,500 | 298,318 | 299,365 |
| SWITZERLAND | 494,613 | 613,474 | 665,927 | 702,335 | 720,066 | 763,933 | 853,457 | 884,018 | 832,915 | 896,413 | 960,608 | n/a |
| UNITED KINGDOM | 1,342,736 | 1,392,970 | 1,439,814 | 1,501,265 | 1,483,422 | 1,612,453 | 1,755,378 | 1,546,503 | 1,542,945 | 1,574,861 | 1,709,024 | 1,667,526 |
| AUSTRALIA | 673,853 | 882,843 | 951,899 | 999,298 | 862,650 | 957,667 | 1,019,506 | 1,107,474 | 1,124,581 | 1,115,494 | 1,134,301 | 1,183,055 |
| BRAZIL | 33,567 | 59,210 | 78,394 | 94,454 | 103,519 | 134,023 | 117,305 | 157,747 | 143,958 | 134,780 | 141,341 | 111,840 |
| CANADA | 624,427 | 759,388 | 814,996 | 867,566 | 817,605 | 896,116 | 887,681 | 1,004,421 | 996,750 | 991,832 | 1,123,183 | n/a |
| JAPAN | 1,398,488 | 1,710,487 | 1,866,171 | 1,656,240 | 1,316,250 | 1,320,272 | 1,481,570 | 1,606,118 | 1,499,312 | 1,667,478 | 1,772,466 | n/a |
| RUSSIA | 25,951 | 34,655 | 41,841 | 57,739 | 67,238 | 56,579 | 56,366 | 78,449 | 83,379 | 88,621 | 120,740 | 111,753 |
| SINGAPORE | n/a | n/a | 56,695 | 76,850 | 83,310 | 87,728 | 101,021 | 104,109 | 106,172 | 100,555 | 102,563 | n/a |
| SOUTH KOREA | 241,875 | 286,354 | 308,843 | 346,388 | 354,001 | 422,800 | 498,376 | 563,851 | 601,733 | 632,255 | 650,224 | n/a |
| TURKEY | 19,513 | 28,429 | 29,989 | 36,146 | 37,048 | 44,270 | 45,096 | 44,167 | 42,105 | 31,208 | 29,982 | 30,637 |
| USA | 8,185,478 | 7,822,706 | 7,888,477 | 7,561,392 | 7,215,575 | 8,186,393 | 9,232,847 | 9,754,767 | 8,714,389 | 9,496,699 | n/a | n/a |

***Sources:*** *European Mortgage Federation National Experts, European Central Bank, National Central Banks, Federal Reserve*

**1) Time series breaks:**
- Cyprus: 2004 (reclassification of loans)
- Ireland: 2010 (different definition used from 2010 – see point (1) Notes)
- Italy: 2010 (due to a change of methodology)
- Luxembourg: 2003 (due to a change in the statistical source)
- Netherlands: 2006 (due to a change of methodology)
- Norway: 2009 (due to a change in methodology)
- Malta: 2005 (due to a change in the statistical source), before 1999 aggregate data residential and commercial
- Poland: 2007 (due to a change of methodology)
- Romania: 2007 (due to a change of methodology)
- Slovakia: 2006 (due to a change of methodology)
- Spain: 1999 (due to a change in methodology)
- Sweden: 2004 (due to a change in the statistical source)

**2) The series has been revised for at least two years in:**
- Croatia
- Italy
- Poland
- Sweden
- Iceland
- Australia
- Brazil
- Japan
- Russia
- Turkey

**3) Notes:**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the conversion to euros is based on the bilateral exchange rate at the end of the period (provided by the ECB and Bloomberg)
- Please note that due to the conversion to euros, changes observed for countries not belonging to the euro area may be due to exchange rate fluctuations. To obtain values in national currency, please refer to the exchange rates used, on Table 30 of this publication.
- For Turkey the entire series has been updated
- For Ireland, this series includes all housing loans until 2009. From 2010, this series represents only housing loans for owner-occupied dwellings.
- For Malta, this series does not include non-resident lending
- For Japan, the reference year is the Japanese Fiscal year, from April to March
- For Spain the series from 1999 has been updated and refers total residential mortgage loans (only backed up by a mortgage)

# 2. Change in Outstanding Residential Loans

End of period, EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 1,394 | 6,553 | 3,952 | 2,321 | 1,341 | 3,088 | 6,215 | 4,244 | 6,185 | 5,312 | 7,108 | 5,754 |
| BELGIUM | 14,722 | 9,985 | 10,326 | 11,566 | 5,869 | 7,393 | 10,240 | 12,997 | 13,110 | 13,304 | 16,891 | 11,959 |
| BULGARIA | -8 | -85 | -125 | -16 | -66 | -8 | 23 | 178 | 491 | 525 | 1,669 | 647 |
| CROATIA | 162 | 595 | 105 | -70 | -234 | -194 | -130 | -787 | 153 | 190 | 430 | 512 |
| CYPRUS | 1,886 | 1,533 | 624 | 134 | -825 | -199 | 6 | -146 | -392 | -2,453 | -65 | 44 |
| CZECHIA | 6,156 | 3,186 | 1,428 | 2,296 | -630 | 1,510 | 3,353 | 2,855 | 5,616 | 3,428 | 4,675 | 2,516 |
| DENMARK | 9,430 | 7,339 | 4,707 | 1,998 | 1,110 | 2,668 | 4,331 | 4,903 | 5,025 | 2,929 | 7,095 | 7,457 |
| ESTONIA | -98 | -138 | -91 | -36 | 51 | 168 | 259 | 338 | 446 | 496 | 516 | 537 |
| FINLAND | 4,228 | 4,887 | 5,034 | 4,565 | 1,967 | 1,449 | 2,193 | 2,101 | 2,073 | 1,652 | 2,573 | 3,256 |
| FRANCE | 30,300 | 64,700 | 48,000 | 26,840 | -55,413 | 18,493 | 33,281 | 32,957 | 54,868 | 55,336 | 68,438 | 58,990 |
| GERMANY | 1,565 | 5,226 | 11,588 | 21,070 | 23,969 | 28,588 | 42,046 | 47,445 | 51,909 | 67,177 | 84,447 | 98,989 |
| GREECE | 2,859 | -52 | -2,114 | -3,759 | -3,579 | -1,646 | -1,815 | -6,196 | -2,585 | -2,046 | -4,059 | -6,574 |
| HUNGARY | 117 | 2,196 | -2,708 | -1,965 | -1,486 | -1,353 | -2,203 | -919 | -423 | 3 | 111 | -395 |
| IRELAND* | -856 | -44,904 | -2,455 | -3,126 | -2,600 | -4,269 | -2,695 | -1,703 | -2,150 | -744 | -1,664 | -746 |
| ITALY | 16,049 | 71,775 | 15,534 | -2,057 | -4,198 | -2,253 | 3,195 | 7,188 | 5,905 | 3,541 | 4,549 | 8,001 |
| LATVIA | -321 | -312 | -568 | -657 | -272 | -359 | -200 | -91 | -50 | -260 | 75 | 1 |
| LITHUANIA | -29 | -44 | -117 | -55 | 25 | 160 | 172 | 416 | 589 | 585 | 669 | 717 |
| LUXEMBOURG | 1,137 | 1,514 | 1,664 | 1,460 | 1,674 | 1,649 | 1,561 | 1,715 | 2,342 | 2,408 | 2,569 | 3,325 |
| MALTA | 238 | 208 | 227 | 195 | 190 | 314 | 313 | 299 | 344 | 401 | 510 | 365 |
| NETHERLANDS | 23,586 | 20,252 | 13,465 | 5,989 | -9,192 | 1,616 | 4,555 | 10,356 | 9,352 | 9,575 | 8,305 | 25,900 |
| POLAND | 5,972 | 14,981 | 4,357 | 7,551 | 1,378 | 1,743 | 5,835 | 1,202 | 3,520 | 3,616 | 7,419 | 460 |
| PORTUGAL | 5,476 | 3,830 | -599 | -3,396 | -3,935 | -4,116 | -3,953 | -3,139 | -1,284 | -141 | -106 | 2,330 |
| ROMANIA | 463 | 1,029 | 833 | 1,171 | 490 | 848 | 1,417 | 1,371 | 1,369 | 1,523 | 1,214 | 1,355 |
| SLOVAKIA | 933 | 1,380 | 1,471 | 1,381 | 1,603 | 2,060 | 2,350 | 2,794 | 2,875 | 2,888 | 2,730 | 2,786 |
| SLOVENIA | 535 | 911 | 320 | 95 | 48 | 41 | 177 | 192 | 259 | 263 | 348 | 275 |
| SPAIN | 330 | 8,620 | -7,776 | -18,252 | -24,713 | -17,079 | -26,508 | -14,852 | -13,542 | -3,252 | -6,899 | -5,647 |
| SWEDEN | 32,214 | 53,838 | 16,236 | 26,424 | 5,457 | -1,227 | 36,125 | 11,722 | 14,977 | 7,883 | 13,538 | 45,568 |
| EURO AREA 19 | 103,934 | 155,924 | 98,485 | 44,279 | -67,990 | 35,097 | 71,391 | 96,914 | 130,254 | 154,042 | 186,935 | 210,262 |
| EU 28 | 158,440 | 239,004 | 123,317 | 81,667 | -61,971 | 39,083 | 120,141 | 117,439 | 160,982 | 174,138 | 223,086 | 268,384 |
| ICELAND | 301 | 1,574 | 322 | -227 | 880 | 225 | 522 | 2,162 | 240 | 260 | 753 | 1,500 |
| NORWAY | 30,421 | 21,866 | 17,686 | 33,453 | -15,275 | -4,322 | 1,506 | 31,624 | -4,107 | 10,350 | 17,817 | 1,047 |
| SWITZERLAND | 21,964 | 118,861 | 52,453 | 36,408 | 17,731 | 43,867 | 89,524 | 30,561 | -51,103 | 63,498 | 64,195 | n/a |
| UNITED KINGDOM | 97,630 | 50,234 | 46,844 | 61,450 | -17,842 | 129,031 | 142,925 | -208,875 | -3,558 | 31,916 | 134,164 | -41,498 |
| AUSTRALIA | 184,340 | 208,989 | 69,056 | 47,399 | -136,648 | 95,017 | 61,839 | 87,968 | 17,107 | -9,087 | 18,807 | 48,754 |
| BRAZIL | 15,173 | 25,643 | 19,184 | 16,060 | 9,065 | 30,503 | -16,717 | 40,441 | -13,789 | -9,177 | 6,561 | -29,501 |
| CANADA | 104,700 | 134,961 | 55,608 | 52,570 | -49,960 | 78,511 | -8,435 | 116,739 | -7,670 | -4,918 | 131,351 | n/a |
| JAPAN | -86,292 | 311,999 | 155,684 | -209,931 | -339,990 | 4,022 | 161,298 | 124,547 | -106,806 | 168,166 | 104,988 | n/a |
| RUSSIA | -2,265 | 8,704 | 7,186 | 15,898 | 9,499 | -10,659 | -213 | 22,083 | 4,930 | 5,242 | 32,120 | -8,987 |
| SINGAPORE | n/a | n/a | n/a | 20,154 | 6,460 | 4,418 | 13,293 | 3,088 | 2,063 | -5,617 | 2,008 | n/a |
| SOUTH KOREA | 40,930 | 44,479 | 22,489 | 37,545 | 7,613 | 68,799 | 75,576 | 65,475 | 37,882 | 30,522 | 17,969 | n/a |
| TURKEY | 3,082 | 8,916 | 1,560 | 6,157 | 902 | 7,222 | 827 | -930 | -2,062 | -10,896 | -1,226 | 655 |
| USA | -437,429 | -362,772 | 65,771 | -327,085 | -345,816 | 970,818 | 1,046,453 | 521,921 | -1,040,378 | 782,310 | n/a | n/a |

***Sources:*** *European Mortgage Federation National Experts, European Central Bank, National Central Banks, Federal Reserve*

**1) Time series breaks:**
- See Table 1

**2) The series has been revised for at least two years in:**
- See Table 1

**3) Notes:**
- For further details on the methodologies, please see “Annex: Explanatory Note on data”
- n/a: figure not available
- Please note that the time series are the result of the variation between two consecutive amounts of outstanding mortgage loans.
- Please note that the conversion to euros is based on the bilateral exchange rate at the end of the period (provided by the ECB and Bloomberg)
- Please note that due to the conversion to euros, changes observed for countries not belonging to the euro area may be due to exchange rate fluctuations. To obtain values in national currency, please refer to the exchange rates used, on Table 27 of this publication.

# 3. Gross Residential Loans

## Total Amount, EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 11,761 | 12,941 | 14,501 | 15,441 | 15,874 | 16,877 | 21,166 | 20,363 | 28,130 | 28,106 | 30,568 | 38,069 |
| BELGIUM | 22,076 | 26,768 | 28,074 | 25,994 | 25,077 | 29,441 | 36,155 | 36,554 | 33,568 | 34,895 | 43,805 | 36,115 |
| BULGARIA | 617 | 669 | 656 | 599 | 635 | 697 | 973 | 1,157 | 1,620 | 1,709 | 1,793 | 2,013 |
| CROATIA | — | — | — | 753 | 549 | 530 | 669 | 1,721 | 663 | 974 | 1,159 | 1,592 |
| CYPRUS | 2,098 | 3,017 | 1,907 | 1,518 | 1,399 | 480 | 268 | 543 | 720 | 869 | 874 | 783 |
| CZECHIA | 2,689 | 3,216 | 4,757 | 4,566 | 6,404 | 6,446 | 7,984 | 10,384 | 11,207 | 11,871 | 10,694 | 14,688 |
| DENMARK | 44,593 | 41,386 | 24,095 | 43,199 | 24,700 | 35,303 | 50,700 | 40,526 | 40,661 | 39,100 | 74,476 | 55,830 |
| ESTONIA | 446 | 419 | 490 | 566 | 686 | 819 | 942 | 1,038 | 1,206 | 1,315 | 1,399 | 1,368 |
| FINLAND | 19,739 | 20,972 | 22,537 | 21,400 | 17,514 | 17,540 | 33,307 | 29,511 | 30,982 | 33,970 | 33,705 | 38,088 |
| FRANCE | 119,447 | 168,801 | 161,601 | 119,337 | 139,800 | 112,700 | 212,300 | 251,300 | 272,700 | 203,100 | 246,600 | 252,400 |
| GERMANY | 131,300 | 142,700 | 150,600 | 162,900 | 170,100 | 177,100 | 208,600 | 209,400 | 214,300 | 227,800 | 245,000 | 269,700 |
| GREECE | 7,966 | 6,695 | 4,772 | 5,011 | 3,728 | 1,584 | 733 | 577 | 601 | 610 | 625 | 640 |
| HUNGARY | 1,907 | 1,398 | 1,294 | 1,214 | 623 | 885 | 1,343 | 1,688 | 2,352 | 2,875 | 3,012 | 2,844 |
| IRELAND | 8,076 | 4,746 | 2,463 | 2,636 | 2,495 | 3,855 | 4,848 | 5,656 | 7,286 | 8,722 | 9,540 | 8,365 |
| ITALY | 54,370 | 58,257 | 53,148 | 28,578 | 25,910 | 31,848 | 61,850 | 79,092 | 70,499 | 67,860 | 71,616 | 76,338 |
| LATVIA | n/a | 119 | 160 | 176 | 221 | 247 | 271 | 363 | 419 | 450 | 546 | n/a |
| LITHUANIA | 1,050 | 706 | 876 | 856 | 856 | 876 | 1,050 | 1,218 | 1,338 | 1,459 | 1,478 | 1,582 |
| LUXEMBOURG | 4,456 | 5,095 | 5,065 | 5,523 | 4,817 | 5,694 | 6,347 | 7,134 | 7,250 | 8,680 | 9,407 | 10,685 |
| MALTA | 238 | 210 | 227 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| NETHERLANDS | 65,302 | 65,719 | 68,942 | 46,664 | 36,700 | 48,550 | 63,474 | 80,977 | 100,972 | 107,080 | 122,626 | 138,957 |
| POLAND | n/a | 2,666 | n/a | 6,646 | 7,716 | 8,003 | 9,850 | 9,389 | 10,695 | 11,810 | 12,270 | 13,037 |
| PORTUGAL | 9,330 | 10,107 | 4,853 | 1,935 | 2,049 | 2,313 | 4,013 | 5,790 | 8,259 | 9,835 | 10,619 | 11,389 |
| ROMANIA | 921 | 1,458 | 1,472 | 1,455 | 1,521 | 1,542 | 2,516 | 2,470 | 2,656 | 2,688 | 2,696 | 2,504 |
| SLOVAKIA | 2,332 | 3,329 | 3,922 | 3,803 | 4,873 | 5,840 | 6,362 | 9,865 | 8,019 | 7,972 | 7,277 | 8,402 |
| SLOVENIA | 1,456 | 1,213 | 928 | 705 | 597 | 633 | 886 | 1,059 | 1,118 | 1,068 | 1,130 | 1,512 |
| SPAIN | 73,155 | 69,479 | 37,448 | 32,279 | 21,857 | 26,800 | 35,721 | 37,492 | 38,861 | 43,056 | 43,591 | 43,970 |
| SWEDEN | 39,909 | 45,077 | 38,887 | 40,616 | 46,498 | 51,168 | 60,761 | 59,341 | 59,871 | 55,755 | 55,165 | 61,206 |
| EURO AREA 19 | 532,261 | 591,370 | 555,607 | 468,793 | 469,426 | 481,133 | 698,025 | 777,389 | 825,508 | 786,847 | 880,406 | 938,364 |
| EU 27 | 625,233 | 697,163 | 633,674 | 574,368 | 563,198 | 587,769 | 833,090 | 904,609 | 955,953 | 913,628 | 1,041,669 | 1,092,078 |
| ICELAND | n/a | n/a | n/a | n/a | 858 | 994 | 1,769 | 11,562 | 13,978 | 16,558 | n/a | n/a |
| UNITED KINGDOM | 157,779 | 155,981 | 159,303 | 178,217 | 209,257 | 252,301 | 305,534 | 300,855 | 296,364 | 303,739 | 306,465 | 274,162 |
| AUSTRALIA | 145,175 | 157,651 | 165,721 | 191,521 | 205,474 | 224,757 | 242,678 | 239,637 | 250,892 | 218,192 | 197,826 | 234,556 |
| BRAZIL | 17,806 | 34,901 | 48,575 | 47,059 | 52,100 | 49,791 | 33,549 | 25,469 | 27,014 | 26,277 | 30,249 | 29,955 |
| CANADA | n/a | n/a | n/a | 195,557 | 182,258 | 172,343 | 218,526 | 228,136 | 223,819 | 189,081 | 216,977 | n/a |
| JAPAN | 148,236 | 169,881 | 180,636 | 197,864 | 159,624 | 137,448 | 149,785 | 204,841 | 168,978 | 161,047 | 175,628 | n/a |
| RUSSIA | 3,455 | 9,439 | 17,536 | 25,847 | 31,980 | 34,623 | 17,065 | 19,873 | 30,664 | 40,695 | 40,506 | 53,720 |
| TURKEY | 9,811 | 15,939 | 12,728 | 12,305 | 19,893 | 12,566 | 15,464 | 17,078 | 16,611 | 6,872 | 8,808 | 15,680 |
| USA | 1,319,186 | 1,229,539 | 1,073,994 | 1,650,062 | 1,423,086 | 978,547 | 1,563,767 | 1,865,571 | 1,781,889 | 1,886,876 | n/a | n/a |

***Sources:*** *European Mortgage Federation National Experts, European Central Bank, Japan Housing Finance Agency, National Central Banks, Federal Reserve, Inside Mortgage Finance*

**1) Time series breaks:**
- France (2007)
- The Netherlands (2003: change of source; 2004-2007: change of methodology)
- USA (2006)

**2) The series has been revised for at least two years in:**
- Croatia
- France
- Italy
- Slovakia
- United Kingdom
- Australia
- Brazil
- Japan
- Russia

**3) Notes:**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the conversion to euros is based on the yearly average bilateral exchange rate (provided by the ECB)
- Please note that due to the conversion to euros, changes observed for countries not belonging to the euro area may be due to exchange rate fluctuations. To obtain values in national currency, please refer to the exchange rates used, on Table 29 of this publication.
- Data includes internal remortgaging for the following countries: Slovakia and Italy
- For Austria and Turkey the figure includes only new loans
- For Belgium the figure also includes external remortgaging
- For Spain the figure also includes credits to households.
- For Sweden only residential lending from mortgage credit institutions is included. Lending by banks is not included in the above. However, mortgage credit institutions are estimated to constitute around 75% of the total residential mortgage credit market.
- For Denmark the figure does not include second homes
- For Japan, the reference year is the Japanese Fiscal year, from April to March

# 4. Representative Interest Rates on New Residential Loans

Annual average based on monthly figures, %

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 3.71 | 2.71 | 2.86 | 2.71 | 2.39 | 2.29 | 2.02 | 1.92 | 1.89 | 1.84 | 1.63 | 1.34 | 1 |
| BELGIUM | 4.25 | 3.59 | 3.81 | 3.63 | 3.45 | 3.17 | 2.49 | 2.11 | 2.09 | 1.91 | 1.78 | 1.57 | 1 |
| BULGARIA | 9.04 | 8.47 | 7.93 | 7.59 | 7.05 | 6.69 | 5.89 | 4.99 | 4.00 | 4.64 | 3.51 | 3.52 | 1 |
| CROATIA | 6.36 | 6.32 | 5.48 | 5.46 | 5.04 | 5.05 | 5.07 | 4.78 | 3.80 | 3.52 | 3.07 | 2.93 | 1 |
| CYPRUS | 6.05 | 4.73 | 5.31 | 5.33 | 5.03 | 4.43 | 3.59 | 3.06 | 2.77 | 2.41 | 2.12 | 2.10 | 2 |
| CZECHIA | 5.61 | 4.90 | 4.04 | 3.52 | 3.26 | 2.56 | 2.33 | 2.07 | 2.11 | 2.49 | 2.62 | 2.25 | 1 |
| DENMARK | 3.21 | 2.17 | 2.41 | 1.41 | 1.20 | 1.29 | 1.09 | 1.15 | 1.00 | 0.81 | 0.66 | 0.69 | 1 |
| ESTONIA | 3.87 | 3.50 | 3.42 | 2.86 | 2.54 | 2.43 | 2.25 | 2.28 | 2.34 | 2.59 | 2.54 | 2.48 | 1 |
| FINLAND | 2.45 | 1.98 | 2.50 | 1.97 | 1.98 | 1.80 | 1.35 | 1.16 | 0.95 | 0.86 | 0.73 | 0.69 | 1 |
| FRANCE | 4.09 | 3.42 | 3.80 | 3.56 | 3.19 | 2.96 | 2.32 | 1.88 | 1.60 | 1.55 | 1.36 | 1.26 | 1 |
| GERMANY | 4.26 | 3.69 | 3.84 | 3.06 | 2.76 | 2.49 | 1.95 | 1.76 | 1.83 | 1.87 | 1.52 | 1.25 | 1 |
| GREECE | 3.94 | 3.68 | 4.33 | 3.26 | 2.82 | 2.94 | 2.62 | 2.74 | 2.78 | 3.01 | 3.11 | 2.85 | 2 |
| HUNGARY | 11.55 | 10.88 | 10.46 | 10.51 | 9.85 | 8.48 | 6.21 | 5.32 | 4.70 | 4.43 | 4.86 | 4.56 | 2 |
| IRELAND | 3.14 | 3.13 | 3.46 | 3.28 | 3.44 | 3.42 | 3.49 | 3.26 | 3.19 | 3.01 | 2.93 | 2.81 | 1 |
| ITALY | 2.88 | 2.97 | 4.03 | 3.69 | 3.50 | 2.83 | 2.50 | 2.02 | 1.90 | 1.89 | 1.44 | 1.25 | 1 |
| LATVIA | 4.95 | 4.13 | 4.03 | 3.65 | 3.53 | 3.38 | 3.18 | 3.21 | 2.82 | 2.82 | 2.67 | 2.62 | 1 |
| LITHUANIA | 4.17 | 3.70 | 3.71 | 2.97 | 2.39 | 2.15 | 1.88 | 1.95 | 2.01 | 2.22 | 2.37 | 2.33 | 1 |
| LUXEMBOURG | 2.49 | 2.16 | 2.40 | 2.23 | 2.13 | 2.02 | 1.86 | 1.68 | 1.74 | 1.75 | 1.53 | 1.34 | 2 |
| MALTA | 3.51 | 3.43 | 3.38 | 3.40 | 3.03 | 2.85 | 2.99 | 2.84 | 2.83 | 2.71 | 2.58 | 2.60 | 1 |
| NETHERLANDS | 4.86 | 4.52 | 4.55 | 4.27 | 3.78 | 3.37 | 2.93 | 2.59 | 2.41 | 2.40 | 2.27 | 1.85 | 1 |
| POLAND | 7.23 | 6.48 | 6.70 | 6.95 | 5.14 | 4.10 | 4.40 | 4.40 | 4.40 | 4.40 | 4.40 | 2.90 | 1 |
| PORTUGAL | 2.69 | 2.43 | 3.74 | 3.89 | 3.26 | 3.21 | 2.38 | 1.90 | 1.59 | 1.38 | 1.20 | 0.92 | 2 |
| ROMANIA | 7.16 | 5.31 | 5.84 | 5.03 | 4.73 | 5.06 | 3.99 | 3.46 | 3.70 | 5.16 | 5.45 | 5.12 | 2 |
| SLOVAKIA | 5.87 | 5.21 | 4.84 | 4.69 | 4.07 | 3.39 | 2.72 | 1.97 | 1.82 | 1.54 | 1.35 | 1.12 | 1 |
| SLOVENIA | 4.45 | 3.34 | 3.77 | 3.37 | 3.20 | 3.21 | 2.53 | 2.33 | 2.50 | 2.44 | 2.35 | 1.82 | 1 |
| SPAIN | 3.25 | 2.53 | 3.37 | 3.30 | 3.04 | 2.96 | 2.24 | 2.01 | 1.95 | 1.97 | 1.99 | 1.73 | 2 |
| SWEDEN | 2.06 | 2.39 | 3.87 | 3.48 | 2.75 | 2.24 | 1.66 | 1.60 | 1.58 | 1.50 | 1.52 | 1.48 | 2 |
| ICELAND | 5.67 | 5.14 | 4.82 | 4.24 | 3.92 | 3.86 | 4.19 | 4.10 | 4.06 | 3.98 | 3.62 | 2.79 | 6 |
| NORWAY | n/a | n/a | n/a | n/a | 3.98 | 3.78 | 2.86 | 2.43 | 2.50 | 2.45 | 2.75 | 2.12 | 6 |
| SWITZERLAND | 2.79 | 2.58 | 2.39 | 2.18 | 2.02 | 1.89 | 1.77 | 1.63 | 1.53 | 1.45 | 1.37 | 1.28 | 6 |
| UNITED KINGDOM | 4.21 | 3.81 | 3.62 | 3.69 | 3.24 | 3.12 | 2.62 | 2.34 | 2.03 | 2.11 | 2.25 | 2.00 | 1 |
| AUSTRALIA | 6.60 | 7.50 | 7.00 | 6.00 | 5.30 | 5.20 | 5.60 | 5.40 | 5.20 | 5.30 | 5.10 | 4.60 | 2 |
| BRAZIL | n/a | n/a | 10.30 | 8.50 | 8.10 | 9.30 | 10.10 | 10.80 | 9.10 | 8.00 | 7.70 | 7.20 | 6 |
| CANADA | n/a | n/a | n/a | n/a | 3.14 | 3.05 | 2.70 | 2.70 | 2.89 | 3.44 | 3.30 | 2.55 | 1 |
| JAPAN | 2.74 | 2.36 | 2.32 | 1.95 | 1.87 | 1.62 | 1.52 | 1.06 | 1.23 | 1.36 | 1.21 | 1.31 | 6 |
| RUSSIA | 14.30 | 13.10 | 11.90 | 12.29 | 12.44 | 12.45 | 13.35 | 12.48 | 10.64 | 9.56 | 9.87 | 7.62 | 1 |
| SOUTH KOREA | 5.54 | 5.00 | 4.92 | 4.63 | 3.86 | 3.55 | 3.03 | 2.91 | 3.27 | 3.39 | 2.74 | n/a | 6 |
| TURKEY | 15.60 | 11.05 | 11.59 | 12.37 | 9.69 | 11.86 | 12.31 | 13.25 | 12.14 | 19.3 | 17.8 | 12.50 | 1 |
| USA | 5.04 | 4.69 | 4.46 | 3.66 | 3.98 | 4.17 | 3.85 | 3.65 | 3.99 | 4.65 | n/a | n/a | 5 |

***Sources:*** *European Mortgage Federation National Experts, European Central Bank, Japan Housing Finance Agency, National Central Banks, Federal Reserve*

**1) Time series breaks:**
- Czech Republic: 2013 (source was changed from 2013 to the Central Bank data)
- Croatia: 2012 (new series from 2012 onwards due to revised methodology)
- Iceland: 2005 (in 2004, the average is based on data between September and December)
- Romania: 2014 (change in the methodology of the NBR to reflect the changes in granting mortgages by currency)
- Slovakia: 2009 (before 2009, the reference currency for the interest rate was SKK)
- Slovenia: 2007 (before 2007, the reference currency for the interest rate was SIT)
- Sweden: 2005 (before 2005, the average was calculated with quarterly data)
- Japan: 2003 (the underlying mortgage products were changed due to a succession in Japan of government agencies dealing with housing finance)

**2) The series has been revised for at least two years in:**
- Croatia
- Czechia
- France
- Latvia
- Luxembourg
- Netherlands
- Poland
- Romania
- Iceland
- Australia
- Turkey

**3) Notes:**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a : figure not available
- For national definitions of representative interest rates on new residential loans, please see the methodological Annex ("Explanatory Note on data")
- Type: The type of new residential loan related to the published representative interest rate is provided in the column "type". There are 6 main types:
  (1) Weighted average interest rate on loans to households for house purchase
  (2) Initial fixed period interest rate up to 1 year on loans for house purchase
  (3) Initial fixed period interest rate over 1 and up to 5 years on loans for house purchase
  (4) Initial fixed period interest rate over 5 and up to 10 years on loans for house purchase
  (5) Initial fixed period interest rate of over 10 years on loans for house purchase
  (6) Other
- For Iceland the number represents real interest rate

# 5. Amount of gross lending with a variable interest rate

Fixation period of up to 1 year, %

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 69.9 | 73.7 | 74.9 | 78.3 | 81.4 | 84.0 | 76.1 | 63.6 | 51.8 | 43.5 | 43.6 | 37.6 |
| BELGIUM | 28.3 | 32.7 | 9.9 | 2.2 | 5.8 | 4.2 | 0.6 | 0.9 | 1.4 | 6.7 | 6.4 | 5.1 |
| BULGARIA | 99.3 | 97.5 | 97.2 | 94.7 | 96.8 | 96.1 | 93.4 | 97.2 | 98.7 | 98.7 | 99.0 | 98.1 |
| CROATIA | n/a | n/a | 63.3 | 60.4 | 70.5 | 72.2 | 77.5 | 50.7 | 30.7 | 15.7 | 13.3 | 20.3 |
| CYPRUS | 78.2 | 66.0 | 73.6 | 80.3 | 85.7 | 91.7 | 95.1 | 96.1 | 97.9 | 94.8 | 93.2 | 92.7 |
| CZECHIA | 56.0 | 56.0 | 56.4 | n/a | 34.2 | 8.5 | 5.8 | 4.1 | 2.7 | 3.0 | 3.1 | 2.5 |
| DENMARK | n/a | n/a | n/a | n/a | n/a | 23.0 | 14.1 | 17.8 | 19.2 | 15.5 | 18.9 | 25.7 |
| ESTONIA | 92.2 | 63.1 | 72.6 | 77.2 | 86.3 | 88.2 | 89.3 | 89.4 | 88.9 | 88.6 | 89.9 | 86.8 |
| FINLAND | n/a | n/a | n/a | n/a | 95.8 | 93.7 | 92.9 | 92.5 | 95.2 | 96.3 | 96.6 | 96.9 |
| GERMANY | 17.0 | 16.6 | 16.9 | 15.0 | 16.3 | 15.8 | 12.4 | 12.0 | 11.4 | 11.7 | 11.0 | 10.5 |
| GREECE | 68.5 | 76.5 | 79.2 | 88.6 | 87.8 | 90.3 | 92.4 | 85.6 | 82.0 | 85.7 | 83.9 | 61.6 |
| HUNGARY | n/a | 83.4 | 75.6 | 61.5 | 44.1 | 47.1 | 45.0 | 41.9 | 41.0 | 16.0 | 7.0 | 1.2 |
| IRELAND | 88.5 | 70.2 | 78.4 | 87.7 | 83.6 | 86.6 | 66.0 | 65.4 | 49.5 | 39.0 | 26.9 | 22.8 |
| ITALY | n/a | n/a | n/a | n/a | n/a | 77.7 | 47.9 | 37.5 | 33.3 | 33.3 | 29.4 | 18.5 |
| LATVIA | 87.6 | 87.8 | 90.4 | 91.7 | 96.4 | 96.3 | 95.3 | 92.7 | 93.8 | 95.7 | 95.8 | 94.1 |
| LITHUANIA | 85.5 | 79.2 | 77.0 | 78.4 | 83.6 | 89.2 | 88.1 | 85.8 | 91.1 | 97.3 | 98.4 | 97.2 |
| LUXEMBOURG | 88.0 | 86.9 | 85.3 | 72.4 | 68.8 | 74.8 | 52.1 | 45.0 | 42.3 | 46.9 | 39.0 | 33.9 |
| MALTA | 94.4 | 90.8 | 98.4 | 89.9 | 93.4 | 72.8 | 72.4 | 72.2 | 74.2 | 62.7 | 44.4 | 57.7 |
| NETHERLANDS | 24.7 | 20.8 | 21.9 | 23.1 | 24.3 | 19.6 | 14.5 | 13.7 | 13.7 | 16.2 | 18.7 | 14.9 |
| POLAND | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 92.5 |
| PORTUGAL | 98.0 | 99.2 | 98.9 | 94.6 | 91.2 | 92.3 | 92.1 | 66.4 | 60.3 | 65.0 | 71.7 | 67.9 |
| ROMANIA | n/a | n/a | n/a | n/a | n/a | 88.0 | 85.0 | 93.0 | 93.0 | 75.0 | 77.0 | 71.0 |
| SLOVAKIA | 30.1 | 30.1 | 24.6 | 14.8 | 9.6 | 4.0 | 2.7 | 3.0 | 1.4 | 1.2 | 1.4 | 2.1 |
| SLOVENIA | 95.1 | 96.3 | 94.9 | 97.3 | 98.5 | 98.0 | 77.7 | 59.1 | 45.6 | 47.8 | 52.8 | 50.6 |
| SPAIN | 89.2 | 86.4 | 81.8 | 77.8 | 67.7 | 64.5 | 62.9 | 46.3 | 42.4 | 36.3 | 35.5 | 34.0 |
| SWEDEN | 87.7 | 69.8 | 53.8 | 56.3 | 64.3 | 75.7 | 73.0 | 76.0 | 71.7 | 68.8 | 59.3 | 48.4 |
| NORWAY | n/a | n/a | n/a | n/a | n/a | 93.0 | 90.0 | 92.0 | 94.0 | 94.0 | 95.0 | n/a |
| UNITED KINGDOM | 37.8 | 56.9 | 44.1 | 35.9 | 19.0 | 13.2 | 15.8 | 16.0 | 11.5 | 7.5 | 7.9 | 8.6 |
| ICELAND | — | — | — | — | — | — | 33.2 | 43.2 | 40.5 | 45.7 | 46.8 | 57.6 |
| CANADA | n/a | n/a | n/a | n/a | 16.6 | 26.9 | 33.7 | 18.3 | 18.4 | 27.6 | 10.9 | n/a |
| JAPAN | 49.0 | 52.5 | 54.5 | 58.0 | 49.7 | 52.5 | 56.5 | 50.2 | 50.7 | 60.5 | n/a | n/a |
| SOUTH KOREA | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 61.0 | 71.1 | 64.8 | 53.0 | n/a |

***Sources:*** *European Mortgage Federation National Experts, National Central Banks, Statistical Data Warehouse – ECB*

**Note:**

• When available this dataset has been constructed on figures provided in the Quarterly Review

# 6. Average amount of a Mortgage granted

EUR

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BELGIUM | 125,302 | 129,815 | 132,246 | 136,062 | 134,975 | 138,084 | 144,159 | 149,126 | 154,717 | 158,649 | 162,494 | 176,622 |
| CZECHIA | n/a | n/a | n/a | n/a | 41,833 | 40,703 | 47,913 | 59,036 | 69,054 | 71,745 | n/a | n/a |
| DENMARK | 122,730 | 126,849 | 129,030 | 131,649 | 130,288 | 132,820 | 138,767 | 142,238 | 145,861 | 149,750 | 157,094 | 163,852 |
| FINLAND | 90,626 | 93,186 | 93,990 | 94,502 | 94,416 | 94,171 | 95,735 | 97,215 | 98,735 | 100,030 | 102,240 | n/a |
| FRANCE | 110,098 | 127,016 | 135,352 | 137,241 | 142,563 | 145,313 | 149,018 | 153,857 | 161,350 | 170,187 | 179,050 | n/a |
| GERMANY | 175,000 | n/a | n/a | 185,000 | n/a | n/a | 212,000 | n/a | 236,000 | n/a | 277,000 | n/a |
| HUNGARY | n/a | n/a | 16,358 | 15,108 | 13,945 | 15,322 | 17,032 | 18,944 | 21,670 | n/a | n/a | n/a |
| IRELAND | 176,258 | 171,561 | 172,462 | 166,056 | 166,450 | 174,269 | 180,963 | 191,719 | 209,373 | 216,941 | 222,965 | 234,869 |
| LATVIA | n/a | 39,041 | 30,709 | 25,445 | 27,438 | 30,315 | 31,390 | 25,206 | 285,931 | 37,407 | n/a | n/a |
| NETHERLANDS | 246,276 | 258,257 | 275,388 | 233,327 | 215,890 | 217,994 | 245,007 | 263,542 | 285,103 | 307,127 | 326,361 | 291,919 |
| POLAND | 46,781 | 51,557 | 50,445 | 47,493 | 47,604 | 49,364 | 50,633 | 50,562 | 57,369 | 59,493 | 64,658 | 66,523 |
| ROMANIA | 39,606 | 38,954 | 36,880 | 29,153 | 24,209 | 33,306 | 34,418 | 35,632 | 39,299 | 41,899 | 43,472 | 40,308 |
| SLOVAKIA | 53,195 | 52,401 | 55,141 | 53,692 | 59,267 | 62,091 | 59,035 | n/a | n/a | n/a | n/a | n/a |
| SPAIN | 117,804 | 116,934 | 111,922 | 103,438 | 100,011 | 102,253 | 106,736 | 109,785 | 117,199 | 124,265 | 125,615 | 135,093 |
| ICELAND | n/a | n/a | n/a | n/a | 72,842 | 72,003 | 52,278 | 96,354 | 120,664 | 121,582 | n/a | n/a |
| NORWAY | n/a | n/a | n/a | 131,236 | n/a | n/a | 116,653 | n/a | n/a | 123,470 | n/a | n/a |
| UNITED KINGDOM | 151,654 | 170,093 | 170,332 | 184,480 | 182,461 | 206,027 | 241,876 | 222,877 | 214,297 | 216,764 | 225,197 | 239,456 |
| AUSTRALIA | 159,145 | 210,965 | 224,878 | 240,677 | 220,343 | 220,594 | 239,968 | 244,373 | 245,927 | 243,527 | n/a | n/a |
| BRAZIL | 28,583 | 40,662 | 51,313 | 51,025 | 52,260 | 50,171 | 37,652 | 33,150 | 42,692 | 37,474 | 40,491 | 35,657 |
| CANADA | n/a | n/a | n/a | 130,525 | 126,283 | 122,825 | 132,199 | 133,549 | 138,835 | 137,028 | 145,357 | n/a |
| JAPAN | 239,527 | 269,959 | 286,139 | 312,713 | 244,794 | 231,274 | 253,220 | 290,624 | 283,245 | 281,104 | 312,573 | n/a |
| RUSSIA | 26,561 | 31,315 | 33,492 | 37,367 | 38,761 | 34,185 | 24,396 | 23,201 | 28,211 | 27,646 | 30,868 | 30,172 |
| TURKEY | 20,281 | 26,643 | 23,310 | 23,932 | 23,782 | 21,509 | 22,530 | 22,476 | 19,247 | 13,818 | 13,121 | 13,642 |
| USA | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 218,251 | 211,050 | 229,944 |

***Sources:*** *European Mortgage Federation National Experts, National Central Banks, Japan Housing Finance Agency*

**Notes:**

- Please note that the conversion to euros is based on the yearly average bilateral exchange rate (provided by the ECB)
- Please note that due to the conversion to euros, changes observed for countries not belonging to the euro area may be due to exchange rate fluctuations. To obtain values in national currency, please refer to the exchange rates used, on Table 29 of this publication.
- For Belgium it represents the average of the year for the purchase of a dwelling
- For Denmark the statistics includes only owner occupation from mortgage banks
- For Germany the statistics contain average amount of a mortgage for the purchase of a second hand single family house
- For the UK the figure represents the median advance mate to home-owner for house purchase activity

**The series has been revised for at least two years in:**

- France
- Spain
- United Kingdom
- Brazil
- Russia
- Turkey

# 7. Total Outstanding Non-Residential Mortgage Loans

Total Amount , End of the Year, EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CZECHIA | 12,099 | 12,356 | 12,010 | 12,023 | 12,035 | 13,544 | 14,435 | 16,446 | 19,358 | 19,997 | 29,510 | 31,965 |
| DENMARK | 127,141 | 130,405 | 133,754 | 138,160 | 145,158 | 151,264 | 143,427 | 148,532 | 150,540 | 153,352 | 158,447 | 168,919 |
| ESTONIA | 3,937 | 3,658 | 3,395 | 3,371 | 3,223 | 3,250 | 3,339 | 3,509 | 3,382 | 2,393 | 3,501 | 3,716 |
| FINLAND | 14,027 | 15,441 | 16,473 | 16,854 | 18,174 | 19,501 | 20,713 | 22,117 | 24,129 | 26,493 | 28,406 | 29,850 |
| GERMANY | 255,721 | 251,450 | 259,134 | 254,014 | 250,631 | 247,345 | 250,310 | 249,295 | 261,102 | 265,796 | 299,137 | 316,469 |
| GREECE | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| HUNGARY | 7,838 | 8,380 | 7,051 | 6,805 | 6,112 | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| IRELAND | 15,147 | 32,734 | 29,979 | 29,269 | 27,710 | 25,108 | 22,737 | 20,493 | 17,890 | 14,211 | 10,966 | 9,428 |
| ITALY | 71,311 | 74,303 | 73,234 | 93,216 | 87,260 | 79,915 | 87,372 | 81,591 | n/a | n/a | n/a | n/a |
| LATVIA | 4,370 | 3,658 | 3,144 | 2,582 | 2,298 | 2,034 | 1,898 | 2,255 | 2,025 | 1,664 | n/a | n/a |
| MALTA | 1,766 | 1,506 | 1,489 | 1,447 | 1,350 | 1,391 | 1,228 | 1,252 | 1,286 | 1,399 | 1,533 | 1,646 |
| NETHERLANDS | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| POLAND | 12,192 | 12,125 | 11,722 | 13,693 | 13,116 | 13,055 | 13,952 | 13,616 | 18,532 | 16,187 | 16,230 | n/a |
| ROMANIA | 17,742 | 19,264 | 20,140 | 19,966 | 19,244 | 17,763 | 16,887 | 15,409 | 14,189 | 14,427 | 15,000 | 14,986 |
| SPAIN | 420,669 | 396,719 | 339,739 | 235,151 | 159,599 | 134,581 | 129,690 | 115,889 | 185,105 | 166,228 | 156,024 | 150,191 |
| ICELAND | 21,925 | 22,958 | 13,660 | 11,430 | 11,332 | 11,092 | n/a | n/a | n/a | n/a | n/a | n/a |
| NORWAY | 9,100 | 11,943 | 12,391 | 14,195 | 13,626 | 13,550 | 13,027 | 13,752 | 13,399 | 19,556 | 19,215 | 19,012 |
| AUSTRALIA | 445,407 | 524,491 | 560,174 | 576,205 | 482,944 | 524,797 | 558,371 | 599,575 | 589,029 | 588,282 | 610,387 | 620,764 |
| BRAZIL | 3,013 | 3,367 | 13,329 | 15,885 | 16,508 | 20,555 | 15,430 | 18,827 | 13,316 | 10,439 | 7,489 | 4,498 |
| CANADA | 192,645 | 207,478 | 220,568 | 249,441 | 242,341 | 280,904 | 291,451 | 339,483 | 345,150 | 379,414 | 439,130 | n/a |
| JAPAN | 188,721 | 239,740 | 259,354 | 230,744 | 182,518 | 183,992 | 216,335 | 239,327 | 223,963 | 241,122 | 247,542 | n/a |
| RUSSIA | 3,936 | 4,101 | 3,534 | 3,327 | 3,080 | 2,573 | 1,711 | 1,693 | 1,081 | 1,773 | 300 | 203 |
| SINGAPORE | — | — | 45,963 | 51,791 | 52,103 | 52,817 | 58,110 | 59,779 | 62,087 | 70,214 | 71,341 | n/a |
| USA | 1,827,364 | 2,527,915 | 2,544,633 | 2,496,135 | 2,445,870 | 2,916,811 | 3,478,185 | 3,831,895 | 3,462,965 | 3,988,682 | n/a | n/a |

***Sources:*** *European Mortgage Federation National Experts, National Central Banks, Federal Reserve*

**1) Time series breaks**

- Latvia: 2003 (due to a change in the statistical source)

**2) The series has been revised for at least two years in:**

- Czechia
- Malta
- Romania
- Spain
- Norway
- Australia
- Brazil
- Japan
- Russia

**3) Notes**

- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the conversion to euros is based on the bilateral exchange rate at the end of the period (provided by the ECB and Bloomberg)
- Please note that due to the conversion to euros, changes observed for countries not belonging to the euro area may be due to exchange rate fluctuations. To obtain values in national currency, please refer to the exchange rates used, on Table 30 of this publication.

# 8. Total Outstanding Residential Loans to GDP Ratio

%

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 25.5 | 27.0 | 27.1 | 27.1 | 27.1 | 27.2 | 28.2 | 28.3 | 29.1 | 29.2 | 30.1 | 33.3 |
| BELGIUM | 43.8 | 44.5 | 45.8 | 47.5 | 48.2 | 48.9 | 49.7 | 51.2 | 52.4 | 53.5 | 55.3 | 61.0 |
| BULGARIA | 10.2 | 9.8 | 8.7 | 8.5 | 8.4 | 8.2 | 7.7 | 7.6 | 8.0 | 8.4 | 10.4 | 11.6 |
| CROATIA | 17.0 | 18.3 | 18.7 | 18.9 | 18.4 | 18.1 | 17.3 | 14.9 | 14.4 | 14.0 | 14.2 | 16.7 |
| CYPRUS | 55.6 | 61.4 | 63.3 | 65.2 | 65.9 | 67.0 | 65.2 | 60.8 | 55.3 | 40.5 | 38.6 | 41.5 |
| CZECHIA | 14.1 | 15.4 | 15.6 | 17.3 | 17.3 | 18.3 | 18.9 | 19.7 | 20.9 | 20.9 | 21.6 | 23.8 |
| DENMARK | 93.7 | 92.1 | 92.3 | 90.6 | 89.6 | 88.2 | 87.5 | 86.1 | 84.4 | 83.3 | 83.4 | 85.2 |
| ESTONIA | 43.0 | 40.2 | 35.0 | 32.4 | 31.0 | 30.1 | 30.4 | 30.4 | 29.8 | 29.3 | 28.9 | 31.9 |
| FINLAND | 39.5 | 40.8 | 41.3 | 43.0 | 43.2 | 43.4 | 43.5 | 43.2 | 42.5 | 41.9 | 41.8 | 43.9 |
| FRANCE | 37.7 | 39.9 | 41.0 | 41.7 | 38.5 | 38.8 | 39.4 | 40.3 | 41.5 | 42.7 | 44.2 | 49.4 |
| GERMANY | 46.9 | 44.9 | 43.2 | 43.2 | 43.0 | 42.3 | 42.3 | 42.3 | 42.2 | 42.9 | 44.1 | 48.4 |
| GREECE | 33.9 | 35.6 | 37.9 | 39.0 | 39.3 | 38.9 | 38.4 | 35.2 | 33.2 | 31.6 | 28.7 | 27.8 |
| HUNGARY | 23.8 | 24.9 | 21.6 | 20.0 | 18.1 | 16.2 | 13.3 | 12.1 | 10.7 | 10.0 | 9.4 | 9.8 |
| IRELAND | 87.0 | 61.4 | 58.9 | 55.7 | 52.8 | 46.5 | 33.4 | 31.9 | 28.3 | 25.5 | 22.9 | 21.7 |
| ITALY | 26.2 | 32.8 | 34.6 | 35.5 | 35.4 | 34.8 | 21.9 | 21.8 | 21.6 | 21.4 | 21.4 | 23.7 |
| LATVIA | 36.5 | 36.8 | 29.6 | 24.1 | 22.2 | 19.9 | 18.3 | 17.4 | 16.2 | 14.1 | 13.7 | 14.2 |
| LITHUANIA | 22.4 | 21.4 | 18.8 | 17.4 | 16.7 | 16.4 | 16.5 | 16.9 | 17.0 | 17.1 | 17.3 | 18.7 |
| LUXEMBOURG | 46.2 | 46.3 | 46.9 | 49.2 | 50.3 | 50.3 | 51.1 | 51.6 | 54.0 | 55.1 | 56.1 | 60.7 |
| MALTA | 40.0 | 40.4 | 42.3 | 43.1 | 42.8 | 42.1 | 39.1 | 39.8 | 38.8 | 39.3 | 40.2 | 45.9 |
| NETHERLANDS | 103.8 | 104.6 | 104.9 | 105.4 | 102.8 | 101.3 | 99.3 | 98.2 | 95.5 | 92.3 | 88.9 | 93.6 |
| POLAND | 16.6 | 18.7 | 18.9 | 20.4 | 20.5 | 20.1 | 20.5 | 21.0 | 19.9 | 19.4 | 19.5 | 20.0 |
| PORTUGAL | 63.1 | 63.8 | 64.7 | 65.7 | 62.5 | 59.2 | 54.8 | 51.1 | 48.0 | 45.8 | 43.9 | 47.5 |
| ROMANIA | 4.6 | 5.4 | 5.8 | 6.6 | 6.4 | 6.7 | 7.2 | 7.6 | 7.6 | 7.7 | 7.6 | 8.4 |
| SLOVAKIA | 14.8 | 15.9 | 17.3 | 18.6 | 20.6 | 22.8 | 24.7 | 27.8 | 30.0 | 31.6 | 33.0 | 36.9 |
| SLOVENIA | 10.8 | 13.3 | 13.9 | 14.5 | 14.6 | 14.2 | 14.2 | 14.1 | 13.9 | 13.6 | 13.6 | 14.8 |
| SPAIN | 57.2 | 57.8 | 57.6 | 57.6 | 55.8 | 53.5 | 48.8 | 45.9 | 42.8 | 41.1 | 39.2 | 43.0 |
| SWEDEN | 75.8 | 78.0 | 74.7 | 77.9 | 77.0 | 77.3 | 82.4 | 83.0 | 83.7 | 87.1 | 88.8 | 98.8 |
| EURO AREA 19 | 47.0 | 47.5 | 47.4 | 47.8 | 46.5 | 45.8 | 42.3 | 42.1 | 41.7 | 41.7 | 41.9 | 45.9 |
| EU 27 | 46.5 | 47.2 | 47.0 | 47.5 | 46.4 | 45.6 | 42.8 | 42.6 | 42.1 | 42.0 | 42.1 | 46.1 |
| ICELAND | 67.8 | 77.1 | 76.1 | 70.4 | 74.1 | 68.5 | 61.3 | 63.0 | 55.2 | 55.6 | 59.1 | 76.8 |
| NORWAY | 67.5 | 64.7 | 63.4 | 65.8 | 62.4 | 64.1 | 69.8 | 82.2 | 76.5 | 75.8 | 82.4 | 94.0 |
| SWITZERLAND | 125.0 | 126.8 | 139.1 | 132.1 | 135.1 | 138.9 | 142.8 | 134.9 | 140.6 | 133.5 | 143.9 | 147.0 |
| UNITED KINGDOM | 77.3 | 74.6 | 75.3 | 71.1 | 70.7 | 69.8 | 66.5 | 63.5 | 65.3 | 65.0 | 67.7 | n/a |
| AUSTRALIA | 104.7 | 103.2 | 88.6 | 85.7 | 75.9 | 79.7 | 83.7 | 101.4 | 95.6 | 91.9 | 90.9 | 101.5 |
| BRAZIL | 2.9 | 3.6 | 3.9 | 5.1 | 5.8 | 6.6 | 7.2 | 9.7 | 7.9 | 8.3 | 8.4 | 8.8 |
| JAPAN | 38.5 | 40.1 | 39.2 | 35.2 | 35.2 | 33.1 | 37.4 | 36.1 | 34.8 | 39.7 | 39.2 | n/a |
| RUSSIA | 3.1 | 3.0 | 2.7 | 3.5 | 4.2 | 3.3 | 4.6 | 6.8 | 6.0 | 6.3 | 8.0 | 8.6 |
| TURKEY | n/a | n/a | 28.6 | 34.0 | 36.3 | 37.4 | 36.4 | 36.2 | 34.9 | 31.6 | 30.7 | n/a |
| SINGAPORE | 37.4 | 34.7 | 35.8 | 36.4 | 36.0 | 39.8 | 37.7 | 41.6 | 41.9 | 43.3 | 44.2 | n/a |
| SOUTH KOREA | 4.4 | 4.9 | 4.7 | 5.5 | 5.4 | 5.8 | 5.8 | 5.6 | 5.5 | 4.7 | 4.4 | 4.9 |
| USA | 81.8 | 69.9 | 65.8 | 61.8 | 59.6 | 57.1 | 56.2 | 57.6 | 50.4 | 54.4 | n/a | n/a |

***Sources:*** *European Mortgage Federation National Experts, European Central Bank, National Central Banks, Eurostat, Bureau of Economic Analysis, Federal Reserve*

**1) Time series breaks:**

- See Table 1 and Table 27

**2) The series has been revised for at least two years in:**

# 9. Total Outstanding Residential Loans to Disposable Income of Households Ratio

%

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 40.2 | 43.4 | 44.3 | 43.8 | 44.4 | 44.7 | 47.1 | 47.3 | 48.5 | 49.2 | 50.7 | 54.5 |
| BELGIUM | 70.3 | 74.0 | 76.4 | 79.3 | 80.7 | 82.9 | 85.9 | 88.6 | 90.4 | 92.6 | 94.8 | 96.5 |
| BULGARIA | 16.1 | 15.5 | 14.0 | 13.8 | 13.4 | 13.3 | 12.9 | 12.9 | 13.6 | n/a | n/a | n/a |
| CROATIA | 26.7 | 28.7 | 29.2 | 30.0 | 29.2 | 29.2 | 27.7 | 24.1 | 23.4 | 22.7 | 23.0 | n/a |
| CYPRUS | 79.3 | 89.0 | 91.6 | 95.3 | 94.1 | 98.8 | 98.8 | 92.1 | 84.3 | 61.5 | 58.9 | 61.8 |
| CZECHIA | 25.1 | 27.4 | 28.0 | 30.7 | 31.0 | 33.5 | 35.8 | 37.3 | 39.4 | 39.0 | 40.7 | 41.9 |
| DENMARK | 196.3 | 191.8 | 189.4 | 186.8 | 184.6 | 184.2 | 180.0 | 175.5 | 173.4 | 170.2 | 170.5 | 173.8 |
| ESTONIA | 71.9 | 70.3 | 63.9 | 61.5 | 57.2 | 55.6 | 55.0 | 56.4 | 55.1 | 53.9 | 52.4 | 55.8 |
| FINLAND | 68.0 | 69.8 | 71.5 | 73.4 | 73.2 | 73.6 | 74.2 | 74.4 | 74.2 | 73.1 | 72.7 | 74.5 |
| FRANCE | 57.4 | 60.7 | 63.2 | 64.5 | 60.6 | 61.2 | 62.9 | 64.1 | 66.3 | 68.2 | 70.6 | 73.7 |
| GERMANY | 70.8 | 69.5 | 67.8 | 67.4 | 67.6 | 67.5 | 67.9 | 68.1 | 68.4 | 69.2 | 70.9 | 74.9 |
| GREECE | 46.5 | 51.1 | 55.2 | 59.0 | 60.2 | 58.7 | 57.4 | 53.6 | 50.5 | 48.0 | 43.0 | 38.2 |
| HUNGARY | 40.8 | 42.9 | 36.2 | 33.4 | 30.7 | 28.3 | 23.8 | 21.3 | 19.1 | 17.8 | 16.7 | 17.0 |
| IRELAND | 159.9 | 114.0 | 118.8 | 111.6 | 108.9 | 102.0 | 94.8 | 88.7 | 80.9 | 76.5 | 69.9 | 65.7 |
| ITALY | 25.5 | 32.1 | 32.7 | 33.4 | 32.9 | 32.4 | 32.3 | 32.6 | 32.4 | 32.2 | 32.3 | 33.9 |
| LATVIA | 53.3 | 55.1 | 49.9 | 41.0 | 37.5 | 32.9 | 29.8 | 27.7 | 26.0 | 22.8 | 22.5 | 22.0 |
| LITHUANIA | 31.6 | 30.8 | 28.9 | 27.4 | 26.3 | 26.6 | 26.6 | 26.4 | 27.6 | 28.0 | 27.6 | 27.9 |
| LUXEMBOURG | 108.8 | 114.1 | 121.3 | 122.7 | 127.8 | 129.1 | 135.0 | 140.9 | 142.6 | 145.7 | 146.6 | 152.2 |
| NETHERLANDS | 206.3 | 209.5 | 209.2 | 209.3 | 204.4 | 200.0 | 197.7 | 195.0 | 192.9 | 186.7 | 181.6 | 181.0 |
| POLAND | 26.3 | 29.7 | 30.9 | 33.3 | 33.4 | 33.0 | 34.3 | 34.5 | 33.2 | 33.0 | 33.0 | 32.5 |
| PORTUGAL | 86.5 | 88.2 | 89.5 | 89.3 | 86.9 | 83.7 | 77.8 | 72.6 | 69.4 | 66.4 | 63.8 | 64.7 |
| ROMANIA | 8.7 | 9.3 | 10.5 | 12.5 | 12.0 | 13.0 | 13.8 | 14.1 | 13.7 | 14.0 | 13.2 | 13.4 |
| SLOVAKIA | 23.4 | 26.1 | 29.3 | 31.5 | 35.0 | 38.9 | 42.3 | 46.5 | 50.0 | 50.9 | 53.2 | 57.0 |
| SLOVENIA | 17.3 | 21.0 | 21.9 | 22.9 | 23.1 | 23.0 | 23.3 | 23.1 | 23.1 | 22.7 | 22.6 | 22.5 |
| SPAIN | 89.0 | 89.9 | 88.2 | 90.3 | 86.9 | 84.2 | 77.1 | 73.0 | 68.8 | 66.4 | 63.8 | 65.2 |
| SWEDEN | 150.0 | 158.1 | 150.6 | 150.6 | 148.4 | 150.6 | 165.0 | 164.9 | 167.8 | 174.3 | 176.6 | 193.5 |
| EURO AREA 19 | 68.5 | 70.2 | 70.4 | 71.1 | 69.6 | 69.2 | 68.9 | 68.7 | 68.6 | 68.6 | 69.2 | n/a |
| EU 27 | 69.3 | 71.3 | 71.4 | 72.3 | 71.0 | 70.8 | 71.0 | 70.6 | 70.4 | 70.3 | 70.8 | n/a |
| NORWAY | 151.3 | 147.6 | 147.5 | 153.8 | 142.5 | 143.0 | 143.2 | 165.2 | 156.9 | 162.0 | 169.0 | 178.5 |
| SWITZERLAND | 192.5 | 214.1 | 206.2 | 209.8 | 214.6 | 222.0 | 217.9 | 227.7 | 218.2 | 239.0 | 243.6 | n/a |
| UNITED KINGDOM | 111.8 | 109.3 | 112.2 | 104.7 | 104.4 | 104.2 | 96.4 | 94.0 | 98.3 | 96.7 | 100.9 | 98.9 |
| USA | 102.2 | 89.5 | 90.3 | 75.9 | 74.6 | 80.2 | 72.5 | 74.3 | 64.7 | 69.5 | n/a | n/a |

***Source:*** *European Mortgage Federation National Experts, European Central Bank, National Central Banks, National Statistics Offices, Eurostat, Federal Reserve, US Bureau of Census*

**1) Time series breaks:**

- See Table 1

**2) The series has been revised for at least two years in:**

- See Table 1

**3) Notes:**

- For further details on the methodologies, please see “Annex: Explanatory Note on data”
- n/a: figure not available
- Please note that the disposable income of households at current prices has been taken in euros directly from AMECO.

# 10. Total Outstanding Residential Loans per Capita

Population over 18 years, EUR

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 10,845 | 11,749 | 12,255 | 12,506 | 12,602 | 12,930 | 13,664 | 14,075 | 14,812 | 15,458 | 16,356 | 17,059 |
| BELGIUM | 17,752 | 18,749 | 19,648 | 20,818 | 21,362 | 22,109 | 23,134 | 24,422 | 25,779 | 27,123 | 28,814 | 29,925 |
| BULGARIA | 608 | 597 | 581 | 581 | 574 | 577 | 585 | 620 | 709 | 805 | 1,099 | 1,220 |
| CROATIA | 2,190 | 2,361 | 2,397 | 2,381 | 2,318 | 2,266 | 2,234 | 2,017 | 2,075 | 2,151 | 2,290 | 2,450 |
| CYPRUS | 16,781 | 18,604 | 18,954 | 18,518 | 17,158 | 16,962 | 17,205 | 16,949 | 16,196 | 12,463 | 12,177 | 12,055 |
| CZECHIA | 2,442 | 2,800 | 2,958 | 3,213 | 3,137 | 3,317 | 3,703 | 4,036 | 4,684 | 5,078 | 5,609 | 5,886 |
| DENMARK | 50,462 | 51,869 | 52,589 | 52,702 | 52,546 | 52,703 | 53,198 | 53,692 | 54,311 | 54,532 | 55,707 | 57,055 |
| ESTONIA | 5,614 | 5,490 | 5,418 | 5,406 | 5,477 | 5,656 | 5,909 | 6,231 | 6,668 | 7,125 | 7,585 | 8,075 |
| FINLAND | 16,969 | 18,003 | 19,059 | 19,990 | 20,311 | 20,519 | 20,917 | 21,307 | 21,693 | 21,989 | 22,502 | 23,147 |
| FRANCE | 14,602 | 15,812 | 16,677 | 17,132 | 15,966 | 16,202 | 16,766 | 17,343 | 18,328 | 19,302 | 20,513 | 21,542 |
| GERMANY | 16,788 | 16,865 | 17,379 | 17,636 | 17,926 | 18,280 | 18,792 | 19,272 | 19,968 | 20,879 | 22,045 | 23,449 |
| GREECE | 8,833 | 8,796 | 8,553 | 8,173 | 7,840 | 7,710 | 7,545 | 6,893 | 6,616 | 6,400 | 5,947 | 5,204 |
| HUNGARY | 2,747 | 3,012 | 2,681 | 2,453 | 2,269 | 2,106 | 1,837 | 1,728 | 1,683 | 1,687 | 1,701 | 1,653 |
| IRELAND | 43,317 | 30,081 | 29,324 | 28,380 | 27,542 | 26,156 | 25,146 | 24,354 | 23,409 | 22,919 | 22,045 | 21,498 |
| ITALY | 5,727 | 7,168 | 7,454 | 7,401 | 7,277 | 7,094 | 7,147 | 7,294 | 7,408 | 7,478 | 7,633 | 7,798 |
| LATVIA | 3,872 | 3,758 | 3,494 | 3,150 | 3,019 | 2,841 | 2,750 | 2,729 | 2,737 | 2,603 | 2,676 | 2,699 |
| LITHUANIA | 2,355 | 2,356 | 2,368 | 2,375 | 2,404 | 2,487 | 2,573 | 2,778 | 3,069 | 3,364 | 3,673 | 3,984 |
| LUXEMBOURG | 44,094 | 47,089 | 50,225 | 52,227 | 54,839 | 57,208 | 59,127 | 61,324 | 64,541 | 68,145 | 71,839 | 76,906 |
| MALTA | 7,445 | 7,964 | 8,578 | 9,061 | 9,468 | 10,174 | 10,768 | 11,280 | 11,910 | 12,481 | 13,206 | 13,462 |
| NETHERLANDS | 50,040 | 51,196 | 51,857 | 51,958 | 50,984 | 50,837 | 50,854 | 51,277 | 51,530 | 51,785 | 51,900 | 53,202 |
| POLAND | 1,707 | 2,195 | 2,328 | 2,564 | 2,602 | 2,656 | 2,840 | 2,879 | 2,991 | 3,110 | 3,351 | 3,370 |
| PORTUGAL | 12,892 | 13,292 | 13,180 | 12,791 | 12,382 | 11,951 | 11,523 | 11,169 | 11,032 | 11,007 | 10,980 | 11,211 |
| ROMANIA | 347 | 412 | 465 | 539 | 570 | 624 | 714 | 804 | 895 | 996 | 1,079 | 1,170 |
| SLOVAKIA | 2,192 | 2,498 | 2,824 | 3,124 | 3,477 | 3,937 | 4,460 | 5,085 | 5,726 | 6,373 | 6,985 | 7,613 |
| SLOVENIA | 2,333 | 2,851 | 3,039 | 3,089 | 3,117 | 3,140 | 3,244 | 3,359 | 3,512 | 3,669 | 3,847 | 3,979 |
| SPAIN | 16,078 | 16,232 | 15,973 | 15,455 | 14,853 | 14,480 | 13,808 | 13,421 | 13,039 | 12,908 | 12,631 | 12,355 |
| SWEDEN | 32,520 | 39,391 | 41,152 | 44,281 | 44,624 | 44,089 | 48,348 | 49,451 | 50,763 | 51,241 | 52,434 | 57,562 |
| EURO AREA 19 | 15,149 | 15,668 | 16,056 | 16,169 | 15,876 | 15,915 | 16,125 | 16,410 | 16,835 | 17,338 | 17,969 | 18,651 |
| EU 27 | 13,116 | 13,749 | 14,106 | 14,299 | 14,091 | 14,139 | 14,437 | 14,720 | 15,135 | 15,584 | 16,172 | 16,860 |
| ICELAND | 26,794 | 33,621 | 34,822 | 33,628 | 36,932 | 37,318 | 38,894 | 46,846 | 46,762 | 46,073 | 47,430 | 51,647 |
| NORWAY | 50,793 | 55,904 | 59,715 | 67,412 | 62,481 | 60,540 | 60,047 | 67,159 | 65,455 | 67,321 | 70,932 | 70,456 |
| SWITZERLAND | 79,129 | 96,812 | 103,789 | 108,093 | 109,474 | 114,579 | 126,332 | 129,371 | 120,543 | 128,737 | 136,950 | n/a |
| UNITED KINGDOM | 27,569 | 28,347 | 29,025 | 30,019 | 29,467 | 31,800 | 34,335 | 29,998 | 29,716 | 30,137 | 32,518 | n/a |
| AUSTRALIA | 40,447 | 52,034 | 55,339 | 57,014 | 48,288 | 52,731 | 55,279 | 59,133 | 59,094 | 57,790 | 57,933 | 59,696 |
| BRAZIL | 249 | 431 | 563 | 668 | 720 | 918 | 791 | 1,048 | 943 | 870 | 900 | 704 |
| JAPAN | 13,049 | 15,935 | 17,407 | 15,462 | 12,295 | 12,336 | 13,839 | 15,001 | 14,004 | 15,581 | 16,568 | n/a |
| RUSSIA | 223 | 297 | 358 | 495 | 577 | 486 | 486 | 679 | 725 | 774 | 1,060 | 987 |
| TURKEY | n/a | n/a | 1,133 | 1,505 | 1,598 | 1,648 | 1,858 | 1,874 | 1,871 | 1,735 | 1,736 | n/a |
| SINGAPORE | 62,148 | 71,904 | 72,638 | 79,042 | 79,138 | 92,944 | 107,816 | 119,474 | 126,797 | 132,224 | 134,128 | n/a |
| SOUTH KOREA | 501 | 721 | 749 | 891 | 902 | 1,064 | 1,070 | 1,038 | 981 | 720 | 687 | 698 |
| USA | 35,186 | 33,256 | 33,427 | 31,691 | 29,923 | 33,584 | 37,480 | 39,202 | 34,716 | 37,550 | n/a | n/a |

***Sources:*** *European Mortgage Federation National Experts, European Central Bank, National Central Banks, National Statistics Offices, Eurostat, Federal Reserve, US Bureau of Census*

**1) Time series breaks:**

**2) The series has been revised for at least two years in:**

**3) Notes:**

- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the population concerns residents who are more than 18 years old

# B — THE HOUSING MARKET

## 11. Owner Occupation Rate

%

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 57.6 | 57.4 | 52.4 | 57.5 | 57.3 | 57.2 | 55.7 | 55.0 | 55.0 | 55.4 | 55.2 | 55.3 |
| BELGIUM | 72.7 | 71.6 | 71.8 | 72.4 | 72.3 | 72.0 | 71.4 | 70.9 | 72.4 | 72.3 | 71.3 | 71.1 |
| BULGARIA | 86.8 | 86.9 | 87.2 | 87.4 | 85.7 | 84.3 | 82.3 | 82.3 | 82.9 | 83.6 | 84.1 | 84.3 |
| CROATIA | n/a | 88.2 | 90.1 | 89.6 | 88.5 | 89.7 | 90.3 | 90.0 | 90.5 | 90.1 | 89.7 | 91.3 |
| CYPRUS | 74.1 | 73.1 | 73.5 | 73.2 | 74.0 | 72.9 | 73 | 72.5 | 70.7 | 70.1 | 67.9 | n/a |
| CZECHIA | 76.6 | 78.7 | 80.1 | 80.4 | 80.1 | 78.9 | 78 | 78.2 | 78.5 | 78.7 | 78.6 | n/a |
| DENMARK | 66.3 | 66.6 | 68.7 | 66.0 | 64.5 | 63.3 | 62.7 | 61.7 | 62.2 | 60.5 | 60.8 | 59.3 |
| ESTONIA | 87.1 | 85.5 | 83.5 | 82.2 | 81.1 | 81.5 | 81.5 | 81.4 | 81.8 | 82.4 | 81.7 | 81.4 |
| FINLAND | 74.1 | 74.3 | 74.1 | 73.9 | 73.6 | 73.2 | 72.7 | 71.6 | 71.4 | 71.6 | 71.1 | 70.7 |
| FRANCE | 63.0 | 62.0 | 63.1 | 63.7 | 64.3 | 65 | 64.1 | 64.9 | 64.4 | 65.1 | 64.1 | n/a |
| GERMANY | n/a | 53.2 | 53.4 | 53.3 | 52.6 | 52.5 | 51.9 | 51.7 | 51.4 | 51.5 | 51.1 | n/a |
| GREECE | 76.4 | 77.2 | 75.9 | 75.9 | 75.8 | 74.0 | 75.1 | 73.9 | 73.3 | 73.5 | 75.4 | 74.6 |
| HUNGARY | 89.8 | 89.7 | 89.3 | 89.8 | 88.7 | 88.2 | 86.3 | 86.3 | 85.2 | 86 | 91.7 | 91.3 |
| IRELAND | 73.7 | 73.3 | 70.2 | 69.6 | 69.9 | 68.6 | 70 | 69.8 | 69.5 | 70.3 | 68.7 | n/a |
| ITALY | 72.8 | 72.6 | 73.2 | 74.2 | 73.3 | 73.1 | 72.9 | 72.3 | 72.4 | 72.4 | 72.4 | n/a |
| LATVIA | 87.2 | 84.3 | 82.8 | 81.5 | 81.2 | 80.9 | 80.2 | 80.9 | 81.5 | 81.6 | 80.2 | n/a |
| LITHUANIA | 91.5 | 93.6 | 92.2 | 91.9 | 92.2 | 89.9 | 89.4 | 90.3 | 89.7 | 89.9 | 90.3 | n/a |
| LUXEMBOURG | 70.4 | 68.1 | 68.2 | 70.8 | 73.0 | 72.5 | 73.2 | 73.9 | 74.7 | 71.2 | 70.9 | n/a |
| MALTA | 78.5 | 79.5 | 80.2 | 81.8 | 80.3 | 80 | 80.8 | 81.4 | 81.3 | 81.6 | 79.8 | n/a |
| NETHERLANDS | 68.4 | 67.2 | 67.1 | 67.5 | 67.1 | 67 | 67.8 | 69.0 | 69.4 | 68.9 | 68.9 | 69.1 |
| POLAND | 68.7 | 81.3 | 82.1 | 82.4 | 83.8 | 83.5 | 83.7 | 83.4 | 84.2 | 84 | 84.2 | n/a |
| PORTUGAL | 74.6 | 74.9 | 75.0 | 74.5 | 74.2 | 74.9 | 74.8 | 75.2 | 74.7 | 74.5 | 73.9 | n/a |
| ROMANIA | 96.5 | 97.5 | 96.6 | 96.6 | 95.6 | 96.2 | 96.4 | 96.0 | 96.8 | 96.4 | 95.8 | 96.1 |
| SLOVAKIA | 89.5 | 90.0 | 90.2 | 90.4 | 90.5 | 90.3 | 89.3 | 89.5 | 90.1 | 91.3 | 90.9 | n/a |
| SLOVENIA | 81.3 | 78.1 | 77.5 | 76.2 | 76.6 | 76.7 | 76.2 | 75.1 | 75.6 | 75.1 | 74.8 | 74.6 |
| SPAIN | 79.6 | 79.8 | 79.7 | 78.9 | 77.7 | 78.8 | 78.2 | 77.8 | 77.1 | 76.3 | 76.2 | n/a |
| SWEDEN | 69.7 | 70.8 | 69.7 | 70.1 | 69.6 | 69.3 | 66.2 | 65.2 | 65.2 | 64.1 | 63.6 | 64.5 |
| EURO AREA 19 | 71.9 | 66.8 | 66.9 | 67.2 | 66.9 | 66.9 | 66.4 | 66.3 | 66.1 | 66.2 | 65.8 | n/a |
| EU 27 | n/a | 70.7 | 70.8 | 71.0 | 70.7 | 70.7 | 70.2 | 70.1 | 70.0 | 69.9 | 69.8 | n/a |
| ICELAND | 84.2 | 81.3 | 77.9 | 77.3 | 77.5 | 78.2 | 77.8 | 78.7 | 74.1 | 73.6 | n/a | n/a |
| NORWAY | 85.4 | 82.9 | 84.0 | 84.8 | 83.5 | 84.4 | 82.8 | 82.9 | 81.5 | 81.3 | 80.3 | n/a |
| SWITZERLAND | — | 44.4 | 43.8 | 43.8 | 44.0 | 44.5 | 43.4 | 42.5 | 41.3 | 42.5 | 41.6 | n/a |
| UNITED KINGDOM | 69.9 | 70.0 | 67.9 | 66.7 | 64.6 | 64.4 | 63.5 | 63.4 | 65.0 | 65.2 | 64.6 | n/a |
| AUSTRALIA | 69.3 | 68.3 | 68.8 | 67.5 | 67.2 | 67.2 | 67.5 | 67.5 | 66.2 | 66.2 | n/a | n/a |
| TURKEY | 60.8 | n/a | 59.6 | 60.7 | 60.7 | 61.1 | 60.4 | 59.7 | 59.1 | 59.0 | 58.8 | n/a |

**Source:** *Eurostat*

**2) The series has been revised for at least two years in:**
- Belgium
- Croatia
- Estonia
- Hungary
- Netherlands

**3) Notes**
- For further details on the methodologies, please see "Annex  Explanatory Note on data"
- n/a: figure not available
- At the time of writing, the majority of Eurostat's 2018 owner occupation rates were not yet available.

# 12. Building Permits

## Number issued

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 38,300 | 42,050 | 46,200 | 41,100 | 47,000 | 49,800 | 51,900 | 60,000 | 67,500 | 56,200 | 63,300 | 60,100 |
| BELGIUM | 45,456 | 49,872 | 44,352 | 46,811 | 49,141 | 54,903 | 46,181 | 50,977 | 50,388 | 62,656 | 55,812 | 54,269 |
| BULGARIA | 20,166 | 12,832 | 10,973 | 10,616 | 12,278 | 15,848 | 17,264 | 18,157 | 5,562 | 5,956 | 5,980 | 5,860 |
| CROATIA | 17,018 | 13,378 | 13,470 | 9,742 | 7,744 | 7,743 | 6,950 | 9,398 | 12,509 | 11,719 | 15,370 | 14,083 |
| CYPRUS | 8,950 | 8,777 | 7,506 | 7,172 | 5,341 | 4,933 | 5,014 | 5,354 | 5,728 | 6,408 | 7,218 | 7,023 |
| CZECHIA | 41,954 | 39,158 | 39,656 | 34,006 | 29,475 | 28,127 | 28,886 | 31,002 | 32,069 | 30,702 | 31,606 | 31,747 |
| DENMARK | 9,874 | 17,097 | 18,930 | 13,720 | 12,338 | 17,422 | 24,301 | 32,023 | 28,289 | 35,809 | 29,936 | 24,265 |
| ESTONIA | 2,081 | 2,581 | 2,830 | 3,035 | 3,049 | 3,941 | 5,588 | 6,021 | 7,877 | 6,990 | 8,025 | 8,833 |
| FINLAND | 26,697 | 32,836 | 34,567 | 31,825 | 26,680 | 29,370 | 32,014 | 40,208 | 48,353 | 41,137 | 37,754 | 39,986 |
| FRANCE | 380,200 | 476,500 | 517,800 | 480,800 | 423,600 | 381,200 | 405,600 | 463,900 | 493,100 | 461,200 | 449,600 | 388,600 |
| GERMANY | 177,939 | 187,667 | 228,311 | 241,090 | 272,433 | 285,079 | 313,296 | 375,388 | 347,882 | 346,810 | 360,493 | 368,589 |
| GREECE | 27,447 | 23,380 | 15,114 | 9,066 | 5,675 | 4,620 | 4,618 | 4,305 | 4,930 | 5,685 | 6,044 | 6,915 |
| HUNGARY | 28,400 | 17,353 | 12,488 | 10,600 | 7,536 | 9,633 | 12,515 | 31,559 | 37,997 | 36,719 | 35,123 | 22,556 |
| IRELAND | 43,752 | 20,022 | 12,522 | 6,741 | 7,199 | 7,411 | 13,044 | 15,950 | 20,776 | 29,102 | 39,242 | 44,538 |
| ITALY | 141,587 | 119,409 | 112,391 | 82,058 | 53,408 | 46,796 | 42,920 | 44,583 | 51,859 | 54,664 | 55,104 | 49,100 |
| LATVIA | 2,244 | 1,844 | 2,022 | 2,262 | 2,369 | 2,295 | 2,193 | 1,998 | 2,766 | 2,750 | 2,973 | 2,670 |
| LITHUANIA | 5,994 | 5,876 | 4,951 | 5,768 | 7,118 | 6,868 | 7,028 | 8,397 | 7,682 | 8,082 | 7,684 | 9,072 |
| LUXEMBOURG | 3,693 | 3,892 | 4,323 | 4,305 | 3,761 | 6,360 | 4,558 | 4,846 | 5,048 | 5,468 | 5,619 | 5,112 |
| MALTA | 5,298 | 4,444 | 3,955 | 3,064 | 2,705 | 2,937 | 3,947 | 7,508 | 9,822 | 12,885 | 12,485 | 7,837 |
| NETHERLANDS | 72,646 | 61,028 | 55,804 | 39,354 | 27,233 | 41,320 | 55,599 | 53,567 | 69,741 | 70,034 | 57,135 | 67,149 |
| POLAND | 90,632 | 87,593 | 85,270 | 75,923 | 67,175 | 65,449 | 72,293 | 80,796 | 89,888 | 95,463 | 101,595 | 107,590 |
| PORTUGAL | 27,298 | 25,002 | 17,481 | 11,430 | 7,416 | 6,858 | 8,169 | 8,219 | 14,044 | 20,046 | 23,835 | 24,791 |
| ROMANIA | 48,833 | 42,189 | 39,424 | 37,852 | 37,776 | 37,672 | 39,112 | 38,653 | 41,603 | 42,694 | 42,541 | 41,311 |
| SLOVAKIA | 18,155 | 14,466 | 11,641 | 11,614 | 13,180 | 14,310 | 17,642 | 20,224 | 18,472 | 20,574 | 20,385 | 19,050 |
| SLOVENIA | 5,209 | 4,225 | 3,285 | 2,700 | 2,675 | 2,197 | 2,179 | 2,521 | 2,649 | 2,777 | 3,114 | 3,667 |
| SPAIN | 111,140 | 91,662 | 78,286 | 44,162 | 34,288 | 34,873 | 49,695 | 64,038 | 80,786 | 100,733 | 106,266 | 85,535 |
| SWEDEN | 21,606 | 28,818 | 29,512 | 26,006 | 34,476 | 43,140 | 57,147 | 66,435 | 73,044 | 63,251 | 54,502 | 56,266 |
| NORWAY | 19,576 | 21,278 | 27,735 | 30,142 | 30,252 | 27,130 | 30,927 | 36,530 | 35,294 | 31,527 | 31,774 | 29,931 |
| SWITZERLAND | — | — | — | — | — | — | 51,126 | 51,653 | 49,985 | 48,305 | 43,953 | 44,378 |
| AUSTRALIA | 149,995 | 181,960 | 153,755 | 156,634 | 181,248 | 208,556 | 239,735 | 234,854 | 224,743 | 211,402 | 175,840 | 185,808 |
| SINGAPORE | 9,811 | 14,502 | 20,551 | 18,441 | 18,034 | 8,454 | 5,438 | 7,452 | 5,103 | 20,227 | 16,282 | n/a |
| SOUTH KOREA | 381,787 | 386,542 | 549,594 | 586,884 | 440,116 | 515,251 | 765,328 | 726,048 | 653,441 | 554,136 | 487,975 | n/a |
| TURKEY | 650,127 | 771,878 | 839,630 | 1,031,754 | 897,230 | 1,006,650 | 1,405,447 | 664,686 | 313,173 | 572,681 | n/a | n/a |
| USA | 583,000 | 604,600 | 624,100 | 829,700 | 990,800 | 1,052,124 | 1,182,582 | 1,206,037 | 1,281,214 | 1,328,335 | 1,385,202 | 1,470,461 |

***Sources:*** *European Mortgage Federation National Experts, National Statistics Offices, US Bureau of Census*

**1) Time series breaks:**

- Austria: 2005 (source was changed from 2005 onwards)
- Denmark: 2012 (source was changed from 2012 onwards)

**2) The series has been revised for at least two years in:**

- Austria
- Denmark
- France
- Ireland
- Italy
- Lithuania
- Luxembourg
- Slovenia
- Sweden
- Australia

**3) Notes:**

- For further details on the methodologies, please see “Annex: Explanatory Note on data”
- n/a: figure not available
- For Ireland: new data series taking into account the number of dwelling units
- For Italy: 2017 figure takes into accout the first 9 months

# 13. Housing Starts

## Number of projects started per year

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BELGIUM | 44,929 | 47,569 | 41,574 | 44,818 | 44,696 | 52,826 | 43,520 | n/a | n/a | n/a | n/a | n/a |
| BULGARIA | — | 8,009 | 7,096 | 6,789 | 7,669 | 8,355 | 12,308 | 12,495 | 3,681 | 3,824 | 4,223 | 4,116 |
| CZECHIA | 37,319 | 28,135 | 27,535 | 23,853 | 22,108 | 24,351 | 26,378 | 27,224 | 31,521 | 33,121 | 38,677 | 35,254 |
| DENMARK | 11,124 | 15,969 | 18,753 | 15,134 | 11,491 | 17,227 | 20,622 | 29,186 | 25,793 | 29,688 | 27,099 | 25,666 |
| ESTONIA | n/a | n/a | 1,150 | 1,577 | 2,343 | 3,841 | 3,882 | 2,706 | 3,611 | n/a | n/a | 6,833 |
| FINLAND | 23,467 | 33,641 | 33,014 | 30,040 | 27,841 | 25,109 | 31,893 | 36,490 | 44,251 | 45,676 | 39,110 | 40,662 |
| FRANCE | 346,100 | 413,800 | 431,100 | 382,800 | 357,600 | 336,800 | 342,600 | 372,300 | 437,200 | 399,500 | 387,400 | 357,200 |
| GREECE | 61,490 | 52,344 | 29,974 | 18,817 | 11,748 | 9,619 | 9,264 | 9,286 | 10,336 | 13,337 | 17,432 | 19,731 |
| HUNGARY | 8,985 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| IRELAND | 8,599 | 6,391 | 4,365 | 4,042 | 4,708 | 7,717 | 8,747 | 13,234 | 17,572 | 22,467 | 26,237 | 21,686 |
| ITALY | 163,427 | 131,184 | 123,499 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| MALTA | n/a | n/a | 3,955 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| POLAND | 142,901 | 158,064 | 162,200 | 141,798 | 127,392 | 148,122 | 168,403 | 173,932 | 205,990 | 221,907 | 237,281 | 223,842 |
| ROMANIA | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SLOVAKIA | 20,325 | 16,211 | 12,740 | 13,090 | 14,758 | 15,836 | 19,640 | 21,441 | 19,930 | 22,055 | 21,516 | 19,744 |
| SLOVENIA | 6,019 | 4,831 | 3,844 | 3,066 | 3,142 | 2,762 | 2,749 | 2,975 | 3,231 | 3,765 | 3,438 | 3,819 |
| SPAIN | 159,286 | 123,616 | 86,238 | 51,735 | 35,721 | 38,018 | 50,565 | 66,906 | 68,905 | 103,380 | 108,716 | 86,896 |
| SWEDEN | 17,949 | 27,546 | 26,687 | 21,315 | 30,475 | 36,727 | 48,196 | 61,166 | 63,880 | 52,632 | 48,581 | 51,500 |
| ICELAND | 192 | 321 | 142 | 466 | 769 | 582 | 1,612 | 1,133 | 2,836 | 2,525 | 3,792 | 2,406 |
| NORWAY | 19,021 | 22,226 | 28,225 | 29,202 | 27,634 | 25,404 | 30,150 | 31,278 | 30,719 | 29,496 | 25,037 | 23,695 |
| UNITED KINGDOM | 85,600 | 110,660 | 113,260 | 101,020 | 124,790 | 140,760 | 148,150 | 155,150 | 164,160 | 168,600 | 151,750 | 127,580 |
| AUSTRALIA | 135,827 | 158,229 | 150,018 | 151,373 | 168,337 | 201,073 | 227,495 | 234,180 | 216,961 | 224,334 | 175,308 | 183,535 |
| BRAZIL | 181,095 | 349,195 | 418,125 | 394,392 | 363,989 | 320,353 | 281,773 | 225,883 | 236,324 | 308,967 | 385,348 | n/a |
| CANADA | 149,081 | 189,930 | 193,950 | 214,827 | 187,923 | 189,329 | 195,535 | 197,916 | 219,763 | 212,843 | 208,685 | 217,880 |
| JAPAN | 775,277 | 819,020 | 841,246 | 893,002 | 987,254 | 880,470 | 920,537 | 974,137 | 946,396 | 952,936 | 883,687 | 812,164 |
| SINGAPORE | 8,603 | 17,864 | 20,736 | 21,395 | 20,357 | 11,571 | 8,082 | 6,918 | 5,397 | 13,121 | 19,467 | n/a |
| SOUTH KOREA | — | — | 424,269 | 480,995 | 425,944 | 507,666 | 716,759 | 657,956 | 544,274 | 470,706 | 478,949 | n/a |
| USA | 554,000 | 587,000 | 609,000 | 780,000 | 925,000 | 1,003,000 | 1,112,000 | 1,174,000 | 1,203,000 | 1,249,900 | 1,290,000 | 1,379,000 |

***Sources:*** *European Mortgage Federation National Experts, European Central Bank, National Central Banks, National Statistics Offices, Eurostat, US Bureau of Census*

**1) Time series breaks**
- Denmark: 2012 (source was changed from 2012 onwards)

**2) The series has been revised for at least two years in:**
- Denmark
- France
- Spain
- Sweden
- Iceland
- Australia

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available

# 14. Housing Completions

## Number of projects completed per year

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 37,700 | 35,900 | 37,200 | 40,700 | 40,400 | 41,900 | 47,500 | 47,600 | 49,800 | 56,500 | 64,600 | 59,400 |
| BULGARIA | 22,058 | 15,771 | 13,953 | 9,970 | 9,250 | 9,993 | 7,806 | 9,342 | 2,205 | 2,324 | 3,052 | 3,376 |
| CROATIA | 18,740 | 14,972 | 12,390 | 11,792 | 10,090 | 7,805 | 8,059 | 7,809 | 8,496 | 10,141 | 11,726 | n/a |
| CYPRUS | 16,644 | 13,434 | 9,091 | 6,565 | 3,833 | 2,718 | 2,390 | 2,570 | 2,993 | 3,866 | n/a | n/a |
| CZECHIA | 38,473 | 36,442 | 28,630 | 29,467 | 25,238 | 23,954 | 25,095 | 27,322 | 28,575 | 33,868 | 36,406 | 34,412 |
| DENMARK | 19,026 | 12,334 | 13,417 | 17,632 | 16,644 | 15,704 | 15,007 | 21,138 | 24,459 | 28,507 | 32,924 | 35,488 |
| ESTONIA | 3,026 | 2,324 | 1,918 | 1,990 | 2,079 | 2,756 | 3,969 | 4,732 | 5,890 | 6,472 | 7,014 | 7,579 |
| FINLAND | 21,362 | 24,408 | 32,571 | 32,597 | 29,071 | 28,907 | 27,448 | 29,593 | 34,934 | 42,010 | 42,892 | 38,536 |
| FRANCE | 395,103 | 347,166 | 381,620 | 399,056 | 404,355 | 404,355 | 413,627 | 399,564 | n/a | n/a | n/a | n/a |
| GERMANY | 158,987 | 159,832 | 183,110 | 200,466 | 214,817 | 245,325 | 247,722 | 277,691 | 284,816 | 287,352 | 293,002 | 306,376 |
| GREECE | 51,955 | 54,545 | 53,099 | 32,999 | 19,773 | 11,680 | 7,739 | 6,425 | 6,342 | 7,016 | 8,707 | 10,684 |
| HUNGARY | 31,994 | 20,823 | 12,655 | 10,560 | 7,293 | 8,382 | 7,612 | 10,032 | 14,389 | 17,681 | 21,127 | 28,158 |
| IRELAND | 26,420 | 14,602 | 6,994 | 4,911 | 4,575 | 5,518 | 7,219 | 9,876 | 14,348 | 17,914 | 21,076 | 20,584 |
| ITALY | 163,427 | 131,184 | 123,499 | 133,900 | 118,600 | 103,600 | 86,200 | 81,600 | n/a | n/a | n/a | n/a |
| LATVIA | 4,187 | 1,918 | 2,662 | 2,087 | 2,201 | 2,630 | 2,240 | 2,197 | 2,271 | 2,966 | 3,315 | 3,101 |
| LITHUANIA | 9,400 | 3,667 | 3,733 | 3,198 | 3,467 | 4,456 | 5,707 | 7,051 | 6,420 | 6,434 | 6,511 | 6,822 |
| LUXEMBOURG | 3,740 | 2,824 | 2,162 | 2,304 | 2,642 | 3,357 | 3,091 | 3,856 | n/a | n/a | n/a | n/a |
| NETHERLANDS | 82,932 | 55,999 | 57,703 | 48,668 | 49,311 | 44,041 | 48,381 | 54,849 | 62,982 | 66,585 | 71,548 | 69,985 |
| POLAND | 160,019 | 135,818 | 131,148 | 152,904 | 145,388 | 143,235 | 147,821 | 163,394 | 178,342 | 185,170 | 207,224 | 221,401 |
| PORTUGAL | 47,915 | 35,442 | 26,069 | 19,302 | 12,430 | 7,794 | 6,611 | 7,256 | 8,636 | 12,308 | 14,366 | 17,260 |
| ROMANIA | 62,520 | 48,862 | 45,419 | 44,016 | 43,587 | 44,984 | 47,017 | 52,206 | 53,301 | 59,725 | 67,488 | 67,816 |
| SLOVAKIA | 18,834 | 17,076 | 14,608 | 15,255 | 15,100 | 14,985 | 15,471 | 15,672 | 16,946 | 19,071 | 20,171 | 21,490 |
| SLOVENIA | 8,530 | 6,355 | 5,468 | 4,307 | 3,484 | 3,163 | 2,776 | 3,163 | 3,044 | 3,037 | 2,975 | 3,540 |
| SPAIN | 366,887 | 240,920 | 157,405 | 114,991 | 64,817 | 46,822 | 45,152 | 40,119 | 54,610 | 64,354 | 78,789 | 85,945 |
| SWEDEN | 22,821 | 19,500 | 20,064 | 25,993 | 29,225 | 29,164 | 34,603 | 42,441 | 48,227 | 54,876 | 55,659 | 46,682 |
| ICELAND | 893 | 1,148 | 565 | 1,076 | 934 | 1,149 | 1,120 | 1,513 | 1,768 | 2,303 | 3,033 | 3,816 |
| NORWAY | 21,705 | 18,090 | 20,046 | 26,275 | 28,456 | 28,072 | 28,265 | 29,286 | 31,470 | 32,830 | 30,397 | 29,164 |
| SWITZERLAND | 39,733 | 43,632 | 47,174 | 43,134 | 50,166 | 49,162 | 53,126 | 52,034 | 50,209 | 53,199 | n/a | n/a |
| UNITED KINGDOM | 124,970 | 106,720 | 114,020 | 115,590 | 109,450 | 117,820 | 142,480 | 141,880 | 162,470 | 165,420 | 178,300 | 148,620 |
| AUSTRALIA | 144,254 | 146,896 | 143,104 | 141,705 | 150,591 | 174,166 | 197,253 | 213,644 | 213,181 | 219,533 | 202,989 | 181,475 |
| CANADA | 176,441 | 186,855 | 175,623 | 180,093 | 185,494 | 181,428 | 194,461 | 187,605 | 190,923 | 200,262 | 187,177 | 198,761 |
| RUSSIA | 702,000 | 717,000 | 786,000 | 838,000 | 929,000 | 1,124,000 | 1,195,000 | 1,167,000 | 1,139,000 | 1,075,741 | 1,120,333 | 1,121,601 |
| SINGAPORE | 10,488 | 10,399 | 12,469 | 10,329 | 13,150 | 19,941 | 18,971 | 20,803 | 16,449 | 9,112 | 7,527 | n/a |
| SOUTH KOREA | n/a | n/a | 338,813 | 365,053 | 395,519 | 431,339 | 460,153 | 514,775 | 569,209 | 636,494 | 518,084 | n/a |
| TURKEY | 429,755 | 556,769 | 556,331 | 726,339 | 777,596 | 732,948 | 754,174 | 833,517 | 893,651 | 735,325 | n/a | n/a |
| USA | 794,000 | 651,000 | 585,000 | 649,000 | 764,000 | 884,000 | 968,000 | 1,059,000 | 1,153,000 | 1,184,900 | 1,255,100 | 1,287,000 |

***Sources:** European Mortgage Federation National Experts, National Statistics Offices, US Bureau of Census*

**1) Time series breaks**

- Denmark: 2012 (source was changed from 2012 onwards)
- Netherlands: 2012 (due to a change in methodology)

**2) The series has been revised for at least two years in:**

- Austria
- Denmark
- France
- Greece
- Ireland
- Lithuania
- Netherlands
- Luxembourg
- Romania
- Iceland
- Switzerland
- United Kingdom
- Australia

**3) Notes**

- For further details on the methodologies, please see “Annex: Explanatory Note on data”
- n/a: figure not available

**For Archive:**

Austria - data break in 1995

# 15. Real Gross Fixed Investment in Housing

Annual % change

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | -5.7 | 0.6 | 2.9 | -1.4 | -0.2 | -0.4 | 1.0 | 2.3 | 6.1 | 1.9 | 3.4 | -4.0 |
| BELGIUM | -8.6 | 2.8 | -2.6 | 0.2 | -2.8 | 5.7 | 1.0 | 2.9 | 0.8 | 2.6 | 4.8 | -7.4 |
| BULGARIA | -20.4 | -40.8 | -14.2 | -26.7 | -4.0 | -3.3 | -10.3 | 102.1 | 19.2 | -2.2 | 6.6 | -6.4 |
| CYPRUS | -19.1 | -14.4 | -16.1 | -19.0 | -25.6 | -7.9 | -4.5 | 29.7 | 16.4 | 33.2 | 21.8 | -7.9 |
| CZECHIA | -4.6 | 10.3 | -5.9 | 2.7 | -7.7 | 10.2 | 15.6 | 5.3 | 10.6 | 5.2 | 2.0 | 7.2 |
| DENMARK | -20.4 | -8.9 | 15.8 | -5.5 | -7.8 | 6.8 | 5.3 | 4.7 | 11.1 | 4.8 | 4.7 | 10.1 |
| ESTONIA | -35.9 | -9.4 | 9.9 | 9.0 | 19.0 | 19.1 | 7.7 | 16.3 | 9.4 | -1.6 | 11.5 | 14.9 |
| FINLAND | -12.5 | 25.6 | 5.9 | -1.6 | -5.5 | -5.4 | 1.7 | 10.6 | 4.1 | 4.7 | -4.2 | -2.5 |
| FRANCE | -9.2 | 2.1 | 0.9 | -2.2 | -0.4 | -1.9 | -1.1 | 2.8 | 6.1 | 2.3 | 1.8 | -12.5 |
| GERMANY | -3.2 | 4.3 | 10.0 | 3.3 | -0.8 | 2.9 | -0.7 | 5.0 | 0.6 | 3.0 | 4.0 | 3.3 |
| GREECE | -19.6 | -26.2 | -14.6 | -37.9 | -31.1 | -53.1 | -25.8 | -11.7 | -7.0 | 22.6 | 0.4 | 15.6 |
| HUNGARY | -3.4 | -24.7 | -27.4 | -9.9 | -6.0 | 11.0 | 16.8 | 9.7 | 16.0 | 11.3 | 7.0 | 16.6 |
| IRELAND | -37.6 | -32.9 | -31.1 | -24.5 | 7.1 | 15.1 | 6.2 | 21.0 | 22.5 | 19.5 | -1.4 | -7.2 |
| ITALY | -10.0 | 0.2 | -6.6 | -9.0 | -5.4 | -7.9 | -2.4 | 0.1 | 1.1 | 1.1 | 1.7 | -8.5 |
| LATVIA | -52.7 | -28.4 | -3.2 | 21.0 | -0.4 | 10.2 | 5.3 | -17.7 | -0.2 | 26.3 | -3.2 | -2.3 |
| LITHUANIA | -7.2 | -29.7 | 1.0 | 2.3 | 11.5 | 16.9 | 14.9 | 6.8 | -4.6 | 5.9 | 9.3 | 3.3 |
| LUXEMBOURG | -22.3 | -11.7 | 8.3 | 4.7 | 17.0 | 10.5 | 8.8 | 4.1 | -7.4 | 8.3 | -6.7 | 2.8 |
| MALTA | -26.6 | -16.1 | 0.5 | -9.7 | -8.0 | -0.2 | 33.7 | 27.9 | 37.4 | 19.1 | 0.3 | -21.9 |
| NETHERLANDS | -14.7 | -16.0 | -3.6 | -12.9 | -12.2 | 6.1 | 20.1 | 21.7 | 12.3 | 9.3 | 3.4 | -2.6 |
| POLAND | -2.3 | -4.2 | 1.2 | 5.1 | 0.9 | 8.4 | -11.5 | -2.9 | -2.6 | -10.1 | 4.3 | -0.4 |
| PORTUGAL | -14.4 | -10.4 | -11.7 | -7.3 | -14.2 | -0.8 | 1.0 | 6.3 | 8.7 | 6.6 | 0.3 | 1.8 |
| ROMANIA | -14.2 | 2.2 | -10.2 | 5.1 | -11.2 | 4.5 | 5.2 | 12.1 | 10.0 | -24.9 | 17 | 9.5 |
| SLOVAKIA | 10.6 | -12.2 | 4.7 | 4.8 | 12.0 | -15.1 | -1.6 | 24.3 | 0.0 | 9.4 | 2.9 | 3.1 |
| SLOVENIA | -20.5 | -20.4 | -12.4 | -12.5 | -7.6 | -6.7 | 0.7 | -0.8 | 5.3 | 2.4 | 9.9 | 5.3 |
| SPAIN | -20.1 | -13.0 | -12.2 | -5.3 | -7.6 | 9.9 | -3.2 | 8.9 | 13.4 | 12.4 | 4.1 | -16.6 |
| SWEDEN | -18.2 | 14.6 | 9.3 | -13.9 | 4.0 | 18.2 | 15.8 | 9.8 | 7.1 | -6.4 | -6.5 | 3.1 |
| EU 27 | -11.7 | -2.6 | -0.6 | -3.4 | -3.0 | 1.0 | 0.5 | 5.3 | 4.7 | 3.4 | 2.7 | -3.9 |
| EURO AREA 19 | -11.7 | -2.6 | -0.9 | -3.3 | -3.1 | 0.0 | -0.2 | 5.1 | 4.3 | 4.3 | 2.8 | -4.9 |
| ICELAND | -55.7 | -18.0 | 5.4 | 7.2 | 10.5 | 15.1 | -2.2 | 25.9 | 21.1 | 16.0 | 30.8 | -1.2 |
| NORWAY | -8.1 | -1.6 | 17.0 | 10.9 | 5.3 | -1.4 | 3.2 | 6.6 | 7.3 | -6.5 | -1.7 | -4.0 |
| SWITZERLAND | 4.8 | 6.5 | 4.5 | 2.1 | 3.3 | 1.7 | 1.7 | 1.8 | 1.2 | -1.9 | -2.6 | n/a |
| UNITED KINGDOM | -20.6 | 5.5 | 1.6 | -2.4 | 5.7 | 5.0 | 5.3 | 3.9 | 9.2 | 5.1 | 0.1 | n/a |

***Sources:*** *Eurostat, OECD*

**1) Time series breaks:**

**2) The series has been revised for at least two years in:**
- All countries

**3) Notes:**
- For further details on the methodologies, please see “Annex: Explanatory Note on data”
- n/a: figure not available

# 16. Total Dwelling Stock

Thousands units

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 4,351 | 4,396 | 4,441 | 4,485 | 4,530 | 4,573 | 4,619 | 4,666 | 4,713 | 4,764 | 4,821 | 4,937 |
| BELGIUM | 5,043 | 5,087 | 5,131 | 5,180 | 5,229 | 5,273 | 5,315 | 5,357 | 5,404 | 5,455 | 5,514 | 5,577 |
| BULGARIA | 3,789 | 3,804 | 3,900 | 3,909 | 3,918 | 3,928 | 3,935 | 3,944 | 3,951 | 3,959 | 3971 | n/a |
| CROATIA | n/a | n/a | 1,924 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| CYPRUS | 410 | 421 | 431 | 437 | 441 | 444 | 446 | 449 | 452 | 455 | n/a | n/a |
| CZECHIA | 4,635 | 4,671 | 4,700 | 4,729 | 4,754 | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| DENMARK | 2,722 | 2,770 | 2,786 | 2,797 | 2,812 | 2,827 | 2,844 | 2,861 | 2,878 | 2,901 | 2,919 | 2,941 |
| ESTONIA | 651 | 654 | 656 | 658 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| FINLAND | 2,517 | 2,537 | 2,556 | 2,580 | 2,600 | 2,618 | 2,634 | 2,655 | 2,680 | 2,705 | n/a | 2,770 |
| FRANCE | 32,174 | 32,520 | 32,860 | 33,212 | 33,894 | 34,307 | 34,537 | 34,815 | 35,407 | 35,672 | 36,054 | n/a |
| GERMANY | 40,184 | 40,479 | 40,630 | 40,806 | 40,995 | 41,221 | 41,446 | 41,703 | 41,968 | 42,235 | 42,513 | 42,800 |
| GREECE | 6,317 | 6,372 | 6,425 | 6,458 | 6,478 | 6,489 | 6,497 | 6,504 | 6,510 | 6,517 | 6,526 | 6,536 |
| HUNGARY | 4,303 | 4,331 | 4,349 | 4,394 | 4,402 | 4,408 | 4,415 | 4,420 | 4,427 | 4,439 | 4,455 | 4,474 |
| IRELAND | 1,982 | 1,992 | 1,999 | 2,003 | 2,007 | 2,014 | 2,022 | 2,004 | 1,974 | 1,994 | 2,014 | 2,042 |
| ITALY | 30,112 | 30,580 | 31,791 | 31,576 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| LATVIA | 1,035 | n/a | 1,019 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| LITHUANIA | 1,337 | 1,341 | 1,283 | 1,289 | 1,298 | 1,403 | 1,413 | 1,428 | 1,445 | 1,451 | 1,501 | 1,517 |
| LUXEMBOURG | n/a | n/a | 223 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| MALTA | n/a | n/a | 224 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| NETHERLANDS | 7,172 | 7,218 | 7,266 | 7,386 | 7,449 | 7,535 | 7,588 | 7,641 | 7,741 | 7,815 | 7,892 | 7,966 |
| POLAND | 13,302 | 13,422 | 13,560 | 13,723 | 13,853 | 13,983 | 14,119 | 14,272 | 14,440 | 14,615 | 14,813 | n/a |
| PORTUGAL | 5,826 | 5,852 | 5,879 | 5,898 | 5,910 | 5,920 | 5,926 | 5,933 | 5,942 | 5,955 | 5,968 | n/a |
| ROMANIA | 8,385 | 8,428 | 8,722 | 8,761 | 8,800 | 8,841 | 8,882 | 8,929 | 8,977 | 9,031 | 9,093 | n/a |
| SLOVAKIA | 2,006 | 2,023 | 2,036 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| SLOVENIA | 838 | 845 | 850 | 854 | 857 | 860 | n/a | n/a | n/a | n/a | n/a | n/a |
| SPAIN | 24,938 | 25,131 | 25,209 | 25,271 | 25,245 | 25,209 | 25,171 | 25,129 | 25,097 | 25,075 | 25,067 | 25,068 |
| SWEDEN | 4,488 | 4,508 | 4,524 | 4,551 | 4,634 | 4,669 | 4,717 | 4,796 | 4,859 | 4,925 | 4,978 | 5,037 |
| ICELAND | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 135 | 136 | 139 | 142 | 145 |
| NORWAY | 2,301 | 2,343 | 2,369 | 2,399 | 2,427 | 2,456 | 2,485 | 2,516 | 2,548 | 2,582 | 2,610 | 2,638 |
| SWITZERLAND | | 4,079,1 | 4,131,3 | 4,177,5 | 4,234,9 | 4,289,4 | 4,351,8 | 4,420,8 | 4,469,5 | 4,529 | 4,582 | n/a |
| UNITED KINGDOM | 26,529 | 26,696 | 26,855 | 27,008 | 27,151 | 27,306 | 27,498 | 27,713 | 27,954 | 28,203 | 28,431 | 28,700 |
| AUSTRALIA | n/a | n/a | 7,760 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| BRAZIL | 59,253 | 57,324 | 62,117 | 63,768 | 65,130 | 67,039 | 68,037 | 68,899 | 69,471 | 71,015 | 72,395 | n/a |
| JAPAN | n/a | n/a | n/a | n/a | 60,629 | n/a | n/a | n/a | n/a | 62,407 | n/a | n/a |
| RUSSIA | 59,500 | 60,100 | 60,800 | 61,500 | 61,300 | 62,900 | 64,000 | 64,900 | 65,900 | 66,900 | 67,500 | n/a |
| SINGAPORE | 988 | 1,020 | 1,057 | 1,098 | 1,138 | 1,203 | 1,280 | 1,361 | 1,433 | 1,469 | 1,488 | n/a |
| SOUTH KOREA | — | — | 17,739 | 18,082 | 18,414 | 18,742 | 19,161 | 19,559 | 19,877 | n/a | n/a | n/a |
| TURKEY | n/a | n/a | 19,482 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| USA | 131,269 | 131,776 | 132,168 | 132,600 | 133,199 | 133,946 | 134,764 | 135,660 | 136,570 | 138,489 | 139,641 | 140,803 |

***Sources:*** *European Mortgage Federation National Experts, National Statistics Offices, Japanese Ministry of Internal Affairs and Communication, US Bureau of Census*

**1) Time series breaks**
- Denmark: 2007 (due to a change in methodology)
- Netherlands: 2012 (due to a change in methodology)
- Norway: 2006 (due to a change in methodology)

**2) The series has been revised for at least two years in:**
- Austria
- Belgium
- France
- Greece
- Netherlands
- Portugal
- Spain
- Iceland
- Switzerland
- USA

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available

# 17. Number of Transactions

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BELGIUM | 115,069 | 128,094 | 128,621 | 124,358 | 124,356 | 135,180 | 103,514 | 119,063 | 123,848 | 130,323 | 149,661 | 122,435 |
| CROATIA | 2,861 | 2,319 | 2,169 | 2,357 | 1,997 | 2,410 | 1,672 | 2,791 | 2,429 | 2,880 | 3,458 | 3,458 |
| CYPRUS | 8,170 | 8,598 | 7,018 | 6,269 | 3,767 | 4,527 | 4,952 | 7,063 | 8,734 | 9,242 | 10,366 | 7,968 |
| DENMARK | 46,215 | 52,955 | 44,064 | 45,506 | 46,566 | 52,490 | 63,186 | 63,679 | 69,818 | 68,602 | 70,851 | 82,263 |
| ESTONIA | 20,809 | 23,747 | 23,327 | 26,760 | 30,141 | 31,093 | 33,081 | 33,410 | 51,780 | 59,303 | 59,188 | 60,180 |
| FINLAND | 71,012 | 70,689 | 69,099 | 71,645 | 63,440 | 58,520 | 61,954 | 61,334 | 62,654 | 60,800 | 63,298 | 70,794 |
| FRANCE | 829,400 | 1,040,300 | 1,092,500 | 938,900 | 954,700 | 913,900 | 1,033,000 | 1,104,000 | 1,245,000 | 1,242,000 | 1,242,000 | 1,242,000 |
| GERMANY | 485,000 | 525,000 | 571,000 | 576,000 | 565,000 | 562,000 | 577,000 | 575,000 | 567,000 | 575,000 | 605,000 | 630,000 |
| GREECE | 135,967 | 117,948 | 83,665 | 57,650 | 49,774 | 43,443 | 54,631 | 60,540 | 69,826 | 79,532 | 96,662 | 96,662 |
| HUNGARY | 115,610 | 112,212 | 110,024 | 105,700 | 104,129 | 127,592 | 154,212 | 160,975 | 165,782 | 172,846 | 154,940 | 157,000 |
| IRELAND | 44,375 | 28,618 | 26,818 | 31,802 | 34,662 | 47,238 | 56,178 | 55,153 | 61,180 | 63,168 | 67,152 | 58,466 |
| ITALY | 609,145 | 611,878 | 598,224 | 444,018 | 403,124 | 417,524 | 444,636 | 516,574 | 542,700 | 578,647 | 603,541 | 557,926 |
| LATVIA | 34,042 | 36,604 | 42,051 | 43,941 | 49,141 | 49,973 | 48,397 | 52,152 | 52,640 | 49,093 | 49,890 | 50,839 |
| LUXEMBOURG | 4,509 | 5,165 | 5,749 | 5,474 | 5,471 | 6,477 | 6,269 | 6,333 | 7,404 | 7,545 | 7,295 | 6,835 |
| MALTA | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 6,502 | n/a | n/a | n/a | n/a |
| NETHERLANDS | 127,532 | 126,127 | 120,739 | 117,261 | 110,094 | 153,511 | 178,293 | 214,793 | 241,860 | 219,493 | 218,595 | 235,511 |
| POLAND | 60,894 | 76,698 | 86,897 | 116,555 | 124,685 | 130,656 | 160,789 | 173,467 | 188,596 | 211,597 | 213,763 | 213,763 |
| PORTUGAL | 205,442 | 129,950 | 93,618 | 76,398 | 79,775 | 84,215 | 107,302 | 127,106 | 153,292 | 178,691 | 181,478 | 171,620 |
| ROMANIA | 352,000 | 352,324 | 371,569 | 434,954 | 473,319 | 454,001 | 483,699 | 521,805 | 587,017 | 603,592 | 622,260 | 589,748 |
| SLOVENIA | 5,705 | 7,923 | 6,882 | 6,336 | 5,783 | 7,448 | 9,317 | 10,652 | 10,788 | 9,423 | 8,316 | 11,612 |
| SPAIN | 463,719 | 491,287 | 349,118 | 363,623 | 300,568 | 365,621 | 401,713 | 457,738 | 532,261 | 582,888 | 569,993 | 487,089 |
| SWEDEN | 146,582 | 152,072 | 144,946 | 143,675 | 151,582 | 159,536 | 168,298 | 160,200 | 164,735 | 158,233 | 163,784 | 172,185 |
| ICELAND | 3,035 | 4,039 | 5,970 | 6,749 | 7,459 | 8,314 | 10,247 | 11,164 | 10,546 | 11,169 | 10,904 | 12,695 |
| NORWAY | 70,995 | 100,177 | 110,844 | 113,276 | 109,437 | 112,147 | 119,681 | 121,578 | 114,382 | 118,196 | 119,950 | 125,302 |
| UNITED KINGDOM | 858,350 | 885,770 | 884,790 | 932,480 | 969,750 | 1,218,750 | 1,229,580 | 1,235,020 | 1,223,090 | 1,191,510 | 1,176,820 | 1,044,830 |
| BRAZIL | 622,876 | 858.37 | 946,633 | 921,879 | 996.72 | 991,933 | 891,035 | 768,283 | 632,762 | 701,198 | 747,059 | 840,088 |
| JAPAN | 168,800 | 164,600 | 166,800 | 154,900 | 169,467 | 155,900 | 154,200 | 158,100 | 147,500 | 159,867 | n/a | n/a |
| RUSSIA | 1,460,931 | 2,148,541 | 2,745,842 | 3,063,489 | 3,032,834 | 3,448,283 | 2,806,901 | 2,861,989 | 2,863,164 | 3,122,824 | 3,025,069 | 3,130,094 |
| SINGAPORE | 33,663 | 38,900 | 32,640 | 37,873 | 22,728 | 12,848 | 14,117 | 16,378 | 25,010 | n/a | n/a | n/a |
| TURKEY | 555,184 | 607,098 | 708,275 | 701,621 | 1,157,190 | 1,165,381 | 1,289,320 | 1,341,453 | 1,409,314 | 1,375,398 | 1,348,729 | 1,499,316 |
| USA | 4,715,000 | 4,513,000 | 4,566,000 | 5,090,000 | 5,519,000 | 5,377,000 | 5,751,000 | 6,011,000 | 6,123,000 | 5,957,000 | 6,830,000 | n/a |

***Sources:*** *European Mortgage Federation National Experts, National Statistics Offices, US Bureau of Census*

**1) Time series breaks**
- Estonia: 2006 (data from the Estonian Landboard)
- Ireland: 2011 (the source was changed from 2011 onwards)
- Germany: 2007 (the source was changed from 2007 onwards)
- Portugal: 2000

**2) The series has been revised for at least two years in:**
- Finland
- France
- Germany
- Greece
- Poland
- Sweden
- Iceland
- United Kingdom
- Brazil
- Russia

**3) Notes**
- For Ireland, please note that data prior to 2011 is an estimation based on mortgage approvals, and must thus be used with caution.
- In Poland, the data for 2012 concerns only the dwellings of the secondary market and excludes single family houses.
- In Croatia, the number refers to new dwellings only.
- In Cyprus, the number refers to properties sold and transferred
- In Denmark, the number excludes self-build dwellings but covers second homes.
- In Belgium, the number includes only transaction on second hand houses.
- In the Netherlands, the number includes commercial transactions also.
- In Romania, the number includes commercial transactions also.
- In Portugal, the number covers only urban areas including commercial transactions.
- In Japan, the number of second hand dwellings purchased between January and December of the indicated years.
- For further details on the methodologies, please see “Annex: Explanatory Note on data”
- n/a: figure not available
- For Finland 2000-2007 are estimates by the Federation of Finnish Financial Service.
- For Denmark 2000-2003 is an estimation.

# 18. Nominal House Price Indices

2015 = 100

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 72.3 | 76.8 | 81.6 | 87.6 | 92.1 | 95.3 | 100.0 | 108.5 | 114.3 | 119.6 | 123.7 | 132.4 |
| BELGIUM | 86.5 | 89.9 | 93.5 | 97.4 | 99.2 | 100.7 | 100.0 | 104.4 | 108.8 | 113.1 | 119.4 | 120.4 |
| BULGARIA | 117.8 | 105.8 | 100.0 | 98.1 | 95.9 | 97.3 | 100.0 | 107.0 | 116.3 | 122.7 | 128.5 | 129.7 |
| CROATIA | 117.9 | 110.5 | 110.7 | 108.9 | 104.6 | 103.0 | 100.0 | 100.9 | 104.8 | 111.1 | 121.1 | 130.4 |
| CYPRUS | 135.4 | 133.8 | 129.4 | 122.5 | 114.5 | 104.5 | 100.0 | 98.2 | 98.7 | 99.9 | 101.9 | 102.6 |
| CZECHIA | 93.4 | 93.7 | 93.2 | 92.4 | 92.5 | 96.1 | 100.0 | 111.0 | 120.3 | 132.1 | 143.9 | 156.8 |
| DENMARK | 96.8 | 99.5 | 95.9 | 91.6 | 92.3 | 93.8 | 100.0 | 103.7 | 108.4 | 112.8 | 116.0 | 121.0 |
| ESTONIA | 60.5 | 63.9 | 69.3 | 74.4 | 82.3 | 93.6 | 100.0 | 104.8 | 110.5 | 117.4 | 80.0 | 84.8 |
| FINLAND | 87.9 | 95.6 | 98.2 | 99.8 | 101.4 | 100.8 | 100.0 | 100.9 | 101.9 | 103.0 | 103.9 | 105.1 |
| FRANCE | 96.2 | 103.5 | 107.3 | 105.0 | 103.8 | 101.9 | 100.0 | 100.9 | 104.0 | 107.1 | 110.6 | 116.8 |
| GERMANY | 84.8 | 85.3 | 87.4 | 90.0 | 92.7 | 95.6 | 100.0 | 106.0 | 112.1 | 120.7 | 128.9 | 138.5 |
| GREECE | 160.2 | 152.8 | 144.4 | 127.6 | 113.7 | 105.3 | 100.0 | 97.5 | 96.6 | 98.3 | 105.4 | 109.9 |
| HUNGARY | 96.6 | 91.6 | 90.0 | 87.3 | 82.0 | 84.7 | 100.0 | 117.3 | 133.0 | 157.5 | 186.6 | 203.6 |
| IRELAND | 122.3 | 105.9 | 87.8 | 75.9 | 76.9 | 89.6 | 100.0 | 107.3 | 119.0 | 131.2 | 134.3 | 134.8 |
| ITALY | 116.0 | 118.1 | 119.7 | 116.7 | 109.1 | 104.0 | 100.0 | 100.3 | 99.2 | 98.6 | 98.5 | 100.4 |
| LATVIA | 82.9 | 80.9 | 85.6 | 90.8 | 98.2 | 93.8 | 100.0 | 107.8 | 116.2 | 129.2 | 139.9 | 145.8 |
| LITHUANIA | 90.9 | 84.2 | 89.8 | 89.6 | 90.7 | 96.5 | 100.0 | 105.4 | 114.8 | 123.18 | 131.61 | 141.18 |
| LUXEMBOURG | 76.0 | 80.1 | 83.1 | 86.6 | 90.9 | 94.9 | 100.0 | 106.0 | 112.0 | 119.9 | 132.0 | 151.1 |
| MALTA | 90.0 | 91.0 | 89.8 | 92.5 | 92.2 | 94.5 | 100.0 | 105.5 | 111.0 | 117.4 | 124.6 | 125.1 |
| NETHERLANDS | 115.5 | 113.0 | 110.2 | 103.1 | 96.3 | 97.2 | 100.0 | 105.0 | 112.9 | 123.1 | 131.6 | 142.8 |
| POLAND | 110.1 | 107.6 | 107.0 | 98.1 | 97.1 | 98.9 | 100.0 | 102.5 | 107.3 | 119.3 | 132.1 | 146.2 |
| PORTUGAL | 106.5 | 107.4 | 102.1 | 94.9 | 93.1 | 97.0 | 100.0 | 107.1 | 121.2 | 137.1 | 149.3 | 162.2 |
| ROMANIA | 129.3 | 119.5 | 104.8 | 99.5 | 99.3 | 97.2 | 100.0 | 106.0 | 112.4 | 118.6 | 122.7 | 128.0 |
| SLOVAKIA | 109.6 | 105.2 | 102.0 | 100.8 | 99.9 | 99.1 | 100.0 | 104.9 | 111.9 | 118.1 | 126.9 | 142.1 |
| SLOVENIA | 117.0 | 117.2 | 120.3 | 112.1 | 106.3 | 99.3 | 100.0 | 103.3 | 111.6 | 122.3 | 159.1 | 135.8 |
| SPAIN | 130.1 | 124.9 | 118.0 | 107.7 | 101.4 | 98.9 | 100.0 | 101.9 | 104.3 | 107.8 | 111.3 | 110.0 |
| SWEDEN | 76.4 | 82.0 | 82.6 | 81.7 | 84.5 | 90.4 | 100.0 | 108.4 | 117.4 | 117.4 | 120.5 | 128.6 |
| EU 27 (simple average) | 102.9 | 101.5 | 100.1 | 97.5 | 96.4 | 97.2 | 100.0 | 104.9 | 111.1 | 118.5 | 125.3 | 131.3 |
| EURO AREA 19 (simple average) | 102.1 | 101.6 | 101.0 | 98.7 | 97.6 | 98.0 | 100.0 | 104.0 | 109.5 | 116.2 | 121.7 | 126.4 |
| ICELAND | 74.3 | 72.0 | 75.4 | 80.6 | 85.2 | 92.4 | 100.0 | 109.8 | 131.2 | 142.0 | 148.3 | 157.8 |
| NORWAY | 71.1 | 76.1 | 82.4 | 88.7 | 88.0 | 95.6 | 100.0 | 112.5 | 111.2 | 114.3 | 117.3 | 127.3 |
| SWITZERLAND | 80.4 | 82.6 | 87.9 | 92.1 | 94.9 | 97.5 | 100.0 | 98.5 | 102.1 | 104.6 | 106.9 | 112.5 |
| UNITED KINGDOM | 81.4 | 86.1 | 84.8 | 85.2 | 87.4 | 94.4 | 100.0 | 107.0 | 111.9 | 115.4 | 116.5 | 120.1 |
| AUSTRALIA | 72.4 | 80.9 | 79.1 | 78.9 | 84.1 | 91.7 | 100.0 | 106.0 | 114.0 | 113.0 | 108.0 | 114.0 |
| BRAZIL | 56.4 | 69.6 | 80.9 | 89.0 | 96.8 | 101.6 | 100.0 | 97.4 | 95.4 | 95.6 | 98.3 | 105.4 |
| JAPAN | 98.9 | 99.9 | 99.4 | 98.3 | 99.9 | 99.5 | 100.0 | 101.1 | 101.7 | 102.6 | 102.3 | 100.9 |
| RUSSIA | 73.8 | 72.6 | 77.7 | 87.7 | 94.1 | 99.6 | 100.0 | 97.3 | 96.4 | 99.2 | 105.0 | 116.3 |
| SINGAPORE | 69.7 | 92.7 | 101.4 | 103.8 | 107.1 | 104.0 | 100.0 | 96.9 | 95.8 | 103.3 | 105.6 | n/a |
| SOUTH KOREA | 81.1 | 82.4 | 87.7 | 85.4 | 89.3 | 93.8 | 100.0 | 103.2 | 103.2 | 104.6 | 107.3 | n/a |
| TURKEY | n/a | 57.0 | 60.6 | 66.8 | 75.3 | 86.6 | 100.0 | 112.2 | 122.4 | 127.8 | 140.6 | 183.3 |
| USA | 88.7 | 86.1 | 82.4 | 84.7 | 90.6 | 95.1 | 100.0 | 105.7 | 112.2 | 119.3 | 125.4 | 135.2 |

***Sources:*** *European Mortgage Federation, National Statistics Offices, OECD, ECB (for the euro area (19)), EUROSTAT (for the EU), Central Statistical Bureau of Latvia (LV), Federal Housing Finance Agency (US), Ministry of Land Infrastructure Transport and Tourism (JP)*

**1) Time series breaks**
- Croatia: 2005 (change of source)
- Czech Republic: 2008 (change in source)
- Iceland: 2005 (change of source)
- Portugal: 2005

**2) The series has been revised for at least two years in:**
Cyprus, Czechia, Estonia, France, Greece, Hungary, Italy, Latvia, Malta, Romania, Slovakia, Slovenia, Sweden, Iceland, Norway, Switzerland and the UK. Data has also been revised in Australia, Brazil, Japan, Russia and the United States.

**3) Notes:**
- For Hypostat 2020 the base year has been postponed to 2015 to be in line with the dispositions followed by Eurostat in compliance with Regulation (EC) No 2015/2010)
- For further details on the methodologies, please see "Annex: Explanatory Note on Data"
- n/a: figure not available
- For Romania 2009=100
- For Japan 2008=100
- For Turkey 2010=100
- For Austria, the index covers new and used condominiums and for single-family houses.
- For Bulgaria, the index excludes new flats.
- For Croatia, the index covers the average price of new dwellings sold.
- For Cyprus, the index covers houses and flats and is calculated on year averages of valuation data
- For Czech Republic, the index covers second-hand flat prices in CZ and also new flat prices Prague.
- For Denmark, second homes and flats are included.
- For Estonia, both new and existing dwellings are included.
- For Finland, the index covers the change in the prices of single-family houses and single-family house plots.
- For France, the index covers the weighted average of existing homes and the price index for new housing.
- For Greece, the index covers only urban areas.
- For Poland, the index includes only transactions in the secondary market, covering the 7 biggest cities in Poland.
- For Sweden, the index covers one- and two-dwellings buildings.
- For the UK, the index covers only market prices, self-built dwellings are excluded
- For Australia, the index is a weighted average of the seven largest cities
- For Japan, the index covers monthly price indices for detached houses.
- For Brazil: Prices grew fast due to pent-up demand unleashed after 2006, when inflation and interest rates where controled.
- For US: the index includes purchase-only

# 19. Nominal House Price Index - cities

2007 = 100

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AUSTRIA** | | | | | | | | | | | | |
| Vienna | 63.8 | 68.8 | 74.6 | 86.4 | 93.8 | 97.8 | 100.0 | 103.8 | 105.4 | 110.9 | 116.3 | 124.1 |
| Rest of the country | 75.1 | 79.2 | 81.1 | 89.9 | 92.3 | 95.1 | 100.0 | 109.0 | 114.4 | 124.1 | 127.4 | 137.0 |
| **BELGIUM** | | | | | | | | | | | | |
| Brussels | — | 88.0 | 93.4 | 97.5 | 101.5 | 97.2 | 100.0 | 103.0 | 104.3 | 106.9 | 112.7 | 121.9 |
| **BULGARIA** | | | | | | | | | | | | |
| Sofia | 109.0 | 98.4 | 92.1 | 91.1 | 90.3 | 92.9 | 100.0 | 111.0 | 123.1 | 131.2 | 141.7 | 133.6 |
| Varna | 111.0 | 100.1 | 93.9 | 90.3 | 89.5 | 91.9 | 100.0 | 107.6 | 119.0 | 124.2 | 133.1 | 120.0 |
| Plovdiv | 119.8 | 104.1 | 98.1 | 94.3 | 91.7 | 90.8 | 100.0 | 105.6 | 115.9 | 123.2 | 135.0 | 132.0 |
| **CROATIA** | | | | | | | | | | | | |
| Zagreb | 123.5 | 112.5 | 112.1 | 109.9 | 103.5 | 102.2 | 100.0 | 100.7 | 105.1 | 116.4 | 131.8 | 142.5 |
| Adriatic Coast | 114.4 | 109.4 | 110.7 | 108.7 | 105.5 | 103.4 | 100.0 | 101.3 | 105.7 | 111.4 | 119.1 | 126.6 |
| Rest of the country | 113.6 | 109.1 | 108.6 | 108.0 | 103.6 | 102.8 | 100.0 | 99.2 | 99.7 | 100.3 | 104.1 | 114.5 |
| **CYPRUS** | | | | | | | | | | | | |
| Nicosia | 132.1 | 131.4 | 129.7 | 124.1 | 115.4 | 105.6 | 100.0 | 97.6 | 98.5 | 99.9 | 101.5 | 102.7 |
| Limassol | 126.9 | 129.6 | 123.6 | 118.9 | 113.2 | 104.1 | 100.0 | 99.1 | 101.3 | 104.8 | 109.8 | 111.7 |
| Larnaca | 147.3 | 144.7 | 138.1 | 126.9 | 115.7 | 104.9 | 100.0 | 98.8 | 98.0 | 99.6 | 102.4 | 104.7 |
| **CZECHIA** | | | | | | | | | | | | |
| Prague | 96.7 | 92.9 | 91.3 | 93.3 | 95.2 | 96.0 | 100.0 | 110.7 | 119.6 | 131.6 | n/a | n/a |
| **DENMARK** | | | | | | | | | | | | |
| Copenhagen | 72.3 | 80.6 | 80.3 | 77.9 | 83.6 | 90.4 | 100.0 | 106.0 | 113.1 | 122.8 | 125.5 | 134.1 |
| Aarhus | 85.6 | 91.7 | 90.4 | 90.1 | 91.6 | 92.7 | 100.0 | 102.9 | 105.5 | 110.7 | 113.1 | 119.4 |
| Odense | 95.3 | 97.5 | 93.6 | 90.8 | 92.9 | 95.0 | 100.0 | 104.6 | 107.0 | 113.4 | 118.2 | 120.9 |
| **FINLAND** | | | | | | | | | | | | |
| Helsinki | 80.1 | 89.6 | 93.1 | 95.4 | 99.2 | 99.7 | 100.0 | 102.8 | 106.3 | 122.8 | 126.9 | 132.5 |
| Tampere | 85.6 | 92.6 | 95.0 | 96.7 | 98.1 | 99.1 | 100.0 | 101.1 | 103.0 | 120.5 | 122.9 | 126.7 |
| Turku | 85.2 | 91.1 | 92.6 | 94.2 | 96.1 | 99.2 | 100.0 | 100.9 | 104.3 | 104.4 | 109.5 | 112.3 |
| **FRANCE** | | | | | | | | | | | | |
| Paris | 77.6 | 91.5 | 104.5 | 103.4 | 103.5 | 101.6 | 100.0 | 103.1 | 110.5 | 117.8 | 125.4 | 134.3 |
| Marseille | 107.6 | 113.8 | 116.2 | 111.6 | 107.7 | 103.7 | 100.0 | 97.7 | 101.5 | 103.8 | 108.1 | 113.2 |
| Lyon | 80.8 | 90.8 | 96.6 | 100.6 | 100.4 | 100.4 | 100.0 | 102.8 | 110.0 | 119.7 | 132.4 | 146.2 |
| **GERMANY** | | | | | | | | | | | | |
| Aggregate seven largest Germany cities | 70.3 | 73.1 | 77.1 | 81.9 | 86.7 | 92.1 | 100.0 | 109.8 | 122.4 | 132.2 | 137.4 | 144.1 |
| **GREECE** | | | | | | | | | | | | |
| Athens | 166.2 | 160.9 | 150.6 | 132.9 | 116.5 | 105.6 | 100.0 | 98.1 | 97.2 | 99.8 | 110.4 | 118.7 |
| Thessaloniki | 166.8 | 154.5 | 144.0 | 124.5 | 113.2 | 105.7 | 100.0 | 96.7 | 95.3 | 96.3 | 103.0 | 107.9 |

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **HUNGARY** | | | | | | | | | | | | |
| Budapest | 89.5 | 84.5 | 83.6 | 80.2 | 73.1 | 78.5 | 100.0 | 123.7 | 142.5 | 174.6 | 213.1 | 220.3 |
| Debrecen | 91.3 | 87.2 | 85.9 | 89.2 | 79.0 | 84.0 | 100.0 | 117.9 | 134.6 | 161.9 | 202.5 | 211.4 |
| Szeged | 97.1 | 91.8 | 90.9 | 88.2 | 82.0 | 85.1 | 100.0 | 113.8 | 134.6 | 161.2 | 205.6 | 214.0 |
| **ITALY** | | | | | | | | | | | | |
| Rome | 111.9 | 111.5 | 113.0 | 113.5 | 109.3 | 105.4 | 100.0 | 95.1 | 92.0 | 89.8 | 87.5 | 86.1 |
| Milan | 98.6 | 99.5 | 101.1 | 100.8 | 99.1 | 100.5 | 100.0 | 99.2 | 99.3 | 100.2 | 101.9 | 103.5 |
| Naples | 110.9 | 110.6 | 108.9 | 106.2 | 100.8 | 101.5 | 100.0 | 97.6 | 96.9 | 96.8 | 96.5 | 92.2 |
| **IRELAND** | | | | | | | | | | | | |
| Dublin | 108.2 | 89.9 | 75.4 | 66.7 | 73.2 | 90.9 | 100.0 | 105.2 | 115.2 | 125.0 | 125.0 | 124.3 |
| **NETHERLANDS** | | | | | | | | | | | | |
| Amsterdam | 97.7 | 97.3 | 97.0 | 91.5 | 86.7 | 91.1 | 100.0 | 113.6 | 129.5 | 146.0 | 154.3 | 161.6 |
| The Hague | 111.8 | 110.2 | 108.3 | 100.8 | 93.9 | 96.2 | 100.0 | 108.3 | 120.3 | 135.4 | 146.1 | 157.1 |
| Rotterdam | 106.6 | 105.8 | 105.0 | 99.8 | 94.3 | 95.8 | 100.0 | 107.1 | 121.0 | 138.6 | 149.9 | 162.7 |
| **POLAND** | | | | | | | | | | | | |
| Cracovia | 114.8 | 108.4 | 106.6 | 97.8 | 97.1 | 99.8 | 100.0 | 102.0 | 102.3 | 113.4 | 127.2 | 142.5 |
| Lodz | 103.6 | 105.8 | 104.8 | 103.0 | 98.1 | 98.2 | 100.0 | 100.2 | 105.6 | 115.3 | 124.8 | 136.7 |
| Warsaw | 108.8 | 117.4 | 117.9 | 100.0 | 101.8 | 104.5 | 100.0 | 102.3 | 113.2 | 134.2 | 145.8 | 165.3 |
| **PORTUGAL** | | | | | | | | | | | | |
| Lisbon | 104.4 | 105.2 | 110.1 | 99.2 | 95.7 | 96.4 | 100.0 | 103.3 | 114.8 | 126.6 | 132.8 | 144.7 |
| **ROMANIA** | | | | | | | | | | | | |
| Bucarest | 155.4 | 130.9 | 104.7 | 106.8 | 96.9 | 96.7 | 100.0 | 107.5 | 116.4 | 121.6 | 125.6 | 126.6 |
| **SLOVAKIA** | | | | | | | | | | | | |
| Bratislava | 103.3 | 102.0 | 99.1 | 98.1 | 98.0 | 97.3 | 100.0 | 105.7 | 112.0 | 116.5 | 124.1 | 137.8 |
| Košice | 97.4 | 99.5 | 103.1 | 102.7 | 98.1 | 97.3 | 100.0 | 98.5 | 107.3 | 113.3 | 109.3 | 140.1 |
| Prešov | 120.7 | 110.9 | 110.3 | 107.8 | 105.7 | 102.7 | 100.0 | 105.2 | 111.7 | 117.3 | 139.0 | 154.0 |
| **SLOVENIA** | | | | | | | | | | | | |
| Ljubliana | 120.7 | 120.1 | 123.8 | 116.3 | 102.8 | 95.0 | 100.0 | 106.0 | 120.0 | 138.3 | 183.3 | 142.6 |
| **SPAIN** | | | | | | | | | | | | |
| Barcelona | 128.5 | 121.9 | 111.7 | 100.2 | 97.5 | 97.1 | 100.0 | 104.5 | 110.3 | 119.7 | 126.6 | 125.4 |
| Madrid | 135.8 | 131.6 | 123.5 | 110.3 | 100.3 | 98.7 | 100.0 | 106.2 | 113.0 | 120.5 | 126.1 | 124.3 |
| Valencia | 142.1 | 132.5 | 123.3 | 108.8 | 102.0 | 99.5 | 100.0 | 102.6 | 101.7 | 105.2 | 110.3 | 109.9 |
| **SWEDEN** | | | | | | | | | | | | |
| Stockholm | 68.9 | 75.6 | 76.6 | 76.3 | 79.4 | 87.7 | 100.0 | 108.7 | 114.9 | 108.7 | 109.3 | 116.2 |
| Malmö | 86.6 | 92.8 | 91.9 | 88.4 | 90.1 | 93.7 | 100.0 | 111.3 | 121.8 | 126.0 | 131.6 | 142.1 |
| Göteborg | 75.2 | 81.8 | 83.1 | 82.4 | 85.6 | 90.6 | 100.0 | 106.6 | 117.6 | 118.5 | 122.3 | 129.2 |

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ICELAND** | | | | | | | | | | | | |
| Reykjavik | 70.9 | 68.2 | 71.0 | 77.2 | 83.1 | 91.7 | 100.0 | 110.5 | 131.8 | 139.7 | 144.8 | 152.8 |
| **NORWAY** | | | | | | | | | | | | |
| Oslo | 62.8 | 68.3 | 75.3 | 84.3 | 79.3 | 90.0 | 100.0 | 126.0 | 112.7 | 119.8 | 126.5 | 141.7 |
| Bergen | 69.8 | 75.6 | 81.8 | 88.3 | 88.9 | 98.8 | 100.0 | 101.0 | 101.0 | 102.9 | 105.7 | 114.7 |
| Trondheim | 66.9 | 73.1 | 81.6 | 89.6 | 91.3 | 97.3 | 100.0 | 104.6 | 107.0 | 106.2 | 107.5 | 115.7 |
| **UNITED KINGDOM** | | | | | | | | | | | | |
| London | 60.7 | 66.9 | 68.3 | 71.5 | 77.4 | 90.8 | 100.0 | 110.0 | 113.0 | 112.4 | 110.8 | 113.9 |
| **AUSTRALIA** | | | | | | | | | | | | |
| Canberra | 84.7 | 94.8 | 94.0 | 93.4 | 94.0 | 96.2 | 100.0 | 105.0 | 113.0 | 117.0 | 117.0 | 122.0 |
| Sydney | 60.4 | 67.8 | 67.5 | 68.4 | 75.0 | 85.9 | 100.0 | 107.0 | 117.0 | 113.0 | 107.0 | 114.0 |
| Melbourne | 74.0 | 86.1 | 84.0 | 81.6 | 86.0 | 92.6 | 100.0 | 109.0 | 123.0 | 123.0 | 117.0 | 125.0 |
| **BRAZIL** | | | | | | | | | | | | |
| São Paulo | n/a | n/a | n/a | n/a | n/a | 96.0 | 100.0 | 98.9 | 97.8 | 98.9 | 102.3 | 117.0 |
| Rio de Janeiro | n/a | n/a | n/a | n/a | n/a | 98.2 | 100.0 | 97.5 | 93.7 | 91.2 | 90.9 | 93.9 |
| Belo Horizonte | n/a | n/a | n/a | n/a | n/a | 100.7 | 100.0 | 97.0 | 94.8 | 94.1 | 95.2 | 99.2 |
| **JAPAN** | | | | | | | | | | | | |
| Tokyo | 96.0 | 98.2 | 96.7 | 94.5 | 96.8 | 96.0 | 100.0 | 102.8 | 104.4 | 106.7 | 105.9 | 105.1 |
| Osaka | 102.6 | 103.2 | 102.4 | 100.4 | 100.4 | 99.1 | 100.0 | 100.3 | 102.2 | 104.4 | 104.0 | 102.8 |
| Aichi | 102.7 | 101.4 | 99.7 | 97.7 | 98.2 | 97.6 | 100.0 | 102.6 | 103.2 | 103.5 | 105.5 | 104.8 |
| **RUSSIA** | | | | | | | | | | | | |
| Moscow | 74.1 | 75.6 | 79.6 | 84.7 | 89.8 | 94.6 | 100.0 | 101.1 | 99.5 | 100.9 | 107.7 | 122.6 |
| St. Petersburg | 83.5 | 79.5 | 82.8 | 92.5 | 97.0 | 99.7 | 100.0 | 102.3 | 103.3 | 110.5 | 118.0 | 133.4 |
| **SOUTH KOREA** | | | | | | | | | | | | |
| Seul | 97.7 | 94.6 | 91.8 | 85.0 | 87.8 | 91.6 | 100.0 | 108.5 | 121.4 | 142.3 | 145.9 | n/a |
| Busan | 63.5 | 74.9 | 87.2 | 84.8 | 87.9 | 91.3 | 100.0 | 110.9 | 110.7 | 105.1 | 107.8 | n/a |
| **TURKEY** | | | | | | | | | | | | |
| Ankara | n/a | 45.4 | 49.3 | 55.0 | 66.1 | 81.2 | 100.0 | 112.8 | 117.8 | 118.9 | 133.7 | 174.0 |
| Istanbul | n/a | 61.9 | 65.4 | 72.8 | 80.9 | 88.8 | 100.0 | 109.1 | 116.7 | 118.4 | 120.2 | 153.7 |
| Izmir | n/a | 57.1 | 62.4 | 67.6 | 77.0 | 87.1 | 100.0 | 116.1 | 137.8 | 145.9 | 160.9 | 208.3 |
| **USA** | | | | | | | | | | | | |
| Washington - DC | 66.6 | 68.6 | 70.7 | 76.3 | 85.4 | 94.5 | 100.0 | 103.7 | 107.9 | 112.3 | 116.6 | 126.0 |
| New York | 96.2 | 95.4 | 92.9 | 93.0 | 95.1 | 97.2 | 100.0 | 103.9 | 109.7 | 115.2 | 118.3 | 124.4 |
| Los Angeles | 78.9 | 78.3 | 74.3 | 75.9 | 85.9 | 93.0 | 100.0 | 107.2 | 116.2 | 123.5 | 128.8 | 139.4 |

***Sources:*** *European Mortgage Federation National Experts, National Central Banks, National Statistics Offices, Federal Housing Finance Agency (US), Ministry of Land Infrastructure Transport and Tourism (JP)*

**1) Time series breaks:**
none

**2) The series has been revised for at least two years in:**

- Bulgaria
- Cyprus
- France
- Greece
- Hungary
- Ireland
- Netherlands
- Portugal
- Slovakia
- Slovenia
- Spain
- Iceland
- United Kingdom
- Australia
- Brazil

**Notes:**

- For Hypostat 2020 the base year has been postponed to 2015 to be in line with the dispositions followed by Eurostat in compliance with Regulation (EC) No 2015/2010)
- Belgium: Data refers to apartments in Brussels which constitute 70% of the market.
- Bulgaria: Data referred to flats in the district centres only (newly built flats are excluded)
- Spain: the indexes refer to the regions around these cities
- Slovakia: the indexes refer to the regions around these cities, price per square metre
- Slovenia: the index comprises only apartments

# 20. Change in Nominal house price

Annual % change

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 4.0 | 6.2 | 6.3 | 7.3 | 5.2 | 3.5 | 4.9 | 8.5 | 5.3 | 4.7 | 3.4 | 7.0 |
| BELGIUM | -0.4 | 3.9 | 4.0 | 4.1 | 1.9 | 1.5 | -0.7 | 4.4 | 4.2 | 3.9 | 5.6 | 0.8 |
| BULGARIA | -20.4 | -10.2 | -5.5 | -1.9 | -2.2 | 1.4 | 2.8 | 7.0 | 8.7 | 5.5 | 4.8 | 0.9 |
| CROATIA | -5.0 | -6.3 | 0.2 | -1.6 | -3.9 | -1.6 | -2.9 | 0.9 | 3.8 | 6.1 | 9.0 | 7.7 |
| CYPRUS | -4.7 | -1.1 | -3.3 | -5.3 | -6.5 | -8.8 | -4.3 | -1.8 | 0.5 | 1.2 | 2.0 | 0.7 |
| CZECHIA | -7.7 | 0.3 | -0.6 | -0.8 | 0.1 | 3.8 | 4.1 | 11.0 | 8.4 | 9.8 | 8.9 | 9.0 |
| DENMARK | -10.5 | 2.8 | -3.6 | -4.5 | 0.8 | 1.5 | 6.7 | 3.7 | 4.5 | 4.1 | 2.8 | 4.3 |
| ESTONIA | -37.2 | 5.7 | 8.5 | 7.3 | 10.7 | 13.7 | 6.9 | 4.8 | 5.4 | 6.2 | -31.8 | 6.0 |
| FINLAND | -0.3 | 8.8 | 2.7 | 1.6 | 1.6 | -0.6 | -0.8 | 0.9 | 1.1 | 1.0 | 0.9 | 1.2 |
| FRANCE | -4.1 | 7.6 | 3.7 | -2.1 | -1.2 | -1.8 | -1.9 | 0.9 | 3.0 | 3.0 | 3.2 | 5.6 |
| GERMANY | -0.7 | 0.6 | 2.4 | 3.0 | 3.0 | 3.1 | 4.6 | 6.0 | 5.8 | 7.7 | 6.8 | 7.4 |
| GREECE | -3.7 | -4.6 | -5.5 | -11.7 | -10.9 | -7.5 | -5.0 | -2.5 | -1.0 | 1.8 | 7.2 | 4.3 |
| HUNGARY | -6.3 | -5.2 | -1.8 | -3.0 | -6.1 | 3.3 | 18.1 | 17.3 | 13.4 | 18.5 | 18.4 | 9.1 |
| IRELAND | -19.1 | -13.4 | -17.1 | -13.5 | 1.3 | 16.5 | 11.6 | 7.3 | 10.9 | 10.2 | 2.4 | 0.4 |
| ITALY | -0.1 | 1.8 | 1.4 | -2.5 | -6.5 | -4.7 | -3.8 | 0.3 | -1.1 | -0.6 | -0.1 | 1.9 |
| LATVIA | -29.3 | -2.4 | 5.8 | 6.1 | 8.2 | -4.5 | 6.6 | 7.8 | 7.9 | 11.2 | 8.2 | 4.2 |
| LITHUANIA | -29.9 | -7.4 | 6.6 | -0.2 | 1.2 | 6.4 | 3.7 | 5.4 | 8.9 | 7.3 | 6.8 | 7.3 |
| LUXEMBOURG | -1.2 | 5.4 | 3.7 | 4.2 | 5.0 | 4.4 | 5.4 | 6.0 | 5.6 | 7.1 | 10.1 | 14.5 |
| MALTA | -4.4 | 1.1 | -1.4 | 3.1 | -0.4 | 2.6 | 5.8 | 5.5 | 5.3 | 5.8 | 6.1 | 0.4 |
| NETHERLANDS | -3.4 | -2.2 | -2.4 | -6.5 | -6.6 | 0.9 | 2.9 | 5.0 | 7.5 | 9.0 | 6.9 | 8.5 |
| POLAND | -6.8 | -2.3 | -0.6 | -8.3 | -1.0 | 1.8 | 1.1 | 2.5 | 4.7 | 11.2 | 10.7 | 10.7 |
| PORTUGAL | -0.9 | 0.8 | -4.9 | -7.1 | -1.9 | 4.2 | 3.1 | 7.1 | 13.2 | 13.1 | 8.9 | 8.6 |
| ROMANIA | n/a | -7.5 | -12.3 | -5.1 | -0.3 | -2.1 | 2.9 | 6.0 | 6.0 | 5.6 | 3.4 | 4.3 |
| SLOVAKIA | -11.1 | -4.0 | -3.1 | -1.2 | -0.9 | -0.8 | 0.9 | 4.9 | 6.7 | 5.5 | 7.5 | 11.9 |
| SLOVENIA | -9.5 | 0.1 | 2.7 | -6.8 | -5.2 | -6.6 | 0.7 | 3.3 | 8.0 | 9.7 | 30.0 | -14.7 |
| SPAIN | -7.4 | -3.9 | -5.6 | -8.7 | -5.8 | -2.4 | 1.1 | 1.9 | 2.4 | 3.4 | 3.2 | -1.1 |
| SWEDEN | 1.7 | 7.3 | 0.8 | -1.1 | 3.4 | 7.0 | 10.7 | 8.4 | 8.3 | 0.0 | 2.6 | 6.7 |
| ICELAND | -9.7 | -3.0 | 4.6 | 6.9 | 5.8 | 8.4 | 8.2 | 9.8 | 19.5 | 8.2 | 4.4 | 6.4 |
| NORWAY | 13.1 | 7.1 | 8.2 | 7.6 | -0.7 | 8.7 | 4.6 | 12.5 | -1.1 | 2.8 | 2.6 | 4.8 |
| UNITED KINGDOM | -8.9 | 5.7 | -1.5 | 0.4 | 2.6 | 8.0 | 6.0 | 7.0 | 4.6 | 3.1 | 1.0 | 3.8 |
| SWITZERLAND | 0.5 | 2.8 | 6.4 | 4.8 | 3.0 | 2.7 | 2.6 | -1.5 | 3.6 | 2.5 | 2.2 | 5.3 |
| AUSTRALIA | 4.0 | 11.7 | -2.2 | -0.3 | 6.6 | 9.1 | 9.0 | 6.0 | 7.5 | -0.9 | -4.4 | 5.6 |
| BRAZIL | 26.0 | 23.4 | 16.3 | 10.1 | 8.7 | 5.0 | -1.6 | -2.6 | -2.1 | 0.2 | 2.9 | 7.1 |
| JAPAN | -5.4 | 1.0 | -0.5 | -1.2 | 1.6 | -0.3 | 0.5 | 1.1 | 0.6 | 0.9 | -0.3 | -1.4 |
| RUSSIA | -4.5 | -1.6 | 7.0 | 12.9 | 7.3 | 5.9 | 0.4 | -2.7 | -1.0 | 3.0 | 5.9 | 10.7 |
| SINGAPORE | -19.0 | 32.9 | 9.5 | 2.3 | 3.2 | -2.9 | -3.9 | -3.1 | -1.1 | 7.8 | 2.3 | n/a |
| SOUTH KOREA | 9.6 | 1.6 | 6.4 | -2.6 | 4.5 | 5.1 | 6.6 | 3.2 | 0.0 | 1.3 | 2.6 | n/a |
| TURKEY | n/a | n/a | 6.5 | 10.1 | 12.7 | 15.0 | 15.5 | 12.2 | 9.1 | 4.5 | 10.0 | 30.4 |
| USA | -6.0 | -3.0 | -4.2 | 2.8 | 6.9 | 4.9 | 5.2 | 5.7 | 6.2 | 6.3 | 5.1 | 7.8 |

***Sources:*** *European Mortgage Federation, National Statistics Offices, OECD, ECB (for the euro area)*

**1) Time series breaks**

- See Table 18

**2) The series has been revised for at least two years in:**

- See Table 18

**3) Notes**

- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- See Table 18 for further notes.

# 21. Nominal House Price to Disposable Income of Households Ratio

2015 = 100

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 81.4 | 85.6 | 88.6 | 91.4 | 95.9 | 96.6 | 100.0 | 104.3 | 106.2 | 107.4 | 107.6 | 118.1 |
| BELGIUM | 96.7 | 99.3 | 100.2 | 101.4 | 101.9 | 102.2 | 100.0 | 101.4 | 101.7 | 102.4 | 103.6 | 101.8 |
| BULGARIA | 136.8 | 120.8 | 106.6 | 104.2 | 100.3 | 101.0 | 100.0 | 102.2 | 103.8 | n/a | n/a | n/a |
| CROATIA | 114.6 | 107.0 | 108.0 | 110.1 | 105.8 | 106.8 | 100.0 | 97.7 | 96.5 | 96.6 | 100.9 | n/a |
| CYPRUS | 121.9 | 117.9 | 111.5 | 108.7 | 107.3 | 104.5 | 100.0 | 92.7 | 88.2 | 83.6 | 82.4 | 86.5 |
| CZECHIA | 100.5 | 95.3 | 91.5 | 91.5 | 94.4 | 100.4 | 100.0 | 106.2 | 104.8 | 105.1 | 108.0 | 115.2 |
| DENMARK | 116.3 | 113.0 | 105.3 | 98.4 | 97.6 | 97.7 | 100.0 | 99.1 | 100.3 | 101.2 | 101.4 | 104.8 |
| ESTONIA | 81.8 | 86.4 | 86.7 | 90.0 | 91.9 | 98.7 | 100.0 | 102.1 | 98.5 | 95.7 | 59.4 | 63.0 |
| FINLAND | 103.1 | 107.9 | 106.5 | 105.2 | 104.2 | 102.5 | 100.0 | 99.0 | 97.6 | 95.4 | 93.3 | 93.7 |
| FRANCE | 104.1 | 108.9 | 110.7 | 107.3 | 106.4 | 103.1 | 100.0 | 99.1 | 99.6 | 99.6 | 99.8 | 104.2 |
| GERMANY | 98.6 | 96.9 | 95.9 | 96.5 | 97.8 | 98.3 | 100.0 | 102.5 | 104.8 | 108.8 | 112.6 | 119.9 |
| GREECE | 108.9 | 114.3 | 119.9 | 118.8 | 113.5 | 104.9 | 100.0 | 100.3 | 97.6 | 98.0 | 101.2 | 107.3 |
| HUNGARY | 110.2 | 99.9 | 92.9 | 91.5 | 85.2 | 87.8 | 100.0 | 111.9 | 116.9 | 129.1 | 142.8 | 162.8 |
| IRELAND | 122.5 | 108.5 | 96.1 | 80.6 | 81.9 | 93.5 | 100.0 | 102.3 | 106.2 | 111.7 | 106.6 | 101.5 |
| ITALY | 118.4 | 120.6 | 119.1 | 119.4 | 111.1 | 105.3 | 100.0 | 99.0 | 96.0 | 93.7 | 92.9 | 97.5 |
| LATVIA | 97.1 | 102.6 | 107.7 | 105.4 | 109.9 | 99.1 | 100.0 | 102.3 | 104.5 | 108.4 | 113.5 | 115.8 |
| LITHUANIA | 110.4 | 100.7 | 102.6 | 98.0 | 94.7 | 99.5 | 100.0 | 98.2 | 102.4 | 103.2 | 100.1 | 99.9 |
| LUXEMBOURG | 95.4 | 96.9 | 98.0 | 96.4 | 97.9 | 96.3 | 100.0 | 103.9 | 102.6 | 104.0 | 107.0 | 116.3 |
| NETHERLANDS | 127.4 | 122.6 | 117.1 | 108.7 | 100.5 | 99.0 | 100.0 | 102.0 | 107.1 | 111.5 | 114.5 | 119.6 |
| POLAND | 141.9 | 121.7 | 118.4 | 105.9 | 103.4 | 102.0 | 100.0 | 101.7 | 98.6 | 104.7 | 107.9 | 116.9 |
| PORTUGAL | 105.5 | 104.6 | 101.5 | 97.0 | 96.0 | 100.4 | 100.0 | 103.2 | 113.3 | 122.8 | 128.5 | 138.2 |
| ROMANIA | 164.7 | 136.7 | 121.4 | 118.7 | 107.2 | 104.3 | 100.0 | 96.6 | 90.1 | 88.2 | 79.7 | 78.1 |
| SLOVAKIA | 126.1 | 118.2 | 113.2 | 108.0 | 106.5 | 103.5 | 100.0 | 101.0 | 102.7 | 99.2 | 101.5 | 111.7 |
| SLOVENIA | 121.7 | 120.2 | 120.8 | 115.5 | 109.5 | 101.0 | 100.0 | 99.1 | 102.1 | 105.4 | 129.6 | 105.5 |
| SPAIN | 129.1 | 123.5 | 115.9 | 111.6 | 105.4 | 102.8 | 100.0 | 99.2 | 98.4 | 98.8 | 99.3 | 101.5 |
| SWEDEN | 109.3 | 100.8 | 91.7 | 83.5 | 83.7 | 91.3 | 100.0 | 105.0 | 111.4 | 113.5 | 114.3 | 120.7 |
| NORWAY | 97.0 | 90.8 | 90.6 | 88.6 | 86.5 | 96.1 | 100.0 | 114.8 | 109.4 | 111.9 | 112.6 | 128.6 |
| UNITED KINGDOM | 107.8 | 108.8 | 116.9 | 112.7 | 112.9 | 112.6 | 100.0 | 124.6 | 129.0 | 127.8 | 126.2 | 137.5 |
| SWITZERLAND | 122.6 | 112.9 | 106.6 | 107.8 | 110.8 | 110.9 | 100.0 | 99.3 | 104.7 | 109.3 | 106.2 | 103.4 |
| JAPAN | 97.5 | 87.5 | 83.8 | 76.5 | 98.4 | 105.6 | 100.0 | 89.7 | 94.3 | 95.9 | 89.5 | 86.2 |
| UNITED STATES | 88.7 | 86.1 | 82.4 | 84.7 | 90.6 | 95.1 | 100.0 | 105.7 | 112.2 | 119.3 | 125.4 | 135.2 |

**1) Time series breaks**
- See Table 18

**2) The series has been revised for at least two years in:**
- all revised

**3) Notes**
- For Hypostat 2021 the base year has been postponed to 2015
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- See Tables 18 and 28 for further notes.

# C — FUNDING OF THE MORTGAGE MARKET

## 22. Total Covered Bonds Outstanding

Backed by Mortgages, EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 5,317 | 7,645 | 17,174 | 17,010 | 18,854 | 22,450 | 27,345 | 30,894 | 31,915 | 42,001 | 49,124 | 59,601 |
| BELGIUM | — | — | — | 2,590 | 8,188 | 10,575 | 15,105 | 16,700 | 15,250 | 20,092 | 23,637 | 41,062 |
| CYPRUS | — | — | 5,200 | 4,550 | 1,000 | 1,000 | 650 | 650 | 650 | 650 | 650 | 650 |
| CZECHIA | 8,179 | 8,234 | 8,546 | 9,056 | 10,355 | 11,106 | 11,656 | 13,060 | 15,522 | 13,757 | 14,168 | 18,185 |
| DENMARK | 319,434 | 332,505 | 345,529 | 359,560 | 359,646 | 369,978 | 377,903 | 389,200 | 393,447 | 396,246 | 402,432 | 419,031 |
| ESTONIA | — | — | — | — | — | — | — | — | — | — | — | 850 |
| FINLAND | 7,625 | 10,125 | 18,839 | 26,684 | 29,783 | 32,031 | 33,974 | 33,822 | 34,625 | 37,257 | 37,774 | 43,855 |
| FRANCE | 134,757 | 156,239 | 189,395 | 208,297 | 202,822 | 188,925 | 188,669 | 177,813 | 185,820 | 194,227 | 209,294 | 221,821 |
| GERMANY | 225,100 | 219,947 | 223,676 | 215,999 | 199,900 | 189,936 | 197,726 | 207,338 | 215,199 | 233,372 | 239,570 | 246,311 |
| GREECE | 6,500 | 19,750 | 19,750 | 18,046 | 16,546 | 14,546 | 4,961 | 4,485 | 10,100 | 13,840 | 13,190 | 10,890 |
| HUNGARY | 7,375 | 6,323 | 5,175 | 4,958 | 4,016 | 3,272 | 3,022 | 2,189 | 2,641 | 3,762 | 3,868 | 4,526 |
| IRELAND | 29,725 | 29,037 | 30,007 | 25,099 | 20,827 | 18,473 | 16,916 | 17,062 | 16,416 | 20,788 | 19,337 | 16,816 |
| ITALY | 14,000 | 26,925 | 50,768 | 116,405 | 122,099 | 122,464 | 122,135 | 138,977 | 139,937 | 163,311 | 172,728 | 171,102 |
| LATVIA | 85 | 63 | 37 | — | — | — | — | — | — | — | — | — |
| LUXEMBOURG | — | — | — | — | — | — | — | — | — | — | — | — |
| NETHERLANDS | 27,664 | 40,180 | 51,970 | 59,822 | 61,015 | 58,850 | 61,101 | 67,604 | 72,880 | 94,797 | 118,969 | 154,505 |
| POLAND | 583 | 511 | 527 | 657 | 707 | 882 | 1,230 | 2,216 | 3,959 | 4,925 | 6,111 | 5,776 |
| PORTUGAL | 20,270 | 27,690 | 33,248 | 34,321 | 36,016 | 33,711 | 34,461 | 32,970 | 35,530 | 35,795 | 36,600 | 38,350 |
| SLOVAKIA | 3,608 | 3,442 | 3,768 | 3,835 | 4,067 | 3,939 | 4,198 | 4,197 | 5,118 | 4,858 | 6,658 | 7,337 |
| SPAIN | 336,750 | 343,401 | 369,208 | 406,736 | 334,572 | 282,568 | 252,383 | 232,456 | 216,498 | 213,253 | 220,767 | 231,143 |
| SWEDEN | 133,903 | 188,750 | 208,894 | 220,374 | 217,854 | 209,842 | 221,990 | 222,444 | 219,212 | 217,979 | 235,111 | 247,713 |
| ICELAND | 685 | 807 | 808 | 893 | 803 | 927 | 1,205 | 1,902 | 2,506 | 3,123 | 3,071 | 3,330 |
| NORWAY | 53,582 | 70,401 | 91,852 | 107,242 | 105,202 | 102,704 | 107,694 | 113,051 | 113,359 | 119,398 | 123,023 | 131,713 |
| SWITZERLAND | 46,283 | 65,046 | 71,881 | 85,707 | 89,064 | 100,436 | 111,542 | 117,564 | 111,632 | 119,422 | 128,248 | 140,617 |
| UNITED KINGDOM (regulated) | 109,473 | 125,250 | 121,623 | 147,425 | 114,395 | 114,654 | 106,674 | 97,127 | 89,509 | 93,530 | 108,857 | 97,124 |
| UNITED KINGDOM (non regulated) | 90,993 | 77,965 | 63,429 | 37,818 | 18,077 | 16,143 | 8,236 | — | — | — | — | — |
| AUSTRALIA | — | — | 2,478 | 35,962 | 51,831 | 64,741 | 69,312 | 70,796 | 64,001 | 65,855 | 64,630 | 62,592 |
| BRAZIL | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 454 | 2,487 | 3,199 |
| CANADA | 7,525 | 18,003 | 38,610 | 49,121 | 50,459 | 64,836 | 85,759 | 100,830 | 93,095 | 107,496 | 113,016 | 168,195 |
| JAPAN | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 1,000 | 3,585 | 5,322 |
| SINGAPORE | n/a | n/a | n/a | n/a | n/a | n/a | 919 | 1,963 | 5,576 | 8,466 | 8,990 | 8,815 |
| SOUTH KOREA | 773 | 1,120 | 2,171 | 2,407 | 2,536 | 1,349 | 1,954 | 2,490 | 2,619 | 2,771 | 6,183 | 7,928 |
| TURKEY | n/a | n/a | n/a | n/a | n/a | n/a | 128 | 628 | 1,923 | 2,334 | 1,967 | 1,755 |
| USA | 12,888 | 11,497 | 9,546 | 6,000 | 6,000 | 4,000 | 4,000 | 2,000 | — | — | — | — |

***Source:*** *European Covered Bond Council*

**1) Time series breaks**

**2) The series has been revised for at least two years in:**

**3) Notes**

- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the conversion to euros was performed by the ECBC

# 23. Total Covered Bonds Issuances

Backed by Mortgages, EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 1,442 | 3,600 | 3,664 | 3,805 | 6,093 | 7,111 | 5,457 | 7181 | 3,165 | 11007 | 11,228 | 20,587 |
| BELGIUM | — | — | — | 2,590 | 5,598 | 2,387 | 4,530 | 2345 | 1,050 | 5842 | 5,000 | 19,250 |
| CYPRUS | — | — | 5,200 | — | — | — | — | — | — | — | — | — |
| CZECHIA | 738 | 723 | 770 | 1,309 | 1,791 | 2,188 | 2,729 | 1693 | 4,074 | 2,573 | 1,516 | 6,412 |
| DENMARK | 125,484 | 148,475 | 145,147 | 185,845 | 149,989 | 154,310 | 163,050 | 130,329 | 123,205 | 113,441 | 165,208 | 124,013 |
| ESTONIA | — | — | — | — | — | — | — | — | — | — | — | 850 |
| FINLAND | 2,125 | 5,250 | 9,964 | 9,368 | 3,771 | 6,469 | 7,425 | 4,679 | 5,550 | 5,650 | 6,650 | 11,199 |
| FRANCE | 37,285 | 51,525 | 88,776 | 53,310 | 21,386 | 17,558 | 33,903 | 19,482 | 28,347 | 27,108 | 37,050 | 39,770 |
| GERMANY | 56,852 | 42,216 | 40,911 | 38,540 | 33,583 | 29,145 | 40,369 | 35,070 | 36,841 | 43,142 | 41,973 | 40,248 |
| GREECE | 1,500 | 17,250 | 5,000 | — | — | 750 | — | 3,675 | 7,375 | 6,650 | 200 | 0 |
| HUNGARY | 3,209 | 542 | 2,264 | 1,140 | 559 | 91 | 888 | 625 | 1,166 | 2,004 | 487 | 1,555 |
| IRELAND | 14,801 | 6,000 | 9,290 | 5,500 | 3,235 | 2,535 | 5,225 | 3,542 | 3,250 | 5,575 | — | 2,000 |
| ITALY | 7,500 | 12,925 | 29,261 | 70,768 | 24,520 | 39,475 | 27,650 | 41,780 | 19,180 | 45,200 | 27,000 | 26,100 |
| LATVIA | — | — | — | — | — | — | — | — | — | — | — | — |
| LUXEMBOURG | — | — | — | — | — | — | — | — | — | — | — | — |
| NETHERLANDS | 7,725 | 13,660 | 14,143 | 10,738 | 4,478 | 3,910 | 7,908 | 9,908 | 11,925 | 28,714 | 28,388 | 44,013 |
| POLAND | 88 | 138 | 269 | 228 | 116 | 269 | 416 | 1,099 | 2,048 | 1,244 | 1,284 | 22 |
| PORTUGAL | 6,000 | 11,570 | 8,450 | 4,850 | 4,500 | 3,825 | 8,675 | 5,950 | 8,200 | 2,350 | 4,800 | 1,500 |
| SLOVAKIA | 707 | 1,179 | 867 | 785 | 841 | 654 | 1,159 | 751 | 1,316 | 800 | 2,250 | 1,500 |
| SPAIN | 43,580 | 51,916 | 72,077 | 98,846 | 22,919 | 23,038 | 31,375 | 31,393 | 30,000 | 19,935 | 19,435 | 14,560 |
| SWEDEN | 53,106 | 79,910 | 69,800 | 48,936 | 51,633 | 48,424 | 60,729 | 52,187 | 48,525 | 54,199 | 53,258 | 53,222 |
| ICELAND | — | — | 25 | 113 | 51 | 91 | 414 | 560 | 850 | 755 | 788 | 646 |
| NORWAY | 30,105 | 21,062 | 28,135 | 22,946 | 18,339 | 14,474 | 17,750 | 23,058 | 21,256 | 24,331 | 20,766 | 29,686 |
| SWITZERLAND | 12,414 | 14,834 | 15,379 | 19,723 | 13,583 | 19,193 | 15,840 | 16,106 | 12,922 | 13,725 | 15,360 | 20,508 |
| UNITED KINGDOM (regulated) | 8,254 | 25,000 | 36,983 | 37,109 | 1,480 | 12,529 | 15,015 | 9,599 | 11,563 | 14,916 | 22,959 | 10,201 |
| UNITED KINGDOM (non regulated) | 22,177 | 900 | — | — | — | — | — | — | — | — | — | — |
| AUSTRALIA | — | — | 2,478 | 33,484 | 15,868 | 13,253 | 10,004 | 11,382 | 7,351 | 11,075 | 9,511 | 4,594 |
| BRAZIL | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 454 | 2,040 | 2,473 |
| CANADA | 951 | 12,648 | 19,977 | 12,937 | 9,354 | 19,275 | 29,287 | 28,148 | 12,441 | 24,384 | 23,647 | 79,834 |
| JAPAN | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 1,000 | 2,585 | 1,850 |
| SINGAPORE | n/a | n/a | n/a | n/a | n/a | n/a | 919 | 1,014 | 3,753 | 3,762 | 914 | 1,000 |
| SOUTH KOREA | 773 | 347 | 1,051 | 178 | 466 | - | 919 | 949 | 417 | 587 | 3,369 | 2,921 |
| TURKEY | n/a | n/a | n/a | n/a | n/a | n/a | 128 | 500 | 1,334 | 766 | 256 | — |
| USA | 1,051 | — | — | — | — | — | — | — | — | — | — | — |

***Source:*** *European Covered Bond Council*

**1) Time series breaks**

**2) The series has been revised for at least two years in:**
none

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the conversion to euros was performed by the ECBC

# 24. Total Covered Bonds Outstanding

## As a Percentage of GDP, Backed by Mortgages, %

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 1.8 | 2.6 | 5.5 | 5.3 | 5.8 | 6.7 | 7.9 | 8.6 | 8.6 | 10.9 | 12.4 | 15.8 |
| BELGIUM | 0.0 | 0.0 | 0.0 | 0.7 | 2.1 | 2.6 | 3.6 | 3.9 | 3.4 | 4.4 | 5.0 | 9.1 |
| CYPRUS | 0.0 | 0.0 | 26.3 | 23.4 | 5.6 | 5.7 | 3.6 | 3.4 | 3.2 | 3.0 | 2.9 | 3.1 |
| CZECHIA | 5.5 | 5.3 | 5.2 | 5.6 | 6.6 | 7.1 | 6.9 | 7.4 | 8.0 | 6.5 | 6.3 | 8.4 |
| DENMARK | 138.1 | 136.7 | 139.4 | 141.2 | 139.0 | 139.2 | 138.4 | 137.5 | 133.5 | 131.1 | 129.6 | 134.1 |
| FINLAND | 4.2 | 5.4 | 9.5 | 13.3 | 14.6 | 15.5 | 16.1 | 15.5 | 15.3 | 16.0 | 15.7 | 18.6 |
| FRANCE | 7.0 | 7.8 | 9.2 | 10.0 | 9.6 | 8.8 | 8.6 | 8.0 | 8.1 | 8.2 | 8.6 | 9.6 |
| GERMANY | 9.2 | 8.6 | 8.3 | 7.9 | 7.1 | 6.5 | 6.5 | 6.6 | 6.6 | 6.9 | 6.9 | 7.3 |
| GREECE | 2.7 | 8.7 | 9.5 | 9.4 | 9.2 | 8.1 | 2.8 | 2.6 | 5.7 | 7.7 | 7.2 | 6.6 |
| HUNGARY | 7.8 | 6.4 | 5.1 | 5.0 | 3.9 | 3.1 | 2.7 | 1.9 | 2.1 | 2.8 | 2.6 | 3.3 |
| IRELAND | 17.5 | 17.3 | 17.6 | 14.3 | 11.6 | 9.5 | 6.4 | 6.3 | 5.5 | 6.4 | 5.4 | 4.5 |
| ITALY | 1.3 | 2.5 | 4.8 | 11.3 | 12.0 | 11.9 | 7.4 | 8.2 | 8.1 | 9.2 | 9.6 | 10.4 |
| LATVIA | 0.5 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LUXEMBOURG | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NETHERLANDS | 4.4 | 6.3 | 8.0 | 9.2 | 9.2 | 8.8 | 8.9 | 9.5 | 9.9 | 12.2 | 14.6 | 19.3 |
| POLAND | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.8 | 1.0 | 1.1 | 1.1 |
| PORTUGAL | 11.6 | 15.4 | 18.9 | 20.4 | 21.1 | 19.5 | 19.2 | 17.7 | 18.1 | 17.4 | 17.1 | 18.9 |
| SLOVAKIA | 5.6 | 5.1 | 5.3 | 5.2 | 5.5 | 5.2 | 5.3 | 5.2 | 6.1 | 5.4 | 7.1 | 8.0 |
| SPAIN | 31.5 | 32.0 | 34.7 | 39.4 | 32.8 | 27.4 | 23.4 | 20.9 | 18.6 | 17.7 | 17.7 | 20.6 |
| SWEDEN | 42.6 | 50.4 | 50.6 | 51.2 | 49.3 | 47.8 | 48.7 | 47.7 | 45.7 | 46.3 | 49.3 | 52.2 |
| ICELAND | 7.3 | 7.8 | 7.4 | 7.8 | 6.7 | 6.9 | 7.6 | 10.1 | 11.4 | 14.1 | 13.8 | 17.5 |
| NORWAY | 19.3 | 21.7 | 25.6 | 27.0 | 26.7 | 27.3 | 31.0 | 33.9 | 32.1 | 32.2 | 34.0 | 41.4 |
| SWITZERLAND | 11.9 | 14.7 | 14.3 | 16.5 | 17.2 | 18.8 | 17.6 | 18.7 | 17.9 | 19.2 | 19.6 | 21.4 |
| UNITED KINGDOM (regulated) | 6.3 | 6.7 | 6.4 | 7.0 | 5.5 | 5.0 | 4.0 | 4.0 | 3.8 | 3.9 | 4.3 | n/a |
| UNITED KINGDOM (non regulated) | 5.2 | 4.2 | 3.3 | 1.8 | 0.9 | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | n/a |
| AUSTRALIA | 0.0 | 0.0 | 0.2 | 3.1 | 4.6 | 5.4 | 5.7 | 6.5 | 5.4 | 5.4 | 5.2 | 5.4 |
| BRAZIL | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 0.0 | 0.1 | 0.3 |
| CANADA | 0.8 | 1.5 | 2.8 | 3.6 | 3.8 | 4.4 | 6.1 | 7.3 | 6.4 | 7.4 | 7.3 | 11.7 |
| JAPAN | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 0.0 | 0.1 | n/a |
| SINGAPORE | n/a | n/a | n/a | n/a | n/a | n/a | 0.3 | 0.7 | 1.8 | 2.7 | 2.7 | 3.0 |
| SOUTH KOREA | 0.1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 |
| TURKEY | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 0.1 | 0.3 | 0.4 | 0.3 | 0.3 |
| USA | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

***Sources:*** *European Covered Bond Council, Eurostat*

**1) Time series breaks**

**2) The series has been revised for at least two years in:**
- all countries

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- - : no active covered bond market
- For a detailed defintion of covered bonds, please see the glossary
- Please note that the conversion to euros was performed by the ECBC
- See Tables 22 and 27 for further notes

# 25. Total Residential Mortgage-Backed Securities (RMBS) Outstanding

EUR million

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 1,815 | 1,702 | 1,576 | 1,438 | 1,292 | 1,142 | 1,142 | n/a |
| BELGIUM | 63,318 | 55,813 | 47,729 | 44,817 | 45,070 | 38,575 | 30,743 | 25,067 |
| FINLAND | — | — | — | — | — | — | — | — |
| FRANCE | 10,237 | 50,147 | 59,336 | 63,008 | 78,996 | 83,279 | 97,215 | 81,727 |
| GERMANY | 23,793 | 20,158 | 26,563 | 26,016 | 28,141 | 29,296 | 5,075 | 4,307 |
| GREECE | 4,274 | 3,658 | 2,600 | 1,315 | 1,208 | 1,093 | 385 | 321 |
| IRELAND | 37,626 | 36,159 | 31,532 | 30,282 | 27,895 | 26,961 | 21,987 | 23,369 |
| ITALY | 90,205 | 80,685 | 69,473 | 60,816 | 60,435 | 60,094 | 59,645 | 49,369 |
| NETHERLANDS | 250,142 | 239,768 | 209,590 | 192,470 | 164,846 | 167,214 | 159,005 | 151,522 |
| PORTUGAL | 27,621 | 26,051 | 22,736 | 19,237 | 17,369 | 16,755 | 12,168 | 12,634 |
| SPAIN | 118,040 | 122,570 | 118,604 | 126,112 | 126,644 | 112,336 | 104,652 | 113,477 |
| SWEDEN | 380 | 302 | 499 | 611 | — | — | — | — |
| UNITED KINGDOM | 254,807 | 217,984 | 160,668 | 146,197 | 142,546 | 152,819 | 175,973 | 168,788 |
| RUSSIA | 1,281 | 505 | 380 | 1,004 | 1,868 | 3,083 | 2,842 | n/a |

***Source:*** *Association for Financial Markets in Europe (AFME)*

**1) Time series breaks**

**2) The series has been revised for at least two years in:**
none

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the conversion to euros was performed by AFME

# 26. Total RMBS Issuances

EUR million

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|
| BELGIUM | 2,018 | 0 | 1,216 | 3,636 | 6,680 | 0 | 6,960 | 593 |
| FRANCE | 0 | 47,216 | 11,362 | 10,360 | 28,212 | 13,640 | 21,810 | 12,150 |
| GERMANY | 0 | 40 | 20,487 | 0 | 2,500 | 0 | 0 | 0 |
| GREECE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IRELAND | 1,021 | 2,072 | 206 | 4,377 | 4,215 | 13,568 | 5,010 | 5,485 |
| ITALY | 4,914 | 4,756 | 6,589 | 6,760 | 12,880 | 11,940 | 13,586 | 578 |
| NETHERLANDS | 39,462 | 14,231 | 19,359 | 32,380 | 14,850 | 30,415 | 10,328 | 7,997 |
| PORTUGAL | 1,373 | 0 | 1,192 | 0 | 0 | 2,266 | 0 | 1,647 |
| SPAIN | 7,322 | 17,321 | 9,566 | 20,337 | 15,347 | 683 | 2,884 | 20,336 |
| SWEDEN | 284 | 0 | 358 | 214 | 313 | 0 | 0 | 0 |
| UNITED KINGDOM | 8,399 | 25,201 | 30,701 | 41,820 | 33,131 | 39,277 | 39,816 | 0 |

***Source:*** *Association for Financial Markets in Europe (AFME)*

**1) Time series breaks**
*All countries: 2007

**2) The series has been revised for at least two years in:**
- All countries

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the conversion to euros was performed by AFME

# D — MACROECONOMIC INDICATORS

## 27. GDP at Current Market Prices

EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 288,044 | 295,897 | 310,129 | 318,653 | 323,910 | 333,146 | 344,269 | 357,608 | 369,341 | 385,362 | 397,575 | 377,297 |
| BELGIUM | 346,473 | 363,140 | 375,968 | 386,175 | 392,880 | 403,003 | 416,701 | 430,085 | 445,050 | 460,370 | 476,344 | 451,177 |
| BULGARIA | 37,400 | 38,044 | 41,253 | 42,034 | 41,885 | 42,876 | 45,691 | 48,640 | 52,329 | 56,112 | 61,240 | 60,643 |
| CROATIA | 45,064 | 45,112 | 44,793 | 43,941 | 43,703 | 43,401 | 44,612 | 46,619 | 49,239 | 51,950 | 54,237 | 49,283 |
| CYPRUS | 18,676 | 19,410 | 19,803 | 19,441 | 17,995 | 17,409 | 17,884 | 18,929 | 20,120 | 21,433 | 22,287 | 20,841 |
| CZECHIA | 148,682 | 156,718 | 164,041 | 161,434 | 157,742 | 156,660 | 169,558 | 177,439 | 194,133 | 210,928 | 225,569 | 215,257 |
| DENMARK | 231,278 | 243,165 | 247,880 | 254,578 | 258,743 | 265,757 | 273,018 | 283,110 | 294,808 | 302,329 | 310,476 | 312,517 |
| ESTONIA | 14,212 | 14,861 | 16,827 | 18,051 | 19,033 | 20,180 | 20,782 | 21,932 | 23,858 | 25,938 | 28,112 | 27,167 |
| FINLAND | 181,747 | 188,143 | 197,998 | 201,037 | 204,321 | 206,897 | 211,385 | 217,518 | 226,301 | 233,468 | 240,097 | 236,188 |
| FRANCE | 1,936,422 | 1,995,289 | 2,058,369 | 2,088,804 | 2,117,189 | 2,149,765 | 2,198,432 | 2,234,129 | 2,297,242 | 2,363,306 | 2,437,635 | 2,302,860 |
| GERMANY | 2,445,730 | 2,564,400 | 2,693,560 | 2,745,310 | 2,811,350 | 2,927,430 | 3,026,180 | 3,134,740 | 3,267,160 | 3,367,860 | 3,473,350 | 3,367,560 |
| GREECE | 237,534 | 226,031 | 207,029 | 191,204 | 180,654 | 178,657 | 176,110 | 174,237 | 177,152 | 179,727 | 183,414 | 165,830 |
| HUNGARY | 94,383 | 98,987 | 101,553 | 99,734 | 102,032 | 105,906 | 112,701 | 116,130 | 126,891 | 135,941 | 146,093 | 135,925 |
| IRELAND | 170,101 | 167,732 | 170,827 | 175,116 | 179,661 | 194,818 | 262,800 | 270,058 | 296,925 | 326,043 | 356,526 | 372,869 |
| ITALY | 1,069,323 | 1,072,709 | 1,063,763 | 1,031,099 | 1,020,348 | 1,032,158 | 1,655,355 | 1,695,787 | 1,736,593 | 1,771,566 | 1,790,942 | 1,651,595 |
| LATVIA | 18,807 | 17,818 | 20,219 | 22,098 | 22,845 | 23,654 | 24,561 | 25,360 | 26,962 | 29,143 | 30,421 | 29,334 |
| LITHUANIA | 26,935 | 27,955 | 31,234 | 33,332 | 34,985 | 36,545 | 37,346 | 38,890 | 42,276 | 45,491 | 48,809 | 48,930 |
| LUXEMBOURG | 36,977 | 40,178 | 43,165 | 44,112 | 46,500 | 49,825 | 52,066 | 54,867 | 56,814 | 60,053 | 63,516 | 64,143 |
| MALTA | 6,139 | 6,600 | 6,840 | 7,171 | 7,652 | 8,526 | 9,997 | 10,567 | 11,717 | 12,595 | 13,590 | 12,701 |
| NETHERLANDS | 624,842 | 639,187 | 650,359 | 652,966 | 660,463 | 671,560 | 690,008 | 708,337 | 738,146 | 773,987 | 813,055 | 800,095 |
| POLAND | 317,081 | 361,804 | 380,242 | 389,377 | 394,734 | 411,163 | 430,466 | 427,092 | 467,427 | 497,842 | 533,600 | 523,038 |
| PORTUGAL | 175,416 | 179,611 | 176,096 | 168,296 | 170,492 | 173,054 | 179,713 | 186,490 | 195,947 | 205,184 | 213,949 | 202,441 |
| ROMANIA | 125,214 | 125,409 | 131,925 | 133,147 | 143,802 | 150,458 | 160,150 | 170,063 | 187,773 | 204,497 | 222,998 | 218,165 |
| SLOVAKIA | 64,096 | 68,093 | 71,214 | 73,484 | 74,355 | 76,256 | 79,768 | 81,052 | 84,489 | 89,357 | 93,901 | 91,555 |
| SLOVENIA | 36,255 | 36,364 | 37,059 | 36,253 | 36,454 | 37,634 | 38,853 | 40,443 | 43,009 | 45,863 | 48,393 | 46,297 |
| SPAIN | 1,069,323 | 1,072,709 | 1,063,763 | 1,031,099 | 1,020,348 | 1,032,158 | 1,077,590 | 1,113,840 | 1,161,867 | 1,204,241 | 1,244,772 | 1,121,698 |
| SWEDEN | 314,638 | 374,695 | 412,845 | 430,037 | 441,851 | 438,834 | 455,495 | 466,267 | 480,026 | 470,673 | 476,870 | 474,724 |
| EURO AREA 19 | 8,767,050 | 8,996,126 | 9,214,220 | 9,243,699 | 9,341,436 | 9,572,674 | 10,519,800 | 10,814,869 | 11,220,969 | 11,600,985 | 11,976,687 | 11,390,577 |
| EU 27 | 10,080,790 | 10,440,060 | 10,738,750 | 10,797,981 | 10,925,927 | 11,187,730 | 12,211,490 | 12,550,228 | 13,073,594 | 13,531,257 | 14,007,767 | 13,380,129 |
| ICELAND | 9,426,4 | 10,332,4 | 10,889,0 | 11,458,5 | 12,064,1 | 13,389,9 | 15,795,3 | 18,804,2 | 21,917,7 | 22,207,3 | 22,182,0 | 19,022 |
| NORWAY | 278,246,6 | 323,760,9 | 358,339,5 | 396,523,5 | 393,408,7 | 375,947,3 | 347,632,1 | 333,471,3 | 353,316,4 | 370,294,3 | 362,242,6 | 318,336 |
| SWITZERLAND | 390,207 | 441,086 | 504,021 | 519,716 | 518,380 | 534,924 | 632,771 | 628,730 | 623,994 | 623,042 | 653,470,8 | 655,978 |
| UNITED KINGDOM | 1,737,000 | 1,867,396 | 1,912,458 | 2,111,708 | 2,098,426 | 2,309,785 | 2,640,935 | 2,435,055 | 2,363,109 | 2,423,737 | 2,523,313 | n/a |
| AUSTRALIA | 643,599 | 855,319 | 1,074,702 | 1,165,829 | 1,136,378 | 1,202,206 | 1,218,291 | 1,092,101 | 1,176,585 | 1,213,278 | 1,247,492 | 1,165,208 |
| BRAZIL | 1,157,170 | 1,653,100 | 2,021,950 | 1,868,416 | 1,793,058 | 2,022,892 | 1,624,348 | 1,622,279 | 1,826,598 | 1,623,156 | 1,677,365 | 1,264,869 |
| CANADA | 951,793 | 1,207,561 | 1,382,750 | 1,382,421 | 1,335,667 | 1,483,799 | 1,402,892 | 1,380,427 | 1,459,915 | 1,457,962 | 1,555,673 | 1,438,809 |
| JAPAN | 3,631,392 | 4,265,902 | 4,758,837 | 4,701,541 | 3,738,465 | 3,993,685 | 3,956,265 | 4,447,139 | 4,308,103 | 4,195,433 | 4,524,228 | n/a |
| RUSSIA | 848,704 | 1,141,233 | 1,570,267 | 1,644,796 | 1,617,450 | 1,699,747 | 1,228,915 | 1,153,480 | 1,393,467 | 1,403,327 | 1,507,323 | 1,298,807 |
| SINGAPORE | 137,947 | 178,337 | 198,252 | 226,240 | 229,241 | 234,505 | 277,606 | 287,979 | 303,919 | 318,359 | 334,423 | 297,670 |
| SOUTH KOREA | 646,641 | 825,601 | 863,839 | 951,749 | 983,062 | 1,062,351 | 1,321,112 | 1,355,237 | 1,437,463 | 1,460,496 | 1,470,960 | 1,427,530 |
| TURKEY | 447,492 | 577,666 | 643,440 | 662,409 | 689,287 | 769,432 | 779,015 | 785,701 | 760,376 | 659,083 | 680,150 | 630,451 |
| USA | 10,008,843 | 11,199,201 | 11,993,142 | 12,244,395 | 12,103,196 | 14,325,923 | 16,438,306 | 16,934,751 | 17,299,265 | 17,452,888 | 19,145,355 | 18,330,065 |

***Sources:*** *Eurostat, World Bank*

**1) Time series breaks:**
- For all counties: 2003 and onwards

**2) The series has been revised for at least two years in:**
- All countries

**3) Notes:**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the GDP at current prices has been taken in euros directly from Eurostat.
- Please note that for the non European countries GDP figures have been downloaded from the World Bank and the year-average USD/EUR exchange rate (Table 30) has been applied

# 28. Gross Disposable Income of Households

EUR million

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 182,800 | 184,500 | 189,400 | 196,900 | 197,400 | 202,900 | 205,600 | 214,000 | 221,200 | 229,000 | 236,400 | 230,500 |
| BELGIUM | 215,900 | 218,500 | 225,100 | 231,600 | 234,800 | 237,600 | 241,200 | 248,300 | 258,000 | 266,300 | 277,900 | 285,300 |
| BULGARIA | 23,600 | 24,000 | 25,700 | 25,800 | 26,200 | 26,400 | 27,400 | 28,700 | 30,700 | n/a | n/a | n/a |
| CROATIA | 28,700 | 28,800 | 28,600 | 27,600 | 27,600 | 26,900 | 27,900 | 28,800 | 30,300 | 32,100 | 33,500 | n/a |
| CYPRUS | 13,100 | 13,400 | 13,700 | 13,300 | 12,600 | 11,800 | 11,800 | 12,500 | 13,200 | 14,100 | 14,600 | 14,000 |
| CZECHIA | 83,400 | 88,200 | 91,300 | 90,600 | 87,900 | 85,800 | 89,700 | 93,700 | 103,000 | 112,800 | 119,500 | 122,100 |
| DENMARK | 110,400 | 116,800 | 120,800 | 123,500 | 125,600 | 127,300 | 132,700 | 138,900 | 143,500 | 147,900 | 151,800 | 153,200 |
| ESTONIA | 8,500 | 8,500 | 9,200 | 9,500 | 10,300 | 10,900 | 11,500 | 11,800 | 12,900 | 14,100 | 15,500 | 15,500 |
| FINLAND | 105,700 | 109,900 | 114,300 | 117,700 | 120,700 | 122,000 | 124,000 | 126,400 | 129,500 | 133,800 | 138,100 | 139,100 |
| FRANCE | 1,273,200 | 1,309,200 | 1,334,900 | 1,349,100 | 1,343,500 | 1,361,600 | 1,377,400 | 1,402,400 | 1,438,600 | 1,481,100 | 1,526,300 | 1,542,900 |
| GERMANY | 1,620,500 | 1,658,200 | 1,716,100 | 1,758,500 | 1,787,400 | 1,834,100 | 1,884,800 | 1,949,000 | 2,016,300 | 2,089,800 | 2,157,500 | 2,176,500 |
| GREECE | 173,300 | 157,400 | 141,900 | 126,500 | 118,100 | 118,200 | 117,800 | 114,600 | 116,500 | 118,200 | 122,700 | 120,700 |
| HUNGARY | 55,000 | 57,500 | 60,700 | 59,800 | 60,300 | 60,500 | 62,700 | 65,700 | 71,300 | 76,500 | 81,900 | 78,400 |
| IRELAND | 92,500 | 90,400 | 84,700 | 87,300 | 87,100 | 88,800 | 92,700 | 97,200 | 103,900 | 108,900 | 116,800 | 123,100 |
| ITALY | 1,097,800 | 1,097,000 | 1,125,600 | 1,094,800 | 1,100,000 | 1,106,900 | 1,120,400 | 1,134,800 | 1,158,000 | 1,178,600 | 1,188,100 | 1,154,300 |
| LATVIA | 12,900 | 11,900 | 12,000 | 13,000 | 13,500 | 14,300 | 15,100 | 15,900 | 16,800 | 18,000 | 18,600 | 19,000 |
| LITHUANIA | 19,100 | 19,400 | 20,300 | 21,200 | 22,200 | 22,500 | 23,200 | 24,900 | 26,000 | 27,700 | 30,500 | 32,800 |
| LUXEMBOURG | 15,700 | 16,300 | 16,700 | 17,700 | 18,300 | 19,400 | 19,700 | 20,100 | 21,500 | 22,700 | 24,300 | 25,600 |
| NETHERLANDS | 314,300 | 319,100 | 326,100 | 328,800 | 332,200 | 340,200 | 346,500 | 356,600 | 365,400 | 382,600 | 398,000 | 413,600 |
| POLAND | 199,800 | 227,600 | 232,600 | 238,600 | 242,000 | 249,800 | 257,500 | 259,600 | 280,100 | 293,500 | 315,300 | 322,200 |
| PORTUGAL | 127,900 | 129,900 | 127,300 | 123,800 | 122,700 | 122,400 | 126,600 | 131,400 | 135,500 | 141,400 | 147,100 | 148,600 |
| ROMANIA | 65,600 | 73,100 | 72,200 | 70,100 | 77,400 | 77,900 | 83,600 | 91,700 | 104,200 | 112,400 | 128,700 | 136,900 |
| SLOVAKIA | 40,500 | 41,500 | 42,000 | 43,500 | 43,700 | 44,600 | 46,600 | 48,400 | 50,800 | 55,500 | 58,300 | 59,300 |
| SLOVENIA | 22,800 | 23,100 | 23,600 | 23,000 | 23,000 | 23,300 | 23,700 | 24,700 | 25,900 | 27,500 | 29,100 | 30,500 |
| SPAIN | 687,100 | 690,300 | 694,500 | 658,200 | 655,900 | 656,200 | 682,200 | 700,600 | 722,900 | 744,900 | 764,600 | 739,600 |
| SWEDEN | 158,900 | 184,900 | 204,900 | 222,400 | 229,400 | 225,200 | 227,400 | 234,700 | 239,600 | 235,200 | 239,700 | 242,300 |
| EURO AREA 19 | 6,009,400 | 6,085,800 | 6,207,100 | 6,214,000 | 6,245,900 | 6,336,200 | 6,466,200 | 6,624,300 | 6,820,400 | 7,045,000 | 7,255,500 | n/a |
| EU 27 | 6,763,900 | 6,905,300 | 7,068,700 | 7,089,400 | 7,135,900 | 7,216,700 | 7,365,600 | 7,564,400 | 7,818,400 | 8,073,600 | 8,333,500 | n/a |
| ICELAND | 4,400 | 4,200 | 4,600 | 5,100 | 5,300 | 6,000 | n/a | n/a | n/a | n/a | n/a | n/a |
| NORWAY | 124,100 | 142,000 | 154,100 | 169,500 | 172,300 | 168,600 | 169,400 | 166,000 | 172200 | 173,100 | 176,500 | 167,700 |
| SWITZERLAND | 256,900 | 286,500 | 323,000 | 334,800 | 335,500 | 344,100 | 391,700 | 388,300 | 381700 | 375,000 | 394300 | 426,300 |
| UNITED KINGDOM | 1,201,200 | 1,274,700 | 1,283,800 | 1,433,300 | 1,420,300 | 1,547,900 | 1,821,500 | 1,644,500 | 1,569,800 | 1,629,000 | 1,693,700 | 1,686,200 |
| JAPAN | 2,478,500 | 2,788,400 | 2,899,400 | 3,139,700 | 2,478,700 | 2,303,400 | 2,443,100 | 2,753,400 | 2,633,300 | 2,614,500 | 2,791,900 | 2,861,000 |
| TURKEY | 316,700 | 401,300 | 413,200 | 463,300 | 496,000 | 488,600 | 535,800 | 538,700 | 519,100 | n/a | n/a | n/a |
| UNITED STATES | 8,011,000 | 8,741,900 | 8,738,500 | 9,966,100 | 9,671,500 | 10,210,400 | 12,739,000 | 13,135,700 | 13,470,400 | 13,665,700 | 15,216,600 | 16,386,300 |

***Sources:*** *European Commission (AMECO Database), National Statistical Offices*

**1) Time series breaks:**
Croatia (2016) data from the ECB

**2) The series has been revised for at least two years in:**
- All countries

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available
- Please note that the disposable income of households at current prices has been taken in euros directly from AMECO, except for Greece which was taken from ELSTAT
- Figures from Malta not available

# 29. Population over 18

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUSTRIA | 6,772,979 | 6,809,974 | 6,851,056 | 6,899,032 | 6,953,033 | 7,015,329 | 7,093,573 | 7,187,684 | 7,247,528 | 7,288,698 | 7,322,817 | 7,358,443 |
| BELGIUM | 8,547,467 | 8,625,749 | 8,756,344 | 8,820,030 | 8,870,350 | 8,905,031 | 8,952,757 | 9,012,839 | 9,047,019 | 9,089,375 | 9,142,017 | 9,202,196 |
| BULGARIA | 6,244,348 | 6,216,530 | 6,181,328 | 6,145,788 | 6,106,540 | 6,066,969 | 6,019,998 | 5,963,884 | 5,907,405 | 5,857,288 | 5,810,294 | 5,761,802 |
| CROATIA | 3,498,685 | 3,497,838 | 3,489,107 | 3,482,850 | 3,475,931 | 3,470,956 | 3,461,959 | 3,443,950 | 3,422,613 | 3,388,668 | 3,370,748 | 3,360,840 |
| CYPRUS | 619,004 | 640,785 | 661,878 | 684,689 | 690,884 | 687,113 | 677,766 | 679,378 | 686,783 | 695,662 | 706,661 | 717,452 |
| CZECHIA | 8,576,764 | 8,617,502 | 8,639,375 | 8,668,769 | 8,676,895 | 8,662,146 | 8,665,578 | 8,657,996 | 8,657,869 | 8,661,165 | 8,674,679 | 8,694,474 |
| DENMARK | 4,294,246 | 4,319,228 | 4,349,596 | 4,378,227 | 4,412,327 | 4,449,811 | 4,489,821 | 4,539,791 | 4,580,547 | 4,615,690 | 4,645,697 | 4,666,625 |
| ESTONIA | 1,088,470 | 1,087,930 | 1,085,600 | 1,081,355 | 1,076,483 | 1,072,179 | 1,070,126 | 1,068,953 | 1,065,855 | 1,067,016 | 1,070,375 | 1,071,932 |
| FINLAND | 4,234,754 | 4,262,971 | 4,290,980 | 4,319,501 | 4,347,944 | 4,374,590 | 4,396,261 | 4,414,248 | 4,431,392 | 4,446,869 | 4,459,828 | 4,476,235 |
| FRANCE | 50,026,691 | 50,289,714 | 50,561,775 | 50,783,443 | 51,023,819 | 51,422,252 | 51,675,217 | 51,855,973 | 52,064,447 | 52,304,601 | 52,551,448 | 52,780,048 |
| GERMANY | 68,318,799 | 68,320,564 | 66,963,546 | 67,184,948 | 67,432,859 | 67,691,934 | 68,085,517 | 68,850,007 | 69,051,391 | 69,254,205 | 69,421,785 | 69,488,809 |
| GREECE | 9,119,797 | 9,152,259 | 9,165,757 | 9,131,374 | 9,063,145 | 9,002,883 | 8,958,738 | 8,907,030 | 8,889,805 | 8,869,134 | 8,862,859 | 8,864,187 |
| HUNGARY | 8,176,847 | 8,187,583 | 8,187,767 | 8,148,079 | 8,151,220 | 8,142,944 | 8,133,934 | 8,114,580 | 8,083,674 | 8,063,258 | 8,061,304 | 8,060,478 |
| IRELAND | 3,415,449 | 3,425,549 | 3,430,232 | 3,434,216 | 3,444,289 | 3,463,560 | 3,495,568 | 3,539,203 | 3,590,330 | 3,634,536 | 3,703,238 | 3,762,805 |
| ITALY | 48,948,648 | 49,125,682 | 49,321,210 | 49,396,435 | 49,662,299 | 50,624,663 | 50,699,447 | 50,657,518 | 50,678,735 | 50,677,616 | 50,243,518 | 50,208,329 |
| LATVIA | 1,774,385 | 1,745,489 | 1,714,389 | 1,693,261 | 1,676,807 | 1,655,631 | 1,637,436 | 1,616,659 | 1,593,589 | 1,575,617 | 1,561,155 | 1,548,218 |
| LITHUANIA | 2,559,069 | 2,539,358 | 2,477,645 | 2,447,378 | 2,428,149 | 2,410,825 | 2,396,789 | 2,370,357 | 2,337,516 | 2,305,886 | 2,294,609 | 2,295,269 |
| LUXEMBOURG | 387,286 | 394,805 | 403,289 | 415,783 | 426,500 | 437,663 | 449,861 | 461,711 | 474,986 | 485,200 | 496,015 | 506,569 |
| MALTA | 330,123 | 334,759 | 337,240 | 340,819 | 346,271 | 353,065 | 362,652 | 372,709 | 381,876 | 396,538 | 413,363 | 432,616 |
| NETHERLANDS | 12,957,546 | 13,060,511 | 13,153,716 | 13,243,578 | 13,316,082 | 13,386,487 | 13,471,533 | 13,562,539 | 13,677,409 | 13,794,988 | 13,924,408 | 14,070,340 |
| POLAND | 30,786,207 | 30,756,819 | 30,878,251 | 30,981,112 | 31,057,690 | 31,083,811 | 31,120,744 | 31,120,076 | 31,126,994 | 31,102,681 | 31,077,952 | 31,044,901 |
| PORTUGAL | 8,585,358 | 8,615,642 | 8,643,390 | 8,640,208 | 8,607,853 | 8,574,343 | 8,549,207 | 8,539,134 | 8,529,440 | 8,535,618 | 8,546,942 | 8,578,859 |
| ROMANIA | 16,539,284 | 16,417,888 | 16,336,812 | 16,254,443 | 16,234,182 | 16,204,893 | 16,135,980 | 16,036,403 | 15,939,348 | 15,845,966 | 15,757,669 | 15,684,219 |
| SLOVAKIA | 4,320,057 | 4,343,880 | 4,361,987 | 4,385,503 | 4,401,188 | 4,410,901 | 4,419,854 | 4,426,496 | 4,432,721 | 4,436,138 | 4,438,462 | 4,437,897 |
| SLOVENIA | 1,685,679 | 1,698,911 | 1,699,493 | 1,702,224 | 1,702,827 | 1,703,087 | 1,702,971 | 1,701,967 | 1,701,642 | 1,700,354 | 1,712,175 | 1,724,466 |
| SPAIN | 38,051,708 | 38,223,380 | 38,356,620 | 38,460,731 | 38,356,537 | 38,162,985 | 38,102,545 | 38,093,066 | 38,170,911 | 38,306,476 | 38,600,666 | 39,006,858 |
| SWEDEN | 7,331,508 | 7,419,589 | 7,496,476 | 7,563,649 | 7,627,772 | 7,692,386 | 7,762,073 | 7,825,940 | 7,918,746 | 7,998,644 | 8,074,806 | 8,147,081 |
| EURO AREA 19 | 271,743,269 | 272,697,912 | 272,236,147 | 273,064,508 | 273,827,319 | 275,354,521 | 276,197,818 | 277,317,471 | 278,053,375 | 278,864,527 | 279,472,341 | 280,531,528 |
| EU 27 | 357,191,158 | 358,130,889 | 357,794,859 | 358,687,425 | 359,569,876 | 361,128,437 | 361,987,905 | 363,020,091 | 363,690,571 | 364,397,887 | 364,945,490 | 365,951,948 |
| ICELAND | 238,587 | 236,948 | 238,035 | 239,724 | 242,099 | 245,631 | 249,094 | 252,974 | 258,565 | 268,067 | 276,283 | 282,770 |
| NORWAY | 3,695,771 | 3,749,043 | 3,805,931 | 3,867,645 | 3,928,378 | 3,982,920 | 4,040,722 | 4,083,702 | 4,127,266 | 4,166,612 | 4,205,704 | 4,248,972 |
| SWITZERLAND | 6,250,712 | 6,336,785 | 6,416,153 | 6,497,511 | 6,577,492 | 6,667,327 | 6,755,656 | 6,833,218 | 6,909,664 | 6,963,149 | 7,014,296 | 7,063,672 |
| UNITED KINGDOM | 48,704,715 | 49,140,673 | 49,605,268 | 50,009,997 | 50,341,542 | 50,705,811 | 51,124,363 | 51,553,340 | 51,923,025 | 52,257,210 | 52,555,501 | n/a |
| AUSTRALIA | 16,660,075 | 16,966,518 | 17,201,178 | 17,527,242 | 17,864,524 | 18,161,511 | 18,442,952 | 18,728,480 | 19,030,497 | 19,302,601 | 19,579,499 | 19,818,097 |
| BRAZIL | 135,000,068 | 137,398,556 | 139,135,881 | 141,419,613 | 143,699,108 | 145,991,053 | 148,303,939 | 150,513,508 | 152,719,837 | 154,877,574 | 156,961,315 | 158,962,081 |
| CANADA | 26,240,250 | 26,639,421 | 27,397,198 | 27,764,999 | 28,137,318 | 28,493,536 | 28,764,287 | 29,153,465 | 29,547,653 | 30,007,116 | 30,472,820 | 30,843,577 |
| JAPAN | 107,175,120 | 107,341,582 | 107,209,965 | 107,115,304 | 107,055,131 | 107,028,302 | 107,060,042 | 107,070,678 | 107,060,114 | 107,022,933 | 106,978,067 | 106,779,055 |
| RUSSIA | 116,585,375 | 116,753,200 | 116,744,421 | 116,699,798 | 116,556,297 | 116,317,518 | 115,977,920 | 115,521,843 | 115,035,452 | 114,479,475 | 113,936,015 | 113,266,874 |
| TURKEY | 49,019,859 | 49,922,901 | 50,052,438 | 51,068,774 | 52,136,638 | 53,243,860 | 54,384,931 | 55,553,321 | 56,757,773 | 57,947,749 | 59,074,052 | 60,057,715 |
| SINGAPORE | 3,891,912 | 3,982,471 | 4,251,818 | 4,382,307 | 4,473,234 | 4,548,982 | 4,622,463 | 4,719,440 | 4,745,652 | 4,781,704 | 4,847,799 | 4,839,217 |
| SOUTH KOREA | 38,956,094 | 39,443,455 | 40,053,363 | 40,573,722 | 41,057,070 | 41,611,416 | 42,127,148 | 42,548,832 | 42,923,262 | 43,368,344 | 43,655,455 | 43,869,944 |
| USA | 232,637,362 | 235,223,828 | 235,994,077 | 238,595,009 | 241,135,145 | 243,760,867 | 246,341,336 | 248,832,452 | 251,020,457 | 252,906,846 | 253,274,655 | 255,142,036 |

***Sources:*** *Eurostat, US Bureau of Census, World Bank*

**1) Time series breaks**

**2) The series has been revised for at least two years in:**

- France
- Italy

**3) Notes**

- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available

# 30. Bilateral Nominal Exchange Rate with the Euro

| END-OF-YEAR | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EU 27** | | | | | | | | | | | | |
| Bulgarian lev | 1.956 | 1.956 | 1.956 | 1.956 | 1.956 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.95583 | 1.9558 | 1.9558 |
| Croatian kuna | 7.300 | 7.383 | 7.537 | 7.558 | 7.627 | 7.658 | 7.638 | 7.560 | 7.44 | 7.413 | 7.440 | 7.552 |
| Czech koruna | 26.47 | 25.06 | 25.79 | 25.15 | 27.43 | 27.735 | 27.023 | 27.02 | 25.535 | 25.724 | 25.408 | 26.242 |
| Danish krone | 7.442 | 7.454 | 7.434 | 7.461 | 7.459 | 7.4453 | 7.4626 | 7.434 | 7.4449 | 7.4673 | 7.4715 | 7.4409 |
| Hungarian forint | 270.4 | 278.0 | 314.6 | 292.3 | 297.0 | 315.54 | 315.98 | 309.8 | 310.33 | 320.98 | 330.53 | 363.89 |
| Polish zloty | 4.105 | 3.975 | 4.458 | 4.074 | 4.154 | 4.2732 | 4.264 | 4.410 | 4.177 | 4.3014 | 4.2568 | 4.5597 |
| Romanian leu | 4.236 | 4.262 | 4.323 | 4.445 | 4.471 | 4.4828 | 4.524 | 4.539 | 4.6585 | 4.653087 | 4.783 | 4.8683 |
| Swedish krona | 10.25 | 8.966 | 8.912 | 8.582 | 8.859 | 9.393 | 9.190 | 9.553 | 9.8438 | 10.2548 | 10.4468 | 10.0343 |
| **NON-EU** | | | | | | | | | | | | |
| Australian dollar | 1.6008 | 1.3136 | 1.2723 | 1.2712 | 1.5423 | 1.4829 | 1.4897 | 1.4596 | 1.5346 | 1.622 | 1.5995 | 1.5896 |
| Brazilian real | 2.5113 | 2.2177 | 2.4159 | 2.7036 | 3.2576 | 3.2207 | 4.3117 | 3.4305 | 3.9729 | 4.444 | 4.5157 | 6.3735 |
| Canadian dollar | 1.5128 | 1.3322 | 1.3215 | 1.3137 | 1.4671 | 1.4063 | 1.5116 | 1.4188 | 1.5039 | 1.5605 | 1.4598 | 1.5633 |
| Icelandic krona* | 179.76 | 153.78 | 158.98 | 168.89 | 158.29 | 154.31 | 141.38 | 119.15 | 124.209 | 133.206201 | 135.85 | 136.9 |
| Japanese yen | 133.16 | 108.65 | 100.20 | 113.61 | 144.72 | 145.23 | 131.07 | 123.40 | 135.01 | 125.85 | 121.94 | 126.49 |
| Norwegian krone | 8.300 | 7.800 | 7.754 | 7.348 | 8.363 | 9.042 | 9.603 | 9.086 | 9.8403 | 9.948 | 9.8638 | 10.470 |
| Russian rouble | 43.15 | 40.82 | 41.77 | 40.33 | 45.32 | 72.337 | 80.67 | 64.30 | 69.392 | 79.7153 | 69.956 | 91.47 |
| Singapore Dollar | 2.02 | 1.81 | 1.75 | 1.61 | 1.66 | 1.6823 | 1.53 | 1.53 | 1.5588 | 1.5591 | 1.5111 | 1.6218 |
| South Korean won | 1666.97 | 1499.06 | 1498.69 | 1406.23 | 1450.93 | 1324.8 | 1280.78 | 1269.34 | 1279.61 | 1277.93 | 1296.28 | 1336.00 |
| Swiss franc | 1.4836 | 1.2504 | 1.2154 | 1.2072 | 1.2276 | 1.2024 | 1.0835 | 1.0739 | 1.1702 | 1.1269 | 1.0854 | 1.0802 |
| Turkish lira | — | — | — | 2.355 | 2.961 | 2.832 | 3.177 | 3.707 | 4.5464 | 6.059 | 6.684 | 9.113 |
| UK pound sterling | 0.888 | 0.861 | 0.835 | 0.816 | 0.834 | 0.7789 | 0.73395 | 0.856 | 0.88723 | 0.89453 | 0.8508 | 0.89903 |
| US dollar | — | — | — | 1.319 | 1.379 | 1.2141 | 1.089 | 1.054 | 1.1993 | 1.145 | 1.123 | 1.227 |

| YEARLY AVERAGE | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EU 27** | | | | | | | | | | | | |
| Bulgarian lev | 1.956 | 1.956 | 1.956 | 1.956 | 1.956 | 1.956 | 1.956 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 |
| Croatian kuna | 7.340 | 7.289 | 7.439 | 7.522 | 7.579 | 7.634 | 7.614 | 7.5333 | 7.4637 | 7.4182 | 7.418 | 7.5384 |
| Czech koruna | 26.435 | 25.284 | 24.590 | 25.149 | 25.980 | 27.536 | 27.279 | 27.034 | 26.326 | 25.647 | 25.67 | 26.455 |
| Danish krone | 7.446 | 7.447 | 7.451 | 7.444 | 7.458 | 7.455 | 7.459 | 7.4452 | 7.4452 | 7.4532 | 7.4661 | 7.4542 |
| Hungarian forint | 280.330 | 275.480 | 279.370 | 289.250 | 296.870 | 308.710 | 310.000 | 311.44 | 309.190 | 318.89 | 325.3 | 351.25 |
| Polish zloty | 4.328 | 3.995 | 4.121 | 4.185 | 4.198 | 4.184 | 4.184 | 4.3632 | 4.2570 | 4.2615 | 4.2976 | 4.443 |
| Romanian leu | 4.240 | 4.212 | 4.239 | 4.459 | 4.419 | 4.444 | 4.445 | 4.4904 | 4.5688 | 4.654 | 4.7453 | 4.8383 |
| Swedish krona | 10.619 | 9.537 | 9.030 | 8.704 | 8.652 | 9.099 | 9.354 | 9.4689 | 9.6351 | 10.2583 | 10.5891 | 10.4848 |
| **NON-EU** | | | | | | | | | | | | |
| Australian dollar | 1.7727 | 1.4423 | 1.3484 | 1.2407 | 1.3777 | 1.4719 | 1.4777 | 1.4883 | 1.4732 | 1.5797 | 1.6109 | 1.6549 |
| Brazilian real | 2.7674 | 2.3314 | 2.3265 | 2.5084 | 2.8687 | 3.1211 | 3.7004 | 3.8561 | 3.6054 | 4.3085 | 4.4134 | 5.8943 |
| Canadian dollar | 1.585 | 1.365 | 1.376 | 1.284 | 1.368 | 1.466 | 1.4186 | 1.4659 | 1.4647 | 1.5294 | 1.4855 | 1.53 |
| Icelandic krona | 172.730 | 161.950 | 161.490 | 160.930 | 162.200 | 154.850 | 144.390 | 131.010 | 120.540 | 127.890 | 137.280 | 154.590 |
| Japanese yen | 130.340 | 116.240 | 110.960 | 102.490 | 129.660 | 140.310 | 134.310 | 120.2 | 126.710 | 130.4 | 122.01 | 121.85 |
| Norwegian krone | 8.728 | 8.004 | 7.793 | 7.475 | 7.807 | 8.354 | 8.9496 | 9.2906 | 9.3270 | 9.5975 | 9.8511 | 10.7228 |
| Russian rouble | 44.138 | 40.263 | 40.885 | 39.926 | 42.337 | 50.952 | 68.072 | 74.1446 | 65.9383 | 74.0416 | 72.4553 | 82.7248 |
| Singapore Dollar | 2.024 | 1.806 | 1.749 | 1.606 | 1.662 | 1.682 | 1.5255 | 1.5275 | 1.5588 | 1.5926 | 1.5273 | 1.5742 |
| South Korean won | 1 772.900 | 1 531.82 | 1 541.23 | 1 447.69 | 1 453.91 | 1 398.14 | 1256.54 | 1284.18 | 1276.740 | 1299.07 | 1305.32 | 1345.58 |
| Swiss franc | 1.510 | 1.380 | 1.233 | 1.205 | 1.231 | 1.215 | 1.0679 | 1.0902 | 1.112 | 1.155 | 1.1124 | 1.0705 |
| Turkish lira | 2.163 | 1.997 | 2.338 | 2.314 | 2.534 | 2.907 | 3.0255 | 3.3433 | 4.121 | 5.7077 | 6.3578 | 8.0547 |
| UK pound sterling | 0.891 | 0.858 | 0.868 | 0.811 | 0.849 | 0.806 | 0.726 | 0.81948 | 0.8767 | 0.88471 | 0.87777 | 0.8897 |
| US dollar | 1.395 | 1.326 | 1.392 | 1.285 | 1.328 | 1.329 | 1.110 | 1.1069 | 1.130 | 1.181 | 1.1195 | 1.1422 |

***Source:** European Central Bank*

**1) Time series breaks**

**2) The series has been revised for:**
- Icelandic krona

**3) Notes**
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available

* For Iceland, the source for end-of-year was Bloomberg.

**For Exchange Rates

## A — THE MORTGAGE MARKET

### 1. TOTAL OUTSTANDING RESIDENTIAL LOANS TOTAL AMOUNT, END OF THE YEAR, EUR MILLION

Total residential loans on lender's books at the end of the period. The definition of residential loans can vary somewhat across EU27 countries, depending on the collateral system and the purpose of the loans. Some countries only integrate secured residential loans, while some others include both secured and non-secured loans. In some countries, this collateral is generally the property, whilst some others favour a system of personal guarantees.

Regarding the purpose, a few countries exclude residential loans whose purpose is above all commercial (such as purchasing a building to let). In addition, there are some methodological differences across EU27 countries regarding the statistical treatment of loans made for renovations of existing dwellings: under some assumptions, some of these loans can be considered as consumption loans.

The conversion to EUR is based on the bilateral exchange rate at the end of the period (provided by the European Central Bank).

### 2. CHANGE IN OUTSTANDING RESIDENTIAL LOANS END OF PERIOD, EUR MILLION

Year-on-year changes in Table 2. It also corresponds to new residential loans advanced during the period minus repayments.

### 3. GROSS RESIDENTIAL LOANS TOTAL AMOUNT, EUR MILLION

Total amount of residential loans advanced during the period. Gross lending includes new mortgage loans and external remortgaging (i.e. remortgaging with another bank) in most countries. Internal remortgaging (i.e. remortgaging with the same bank) is not included, unless it is otherwise stated.

The conversion to EUR is based on the average bilateral exchange rate over the given year (provided by the European Central Bank).

**Denmark:** Denmark the figure does not include second homes.

**Italy:** Includes the total value of residential loans during the period, including new lending and remortgaging/refinancing of existing loan on same property.

**Poland:** The estimated value of newly granted loans was based on increases in the volume of loans to households adjusted for loan amortization and flows between the foreign currency loan portfolio and the zloty loan portfolio; the entire banking system was taken into account, including credit unions.

**Spain:** Total amount of loans and credits to households.

**Sweden:** The figures covers only gross lending by mortgage institutions. New mortgage lending from banks are not included.

### 4. REPRESENTATIVE INTEREST RATES ON NEW MORTGAGE LOANS, PERCENT

This series aims at providing the most representative figures on interest rates on mortgage loans in the EU 27 countries and beyond. For most of these countries, the source of the data is the European Central Bank (ECB), which in turn collects data from the respective national central bank. The ECB's definition of the interest rate reported is the following:

"Dataset name: MFI Interest Rate Statistics; BS reference sector breakdown: Credit and other institutions (MFI except MMFs and central banks); Balance sheet item: Lending for house purchase excluding revolving loans and overdrafts, convenience and extended credit card debt; MFI interest rate data type: Annualised agreed rate (AAR) / Narrowly defined effective rate (NDER); BS counterpart sector: Households and non-profit institutions serving households; Currency of transaction: Euro; IR business coverage: New business"

The data provided normally refers to weighted averages.

Below is a list of countries for which the above does not apply (at least in part):

**Bulgaria:** Weighted average of interest rates on loans for house purchase, excluding revolving loans and overdrafts, convenience and extended credit card debt, BGN (the monthly data is based on the average of observations through the period). *Source: Bulgarian National Bank (BNB).*

**Croatia:** Weighted average interest rate on HRK housing credits indexed to foreign currency (to households). *Source: Croatian National Bank.*

**Czechia:** Weighted average mortgage rate on loans to households for house purchase. *Source: Hypoindex until 2012; Czech National Bank from 2013.*

**Denmark:** Data reflects interest rates fixed up to 12 months on mortgage loans from mortgage banks.

**Germany:** Initial fixed period interest rate between 5 and 10 years on loans for house purchase, excluding revolving loans and overdrafts, convenience and extended credit card debt, EUR (the monthly data is based on the average of observations through the period). *Source: Deutsche Bundesbank.*

**Greece:** Initial fixed period interest rate up to 1 year on loans for house purchase, excluding revolving loans and overdrafts, convenience and extended credit card debt, EUR (the monthly data is based on the average of observations through the period). *Source: National Bank of Greece.*

**Hungary:** Weighted average rate of housing purpose residential loans with different interest rate periods. The data is the average rate over the year. *Source: National Bank of Hungary.*

**Lithuania:** Total initial rate fixation on loans for house purchase. *Source: Bank of Lithuania.*

**Luxembourg:** Initial fixed period interest rate up to 1 year on loans for house purchase. *Source: Central Bank of Luxembourg.*

**Malta:** Weighted average of interest rates on loans for house purchase to households and NPISH. *Source: Central Bank of Malta.*

**Poland:** Weighted average interest rate on housing loans. *Source: National Bank of Poland.*

**Romania:** Mortgage loans granted in EUR with a maturity of 10 years or more with a charged rate fixed for 1 year. *Source: National Bank of Romania.*

**Spain:** Initial fixed period interest rate up to 1 year on loans for house purchase, excluding revolving loans and overdrafts, convenience and extended credit card debt, EUR, (the monthly data is based on the average of observations through the period). *Source: European Central Bank.*

**Sweden:** Housing credit institutions' lending rates on new agreements with variable interest rates, to Swedish households (incl. NPISH) and non-financial corporations. Variable interest rates are defined as interest rates up to 3 months fixed interest rates.

**United Kingdom:** Weighted average interest rate on loans secured on dwellings, GBP. *Source: Bank of England.*

**Iceland:** Average of the lowest mortgage interest rates provided by lending institutions for indexed housing loans; these mortgage interest rates are real mortgage interest rates (nominal mortgage interest rates adjusted for CPI inflation).

**Japan:** Since the Japanese Fiscal Year 2003 the statistics depicted is the average rates of monthly lowest interest rates of Flat 35 of which the maturity is 21-35 years. Flat35 is a long term fixed rate mortgage which is provided by the securitization business of Japan Housing Finance Agency.

**Russia:** Weighted average interest rates of total new housing mortgage lending in RUB. *Source: Central Bank of Russia.*

**Turkey:** Weighted average interest rates for banks' loans in TYR. *Source: Central Bank of the Republic of Turkey.*

**United States:** Contract interest rate on 30-year, fixed-rate conventional home mortgage commitments. *Source: Federal Reserve.*

### 5. AMOUNT OF GROSS LENDING WITH A VARIABLE INTEREST RATE (FIXATION PERIOD OF UP TO 1 YEAR), PERCENT

This series, based on a dataset already collected for the EMF Quarterly Review, aims at looking at the size of gross lending with a variable interest rate.

### 6. AVERAGE AMOUNT OF MORTGAGE LOAN, IN EUR

This series aims at providing an average figure of the amount of mortgage loans a prospective homeowner is granted in the various countries.

**Denmark:** The statistics captures values of owner occupation from mortgage banks.

**Germany:** The statistics captures the average amount of a mortgage for the purchase of a second hand single family house.

**Slovakia:** The statistics has been constructed by dividing the total volume of gross residential loans of a given year by the total number of concluded contracts and is based on data of the Central Bank.

**United Kingdom:** This figure represents the median advance made to home-owners for house purchase activity. It excludes loans made for the purpose of buy-to-let, although the figures are not that different from one another.

**Iceland:** The downsize of 2015 figures can be explained by the partial remortgaging due to government financed prepayment on selected loans, which spurred a large number of small mortgages in the beginning of that year.

**Japan:** Flat35 data for detached houses. Flat35 is a long term fixed rate mortgage which is provided by the securitisation business of Japan Housing Finance Agency. The data is available only from Japanese Fiscal Year 2004. Entire market data are not available.

### 7. TOTAL OUTSTANDING NON-RESIDENTIAL MORTGAGE LOANS TOTAL AMOUNT, END OF THE YEAR, EUR MILLION

Total non-residential loans on lender's books at the end of the period. Typically, these loans are the mortgage loans whose main purpose is not residential. The sum of "Total Outstanding Residential Loans" and "Total Outstanding Non-Residential Mortgage Loans" gives the total outstanding housing loans.

### 8. TOTAL OUTSTANDING RESIDENTIAL LOANS TO GDP RATIO, PERCENT

Total Outstanding Residential Loans is provided by the European Mortgage Federation (Table 1). GDP at current prices is provided by Eurostat and the World Bank (Table 27).

### 9. TOTAL OUTSTANDING RESIDENTIAL LOANS TO DISPOSABLE INCOME OF HOUSEHOLDS RATIO, PERCENT

Total Outstanding Residential Loans is provided by the European Mortgage Federation (Table 1). Data on Disposable Income of Households at current prices is provided by the European Commission (AMECO Database) and National Statistical Offices (Table 28).

### 10. TOTAL OUTSTANDING RESIDENTIAL LOANS PER CAPITA - POPULATION OVER 18, EUR

Total Outstanding Residential Loans is provided by the European Mortgage Federation (Table 1). Data on population is provided by Eurostat and the US Bureau of Census, and concerns the population whose age is 18 years or more (Table 29).

## B — THE HOUSING MARKET

### 11. OWNER OCCUPATION RATE, PERCENT

Distribution of population by tenure status – owner. *Source: Eurostat [ilc_lvho02].*

### 12. BUILDING PERMITS, NUMBER ISSUED

A building permit is an authorisation to start work on a building project. As such, a permit is the final stage of planning and building authorisations from public authorities, prior to the start of work. In Hypostat, the building permit concerns only dwellings.

### 13. HOUSING STARTS, NUMBER OF PROJECTS STARTED PER YEAR

Number of new residential construction projects that have begun during a given period. Housing Starts is usually considered to be a critical indicator of economic strength (since it has an effect on related industries, such as banking, the mortgage sector, raw materials, employment, construction, manufacturing and real estate).

### 14. HOUSING COMPLETIONS, NUMBER OF PROJECTS COMPLETED PER YEAR

Number of new residential construction projects that have been completed during a given period. Housing Completions is directly integrated into the dwelling stocks and, as such, is a determinant of the housing supply.

### 15. REAL GROSS FIXED INVESTMENT IN HOUSING, ANNUAL % CHANGE

Real Gross fixed capital investment in housing is measured by the total value of producers' acquisitions, less disposals, of new dwellings during the accounting period. S*ource: Eurostat, OECD*.

### 16. TOTAL DWELLING STOCK, THOUSAND UNITS

According to the "1993 SNA" (System of National Account), dwellings are buildings that are used entirely or primarily as residences, including any associated structures, such as garages, and all permanent fixtures customarily installed in residences; movable structures, such as caravans, used as principal residences of households are included.

For many countries, the yearly change in total dwelling stock is above the number of yearly completions because these two variables have been created with different methodologies.

### 17. NUMBER OF TRANSACTIONS

Total number of new or second hand dwellings purchased or transferred in the period, including those occupied for the first time.

The national methodologies used to calculate this index are the following:

***EU27***

**Belgium**: transactions on second hand houses only.

**Croatia:** number of new dwellings purchased.

**Denmark:** excludes self-build.

**Finland:** 2000-2007 are estimates of Federation of Finnish Financial Services (FFI), calculated by utilising the average housing completions of the years 2008-2014.

**France:** new apartments as principal and secondary residence or rental.

**Ireland:** estimate based on mortgage approvals until 2011.

**Latvia:** new or second hand real estate purchased or transferred, including those occupied for the first time.

**Netherlands:** includes commercial transactions.

**Romania:** includes commercial transactions.

**Sweden:** from year 2000, not only one-family homes are included in the transaction figures but also apartment transactions.

***NON EU27***

**USA:** number of existing home sales

### 18. NOMINAL HOUSE PRICES INDICES, 2015=100

Indices computed to reflect the changes in house prices observed over the period. For Hypostat 2020 the base year has been postponed to 2015 to be in line with the dispositions followed by Eurostat in compliance with Regulation (EC) No 2015/2010). Eurostat data is used for a number of countries.

The data description is as follows:

**Eurostat:** House Price Indices (HPIs) measure inflation in the residential property market. The HPI captures price changes of all kinds of residential property purchased by households (flats, detached houses, terraced houses, etc.), both new and existing. Only market prices are considered, self-build dwellings are therefore excluded. The land component of the residential property is included. These indices are the result of the work that National Statistical Institutes (NSIs) have been doing mostly within the framework of the Owner-Occupied Housing (OOH) pilot project coordinated by Eurostat.

For the countries for which Eurostat data is not employed, the following national methodologies are used to calculate the published indices:

***EU27***

**Austria:** The RPPI for Vienna and for Austria excluding Vienna (regional breakdown) is a so-called "dummy index." It is calculated on the basis of the euro price per square meter for new and used condominiums and for single-family houses. The dummy index is calculated by Vienna University of Technology on the basis of data provided by the Internet platform Ametanet of the Austrian real estate software company EDI-Real. The calculation uses a hedonic regression model with a fixed structure over time. This approach may produce biased estimates if the effects of the variables change over time. *Source: OeNB.*

**Bulgaria:** Annual average market price index of dwellings, flats in the district centres (new flats are excluded). *Source: National Statistical Institute.*

**Croatia:** The average prices per $m^2$ of new dwellings sold.

**Cyprus:** The indices are based on property valuation data collected since 2006 by the contracted banks, which receive the relevant information from independent property surveyors in connection with mortgage transactions, such as housing loans, mortgage refinancing and mortgage collateral. The data, which are representative of the Cyprus property market, cover all the areas under the effective control of the Republic of Cyprus (Nicosia, Limassol, Larnaca, Paphos and Famagusta) and refer to residential properties (houses and apartments). *Source: Central Bank of Cyprus.*

**Czechia:** Index of realised new and second-hand flat prices. New flats published for Prague only. *Source: Czech Statistical Office.*

**Denmark:** The House Price Statistics are based on statements of properties offered for sale on the internet and registered as sold in the public Sales and Valuation Register, SVUR, or the joint municipal property register, ESR.

**Estonia:** New and existing dwellings, whole country. *Source: Estonian Statistics Database.*

**Finland:** The statistics on prices of dwellings in housing companies are compiled from the Finnish Tax Administration's asset transfer tax data. The preliminary data on monthly statistics include around two-fifths of all housing transactions and quarterly statistics around two-thirds, though coverage varies by area. For transactions of old dwellings in housing companies the coverage of the annual statistics is almost complete. These statistics describe the levels of the prices and changes in the prices of single-family houses and single-family house plots quarterly and annually. *Source: Statistics Finland.*

**France:** The index of housing prices (IPL) is a quarterly index, average annual base 100 in 2010.
The IPL is a transaction price index measuring, between two consecutive quarters, the pure evolution of prices of homes sold. For a given quarter, the index is obtained as the weighted average of two indices: (1) the Notaries – INSEE index of existing homes; and (2) the price index for new housing. *Source: National Institute of Statistics and Economic Studies (INSEE).*

**Germany:** VDP Price Index for Owner Occupied Housing, calculated by vdpResearch.

**Greece:** Urban areas only.

**Hungary:** The house price changes observed over the period are based on the data of the FHB house price index. The index is based on real transactions and comprises newbuilt and existing (used) residential properties (flats, detached houses, terraced houses). The methodology for the calculations is the hedonic regression model, that is also used by European institution ( Eurostat, ECB). The index shows the annual avg.change compared to the base year of 2006. All dwellings, FHB house price Index.

**Italy:** *Source: Bank of Italy, Istat, Revenue Agency Property Market Observatory (Osservatorio del mercato immobiliare), Consulente Immobiliare and Tecnoborsa.*

**Poland:** The data contains average transaction prices on secondary market – 7 biggest cities in Poland, weighted with the market housing stock of the city. Analysed cities: Gdańsk, Gdynia, Kraków, Łódź, Poznań, Warszawa, Wrocław.

**Portugal:** Annual average based on bank evaluation data. *Source: Statistics Portugal.*

**Romania:** *Source: National Institute of Statistics.*

**Slovenia:** Existing dwellings; y-o-y variation in the last quarter of each year. *Source: Statistical Office of the Republic of Slovenia.*

**Spain:** All dwellings. *Source: Ministerio de foment.*

**Sweden:** One- and two-dwellings buildings annual average.

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**Australia:** Residential Property Price index, average of the eight largest cities. *Source: Australian Bureau of Statistics.*

**Japan:** The indices are based on monthly prices for detached houses. *Source: Ministry of Land Infrastructure, Transport and Tourism.* The index of the latest fiscal year is the average of the monthlyl price indices between April and teh data available month(s).

**Russia:** Y-o-y variation in the last quarter of each year.

**Turkey:** Data on house prices, in percentage change over previous period. *Source: OECD.*

**United Kingdom:** All dwellings. *Source: Office for National Statistics.*

**United States:** Data on house prices, in percentage change over previous period. *Source: OECD.*

### 19. NOMINAL HOUSE PRICE INDEX – CITIES (2015=100)

Indices computed to reflect the changes in house prices observed over the period in the capital cities and in the largest cities of a given country. The provided statistics are based on heterogeneous data sources, methodologies and also areas (considering either the city as such or also the surrounding region). The indexes provided in this section have to be compared with caution. The following national methodologies (if explanation available) have been applied for the calculation:

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**Austria:** Residential Property price index for overall dwellings in Vienna.

**Belgium:** Index for Brussels has been calculated on the basis of the Notary Barometer and refers to apartments in Brussels, which constitute 70% of the market.

**Bulgaria:** annual average market price index of dwellings, flats in the district centres (new flats are excluded). *Source: National Statistical Institute.*

**Croatia:** the average prices per m$^2$ of new dwellings sold. *Source: Croatian Bureau of Statistics.*

**Cyprus:** The indices are based on property valuation data collected since 2006 by the contracted banks, which receive the relevant information from independent property surveyors in connection with mortgage transactions, such as housing loans, mortgage refinancing and mortgage collateral. The data is available at district level for Nicosia, Limassol, Larnaca, Paphos and Famagusta and refer to residential properties (houses and apartments). *Source: Central Bank of Cyprus.*

**Denmark:** The House Price Statistics are based on statements of properties offered for sale on the internet and registered as sold in the public Sales and Valuation Register, SVUR, or the joint municipal property register, ESR. Data is available until postal code level. *Source: Association of Danish Mortgage Banks.*

**Finland:** The statistics on prices of dwellings in housing companies are compiled from the Finnish Tax Administration's asset transfer tax data. The preliminary data on monthly statistics include around two-fifths of all housing transactions and quarterly statistics around two-thirds, though coverage varies by area. For transactions of old dwellings in housing companies the coverage of the annual statistics is almost complete. These statistics describe the levels of the prices and changes in the prices of single-family houses and single-family house plots quarterly and annually. *Source: Statistics Finland.*

**France:** the statistics considers only apartments. *Source: National Institute of Statistics and Economic Studies.*

**Germany:** VDP Price Index for Owner Occupied Housing, calculated by vdpResearch.

**Hungary:** The house price changes observed over the period are based on the data of the FHB house price index. The index is based on real transactions and comprises newbuilt and existing (used) residential properties (flats, detached houses, terraced houses). The methodology for the calculations is the hedonic regression model ,that is also used by European institution (Eurostat, ECB). The index shows the annual average change compared to the base year of 2006. All dwellings, FHB house price Index.

**Ireland:** All residential properties. *Source: Central Statistical Office.*

**Poland:** average transaction prices on secondary market

**Portugal:** yearly average on the Banking sector's valuations monthly data, Statistics Portugal

**Slovakia:** prices Euro per square metre. *Source: Central Bank of Slovakia.*

**Slovenia:** captures only existing flats in Ljubljana. *Source: Statistical Office of the Republic of Slovenia.*

**Spain:** the indexes refer to the regions around these cities calculated with valuation prices. *Source: Ministerio de foment.*

**Sweden:** One- or two-dwelling buildings for permanent living. *Source: Statistics Sweden.*

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**Australia:** Residential Property Price index. *Source: Australian Bureau of Statistics.*

**Brazil:** The Financed Housing Collateral Value Index – IVG-R measures the long term trend of the household's houses in Brazil. The index is calculated using the evaluation data of housing loans that are granted to natural persons and collateralized by financed real estate. The IVG-R is constructed using information from eleven Brazilian metropolitan regions : Belém, Belo Horizonte, Brasília, Curitiba, Fortaleza, Goiânia, Porto Alegre, Recife, Rio de Janeiro, Salvador e São Paulo.

**Iceland:** total residential property. *Source: Statistics Iceland.*

**Japan:** The indices are based on monthly prices for detached houses. *Source: Ministry of Land, Infrastructure, Transport and Tourism.*

**Norway:** *Source: Real Estate Norway.*

**Turkey:** *Source: Central Bank of the Republic of Turkey.*

**United Kingdom:** all dwellings. *Source: Office for National Statistics.*

**United States:** *Source: Federal Housing Finance Agency.*

### 20. CHANGE IN NOMINAL HOUSE PRICES, ANNUAL % CHANGE

The annual percentage change computed using the house price indices found in Table 17.

### 21. NOMINAL HOUSE PRICE TO DISPOSABLE INCOME OF HOUSEHOLDS RATIO, 2015=100

This indicator is a measure of housing affordability. The nominal house price to disposable income ratio is also used by the OECD to provide a measure of housing affordability. However, this index is partially biased since it does not integrate financing costs: mortgage interest rate, taxes, notary costs, etc.

## C — FUNDING OF THE MORTGAGE MARKET

### 22. TOTAL COVERED BONDS OUTSTANDING, BACKED BY MORTGAGES, EUR MILLION

Covered bonds are a dual recourse debt instruments issued by credit institutions and secured by a cover pool of financial assets, typically composed of mortgage loans, public-sector debt or ship mortgage. Three different models of covered bonds co-exist in Europe:

- **Direct/on-balance issuance (German model):** the originator issues the covered bonds and the assets are ring-fenced on the balance sheet of the originator.
- **Specialist issuer (French model):** an originator establishes a credit institution subsidiary which issues the covered bonds and holds the collateral.
- **Direct issuance with guarantee (UK model):** the originator issues the covered bonds, which are guaranteed by a special purpose entity of the originator, which holds the cover pool assets.

### 25. TOTAL RESIDENTIAL MORTGAGE-BACKED SECURITIES (RMBS) OUTSTANDING, EUR MILLION

A RMBS is a derivative whose value is derived from home equity loans and residential mortgages. In line with the other mortgage-backed securities, the owner is entitled to a claim on the principal and interest payments on the residential loans underpinning the security.

## D – MACROECONOMIC INDICATORS

### 27. GDP AT CURRENT MARKET PRICES, EUR MILLION

Within the approach of GDP at current prices, the fundamental principle is that output and intermediate consumption is valued at the prices current at the time the production takes place. This implies that goods withdrawn from inventories by producers must be valued at the prices prevailing at the times the goods are withdrawn, and consumption of fixed capital in the system is calculated on the basis of the estimated opportunity costs of using the assets at the time they are used, as distinct from the prices at which the assets were acquired.

### 28. GROSS DISPOSABLE INCOME OF HOUSEHOLDS, EUR MILLION

According to the "1993 SNA", Gross Disposable Income of Households is the sum of household final consumption expenditures and savings (minus the change in net equity of households in pension funds). It also corresponds to the sum of wages and salaries, mixed income, net property income, net current transfers and social benefits other than social transfers in kind, less taxes on income and wealth and social security contributions paid by employees, the self-employed and the unemployed.

The indicator for the household sector includes the disposable income of non-profit institutions serving households (NPISH).

### 29. POPULATION OVER 18 YEARS OLD

This statistic takes into account the residents older than 18 years of a given country. The minors of age have been excluded in order not to underestimate the actual per capita outstanding mortgage lending presented in table 9.

The sources used are Eurostat and the US Bureau of Census.

### 30. BILATERAL NOMINAL EXCHANGE RATE WITH THE EURO

For the outstanding residential and non-residential loans the End-of-Year Exchange rate has been taken into account while for the gross lending figures and for the average amount of mortgage the average Exchange rate was used.

The source is the Statistics Data Warehouse of the European Central Bank. For the Exchange Rate with the Icelandic krona Bloomberg has been used.

HYPOSTAT

2021

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