EMF

FUNDING THE REAL ECONOMY

HYPOSTAT 2018

HYPOSTAT **2018** | A REVIEW OF EUROPE'S MORTGAGE AND HOUSING MARKETS

European Mortgage Federation
September 2018

DISCLAIMER

Hypostat 2018 and the information, statements and opinions contained in the document are intended for information purposes only and do not replace independent professional judgment.

Hypostat 2018 and the information, statements and opinions contained in the document do not constitute any solicitation or a public offer under any applicable legislation or an offer to sell or solicitation of an offer to purchase or subscribe for securities or financial instruments or any advice or recommendation with respect to such securities or other financial instruments.

Neither the European Mortgage Federation nor the authors contributing to Hypostat shall accept any liability whatsoever (whether in negligence, tort or otherwise) arising in any way in relation to the statements contained herein or in relation to any loss arising from their use or otherwise arising in connection with this document.

Nothing in this document shall be construe as investment, legal, tax or other professional advice by the European Mortgage Federation or the authors contributing to Hypostat.

CONTACT DETAILS

EDITORS

Daniele Westig
Economic Adviser
dwestig@hypo.org
Tel: +32 2 285 40 40

Luca Bertalot
Secretary General
lbertalot@hypo.org
Tel: +32 2 285 40 35

LIST OF CONTRIBUTORS TO DATA AND ANALYSIS

AUSTRIA
Wolfgang Amann
Institut für Immobilien, Bauen und Wohnen Gmbh
amann@iibw.at
Karin Wagner
Oesterreichische Nationalbank
karin.wagner@oenb.at

BELGIUM
Frans Meel
Union Professionnelle du Crédit (Febelfin)
frans.meel@febelfin.be

BULGARIA
Jacek Kubas
European Bank of Reconstruction and Development
KubasJ@ebrd.com

CROATIA
Alen Stojanović
University of Zagreb, Faculty of Economics and Business
astojanovic@efzg.hr
Branka Tuškan
University of Zagreb, Faculty of Economics and Business
btuskan@efzg.hr

CYPRUS
Ioannis Tirkides
Bank of Cyprus
ioannis.tirkides@bankofcyprus.com

CZECH REPUBLIC
Martin Kotek
Komerční banka, a. s.
martin_kotek@kb.cz

DENMARK
Kaare Christensen
Finance Denmark
kc@fida.dk

ESTONIA
Sofia Garrido
European Mortgage Federation – European Covered Bond Council
sgarrido@hypo.org
Daniele Westig
European Mortgage Federation – European Covered Bond Council
dwestig@hypo.org

FINLAND
Elina Erkkilä
Finance Finland
Elina.erkkila@financefinland.fi

FRANCE
Emmanuel Ducasse
Crédit Foncier Immobilier
emmanuel.ducasse@creditfoncierimmobilier.fr

GERMANY
Thomas Hofer
vdpResearch
hofer@vdpresearch.de

GREECE
Calliope Akantziliotou
Bank of Greece
CAkantziliotou@bankofgreece.gr

HUNGARY
Gyula Nagy
Takarék Mortgage Bank Plc
Nagy.GyulaLaszlo@takarek.hu

IRELAND
Anthony O'Brien
Banking & Payments Federation Ireland
anthony.obrien@bpfi.ie

ITALY
Marco Marino
Italian Banking Association - ABI
marco.marino@abi.it

LATVIA
Anna Kasjanova
Latvijas Banka
Anna.Kasjanova@bank.lv

LITHUANIA
Jonas Grincius
AB Citadele Bankas
grinciusjr@hotmail.com

LUXEMBOURG
Fabio Mandorino
The Luxembourg Bankers' Association
mandorino@abbl.lu

MALTA
Mariosa Vella Cardona
Malta Bankers' Association
info@maltabankers.org

NETHERLANDS
Nico de Vries
ING Bank
Nico.de.Vries@ing.com
Paul de Vries
Dutch Land Registry
paul.devries@kadaster.nl

POLAND
Agnieszka Nierodka
Polish Mortgage Credit Foundation
a.nierodka@ehipoteka.pl

PORTUGAL
António Figueiredo Lopes
Caixa Economica Montepio Geral
Antonio.Figueiredo.Lopes@montepio.pt
Manuel Lourenço
Caixa Economica Montepio Geral
MGLourenco@montepio.pt
Bráulio Silva
Caixa Economica Montepio Geral
Braulio.Silva@montepio.pt

ROMANIA
Ştefan Dina
Romanian Association of Banks
stefan.dina@arb.ro

SLOVAKIA
Jacek Kubas
European Bank of Reconstruction and Development
KubasJ@ebrd.com

SLOVENIA
Andreja Cirman
University of Ljubljana, Faculty of Economics
andreja.cirman@ef.uni-lj.si

SPAIN
Leyre Lopez
Spanish Mortgage Association – AHE
leyre.lopez@ahe.es

SWEDEN
Christian Nilsson
Swedish Bankers' Association
christian.nilsson@swedishbankers.se

UNITED KINGDOM
James Tatch
UK Finance
James.tatch@ukfinance.org.uk

AUSTRALIA
Chris Dalton
Australian Securitisation Forum
cdalton@securitisation.com.au

BRAZIL
Filipe F. Pontual
Brazilian Association of Real Estate Loans and Savings Companies -ABECIP
filipepontual@abecip.org.br

ICELAND
Magnus Arni Skulason
Reykjavik Economics ehf
magnus@reconomics.is

JAPAN
Shoichiro Konishi
Japan Housing Finance Agency – JHF
konishi.9rh@jhf.go.jp

NORWAY
Michael H. Cook
Finance Norway
mhc@finansnorge.no

RUSSIA
Andrey Tumanov
DOM.RF Russia Housing and Urban Development Corporation
Andrei.Tumanov@domrf.ru

TURKEY
Yener Coşkun
Capital Markets Board of Turkey, MRICS
ycoskun@spk.gov.tr

CONTRIBUTORS TO HYPOSTAT ARTICLES

Gerald Koessl
National Housing Federation
Gerald.Koessl@housing.org.uk

Alice Pittini
Housing Europe
Alice.Pittini@housingeurope.eu

Ludovic Thebault
European DataWarehouse
ludovic.thebault@eurodw.eu

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.

Dear Reader,

The Capital Markets Union (CMU) initiative of recent years represents one of the key post crisis policy action of the European Union (EU) aimed at boosting real economic growth and further deepening the integration of European capital markets. Mortgage markets are a key driver of macroeconomic growth and an essential link between financial markets and the real economy and, as such, are at the heart of the CMU initiative. Accounting for nearly 46% of EU GDP in 2017, mortgage markets can be considered of systemic importance in the EU financial and social landscape. Mortgage markets not only play a fundamental role as mechanisms of transmission of monetary policies but they crucially facilitate access to homeownership, therefore playing a vital role in the socio-political-economic life of EU citizens. In fact, from a micro perspective point of view, mortgages are embedded in the daily lives of 70% of Europeans as a crucial financial instrument which provides a social lift for their families.

Historically, on the Old continent, the efficient use of private capital market resources has mitigated the use of public resources in housing policies, enabling dedication of public finances to welfare policies and, subsequently, securing the smooth functioning of mortgage systems and preventing major systemic crises. In this context, the European Mortgage Federation has always sought to enhance the macro-prudential characteristics of mortgage markets and develop and foster market best practices and transparency in order to facilitate financial stability and secure the access to credit for citizens. The EMF is committed to acting as a conduit at EU level between the finance and the housing "worlds" which must be brought closer together in order to achieve not only affordable housing solutions, but also energy efficient ones in light of the EU's energy savings ambitions.

Enhancing transparency and delivering reliable information is the main path to securing resilience in the system and facilitating investor due diligence. The continuous improvement of market best practices should be based on the lessons learned from the past. The analytic work undertaken by the European mortgage Industry in recent years has helped to develop a common understanding of the European post crisis landscape. This qualitative and quantitative analysis in turn helps us to better assess the current challenges and draw conclusions for the future of European housing and mortgage markets according to the evolving socio-economic landscape. The quantitative analysis presented in this publication aims to capture the trends in these markets, as well as the behaviour of European lenders and borrowers, and highlight some of the driving forces behind these markets, whilst also shedding some light on the challenges which lay ahead.

Against this background, we are delighted to present you the 2018 edition of Hypostat, the EMF-ECBC's statistical publication on European 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. Hypostat brings together over 30 contributors, commenting on historical annual series for 30 indicators, covering, where data is available, the 28 Member States of the EU and also ten jurisdictions beyond EU borders. The country chapters of our publication offer the most comprehensive and accurate source of data available on the respective markets and outline developments observed over the past year.

Besides a general analysis of European mortgage and housing markets, this year's Hypostat includes three external articles focusing on key topics which have an impact on these markets.

With access to affordable housing a growing concern in Europe, it is fundamental to include in the broader discussion on Europe's housing and mortgage markets the role of social housing. Housing Europe, a network of 45 national and regional federations which together gather about 43.000 public, social and cooperative housing providers in 24 countries, has authored an article in which it provides a general overview of social housing in the EU Member States, the actors involved, the size of the market and the challenges ahead. This article is also meant to mark a first step towards further cooperation between the EMF and Housing Europe on these topics which are gaining in importance on both the national and European political agenda.

In the ongoing debate of improving financial stability in Europe, the financing of residential real estate plays an important role. Following on from last year's article on the various ways to calculate the Loan-to-Value (LTV) ratio, European DataWarehouse (EDW) has authored a follow-up article on the importance of Current Loan-to-Value (CLTV) i.e. the current amount of a loan compared with the current value of the property used as collateral and its implications in performance monitoring related issues. The article takes advantage of the granular database of EDW to provide empirical findings.

In recent years, the EMF has become a primary advocate of energy efficient mortgage finance and has, since 2016, been working on the development of an energy efficient mortgage product, according to which building owners are incentivised to improve the energy efficiency of their buildings or acquire an already energy efficient property. The third article of this year's Hypostat provides an update on the latest state of play of the Energy Efficient Mortgages Initiative, with a particular focus on the recently launched Pilot Scheme involving 37 pioneering banks together with European and international institutions, as well as the evolution of green covered bonds..

The EMF-ECBC, also on behalf of the EMF Research & Data Committee and its Chairman, Kaare Christensen, would like to thank all contributors for making the publication of Hypostat possible and expresses its particular gratitude to them for their support in bringing forward the release date to early September, thus increasing the timeliness and consequently the value of the analyses and of the data.

We hope you will find this publication interesting and useful.

Sincerely,

Luca BERTALOT *– EMF-ECBC Secretary General*

MACROECONOMIC SITUATION

- For first year since the beginning of the crisis, all the countries are growing. Nevertheless, the patterns are still heterogenous, with Ireland growing more than 7% and countries like Greece or Italy with a modest 1.5% growth.
- In aggregate terms, the European Union produced a positive **GDP** growth of 2.4% in 2017, thus continuing the positive progress of 2015 (2.3%) and 2016 (1.9%). The Euro area registered a growth of 2.4% in 2017. Public finances continue in aggregate the deleveraging path since 2015, though also here Member States provide different pictures in terms of stocks and flows.
- **Unemployment** decreased in the EU by 1 pps in 2017. And for first time since the beginning of the crisis, all the European countries have experienced a recovery of the labour market.
- In 2017 the **inflation** was positive but subdued with respect to the targets of the ECB and the other central banks in the EU.

HOUSING MARKET

- Putting the focus on the urban areas in the EU, we see a general positive trend of population growth on cities, phenomenon know as capital magnetism. In all capital cities, except from Athens, Riga and Vilnius, population grew during the last past 10 years. Moreover, in capital cities the population structure is generally younger than the rest of the country which is also having an impact on the housing market.
- The lack of space and the high demand result in well-known supply shortages that favours price rises, the unweighted average for the EU showed a 6% yearly increase. Therefore, house prices in aggregate terms continued the positive trend of the previous years, but with some exceptions. The situation among different jurisdictions remained highly fragmented, with some markets recovering, while others continued to decline. Nonetheless, the rate of decline seems to have slowed down across the board and only three countries, Spain, Ireland and Greece are at a price level below 20% of the 2007 level.
- Price developments are not only very heterogeneous between the different EU countries, but also within them. House price increases in capital cities were on average more than 10 pps higher compared to the overall situation in their countries over the period of from 2007-2017. At one end of the spectrum, aggregate house prices in Berlin, Hamburg and Munich increased by nearly 54 pps more than in the rest of the Germany, followed by London where the prices increased by almost 48 pps more than in the UK whereas in countries such as Portugal, house prices in the capital decreased by nearly 4% while the country they increased by 17%.
- Looking at the Price-to-income ratio evolution, we see that in various countries the housing affordability deteriorated since 2007. In other countries like Italy, France, Greece and some Central and Eastern countries affordability improved.
- Housing supply (as measured by the number of building permits issued, housing projects begun and housing projects completed) confirms the first encouraging signs of 2015 and is picking up.

MORTGAGE MARKETS

- In 2017, the rate of mortgage lending recovered the positive trend. Contrary to 2016, the total outstanding lending in the EU in 2017 increased by 2.24% with respect to 2016. The Euro area outstanding mortgage market increased by almost 3% in 2017, whereas the non-Euro area increased by 1.16% in aggregate terms. Not considering the Exchange rates fluctuations, the outstanding residential lending increased by EUR 208 bn.
- The mortgage market is strongly characterised by five countries: the UK, Germany, France, the Netherlands and Spain accounted for 72% of the overall outstanding residential mortgages in the EU in 2017, significantly less than the year before. This reflects the development of other mortgage markets in countries like Czech Republic, Romania, Slovakia o Bulgaria.
- Some countries contributed more than others to the increase in EU outstanding residential mortgage lending. Germany, France provided the major contribution to the increased outstanding mortgage lending. At fixed Exchange rates, also the UK and Sweden saw an increase in their outstanding mortgage lending.
- Interest rates seems to continue with the declining trend they started in 2015. They have fallen from an average of 2.60% to 2.42%.
- In terms of market structure for different mortgage interest rates, the EU is, again, highly fragmented. Some countries almost exclusively have variable rate mortgages, whereas others rely more on long-term fixed rates, or on a balanced mix. Taking into consideration the countries for which we have information on the mortgage interest rate breakdown, around 24% of gross new issuance was under a variable interest rate.
- The general tendency towards fixed rates from past years seems to be reversing as consumers expect an increase of the interest rates in the near future

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 2018", focuses on developments till early 2018[1]. 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:

Q1 2017	first quarter of 2017
bn	billion
bps	basis points
mn	million
pps	percentage points
q-o-q	quarter on quarter
td	thousand
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

[1] Please note that the edition presenting developments in housing and mortgage markets till early 2012 is titled "Hypostat 2011"; the edition immediately following that, and focusing on developments until early 2013 is "Hypostat 2013, therefore, due to a change in the naming, there is no "Hypostat 2012".

Social Housing in the EU

By Gerald Koessl, Alice Pittini, Mariel Whelan

FOREWORD OF THE EUROPEAN MORTGAGE FEDERATION

This article on Social Housing in the EU has been included in this year's Hypostat for two main reasons. Firstly, the intention is to shed some light on a topic which characterises the housing market and also the housing choices in different ways and to differing extents throughout Europe. Social housing is an important dimension to take into account when the broader concept of housing affordability is considered. It also has a significant impact on the mortgage market: with fewer affordable dwellings, constraints for lenders and burdens for prospective homeowners increase. Secondly, this mapping article is meant to mark a first step towards more structural cooperation between the EMF and Housing Europe on the various topics which overlap within both federations, such as the current and future role of private financing in social housing and the associated challenges. Cooperation such as this increases the value added provided by Hypostat, especially taking into account the increasing importance of the discussion around housing and affordability at both national and European levels.

INTRODUCTION

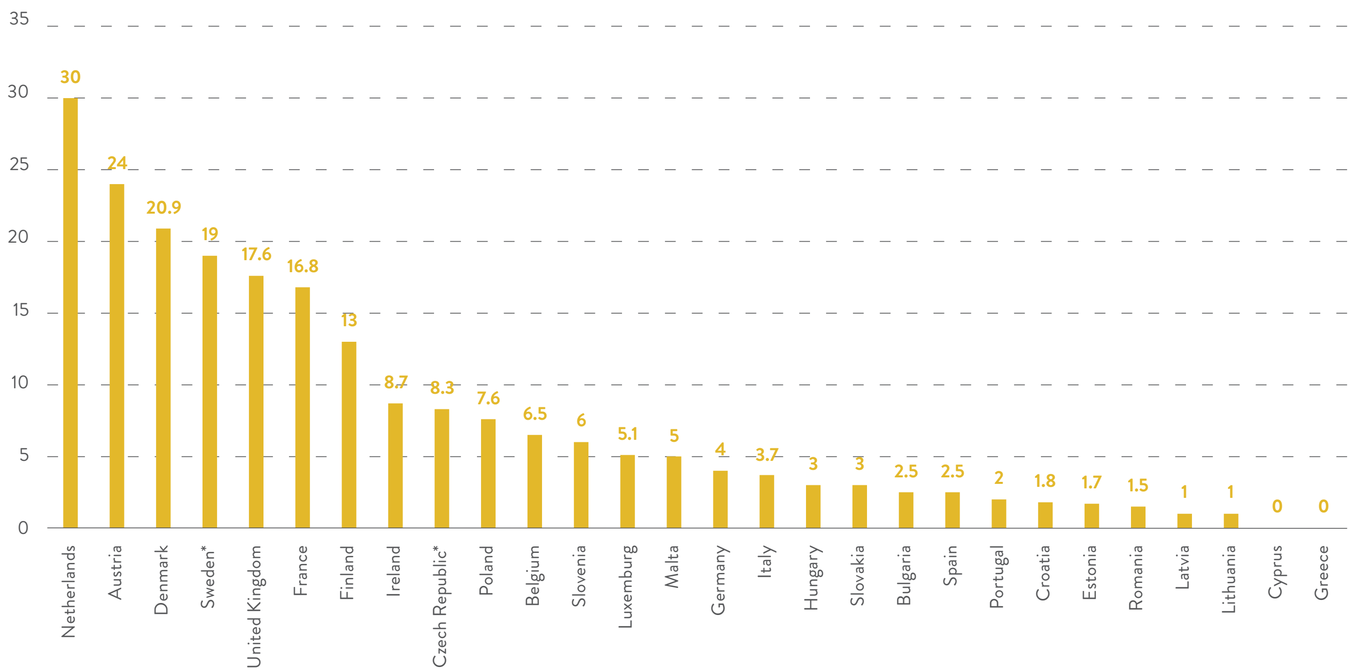
The concept of 'social housing' brings to mind a different image to different people, and one that changes across geographic areas and over time – from the 'cités ouvrières' and the Garden Cities movement to large scale public housing programmes, small community-based projects or exemplary nearly zero energy buildings.

This is no surprise, as there is no single definition for 'social housing' in the EU. Quite the opposite - the sector is characterised by the wide diversity of national housing situations and policies put in place. To complicate things further, most countries have not adopted an official definition of 'social housing', and this term is not used everywhere. Instead we find the terms such as 'Housing at Moderate Rent' in France (HLM), 'Common Housing' or 'Not-for-profit housing' in Denmark, 'Housing Promotion' in Germany and 'Limited-Profit Housing' in Austria, just to name a few. Overall, affordability of rents and the existence of rules for the allocation of dwellings taking into consideration people's social or economic circumstances and needs (i.e. allocation by administrative means, as opposed to market mechanisms) constitute the core common features of what we can broadly see as 'social housing' in the EU.

SOCIAL HOUSING STOCK AND SIZE OF THE SECTOR

It is worth noting that, although social housing is generally equated to social rental, it also often comprises the provision of affordable dwellings for sale or under shared ownership schemes. However, given the difficulties in statistically identifying the stock of 'social' home-ownership, the size of the sector is usually illustrated by data on social rental stock. Figure 1 shows the total social rental housing available in each country as a proportion of the total housing stock in a country.

FIGURE 1 | SOCIAL RENTAL HOUSING AS A SHARE OF TOTAL HOUSING STOCK, EU 28 (2017)



Note: *In the case of Sweden and the Czech Republic, data refers to municipal (public) housing which is only partly used for social purpose.

Source: Housing Europe. State of Housing in the EU 2017

While the UK and France have the largest stock of social housing in absolute terms (with 4.9 and 4.8 million units respectively), the Netherlands is the country with the highest share of social housing in Europe, accounting for over 30% of the total housing stock, followed by Austria (24%) and Denmark (20%). At the opposite end of this spectrum, most Eastern European countries have extremely low shares of social rental housing (following privatisation of formerly state owned housing, which accompanied the transition from communist regimes). Similarly, most Mediterranean countries have historically favoured policies encouraging access to home ownership and have very little social rental housing or virtually none, as is the case for example in Greece and Cyprus.

Despite the existence of a large social housing sector in a number of Western European countries, in general the relative size has been decreasing over the past two to three decades, partly as a result of the slowdown in new social housing construction as well as policies supporting the sale of public stock. However, the demand for social housing is by no means shrinking, as shown, for example, by the ever-growing number of households registered on waiting lists (European Parliament 2013), the growing number of homeless (Feantsa 2018) or the rising number of households being overburdened by housing costs (Eurostat 2015 and State of Housing in the EU 2017). For example, the proportion of households overburdened by housing costs in the EU rose from 9.9% in 2009 to 11.3% in 2015 and the increase has been even starker among households at risk of poverty, amongst whom the proportion rose from 34.5% to 39.3% over the same period (Eurostat 2015).

ACTORS INVOLVED

Social housing was first created in most European countries at the initiative of the private sector (charitable institutions and some private companies that built housing to accommodate their workers, but also self-help/cooperative solutions), as a response to the emerging housing needs brought about by massive industrialisation and urbanisation in the early 20th century.

Later on, in order to face the pressing housing needs of the post-World War II period, many states across Europe took over those private initiatives with the aim to generalise them on a wider scale. Many European countries saw large-scale public investment programmes set up to build new affordable homes. However, the 1990s were characterised by a decentralisation of responsibilities to the regional and local level, paralleled with a retreat of public actors as direct providers of (social) housing. Henceforth, private and not-for-profit initiatives (re-)gained an increasing role as social housing providers, often supported by government subsidies, housing finance programmes and sectorial regulation.

As a result of these historical developments, today in most of the EU we find a combination of actors involved in social housing, including public providers (usually municipalities, either directly or through dedicated publicly owned companies) and not-for profit or limited-profit housing providers, often co-existing with a growing private sector. Despite the fact that in several EU Member States the presence of publicly owned housing is still very significant (e.g. Sweden, but also the UK, France), we tend to find a stronger presence of social housing in countries with a large not-for-profit sector.

These actors can be broadly defined as 'housing associations', meaning a variety of independent organisations (associations, companies, charities, foundations and cooperatives) acting on a not-for-profit or limited-profit basis and with a mission to provide good quality homes for many different sectors of the community, involving residents in both the management of the service and the functioning of the company. This is notably the case in the Netherlands, Denmark, Austria and the UK.

There is an increasing involvement in social housing provision by non-specialised actors (commercial developers and private landlords, as opposed to specialised 'approved' not-for-profit providers). For instance, in Germany, public funding schemes are open to any kind of housing provider in exchange for the use of a dwelling for social purposes on a temporary basis. In Ireland, households on the social housing waiting list can apply for a rent supplement which can be used towards securing private rental accommodation.

SOCIAL HOUSING ALLOCATION AND USERS

In a few countries social housing is still virtually open to all citizens (a universal approach, typical for instance of the public housing companies in Sweden), or to all those below certain income limits which are quite broadly defined. In such countries the sector plays a market regulating role and favours social mixing in accordance with local or national policies. However, in most cases only households for whom the market is deemed unable to deliver housing will benefit from social housing (a targeted approach).

As mentioned above, eligibility is often based on means-tested income thresholds, usually benchmarked against average or minimum incomes/wages. Access criteria can also be defined according to criteria of need (housing conditions at the time of the application: homelessness, inadequate accommodation, over-occupation, etc. as is typically the case in the UK) or criteria relating to the beneficiaries as vulnerable groups (youths, older people, families with a large number of children, people with disabilities, etc.). The time a household has been registered on a waiting list is also one of the driving criteria. Even in cases where access is not absolutely restricted like in Denmark, there are limits for costs of construction and the size of dwellings for new builds. Overall, this means that social housing providers house a disproportionate number of those who would find it difficult or impossible to access housing options via the private market.

It is worth mentioning that in most cases the system of allocation is controlled by the municipality, with the overall objective of guaranteeing and accelerating access to social housing for target groups and emergency cases in line with local and national policies.

Once registration is completed, criteria of priority are often used to establish the order of allocation to different registered applicants. These criteria aim to guarantee that persons with the greatest needs are served first. Criteria can also vary according to the local needs and gaps in local housing markets, for instance the need to attract certain types of key workers or professionals, to provide housing for students and young people with the aim of revitalising areas with an ageing population, etc. Indeed, one of the main challenges many European cities are faced with nowadays, besides tackling the shortage of affordable housing in the most attractive urban areas, is to increase the social mix and deal with socio-spatial segregation.

FINANCING SOCIAL HOUSING IN EUROPE

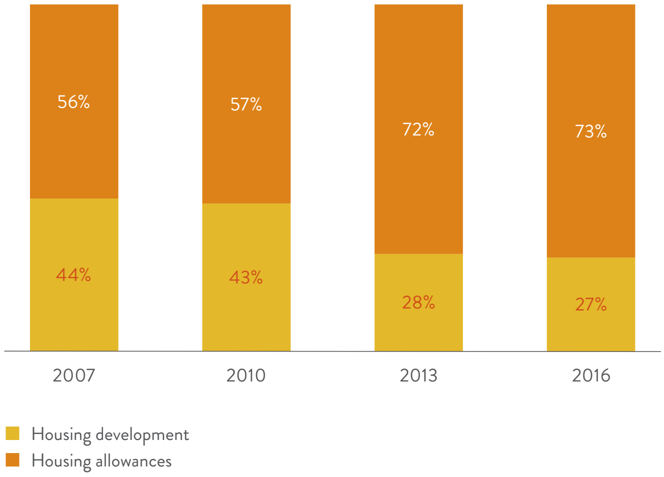
Social housing providers draw on a number of funding sources for building homes which vary a great deal across different European countries. Even within a country social housing is in most cases provided through a mix of different types of funding sources. These sources include grant funding from (central or local) government, public loans and guarantees at favourable rates or interest rate subsidies. Moreover, social housing providers frequently borrow from banks, on the capital market or issue their own bonds. In addition, the European Investment Bank (EIB) is playing an increasing role as an investor in social housing projects, often facilitated by national aggregators, such is the case with the Housing Finance Corporation (THFC) in the UK.

Many housing providers use their own resources and surpluses, both as a leverage for additional funding on the capital markets, but also as a direct funding stream. With some social housing providers simultaneously being involved in commercial activities, they use funds generated from private sales to cross-subsidise the construction of social and affordable homes. Another funding source that plays a role in a few countries is tenants' own equity contribution, usually paid at the beginning of a tenancy. Equally important to capital funding for building new homes is the revenue funding which mainly comes in the form of rent payments from tenants. In this way, financial support for tenants, such as housing allowances, is not only an important support for households who face hardship but also for housing providers to guarantee that their income streams are maintained.

In some countries, housing policies even vary by region, as it is the case for instance with the nine federal states in Austria or the four countries of the UK. Despite this complexity, the literature on housing research broadly distinguishes between supply and demand side interventions or, what are sometimes also referred to as object and subject subsidies. Historically, the housing shortages many European countries faced in the wake of World War I and II have been tackled by large government investment programmes into building new homes. Building subsidies were seen as the most effective way of dealing with this problem. In many cases this was achieved via the construction of public or social housing. As a result, the most severe housing shortages have been alleviated and housing standards have improved.

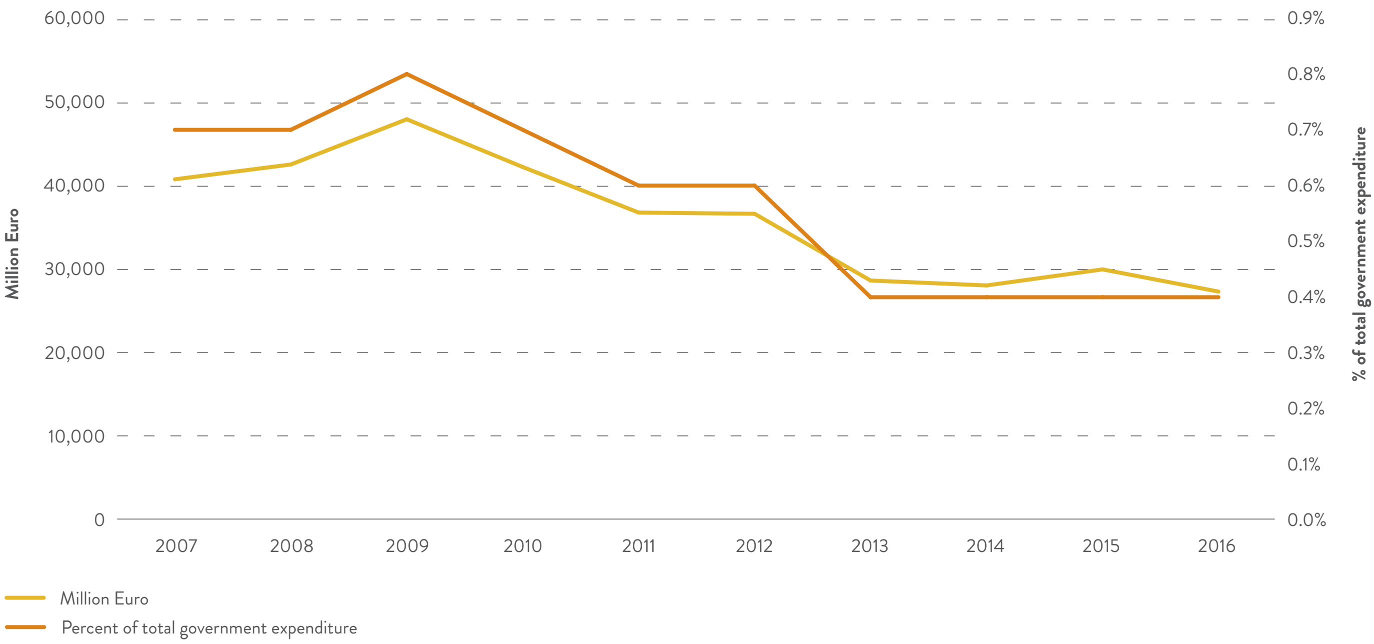
Despite the diversity of European housing systems and several exceptions in this regard, there has been a noticeable shift from supply to demand side subsidies over recent decades in many European countries, with many now spending more on housing allowances than on supply-side subsidies or building new homes.

FIGURE 2 | PUBLIC FUNDING TOWARDS CAPITAL SPEND ON HOUSING DEVELOPMENT AND HOUSING ALLOWANCE IN THE EU, 2007 TO 2016



Source: Eurostat (2016), General government expenditure by function (COFOG)

FIGURE 3 | PUBLIC EXPENDITURE ON HOUSE BUILDING IN THE EU



Source: Eurostat (2016), General government expenditure by function (COFOG)

While in 2009 the split between investing into building new homes versus housing allowances was about half and half, by 2015 the balance had significantly shifted towards housing allowances, which now accounts for around three quarters (73%) of public spending on housing (see also Housing Europe 2017).

One of the main reasons for this shift is of course the decline of investment into building new homes. Public expenditure on house building in the EU has in fact declined from around £40bn to £27bn over the last ten years. While in 2007 around 0.7% of total GDP in the EU went towards subsidising the construction of new homes in 2016 it was only 0.4% (see Fig. 3). A trend towards declining capital investment into housing has been particularly prevalent in countries with a comparatively large rented sector, including Denmark, France, the Netherlands and Sweden.

Instead of grant funding public support for social housing, construction today often comes in the form of reductions in the cost of finance obtained from the private capital market. For instance, public support can come in the form of government-secured private investment or state-backed guarantees (social housing associations raise capital in the private sector with a state guarantee, which allows the association to obtain favourable terms from commercial banks) (UNECE 2015 and CEB 2017).

CONCLUSIONS

Despite the broad range of housing systems and the diversity of financing mechanisms, many social housing providers across Europe face similar issues. Decreasing public investment into the sector is making it increasingly difficult to provide the affordable homes that are desperately needed. In urban areas in particular, a growing number of people are struggling to find affordable housing options, having to spend a large part of their incomes on housing costs. And this is true not only for lower income but increasingly also for middle income households. Providing secure and affordable housing is therefore not only helping these households financially, but it also ensures that people can choose to live in areas they want to live, be it in order to be close to their workplace, their place of study or where they have their social networks.

As highlighted in the foreword, today the question of how to make housing more affordable is increasingly important at both national and European levels and social housing plays an important role in achieving this. With a new political balance taking shape, and both demographic and climate change already a reality, EU Member States are at a historical crossroads concerning their housing systems. Which path are they going to choose this time?

SOURCES

- Council of Europe Development Bank (CEB). 2017. Housing inequality in Europe. Tackling inequalities in Europe: the role of social investment. Available at: https://coebank.org/media/documents/Part_3-Inequality-Housing.pdf
- Housing Europe. 2012. Housing Europe Review: Nuts and bolts of European social housing systems. Available at: http://www.housingeurope.eu/resource-105/the-housing-europe-review-2012
- Housing Europe. 2017. The State of Housing in the EU 2017. Available at: http://www.housingeurope.eu/resource-1000/the-state-of-housing-in-the-eu-2017
- OECD. 2016. Affordable Housing Database: key characteristics of social rental housing. Available at: http://www.oecd.org/social/affordable-housing-database.htm
- UNECE. 2015. Social Housing in the UNECE region: Models, Trends and Challenges. Geneva: United Nations. Available at: https://www.unece.org/fileadmin/DAM/hlm/documents/Publications/Social_Housing_in_UNECE_region.pdf
- Eurostat. 2015. Housing cost overburden rate by poverty status – EU-SILC survey. Available at: http://ec.europa.eu/eurostat/data/database
- Eurostat. 2016. General government expenditure by function (COFOG). Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Government_expenditure_by_function_%E2%80%93_COFOG

Monitoring the Current LTV

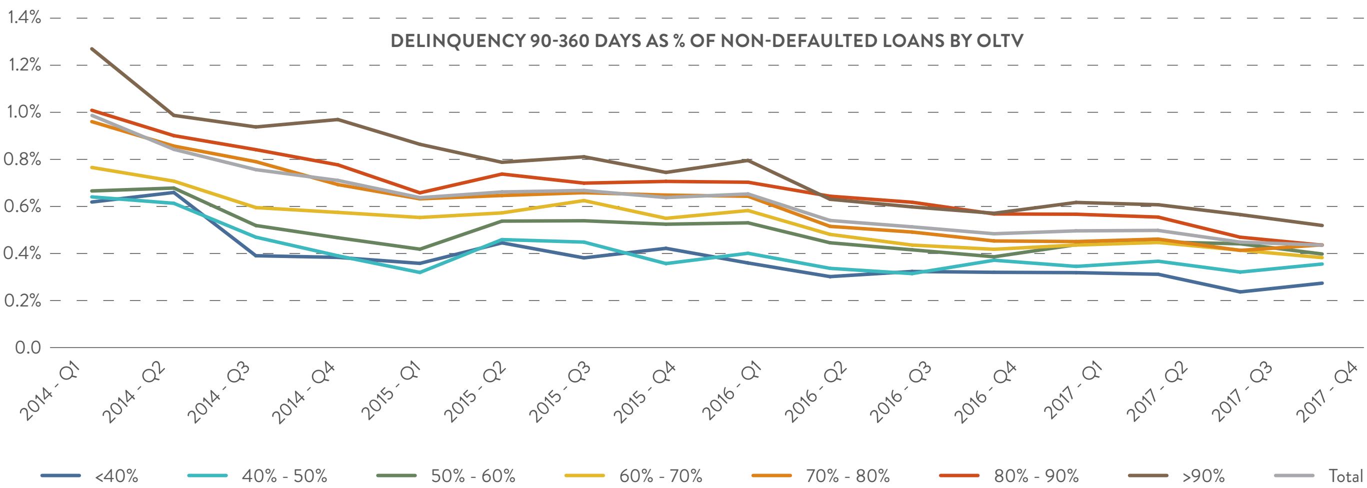
This article follows the publication in the Hypostat 2017 of "The V in LTV and Why it Matters". In last year's article, we used European DataWarehouse's database of securitised loans[1] to discuss the use of the LTV at loan origination (the OLTV) as a predictor of performance.[2] We also discussed the need to adjust the "V" over time, in particular for loss given default calculations. The Current Loan-to-Value (the CLTV), the current amount of a loan compared with the current value of the property used as collateral, typically plays a role in banks' monitoring processes, and high CLTV loans are generally considered riskier and treated in priority.[3] We thus focus this follow-up article on the CLTV and its role in performance monitoring-related issues.

Using our Spanish RMBS performance indices,[4] we find that the CLTV is more strongly related to performance than the OLTV. We also find that this relationship is enduring as it is identified even in old loan vintages. The level of the CLTV can influence loan performance in several ways. Borrowers whose loans are worth more than the value of their property (high CLTV loans) may be reluctant to make further payments and are more likely to default. Conversely, borrowers that can afford to prepay their loans to boost the decrease of their CLTV have a lower probability of default. Also, the fact that lower CLTV loans have an easier access to forbearance options is probably a key explanation for the better performance of these loans. In Europe, regulation aiming at consumer protection requires banks to consider and prefer forbearance options if feasible at no prejudice for the bank, before considering repossessing and liquidating the loan. When there is a risk of making a loss on the loan, the lender would compare the net present value (NPV) of its forbearance options versus the NPV of repossessing the property, which is a direct function of the CLTV. Lower CLTV loans thus perform better than others, because they can benefit from forbearance before becoming delinquent, and if delinquent, they are less likely to stay delinquent. We thus conclude that high CLTV loans should be watched closely as part of the loan monitoring process, particularly when they already have features that would make them ineligible for forbearance. Data on loan valuations indicate that lenders are more careful when valuing high OLTV loans at origination, and that high OLTV loans tend to be revalued somewhat more frequently.

CURRENT LTV AND PERFORMANCE: EVIDENCE FROM SPAIN

Comparing our OLTV-based performance indices to the CLTV-based performance indices for Spain, we find that loan performance is more strongly related to the CLTV than to the OLTV. The case of the Spanish real estate sector is particularly interesting, because it underwent a boom/bust cycle from which it is now recovering. Spanish mortgages are also well represented in European DataWarehouse's securitised loans database. Our Spanish RMBS indices (see description in Appendix 2) track the ratio of loans in arrears by more than 90 days but less than 1 year to the non-defaulted portfolio balance.[5]

EXHIBIT 1A | THE HIGHER THE OLTV, THE WORSE THE PERFORMANCE



Source: European DataWarehouse, upcoming Spanish RMBS Index; Please note: these securitised loans may not be representative of all the loans in the Spanish banking sector. See also our upcoming Spanish RMBS Index and upcoming report on indexed property values and LTVs

1 See European DataWarehouse, see also Appendix 1

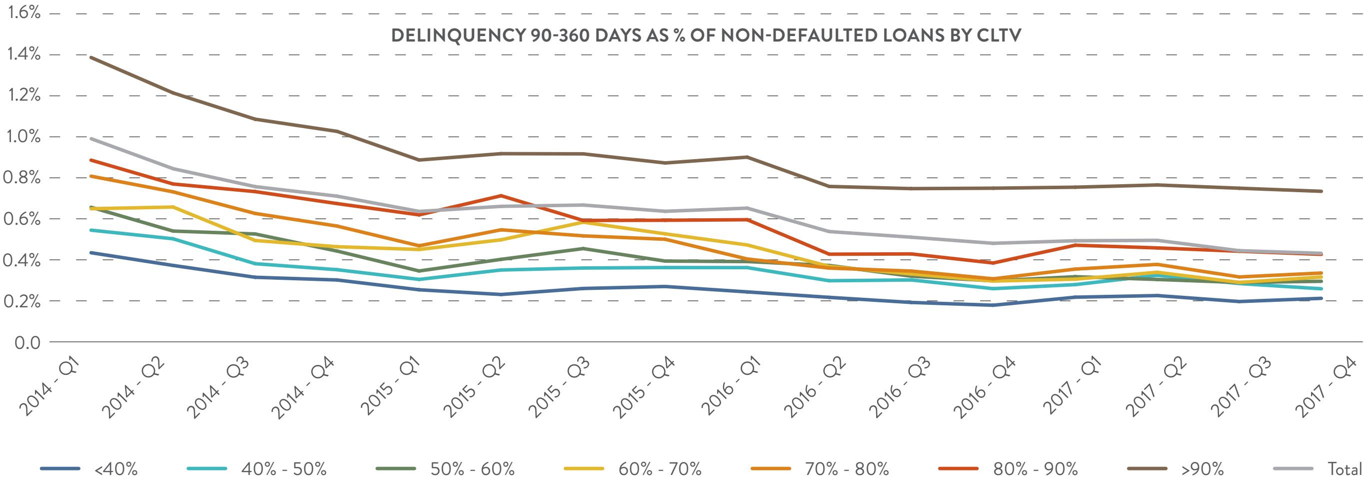
2 See Hypostat 2017 "The "V" in LTV and Why it Matters"; *The Loan To Value (LTV) ratio "… the ratio between the principal balance on the mortgage and the appraised value of the property serving as security for the loan itself" (DBRS definition)*, is a key credit risk indicator for mortgages. It is used in financial regulation, rating agency methodologies, and bank credit policy. See also the use of the LTV for the calibration of performance assumptions. A high LTV at origination implies higher leverage and risk. Either the borrower had to borrow more to buy the property, or it shows a greater risk appetite if he chose to borrow more. Also, the amount of equity in the property can be used as an indicator of willingness to pay, particularly in non-recourse countries.

3 See, for example, Moody's servicer updates in Moody's Credit Insight about Barclays in September 2012 and Nationwide Building Society in January 2014.

4 Upcoming RMBS Indices based on European DataWarehouse loan by loan data.

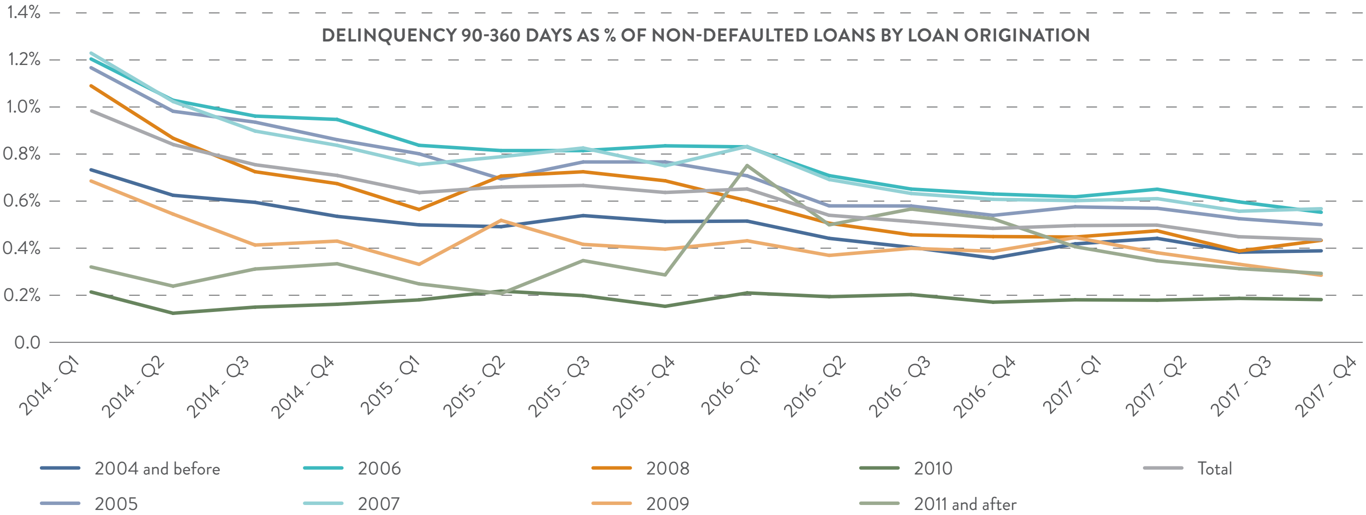
5 In Spanish securitisations, loans are usually considered defaulted once they become more than 12 or 18 months in arrears.

EXHIBIT 1B | THE HIGHER THE CLTV, THE WORSE THE PERFORMANCE (THE RELATIONSHIP IS EVEN STRONGER)



Source: European DataWarehouse

EXHIBIT 1C | SPANISH RMBS INDEX PERFORMANCE BY LOAN VINTAGE



Source: European DataWarehouse

Exhibit 1a shows our Spanish RMBS index, grouping loans according to their OLTV. Exhibit 1b groups the same loans according to their CLTV, thus leaving the "Total" index unchanged in both charts. Whereas the loans in Exhibit 1a are sorted once in an LTV bucket, in Exhibit 1b, a loan can change categories from one period to the next. Comparing Exhibit 1a to Exhibit 1b, the CLTV appears even more strongly related to performance than the OLTV, particularly in the case of the underperformance of loans with a CLTV greater than 90%.

Exhibit 1c shows that independently of the LTV, there is also a strong loan origination vintage effect, with the vintages 2005-2008 (directly before the crisis) performing substantially worse than others. The better performance of post-2008 vintages can probably be explained by the tightening of lending criteria in the wake of the crisis, while the better performance of older vintages can partially be explained by a survivor bias (the worst loans of these vintages would have defaulted and left the sample prior to 2014), and partially by deleveraging. Perhaps vintage composition also plays a role. In the older vintages of Exhibit 1c, the loans would have on average lower LTVs because they were originated with lower OLTVs and benefitted from deleveraging prior to 2007. As we saw in last year's article, the proportion of high OLTV loans increased in the years directly before the crisis.

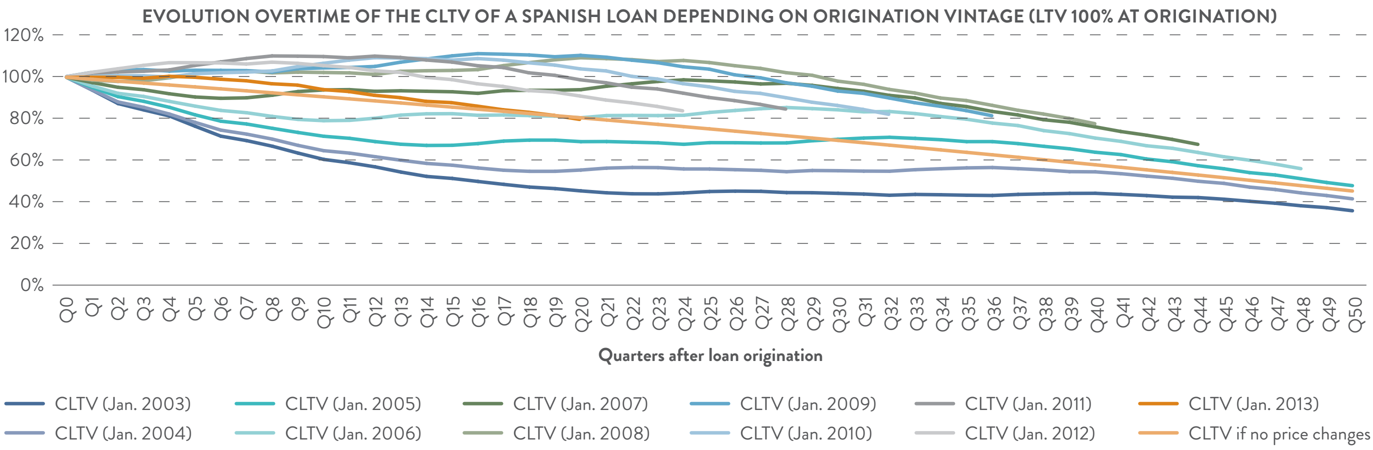
Exhibit 2 shows the theoretical effect of house price fluctuations on the CLTV, for a loan issued in Spain with a 20 years maturity and a 3% interest rate, depending on the year of origination. For the 2003-2004 vintages, increasing house prices boosted deleveraging until 2007. In the following vintages, amortisation barely compensated for the effect of declining house prices for several years. For the worst performing vintages of Exhibit 1c (vintages 2005-2008), deleveraging goes into reverse after a while, as declining house prices outpace loan amortisation. For the 2009+ "crisis" vintages, for which the CLTV would stay at very high levels, performance is better than that of the 2005-2008 vintages, with lower CLTVs. The better performance of the 2009+ vintages in Exhibit 1c, despite their higher CLTVs, is probably also due to the tightening of credit that took place in the wake of the crisis. For vintages 2013 onwards, the house price recovery keeps the CLTV close to what amortisation would be like with static house prices.

Exhibit 3 shows performance based on a CLTV/Vintage segmentation, again using the same loan data but aggregating it in different buckets. Within a vintage category, lower LTV loans perform better and high LTV loans worse, but within a LTV bucket category, recent loans perform better than older loans. The apparent better than index performance of older loans thus appears driven by their leverage rather than by their seasoning.

The better than average performance of the loans with lower CLTV can have several explanations. First, if we focus on the numerator of the CLTV (the loan amount), a borrower with sufficiently high earnings may prepay his loan, thus amortising his loan faster and bringing it into the lower CLTV categories. Conversely, a borrower having trouble repaying his loan and having already benefitted from relief (forbearance) measures is likely to deleverage more slowly all things being equal. The worse performance of the very high CLTV loans can also be driven by borrowers becoming unwilling to pay for properties that are worth less than the value of the loan. This latter observation is expected to be particularly true for non-recourse countries, where the property is the only guarantee for the collateral. However, it is with respect to the access to forbearance measures and their success that the CLTV can be expected to play a pivotal role.

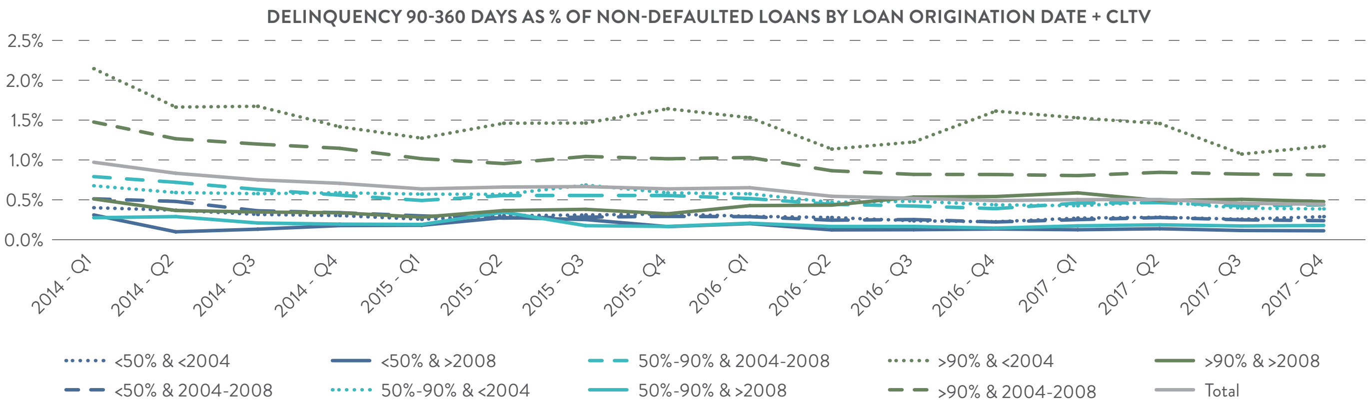
If the OLTV plays a role in the loan origination process, the CLTV can be considered as a key indicator of a borrower's potential eligibility for forbearance. A loan with a lower CLTV could be less likely to be in arrears because it can either avoid delinquency status altogether by pre-emptively undergoing modifications, or once delinquent, it can more easily benefit from loan modifications and cure. For our Exhibit 4, we followed the batch of Spanish mortgages that were not delinquent in 2014,[6] with a maturity date in 2018 or beyond, and that became delinquent in 2015. Exhibit 4 shows the last status available for these loans as of Q4 2017.

EXHIBIT 2 | EFFECT OF HOUSE PRICE FLUCTUATIONS ON THE CLTV (EXAMPLE FOR SPAIN)



Source: European DataWarehouse; CLTV of a loan originated in Q0 with 100% LTV, 20 years of maturity and a 3% fixed interest rate. Assuming a loan of €100,000 and a property value of €100,000, then indexing the property value subsequently with Fomento's house price index for Spain.

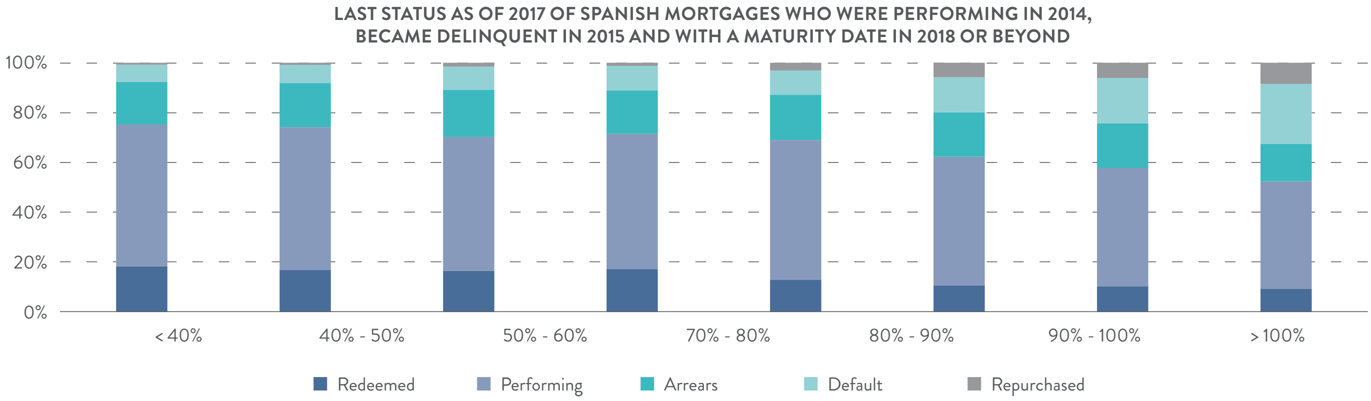
EXHIBIT 3 | BREAKDOWN OF SPANISH RMBS INDEX BY CLTV AND LOAN VINTAGE



Source: European DataWarehouse

6 It should be noted, that the effects of the crisis were already fading over the course of the period observed.

EXHIBIT 4 | HOW THE CLTV AT THE TIME OF ENTERING ARREARS IN 2015 AFFECTS LOANS IN 2017



Source: European DataWarehouse

As expected, the higher the CLTV of a loan is at the time of becoming delinquent, the more likely it is for this loan to subsequently default or stay delinquent. If about 10% of loans with a CLTV<60% were defaulted or repurchased by Q4 2017, it was the case of about 1/3 of loans with a CLTV exceeding 100%. Conversely, in about 70% of cases, loans with a CLTV <60% that entered delinquency in 2015 had either become reperforming or been redeemed, by Q4 2017, even though they were not due before 2018. For very high LTV loans (more than 90% CLTV), about half were back to performing status or had been redeemed, with few cases of actual redemption. Cases of redemption in Exhibit 4 could be due to a voluntary sale of the property (or other asset) by the borrower to repay the loan, given that these loans were not maturing until 2018. This kind of outcome is substantially rarer for higher CLTV loans. The higher the CLTV, the more likely it is that the loan was repurchased by the originator of the securitisation fund, possibly indicating the use of forbearance measures that were incompatible with the securitisation's documentation (see Appendix 3). This happens for instance when the maturity of the securitised loan extends beyond the final legal maturity of the securitisation fund. Also, loan repurchase by the originator are sometimes also used as a way to minimise reported defaults and support the securitisation fund.

IMPACT OF THE CLTV ON THE FORBEARANCE PROCESS

European regulation encourages lenders to apply reasonable forbearance in favour of their borrowers facing payment difficulties. In particular, the European Central Bank's (ECB) Draft Guidance to Banks on Non-Performing Loans explicitly states *"The key objective of granting forbearance measures is to pave the way for non-performing borrowers to exit their non-performing status, or to prevent performing borrowers from reaching a non-performing status. Forbearance measures should always aim to return the exposure to a situation of sustainable repayment."* [7] It thus lists 14 possible forbearance measures banks can apply as well as their field of application. Forbearance measures mentioned in the ECB's guidance include short term measures such as switch to interest-only, reduced payments, grace period, arrears capitalisation and long-term measures such as interest rate reduction, maturity extension, provision of extra security, sale of the property etc. The application of forbearance measures is normally subject to borrower affordability to ensure that the new debt repayment schedule is sustainable. Forbearance measures, if feasible at no loss for the bank, are typically tried first, whereas forced repossession and sale of the asset are generally used as a last resort to avoid losses for the bank. In this context, forbearance measures can also help preserve client relationships and lender reputations.

The use of forbearance measures is typically constrained by several factors. Essentially, the borrower must be acting in good faith and be willing and able to comply with the newly agreed loan conditions.[8] Borrower cooperation with the lender is thus essential to successfully cure the loan. Finally, the agreement must be viable in the long-term. Banks typically have well defined sets of measures that can be applied in these circumstances, and for a loan with a low CLTV, more can be undertaken, than for a loan with a high CLTV. With borrowers in temporary financial difficulty, for instance due to a life changing event (loss of job/divorce/illness…), short term forbearance measures such as a temporary switch to interest only or a grace period can be appropriate.

Several of the possible forbearance measures depend explicitly on the value of the collateral relatively to the value of the loan. Forbearance options are typically assessed relative to the probable outcome of an asset repossession and sale, where the property value is a direct part of the equation. The higher the CLTV, the greater the probability of suffering a loss. A lower CLTV thus helps gain time for the trial and implementation of forbearance measures such as temporary grace periods and capitalisation of due interest. Of course, the borrower's income and expenses play a key role when it comes to determining the affordability of the new plan, as do the borrowers' ability to extend the loan maturity (it should typically not exceed the date at which the borrower would retire). Also, if the loan has a sufficiently low CLTV, the risk at that stage may have decreased sufficiently to make a lower interest rate acceptable to the lender.

---

7 See ECB - Draft Guidance to Banks on Non-Performing Loans; Please refer also to the list of short and long term forbearance measures on pp41-42

8 Forbearance measures should ideally not benefit "strategic defaulters", who could pay their mortgage obligations but choose not to.

9 See for instance "European Housing Market Remains Full Recourse Despite Less Restrictive Legal Environment", Moody's Credit Insight, January 2014

10 See Moody's Credit Insight February 2017 "Recovery rates remain within our assumptions amid weakened repossessed property prices"

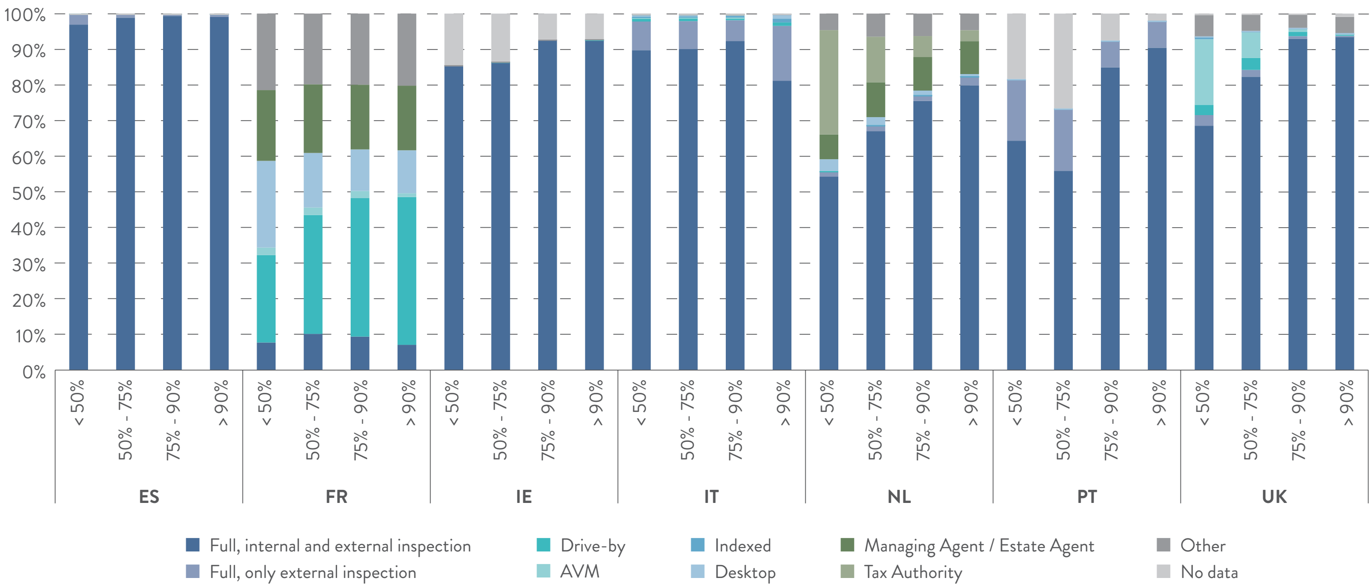
11 See "The Effects of Principal Reduction on HAMP Early Redefault Rates". Debt forgiveness reduces the payment amount, but also increases the borrower's willingness to pay. A US Treasury study finds that "the behaviour of borrowers who get principal reductions under the Home Affordable Modification Program (HAMP) is much more closely related to their new, reduced loan-to-value (LTV) ratio, than to their before modification (higher) LTV." The same study also finds that a borrower benefitting from a payment reduction through a reduction of negative equity (thus decreasing the CLTV) is less likely to redefault than a borrower having benefitted from the same payment reduction through other means without a reduction of CLTV. The outright Liquidation of an underwater loan is therefore likely to result in a loss for the bank and should be weighed against the interest or principal forgiveness measures as part of a loan restructuring.

When forbearance cannot be granted, the property would be repossessed, sold, and, provided that the CLTV does not exceed a certain percentage, a full recovery with no loss should be expected. If the proceeds of the liquidation are insufficient, final recovery will depend on the amount of the remainder that can be claimed from the borrower. In "full recourse" countries, the borrower should repay the outstanding debt even after liquidation of the asset.[9] A defaulting loan with a high CLTV (i.e. beyond 100%) that would not make a loss in a full recourse country (like the Netherlands), may result in a loss in a non-full recourse country. But even in a full recourse country, it is possible that in a case of severe market disruption, the standards are lowered during the crisis when too many borrowers are affected. On the contrary, in a dislocated real estate market, it is possible that the actual recovery following a forced sale ends up being well below what the indexed property value would suggest.[10] When facing substantial losses, a bank may instead weigh the pros and cons of debt forgiveness (thus taking an up-front loss), to still maximise its recovery, as it may be pointless to repossess a property if there is no one to sell it to.[11]

IMPLICATIONS FOR PROPERTY VALUATIONS

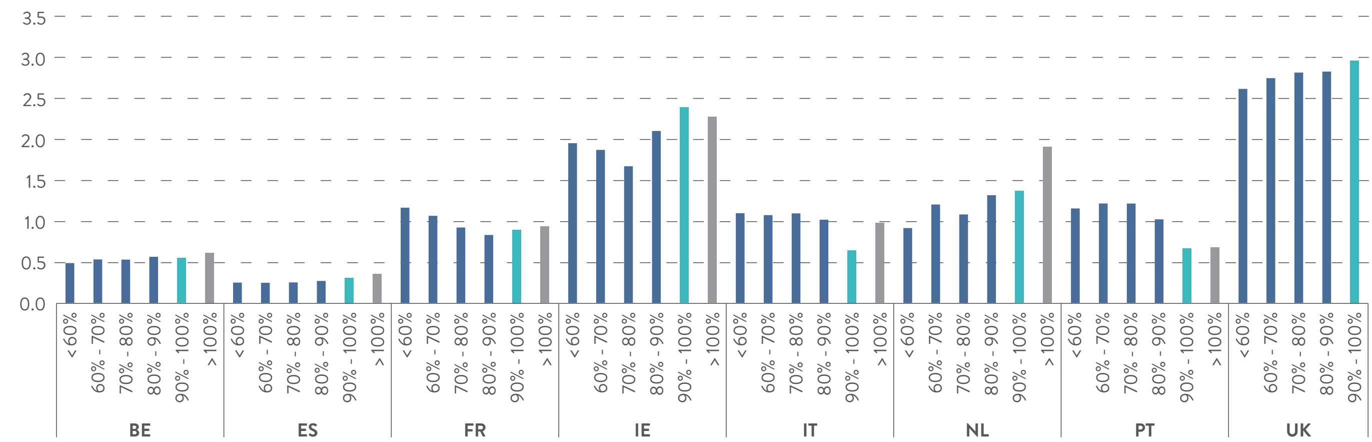
Keeping track of property prices is thus vital to update the CLTV. This can start with a reliable evaluation at loan origination, used as a basis to infer the updated property valuations afterward (i.e. indexing an original value to infer the current value). Exhibit 5 shows that the full inspection, generally considered the most reliable sort of evaluation, is indeed the most used method. It is interesting to note that alternative methods used at loan origination tend to be employed for the loans with the lowest OLTVs, while the full internal and external inspection is the preferred method for the loans with the highest original LTVs.

EXHIBIT 5 | METHOD USED FOR THE VALUATION OF LOANS AT ORIGINATION DEPENDING ON OLTV



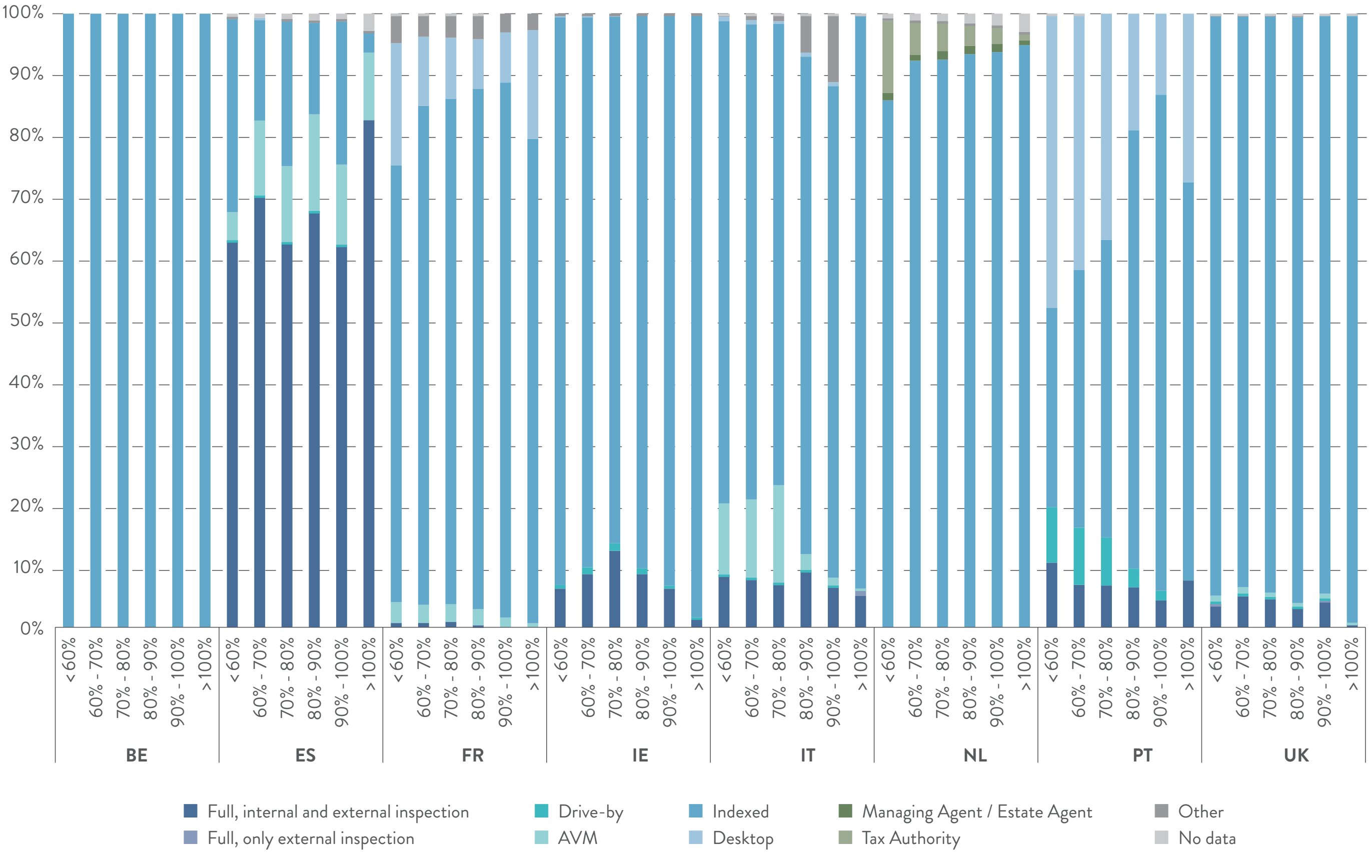
Source: European DataWarehouse

EXHIBIT 6 | REVALUATION FREQUENCY (AVERAGE NUMBER OF VALUATIONS PER YEAR, DEPENDING ON OLTV)



Source: European DataWarehouse

EXHIBIT 7 | REVALUATION METHOD USED DEPENDING ON THE OLTV



Source: European DataWarehouse

Exhibit 6 shows the average number of revaluations we recorded per year per property, depending on the country and the OLTV. In several countries, properties with an OLTV exceeding 90% are indeed revalued more frequently, indicating that these loans are monitored more carefully.

Exhibit 7 shows the revaluation method used depending on the original LTV. Overwhelmingly, indexation is indeed the most frequently used method, probably as it is most cost efficient, although desktop valuations and AVM are also used to a lesser extent. Full reviews are only prevalent in Spain, where the revaluation frequency is also lowest, and in this case indeed, loans with an OLTV above 100% are somewhat more likely to benefit from the full valuation. Otherwise, the level of the OLTV does not seem to influence the choice of method used.

High LTV loans have a well-documented higher default probability and expected loss given default. Nevertheless, most high LTV loans end up repaid in full, and make it possible for buyers with little savings to step onto the property ladder. By now, many countries have enacted LTV ceilings at origination, to limit the risks taken by their banks and citizens when they contract a mortgage. The ability to benefit from forbearance measures mitigates the risks that come with high LTV mortgages, and some buffers should probably be embedded in the loan contracts upfront. Loans that have at the same time a high OLTV, a long maturity, a small margin and other forbearance-like conditions already at origination have little leeway for forbearance in a market downturn. High CLTV loans with little options for forbearance, deserve special scrutiny.

APPENDIX 1: EUROPEAN DATAWAREHOUSE LOAN BY LOAN DATA

Our database records loan by loan data for the securitisations that are repo-eligible with the Eurosystem. The fields available are listed in the ECB's reporting templates.[12] Our mortgage database comprises 15.5 million loans (or loan parts) from 673 RMBS securitisation funds as of July 2018.[13] Thus, the representativeness of the sample is subject to the issuance of securitisations and mirrors some selection bias. Typically, loans included in securitisations funds are all performing on the closing date, and thus tend to show better performance than non-securitised loans, all things being equal. Our data sample is also subject to survivor bias as the loans are those that were still active by the time the data was first reported to us, from 2013 onwards. Loans that would have been liquidated, repaid or refinanced prior to this may, therefore, be excluded. We decided to focus on the markets for which ED has the greatest number and volumes of loans, and limit in time the starting date for the study, starting end 2013, as by that time, data quality had substantially improved. In previous studies, our samples were found

12 See ECB' Loan Level Data Templates

13 See European DataWarehouse ABS Market Coverage – July 2018

14 See European DataWarehouse (ED) introduces new ED Index for Spanish SMEs based on Loan Level Data (May 2016).

to be geographically representative, as for most countries, the proportion of loans in a given region tends to match the importance of that region in the country. For some countries, the influence of very large portfolios must also be taken into account. We based our queries on all the mortgages, regardless of loan purpose.

APPENDIX 2: EUROPEAN DATAWAREHOUSE SPANISH RMBS INDEX

Our upcoming Excel-based Spanish RMBS Index (ED's Index) using Loan Level Data (LLD) will provide a unique overview of Spanish RMBS performance (European DataWarehouse 2017-Q4 – INDEX RMBS SPAIN – MS Excel version). It uses the same method as our Spanish SME Index which was first published in 2016 and has been updated quarterly since.[14] It will therefore differ from existing indices, in that it will group the data based on loan rather than deal-specific characteristics (by loan vintage, loan LTV, region etc.). It will also contain standardised stratification tables and performance measures for our active deals, making benchmarking easier. We show two performance indicators, delinquency 60-90 days and delinquency 90-360 days as a percentage of non-defaulted loans.

The 90-360 days delinquency index is the ratio of the amounts of loans that are at least 3 months (90 days) delinquent but less than one-year (360 days) as a proportion of the current volume of the non-defaulted loans. In general, issuers tend to exclude delinquent loans on the closing date, therefore deals with less than a year of seasoning are excluded from the index calculation, as otherwise, a recently closed deal will always show better performance than a seasoned deal, all things being equal.

Our performance indices show a steady performance improvement for Spanish mortgages since Q1 2014. Due to reporting peculiarities, we adjusted the data to improve comparability, using our experience with data quality work to convert the reported "months in arrears" into "days in arrears". For the sake of transparency, the deal-specific time series used in the calculations will also be displayed along with the index values.

Given the size of our sample (more than 1,000,000 borrowers are represented in the active deals as of Q4 2017), conclusions based on ED's Index are to some extent applicable beyond the securitisation universe. Please note however, that several factors come into play to limit the scope of the conclusions to the broader mortgage markets. Given that loans have a certain seasoning prior to being securitised and given that only performing loans are being securitised at that stage, it follows that some of the worst performing loans are excluded from the securitised pools. We therefore expect securitised loans to perform better than others. One last constraint, is that our database gathers data for all the repo eligible deals for which data was submitted since 2013. Data for non-repo eligible deals is therefore not represented in our sample. There is also a possibility that adverse selection (selecting the worst loans to transfer the risk to the investors) and cherry picking (selecting only the best loans to ensure better than average performance) affect pool composition and performance. ED intends to update this index every quarter and to introduce similar indices for other market segments and jurisdictions.

APPENDIX 3: FORBORNE LOANS IN OUR DATABASE

The prospectuses of the securitisation funds in our database typically have a section regarding the applicable forbearance policies, sometimes mentioning in great detail the acceptable forbearance measures, and specifying what proportion of the loans may be subject to interest rate and maturity modifications, with the applicable constraints on the maturity of the individual loans (which may not exceed the final legal maturity of the securitised portfolios) and the loans' revised interest rates (typically stating that the overall margin for the entire portfolio must remain within a specific range). The proportion of loans subject to forbearance in the portfolios at closing (if any), is also typically mentioned in the prospectus. In our database, a specific field can be used to identify loans benefitting from forbearance arrangements (AR173 "Performance arrangement", optional field), and forborne loans can be identified as loans whose current maturity, or interest rate, or repayment type, are different from those originally stated.

Energy Efficient Mortgages Initiative – The Dawn of a New Asset Class

By the EMF-ECBC Secretariat

1 — INTRODUCTION

Interest in energy efficiency finance has increased in recent years, driven largely by the successful conclusion of COP21 and the ambitious efforts being undertaken at EU level as a result.

For its part, the EU has set itself an overall 20% energy savings target by 2020 and a 30% target by 2030. It is widely anticipated that around €180 billion of additional investments a year is needed to reach the EU's 2030 energy efficiency saving targets agreed during COP21. Considering that the EU's building stock is responsible for 40% of the EU's total energy use, and that the value of the European mortgage market is equal to 53% of EU's GDP, there is huge potential to unlock the benefits of mortgage financing to support energy efficiency. Bridging these two worlds, which until recently have been operating in a largely disconnected manner, has the potential to deliver an effective way to tackle the challenges arising from climate change.

With this in mind, for approximately three years, the European Mortgage Federation – European Covered Bond Council (EMF-ECBC) has been working on the development of an "energy efficient mortgage" according to which building owners are incentivised to improve the energy efficiency of their buildings or acquire an already energy efficient property by way of favourable financing conditions linked to the mortgage. This mortgage financing mechanism is intended to be supported by a data protocol and portal to collect and access large-scale empirical evidence relating to energy efficient mortgage assets allowing a comprehensive analysis of de-risking energy efficiency features. The Energy Efficient Mortgages Initiative, as the project is known, consists of two parallel projects, the "Energy efficient Mortgages Action Plan" (EeMAP) and the "Energy Efficient Data Portal & Protocol" (EeDaPP), and is funded via the European Commission's Horizon 2020 Programme.

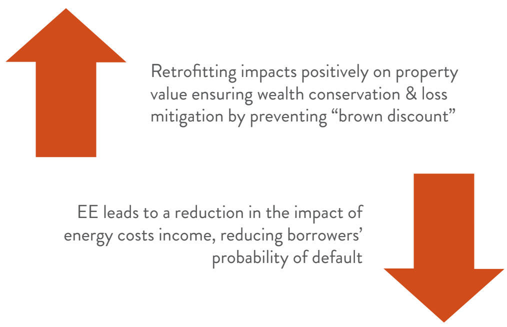
Significantly, the Energy Efficient Mortgages Initiative represents the first time a group of major banks and mortgage lenders, as well as data providers, companies and organisations from the building and energy industries and the valuation profession have proactively come together to discuss private financing of energy efficiency.

2 — ENERGY EFFICIENT MORTGAGES INITIATIVE – THE CONCEPT

The Energy Efficient Mortgages Initiative was born from the realisation that: (i) banks, in financing the purchase of property, can play a game-changing role in supporting the EU's energy savings targets, by bringing energy efficiency into the conversation between banks and consumers by means of a standardised approach to the financing of energy efficient buildings/renovation, and (ii) by way of the Initiative, it would be possible to respond to increasing demand for 'green' on the funding side of the mortgage business, by delivering a new asset class, an energy efficient mortgage, which could be used for the purposes of green bond and green covered bond issuance.

The ultimate success of the Project rests on the key assumption that energy efficiency has a risk mitigation effect for banks, by positively impacting borrowers' ability to service their loan thereby lowering the Probability-of-Default (PD) of the borrower (because there is more disposable income available) and that improved energy efficiency increases the value of the property, thereby lowering the loss for the bank in the case of default, i.e. the Loss-Given-Default (LGD).

FIGURE 1 | ENERGY EFFICIENCY DRIVERS IMPACTING RISK PARAMETERS



Source: EeMAP

Establishing a correlation between energy efficiency and PD and LGD provides a central business case for lenders to originate energy efficient mortgages, given the fundamental role of these risk parameters in the calculation of banks' capital requirements. If a positive effect in respect to the correlation can be established using large-scale empirical evidence – as envisioned by the Project – the EMF-ECBC believes that the lower risk of energy efficient mortgages should be recognised in the regulatory framework in the form of a realignment of the capital requirements for these exposures. In turn, this would represent a strong incentive for banks and investors to play an active role in the energy efficiency financing agenda.

FIGURE 2 | UNDERLYING BUSNIESS CASE

Source: EeMAP

This alignment is also supported at EU level with numerous initiatives being pursued to bring into line the financial sector with the EU's commitments on climate change. As part of these efforts, the European Commission published an Action Plan on Financing Sustainable Growth in March 2018, which sets out the necessary steps for the financial system to contribute to the delivering the

EU's new sustainable finance strategy, by introducing legislative proposals on how to integrate sustainability considerations into new and existing policy frameworks, with the first initiatives already published in Q2 2018.

Encouragingly, in its recently published Action Plan on Sustainable Finance, the European Commission specifically refers to the Energy Efficient Mortgage Initiative on page 9 (footnote 30) as a market initiative aimed at *"demonstrating a correlation between energy efficiency in buildings and mortgage performance"* and commits to considering the potential for a realignment of capital requirements for green assets. In this respect, the European Commission states that it *"will consider all the available evidence on the link between energy efficiency savings and mortgage loan performance"*.

3 — ENERGY EFFICIENT MORTGAGES PILOT SCHEME

Data collection and analysis with a view to establishing this correlation will begin in the form of an Energy Efficient Mortgages Pilot Scheme, which was launched on the occasion of a large Energy Efficient Mortgages Stakeholder Event in Windsor, UK on the 14 June 2018. The Pilot Scheme, which will run for two years, is supported by an Energy Efficient Mortgage Product Framework, which after having undergo extensive market review sets out high-level guidelines for mortgage lending, building performance assessment and property valuation. At the time of the launch of the Pilot Scheme, 37 pioneering banks from across the EU had signed up to participate in the Pilot Scheme along with 24 other supporting organisations. The Pilot Scheme is furthermore supported by an institutional Advisory Council, whose Members include the European Commission, European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), The World Bank, International Finance Corporation (IFC) and UNEP Finance Initiative.

Significantly, the Project in general and the Pilot Scheme in particular will be supported by the design and delivery of a market-led protocol, which will enable the large-scale recording of data relating to energy efficient mortgage assets, via a standardised reporting template. The data will be accessed by way of a common, centralised portal, allowing for continuous tracking of the performance of the energy efficient mortgage assets, thereby also facilitating the tagging of such assets for the purposes of energy efficient bond issuance.

As indicated, the datasets gathered as part of the Project are intended to allow for the linking between energy efficient features of a building, its value, and the loan performance, thereby creating a better understanding of the impact of energy efficiency on banks risk parameters as described above.

Looking at the Project from a broader perspective, the underlying risk assumptions also drive an incentive chain which provides an economic advantage to all stakeholders involved: borrowers, lenders and investors. In addition, the private investments foreseen will provide a flow of capital into the real economy and in doing so support privately held companies, e.g. small and medium sized enterprises (SMEs), engaged in renovation whilst encouraging innovation and stimulating start-ups in the field of energy efficiency.

ENERGY EFFICIENT MORTGAGES INITIATIVE: PROJECT PARTNERS & DELIVERABLES:

The Energy Efficient Mortgages Initiative will concretely deliver the following results by way of EeMAP and EeDaPP during the life of each Project (each 24 months, from May 2017 and March 2018 respectively):

The **EeMAP Initiative** – led by the European Mortgage Federation-European Covered Bond Council (EMF-ECBC), Ca'Foscari University of Venice, RICS, the Europe Regional Network of the World Green Building Council, E.ON and SAFE Goethe University Frankfurt – will deliver the following five deliverables: (1) Identification and summary of market best practices, (2) Definition of an energy performance indicators and a Building Energy Passport, (3) Identification of pre-requisites for the assessment of "green value", (4) Substantiation of correlation between EE & probability of default – portfolio analysis and (5) Definition and design of energy efficient mortgage, based on preferential financial conditions.

The **EeDaPP Initiative** – led by European Mortgage Federation-European Covered Bond Council (EMF-ECBC), Ca'Foscari University of Venice, CRIF, European DataWarehouse, Hypoport, SAFE Goethe University Frankfurt and TXS – will deliver the following five deliverables: (1) identification and summary of market best practices within data systems; (2) definition of energy efficiency reporting criteria; (3) design and delivery of standardised data protocol and common centralised portal; (4) data and substantiation correlation analysis; and (5) roadmap for system integration.

For more information about the Energy Efficient Mortgages Initiative, please visit: http://eemap.energyefficientmortgages.eu

The EeMAP and EeDaPP projects have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements n. 746205 and n. 784979

Over the past few years, green and sustainable bonds have been a fast-growing capital market segment. The first issuers of green bonds were supranational issuers such as the European Investment Fund and the International Finance Corporation (part of the World Bank Group). Since then a wide variety of corporate and agency issuers as well as local and regional authorities and sovereigns have entered the market. Banks also play an increasing role with green senior unsecured issuance by players such as ABN AMRO, Berlin Hyp, Credit Agricole, and ING. In line with the growing issue volumes, investors have become more comfortable with green bonds and their underlying definitions. We see two major trends in the investor community: first, the number of dedicated green institutional investors and/or funds continues to increase in terms of volumes and numbers; and second, even some traditional investors have started to disclose their share of green and sustainable investments. However, there is still a need for further standardisation of the product and for improving transparency to ensure the integrity of the asset class.

The Green Bond Principles as well as the Social Bond Principles – which both have been developed by issuers, investors and intermediaries in close cooperation with the International Capital Market Association (ICMA) – are an important step in the right direction as they provide guidance for both issuers and investors and should help further promote the mainstream acceptance of the green bond market.

Despite the fact that green, social and sustainability bond supply has grown rapidly amongst corporate, financial, multi-lateral and sub-sovereign issuers, we have not seen a concomitant growth in green, social and sustainability covered bond supply. However, the number of green and sustainable covered bond programmes increases constantly with, Sparebank 1 Boligkreditt, DBN Boligkreditt and LBBW having issued their inaugural green covered bonds this year (as of June 2018).

The proceeds from the bond issuance are used to finance or refinance green assets (very commonly green buildings) or social assets (typically social housing). However, the cover pools usually contain a mix of assets as the covered bond laws in most countries such as Germany do not allow the covered bond issuers to have several separate mortgage cover pools. Therefore, green covered bond investors rank pari passu with other mortgage covered bond investors and do not have a preferential claim on the green assets in the cover pool in case of issuer insolvency or resolution. Luxembourg has been the first country to introduce a law that allows different programmes for green and non-green covered bonds, with separate cover pools for green and non-green assets.

LUXEMBOURG INTRODUCES LAW ON GREEN COVERED BONDS

In June 2018, Luxembourg amended its covered bond law, introducing green covered bonds as a fifth covered bond type in Luxembourg. The new covered bond type called 'Lettres de Gage (LdG) énergies renouvelables', translates as 'renewable energy covered bonds'. The Luxembourg law is the first legislation explicitly regulating green covered bonds, overcoming the problem that green cover assets currently are included in the regular cover pools that include non-green assets as well (and that green covered bond investor rank pari passu with the other non-green covered bond investors).

ISSUE A GREEN COVERED BOND OR A GREEN SENIOR UNSECURED BOND?

Some covered bond issuers are choosing to issue green bonds in a senior unsecured format, rather than as green covered bonds. In principal, covered bond issuers who want to go down the road of issuing green, social or sustainability bonds have to make several decisions:

First, should the new bond be in a secured or unsecured format? In both cases the proceeds of the bond would be used for green, social or sustainability purposes (but in the case of a covered bond eligible assets would have to be transferred into the cover pool).

Second, if the issuer opted for covered bonds, it has to select the right assets. Social housing loans would be the prime example for collateral for social covered bonds. Mortgages for green buildings could be principally used for green covered bonds. However, here the devil is in the detail. Given the wide-ranging regular reporting requirements, having a granular pool of thousands of smaller residential mortgages could prove difficult (unless you opt for the bold approach of declaring all residential mortgages for properties built after a certain date as green, as with Sparebank 1 Boligkreditt and DNB. Thus, focusing on larger green commercial real estate loans significantly reduces the reporting burden for the issuers.

Moreover, an issuer can combine green, social and sustainable assets in the pool. The ESG (Environmental, Social and Governance) covered bond issued by Munich Hyp would be such an example – as the documentation would allow a combination of green and social assets. The problem with those structures is that they are only eligible for investor portfolios that allow a combination of green and social assets but wouldn't qualify for 'pure green' portfolios. The table below provides an overview of the green, social and sustainability covered bonds issued as of June 2018.

FIGURE 3 | SELECTED GREEN, SOCIAL AND SUSTAINABILITY COVERED BONDS

ISSUE DATE	COUNTRY	BOND	SIZE	TYPE
Sep 14	Germany	MUNHYP 0.375% 9/19	EUR300m	sustainable*
May 15	Germany	BHH 0.125% 5/22	EUR500m	green
Jun 17	Germany	BHH 0.125% 10/23	EUR500m	green
Nov 17	Germany	DHY 0.125% 11/23	EUR500m	green
Jun 18	Germany	LBBW 0.125% 6/27	EUR500m	green
Sep 15	Spain	KUTXAB 1.25% 9/25	EUR1.0bn	social
Dec 16	Spain	CRUNAV 0.625% 12/23	EUR500m	sustainable
Apr 18	Spain	CRUNAV 0.875% 5/25	EUR500m	sustainable
Jul 17	Austria	KA 0.375% 7/21	EUR300m	social
Jan 18	Norway	SPABOL 0.5% 1/25	EUR1.0bn	green
May 18	Norway	DNBNO 0.625% 6/25	EUR1.5bn	green

*Source: Issuer, Bloomberg, HSBC calculations * Environmental, Social and Governance (ESG)*

GREEN COVERED BOND

Berlin Hyp: Berlin Hyp is a frequent issuer of green covered bonds. So far it has issued five green bonds (as of June 2018), of which two are benchmark covered bonds. In the case of green Pfandbriefe, the green cover assets are commercial real estate included in Berlin Hyp's 'normal' mortgage Pfandbrief cover pool. In April 2018, Berlin Hyp adjusted its Framework parameters, previously noting that it could change eligibility criteria provided these become stricter. Berlin Hyp targets growing its share of green assets to 20% of its overall loan portfolio. As of February 2018, Berlin Hyp was at 14% and looks on course to meet its goal.

Deutsche Hyp: In November 2017, Deutsche Hyp became Germany's second green covered bond issuer. Initially, Deutsche Hyp's eligibility criteria for 'green' buildings were virtually identical to those of Berlin Hyp. As such they concluded a licensing agreement they would both use the 'Green Pfandbrief' trademark. Deutsche Hyp also focuses on commercial real estate.

LBBW: In June 2018, LBBW became the third issuer of green German Pfandbriefe. LBBW predominantly finances green commercial buildings according to its general Green Bond Framework that also covers green senior unsecured bonds. In the case of a green covered bond, the green assets are primarily located in Germany and in the US.

Sparebank 1 Boligkreditt: At the beginning of 2018, Norwegian bank Sparebank 1 Boligkreditt issued its inaugural covered bond. Sparebank 1 allocates its green covered bond proceeds to new and existing mortgages for energy efficient residential buildings in Norway. The selection of eligible assets is based on the Norwegian residential Energy Performance Certificates (EPC) system. Once the precise labels are public – likely in 2019 – EPC energy labels A, B and C will be eligible, as well as refurbished buildings that show a 30% energy efficiency improvement. Until then, the selection of eligible assets is derived from the year of construction as newer buildings have significantly better energy standards. Sparebank 1 considers all buildings finished in 2009 or later to be eligible as green cover assets. The issuer commits itself to maintain the cover pool so that the amount of eligible assets at all times is higher than the amount of outstanding green covered bonds.

DNB Boligkreditt: Norway's DNB Boligkreditt issued its inaugural green covered bond in June 2018. Just as Sparebank 1, DNB uses the proceeds for new and existing energy efficient residential buildings in Norway. To be eligible, the residential building has to be amongst the top 15% of the most energy efficient buildings in Norway. Currently, DNB considers all residential buildings completed in 2012 or later to be eligible. The buildings are therefore subject to a stricter building regulation than those eligible for Sparebank 1 covered bonds. Green assets that become ineligible will no longer count as green cover assets and will be replaced when necessary.

SOCIAL COVERED BONDS

Kutxabank social covered bond: Spain's Kutxabank issued its first social covered bond to help low-income individuals and families access accommodation. Proceeds from the bond are used to finance social housing loans and to finance loans for new social housing projects. Kutxabank allocates proceeds from its social covered bond into new or existing loans made under the Basque government's Viviendas de Protección Oficial (VPO) social housing programme. Proceeds must be used for mortgages for disadvantaged individuals in the Basque country who qualify as low-income, handicapped, divorced, elderly or female victims of gender-based violence. Kuxtabank plans to grant EUR1bn of VPO loans before the bond matures in 2025.

Kommunalkredit Austria: Kommunalkredit so far issued one social covered bond in sub-benchmark size. The issuer plans to issue social covered bonds to refinance social infrastructure projects, in particular supporting education, healthcare and social housing. More specifically, the proceeds will be used (i) for public primary and secondary schools as well as universities, (ii) for public hospitals, nursing homes, rehabilitation centers and homes for the care of the handicapped, and (iii) for the development of subsidised housing and/or retirement or pension homes.

SUSTAINABILITY COVERED BONDS

Munich Hyp: Munich Hyp uses the proceeds of its 'ESG' (sustainability) Pfandbriefe to refinance loans to housing cooperatives in Germany. The funds are used to purchase, build and improve the energy efficiency of housing, and maintain housing for disadvantaged sections of society. Caja Rural de Navarra: Spanish Caja Rural de Navarra has issued two sustainable Cédulas Hipotecarias. Proceeds will be allocated to projects focused on local community social impact and environmental sustainability. The issuer's sustainable projects cover a broad range and include affordable housing, provision of microfinance loans and energy efficiency.

Caja Rural de Navarra: Spanish Caja Rural de Navarra has issued two sustainable Cédulas Hipotecarias. Proceeds will be allocated to projects focused on local community social impact and environmental sustainability. The issuer's sustainable projects cover a broad range and include affordable housing, provision of microfinance loans and energy efficiency.

DO GREEN OR SUSTAINABLE BONDS TRADE TIGHTER THAN OTHER COVERED BONDS?

In terms of spreads, the market does not really distinguish between green/sustainable bonds and 'normal' covered bonds, despite the larger investor base of the former (as they attract sustainable investors in addition to their traditional investors). The new issue levels of the green and ESG German Pfandbriefe were not substantially tighter than those of a 'normal' Pfandbrief transaction and the deals trade more or less in line with the other German mortgage Pfandbriefe. The same holds true for the sustainable Spanish deals by Kutxabank and Caja Rural de Navarra as well as the Norwegian green covered bonds.

The lack of differentiation is currently driven by three main factors, in our opinion. Firstly, from a risk perspective the cover assets backing the green or sustainable covered bonds are the same backing the other 'normal' mortgage covered bonds, i.e. in case of issuer insolvency green/sustainable covered bond investors do not have any preferential claim on the green/sustainable assets. Secondly, the green and sustainable (covered) bond market is still growing and the investor base is still not large enough to justify a significant difference in the pricing. Thirdly, the spread levels in the market are still very compressed as large parts of the market are held by the ECB.

FUTURE MARKET POTENTIAL

In our view, there is significant market potential for the green and sustainable bond market in general. It also seems as if the covered bond market is starting to pick up momentum as the number of issuers continue to rise. Moreover, there is a good chance that the current development in regard to the 'Energy Efficient Mortgages' will further stimulate the growth of the green covered bond market over the coming years.

THE COVERED BOND LABEL: SUSTAINABLE COVERED BONDS

To facilitate the increased interest in and commitment to sustainable funding, the Covered Bond Label Foundation (CBLF) implemented in 2017 a new IT feature which allows investors to identify **Covered Bond Labelled Sustainable Bonds** by means of a "green leaf" icon appearing next to the ISIN of the relevant bonds. At the time of writing, seven sustainable covered bond issuances (Caja Rural de Navarra (two pools), SpareBank 1 Boligkreditt, Berlin Hyp (two pools), Kutxabank and Münchener Hypothekenbank) make use of the Covered Bond Label's green leaf feature to differentiate their sustainable and social covered bonds within the covered bond market. For more information about the Covered Bond Label and its efforts to increase and improve transparency and ensure a homogeneous format across countries and institutions, please refer to the introductory article on the Covered Bond Label, to be found on the ECBC Fact Book 2018[1].

4 — MORTGAGE AND COVERED BOND FUNDING VALUE CHAIN & CONCLUDING REMARKS

As suggested above, the Energy Efficient Mortgages Initiative aims to consider and deliver additional synergies in the mortgage lending and funding value chain by delivering a new asset class, an "Energy Efficient Mortgage" which could be used for the purposes of green/energy efficient covered bonds issuance, creating a virtuous circle. While over the past few years, green and sustainable bonds have been a fast-growing capital market segment, the market for green and sustainable (covered) bonds is still in its infancy. There is nonetheless reason to believe that the market has significant potential going forward, with a strong investor base for green/ sustainable debt products having been observed, e.g. green covered bonds being heavily oversubscribed.

Against this background, there is therefore reason to believe that the Energy Efficient Mortgage Initiative have the potential to act as a catalyst for the mobilisation of mortgage financing of energy efficiency, especially in light of the successful launch of the Energy Efficient Mortgage Pilot Scheme earlier this year, which in turn will stimulate the growth of the green and sustainable covered bond market.

[1] https://hypo.org/ecbc/publications/fact-book/

Housing and Mortgage Markets in 2017

MACROECONOMIC OVERVIEW

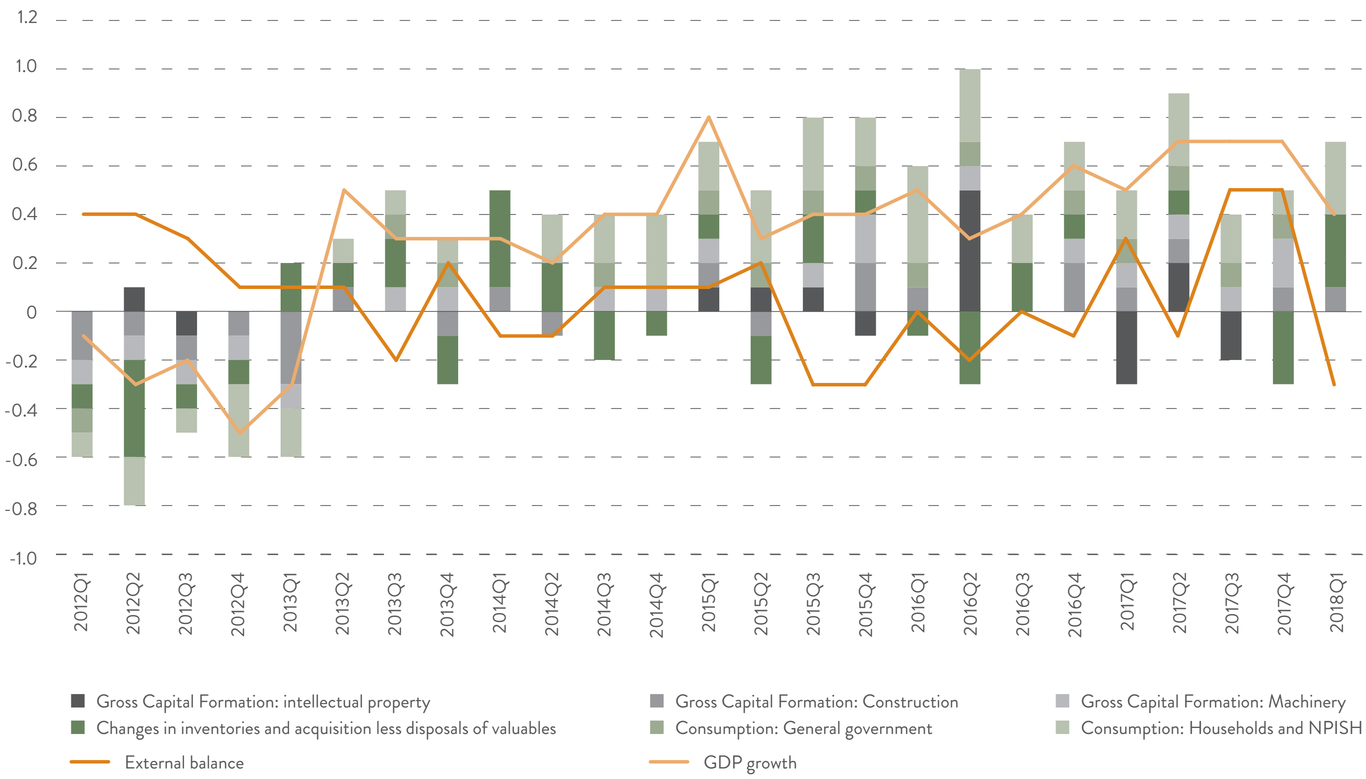
In 2017 Macroeconomic fundamentals are improving with all countries experiencing GDP growth for the first time since the onset of the crisis. Unemployment figures are improving and inflation is picking up, though core-inflation is still subdued.

In 2017, the European economy registered its strongest growth in the last 10 years and the European Union (EU) economy as a whole grew by 2.4% y-o-y. The Euro area economy ended 2017 with a solid 0.7% increase q-o-q, cf. chart 1, thus growing throughout five consecutive quarters. This performance surpassed earlier expectations and it was broad-based and furthermore supported by a high level of confidence, general positive global expansion, low financing costs, improving private balance sheets and decreasing unemployment rates. The cyclical upswing, which started in the second half of 2013 has now reached all Member States to varying degrees which, for the first time since 2007 all registered expansion of their economies.

In 2017, the main factors for GDP growth were principally to be found in domestic demand and net exports. Within domestic demand, which accounts for roughly 55% of GDP, private consumption, investment and public consumption increased the most. Net exports increased substantially in 2017 from -0.4 pps to 0.6 pps. This evolution in the GDP components will make the economy more sensitive to trade tensions and confidence effects.

Considering the recent European Commission surveys the short-term outlook for private consumption appears favourable, fuelled by improvements in the labour market, which have reduced unemployment expectations and increased optimism about the general economic situation. The evolution of private consumption followed closely the deceleration of real disposable income growth.

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



Source: Statistics Data Warehouse – European Central Bank

However, it is also important to notice that the 'optimism bias', namely the difference between the assessment of the future 12 months with respect to the past 12 months, has diminished.

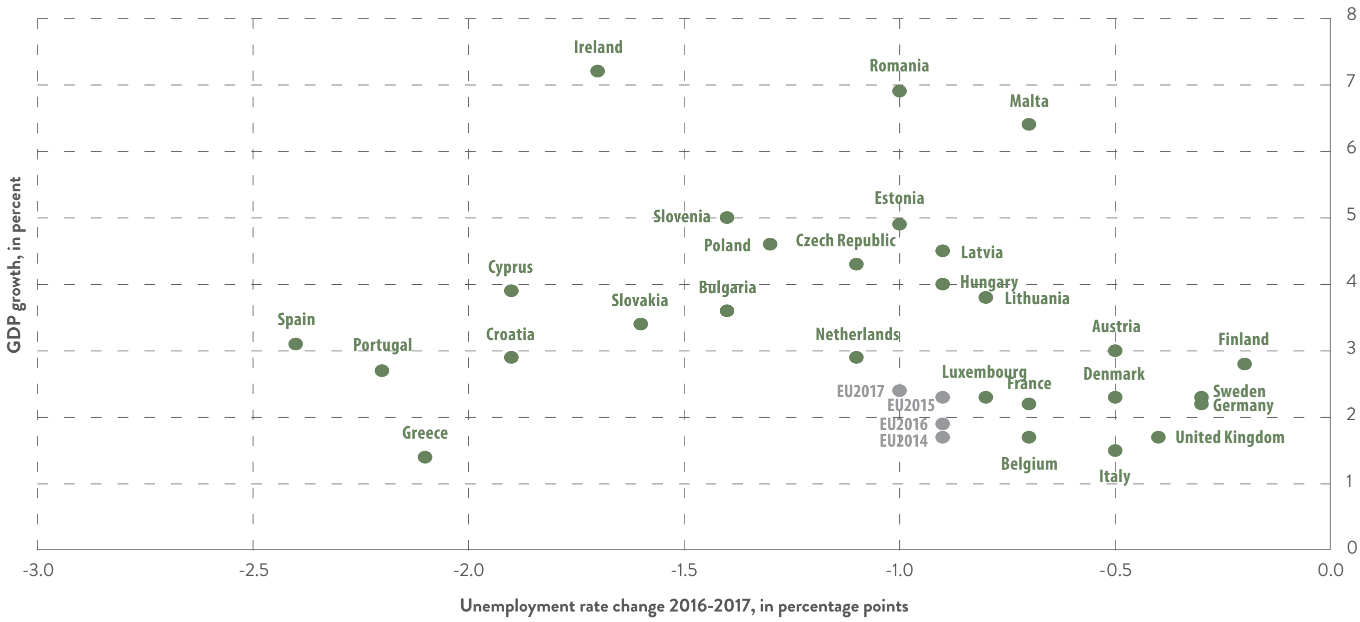
Government consumption grew at its slowest pace since 2014 and its contribution fell from 0.4 pps to 0.2 pps. Investment, which was often identified as the most problematic component after the global financial crisis, has shown encouraging signs of a broad-based pick-up, accounting for 20.7% of the GDP in the Euro area in 2017. This strong performance was based on various supportive factors, including high business confidence, high capacity utilisation, low financing costs and an upswing of global economic activity which also boosted investment.

Economic expansion has also led to improvements in the labour market with fewer unemployed and better employment rates in terms of persons and working hours, and receding slack in the labour market. In Q4 2017, the number of employed persons in the Euro area reached the highest level since 1999. However, the increase in employment over the last ten years mainly benefitted older workers, whereas the number of workers under 50 years of age has only been improving since 2015. Overall, the unemployment rate continued its contraction and is currently close to its pre-crisis level. In any case, besides the headline unemployment rate which takes into account people actively seeking jobs and which are available within 2 weeks, there are also wider definitions which also include people working part-time involuntarily and persons without work who are not available in the two-week time-frame or who are not actively searching.

By taking into account these wider definitions of unemployment, it becomes apparent that, notwithstanding the ever-reducing unemployment rate, there is still room for further improvement to reduce the slack in the labour market.

Throughout the EU Member States the labour market situation improved in all countries in 2017. As can be seen in the scatter plot in chart 2 the gap between the highest and lowest unemployment rates remains wide, ranging from 2.9% of the Czech Republic to 21.5% in Greece. Moreover, all EU Member States are located in the 'positive' quadrant, with increasing growth and decreasing unemployment. It can also be seen that the countries with, on average, a lower GDP per capita are experiencing higher growth (and also a steeper improvement of the unemployment rate) thus marking ongoing convergence.

CHART 2 | UNEMPLOYMENT CHANGE AND GDP GROWTH IN 2017, PERCENT



Source: Eurostat

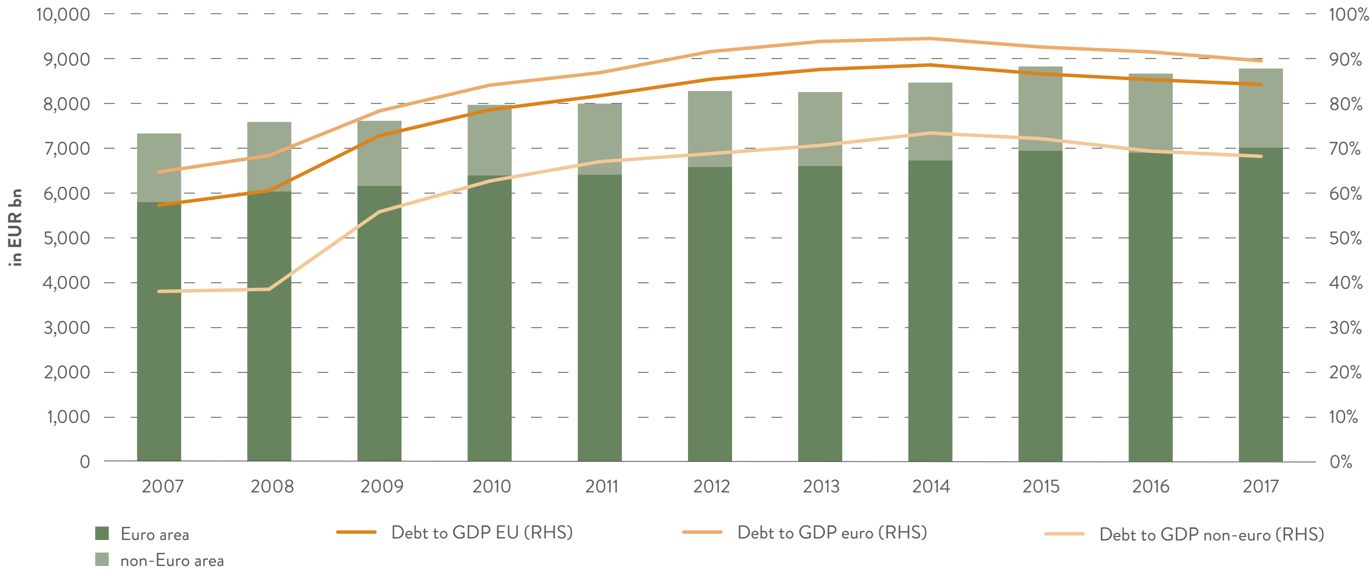
In 2017, public finances continued to improve thanks to the economic improvement and to the historically low interest rates which helped to deleverage the public sector. This dynamic was true for nearly all EU Member States in 2017 and is expected to continue in the coming years. As can be seen in chart 3, even if the debt-to-GDP ratio in the Euro area consolidated at around 89% in absolute values, for the first time the governments of the common currency area owed more than EUR 7 tn at the end of 2017.

Even if the aggregate picture shows a move in the right direction the public finances of the various countries reveal different pictures, with different challenges for each, as can be seen in map 1.

Notwithstanding an increase to 1.5% in 2017 from 0.2% in 2016, core inflation still remains subdued. However, an upturn is expected mainly due to the recent developments in wage growth which is a key determinant of domestic price pressures. The differing growth and inflation evolution over the year shaped the ECB's monetary policy decisions to recalibrate its asset purchase programme. In October, the ECB decided to reduce the pace of monthly asset purchase from EUR 60 bn to EUR 30 bn, whilst at the same time extending it by nine months, until September 2018. Moreover, in March 2018, the explicit reference to the ECB's readiness to expand the asset purchase programme if the outlook should become less favourable was removed from their official communication, thus reflecting the increased confidence in the outlook of the economy. As can be seen in chart 4, short and medium-term expectations remain stable. In the UK, the largest non-Euro area economy, inflation reached 3% at the end of 2017, however the first half of 2018 saw a decreasing trend.

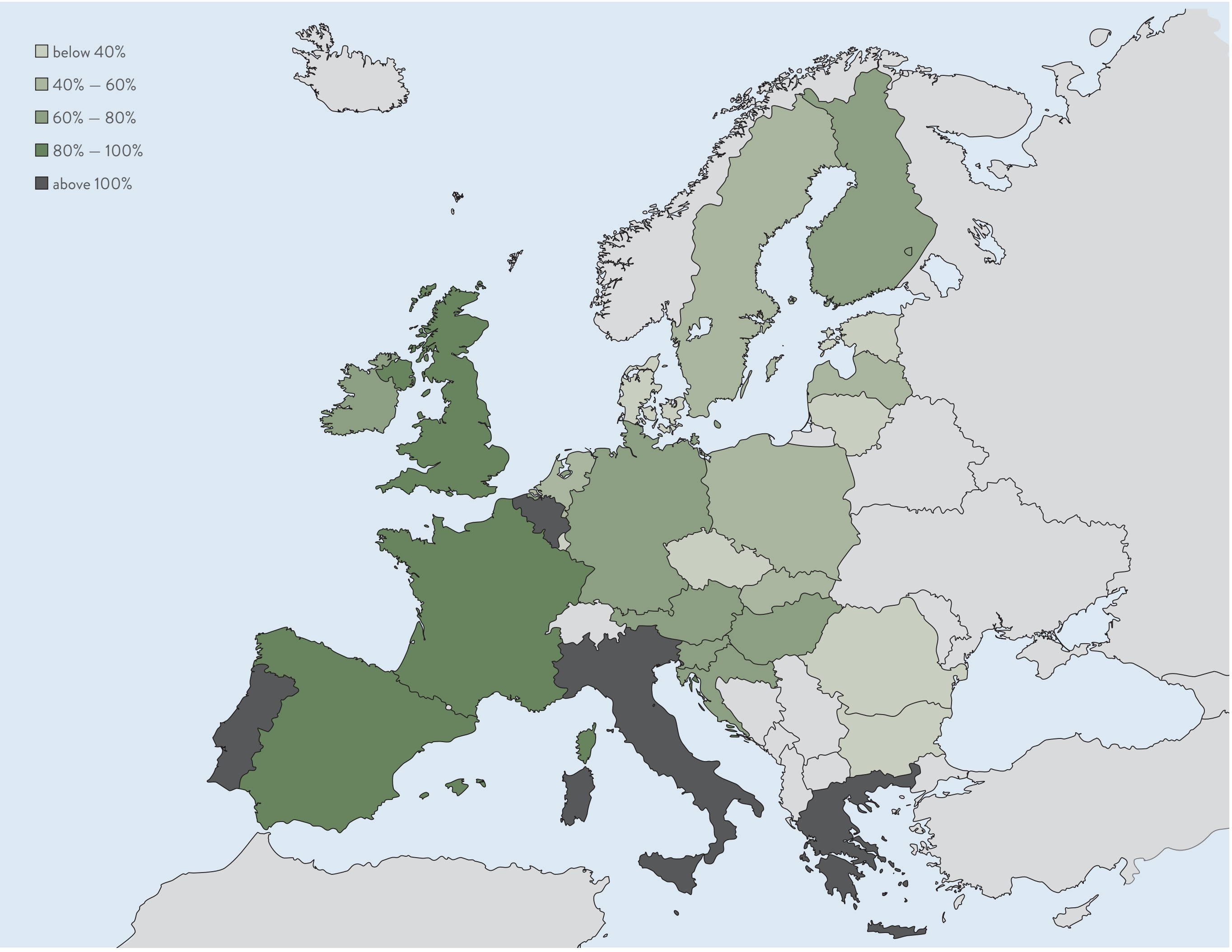
The global economy showed a strong performance in 2017 although global real GDP growth (excluding the EU) slightly decelerated in the second half. This deceleration was broad-based with both advanced and emerging economies posting weaker than expected GDP outturns. In the US, this was mainly due to weak net exports while domestic components of GDP continued to grow. Growth remained strong in emerging Asia and South Africa, while a slowdown was registered in Brazil and Russia in Q4 2017. Worth mentioning is the ongoing cyclical upswing registered in the US, supported by accommodative financial conditions and buoyant confidence as well as the temporary boost associated with the reconstruction efforts after the hurricanes at the end of 2017.

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



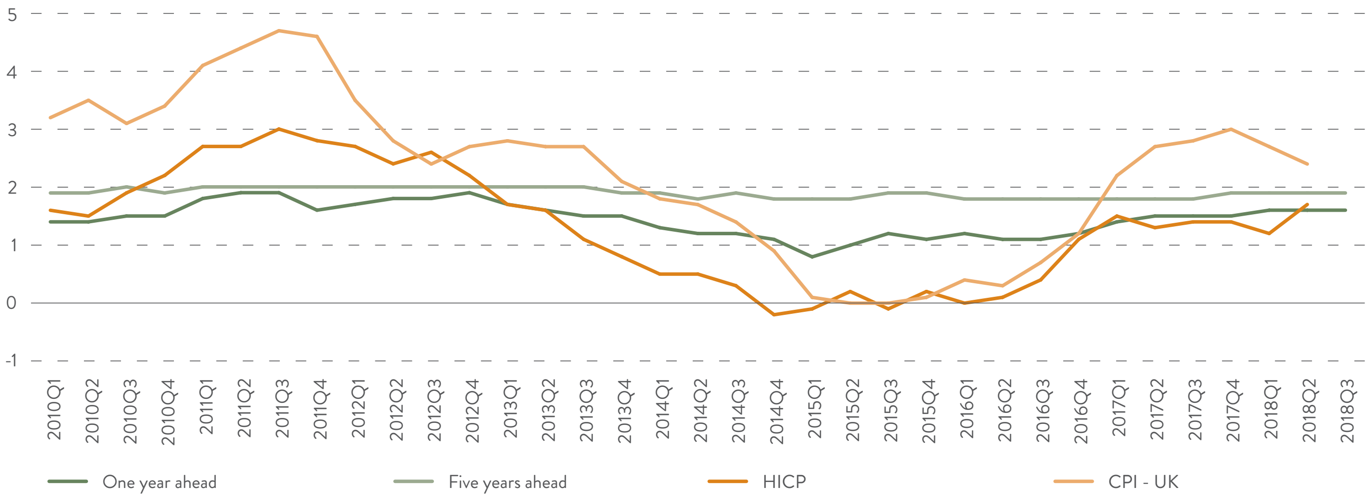
Source: Eurostat

MAP 1 | DEBT TO GDP IN EU 28



Source: Eurostat

CHART 4 | 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

In the Euro area, the current account has risen steadily since 2008 reaching an historically high level of 3.5% of GDP in 2017. The main drivers for this increase were the lower prices of imported commodities, gains in price competitiveness resulting from the weaker Euro and subdued momentum of investment spending which was coupled to high private sector spending. However, since 2016 most of these factors have weakened. The appreciation of the Euro and the increasing of commodity prices, accompanied by the strengthening of domestic demand counteract the positive effects of increasing global activity. In any case even though over the past years more countries have a positive current account balance, the overall current account is mainly driven by Germany, the Netherlands, Italy and France.

HOUSING MARKET

SETTING THE STAGE – DEMOGRAPHIC AND SOCIAL TRENDS IN EUROPE WITH PARTICULAR FOCUS ON THE IMPORTANCE OF CAPITAL CITIES

Cities have always exerted a certain degree of magnetism especially to the younger population and to migrants. Moreover, besides being a place where people are on average richer, the housing costs are generally higher and dwellings are smaller than in the rest of the country. This is just one of the many examples researches have called 'Urban Paradox'.

CAPITAL MAGNETISM

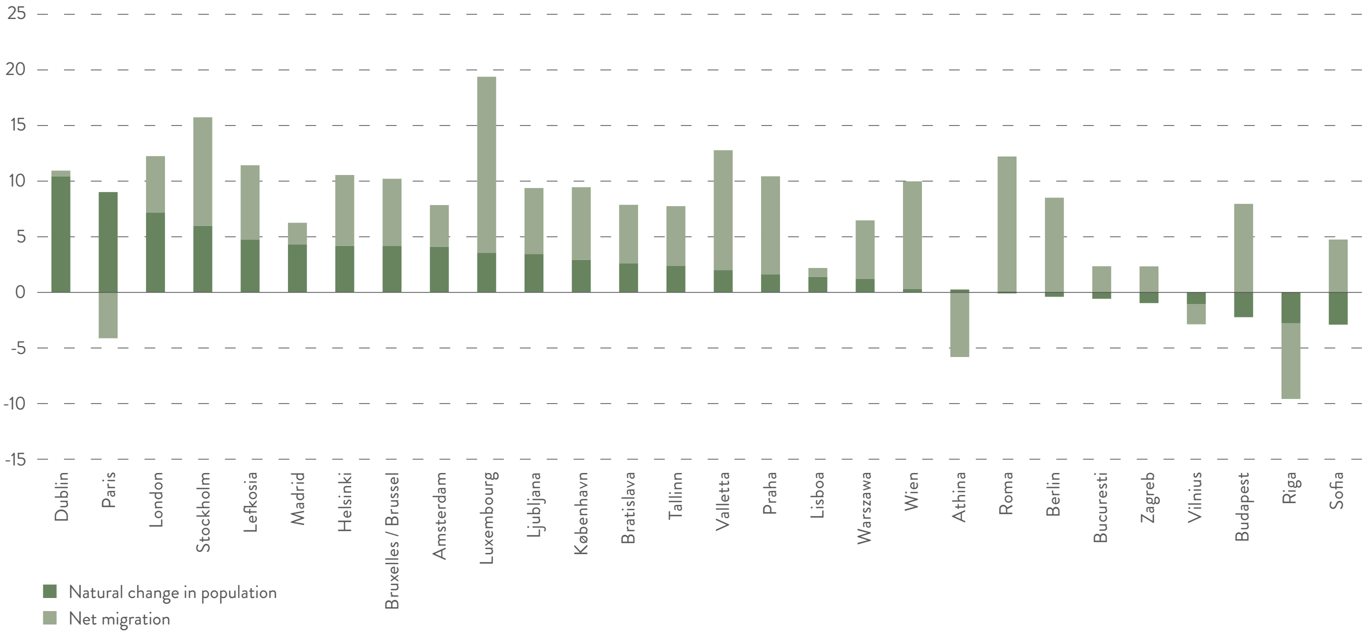
In this year's edition when analysing the Housing market in Europe, we would like to provide some more insight into the urban areas in the EU, where three out of four people in Europe live and which is destined to be home to even more people in the future. The distribution of cities and their morphology in Europe varies significantly across countries due to economic, but also to historic reasons, reflecting political and administrative structures. On the one hand, Germany displays a polycentric pattern of urban development with a high number of medium-sized cities evenly distributed, reflecting the importance of the federal states. This pattern can be also seen in countries like Italy and Poland. On the other hand, Paris and London, the only two cities in the EU with more than 10 million inhabitants, display more monocentric urban development. A similar pattern to that of population is also seen in the relative economic importance of capital cities within their respective countries. Paris and London alone are responsible for around 30% of their national GDP and this pattern is even starker in smaller and less densely populated countries. On the other hand, in Italy and Germany the respective capitals both account for less than 10% of their GDP, and Berlin is the only EU capital where the average GDP per capita is lower than in the rest of the country.

In any case, whether they be large or small, there is a general trend that in all capital cities, except for Athens, Riga and Vilnius, the population has been growing in the last ten years at an average of 7 people per 1000 inhabitants, which can be explained by the sustained attraction of the city as a place to work and to live. The general magnetism of capital cities in the EU can also be observed by looking at the breakdown of who is responsible for this general trend. In the following chart, we see the average population evolution over a ten year period (2007-2016) broken down by natural population change (birth-deaths) and net migration flows[1] (immigration-emigration). It is interesting to note that in cities like Vienna, Rome and Berlin, the growth rate can be explained by the arrival of people not born in these cities, whereas in cities like Dublin immigration and emigration netted out nearly perfectly and the population growth of the city was principally thanks to the birth of more Dubliners.

It is also clear when observing the population structure in the various capitals that they generally have a younger population than their respective countries. In chart 6 we note that the percentage difference between prime age young people (20-34 years) and pensioners (65 years and older) is generally higher in capital cities. In countries especially in north-western Europe the difference is quite stark, while especially in the countries of southern Europe, besides the fact that there are more pensioners than young workers in general, their respective capital cities have an even more biased population towards elderly people.

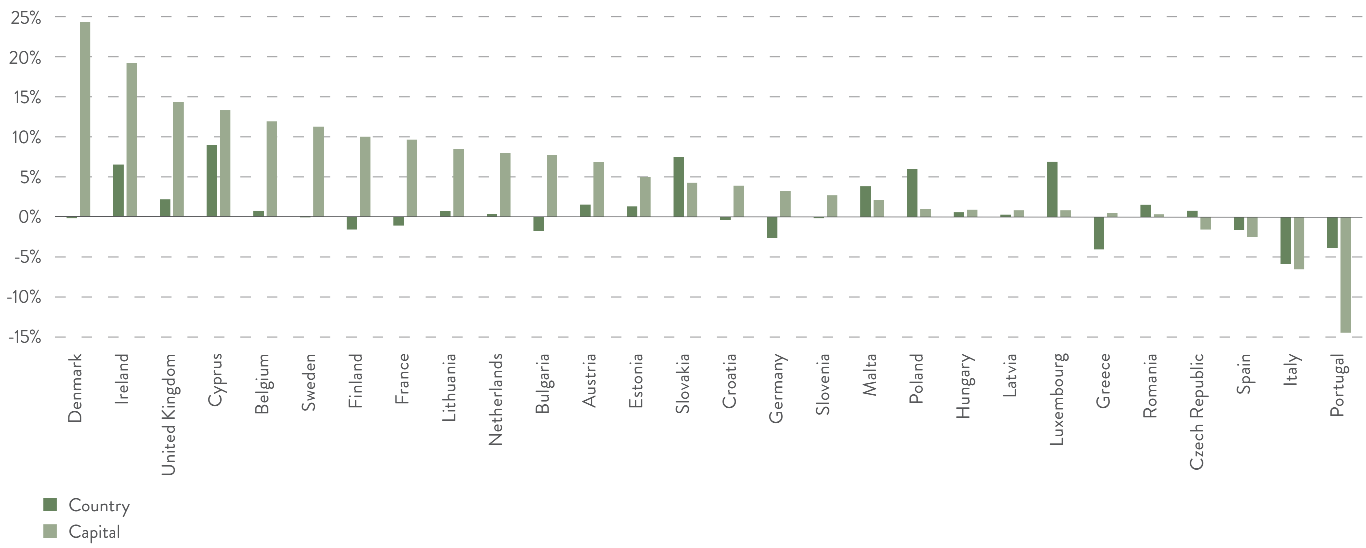
[1] As we are looking at cities these flows account for both intra-country migration, migration within the EU and international migration. Indeed, while much of the current debate around migration focuses on international migration, the vast majority of population movements that take place in the EU are within the confines of the national borders.

CHART 5 | TEN-YEAR POPULATION AVERAGE GROWTH OF CITIES BROKEN DOWN IN NATURAL CHANGE OF POPULATION AND MIGRATION, IN PER THOUSANDS



Source: Eurostat

CHART 6 | DIFFERENCE BETWEEN PRIME AGE WORKERS (20-34 YEARS OLD) AND PENSIONERS (64 YEARS AND OLDER) NATIONAL AVERAGE AND CAPITAL CITY



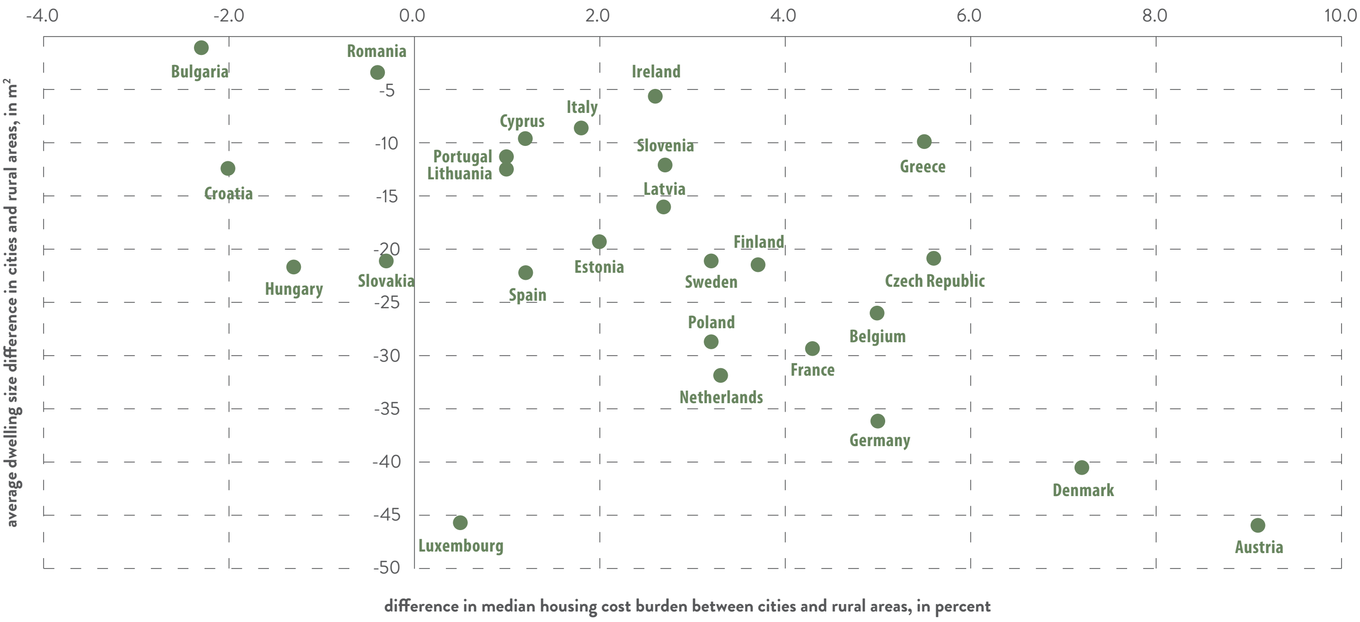
Source: Eurostat

URBAN PARADOX

If on the one hand, capital cities are growing in population, are on average richer and there are more opportunities, on the other hand, they are, at the same time, characterised by a wide range of problems such as higher unemployment, crime, social inequalities and other challenges, such as a lack of affordable housing. This is a reality which researchers have named the "Urban Paradox". One of the classic paradoxes which prospective homeowners generally face in nearly all EU capital cities, which is furthermore borne out by the data, is the dilemma to either live in the city, therefore facing higher costs for less space, or to find a dwelling in more rural areas where costs are lower and there is more space.

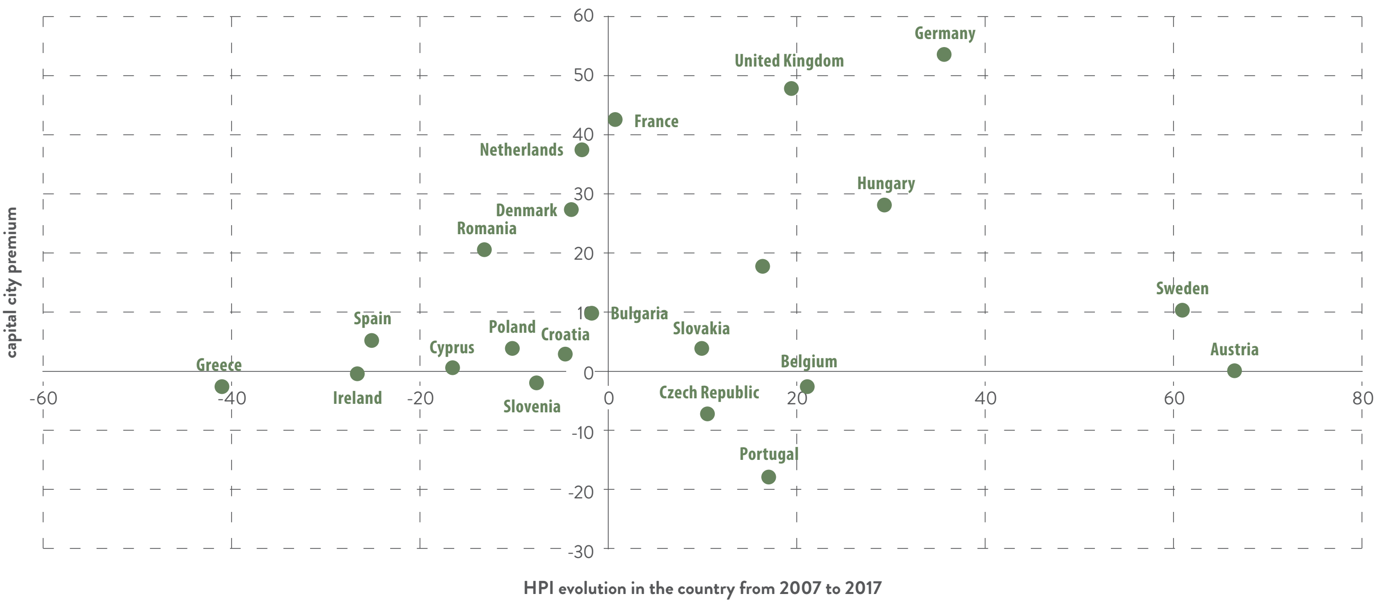
Among the various paradoxes, we would like to focus on the housing one. The lack of space for urban developments coupled with the high demand for new houses which is in turn exacerbated by the fact that in cities there are more two or one-person households (in Berlin nearly 50% of the total households are

CHART 7 | DWELLINGS IN CITIES ARE GENERALLY MORE EXPENSIVE AND SMALLER THAN IN RURAL AREAS



Source: Eurostat

CHART 8 | PREMIUM CAPITAL HPI WITH RESPECT TO THE HOUSE PRICE INDEX OF THE COUNTRY, 2007-2017



Source: European Mortgage Federation

* for the following countries the house price evolution was analysed for a different time-line due to lack of data: Belgium (2010-2017), Czech Republic (2007-2015), Portugal (2008-2017), Romania (2009-2017)

composed by a single person), leads to severe shortages. This is also a factor that explains the higher than average house price evolution in capital cities, which grew on average 10% more than the entire country. Chart 8 visualises the different patterns of the capital city house price index with respect to overall national house price evolution. On the x-axis the HPI dynamics of the overall country are shown, while the y-axis indicates the 'premium', i.e. by how much more the capital city has increased with respect to its surroundings. As can be seen from the chart, several different situations arose in Europe in 2017 with respect to 2007. As a general takeaway, we can safely say that a majority of capital cities grew more than their respective countries. Looking at the countries with the largest capital city premium, i.e. Germany, UK and France, which saw their capitals[2] increase by at least 40% more than the overall country, we note that overall German and British house prices also increased by respectively 35% and 20%, while French house prices have remained virtually the same since 2007. A completely different picture is seen in Austria, where house prices in the capital city and country increased both significantly with

[2] For Germany the capital city index is an aggregate number of Berlin, Hamburg and Munich.

respect to 2007, although Vienna did not have a significantly different house price level increase compared to the rest of the country. In other countries with a vibrant housing market such as Belgium, Czech Republic and Portugal, we see that the capital cities actually grew by less than the average amount of the rest of the country. Finally, are three countries, Greece, Ireland and Slovenia, which saw house prices overall decrease since 2007 and house prices in their respective capital cities decrease slightly more. As also seen in the chart above, house price growth in these three countries is accelerating and house prices in Dublin and Ljubljana have been increasing lately, while in Athens, as in Greece in general, house prices decrease is decelerating.

TRENDS IN HOUSE PRICES

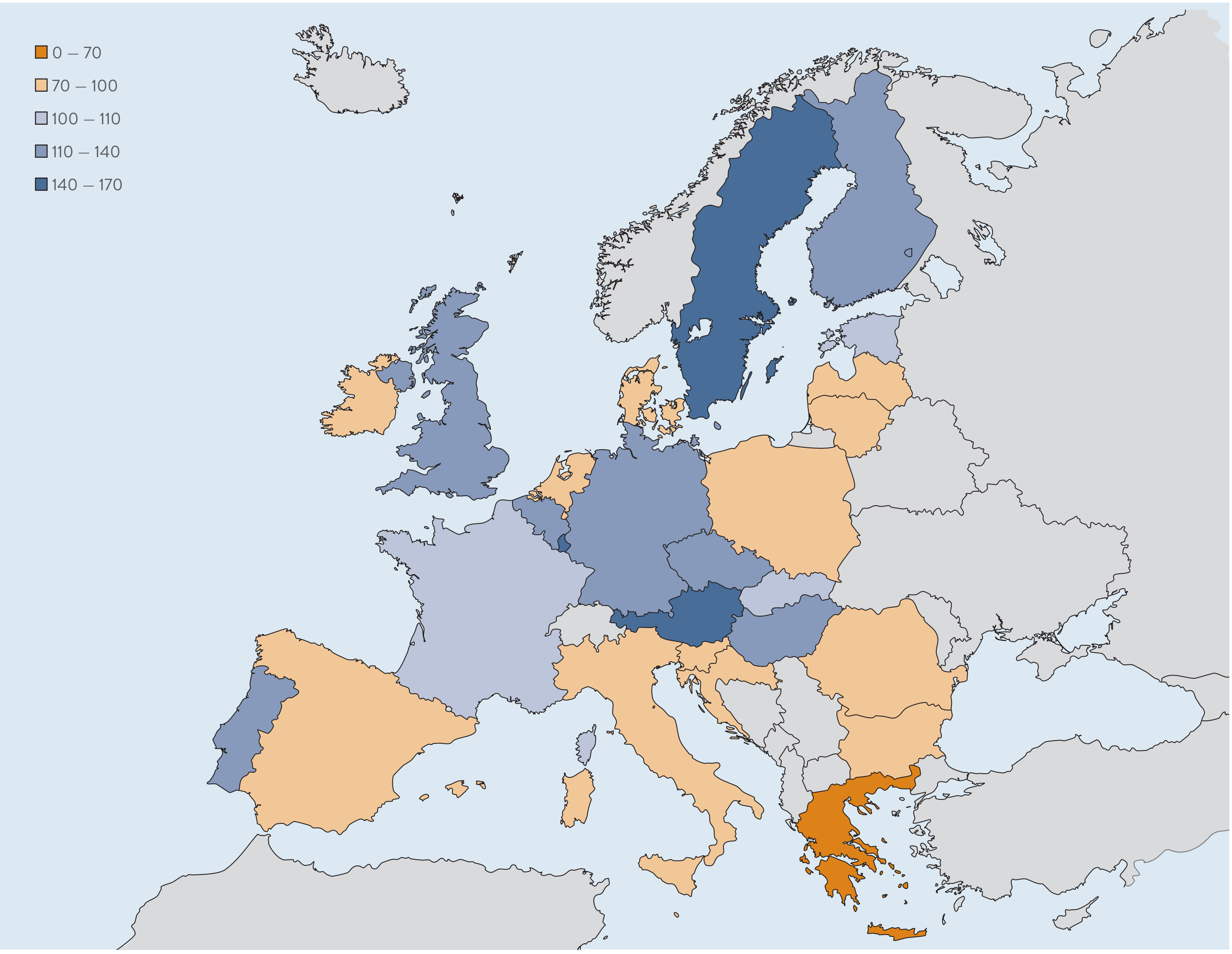
Besides few exceptions, House Prices are increasing in Europe and half of the EU Member States have reached their pre-crisis House Price Levels. The dynamics are heterogeneous with some countries growing significantly on top of already high house prices, while in other countries prices continue to stagnate or contract with house price indexes still below 2007 levels.

CROSS COUNTRY COMPARISON

In 2017, we can derive from the map below that half of the EU Member States reached or surpassed, in some cases by over 60%, the house price levels reached in 2007, while the other half has not yet reached this threshold. The vast majority of this sub-group record levels, ranging between 80-90% of those in 2007. Only Spain, Ireland and Greece are below this level.

Looking at the house price dynamics in chart 9, we see that house prices in the EU are increasing and the general growth trend over the last couple of years shows an accelerating dynamic in around 65% of countries. Also the unweighted average for the EU showed a nearly 6% yearly increase which followed a 5% increase in the previous year. Moreover, it is interesting to point out that countries whose house prices increased by at least 20% above the 2007 levels, saw a deceleration in their house price growth with respect to the previous year. This trend is more marked in Sweden and Hungary, while countries such as Germany and Czech Republic practically confirmed in 2017 their growth rate of 2016 after a significant acceleration with respect to 2015. Among those countries with a higher house price level in 2017 than in 2007 we can also see that in Portugal's house price growth has significantly accelerated over the last years, reaching over 13% growth in 2017, the highest level in Europe for this year. Among those

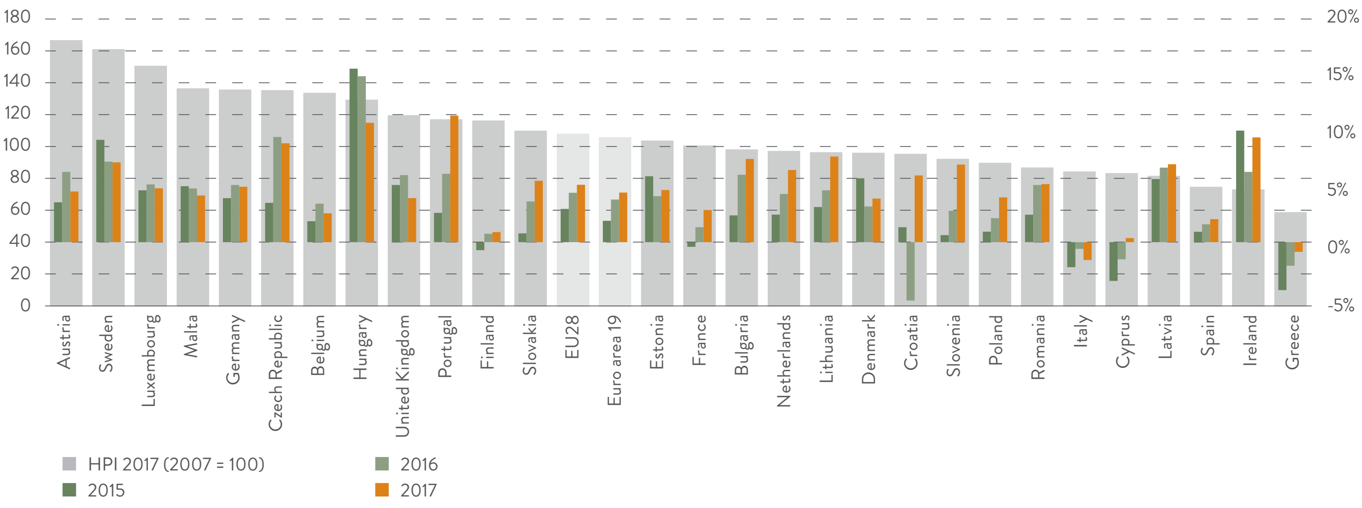
MAP 2 | HOUSE PRICE INDEX EVOLUTION 2007-2017



Source: Eurostat

countries which have house prices that are below 2007 levels we note a general acceleration in house prices, leaving only Italy and Greece with a national house price contraction in 2017. House prices in the former, after nearly breaking even in 2016, contracted by nearly 2% in 2017, while Greece's house prices remained virtually constant in 2017 after a contraction of 5% and 2.5% in respectively 2015 and 2016, a very similar dynamic to Cyprus which grew by nearly 0.5% in 2017.

CHART 9 | HOUSE PRICE INDEX EVOLUTION AND GROWTH RATES



Source: European Mortgage Federation

AFFORDABILITY TO BUY A HOUSE

Looking at the general picture the increasing house prices have in general eroded the house affordability over the last eleven years.

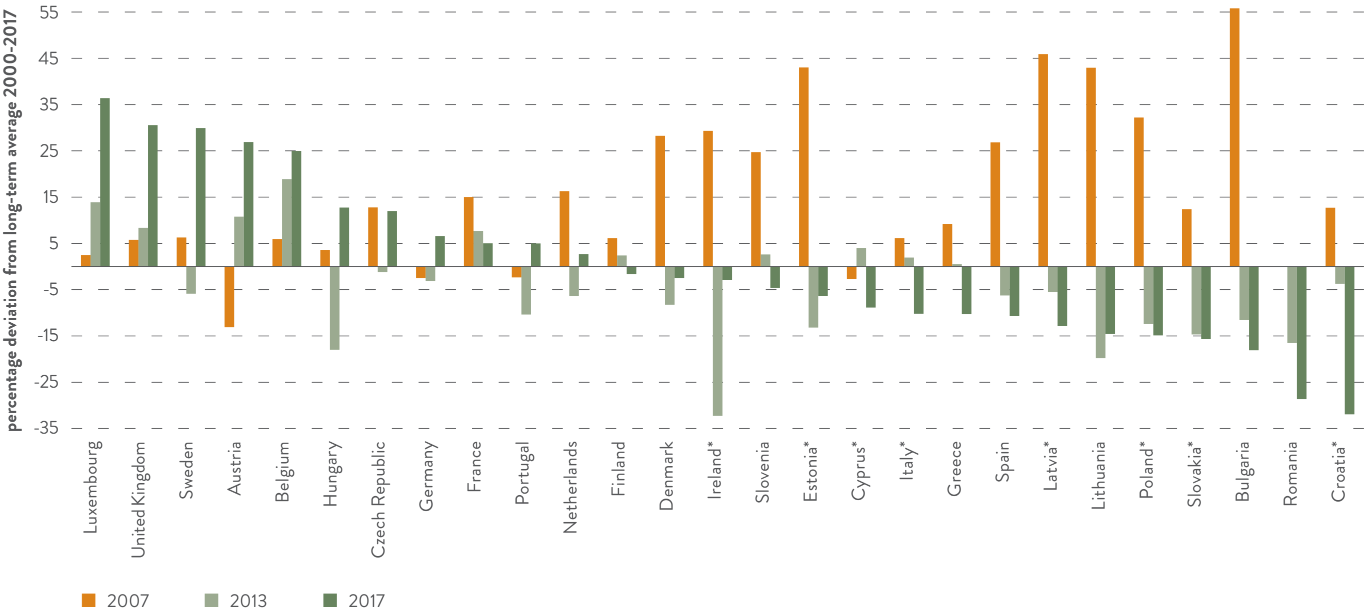
Developments in house prices have a significant impact on the affordability of housing which in turn has profound social consequences especially in active urban areas where the housing market is tight and demand generally outstrips supply. This phenomenon is demonstrated by high levels of homelessness, housing cost overburden, long waiting lists for social housing and eroding house affordability. If on the one hand house prices are increasing overall, it is also important to analyse if gross income of households has kept pace and, therefore, if it is more difficult to buy a dwelling or not. To this end, in the following chart, we compare the price to income ratios, using as the nominator the house price index and as the denominator the per capita gross disposable income, respectively Tables 18 and 28 of the statistical charts of this Hypostat. Since a cross-country comparison of indexes is not significant, as also recorded in the literature[3], we have to analyse the deviation from the long term average of the Price-to-Income Ratio. With the data at hand this reference is the period between 2000 and 2017, since not all house price data were available for the period before. The house prices, besides the data from the EMF, have been taken from the OECD dataset. For six countries (Cyprus, Estonia, Latvia, Poland Romania and Slovakia) variable long-term averages have been taken into account according to the data availability. The fact that for these countries a different long-term average was used with respect to the rest of the dataset will have an impact on their level of deviation from their average, but not on their direction. The countries are ordered according to the size of their deviation from their respective long-term mean in 2017. Here we see how, in the last year, in eleven countries the housing affordability has been eroded. Especially in a handful of countries (Luxembourg, UK, Sweden, Austria and Belgium) the Price-to-Income Ratio in 2017 was at least 24% more than the average over the last 17 years. Moreover it has to be noted that in a majority of countries this ratio has deteriorated over the last 4 years, making getting on and climbing the housing ladder more difficult. When furthermore taking into account the 2007 figure, only in four countries can we identify a constant eroding trend over the last eleven years, while in the majority of cases in our sample between 2007 and 2013 affordability improved. In countries such as Sweden, Hungary and Ireland there have been important swings in the index since 2007 with a significant erosion having taken place in the last four years. The first two countries reached respectively 30% and over 12% of their long term average, while affordability in Ireland reached in 2017 its long term average after having experienced significant swings in the previous eleven years. In other countries, such as Italy, France, Greece and in a series of Central and Eastern European countries except for Hungary and the Czech Republic, affordability improved due to improved gross disposable income coupled with a stagnating or a slower corresponding increase in house prices.

Rising house prices constitute an increasing obstacle to access to housing and the housing overburden rate, which is defined as the proportion of households for whom housing costs represent more than 40% of disposable household income, net of housing allowances, provides a clearer picture of how the population in the various EU Member States is affected by not affordable dwellings. For these statistics, housing costs besides mortgage or rent payments include other costs associated with the actual use of the dwelling, such as cost of utilities, insurance, repair and maintenance, taxes, service and charges[4]. In the chart below, we can see that in Greece over 40% of the entire population and nearly the totality of those at risk of poverty, i.e. those with less than 60% of median income, are considered as having a housing cost overburden. On average around 11% of the EU population had to pay more than 40% of their income for housing costs. In most countries, the housing cost overburden hits tenants more than owners with a mortgage or loan, respectively at 28% and 5.6% in 2016.

[3] For further details see N. Philiponnet and A. Turrini (2017), 'Assessing house price Development in the EU2, Discussion Paper, European Economy

[4] For more information please refer to Eurostat: EU-SILC (survey ilc_lvho70a)

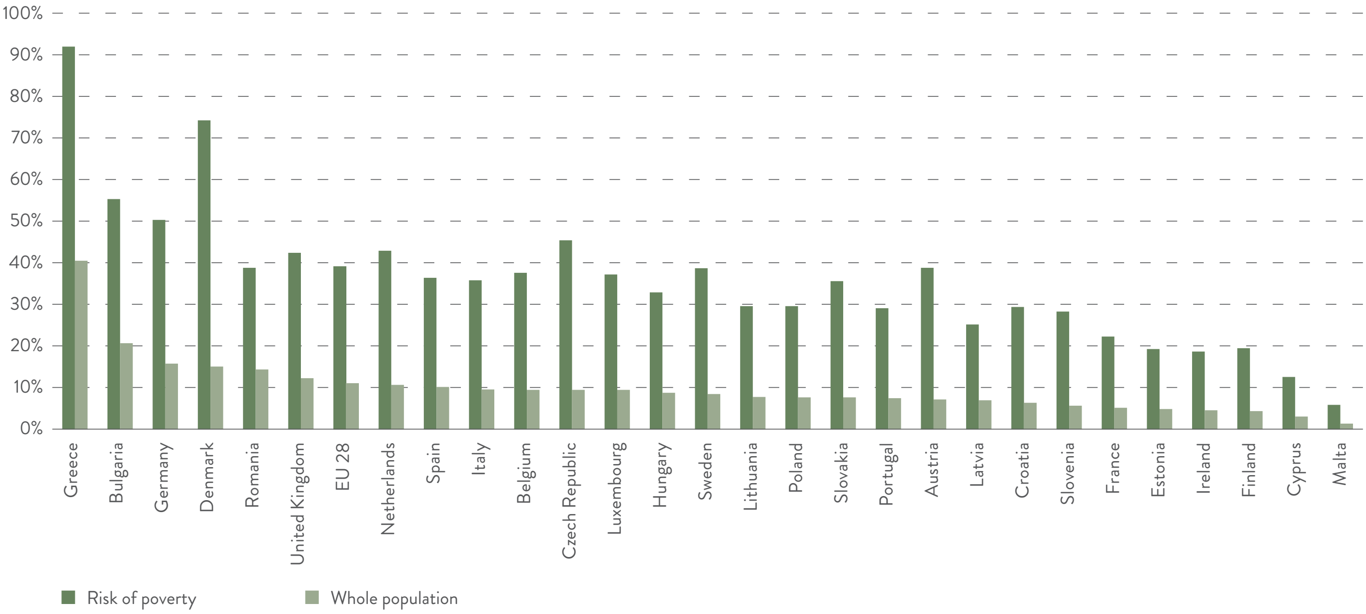
CHART 10 | PRICE-TO-INCOME RATIO EVOLUTION



Source: European Mortgage Federation, OECD, Eurostat, author's calculations

Note: in the countries with an asterisk a different long term average to 2000-2017 has been used due to missing data-points: Croatia, Slovakia (2002-2017); Estonia (2004-2017); Cyprus, Ireland, Italy (2005-2017); Latvia, Poland (2006-2017)

CHART 11 | POPULATION SHARE OF HOUSING COST OVERBURDEN IN 2016, IN PERCENT



Source: Eurostat

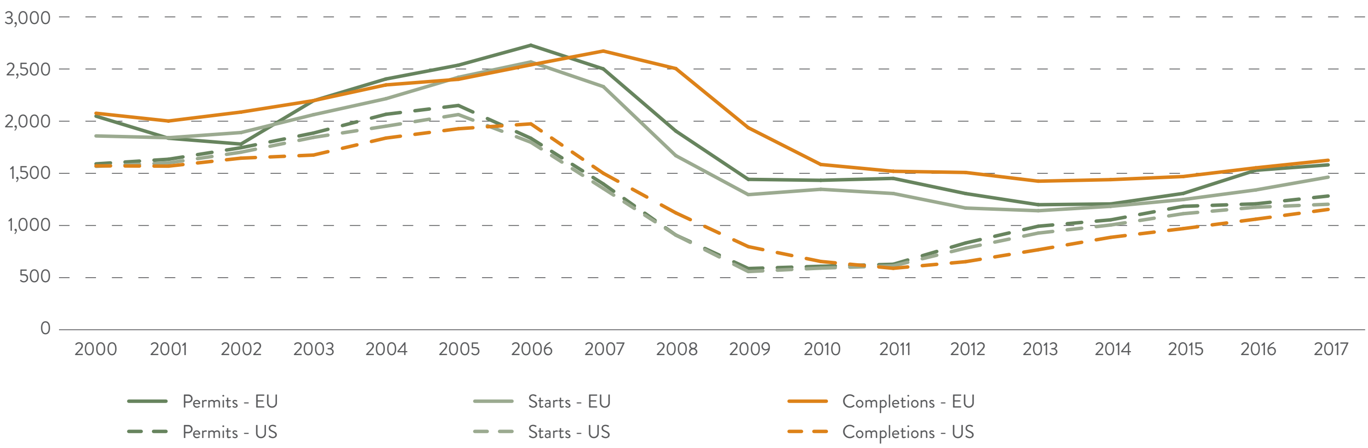
HOUSING SUPPLY DEVELOPMENTS

Increasing house price, low interest rates and lack of housing contributed to an uptake of housing construction. This can be seen in the ongoing widespread increase of housing permits, starts and completions throughout the EU. Also here in some countries pre-crisis levels have been reached and surpassed, while in other countries, especially those which have experienced a significant correction of their housing markets, are still far below pre-crisis levels.

In 2017, construction investment registered its third consecutive year of growth, expanding by 3.5% in the Euro area, however its share of GDP of around 18% remains clearly below the pre-crisis peak of 2007. The same can also be said for investment in dwellings, which increased for the second year to 4.9% to GDP on average in the EU, however it remained markedly below the pre-boom levels and below the 2007 peak of around 6%. The above-mentioned increase in house prices and the increase in mortgages, which will be described in the next section, provide a favourable environment for future construction investments. However, in some countries there are growing indications of capacity constraints in construction related to labour shortages. On both sides of the Atlantic, housing supply continues its uptake, however the levels of 2007 are still far away.

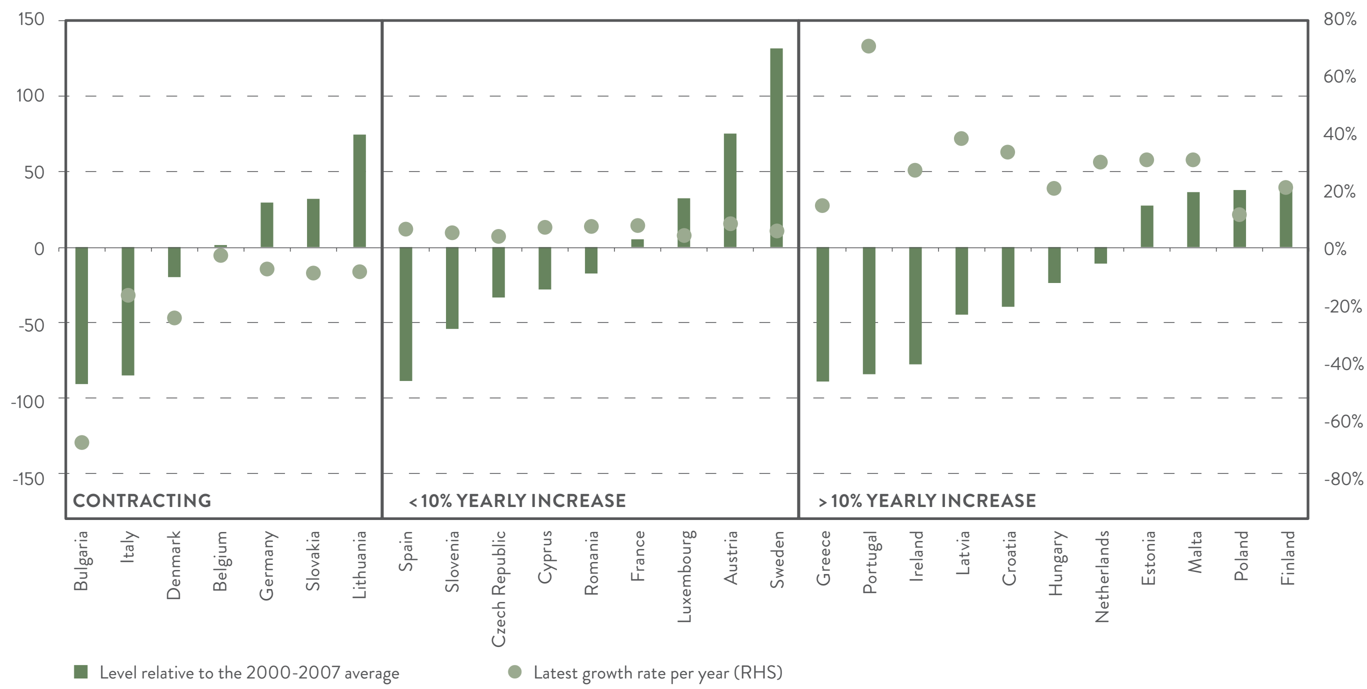
The issuance of building permits, which can be used as a proxy for residential construction investment, has increased significantly in some countries, especially in those where the construction sector was hit hardest during the crisis. Bulgaria, Italy and Denmark are the only countries in our sample in which issuance of new building permits decreased in 2017 and in which the number of permits issued remained below the average of 2000-2007. At the other end of the spectrum, the issuance of building permits increased especially in Portugal but also in Ireland and the Netherlands, albeit to levels much below their pre-crisis average. In countries such as Austria, Sweden and Finland we still see sustained growth which comes on top of an already high number of building permits and which is already above the pre-crisis average.

CHART 12 | EVOLUTION OF CONSTRUCTION INDICATORS IN THE EU[5], IN '000 RESIDENTIAL UNITS



Source: European Mortgage Federation, author's calculations

CHART 13 | EVOLUTION OF BUILDING PERMITS IN PERCENT CHANGE IN 2017



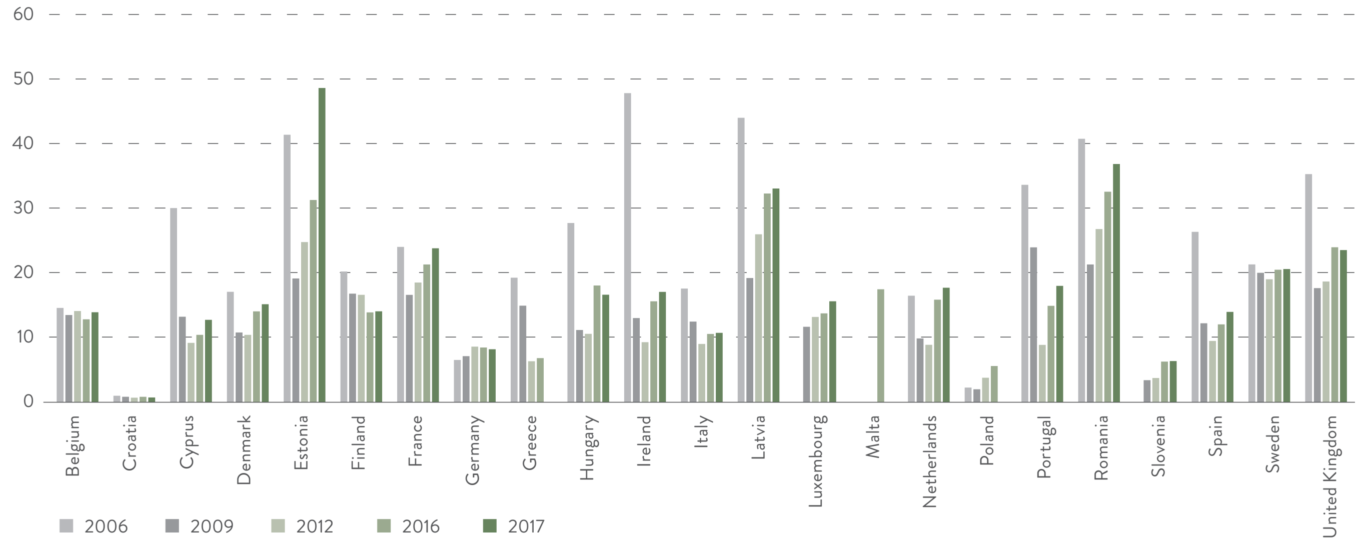
Source: European Mortgage Federation

[5] The three indicators cover all countries in the EU for the stated period with the exception of the following:
- Building permits: UK, BG (2000-2005), IT (2001-2002, 2015), LV (2000-2002), RO (2000-2004), SK (2012-2015)
- Housing Starts: AT, CY, DE, EE, HR, LT, LU, LV, NL, PT, BG (2000-2009), HU (2000-2003, 2010-2015), IE (2000-2003), IT (2000-2003, 2012-2015), MT (2000-2002, 2008-2010, 2012-2015), RO (2000-2001, 2009-2015), SK (2012-2015), UK (2015).
- Housing Completions: AT, BE, FR, MT, BG (2000-2003), HR (2000-2001, 2015), CY (2015), IT (2012-2015), LU (2014-2015), SK (2012-2015), UK (2015).

Please note that in order to achieve a consistent sum for the EU over time, the data gaps (i.e. the years in brackets above) have been filled by using the closest available data to the missing point for the given country.

If building permits on the one hand focus on new buildings, the number of residential property transactions consider both new and existing dwellings. Similar to the building permits, the number of transactions is continuing its upwards path of the last years, but the peak reached before the crisis is still far away. However, looking at chart 14, we see that the various EU Member States are at quite different levels with respect to each other and also with respect to the pre-crisis level. On the one hand in countries like Belgium, Croatia, Germany and Sweden the figures have not changed dramatically over the years and with respect to 2007. The majority of countries however did see a decrease, and in some cases a severe decrease, in transaction figures, however over the last couple of years the figures have been increasing and are approaching the pre-crisis level, such as in Romania and France, while other countries, such as Estonia and the Netherlands, transactions in 2017 surpassed the levels of 2007.

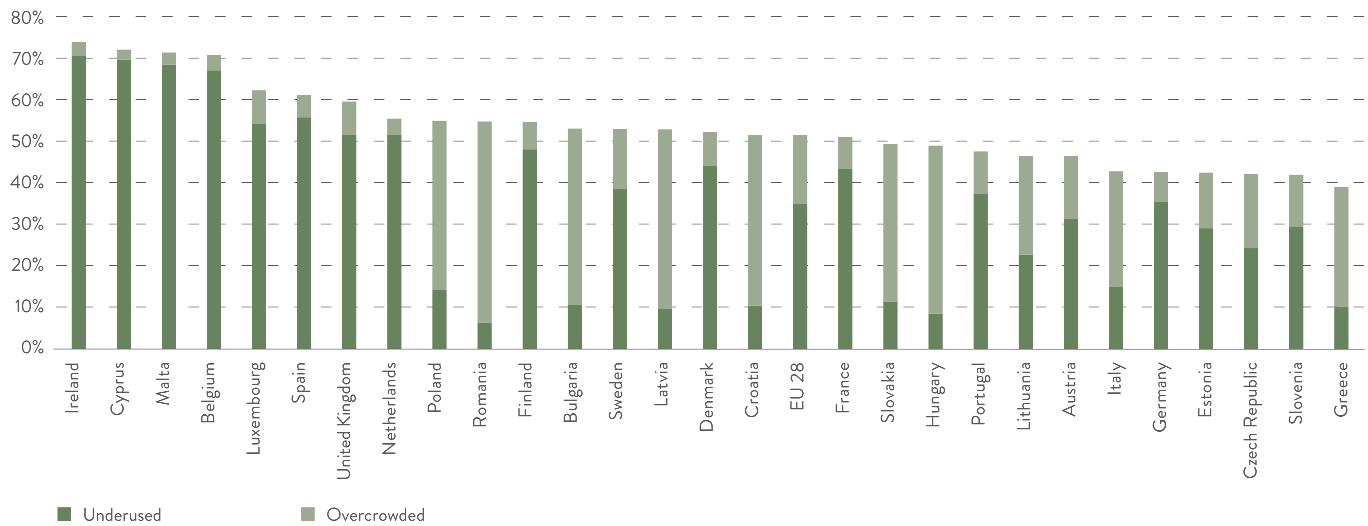
CHART 14 | NUMBER OF TRANSACTIONS EVERY 1000 INHABITANTS OVER 18 YEARS



Source: European Mortgage Federation

Notwithstanding the increase on the supply side of the housing market, there is still a general widespread lack of housing especially in the areas where highest demand is registered, such as in cities as described above. It is also important to point out that even the existing housing stock is unsuitable to serve the needs of the current population. This can either create an over-abundance of housing space in certain neighbourhoods, as older individuals or couples remain in their homes once their children have left or overcrowding in other regions, where the household is too large for the space they live in. Taking into account these extremes in the chart below, it is apparent that this 'mismatch' in the location of housing supply is quite severe in a series of countries and, at aggregate level, touches more than half of the EU population who are either living in in an overcrowded or under-used dwelling. Overcrowding is more an issue in Central and Eastern European countries, while under-used dwellings can be seen more in Western Europe and in Scandinavia.

CHART 15 | HOUSING MISMATCH: SHARE OF HOUSEHOLDS LIVING IN OVERCROWDED OR UNDERUSED DWELLINGS, IN PERCENT



Source: Eurostat

MORTGAGE MARKET

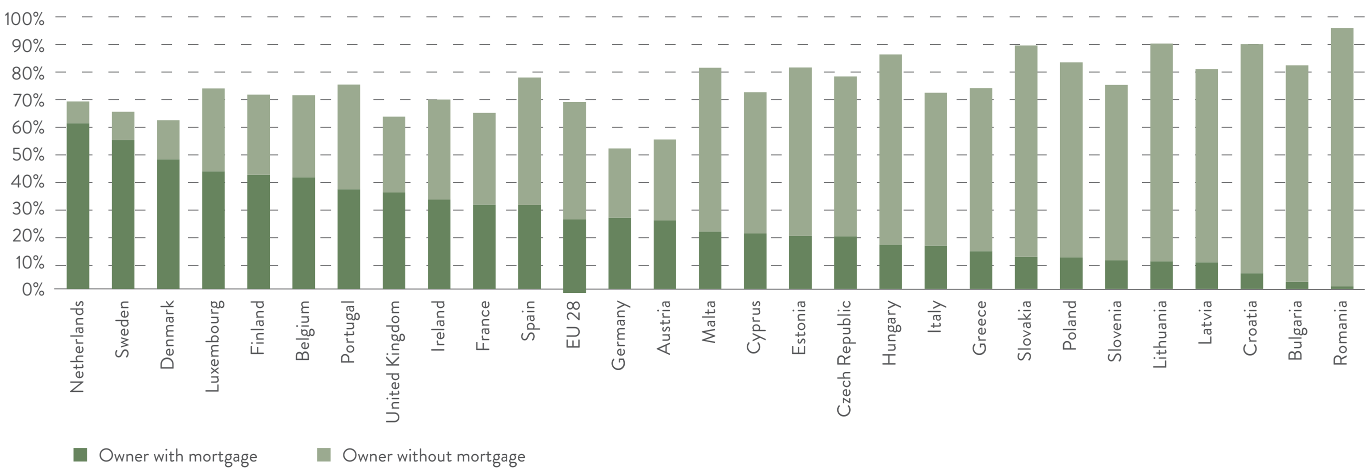
SETTING THE SCENE – HOMEOWNERSHIP AND MORTGAGE INDEBTEDNESS AND AVERAGE MORTGAGE LOANS

Homeownership on average remained constant in the EU 28 at around 70%, with Poland increasing its homeowner shares by 20 percentage points since 2007, while on the other hand in the UK this share decreased by nearly 10 percentage points over the same period. Mortgage indebtedness also continues growing on average as does the average amount of mortgage loans disbursed to home-buyers.

Homeownership, besides being an important economic decision, is principally linked to cultural factors as to how people want to accumulate and transmit wealth. Especially in Mediterranean countries owning a house is an important milestone in life, whereas in countries such as Germany, individuals often live in a rented dwelling and invest in other assets. The following chart provides an overview of the heterogeneous tenure structure throughout Europe in 2016 and thus the importance of the mortgage market in the various countries ordered by the number of homeowners with a mortgage. The sum of the stacked histograms shows the percentage of homeowners in the given countries. At one end of the spectrum is the Netherlands, where 61% of the population own their home with a mortgage, while at the other end of the spectrum is Romania, where 0.9% of the population have a mortgage and 95.1% own their property without a mortgage.

Besides the amount of people owning a house with or without a mortgage it is also important to highlight the actual number of outstanding mortgages with respect to the wealth of a country and of a continent. The mortgage market represents historically an important amount of the wealth Europeans own and reached nearly 46% of the aggregate EU GDP in 2017.

CHART 16 | PERCENTAGE OF HOMEOWNERS IN 2016 WITH BREAKDOWN OF OWNERS WITH AND WITHOUT A MORTGAGE

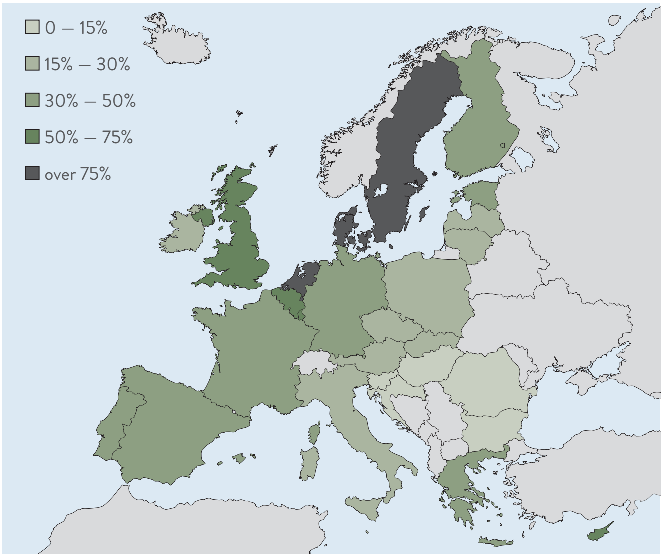


Source: Eurostat

As can be seen in map 3 the concentration of mortgages is heterogeneous. On the one hand, there are countries such as Bulgaria or Romania, where the mortgage market accounts for less than 10% of their national GDP. On the other hand, there are countries such as the Netherlands, where the mortgage market is nearly as large as the Dutch economy (equivalent to 91% of GDP).

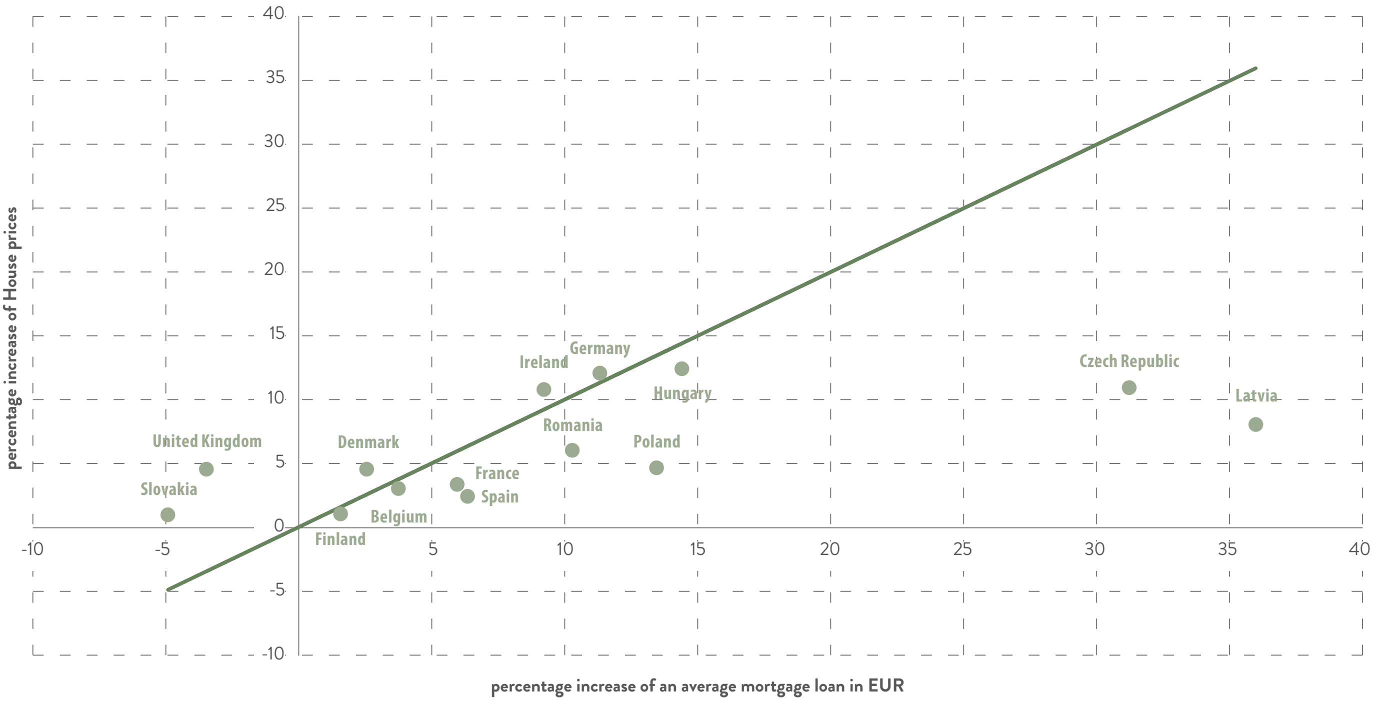
In other words, the average adult in the EU holds a mortgage of EUR 16,872, which marks an increase of 3.2% with respect to the previous year and which accounts for an increase of over EUR 2,000 with respect to 2007. Also here there are important differences ranging from EUR 709 per adult in Bulgaria to nearly EUR 65,000 per adult in Luxembourg. It is also interesting to note how over the time the amount of an average mortgage has increased. In chart 17 it is apparent that the increase in an average mortgage closely follows house price evolution. In other words, borrowers are borrowing more because dwellings are more expensive. Notable exceptions in our sample are Latvia and the Czech Republic and to a lesser extent also Poland and Romania. In these Central and Eastern European Countries, the average mortgage increased more significantly with respect to the, still significant, house price increase, showing how the mortgage market is experiencing strong momentum here with homebuyers shifting more to this financing method to acquire their dwelling.

MAP3 | OUTSTANDING MORTGAGE TO GDP RATIO, IN PERCENT



Source: European Mortgage Federation

CHART 17 | COMPARISON HOUSE PRICES AND MORTGAGE LOAN, Y-O-Y IN 2017



Source: European Mortgage Federation

RESIDENTIAL MORTGAGE LENDING

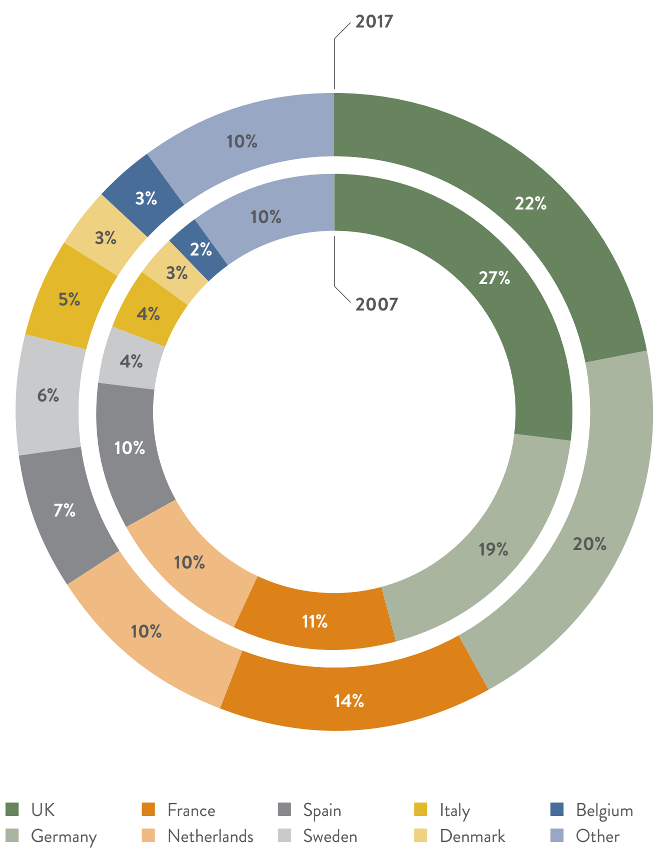
The mortgage market is generally expanding besides a few exceptions reaching in 2017 the EUR 7 tn outstanding, namely 45.7% of the EU GDP. Also gross issuance increased with the majority of EU Member States having reached the pre-crisis issuance level.

As already anticipated by Map 3 the EU mortgage market is mainly concentrated in a handful of countries. As can be seen in chart 18, the five largest mortgage markets, namely UK, Germany, France, Netherlands and Spain accounted for around 72% of outstanding mortgages in 2017.

However, over the years smaller countries have developed a mortgage market and the share of these countries has slightly increased. This trend can also be observed in the following chart where the y-o-y growth rate of outstanding mortgages in 2017 is plotted against the level of the outstanding mortgage market. The average growth in outstanding mortgage loans for the nine largest countries was less than 2.5%, while the remaining countries, which are brought together under 'Other' of chart 18 grew on average by over 5%, double the rate of the larger countries, with peaks in the Czech Republic, which recorded an increase of nearly 30%.

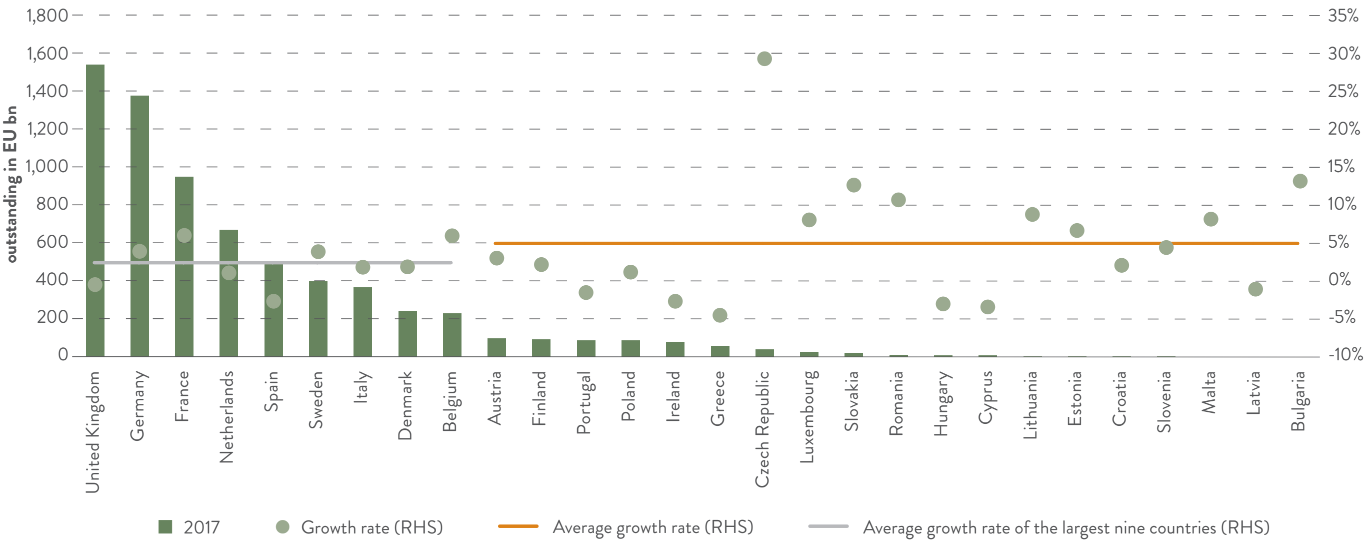
In aggregate terms the mortgage market in Europe grew by 2.3% in 2017 after having experienced a contraction of around 1.3% in the previous year, mainly due to the depreciation of the GBP vis-à-vis the EUR. Taking into account a new, more conservative time series for Spain, which takes into account only mortgages granted for housing purchases and ownership purposes, in 2017 the aggregate figures once 'again' surpassed the EUR 7 tn mark. It is also important to highlight the fact that the Euro area alone grew by 2.8% and thus accounts for around roughly two thirds of the overall EU mortgage market.

CHART 18 | COMPARISON OUTSTANDING RESIDENTIAL MORTGAGE



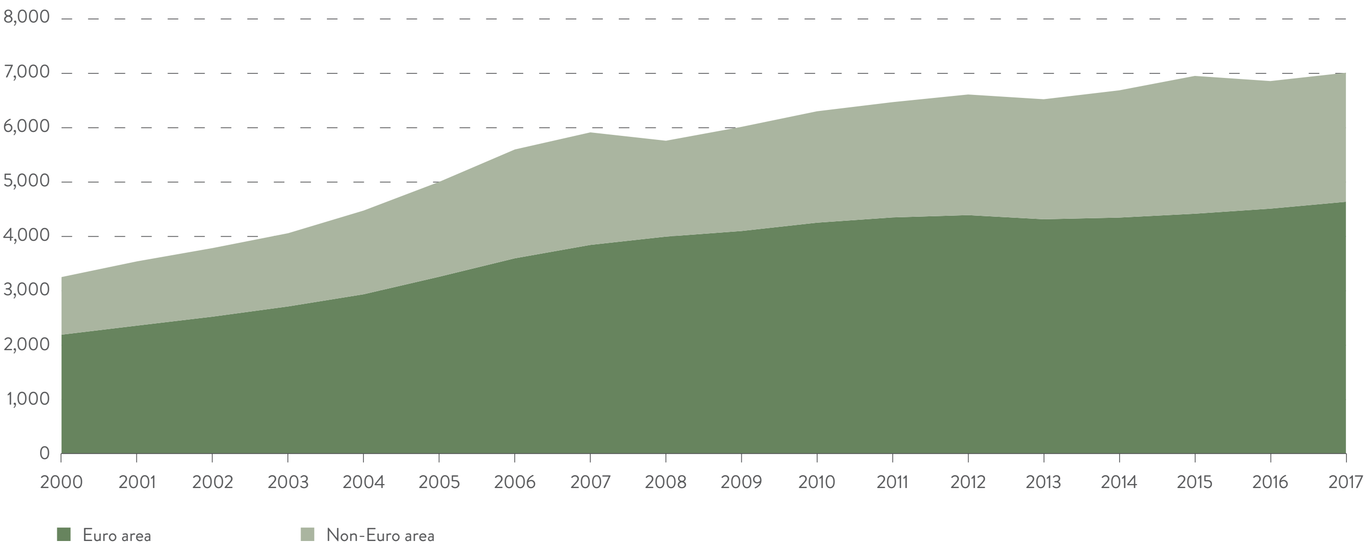
Source: European Mortgage Federation

CHART 19 | OUTSTANDING MARKET AMOUNT AND RELATIVE GROWTH RATE IN 2017



Source: European Mortgage Federation

CHART 20 | OUTSTANDING MORTGAGE LENDING IN THE EU SPLIT BY EURO AREA AND NON-EURO AREA, EUR BN

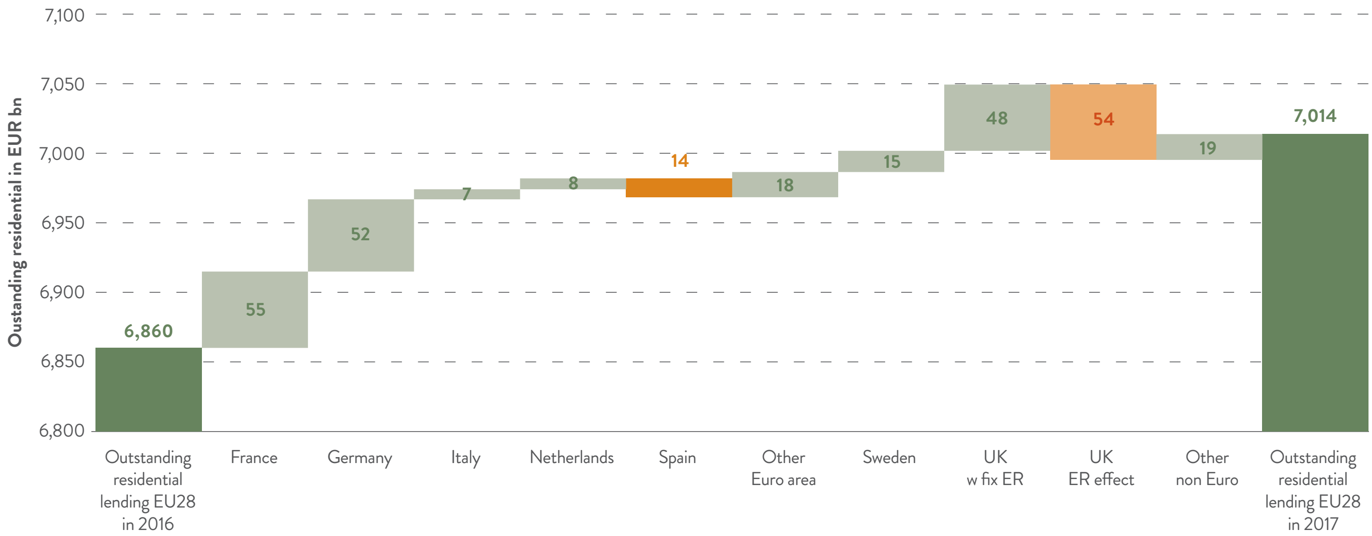


Source: Eurostat

In general these expanding figures can be explained by the improved macroeconomic environment previously outlined, coupled with low interest rates and the general increase in house prices.

The ongoing mortgage market expansion has led several countries to introduce new or strengthen existing macroprudential rules in order to avoid overheating of the market. Most EU Member States took action in 2017, though in aggregate terms at a slower pace than in 2016. The principal measures focused on systemic risk buffers, countercyclical capital buffers, more stringent LTV and LTI rules, the limitation of loans with LTVs beyond a certain threshold or amortisation requirements for loans beyond a certain threshold. Since countries are not all at the same point in the mortgage market cycle, some have taken other measures, such as in Cyprus, where property tax payable was abolished in 2017 after being reduced in 2016. Looking more at the country level, again as last year the countries with the largest outstanding increase in absolute terms were France and Germany, with Spain followed by Sweden, Belgium and the Czech Republic. The latter was nearly single-handedly responsible for the increase in the 'other non-Euro area' increases. At the other end of the spectrum Spain continues its deleveraging path which started in 2010. The depreciation of the GBP with respect to the EUR continued to have a dampening effect on the outstanding figures. As one can see from chart 21 the weakening of the pound has more than offset in EUR terms the mortgage market expansion which, compared to the other countries in the chart was the third largest, after France and Germany.

CHART 21 | OUTSTANDING MORTGAGE EVOLUTION IN 2016-2017, IN EUR BN

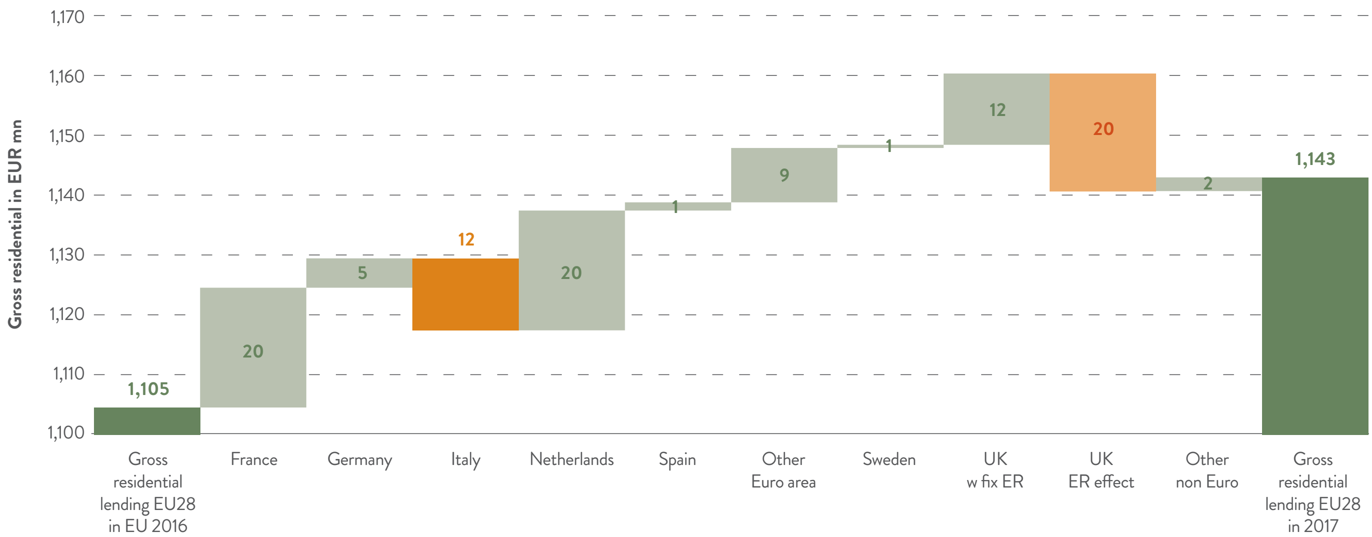


Source: European Mortgage Federation

From the gross residential mortgage lending point of view, the aggregate evolution shows an ongoing expansion, which is still around 18% below the levels reached in 2007. With respect to the onset of the financial crisis, we can see that the Euro area countries have increased their share of the overall gross lending to around 62%.

Looking at the national comparison, the figures are quite heterogeneous. Overall with respect to 2016, in 2017 the vast majority saw their gross lending figures increase, with France and the Netherlands issuing each around EUR 20 bn more mortgages. Notable exceptions to this trend, besides Croatia, Cyprus and Slovakia, were Italy, Belgium and the UK. In Belgium, this was due to the high external remortgaging figures which inflated the figures of 2016 with respect to 2017, a year in which new lending reached a new record. Also the Italian figures can be explained by comparing the 2017 figures with an exceptional 2016. For the UK, the now well-known FX effect played a role in the contraction of the gross lending figures with respect to the previous year.

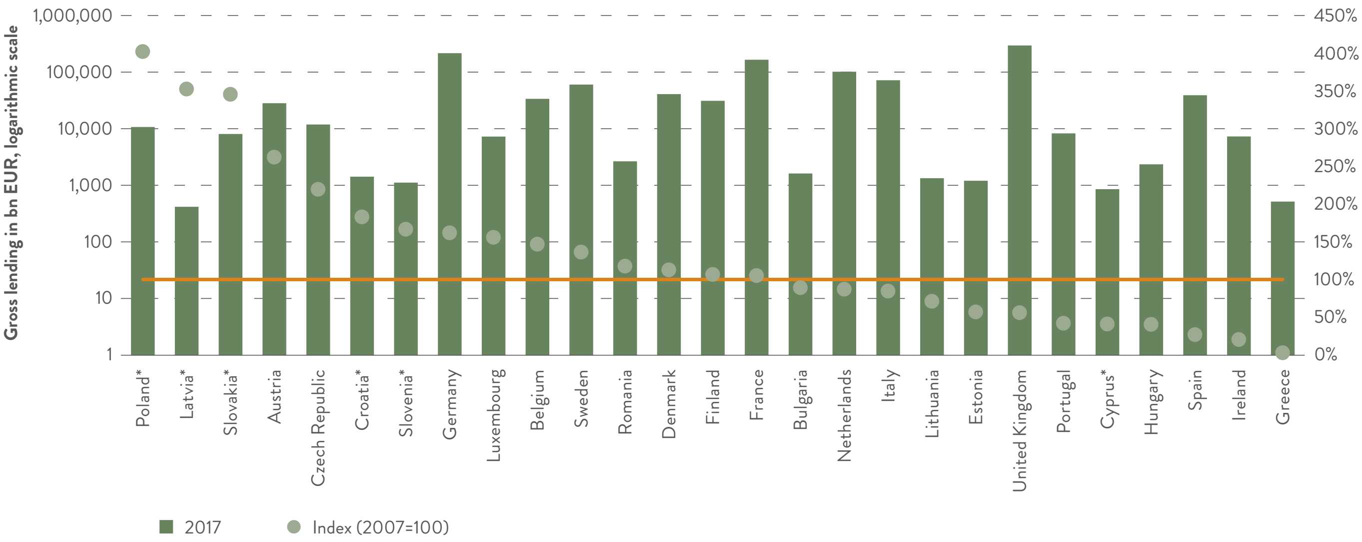
CHART 22 | GROSS LENDING EVOLUTION 2016-2017, IN EUR BN



Source: European Mortgage Federation

Looking at national comparisons with more perspective, it is apparent that the current gross lending levels for more than half of the EU Member States are at least as high as before the crisis, with 5 countries having at least doubled their 2007 levels. The issuance level in Germany, which has not experienced any major corrections due to the crisis, increased by 62% in 2017 with respect to 2007, while issuance levels in other large countries such as France, the Netherlands and Italy are virtually at the levels before the crisis. Countries which experienced during the crisis a major correction in their housing market such as Spain, Ireland or the UK are still far away from their 2007 lending levels. The spectrum is closed by Greece which in 2017 provided around 3% of the lending in 2007. This significant contraction is mostly due to the very severe recession the country experienced. However, since last year the figure has been increasing, with Greece on the path of economic growth.

CHART 23 | GROSS LENDING IN 2017 COMPARED TO THE 2007 LEVEL



Source: European Mortgage Federation

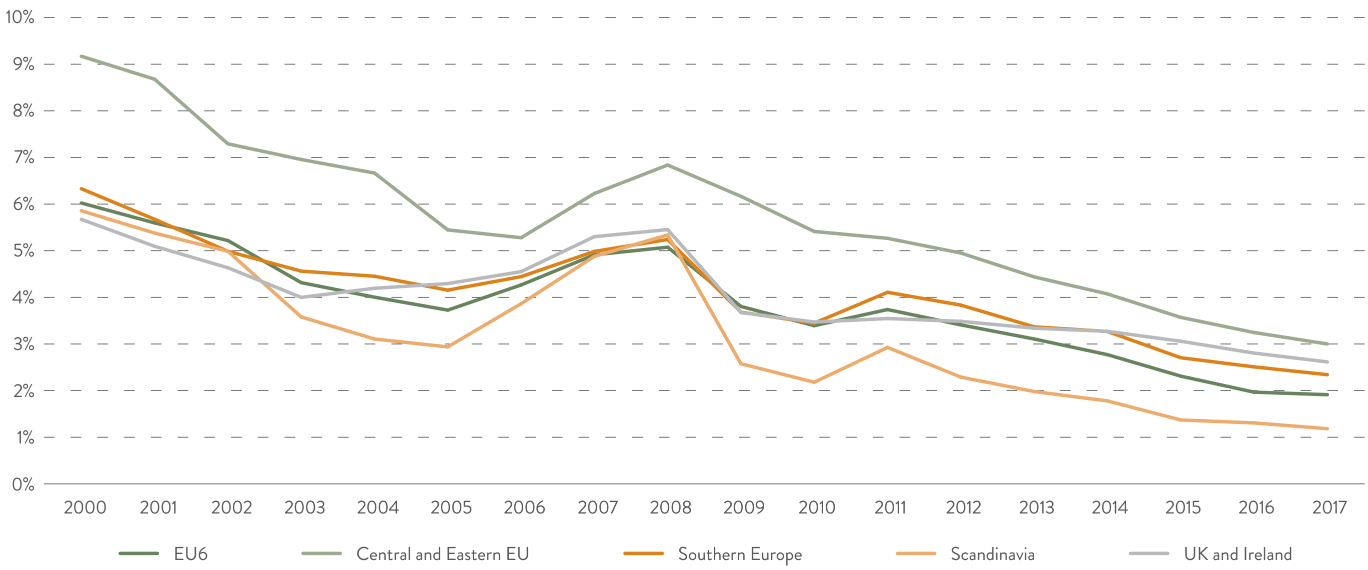
** Countries which did not have available data for 2007 have been compared to their closest data available*

MORTGAGE MARKET INTEREST RATES

Mortgage interest rates in aggregate terms continued to decrease in 2017. The amount of variable interest rates (with an initial fixation period of at most 1 year) varies considerably among EU Member States with Poland having all mortgages a variable rate while in Belgium there were only 1.8% of mortgages with a variable interest rate.

In 2017 mortgage market interest rates continued the descending path which has characterised the last decade, with the unweighted average of interest rates reaching 2.42%, a decrease of 22 bps with respect to the previous year. However, it would appear that interest rates mostly floored out in 2017 and the first figures of 2018 of the Quarterly Review indicate that in the majority of jurisdictions interest rates are timidly increasing or remain virtually unchanged. At the end of 2017, there were eight EU Member States which saw their reference mortgage rate increase with respect to the previous year. Of course, besides the dynamics, there is also a certain heterogeneity in interest rate levels on the continent. As can be seen in chart 24 the evolution of interest rates roughly follows a similar pattern in Europe, however, among the different regions, the levels, though more and more compressed and decreasing, are different. Indeed, the Scandinavian countries have continually lower interest rates, while on average borrowers in the Central and Eastern European Countries have to pay more for their loans.

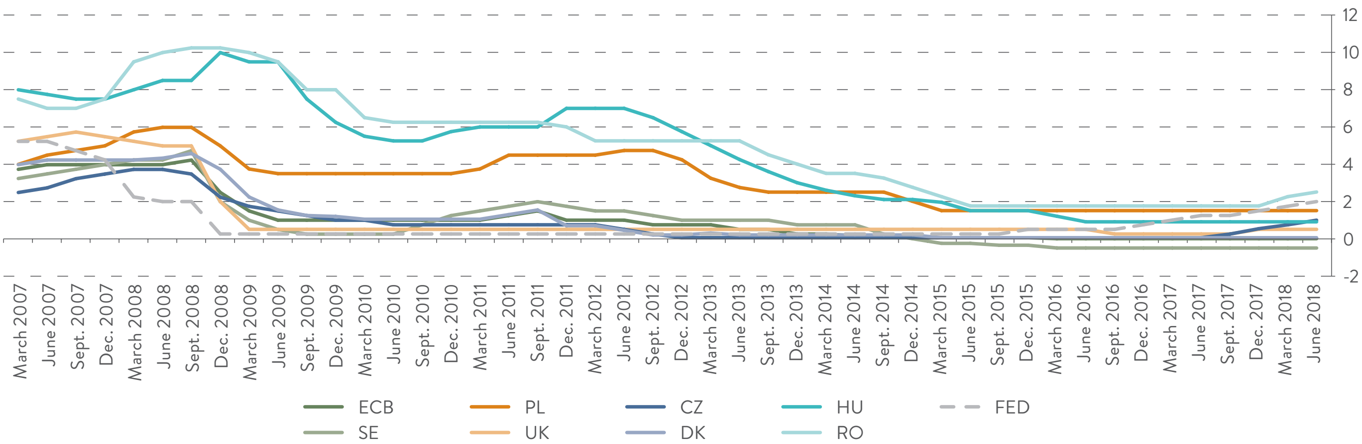
CHART 24 | MORTGAGE INTEREST RATES IN AGGREGATED EU REGIONS, IN PERCENT



Source: European Central Bank and Bank of England

The ECB, up until the time of writing, has not changed the reference rate of 0% and during its announcement after the regular Governing Council Meeting on 26 July 2018 indicated that it expected to leave the rate untouched at least until summer 2019. At the same meeting, the ECB also decided to continue the wind down of the Asset Purchase Programme to EUR 30 bn a month until September and then, by the end of the year, if necessary, to EUR 15 bn a month, when net purchases will end. Other Central Banks, such as those in Romania, as can be seen in chart 25, have increased their benchmark interest rates. Also in the US the reference interest rate reached 2% in Mid-March 2018, attaining the level of 2008.

CHART 25 | BENCHMARK POLICY RATES FOR SOME EU CENTRAL BANKS, PERCENT P.A.

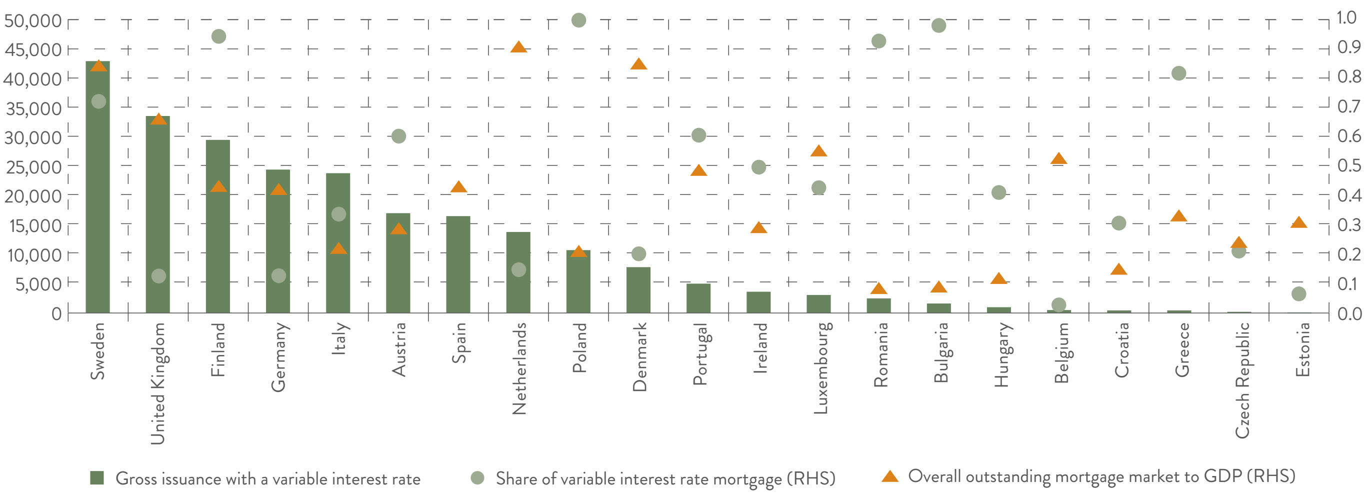


Source: European Central Bank and Bank of England

Following the decrease in mortgage interest rates, a general, continued trend, with certain exceptions, is the growing interest in longer initial periods with fixed mortgage rates in order to lock in a more favourable interest rate in the event that interest rates start to increase in the future. This trend is built on a heterogeneous appetite and tradition for variable interest rate mortgages which can be seen in the following charts depicting the breakdown of new lending in various EU Member States ordered according to the share of variable mortgages. As can be seen, countries from the EU founding members in general prefer more fixed rates together with the Czech Republic, Denmark and the UK. At the other end of the spectrum, lenders in Finland and Poland almost exclusively provide variable interest rates.

In chart 27 it is possible to better understand the volume of variable interest rate mortgages issued in 2017[6]. Taking into account only the countries depicted, which account for nearly 86% of the total outstanding mortgages in EU 28, i.e. over EUR 6.0 tn, it is possible to conclude that, on average, nearly a quarter of new mortgages were issued with a variable interest rate. There are different degrees of importance both in absolute and relative terms of variable interest mortgages. Sweden, at one end of the spectrum, presents a high absolute value in variable rate mortgages with over 70% of the total new issuance in the mortgage market, and total outstanding mortgages amounting to 85% of the size of the Swedish GDP (grey dots). At the other end of the spectrum, Belgium also has a large mortgage market, accounting for more than half of its GDP, however variable rate mortgages only accounted for around 1.4% of the global issuance for 2017.

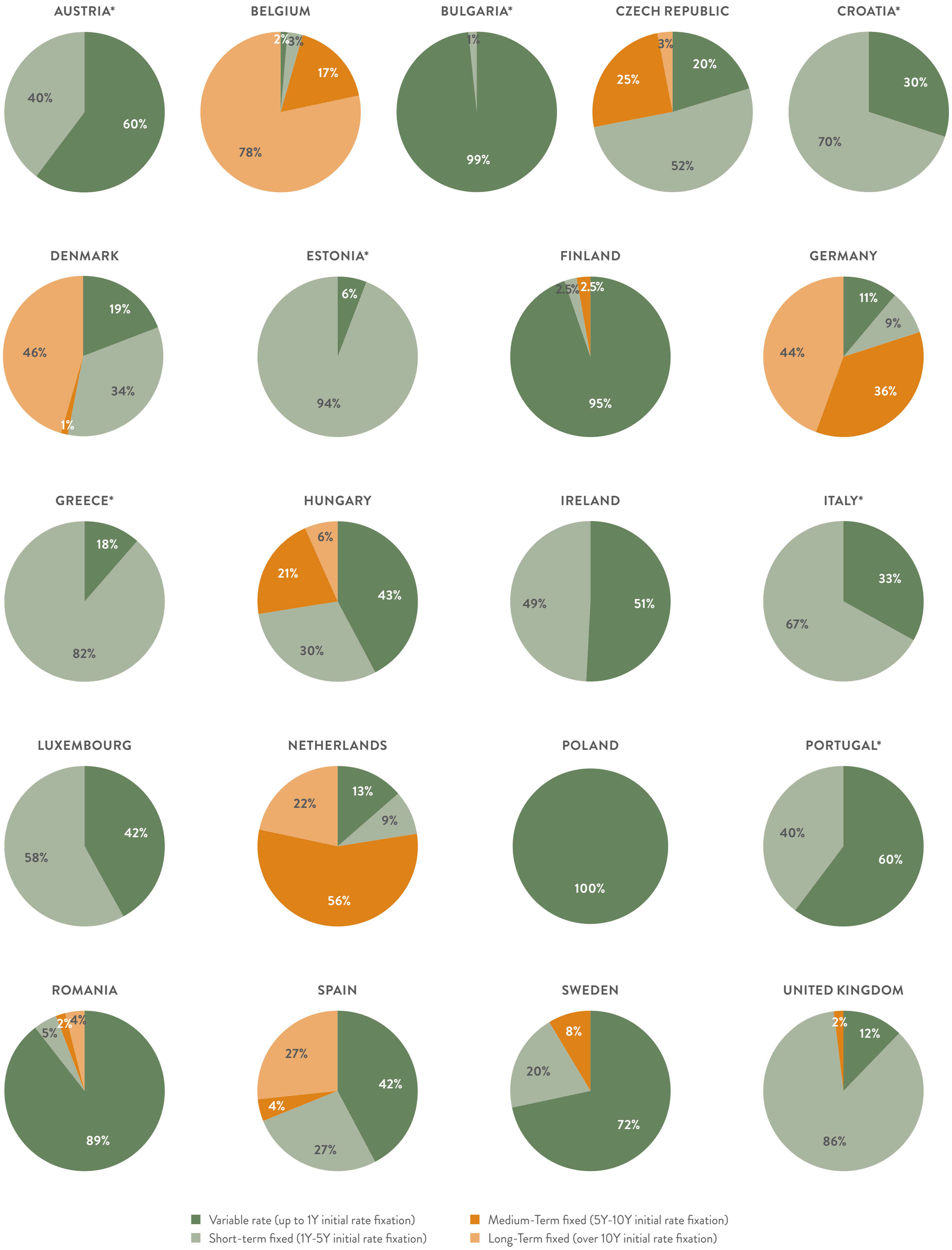
CHART 27 | SIZE OF VARIABLE SHARE INTEREST RATE MORTGAGE ISSUED IN 2017



Source: European Mortgage Federation

[6] Variable rate mortgages are considered all those mortgages with a fixation period of up to 1 year.

CHART 26 | MORTGAGE MARKET GROSS ISSUANCE BREAKDOWN BY INTEREST RATE TYPE IN 2017



Source: European Mortgage Federation

Note: *for these countries all interest rate initial fixation rate over 1 year fixation have been pooled together.

Austria

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

IN A NUTSHELL

→ The economy is going well, with improved growth forecasts, decreasing unemployment and balanced public spending.

→ Housing markets stabilised, with House prices in Vienna growing by less than inflation, while in other areas of the country price developments were steeper which can interpreted as catch-up effect.

→ Construction and building permits are increasing with respect to the previous year.

→ Mortgage market depicts a stable growth with a sizeable, though decreasing amount foreign currency mortgages of around 13%.

→ New construction is at an all-time high and in aggregate terms it has risen above demand.

MACROECONOMIC OVERVIEW

Austria is currently in its second year of an economic boom, with growth being supported by all demand components. Real economic growth amounted to 3.1% in 2017, which means that the pace of expansion doubled compared with 2016. Similar to the previous year, real GDP growth will reach 3.1% in 2018. In 2019 and 2020, growth is expected to slow down to 2.1% and 1.7%, respectively, as the current business cycle runs its course. These figures represent upward revisions of 0.3, 0.2 and 0.1 pps in 2018, 2019 and 2020, respectively, versus the December 2017 outlook. The unemployment rate will fall by half a percentage point to 5.0% in 2018, but will decline only marginally, namely to 4.9%, in the years thereafter. After peaking in 2017 and 2018 (2.2% in each year), inflation will subside somewhat, decreasing to 1.9% in 2020.

Besides exports, domestic demand is the second main pillar of economic activity, with equipment investment playing a decisive role.

After having cut back significantly on investment for several years, businesses began, from mid-2015 onward, to increasingly invest in replacing plants and equipment, and later on in further expanding their production capacities. This investment cycle started to moderate slightly in recent quarters and will peter out gradually in 2019 and 2020. By contrast, residential construction continued to strengthen over the last two quarters, with building permits indicating further acceleration. After having peaked at 4.9% in 2017, growth of total gross fixed capital formation will decline markedly to 2.0% by 2020. As the current business cycle runs its course, employment growth is expected to slow down significantly. The unemployment rate (Eurostat definition) will sink from 5.5% in 2017 to 5.0% in 2018 and to 4.9% in 2019, and remain at this level thereafter. Private consumption will grow by 1.5% in 2018, which is modest given the favorable framework conditions. In 2019 and 2020, private consumption is expected to decelerate slightly to 1.4% and 1.3%, respectively. The general government budget is projected to be balanced in 2018. The debt ratio is forecast to decline to 67.5% of GDP by 2020.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

In 2017, the Austrian housing market faced a stabilisation phase. In Vienna, housing prices stabilised, growing by no more than 1.5% year on year and thus more slowly than the Harmonized Index of Consumer Prices (HICP), which rose by 2.2% in 2017. We saw four quarters with a quarter-on-quarter growth of below 1% and in Q4 2017 even a minus of 0.7%. The most recent data in Q1 2018 show a year-on-year growth of 3.5%.

For Austria excluding Vienna, we observed an opposite development throughout 2017, with price growth accelerating at a pace of 4.9% for the year as a whole. In Q1 2018 we saw a plus of 10% year on year. The western parts of the country show the price pressure. These price trends in the rest of Austria can be interpreted as catch-up effect.

In the first quarter of 2018, the OeNB fundamentals indicator for residential property prices for Vienna went up slightly to 21.9% quarter on quarter from a potential overvaluation (19.7% in the fourth quarter). For Austria as a whole, the indicator reached 11.2%.

Residential construction activity was up significantly in 2017 compared with previous years, as currently suggested by all available indicators. Apart from the production index for building activities and the number of hours worked in this field, residential construction investment has begun to pick up as well. In 2017, real residential construction investment grew by 2.2% per year, clearly outpacing the annual average of 0.2% registered from 2014 to 2016. In 1Q2018, the (smoothed) annual growth was 2.7% (after 2.4% in Q3 2017 and 2.5% in Q4 2017).

The dynamics of building permits and the number for new dwellings indicate a further acceleration in residential building activity. In the third quarter of 2017, the number of building permits issued all over Austria went up by 36% against the corresponding quarter of 2016. Since the number of building permits issued tends to be very volatile, it is more useful to observe the trend series, which augmented by 13% in the third quarter. In Vienna, the number of building permits issued increased by 82% (trend series: +44%) in the third quarter of 2017. Between 2010 and 2016, the number of building permits issued for dwelling units across Austria grew by 39%, while that of total floor areas increased by 26%.

MORTGAGE MARKET

Market dynamics

Growth of housing loans to households was largely stable in the course of 2017. In April 2018, the nominal annual growth rate of domestic housing loans extended by Austrian monetary financial institutions (MFIs) came to 4.6% (adjusted for reclassifications, valuation changes and exchange rate effects), up from 4.4% in January 2017.

Housing loan growth was driven primarily by long-term loans (with a maturity of more than 5 years), whose outstanding volume was almost 95% of total housing loans in April 2018 (EUR 98,293 mn of EUR 103,877 mn).

[1] Nominal gross fixed capital formation as a percentage of nominal GDP.

Conditions for taking out housing loans, in terms of credit standards and lending conditions, have remained favorable. According to the results of the bank lending survey, Austrian banks slightly reduced loan margins for loans with an average default risk in the course of 2017 and the first quarter of 2018. Overall, there has been little change in lending standards and conditions in this segment over the past years.

The share of new foreign currency loans in outstanding housing loans is still sizeable despite its continued downtrend (13% in March 2018). Almost all foreign currency-denominated housing loans outstanding are denominated in Swiss francs (close to 97%). Likewise, the share of variable rate loans in new lending, which has been very high by international standards, still implies substantial interest rate risks even though it has contracted further recently (in March 2018 it came to 51.9%).

Non-market led initiatives

The key characteristics of Austria's housing policy are still its focus on regulated (i.e. limited profit) rental housing and its financing tools. In 2017 the main emphasis was also put on state and regional supply-side subsidies, which aim at fostering affordable housing. Public subsidies accounted for around 0.6% of GDP, including a wide range of policy tools. The most important is the "Wohnbauförderung" of the Austrian provinces, with a focus on subsidies on bricks and mortar and subsidiary housing allowances. The financing system of the "Wohnbauförderung" gains its efficiency through the close interaction with the system of limited profit housing construction and additional capital market financing instruments. Social housing supply follows a generalist eligibility approach with high income limits. Hence Austrian housing policy still promotes integrated rental markets.

Other subsidy tools are and minimum income schemes coming from regional social budgets, subsidies for "Bausparkassen" and "housing bonds", very limited fiscal subsidies and a reduced VAT rate for rental housing. The overall state expenditure on housing is below most other European countries, such as UK, France or Netherlands. At the same time the outputs are quite remarkable, taking quality of housing, affordability and aspects of social integration.

Housing is well positioned in the political agenda both on the federal and the regional level. Despite this, some recent developments cause for concern. New construction (building permits) is at an all-time high and has, on an aggregate level, risen above housing demand. It is doubted whether an inevitable downturn is sufficiently anticipated. In this context it seems counterproductive that the Federal Government has rejected the establishment of a Housing Investment Bank (WBIB, Wohnbauinvestitions–bank). Investments in housing refurbishment are continuously declining.

	AUSTRIA 2016	AUSTRIA 2017	EU 28 2017
Real GDP growth (%) (1)	1.5	3.0	2.4
Unemployment Rate (LSF), annual average (%) (1)	6.0	5.5	7.6
HICP inflation (%) (1)	1.0	2.2	1.7
Outstanding Residential Loans (mn EUR) (2)	101,168	104,296	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	14,075	14,391	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	47.4	47.7	73.8*
Gross residential lending, annual growth (%) (2)	-3.8	38.0	3.5
Typical mortgage rate, annual average (%) (2)	1.9	1.9	2.4**
Owner occupation rate (%) (1)	55.0	n/a	66.4*
Nominal house price growth (%) (2)	7.3	-100.0	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

AUSTRIA FACT TABLE

Entities which can issue mortgage loans:	Mortgage lending is mainly financed via banks and Bausparkassen. Mortgage loans are also issued within the subsidy schemes of the "Länder".
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. Combined with the Saving Banks Group, Bausparkassen make up one of the biggest banking groups in Austria representing 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 LTV is around 60%.
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 choice. In recent years, fixed interest rate loans are expanding.
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:	Housing purchase has a VAT of 20%. Property transaction tax is 3.5%. Registry tax is 1%. Additionally there are minor costs for notary and contract drafting.
The level (if any) of government subsidies for house purchases:	The housing subsidy schemes of the "Länder" focus on rental housing. All Länder also provide subsidy schemes for single family homes and owner-occupied (affordable) housing, but with widely different ranges, from close to zero up to 50% of subsidized production. The cash value of subsidies also differs a lot, between below 10% and 20% of total costs.

Belgium

By Frans Meel, Union Professionnelle du Crédit

IN A NUTSHELL

- → GDP growth of 1.7% in 2017, mainly driven by domestic demand.
- → Inflation averaged 2.2% in 2017.
- → House price increase of 2.8% in the first three quarters of 2017.
- → All times highest credit production in 2017 (EUR 31 billion).
- → 9 out of 10 new loans have a fixed interest rate or an initial fixed interest rate for more than 10 years.
- → A new macroprudential measure has been issued by the National Bank of Belgium on portfolio level, increasing for IRB banks by 5 pps the risk weight calculated on the basis of the internal models and applying a multiplier, on the basis of the average risk of each bank's portfolio (1.33).

MACROECONOMIC OVERVIEW

According to the annual report of the National Bank of Belgium, on which the following comments are based, Belgium saw its real GDP pick up in 2017, from an average of 1.4% in the three previous years to 1.7%. Economic activity advanced strongly in the first six months, but slowed down somewhat in the second half. It was mainly supported by domestic demand.

Private consumption remained a significant contributor to GDP growth, if to a lesser degree in 2017. The slowdown in durable goods consumption from the third quarter of 2016 ended in negative annualised growth in the second and third quarters of 2017.

Investment in housing shows a similar pattern to durable goods consumption : after growing robustly for three years, housing investment even turned negative in 2017, despite historically low mortgage rates. However, both areas of spending (durable goods consumption and investment in housing) are still at high levels.

Growth of economic activity was mainly driven by market services. Its value added for the first nine months rose by 2.4% compared to the same period in 2016, a rate of growth that had not been seen since 2011. By contrast, value added trends in the manufacturing industry, a key contributor to GDP growth in 2014 and 2015, have slowed since. Value added growth turned negative in the construction industry in 2017.

Belgium further bolstered its employment numbers in 2017. Domestic employment added 1.4%, i.e. the number of people in work grew by 66,000. The higher employment involved a fall in the number of unemployed job-seekers for a third year running. The harmonised unemployment rate worked out at 7.3%, still higher than it was in 2008. The number of unemployed job-seekers fell in Belgium's three Regions, across all unemployment durations, age brackets and levels of education.

In 2017, headline inflation averaged 2.2%, compared with 1.8% in 2016. Factors increasing inflation were not specific to Belgium and mainly resulted from external developments like changes in energy prices. Inflation related to electricity prices, services and non-energy industrial goods slowed down.

HOUSING AND MORTGAGE MARKET

HOUSING MARKET

Nominal house prices have more than doubled since 2000 and house price falls during the great recession were very minor both in size and duration when compared with other Euro area countries. Property price increases consistently slowed between 2011 and 2014 but picked up sharply in 2015, notwithstanding property tax reforms, in the Flemish Region in particular. Growth in property prices again somewhat accelerated between 2016 and 2017, with a nominal y-o-y increase of 2.8% in the first three quarters of 2017. Deflated by the final consumption expenditure deflator, the figure amounts to a real price increase of 1.1%.

According to the National Bank of Belgium, house prices in 2017 are believed to have been approximately 6.5% higher than their estimated equilibrium value. This was less than in 2015, when the deviation had risen sharply to 11.1%. The reduction is chiefly attributable to the slower rate of increase in property prices.

Activity in the secondary real estate market, which was clearly influenced by the reforms implemented by the Regions since 2015 with regard to the tax deductibility of mortgage loans, moved closer to its customary levels in 2016. It picked up again in 2017, albeit at a moderate rate, as the Royal Federation of Belgian Notaries recorded a rise of barely 1% in the number of transactions in the first three quarters of the year compared with the corresponding period in 2016.

According to the "notary barometer", nationwide average house prices rose by 2.5% in Belgium (EUR 240,451), by 2.6% in Flanders (EUR 266,928) and by 2.7% (EUR 183,445) in Wallonia as compared to 2016. However, the opposite is true for Brussels, since house prices went down by -2.5% (EUR 429,698). As far as apartments are concerned, nationwide average apartment prices rose by 2.5% in Belgium (EUR 215,440), by 2.3% in Flanders (EUR 220,268) and by 3.4% (EUR 172,367) in Wallonia as compared to 2016. Contrary to the house prices, the apartment prices in the Brussels region also went up by 3.2% (EUR 234.736).

MORTGAGE MARKET

The outstanding amount of residential mortgage lending reached about EUR 233 bn at the end of 2017 (against EUR 220 bn at the end of 2016).[1]

In 2017, the number of new mortgage credit contracts was about 243,000 for a total amount of more than EUR 31 bn (refinancing transactions not included). The number of mortgage credits went down by almost 7%, whereas their amount went up by 3% to reach again an all-time high.

The number of loans for the purpose of purchasing remained status quo. The number of construction loans went up by 1.8%. The number of loans granted for renovation (-21.3%), however, decreased substantially.

[1] Extrapolation for the total Belgian market, based on the figures of the UPC members market (EUR 206 bn).

The considerable growth of credit production in 2014 can be explained to a large extent by the exceptional figure for the fourth quarter as a consequence of the change in housing taxation in Flanders as of 2015. By contrast, the 2015 increase was spread over the last three quarters of the year. The strong growth in loan products in 2016 and 2017 is still closely connected to the low interest rates that further supported loan demand and lending.

The number of mortgage credit arrears of Belgian private persons remains low and is still declining. For years, it has been about 1.1% of the number of credits outstanding and now for the first time since long it only reaches 1%.

The average amount of mortgage loans for "purchases" stood at approximately EUR 156,000 at the end of 2017, about EUR 11,000 (or about 7%) more than at the end of 2015 (EUR 145,700). The average amount of mortgage loans for renovation purposes increased to ca EUR 50,000.

In 2017, the market share of new fixed interest rate loans and loans with initial fixed rate for more than ten years represented about 88.6% of loans newly provided. The share taken up by new loans granted with an initial fixed rate for 1 year, increased to approximately 1.4% of the credits provided (coming from 0.9%). The number of credits with an initial period of variable interest rate between 3 and 5 years also showed an increase (ca 10% of the credits provided).

MARKET PROSPECTS

In the first quarter of 2018, the number of mortgage credit contracts amounted to almost 60,000 for a total amount of nearly EUR 7.8 bn, external refinancing transactions not included. This means a decrease of the number of credits granted by more or less 4% all through the first quarter, as compared to last year's figure. However, the corresponding amount was 1% higher than in the first quarter of 2017.

As for credit purposes, the situation as compared to that of 2017 shows an increase in the number of credit contracts for house purchasing (+3%), but a decrease in the number of credit contracts for construction (-10%), for buying and renovating a house (-6%) and for house renovation (-20%).

However, the number of loan applications, not including the applications for external refinancing, increased by 4% over the course of the first quarter, compared to the same period in the previous year, as well as the corresponding amount (+6%).

NON-MARKET LED INITIATIVES

From 1 June 2018 on, the registration duty in Flanders amounts to 7% of the purchase price, instead of 10%. It only amounts to 6% in case the purchase price does not exceed EUR 200,000 (EUR 220,000 in the main cities and some cities around Brussels).

As from the beginning of 2017, buyers can benefit in the Brussels region from an "abattement" (exemption on which the buyer is not required to pay registration duties) on the first slice of EUR 175,000, compared to the first slice of EUR 75,000 before. However, 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. At the same time the former tax reduction has been abolished in favour of this larger exemption on registration duties.

On 30 April 2018, the National Bank of Belgium has put in place a new macro-prudential measure to limit the risks it identifies in the Belgian residential real estate market. According to the National Bank of Belgium, the indicators first of all point to a further increase in the debt ratio of Belgian households, to a level that was higher than the Euro area average at the end of the first half of 2017. This increasing debt ratio is supported by a persistent and strong increase in the growth of mortgages granted by Belgian banks. In 2016 and in the first half of 2017, the share of risky loans in the banks' portfolios no longer improved. These riskier loans are characterised by a high loan interest rate, a high ratio between monthly payments and monthly income, a long maturity or a combination of these vulnerabilities. These trends further build up the already significant pockets of risk and lead to a further increase in systemic risks.

The new measure applies to the loans granted to retail clients that are covered by residential real estate situated in Belgium and only applies to banks that use an internal risk based approach to calculate their capital requirements.

The new measure consists of two components: the first component is a measure that already came into effect in 2013 and expired in May 2017 (but was continued voluntarily by banks), and is applied equally to all loans. This linear component consists of an increase of 5 pps of the risk weight calculated on the basis of internal models. The second component, which is more focused, applies on the basis of the average risk of each bank's portfolio, using a coefficient (multiplier). In that case, the (micro-prudential) initial risk weight is multiplied by 1.33.

	BELGIUM 2016	BELGIUM 2017	EU 28 2017
Real GDP growth (%) (1)	1.4	1.7	2.4
Unemployment Rate (LSF), annual average (%) (1)	7.8	7.1	7.6
HICP inflation (%) (1)	1.8	2.2	1.7
Outstanding Residential Loans (mn EUR) (2)	220,114	233,224	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	24,422	25,779	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	91.3	94.2	73.8*
Gross residential lending, annual growth (%) (2)	1.1	-8.2	3.5
Typical mortgage rate, annual average (%) (2)	2.1	2.1	2.4**
Owner occupation rate (%) (1)	71.3	72.7	66.4*
Nominal house price growth (%) (2)	4.0	3.0	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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 the Belgian law on mortgage credit.
The market share of the mortgage issuances:	Based on the membership of our Association (UPC), representing ca 90% of the total Belgian market, the following market shares can be approximatively given in amount: • Banks: ca 95.7% • Insurance companies: 1.7% • Other types of lenders: 2.6% 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: • Banks: ca 96.1% • Insurance companies: 1.4% • Other types of lenders: 2.5%
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 2017 vintage, 30% of the volume of new mortgage loans was still made up of loans with an LTV ratio above 90%.
Any distinction made between residential and non-residential loans:	Residential purposes means that it is for private housing (consumers). 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: a) either by a lender having his principal place of business or chief residence in Belgium 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 average maturity of a mortgage loan at origination is estimated at 22.5 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. In 2017, the situation seemed to be changing again: whereas in 2016 only 28.0 % of mortgage loans was granted with a maturity of over 20 years, this number rose to 37.6 % in 2017.
Most common way to fund mortgage lending:	Most funding still comes from deposits. A few major lenders have started issuing covered bonds.
Level of costs associated with a house purchase:	From 01.06.2018 on, the registration duty in **Flanders** is 7% of the purchase price. It only amounts to 6% 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. In **Wallonia**, the registration duty amounts to 12.5% of the purchase price (6% in case of small properties). However, in case of a main residence, the first EUR 20,000 of the purchase price is exempt from registration tax. In the **Brussels** region, buyers can benefit from an "abatement" (= exemption on which the buyer is not required to pay registration duties) on the first slice of EUR 175,000, compared to the first slice of EUR 75,000 before. However, 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. 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: In **Flanders** there is a "housing bonus" system, which allows the owner of a single house bought in 2017 to obtain deductions (40% tax relief) for construction/ purchase/ renovation up to the total amount of EUR 1,520. The deduction consists of interest, capital repayments and life insurance premiums which have been paid in connection with the mortgage. During the first 10 years of the mortgage, the level of deduction will increase up to EUR 2,280 (= + EUR 760). People with 3 children or more are entitled to an extra EUR 80. If one buys a second house, the level of deduction goes down to EUR 1,520 (tax relief of 40%). 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* The **Brussels** region no longer provides a tax reduction. Early 2017, it was decided to replace the reduction and to grant 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.

Bulgaria

By Jacek Kubas, European Bank for Reconstruction and Development

IN A NUTSHELL

- → Real GDP and investment rate increased in 2017.
- → 2017 was very successful for the Bulgarian Real Estate Market, especially in Sofia.
- → Deposit accumulation in the banking system remained stable at high levels as well as funds mortgage loans.

MACROECONOMIC OVERVIEW

In overall terms, Real GDP growth reached a percentage of 3.6% in 2017 driven by strong exports, easier financial conditions and growing confidence. There was also a jump in investment due to the upbeat business sentiment and EU-linked capital spending. It was specifically estimated at 3.8% in 2017 which is impressive considering the -6.6% registered in 2016.

Estimations that the current balance would fall to 2.4 % in 2017 and 1.8% in 2018 proved to be close to the actual numbers. Current balance reached approximately 2.5% of GDP in 2017 and 1.9% in 2018(Q1). However, it is expected to fall to 1.3% in 2019.

Headline inflation turned positive in 2017 and inflationary pressure is rising. In fact, it reached 1.2% in 2017. The unemployment rate impressively decreased to 6.2% in 2017(Q1) from 7.7% in 2016 (Q1). This led to strong retail sales and improved consumer sentiment. In 2018, the unemployment rate declined even more to 5.8%, the lowest level recorded since the Global Financial Crisis.[1]

Exports of goods and services declined significantly from 8.1% in 2016 to 4% in 2017. There was a slight upgrade to 4.1% in 2018 (Q2), while it is estimated to return to 4.1% in 2019 (Q1).

General government debt reached approximately 25.4% in 2017 and a 23.3% of GDP in the second quarter of 2018. By end-December 2017 central government debt totalled EUR 12,667.1 mn in nominal terms, including domestic debt of EUR 3,468.2 mn and external debt of EUR 9,189.9 mn.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

The accelerating GDP, the low unemployment record and 0% interest rates on loans contributed to a significant growth in the Bulgarian Real Estate Market. Especially for Sofia, 2017 was the most successful year in the past decade; property sales increased by a modest 3.75% y-o-y to 6,300 units in Q3 2017. The most purchased apartments in the capital city are located in the districts of Krastova Vada, Manastirski Livadi, Mladost 4, Studentski Grad and Vitosha.

Across the country, home ownership rate increased to 82.9% in 2017 from 82.3% in 2016. In the fourth quarter of 2017 housing starts averaged 779 units but the number decreased to 723 units in the first quarter of 2018. Building permits reached the highest ever number of 3,110 units in the third quarter 2017 but fell to 1296 units in the fourth quarter of 2017.

In addition, EU citizens are now allowed to purchase properties themselves, since the 5-year moratorium on land purchases, set as a condition in the Accession Treaty between Republic of Bulgaria and The European Union, was lifted in January 1, 2012.

According to National Statistical Institute (NSI), the nationwide house price index rose by 8.59% (6.55% inflation-adjusted) in Q2 2017. During the latest quarter, house prices increased 2.41% (2.53% inflation-adjusted) in Q2 2017. In Sofia, the overall house price has seen an increase of 10.6% during the year. Sofia's southern districts are the most preferred location. Prices for new dwellings rose strongly by 13.5% while existing dwellings saw a price increase of 9.4%. In Varna, which is a seaside resort, prices rose significantly to 13.9% during 2017. Foreigners, mostly Russians and British people, were also interested in buying apartments in Varna. Prices of new dwellings had increased by 14.9% and existing properties' prices rose 13.5%. In Plovdiv, prices also rose by 6.7% in Q2 2017. According to specialists in the field, price was the principal consideration in buying a property.

MORTGAGE MARKET DYNAMICS

Bulgaria's mortgage market has seen great variations from 2000 onwards. It reached 11.65% of GDP in 2010, while in October 2017 there were BGN 267.1 mn (EUR 136.6 mn) new housing loans in October 2017, up 39% from the same period last year.

The interest rates of mortgages for properties in Bulgaria vary from 6 to 7% – much higher than those in Spain and France. The maximum term of any mortgage is 25 years. The minimum loan amount is EUR50,000 with no maximum. The maximum LTV ratio for a purchase is 75%. Total outstanding housing loans increased 6.4% to BGN 9.33 bn (EUR 4.77 bn) in October 2017 from the same period last year. Gross residential mortgage loans to individuals reached the number of 8,771,553 in 2016, rose to 9,460,270 in 2017 and slightly dropped to 9,928,714 in 2018(Q1). Non-performing loans in Bulgaria stood at 8.1% in December 2017 but dropped to 7.8% in March 2018.

MORTGAGE FUNDING

By the end of March 2017 banking system deposits totalled BGN 78.9 bn. The share of Lev-denominated deposits increased to 56.6% at the end of March 2017 (from 55.7% at the end of December 2016), and that of Euro-denominated deposits decreased to 34.6% (from 35.4% in the currency structure). It is expected that deposit accumulation in the banking system will retain its rates

[1] http://www.imf.org/en/News/Articles/2018/02/21/pr1864-imf-executive-board-concludes-the-2017-article-iv-consultation-with-bulgaria

due to improvement of the macroeconomic environment and the preference of corporations and households to deposit their free funds in banks rather than in other forms of savings. It is also expected that a future change in the tendency to save and increase in the portion of income used for funding of consumption would have an effect on the banking system balance sheet. Loans to non-financial corporations reached BGN 132 mn and lending to households reached BGN 275 mn.

Mortgage bonds, as a sub-category of corporate bonds, are being traded at the Bulgarian Stock Exchange-Sofia. However, Bulgaria has no active covered bond market yet.

	BULGARIA 2016	BULGARIA 2017	EU 28 2017
Real GDP growth (%) (1)	3.9	3.6	2.4
Unemployment Rate (LSF), annual average (%) (1)	7.6	6.2	7.6
HICP inflation (%) (1)	-1.3	1.2	1.7
Outstanding Residential Loans (mn EUR) (2)	3,700	4,190	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	620	709	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	12.2	13.1	73.8*
Gross residential lending, annual growth (%) (2)	18.9	39.9	3.5
Typical mortgage rate, annual average (%) (2)	5.0	4.0	2.4**
Owner occupation rate (%) (1)	82.3	82.9	66.4*
Nominal house price growth (%) (2)	7.0	8.7	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

BULGARIA FACT TABLE

Entities which can issue mortgage loans:	There are no specialized mortgage banks in Bulgaria. There are specific Bulgarian banks offering home loans to foreigners, such as Bulbank, DSK Bank, First Investment Bank, Invest Bank (I-Bank) and United Bulgarian Bank (UBB). The Greek bank Piraeus, which has 13 branches in Bulgaria, also offers 'Bulgarian' mortgages. Interest rates are usually around 6.5 to 7.5% and can be fixed or variable.
The market share of the mortgage issuances:	Not available
Proportion of outstanding mortgage loans of the mortgage issuances:	Not available
Typical LTV ratio on residential mortgage loans:	The average LTV ratio is 70% for properties under EUR 100.000, 75% for properties over EUR 100,000 and usually around 60 to 65% for brand new.
Any distinction made between residential and non-residential loans:	Not available
Most common mortgage product(s):	The most widely used mortgage products in Bulgaria are housing loans with variable rates, which are generally defined in the banks own lending policies.
Typical maturity of a mortgage:	The average maturity of mortgage loans in Bulgaria is 18 years with the maximum term of any mortgage being 25 years.
Most common way to fund mortgage lending:	Funding of mortgage loans is based largely on deposits. Mortgage bonds are being issued but they are not the primary source by banks.
Level of costs associated with a house purchase:	A variety of taxes and fees are payable when you buy a property in Bulgaria, most of which vary according to the price, but which may also depend on whether the property has land attached, whether you're buying through an agent (as opposed to buying direct from the vendor), whether you've employed a lawyer and surveyor and whether you employ a translator. On top of the purchase price, the purchaser should be aware of the following related costs: municipal tax (2% purchase price), property tax (0.15% purchase price), notary (depending on purchase price up to Lev 3,000), selling agent fee (up to 10% of the purchase price), VAT (possible to have this exempt for residential purposes, otherwise it is 20% with the possibility to have a refund for registered entities).
The level (if any) of government subsidies for house purchases:	Not available

Croatia

By Branka Tuškan and Alen Stojanović, University of Zagreb, Faculty of Economics and Business, Department of Finance

IN A NUTSHELL

→ Housing market has been stabilised in the last two years after longer period of negative trends and continues with trend of recovery:
  • Housing supply (construction sector activity) and demand (the number of dwellings sold) is slowly increasing,
  • Further slight increase in house prices can be expected in the next year, but it is certain that pre-crisis levels still would not be reached.

→ Mortgage market records stronger positive movements:
  • Housing loans have risen after five years of decline.
  • Mortgage interest rates are falling.

→ Real estate transfer tax was reduced from 5% to 4%.

MACROECONOMIC OVERVIEW

Domestic economic activity in 2017 continued with the positive trends from 2016 and registered an increase of 2.9%. The monthly indicators of economic activity for the fourth quarter of 2017 suggest that real GDP continued to grow, although at a slower pace than in the preceding part of the year and recorded temporary stagnation at the end of 2017. Monetary policy kept in 2017 its expansionary character. The result of such a policy was the highest recorded level of banks' free reserves, but also further decline of interest rates on new bank loans granted to households and corporations which increased bank lending to corporates and households. Despite the economic activity temporary stagnation and the current account deterioration, the downward trend in external debt continued from the previous year. At the end of 2017 gross external debt stood at 81.8% of GDP (89.3% at the end of 2016). Current account balance (as % of GDP) after years of negative levels or levels near 0%, in 2017 continued with positive trends from previous two years and recorded 3.9% (2.6% in 2016). If cumulative results in the whole of 2017 are observed, the current and capital account surplus stood at 4.4% of GDP (or 3.3% of GDP if the effect of Agrokor on the profit of banks is excluded), as compared with the 3.9% in 2016. *(CNB, Bulletin)*

In 2017, favourable movements took place on public finance such as an improvement in the general government balance and a drop in the general government debt-to-GDP ratio. The favorable budget outturn, in addition to economic growth and the strengthening of the exchange rate of the domestic currency against the euro, led to a reduction in the general government debt, that at the end of 2017 stood at 77.5% of GDP (80.2% at the end of 2016). Stronger fiscal consolidation in 2017 was achieved on the back of the favorable effect of the economic cycle on tax revenues and attributed to the continued growth in total revenues, but also parallel absence of more significant pressures on the increase in expenditures or even slight decline in that part. Such movements consequently finally led to fiscal surplus in 2017. Consolidated general government net lending/surplus for 2017 was at 0.8% of GDP (- 0.9% in 2016). *(CNB, Bulletin)*

At the end of 2017 favourable developments in the labour market continued. The total number of employed persons in the fourth quarter grew noticeably from the average of the preceding quarter, primarily due to the increase in jobs in the private sector. At the same time, unemployment continued to decrease, driven by new employment and the clearings from records for other reasons. Consequently, the registered unemployment rate decreased from 13.3% at the end of 2016 to 11.3% in December 2017. Inflation rate (HICP) in 2017 stood at at 1.1% (-0.6% in 2016). *(Eurostat, CNB; Statistical data)*

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

Croatia's property market continued in 2017 with positive trends from previous year. The number of new dwellings sold was approximately at the same level, 2,429 in 2017 (2,791 in 2016), and if we observe house price levels, the recovery trend is even more noticeable.

The construction sector continued in 2017 with remarkable recovery. More concrete, dwelling permits rose by 33.1% to 12,509 units in 2017, following growth of 35.2% in 2016 when 9,398 building permits were issued, while the useful floor area of dwelling with building permits increased to 1,167,080 m^2 in 2017 (from 859,996 m^2 in 2016). However, these numbers are still below the annual average number of 22,000 units from pre-crisis period. In 2017 the greatest number of building permits (residential buildings) were issued in the County of Zagreb, 3,170 (2,016 in 2016), as it was the case in previous years. The County of Split-Dalmatia took the second place in 2017 with 1,811 building permits issued and County of Zadar the third place with 1,652 building permits. In general, about 70% of building permits issued are for new construction and the remaining 30% for reconstruction. *(Croatian Bureau of Statistics)*

Total number of new dwellings sold in the Republic of Croatia slightly decreased to 2,429 in comparison to 2,791 units in 2016. About 45% of the new dwellings sold in 2017 were located in Zagreb, while the remaining 55% were located in other counties. House prices also continued with a positive trend in 2017. During 2017, the average price of new dwellings sold in the Republic of Croatia was HRK 10,734 (or EUR 1,429) per square meter, which represents a slight increase in comparison to the 2016 (HRK 10,034 or EUR 1,327). Into the calculation of these average prices (per square meter of sold new dwellings) are included prices of dwellings constructed by trade companies and other legal entities but also those constructed under the government support ("Publicly Subsidised Residential Construction Program"). The average price of sold new dwellings constructed by trade companies and other legal entities in 2017 increased to HRK 11,128 per square meter (2,137 units sold) in comparison to 2016 when average price was HRK 11,027 per square meter (1,984 units sold). The price of those constructed under the "Publicly Subsidised Residential Construction Program" was significantly lower, in 2017 their average price was HRK 8,132 (292 units sold) against HRK 7,806 per square meter and 807 units sold in 2016. Soit must be taken into consideration the influence of such a sale structure and price levels to the average price of total new dwellings sold per square meter. Data on prices of new dwellings sold are collected from legal entities that are at the same time contractors of construction works. They do not include legal entities that solely intermediate in the sale of the existing dwelling stock, that are considered "old dwellings". In Croatia's capital, Zagreb, total number of sold new dwellings decreased to 1,086 units in 2017 (from 1,481 units in 2016). But the average price of new dwellings sold significantly increased to HRK 12,098 per square meter (or EUR 1,610) in 2017 from HRK 10,445 (EUR 1,382) per square meter in 2016. In all other settlements, total number of new dwellings sold remain almost the same in 2017 as in previous years, 1,343 units (1,310 units in 2016) and the average price of new dwellings slightly increased to HRK 9,679 per square meter in 2017 (or EUR 1,288) in comparison to the HRK 9,582 (EUR 1,268) per m^2 in 2016. *(Croatian Bureau of Statistics)*

MORTGAGE MARKET

Mortgage loans have risen after five years of decline. Since 2012, the amount of outstanding housing loans has been declining, even after the economy recovered from recession in 2015. Outstanding housing loans amount expanded by 2.2% in 2017.

Despite further slow decrease in the relative importance of commercial banks in the total Croatian financial sector assets, they still have dominant role in housing finance. Nearly 70% of the total Croatian financial sector assets are credit institutions assets, they were valued at HRK 400 bn (EUR 53.2 bn) at the end of 2017 (98% of that is commercial banks asset). Housing loans in 2017 took a share of 45% of total loans granted to the household sector, about 13% of the total credit institutions assets. Banks' housing loans remain dominant in the total structure of housing loans granted and made up about 92% of all housing loans granted in the Republic of Croatia. Rest of 8% was granted by housing saving banks. Housing saving banks have not changed, thewy keep their symbolic role in the Croatian market-oriented housing finance system. In that sense, they represent less than 2% of credit institutions total assets. In the Republic of Croatia, there are still no other financial institutions involved in the market-oriented housing financing. *(CNB, Statistical data)*

Most commercial banks in the Republic of Croatia offer housing loans for periods off mostly up to 30 years, with LTV ratio up to 80%, mostly with variable rate and with different types of insurances and collaterals. Besides common housing loans they also offer specialised housing loans for young people, reconstruction, furnishing, etc. In the past two years, trend of rise of supply and demand for housing loans denominated in domestic currency has been highlighted, mostly due to the decline of interest rates on domestic currency loans as a result of the drop in the general level of interest rates, but also due to the negative experience with loans indexed to CHF. In that sense, total amount of newly granted (new business) housing loans denominated in domestic currency continued with the growing trend in 2017, in opposition to the total amount of newly granted housing loans denominated in F/C or in domestic currency indexed to F/C that have had priority in credit institutions long-term lending offer, especially in housing lending, for a long time. The value of total housing loans granted in 2017 (new business) amounted HRK 10,6 bn (HRK 19,6 bn in 2016), 53% of that amount were housing loans debt denominated in domestic currency (34% in 2016) with average interest rate of 4.1% (4.7% in 2016) and 47% denominated in F/C or in domestic currency indexed to F/C (66% in 2016), mostly in EUR and with average interest rate of 3.8% (4.8% in 2016). *(CNB, Statistical data, Credit institutions, tables g2a and g2b)*

The value of total outstanding housing loans at the end of 2017 amounted HRK 52.8 bn (or EUR 7.03 bn), representing a slightly decrease in comparison to 2016 (HRK 55.5 bn or EUR 7.34 billion). Around 27% of that amount was housing loans debt denominated in domestic currency and 73% denominated in F/C, mostly in EUR, as a consequence of the current trend in new housing lending business that significantly favoured the lending in domestic currency in the last few years (about 90% of total amount of outstanding housing loans was in F/C or in domestic currency indexed to F/C for a long-time). *(CNB, Statistical data, Credit institutions, table d5)*

On regulatory issues, in October 2017 a new law came into force – Mortgage Consumer Protection Act. This law should positively influence the mortgage and housing market movements, since it regulates and brings more transparency on mortgage lending and that means also more protection for homebuyers with a mortgage.

Croatia's residential market continues to attract foreign buyers, especially in the tourism-oriented counties at the coast. Ñost attractive (luxury) residential properties are located in the counties of Istria, Primorje-Gorski Kotar, Split-Dalmatia, Zadar and Dubrovnik-Neretva. On 1 January 2017, the Republic of Croatia lowered real estate transfer tax from 5% to 4% positively affecting mortgage and housing market movements.

MORTGAGE FUNDING

In 2017, no changes in the sources of housing financing occurred. Croatian banks and certainly housing saving banks were still primarily depositary institutions, which did not fund loans via mortgage covered bonds or mortgage backed securities. Funding structure of credit institutions in the Republic of Croatia at the end of 2015 (last available data) was as follows: deposits 92.4%, loans 6% and other sources 1.6%. In that, approximately 4% of loans and deposits were funded from foreign parent banks. This structure is due to the dominance in the financial sector of traditional household savings and external financing activities.At the same time, there is still present sufficient funding oriented mostly to deposits but also there is still evident absence of confidence in the securities market, as well as slower development of other financial institutions. Frequent economic and banking crisis trough the history as well as absence of adequate regulation, which would make possible the introduction of advanced housing financing techniques, further emphasise the reasons for such a funding structure and the structure of housing finance system as a whole.

	CROATIA 2016	CROATIA 2017	EU 28 2017
Real GDP growth (%) (1)	3.5	2.9	2.4
Unemployment Rate (LSF), annual average (%) (1)	13.1	11.2	7.6
HICP inflation (%) (1)	-0.6	1.3	1.7
Outstanding Residential Loans (mn EUR) (2)	6,947	7,101	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	2,017	2,075	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	18.0	n/a	73.8*
Gross residential lending, annual growth (%) (2)	192.1	-45.4	3.5
Typical mortgage rate, annual average (%) (2)	4.8	3.5	2.4**
Owner occupation rate (%) (1)	90.0	n/a	66.4*
Nominal house price growth (%) (2)	-6.1	6.9	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

CROATIA FACT TABLE

Entities which can issue mortgage loans:	Commercial banks, housing saving banks
The market share of the mortgage issuances:	Commercial banks dominate
Proportion of outstanding mortgage loans of the mortgage issuances:	Commercial banks: 94% Housing saving banks 6%
Typical LTV ratio on residential mortgage loans:	70-80%
Any distinction made between residential and non-residential loans:	Residential purposes – housing loans, non-residential purposes (but collateralised by mortgage) – mortgage loans
Most common mortgage product(s):	Housing loans
Typical maturity of a mortgage:	20-30 years
Most common way to fund mortgage lending:	Deposits
Level of costs associated with a house purchase:	Real property transfer tax (4% of market value); transaction costs (fees and commissions): up to 2% of market value, 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 Subsidized Residential Construction Program", 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, Economic Research

IN A NUTSHELL

- → Economic recovery continued to strengthen driven by services and construction activity.
- → Residential property prices started to rise in 2017 driven by rising economic activity.
- → New home sales started to rise in 2014 and accelerated sharply in 2016/2017.
- → The mortgage market remains large with mortgage loans at 57.9% of GDP in 2017.
- → Funding conditions in the banking sector have improved substantially allowing banks to increase their mortgage lending.

MACROECONOMIC OVERVIEW

Economic recovery continued to strengthen with real GDP rising by 3.9% in 2017 and by 4% in Q1 2018, seasonally adjusted. Growth was driven by construction, tourism and professional services and by domestic demand on the expenditure side. Fixed investment made a significant contribution reflecting rising construction activity. Despite a significant increase in exports of goods and services a steep increase in imports resulted in net-exports having a net negative contribution to growth in 2017.

The outlook remains positive and downside risks are mainly related to the external environment and geopolitical risks. Upside risks include the broader economic impact of a large casino-resort project under construction and other large building projects.

In public finances, strong economic activity aided revenue collection leading to a sizable budget surplus in 2017 and a significant drop in the public debt-to-GDP ratio. Public debt will rise significantly in 2018 following the restructuring of the Cyprus Cooperative Bank but this will not affect the downward trend in the debt-to-GDP ratio.

In the banking sector non-performing loans continued to decline. The recent amendments to the foreclosure and insolvency framework and the sale of the good loans portfolio of the Cyprus Cooperative Bank are expected to aid substantially in the resolution of remaining non-performing loans.

After four consecutive years of decline, consumer prices turned marginally positive in 2017 rising by 0.7%. Consumer prices remained almost unchanged in the first five months of 2018 but rose sharply in June driven by food, housing and electricity prices.

The unemployment rate dropped to a yearly average of 11.1% in 2017 compared with 13% the year before. On a seasonally adjusted basis, the unemployment rate dropped to 10.3% in Q4 2017 and to 9.4% in Q1 2018. The unemployment rate is expected to drop further in coming quarters as the economy continues to expand.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

There is a high tendency for home ownership in Cyprus. According to Eurostat, the ratio of owner-occupied homes in Cyprus was 72.5% in 2016. This was marginally down from 73% the previous year and from a peak of 74% in 2013, reflecting the impact of the recession of 2011-2014. However, in Cyprus there are still more people living under their own roof with respect to the averages of the EU and the Euro area, which were respectively around 69.2% and 66.4%.

In terms of real gross value added the construction sector peaked in 2008 on an annual basis and declined steeply to 2015. The cumulative decline in the period was 62.8%. The ratio to total economy real gross value added dropped from 10.4% to 4.2% in the same period. The construction sector started to recover in 2016 and 2017 rising respectively by 9% and 25%, and reaching 5.3% of real total economy gross value added in 2017.

According to the Cyprus Statistical Service, the production value of the construction sector at current prices increased by 2.4% in 2015 and by 11% in 2016 after six consecutive years of decline, reaching EUR 2.0 bn or 10.7% of GDP. This compares with a corresponding ratio to total economy gross value added at market prices of 25.9% in 2008 when construction activity peaked.

The number of completed new dwellings in 2015, the last available data, was 2,390 compared with 2,718 the year before and a peak of 18,195 in 2008.

Based on the Central Bank's residential property index, prices peaked in the third quarter of 2008 in Cyprus as a whole as well as in each of the provinces except for Limassol, where prices peaked in the fourth quarter of the same year. Since then, residential property prices were declining through to the end of 2016 but they started to recover in 2017. In this period residential prices dropped by a cumulative 30.6% on an economy-wide basis. Correspondingly prices dropped by 29.1% in Nicosia, 26.7% in Limassol, 34.2% in Larnaca, 25.8% in Paphos and 36.5% in Famagusta. Residential property prices rose by 1.1% on average in 2017. This was driven by price increases in Nicosia and Limassol with prices in the remaining provinces still registering small declines.

Property prices exhibit strong correlation with overall economic activity and GDP growth. With the recovery that started in 2015, property prices might be expected to continue to rise at a higher pace in coming quarters. Regional differences in price developments reflect differences in the composition of demand. There is a high proportion of vacation and second homes in the Larnaca, Paphos and Famagusta regions where prices have been weaker in both the contraction and the recovery phases.

New sales as reflected in sales contracts registered are still considerably below their peak levels from 2007, but have been rising sharply since 2014, they went up a steep 42.6% in 2016 and 23.7% in 2017.

MORTGAGE MARKETS

Market dynamics

The mortgage market is relatively large in relation to GDP. Total housing loans outstanding at the end of 2017 were EUR 11.1 bn, which correspond to 56% of total household loans outstanding and to 26.3% of total loans to residents excluding the government. The ratio of mortgage loans to GDP at the end of 2017 was

57.9% compared with 66.3% in 2014. Total mortgage loans outstanding declined by 1.3% in 2016 from the prior year and by 3.1% in 2017. Compared with their peak in 2012, mortgage loans outstanding at the end of 2017 were 12.3% lower. The decline in total mortgage loans outstanding is the result of loan restructuring and deleveraging. New mortgage loans in 2017 amounted to EUR 857 mn of which EUR 136 mn were renegotiated amounts. This is less than half of new mortgage loans in 2011.

Mortgage lending rates have been declining in recent years. The floating rate for up to one year for house purchase dropped from an average of 6.47% in 2008 to 2.53% in 2017. Mortgage lending rates continued to drop in the first half of 2018.

Loan performance of households and non-financial corporations deteriorated markedly in the aftermath of the bail-in strategy for recapitalising banks in 2013 and the deep recession that started in the second half of 2011 and ended in 2014. Non-performing exposures, as defined by the European Banking Authority, rose sharply in the period. 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.

Total household loans at the end of 2017 were EUR 21 bn or approximately 109.3% of GDP. Non-performing exposures of the household sector were EUR 11 bn or 57.1% of GDP in 2017 compared with EUR 12 bn or 66.1% of GDP in the prior year. The non-performing exposure ratio dropped to 52.4% of gross loans in 2017 from 54.6% in the prior year. It is noted that continued deleveraging causes the non-performing exposure ratio to drop only slowly. Mitigating this large ratio of non-performing exposure, is a high provisioning ratio of 43.3% at the end of 2017 and a high ratio of restructured facilities in of 36.6% of the non-performing exposures of the household sector.

Non-Market led initiatives

The property market in Cyprus is being affected by changes in various tax related alterations and other legislative measures. The property tax payable to the Tax Department was reduced in 2016 and abolished in 2017.

A new amendment law that came into force on 2 January 2018 introduces a 19% VAT on building land and on the leasing of commercial property for business purposes.

As part of its policies aiming to attract foreign investors in Cyprus through the 'Scheme for Naturalisation of Investors in Cyprus by Exception', the Council of Ministers in March 2014 established relevant new financial criteria. This led to a substantial increase in foreign demand for property in 2016 and 2017.

MORTGAGE FUNDING

Bank funding in Cyprus is dependent primarily on customer deposits. Funding conditions are comfortable as reflected in the net-loans (net of provisions) to deposits ratio at 83.9% at the end of 2017. There is one covered bond outstanding with a total size of EUR 650 mn. No new issuances of covered bonds occurred in 2017. The securitisation legislation has been enacted in July 2018 providing an additional tool for utilising banks' mortgage books to obtain funding. Moreover, in May 2016, new funding from the ECB was raised using as collateral a pool of housing loans that satisfy the criteria of the Additional Credit Claims as set out in accordance with the Implementation of the Eurosystem Monetary Policy Framework Directives of 2015 and 2016.

	CYPRUS 2016	CYPRUS 2017	EU 28 2017
Real GDP growth (%) (1)	3.4	3.9	2.4
Unemployment Rate (LSF), annual average (%) (1)	13.0	11.1	7.6
HICP inflation (%) (1)	-1.2	0.7	1.7
Outstanding Residential Loans (mn EUR) (2)	11,515	11,123	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	16,949	16,196	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	94.7	88.7	73.8*
Gross residential lending, annual growth (%) (2)	34.5	-1.0	3.5
Typical mortgage rate, annual average (%) (2)	3.0	2.5	2.4**
Owner occupation rate (%) (1)	72.5	n/a	66.4*
Nominal house price growth (%) (2)	-1.8	0.4	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

CYPRUS FACT TABLE

Entities which can issue mortgage loans:	Financial institutions (banks and cooperative credit institutions)
The market share of the mortgage issuances:	100%
Proportion of outstanding mortgage loans of the mortgage issuances:	Banks: 70% and coops: 30%
Typical LTV ratio on residential mortgage loans:	80%
Any distinction made between residential and non-residential loans:	Loan purpose & property use
Most common mortgage product(s):	Euro-denominated loans with bank base rate + spread
Typical maturity of a mortgage:	Average 25 years
Most common way to fund mortgage lending:	Customer deposits
Level of costs associated with a house purchase:	• Transfer Tax • Title Deeds • Stamp Duty • Mortgage Fee • Land Tax
The level (if any) of government subsidies for house purchases:	None

Czech Republic

By Martin Kotek, Komerční banka, a. s.

IN A NUTSHELL

→ The Czech Republic is enjoying an economic upswing. Boosted by consumer confidence, low unemployment rate, increasing wages and low credit costs, private consumption growth remained high;

→ Housing prices are increasing rapidly against a backdrop of high demand, constrained supply and regulatory obstacles;

→ The mortgage market kept growing in 2017, also thanks to favourable economic conditions, despite a slight increase of average interest rates and tightened regulation.

MACROECONOMIC OVERVIEW

2017 was marked by renewed acceleration of economic growth, which was aided by the better – than-expected Eurozone developments and an improvement in all components of domestic demand, and supported by low interest rates and greater utilisation of EU funds. Domestic real GDP increased by 4.4% in 2017, driven by both internal and external demand. Household consumption increased by 3.5% thanks to the dynamic growth of employment and salaries.

The labour market reflected economic growth with a very high utilisation of the labour force, with employment growing at 78.5% in comparison to 76.7 in 2016. The unemployment rate (adjusted by seasonal influences) further decreased to 2.9% in 2017 and reached the lowest level of the EU. The low unemployment level and the mismatch in supply and demand for labour are reflected in the faster growth of real wages.

Lower capital spending and higher tax revenues have led to a fiscal surplus of 1.6% of GDP, while government debt dropped below 37% of GDP, one of the lowest levels in the EU.

Czech National Bank removed pegging to the Euro and increased the base interest rates (2W repo) and the base rate was 0.5%. Inflation picked up strongly in 2017 reaching an annual average of 2.5%. This increase in inflation – from around 0.5% during the last three years – was partly driven by an acceleration of wage growth.

HOUSING AND MORTGAGE MARKETS

The real estate market of the Czech Republic has been very buoyant and one of the fastest growing in the EU. In 2017 house prices increased by 10.3%. The most expensive flats are not located only in big cities (Prague, Brno), but also in smaller ones such as Hradec Kralove.

The house price increase is caused mainly by the economic boom. Thus, people are not afraid of losing their job, real salaries are increasing and it is more affordable to buy a property. Another driving factor is high demand for and the lack of available flats, especially newer ones, also due to strict building regulations. Although the offer of newly developed flats increased in 2017 by 4.5%, lack of the new housing opportunities remains the key issue of the Czech real estate market.

The favourable economic developments, coupled with low loan interest rates, are encouraging the emergence of optimistic expectations and increasing households' willingness to finance their expenditure using debt. Despite slight growth in interest rates, lending conditions remain without changes and the amounts of new loans provided to households are still high. From total sales volume perspective the mortgage market remained on the same level as in previous year, in which the production of mortgages was historically highest. The total amount of mortgages provided slightly decreased to 105,000 (from 112,000 in 2016) and the total volume outstanding was CZK 1,153.1 bn (8,8% y-o-y growth). The driving factors were not only economic growth, but also relatively low interest rates, despite a slight increase from last year reaching an average rate of 2.25% due to CNB countercyclical monetary policy decisions in order to cool the market.

At the end of 2016, CNB issued several recommendations in regards to LTV and the recommended maximum LTV was 95%, further decreased to 90% with effectiveness as of April 1st, 2017. Although banks are not legally obliged to follow this rule, the CNB can request higher volume of the Mandatory Minimum Reserve, if these recommendations are not met, which means higher costs for lending. Another recommendation relates to proportion of loans with LTV in range of 80% - 90%, which should not be more than 15% of total volume of loans provided by a bank.

MORTGAGE FUNDING

The covered bond (***"Hypotecni zastavni list"*** – hereinafter referred to as "MCB") market in the Czech Republic was kick started on 1 January 1992 on the basis of the general regulation contained in the Commercial Code. At present, MCBs and mortgage loans are regulated in detail in the Bond Act, which entered into force on 1 April 2004. The Bond Act was amended in 2012 with the new provisions, amongst other things, enabling the issuance of MCBs under a foreign law and clarifying the calculation of the minimum LTV required by the law. Specific provisions treating cover assets and applicable to the opening of insolvency proceedings or the declaration of bankruptcy of the issuing bank are part of the Insolvency Act No. 182/2006 Coll.

The main source of funding for banks are client deposits, which dominate the liability side of the banking sector. A higher degree of prudence also results in LTD ratios of 80%, which are much lower than other countries in the EU.

	CZECH REPUBLIC 2016	CZECH REPUBLIC 2017	EU 28 2017
Real GDP growth (%) (1)	2.5	4.3	2.4
Unemployment Rate (LSF), annual average (%) (1)	4.0	2.9	7.6
HICP inflation (%) (1)	0.6	2.4	1.7
Outstanding Residential Loans (mn EUR) (2)	34,940	45,160	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	4,036	5,216	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	37.9	45.0	73.8*
Gross residential lending, annual growth (%) (2)	28.5	6.6	3.5
Typical mortgage rate, annual average (%) (2)	2.2	2.4	2.4**
Owner occupation rate (%) (1)	78.2	n/a	66.4*
Nominal house price growth (%) (2)	11.0	10.3	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

CZECH REPUBLIC FACT TABLE

Entities which can issue mortgage loans:	In the Czech Republic, housing finance is mainly raised by banks, in some cases also by credit unions.
The market share of the mortgage issuances:	Not available
Proportion of outstanding mortgage loans of the mortgage issuances:	Three retail banks - Hypotečni banka, Česká spořitelna and Komerčni banka together hold almost 75% of the market share in the Czech Republic.
Typical LTV ratio on residential mortgage loans:	One of the recommendations of the Czech National Bank was that maximum LTV is 90% and share of mortgages with LTV 80+ should not exceed 15% of the total volume of new loans granted each quarter. Market fulfilled these recommendations and typical mortgage was with LTV 70 – 80%
Any distinction made between residential and non-residential loans:	75% of housing loans were provided for residential purpose.
Most common mortgage product(s):	Most common mortgage loan in 2017 was the loan for house/flat purchase (> 50%) secured by this property with interest rate fixation 5-7 years and maturity 20-30 years.
Typical maturity of a mortgage:	Typical mortgage loans have maturity 20 to 30 years. Again, the recommendation of the Czech National Bank is not to provide loans of over 30 years.
Most common way to fund mortgage lending:	Mainly deposits (Loan-to-deposit ratio is at about 80%), less often covered bonds.
Level of costs associated with a house purchase:	Taxes and fees when buying/selling a property in the Czech Republic: 1) Real Estate Transfer Tax (4% of purchase price – does not apply to the first transfer of ownership of a newly-built building or flat) 2) Real estate agency fee (at about 3%)
The level (if any) of government subsidies for house purchases:	1. With the current landscape of very low interest rates, the state does not consider it necessary to support mortgage loans for young people as used it used to do from 2004 to 2011. However, since the 21st April 2016 there was the possibility – for young families up to 36 years with at least one child under six years to receive a subsidy for a house purchase and construction in amount up to CZK 600,000 (EUR 23,000) in the form of a discounted rate derived from EU reference rate (EU basic rate + 1,0% - 2,0%) fixed for 5 years with maximum maturity 15 years. – for young people up to 36 years subsidy for reconstruction of housing in amount up to CZK 150,000 (EUR 5,750) in the form of a discounted rate of 2,0% with maturity max. 10 years 2. 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 (this also applies to foreigners who have a tax domiciliation in the Czech Republic).

Denmark

By Kaare Christensen, Finance Denmark

IN A NUTSHELL

→ Continued deleveraging and balanced upswing in the Danish economy.
→ Borrowers still favouring fixed rate mortgages.
→ New and stricter loan requirements on borrowers with high leverage taking effect in 2018.

MACROECONOMIC OVERVIEW

The Danish economy continued previous years' expansion and grew in real terms by 2.2% in 2017, mainly driven by export growth of +4.4%. However, Danish exports for 2017 are influenced by a significant single sale of a patent. Excluding this sale, real GDP growth is more in the +2.0% region. Real gross total fixed capital formation rose by (+3.7%) including a rise in gross residential fixed capital formation of +8.7%. Private consumption (+1.6%) also added to real GDP growth in 2017. Factors driving private consumption including employment and real wage growth performed well in 2017 – perhaps well enough to justify a larger rise in consumption expenditure. However, Danish households continue to deleverage helping household net wealth improve by +6.0% during the year. The labour market continued to perform well with an increase of 1.6% in employment in 2017. The positive influence from the labour market can be read in consumer confidence that rose through 2017 after a sharp set-back in 2016. Real wages continued to improve as compensation per employee outpaced consumer price increases by almost +1%. Public consumption rose by +0.6%. The output gap for Denmark in 2017 was +0.2% showing an economy on a balanced growth path, however showing some early signs of labour shortage in few selected sectors. The deposit rate at the Danish central bank, Danmarks Nationalbank, remained at -0.65% throughout the year.

Unemployment decreased from 6.2% to 5.7% (Eurostat Unemployment Rates) by the end of 2017. Unit labour costs in the Danish private sector rose by 0.9%, while consumer prices increased by 1.1% in 2017.

The Danish government recorded a budget surplus of +1.0% of GDP for the year. Meanwhile, gross public debt was -36.4% of GDP, which is low in a European context. Meanwhile, Denmark ran a current account surplus of +7.6% of GDP.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKETS

The Danish housing market is characterised by a relatively low owner occupation rate, which is even lower in larger cities. Hence, price developments in the owner-occupied segment impact macro-economic factors such as private consumption less, than if the owner occupation rate had been higher.

The owner occupation rate was 52.5% by the end of 2017. This marks a decrease of 0.2 pps over the year. Since 2007, the owner occupation rate has slightly decreased by a total of -1.9% pps. The development over the year could be the result of housing affordability conditions. Despite higher real incomes, user costs kept rising in 2017 due to higher house prices. User costs for the country as a whole have reached their long-term average. However, in Copenhagen user costs are now above the long-term average.

Domestic nominal house prices increased by 4.5% (y-o-y) in 2017 picking up slightly on the growth rate recorded for the previous year. Not only house prices, but also prices on owner occupied flats have been rising for some years. House price increases are now prevalent across the country. The current increasing trend started in the bigger cities and have spread from there. Prices on owner-occupied flats and detached and terraced houses in the Copenhagen area rose by 10.5% and 8.1% (y-o-y) in 2017.

Higher house prices have stimulated transaction activity. The number of transactions involving detached and terraced houses is up 10.0% in 2017, whereas 1.5% more owner-occupied flats were sold. Especially areas outside the larger cities are driving transaction activity. Meanwhile, the underlying demographic movement away from the countryside remains an underlying demand factor favouring markets in larger cities.

Construction activity is finally gaining momentum after a period of subdued activity since the financial crisis. Building upon a big leap in 2016, momentum carried from 2016 into 2017. Housing completions improved by 10.8% in 2017.

MORTGAGE MARKETS

By year end 2017, outstanding mortgage loans from mortgage banks amounted to DKK 2,670 bn, of which app. DKK 1,600 bn was for owner occupied housing. On top of this housing loans for households from commercial retail banks amounted to DKK 303bn. In total mortgage credit growth was recorded at 1.9% in 2017. In light of recent years' house price increases, mortgage credit growth remains modest. However, due to past years' faster house price growth in Copenhagen, lending growth for owner occupation is much higher in the capital area compared to the rest of the country.

Mortgage lending activity in 2017 has repeated previous years' developments. Fixed rate mortgages have gained market share while especially the share of variable rate mortgages has decreased. Outstanding mortgage loans issued by mortgage banks are split between fixed rate mortgages (34.4% by year end 2017), adjustable rate mortgages with an interest rate cap (3.5% by year end 2017), interest reset mortgages with interest reset under 1 year (35.3% by year end 2017) and interest reset mortgages with interest reset intervals between 1 and 10 years (30.3% by year end 2017).

Gross lending activity by mortgage banks increased slightly from the 2016 level. The activity level remains relatively high in a historic perspective due to attractive remortgaging opportunities as a consequence of low mortgage rates. All in all, total gross lending reached DKK 508.7 bn. Residential mortgages counted for 77.0% of gross lending which is slightly less than in 2016. Fixed rate mortgages (typically fixed for 30 years) accounted for 50.1% of gross lending in 2017, a decrease of 2 pps compared to 2016. Adjustable rate mortgages and interest reset mortgages accounted for 49.5% and adjustable rate mortgages with an interest rate cap accounted for 0.2% of gross lending in 2017.

The increasing popularity of fixed rate mortgages that picked up already in 2015 and has remained high since then as the majority of new mortgages are issued with a fixed interest rate. Furthermore, movements within the interest reset segment continued in 2017. Borrowers are still favouring fixed rate mortgages and interest rate reset mortgages with semi-annual and 3-5 year intervals over interest reset mortgages with yearly intervals. There are several potential reasons for this development. One reason that stands out is the industry's own measures which includes increased fees on interest reset mortgages with yearly intervals and interest only mortgages relative to other types of loans. On the margin, this has given borrowers an incentive to choose other mortgages than interest reset mortgages with 1 year interval and interest only mortgages. Other possible reasons for borrowers preferring fixed rate mortgages and mortgages with longer interest rate fixation could be borrowers' expectations of future interest rate increases. Indeed, in 2017 the interest rate on a 30 year fixed rate mortgage remained at the very low level of previous years, which provides equity protection from an interest rate increase (and hence expected house price decline) as the price of the mortgage is reduced as interest rates rise - neutralising possible value deterioration.

The interest rates on fixed mortgage loans continued at a historically low level in 2017. The interest rates on short term loans were so low, that investors received negative yields on the underlying bonds. The short term interest rate to borrowers was on average 1.00% in 2017 and 30 year fixed rate mortgages were issued with a coupon of between 2% or 2.5% during the year.

ANY FURTHER IMPORTANT EVOLUTION

Taking effect on 1. January 2018 a tightening of existing consumer protection legislation took effect. The new stricter requirements are a direct consequence of recommendations from the Danish Financial Stability Board from March 2017, stating that household with large loan exposures should be limited to loans with longer rate fixation combined with an amortisation requirement.

Even though households are still credit accessed on the same terms as before, households ending up with a loan to income ratio of more than 4 will be limited to safer mortgage products including amortisation requirement and fixed or longer term rate fixation. It is expected that the new legislation wil dampen overall demand for mortgage loans and that the existing market driven move towards fixed rates and amortisation will be consolidated by the new rules.

Even though the new rules did not take effect until the beginning of 2018, the new rules were announced in late 2017, and the mortgage banks and commercial banks already started observing the new requirements in late 2017.

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, 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 the point risk more evenly across the year. In December 2017, the shortest bullet bonds (1 year maturity) were sold and resulted at a mortgage interest rate of approximately -0.21%, compared to 0.00% a year earlier.

Over the course of 2017, long-term callable bonds, which fund the fixed rate mortgages, were issued with a coupon of 2% or 2.5% matching the rate on the loans

	DENMARK 2016	DENMARK 2017	EU 28 2017
Real GDP growth (%) (1)	2.0	2.3	2.4
Unemployment Rate (LSF), annual average (%) (1)	6.2	5.7	7.6
HICP inflation (%) (1)	0.0	1.1	1.7
Outstanding Residential Loans (mn EUR) (2)	243,751	248,776	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	53,692	54,311	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	174.7	172.6	73.8*
Gross residential lending, annual growth (%) (2)	-20.1	0.3	3.5
Typical mortgage rate, annual average (%) (2)	1.1	1.0	2.4**
Owner occupation rate (%) (1)	62.0	62.4	66.4*
Nominal house price growth (%) (2)	3.7	4.5	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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: • Retail banks – 15% • 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%. 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: • Loans with Fixed rate • Interest reset loans • 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 million (EUR 134,000) with fixed rate the following apply: • Taxes going to state: Approximately DKK 17,000 (EUR 2,280) • 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 Sofia Garrido and Daniele Westig, European Mortgage Federation, European Covered Bond Council

IN A NUTSHELL

- → Positive trend of the GDP, significant growth of 4.9%.
- → Increase in investment, particularly in fixed capital formation.
- → Increase in labour productivity higher than increase in salaries.
- → Highest price increase on houses by 5.8%.
- → Growing housing and mortgage market due to economic growth and low interest rates, increase in the number of purchase-sale transactions and their value.

MACROECONOMIC OVERVIEW

The Estonian economy has experienced a remarkable growth since 2016. In 2017growth was broad-based and reached a significant 4.9%. With nearly a fifth construction activities contributed for the largest part to this growth closely followed by information and communication activities and professional, scientific and technical activities. The important role trade played in past years has been overtaken by quarrying and mining activities, which have just exited from a crisis. Despite it more than half of the activities have contributed positively to the economy.

If in past years domestic demand was driven by private consumption and inventories, in 2017 demand grew thanks to fixed capital formation, which experienced an exceptional growth of 13.1%, after three years of decline. Investment has reversed a 3-year decreasing trend since companies have started to invest in capital formation. However, investment did not grow the same above all activities. It increased mainly in manufacturing, transportation and storage, less significantly in buildings and structures, transport equipment as well as machinery.

In 2017, salaries increased by 7.5% following the trend from the past. An increase that was due mainly to a faster growth in labour productivity, higher inflation, higher labour demand and lower unemployment. In spite of that, for the first time in several years, the Estonian economy experienced an increase in labour productivity larger than the increase in salaries allowing firms to earn higher profits. The economy is close to the maximum employment rate with 67.5%, reaching the highest levels since 1998.Consequently, the unemployment rate fell to 5.2%.

In prices, the most important increase occurred in the export price index 5.5% increase. The consumer price index also rose by 3.4% during 2017. The main product affecting the consumer price index was the milk which rose its price by 10.4%.

The good shape of the EU economy as well as that of the Estonian economy is in part due to foreign trade. Both imports and exports increased, by a 3.9% and 3.5% respectively. Main exports in services where business, travel and transport services. The current account was in surplus as the year before and reflecting that saving is still preferred to investing.

The Estonian deficit in 2017 was 0.3% of GDP, higher than in 2016. Nevertheless, the economy is strong and government debt keeps decreasing, making Estonia the country with the lowest debt level in the EU.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

Estonian housing market keeps its strength helped by the general economic growth and the low interest rates.

Prices of apartments and houses grew during 2017 at a faster pace than in 2016. From year on year, the average price of dwellings in Estonia rose by 5.4%. If we distinguish among different kind of buildings those who experienced the largestincrease where houses whose price rose by 6.18%. The increase in the transaction share of new apartments is partly the reason for high average price growth.

Looking at the evolution of prices on the various regions or areas differences are observed. The second largest city of the country, Tartu City, experienced with 7% the largest increase in apartment prices with respect to 2016. It was followed by the main coast city, Parnu, where apartments are 6.05% more expensive than the previous year. Finally, the capital, Tallin, experienced a 4.8% increase in apartment prices. From a general point of view, the increase in the whole country, without considering Tallin, was a 10.6%.

In 2017, the number of sale-purchase transactions in the Estonian housing market was 51,780 units, 9.3% higher from a year earlier, thus reaching the highest level since 2006.The capital was the city in which the number of transactions as well as the value of the transactions rose the most. Likewise, the number of building permits has kept growing trough 2017 signalling that the level of construction activity will remain high in the near term.

Alongside the property ownership market, the apartment rental market also has been very active. The rental market is concentrated mostly in Tallin where apartment gross rental yields have ranged between 5 to 5.5% in 2017. It is in the capital where demand for apartments was stronger thanks to the arrival of international immigrants.

The generalised increase in households´ income is the main reason for the increase in prices and number of transactions. Nevertheless, the actions taken by the banks have not helped to support this strong demand but the supply.

MORTGAGE MARKETS

The healthy Estonian economy and the increase on households` income have encouraged people to increase their debt liabilities. Housing loans kept growing in 2017, the number of outstanding residential loans increased more than in previous years reaching EUR 7,107, which means that the value of these loans was a 16% higher in 2017 than in 2016. The increase on the value of the total number of loans, including commercial ones for households, was even bigger than in the previous year allowing to increase consumption and favouring growth, house loans account for most of it.

Families have been paying an average interest rate of 2.34% on these loans, a price slightly higher compared to 2016, but it remains at low levels. Furthermore, in Q4 2017 interest rate on house loans started to decrease due to the high competition among banks.

All along 2017 banks kept increasing their exposure to the commercial real estate market trough loans for constructors as well as for households willing to buy new properties.

The market has not suffered major distortions since in the last 12 months no regulatory changes have taken place. There have been no new measures introduced in the market so the it has followed with the positive trend of the previous year.

MORTGAGE FUNDING

The lending policy of banks for housing loans did not change particularly during 2017. The average mortgage contract interest rate has slightly increased to 2.35% with respect to the previous year. The most important source of funds for the Estonian banking sector is deposits. As deposits have grown strongly in recent years, by 9% in the last year, they have been sufficient to finance the demand for credit.

	ESTONIA 2016	ESTONIA 2017	EU 28 2017
Real GDP growth (%) (1)	2.1	4.9	2.4
Unemployment Rate (LSF), annual average (%) (1)	6.8	5.8	7.6
HICP inflation (%) (1)	0.8	3.7	1.7
Outstanding Residential Loans (mn EUR) (2)	6,661	7,107	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	6,231	6,668	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	54.8	55.1	73.8*
Gross residential lending, annual growth (%) (2)	10.2	16.2	3.5
Typical mortgage rate, annual average (%) (2)	2.3	2.3	2.4**
Owner occupation rate (%) (1)	81.4	n/a	66.4*
Nominal house price growth (%) (2)	4.8	5.4	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

ESTONIA FACT TABLE

Entities which can issue mortgage loans:	No limitation on issuers.
The market share of the mortgage issuances:	Mortgage market consists mainly of commercial banks.
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 of homes. Additionally loan payments can be partly subtracted from income tax payment.

Finland

By Elina Erkkilä, Finance Finland

IN A NUTSHELL

→ Strong upswing in residential construction market
→ Increasing demand for housing loans
→ New macroprudential tools introduced

MACROECONOMIC OVERVIEW

The Finnish economy grew at a rapid pace on a wide front. GDP grew 3.2% in 2017 after a decade long recovery from the financial crisis. In spite of the good growth, GDP will not exceed the level of 2008 until 2018.

Exports are finally fuelling growth, while domestic demand also continues to be high. Companies are investing in machinery and equipment, in addition to construction. Consumer confidence improved to a record level which boosted consumer spending, supported by favourable employment development. Government target to reach 72% employment level is close to be achieved.

Strong economic conditions have also improved public finances. The general government deficit shrank to 1.1% of GDP in 2017 and public debt/GDP ratio will continue to decrease and is expected to come down below 60% by next year. The better economic situation will not, however, resolve the longer-term problems with ageing population.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

The majority of Finns (71.4%) live in owner-occupied houses. Approximately half of those households have a housing loan. Around one third of households (28.4%) rent their houses, 15.4% of them paying reduced prices (living in government subsidued houses) and 13.0% rent from free markets. The average size of a housing loan is EUR 97,215 and a typical maturity for a new housing loan is 20 years.

The strong upswing in construction market continued in 2017. Growth was strongest in the construction of blocks of flats. New housing starts peaked to 44,773 units, which represents a 20.2% increase y-o-y. Housing starts are their highest level in 25 years. Housing completions saw an increase of 17.9% in the same period. Whereas, the number of buildings permits issued grew the most totalling 47,273 units, which represents a 21.1% increase y-o-y.

Strong polarisation continued in the housing market. Big cities are attracting more, especially young people, from the rural areas and this urbanisation reflects to housing prices. In Helsinki metropolitan area, prices went up by 2.7%, while in the rest of Finland they went down by 0.3%. In many areas the housing market is at a standstill and the transactions are almost non-existent.

In 2017, the average price per square meter was EUR 2,341 in the whole country, EUR 3,753 in Helsinki metropolitan area and EUR 1,708 elsewhere in Finland. High levels of construction prevents prices from accelerating more. However, in Helsinki metropolitan area more people are moving in than dwellings are completed every year, which is putting pressure to prices.

MORTGAGE MARKET

Market dynamics

New housing loans were taken out for EUR 18.0 bn in 2017, which is 1.6% more than the previous year. For the sake of comparison, new housing loans peaked in 2007, when they totalled EUR 21.2bn. At the end of 2017, the total housing loan portfolio stood at EUR 96.1 bn (43.0% of GDP), after growing by 2.2% during the same year. In 2017 growth rate remained fairly stable over the year. It is expected that the demand will accelerate in 2018 driven by, among other things, positive economic and employment prospects, strong consumer confidence and the low interest rate environment.

Repayments on housing loans were made for a total of EUR 16.0 bn in 2017. Amortisations grew by 1.9% y-o-y. Housing loans have been amortised at a faster rate than in years, because low interest rates have enabled a larger proportion of principal in the instalments of constant payment loans – which make up about 40% of Finnish households' housing loans, according to the Bank of Finland.

Compared with the rest of Europe, Finland has a particularly high proportion of variable interest rate residential mortgage loans. As much as 95% of the new loans are linked to Euribors, most often to 12 month rate. Due to the low level of Euribor indexes, interest rates on housing loans in Finland are lower than in the euro area on average and were 0.95 % at the end of the year.

Non-market led initiatives

The Finnish Financial Supervisory Authority (FIN-FSA) has introduced new macro prudential tools to curb debt accumulation of households. The authority sees household indebtedness as the most significant vulnerability of the Finnish financial system. The households debt ratio has risen for the past two decades and at the end of 2017 it reached 128%. It is sufficiently low compared to other Nordic countries but above the average in the EU.

FIN-FSA decided that credit institutions which use their own internal ratings-based (IRB) approaches for credit risk would be set a minimum level for the average risk weight on their mortgage portfolios. The risk weight floor was initially set at 10%, but FIN-FSA raised the requirement to 15% in its March 2017 decision. The floor came into effect on 1 January 2018.

The loan cap (loan-to-collateral) tool has been in force since July 2016. The maximum LTC ratio for residential mortgage loans taken out for first-home purchases is 95% and 90% for others. At its meeting on 19 March FIN-FSA decided to tighten the rule: for the first time buyers cap will remain the same, but for others it will be lowered to 85%. The decision will enter into force on 1 July 2018.

Systemic risk buffer was prepared in 2017 and entered into force on January 2018. The additional capital requirement based on the systemic risk buffer was set in 29.6.2018 and the level is different for different banks.The buffer enters into effect on 1 July 2019 and it will be reviewed annually in the future. Systemic risk buffer is targeting long-term, non-cyclical risks to the financial system. Indicators include household indebtenssess among others.

In addition to specific rules, the FIN-FSA urges banks to avoid very long loan repayment periods that deviate from prevailing practice and the use of long interest-only periods without special reasons.

NPLs have remained on a low level and they constitute 1.6% of total loans stocks.

MORTGAGE FUNDING

At the end of 2017, an average of two thirds of banking groups' funding consisted of non-MFI deposits. However, the shares vary greatly between credit institutions: some fund their operations almost entirely with deposits while some, especially mortgage credit institutions, only issue covered bonds. There are five special mortgage banks in Finland and also three deposit taking banking groups are issuing covered bonds.

The total amount of covered bond stock stood at EUR 34.6 bn at the end of 2017. New issuenses were made at the total value of EUR 5.55 bn, in line with the average since 2012.

In Finland, there is no active RMBS market.

	FINLAND 2016	FINLAND 2017	EU 28 2017
Real GDP growth (%) (1)	2.5	2.8	2.4
Unemployment Rate (LSF), annual average (%) (1)	8.8	8.6	7.6
HICP inflation (%) (1)	0.4	0.8	1.7
Outstanding Residential Loans (mn EUR) (2)	94,056	96,129	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	21,307	21,693	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	73.9	73.9	73.8*
Gross residential lending, annual growth (%) (2)	-11.4	5.0	3.5
Typical mortgage rate, annual average (%) (2)	1.2	1.0	2.4**
Owner occupation rate (%) (1)	71.6	71.4	66.4*
Nominal house price growth (%) (2)	0.9	1.1	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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 byers 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:	20 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 of housing loan are tax deductible up to 45% (in 2017).

France

By Emmanuel Ducasse, Crédit Foncier Immobilier

IN A NUTSHELL

- → The economic recovery took hold in France, a strong morale booster for all market players.
- → 2017 was a record year for the housing market, especially the existing home market.
- → A historical record volume of new loans was granted this year, as a result of both the real estate market activity and persistent low interest rates.
- → Favorable mortgage funding conditions supported the loan market.

MACROECONOMIC OVERVIEW

In 2017, France came close to the Eurozone pace of activity: its GDP grew up by 2.2%, vs. a 1% per year under-performance between 2014 and 2016, due to late fiscal adjustments and a structural loss of competitiveness.

During 5 consecutive quarters, activity has been increasing by 2% per year, until December 2017. For its part, the beginning of the year was favorable for productive investment, especially as regards capital goods. The household housing investment was an additional driver, and private consumption firmed up somewhat in the second year-half, thanks to low inflation, a wage slight upturn and a better labor market.

Price increase remained at a 1.2% annual rate, vs. 0.3% in 2016. Unemployment rate decreased to 9.4%, despite a slight upturn during summer, due to the end of a hiring facility in SMEs.

At 2.8% of GDP, government deficit stayed below the 3% ratio, vs. 3.4% in 2016. However, public debt rose further, climbing to 97.7% of GDP.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

Supported by a continuation of attractive interest rates, the housing market reached record levels in 2017. In the new-build sector, government support measures were particularly favorable, especially for first-time buyers and private individual investors.

Thus, the existing home market registered an historical trading volume of 968,000 sales (+14.7% vs. 2016), and prices grew up by 4% on national average, with maxima peaks in Paris (+8.6%) and in the Ile-de-France region (+5.6% as for collective housing).

The new home market saw the building permits leveling off in the end of the year, with 504,800 units (+8% over 1 year), approaching the 2012 outstanding performance, but failing to match it. Housing starts rose to 427,300 units over a 12-month period, and increased by 12.5% from 2016. Developer's' sales slightly increased (+2.1%), reaching 103,900 dwellings sold in 2017. Meanwhile, individual house builders sold 129,900 detached houses (+14.9% vs. 2016).

MORTGAGE MARKET

For the housing loan market, 2017 was a record year too. The total granted loans volume is estimated to about EUR 175 bn, vs. EUR 157 bn in 2016 (+11.6%), excluding repurchase and redemptions.

This volume was achieved thanks to persistent low interest rates in France, which, contrary to the forecasts, remained virtually unchanged between January and December: 1.52% in the Q4 vs. 1.45% in the Q1. About 98% of the loans regranted with fixed interest rates, since there is no demand for variable rates, especially when interest rates are so low. Credit institutions have maintained accommodative financing conditions, including long credit periods to take advantage of these low interest rates, the average observed in the end of the year being more than 18 years.

It should be noted that the loan redemption activity was strong in 2017, and could be as high as EUR 45,7 bn.

MORTGAGE FUNDING

DEPOSITS

At the end of 2017, the total amount of deposits in French banks (non-financial corporations and households) reached EUR 550.16 bn, compared with EUR 500.88 bn in December 2016, that is a 9.8% year-on-year growth.

More precisely, y-o-y, sight deposits accounted for EUR 396,8 bn (+19.6%), non-taxable saving accounts for EUR 11.46 bn (+38%), other saving accounts for EUR 6.9 bn, term deposits for EUR 134.85 bn (-7.75%), bonds for EUR 100 bn (+23.46%).

COVERED BONDS

Covered bonds remained a more secure source of funding for European credit institutions than non-privileged resources and other types of secured debt. Primary market activity was very dynamic at the start of 2017, with first quarter issuance volume exceeding EUR 50 bn.

Market conditions were very positive, notably due to the ECB's ongoing significant asset purchases program, which totaled EUR 80 bn per month in Q1 2017 and EUR 60 bn for the rest of 2017. Issuers made the most of this situation to come to the market.

The rest of the year was more contrasted, and total issuance volumes were down 11%, at EUR 110 bn in December 2017.

	FRANCE 2016	FRANCE 2017	EU 28 2017
Real GDP growth (%) (1)	1.2	2.2	2.4
Unemployment Rate (LSF), annual average (%) (1)	10.1	9.4	7.6
HICP inflation (%) (1)	0.3	1.2	1.7
Outstanding Residential Loans (mn EUR) (2)	899,358	954,226	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	17,318	18,289	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	63.1	65.4	73.8*
Gross residential lending, annual growth (%) (2)	12.8	13.9	3.5
Typical mortgage rate, annual average (%) (2)	1.6	1.5	2.4**
Owner occupation rate (%) (1)	64.9	n/a	66.4*
Nominal house price growth (%) (2)	1.6	3.3	6.0

* The aggregate EU figure is from 2016.

** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:

(1) Eurostat

(2) European Mortgage Federation - Hypostat 2018, 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: • Full service banks, whose market share lightly decreased in 2017 (36.8% vs 38.6% in 2016) • Mutual and cooperative banks, with a lightly increasing market share (58.0% vs 56.4% in 2016) • Specialised institutions, which showed a stable position (5.2% vs 5.0% in 2016).
Proportion of outstanding mortgage loans of the mortgage issuances:	The French market is mainly based on guaranteed loans, so there is no statistics related with the outstanding mortgage loans allocation between the three categories of banks.
Typical LTV ratio on residential mortgage loans:	In 2016 (no more recent data available), the LTV ratio was 85.9% of the average cost of the operation.
Any distinction made between residential and non-residential loans:	French banking regulations 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):	This is a fixed-rate one. In 2016, 97.9% of the new credits were fixed-rate loans. As for 2017, we assume the ratio would not be very different.
Typical maturity of a mortgage:	In December 2017, the average term of real estate loans was 217 months, which is 18 years and 1 month.
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 on the other hand. Securitisation of loans remains marginal in France.
Level of costs associated with a house purchase:	In France, the purchase costs depend on the new or existing nature of the purchased house: between 7% and 10% for an existing one (these costs including transfer duties and agency fees); about 2% for a new house (transfer duties only), plus VAT (20%).
The level (if any) of government subsidies for house purchases:	As regards new housing, the development fees and the VAT may be affected by standard abatement. Furthermore, the first-time buyer may benefit from a zero-percent loan (supplemented by the government), which can cover up to 30% of the global cost of the operation, depending on: • the area (four areas are defined by law, according to the local real estate market situation: more or less stretched), • the household composition and income. 2017 was the last year of "APL" (individualised housing assistance).

Germany

By Thomas Hofer, vdpResearch

IN A NUTSHELL

→ German economy experienced continuing strong growth in 2017 and the employment situation has further improved.

→ The economic background of growing wages, higher employment and favourable financing conditions maintains investments in housing attractive for private households.

→ Gross residential lending, and especially the volume of mortgage loans outstanding, follows a steady upward trend.

→ Due to house prices increasing more than disposable household incomes, debt to income ratio and the share of borrowed funds rose slightly for the last two years.

→ Borrowers and lenders continue to put safety first when financing residential property: arranging longer term interest rate fixation periods, locking favourable loan conditions and agreeing higher initial amortization rates which ultimately leads to a slightly decreasing loan maturity.

MACROECONOMIC OVERVIEW

In 2017, economic growth exceeded again initial expectations. The Gross Domestic Product (GDP) grew in real terms by +2.2% y-o-y (after +1.9% in the previous year). The unemployment rate was reduced further reaching 3.8% while employment recorded another marked increase. Consumer price inflation reached 1.7% approaching the target of 2%, and public finances are in extremely good shape.

The buoyant economic situation also supports the labour market. Therefore, employment in Germany has increased steadily for years: job creation is still recording growth while unemployment is on a continuous downward path. The unemployment rate reached 3.8% in 2017 (2016: 4.1%). Consumer price inflation, which in 2016 was very low at 0.5%, picked up pace appreciably in 2017, and was ultimately up by 1.7% on average for the year.

Moreover, there is considerable consensus on the fact that not only the current situation is positive but also the prospects for the coming years. The German Council of Economic Experts, the Deutsche Bundesbank and the leading economic research institutes are forecasting that the rise in real GDP will continue in 2018 and 2019, although it could lose some of its momentum over time.

The combined factors of growing wages, higher employment, favourable financing conditions and the positive sentiment among private households will sustain investment in housing attractive.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKETS

Residential properties located in Germany went up sharply in price in 2017. The vdp property price index for single family houses rose by 5.5% and for condominiums by 6.8% on average for the year. Yet, even more striking than the nationwide figures are the index values for Germany's largest cities (Berlin, Hamburg and Munich). Prices for owner-occupied housing (condominiums and single-family houses) in these locations increased by 12.4% compared with the previous year. Like the movement in prices, the upward trend in residential construction has intensified continuously too since 2010. In 2017, 285,000 dwelling units were built: the highest result since 2002. This growth was accompanied by structural shifts between single- and two-family houses and multi-family houses. Last year, more than 60% of newly constructed dwellings were accounted for by multi-story buildings. The last time a similar distribution was recorded was in the mid-1990s. The figure of 285,000 dwellings will probably be exceeded in 2018. Although recently building permits were down slightly, a substantial number of dwellings not yet started or already under construction means that more than 300,000 completed dwellings can be expected in 2018. Once again, the new construction of multi-family houses will outstrip that of single-family houses. This is mainly attributable to the sustained demand for housing in the economically vibrant conurbations and the larger urban regions, where multi-family houses typically predominate. Particularly in the prosperous urban concentrations, where home-seeking is a time-consuming and nerve-wracking activity, even more new dwellings are needed in the short term. However, this potential is limited by the high level of capacity utilization that the construction sector is already experiencing (as reflected in the growing number of dwellings not yet started or already under construction) and by a shortage of building plots.

In contrast to the new construction of residential properties, sales figures for existing residential real estate have stagnated for many years. All in all, 564,000 single- and two-family houses, multi-family houses and condominiums changed owners in 2017. Compared with the previous year, the number of transactions decreased by 2.9%. By contrast, the sales volume associated with these transactions rose once again (+2.4% y-o-y). This was due to the aforementioned strong increase in prices, as a result of which purchase amounts rose accordingly.

MORTGAGE MARKETS

The growth of construction and monetary turnover associated with transaction activities on the residential property market has been accompanied by increasing residential mortgage lending for several years. In 2017, gross residential lending rose again and amounted to EUR 214.3 bn. The volume of residential loans outstanding summed up to EUR 1,379 bn, which corresponded to an increase of +3.9% on 2016.

Growth in residential property finance reflects a 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 a consistently positive macroeconomic momentum since 2010. As mentioned above, the positive labour market situation leads to sustained positive households' income expectations. In addition, financing conditions become more and more favourable. The interest rate (effective interest rate, average across all interest rate fixation periods) for loans for house purchase fell – with short interruptions – from 4.5% at the beginning of 2009 to 1.8% in mid-2015. Since then, interest rates for loans for house purchase have ranged between 1.6% and 2.0%. From 2009 onward, the year in which the financial crisis struck, housing prices in

Germany have climbed continuously. And up until 2014, this trend was accompanied by an almost equally strong increase in household disposable income. Over this period, average growth in both cases came to around 2% p.a. However, residential property prices have surged at a clearly stronger pace than before over the last three years. Between mid-2014 and mid-2017, housing prices climbed by roughly 5% p.a. – much faster than household incomes, which experienced growth of 3% p.a.

Up to 2015, the effect on financing structures was low, as financing conditions were becoming more and more favourable at the same time. As a result, the affordability for homebuyers remained constant as credit burden did not increase in relation to disposable incomes. The situation proved to be different in 2017, however: the gap between the trend in housing prices and incomes has widened further since 2015. Interest rates have been moving sideways since 2015 and so no longer offset the rise in property prices. So residential property price growth, which has gained increasingly in momentum over the last years and is today considerably stronger than growth in household disposable incomes, is impacting on the financing structure as well.

The average share of borrowed funds employed to buy property has edged up to 78%, and the burden as a result of the loans in relation to disposable income has likewise risen to 25%, although the debt burden ratio is low when viewed from a long-term perspective. The fact that borrowers and lenders alike continue to put safety first in questions of residential property finance is borne out in particular by the fact that they again agreed on longer interest rate fixation periods (14 years on average) and higher initial amortization rates (3.2% on average). This means, on the one hand, that homebuyers are locking in the favourable loan conditions over a long period of time and, on the other, that the average maturity of the loans is decreasing slightly.

The Act Supplementing Financial Supervision Legislation (Finanzaufsichtsrechtergänzungsgesetz), adopted in 2017, has conferred additional powers on Federal Financial Supervisory Authority (BaFin) to allow it to better counter risks to financial stability resulting from real estate financing. The new legislation enables the Federal Financial Supervisory Authority to govern new mortgage lending business in a more targeted fashion by capping, if necessary, mortgage financing for property purchases. It can also impose requirements governing the repayment of loans and hence stipulate the minimum amount of a loan that has to be repaid within a specified period (amortisation requirement).

MORTGAGE FUNDING

In Germany, the main funding instruments on the banking side for housing loans are savings deposits and mortgage bonds (Pfandbriefe). Germany has one of the largest covered bond markets in Europe, representing a significant share of the total market. The market sub-sector for mortgage-backed covered bonds is also strong in Germany and in the total EU market.

In the year under review, Pfandbriefe totalling EUR 49 bn were brought to the market (in 2016 the figure was EUR 45 bn). Mortgage Pfandbriefe sales accounted for EUR 37 bn (EUR 35 bn in 2016), and Public Pfandbriefe worth EUR 12 bn were sold (10 in 2016).

As repayments exceeded new sales, the outstanding volume of Pfandbriefe decreased to EUR 366 bn in 2017 (from EUR 374 bn in 2016). Whereas the volume outstanding of Mortgage Pfandbriefe increased from EUR 207 bn in 2016 to EUR 215 bn in 2017, Public Pfandbriefe experienced a further decline from EUR 162 bn to EUR 148 bn. In 2017, Ship and Aircraft Pfandbriefe accounted for EUR 3 bn (EUR 5 bn in 2016).

	GERMANY 2016	GERMANY 2017	EU 28 2017
Real GDP growth (%) (1)	1.9	2.2	2.4
Unemployment Rate (LSF), annual average (%) (1)	4.1	3.8	7.6
HICP inflation (%) (1)	0.4	1.7	1.7
Outstanding Residential Loans (mn EUR) (2)	1,326,901	1,378,810	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	19,272	19,968	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	67.3	67.3	73.8*
Gross residential lending, annual growth (%) (2)	0.4	2.3	3.5
Typical mortgage rate, annual average (%) (2)	1.8	1.8	2.4**
Owner occupation rate (%) (1)	51.7	n/a	66.4*
Nominal house price growth (%) (2)	6.0	5.8	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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% Life Insurers: 4%
Proportion of outstanding mortgage loans of the mortgage issuances:	MFI's: 96% Life Insurers: 4%
Typical LTV ratio on residential mortgage loans:	78% (average for purchase of existing single family houses)
Any distinction made between residential and non-residential loans:	Type of use (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:	Families who want to buy a house or a condominium for their own use will benefit from subsidies in future. The Government plans to introduce a grant scheme to support families building or purchasing homes for their own use. With the so called "Baukindergeld" the state promotes families with EUR 12,000 per child. The necessary law should come before the summer break. The program follows the Home Ownership Allowance, with which the State supported the creation of home ownership between 1995 and 2005. 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. 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

IN A NUTSHELL

- Following stagnation in 2015-2016, GDP growth turned positive in 2017 (1.4%) and further increased in the first quarter of 2018 (2.3% y-o-y). The successful completion of the fourth and final review and the strengthening of the recovery outlook of the Greek economy, suggests that economic activity will improve for 2018 and accelerate further for the years 2019 and 2020.
- Based on Bank of Greece residential property data, in 2017, nominal apartment prices for the whole country marginally declined on average by 1.0%, whereas for 2016 the average annual decline was 2.4%.
- Based on Bank of Greece commercial property data, the nominal prices of prime offices increased by 1.7% on average in 2017, against a marginal increase of 0.2% in 2016, whereas nominal prime retail prices increased by 1.6% in 2017, against a marginal drop of 0.4% in 2016.
- Based on a new ministerial decision, further relaxations were introduced on capital controls.
- Housing loans continued to decline by 3.0% in 2017 and in the first four months of 2018 in a decelerating rate compared to the declines of previous years.

MACROECONOMIC OVERVIEW

Following stagnation in 2015-2016, the economic activity rebounded in 2017, recording positive, albeit low, growth rates and creating expectations of further acceleration and a positive outlook for the year 2018. In particular, the GDP growth turned positive (1.4%) for the first time in 2017 after two years of negative growth. In the first quarter of 2018, according to ELSTAT GDP provisional data, GDP growth increased further (2.3% y-o-y). The contribution to the positive GDP growth was mainly by gross fixed capital formation (9.6% y-o-y) and exports of goods and services (6.8% y-o-y). Overall, from the beginning of the current crisis in 2007 (average level) up till the first quarter of 2018, the cumulative decline in real GDP was 24.3%. Investment in construction had rebounded in 2016 relative to the previous year (18.2%), for the first time since 2007, recording though a decline in 2017 (-4.1%), before posting a positive growth rate in the first quarter of 2018 (4.8% y-o-y). Unemployment decelerated further and stood at 21.5% on average in 2017 against 23.5% in 2016 and 24.9% in 2015, with the share of long-term unemployed (12 months and above) in total employment accounting for 72.9% in 2017 against 72.0% in 2016 and 73.2% in 2015.

According to provisional non-seasonally-adjusted estimates published by ELSTAT, on the demand side, private consumption in 2017 increased marginally by 0.1% and gross fixed capital formation increased by 9.6% relative to the previous year. Public consumption decreased by 1.1% decelerating with respect to the previous year (2016: -1.5%). On the supply side, gross value added (at basic and constant prices), which had been declining continuously in the previous two years, increased by 1.4% in 2017, a significant increase with respect to the previous year (2016: -1.2%). On the income side (GDP at current prices), compensation of employees for 2017 increased by 2.3% for the first time since 2009, mainly reflecting a robust increase in dependent employment. According to ELSTAT's Labour Force Survey (LFS), employment increased by 2.2% in 2017 (1.8% y-o-y in Q1 2018) against 1.7% in 2016. Nevertheless, unemployment remained high at 21.5%, the highest in EU-28. At the same time, the long-term unemployment rate dropped to 15.6% in 2017 (16.9% in 2016), with the majority of unemployed individuals being women. Along with the decrease in total unemployment, youth unemployment rate (aged 20-29 years old) continued its downward trend and stood at 34.7% in 2017 (2016: 37.7% and 2015: 40.6%).

Inflation (HICP) came in positive territory in 2017 at 1.1% against 0.0% in 2016, -1.1% in 2015 and -1.4% in 2014, mainly due to increases in indirect taxation and higher crude oil prices. In May 2018, the inflation value stood at 0.8% y-o-y. For 2018, the overall inflation is expected to increase, though at more moderate rates compared to 2017. Core inflation (HICP excluding energy and unprocessed food) was in negative territory since September 2012 up to May 2015 and since then increased only marginally to 0.1% in 2015 and 0.7% in 2016 and remained stable at 0.6% in 2017 (in May 2018 stood at 0.5% y-o-y). The GDP deflator increased by 0.7% in 2017 (0.4% y-o-y in Q1:2018) mainly reflecting an increase in the unit labour cost as a result of a drop in productivity.

Based on a new ministerial decision, capital controls were further relaxed involving the opening of new accounts, monthly cash withdrawals (from EUR 2,300 increased to EUR 5,000) and fund transfers abroad (from EUR 2,300 to EUR 3,000).

The primary fiscal balance as a percentage of GDP has improved by about 14 pps since the beginning of the sovereign debt crisis. The 2017 primary fiscal outcome (programme definition) recorded a surplus of 4.2% of GDP, outperforming significantly the target of 1.75% of GDP. The improvement compared to the target reflects primarily under execution of government investment and intermediate consumption as well as revenue overperformance across the board on the back of fiscal measures. For 2018 the primary balance target of 3.5% of GDP is considered achievable.

Following the implementation of the fiscal and structural reforms that warranted the successful conclusion of the ESM programme and the announcement of the medium-term debt measures by the Eurogroup in June 2018, the growth prospects of the economy are expected to be stronger. The gradual restoration of confidence in 2017 and in the recent months of 2018 suggests that economic activity will improve for 2018. According to Bank of Greece estimates, real GDP is expected to accelerate further for the years 2018 and 2019 by 2.4% and 2.5% respectively. Downside risks, however, include a possible deterioration in the refugee crisis as well as the impact of increased taxation on economic activity and the reform implementation.

HOUSING AND MORTGAGE MARKETS

The improving of the economic environment and expectations, the recovery of the economy to positive, albeit low, growth rates in 2017, and the completion of

[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.

the fourth and final review create expectations of gradual stabilisation of the property market. This is confirmed by recent developments in property values. However, factors such as the high unemployment rate, the imposition of capital restrictions, the lack of liquidity, the reduction of real disposable income (-0.2% on average in 2017) and the constantly changing tax framework are impediments in the real estate market recovery. Pressures on market values and rents for residential and commercial properties continued through 2017, albeit weaker than in the past few years. The two sectors that stood out and attracted investor interest were those of tourist and prime income properties (office and retail). With regard to tourist properties in particular, interest headed towards a number of new investment projects in hotel units located in the greater Athens area, as well as in tourist destinations throughout Greece.

According to the ELSTAT data collected by notaries throughout the country, the number of sales in real estate increased for a second consecutive year on average by 10.8% in 2016 (25.8% in 2015). The annual rate of change in private construction activity, in terms of building permits, increased on average by 8.7% relative to 2016, recording a positive rate of change for the first time since 2005, a trend that continued in the first quarter of 2018 (6.4% y-o-y). By contrast, investment in construction decreased by 4.1% on average in 2017, inverting the positive growth in 2016 (18.2%), but still represents a significantly smaller contraction compared to the dramatic rates of decline since 2008. Residential investment continued its downward trend (-8.7% in 2017) although there was a deceleration in the rate of decline with respect to previous years. A reversal of the negative rates, for the first time since 2008, was recorded in the first quarter of 2018 (10.7% y-o-y). Residential investment (at constant prices) declined from 9.9% of GDP in 2007 to 0.6% of GDP in 2017 and still remains at very low levels in the first quarter of 2018 (at 0.6% of GDP). Business expectations in construction reached lowest point in 2015 (-29.9%) and remained into negative territory in 2016 (-1.1%) and in 2017 (-9.6%), whilst the first half of 2018 a positive rate of change was recorded (15.6%). In contrast, business expectations for dwellings rebound in 2016 and in 2017 by 44.4% and 18.8% respectively, after a significant drop in 2015 (-32.2%). In the first half of 2018 an increase of 31.4% y-o-y was recorded.

The housing market continued to be characterised by a downward trend in prices in 2017, albeit at a more moderate pace, as the high rates of price reduction recorded in 2012 and 2013 moderated from 2014 onwards, while during the second half of 2017, a trend of gradual price stabilisation was observed. In particular, on the basis of data collected from credit institutions, it is estimated that nominal apartment prices fell marginally on average 0.2% in the first quarter of 2018 compared with the respective quarter of 2017. For 2017 as a whole, apartment prices declined at an average annual rate of 1.0% (with a significant deceleration in price declines in individual quarters: -1.9%, -1.0%, -0.8% and -0.4% in the first, second, third and fourth quarter 2017, respectively); also significantly lower than the corresponding rate of decline of 2.4% in 2016 and 5.1% in 2015. Cumulatively, however, nominal apartment prices have dropped by 42.1% from 2008 (average level) to the first quarter of 2018, while a breakdown by age shows that the decline was more significant for older apartments (43.0%). A geographical breakdown reveals that prices dropped more in the two major urban centres (Athens: -44.5% and Thessaloniki: -46.4%) compared with other cities (-39.5%) and other areas (-38.0%). It should be noted that the recent (12 June2018) revision of zonal property values (administrative values for tax purposes) for the 10,216 areas of the country is not expected to have a significant impact on the real estate market and prices during 2018. However, the readjustment is expected to continue in 2019 and 2020 in order to achieve progressively the alignment of zonal property values with the market ones.

The successful completion of the fourth and final review and the strengthening of the recovery outlook of the Greek economy, coupled with the expected successful implementation of the privatisation and public real estate development programme and a stable tax regime, should contribute to ensuring an era of gradual price stabilisation and strong investor interest in the market, as a result of the prevailing low property prices and high returns on real estate. The stabilisation trend in house prices is expected to continue into the quarters ahead of 2018.

The volume of credit to the private sector has contracted at relatively stable rates in the last seven years. The rate of contraction of bank credit remains negative and has been relatively stable during 2017 and the first two months in 2018. The outstanding balances of loans from domestic MFIs to households declined at an annual rate of -2.3% in 2017, a downward trend albeit at a more moderate pace relative to previous years, and remained unchanged in April 2018. Similarly, housing loans continued to decline by 3.0% in 2017 and in the first four months of 2018 in a decelerating rate compare to the declines of previous years. The negative growth of domestic private sector lending bottomed-out in mid-2012 and has been gradually decelerating ever since, especially for non-financial corporations and to a lesser extent for households. In particular, the rate of contraction of bank credit to non-financial corporations has been decelerating since the beginning of 2014, but stopped decelerating after the imposition of capital controls in June 2015, reflecting the slowdown in economic activity; however, since March 2016 it has started to decelerate again and a marginal increase of 0.4% was recorded in April 2017 for the first time since August 2011. Since then the rate of bank credit to non-financial corporations has been decelerating up to November 2017, where it turned into positive sign for two months and since March 2018 up to April 2018 (latest figure) returned back to negative sign. The rate of contraction of bank credit to households bottomed-out in mid-2012 and has been gradually decelerating ever since, stabilised for 3 years (2014-2016), on average, by approximately -3.0% and in 2017 the rate decelerated further by -2.3% (-2.3% y-o-y in the first four months of 2018). The corresponding consumer credit rate, which decelerated significantly in 2015, has been stabilised during 2017 and in the first four months of 2018 at approximately -0.6%.

Interest rates on new residential loans, as a weighted average of entire market, reached their peak in August 2011 (4.6%) and started decelerating for one year (August 2012: 2.9%) and since then remained stable and are on average approximately 3.0% (2017: 2.8%, April of 2018: 2.9%). Similarly, bank interest rates on the outstanding amounts of housing loans with over 5 years maturity reached their peak in August 2011 (4.0%) and since then started constantly decelerating and in 2017 stood on average at 2.4% (April of 2018: 2.2%).

The strong recession has affected borrowers' ability to service their outstanding mortgage debt. As a consequence, the share of non-performing housing loans has increased substantially since 2008 (NPLs in 2008: 5.3%). An increase was recorded also in 2017, albeit at a weaker pace compared to the previous years, reaching the share of 33.2% (2016: 32.4%). NPLs (on a solo basis) decreased to 32.7% in 2017 from 35.1% in 2016.

MORTGAGE FUNDING

Housing loans continue to record negative y-o-y growth rates, with the latest figure (April 2018) standing at -3.0%, unchanged compared to 2017 but at a relatively decelerated rate against 2016 (-3.5%). Since the eruption of the Greek crisis in October 2009, deposits are down by EUR 101.7 bn in total. More specifically, the strong deposit outflows between October 2014 and June 2015 (private sector deposits reduced by EUR 48 bn) ceased after the imposition of capital controls (July 2015) and the agreement on the third economic adjustment program (August 2015). Since then, deposits were up by EUR 11 billion up to April 2018 and returned back to the levels of May 2015. The finalisation of the Eurogroup discussion on the ongoing fourth and final review of the ESM programme for Greece in June 2018 represents a step towards the restoration of confidence in the Greek banking system and consequently an improvement in bank credit conditions.

According to the Bank Lending Survey results for Greece, against the previous quarter, terms and conditions for loans to households for house purchase and consumer credit were tightened moderately by the banks during Q3 2016, and remained unchanged since then (latest figure up to Q1 2018). Similarly, credit standards for loans to households for house purchase and consumer credit were tightened moderately by the banks during Q3 2016 as well as during Q2 2017 and remained unchanged since then (Q1 2018), and this trend is expected to continue in Q2 2018. The proportion of rejected loan applications to housing loans increased moderately in Q3 2017 and remained unchanged during the last two quarters, i.e. Q4 2017 and Q1 2018. As far as demand is concerned, it considerably increased for housing loans and only marginally increased for consumer loans in Q1 2018. For Q2 2018, the demand for both housing loans and consumer credit is expected to increase moderately.

After some years of stagnation in the Greek covered bond market that was due to adverse macro-economic conditions, from the year 2016, the market has started to move again. The outstanding amount of covered bonds significantly increased in 2017 as compared with the year 2016 reaching the amount of EUR 10.1 bn. The largest amount of issuances was held by the banks and was used mainly for engaging into repo transactions of which the primary purpose was to enhance banks' liquidity and reduce banks dependency from ELA. It is expected that the Greek Covered Bond Market will be further expanded in the near future as long as the economic conditions continue to improve.

	GREECE 2016	GREECE 2017	EU 28 2017
Real GDP growth (%) (1)	-0.2	1.4	2.4
Unemployment Rate (LSF), annual average (%) (1)	23.6	21.5	7.6
HICP inflation (%) (1)	0.0	1.1	1.7
Outstanding Residential Loans (mn EUR) (2)	61,397	58,812	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	6,893	6,616	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	53.9	51.6	73.8*
Gross residential lending, annual growth (%) (2)	5.4	10.0	3.5
Typical mortgage rate, annual average (%) (2)	2.7	2.8	2.4**
Owner occupation rate (%) (1)	73.9	n/a	66.4*
Nominal house price growth (%) (2)	-2.5	-1.0	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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: • For house purchase, transaction tax is at 3%. • 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 2018.
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

→ House price growth in Hungary has been around 12% in 2017.

→ Gross residential lending (disbursement of new housing loans) grew almost by 40% in 2017 compared to the previous year.

→ With 15% the proportion of outstanding residential loans compared to the GDP is relatively low in Hungary, which shows that there is further growth potential in gross residential lending.

→ There are regulatory incentives on the mortgage market promoting fixed rate mortgages. The proportion of fixed rate mortgages is growing.

→ The Mortgage Funding Adequacy Ratio (part of the residential mortgage portfolio must be funded by mortgage bonds) will increase from 15 to 20% in 2018.

MACROECONOMIC OVERVIEW

In 2017 the volume of gross domestic product increased by 4.0% compared to the previous year. From the production approach, gross value added was up by 3.9% in industry and 32% in construction. Services were up by 3.3%, agriculture fell by 0.9%. From the expenditure approach, the actual final consumption of households was up by 4.1%, and the actual final consumption of the government fell by 0,4 %. As a result of the above trends actual final consumption rose by 3.4%. Gross capital formation increased by 15% compared to the previous year. Exports grew by 7.1 % and imports by 9.7 % in 2017.

Average gross earnings were in December 2017 13.5% higher than a year earlier. As for the whole year both gross and net earnings grew by 12.9% compared to the whole previous year. Unemployment rate reached a historically low figure of 3.8% at the end of 2017.

Consumer prices were higher by 2.1% in December 2017 than a year earlier. On the average for the whole year consumer prices rose by 2.4% compared to the previous year. The highest price growth was observed with alcoholic beverages and tobacco (4.8%) and food (2.8%). Consumers paid 0.3% less for consumer durables.

Hungary posted a budget deficit of 2% percent of the GDP in 2017. The public debt to GDP ratio was 73.6 percent at the end of the year.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

Hungary had a stock of 4,427,000 housing units at the end of 2017. About 60% of dwellings were built before 1980 and only about 10% were built during the last 15 years. Home ownership ratio is the second highest in the EEA reaching 85.3% by the end of 2017. With the intention to boost new residential construction, from January 2016 the government reduced the VAT on new build dwellings (from 27% to 5%). As a result of this regulatory change the number of building permits grew significantly in 2016 and in 2017. The supply side (housing completions) followed the growth of permissions with a delay and now the lack of skilled manpower also causes constrains in the construction industry. As the government has already communicated that the reduced VAT regime will not be continued after the end of 2019, developers face a growing pressure to complete new homes in time.

The supply side of the housing market was characterised by growing number of housing completions compared to previous years. In 2017 altogether 37,997 new construction permits were issued and 14,389 new homes were completed. The renewal of the Hungarian housing stock is nevertheless occurring at a slow pace: the proportion of newly built homes compared to the existing stock is only 0.32% per annum, which is very low in a regional/international comparison.

As regards to the Budapest housing market, the completion of new homes will probably peak in 2018-2019, as residential property developers and property experts forecast a completion of 8,800 and 10,000 new dwellings during this and the next year. House prices in the country increased by 11.5% in 2017 compared to the previous year according to the Takarék House Price Index. In nominal terms house prices have increased by 69.3% since the upturn occurred in the second quarter of 2014. House prices have increased above average in the capital in 2017, where the growth was around 16%.

The growth was achieved in a more balanced structure. During 2017 the highest price increase was measured in the larger towns of Central Transdanubia, and the regions of Southern Great Plain and Southern Transdanubia came also close to the second placed Budapest. In absolute terms however Budapest is still the most expensive settlement in the country, the median value of the house prices there is 37% higher than in the second most expensive Western Transdanubia. The price levels at other (rural) regions were about the half or less of what the homeowners of Budapest were to pay in 2017.

According to the figures of the National Statistical Office, the number of housing transactions was 134,000 in 2017.

MORTGAGE MARKETS

Market dynamics

Gross residential lending (disbursement of new housing loans) grew by 38% in 2017 compared to the previous year. The proportion of outstanding residential loans compared to the GDP is very low in Hungary – only around 15% – so there is a further growth potential in gross residential lending. The mortgage lending may occur only in HUF (FX lending was practically banned earlier in Hungary) and a growing proportion of new mortgage loans is based on fixed interest rate period in light of an increased risk of interest rate hikes in the near future.

The growth observed in mortgage lending in 2016 continued and even accelerated in 2017. HUF 727 bn was distributed in mortgage lending, indicating an almost 40% growth compared to 2017. The average annual interest rate on newly disbursed mortgage loans was around 4.7%.

Variable interest rate was not anymore the most typical for new mortgages: in the 4th quarter of 2017 the proportion of mortgages with interest period shorter than 1 year was 38.7% and a further growth of fixed rate mortgages is expected in 2018. The ratio of non-performing household loans has further decreased during 2017 compared to the previous year. According to the Financial Stability Report of the Hungarian National Bank, by the end of 2017 the ratio of loans overdue for more than 90 days decreased in the segment of housing mortgage loans to 4,9% and to 2.6% in case of subsidised housing loans. The NPL ratio for the so called "home equity loans" is still high: it was around 19% at the end of the year.

NON-MARKET LED INITIATIVES

The National Bank of Hungary supports the spreading of mortgage loans with longer fixed interest rate period through several measures. The so called Certified Consumer Friendly Housing Loans (CCHL) were introduced (loans with an interest period of 3, 5 and 10 years in a fixed scheme). The program was launched in September 2017 and according the National Bank survey the CCHL loans were characterised with higher loan amount (compared to normal mortgage loans) and lower APRC rates.

MORTGAGE FUNDING

The largest portion of mortgage loans is deposit-funded in Hungary, but covered bonds are also an increasingly used source of mortgage finance. Legal act No. XXX. that was introduced for Mortgage Banks and Mortgage Bonds in 1997 contributed significantly to the establishment of the covered bond market and provided support to mortgage lending activity.

From April 2017 a new regulation (Mortgage Funding Adequacy Ratio) issued by the National Bank of Hungary entered into force. According to the new regulation Hungarian financial institutions were obliged to refinance at least 15% of their outstanding long term residential mortgage loans with long term securities. To comply with the new regulation, commercial banks had two choices: either they entered into refinancing agreements with the already existing mortgage banks or they had to create their own new mortgage bank. By the end of 2016 the number of mortgage banks operating on the Hungarian market changed from 3 to 5. From October 2018 the ratio will be increased from 15 to 20%.

	HUNGARY 2016	HUNGARY 2017	EU 28 2017
Real GDP growth (%) (1)	2.2	4.0	2.4
Unemployment Rate (LSF), annual average (%) (1)	5.1	4.2	7.6
HICP inflation (%) (1)	0.4	2.4	1.7
Outstanding Residential Loans (mn EUR) (2)	14,024	13,602	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	1,728	1,683	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	22.7	20.0	73.8*
Gross residential lending, annual growth (%) (2)	25.7	39.3	3.5
Typical mortgage rate, annual average (%) (2)	5.3	4.7	2.4**
Owner occupation rate (%) (1)	86.3	85.3	66.4*
Nominal house price growth (%) (2)	17.3	12.4	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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 Banks issued 49,9%, mortgage banks 26,2%, savings banks 3,5% and savings cooperatives 20,4% of the new mortgage issuences.
Proportion of outstanding mortgage loans of the mortgage issuances:	Banks hold 57,2%, mortgage banks 27,8%, savings banks 3,3% and home saving cooperatives 11,7% of the total outstanding mortgage loan portfolio.
Typical LTV ratio on residential mortgage loans:	The average LTV ratio of the newly disbursed residential mortgage loans was around 55% in 2017.
Any distinction made between residential and non-residential loans:	In the residential loan portfolio we understand on the one hand the so called "housing loans", when the purpose of the loan is to finance the acquisition or purchase of a house or flat. On the other hand in the residential mortgage loan portfolio the so called "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 a flat or house). Home equity loans are much less popular, than before the GFC. Foreign currency loans were prohibited in 2010, and all foreign currency mortgage loans were converted to HUF in 2015.
Typical maturity of a mortgage:	Typical/average maturity for a mortgage loan was 14.8 years in 2017. The average maturity has increased compared to the previous year (14.5 years).
Most common way to fund mortgage lending:	The most common way to fund mortgage lending is funding from deposit, but since April 2017 commercial banks must adhere to a new regulation introduced by the National Bank of Hungary. From April 2017 the regulation prescribed ,that at least 15% of mortgage loans must be funded or refinanced by mortgage bonds. From October 2018 the ratio increases to 20%, so the proportion of residential mortgage loans funded by mortgage bonds is increasing in Hungary.
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 4% up to HUF 1 bn (EUR 3.1 mn) per property, 2% above that, but not exceeding HUF 200 mn per property.Buyers may be entitled to certain reliefs. Legal fees may range from 0.5-1% of the property price, usually paid by the buyer. When the the property is sold through a real estate agency, a further 3-4% is generally paid by the seller. Buying a newly built flat is subject to VAT payment (5%)
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 dwelling. In case of families buying a used flat, a smaller lump sum subsidiy is also available depending on the number of kids. The subsidy in this case will vary between HUF 550,000 and max HUF 2,750,000. From 2018, the extension of already built houses can be fully financed from the subsidies.

Ireland

By Anthony O'Brien, Banking & Payments Federation Ireland

IN A NUTSHELL

→ Economic improvement continues supporting household formation.

→ Housing supply is well below levels required.

→ House sales and rental prices are rising fast due to the mismatch between supply and demand.

→ Mortgage lending is growing strongly especially for first-time buyers (FTBs).

→ The central bank's macro prudential rules restrict the share of lending at high LTVs and LTIs but the government's Help to Buy scheme enables FTBs to help finance new home purchases.

MACROECONOMIC OVERVIEW

Gross domestic product (GDP) grew in volume terms by 7.2% in 2017, according to the Central Statistics Office (CSO). Domestic demand has contributed most of the growth since 2014. Capital formation fell by 31% during 2017, driven by lower imports of intellectual property products (IPP). Personal consumption, which accounted for half of domestic demand, rose by 1.6%.

The unemployment rate continued to decline throughout 2017, falling to 6.4% in Q4 2017 on a seasonally adjusted basis. The seasonally adjusted volume of retail sales grew by 2.9% in 2017 but the fastest growing sectors were electrical goods, household equipment and furniture and lighting – all segments linked to household formation.

The EU Harmonised Index of Consumer Prices for Ireland rose by 0.3% in 2017 according to Eurostat, the fourth successive year in which the rate of change had ranged between 0.3% and -0.2%.

The government deficit was EUR 1.0 bn (-0.3% of GDP) in 2017, down from EUR 1.4 bn (-0.5% of GDP) in 2016. Gross general government debt reduced as a proportion of GDP from 76.9% to 68% over that period. Net general government debt fell to EUR 174 bn in 2017, the first year-on-year drop since 2006.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

The housing and mortgage markets continued to grow in 2017 as they benefitted from improvements in consumer confidence, increased employment and pent-up demand for housing.

The shortage of supply of newly-built 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 and around 7,000 units in Dublin.

Data from the CSO show that 14,446 housing units were completed in 2017, compared to 9,915 in 2016 – a 29% increase. Housing commencements also showed a significant increase in 2017, according to the Department of Housing, Planning and Local Government. Some 17,572 commencements were recorded in 2017, an increase of around 33%.

CSO annual data shows that residential property prices rose for the fifth year in successive, climbing by 10.9% in 2016. While Dublin initially drove the improvement, the prices of properties outside the capital have risen faster in each of the past three years. Dublin prices rose by 9.5% in 2017 but prices outside the capital rose by 12.2%.

The number of residential property sales to household buyers grew by 7.4% in 2017 to almost 52,000, while the value of sales jumped by 18.3% to EUR 12.3 bn. Sales to non-household buyers soared by 34.8% in volume terms to 9,492 and value terms to EUR 2.2 bn.

Household purchases of residential property in Dublin rose by 10.5% year-on-year in volume terms to 14,163 and by 18.7% in value terms to more than EUR 6 bn. The fastest growing region was the Dublin commuter region, comprising the four counties surrounding Dublin (Louth, Meath, Kildare and Wicklow) rose by 19.5% year-on-year in volume terms and by 29.1% in value terms.

The mismatch between current demand, combined with pent-up demand, and the supply of new homes has put significant pressure on the availability and cost

CBI LTV AND LTI LIMITS

LIMIT TYPE	PROPERTY TYPE	LIMITS	ALLOWANCE
LTV Limits	Primary dwelling homes	**From 01/01/17** FTBs: 90% Non-FTBs: 80%	5% of new lending to FTBs allowed above 90% 20% of non-FTB new lending allowed above 80%
	BTLs/Investors	70%	10% of new lending above the BTL limit is allowed
LTI Limits	Primary dwelling homes	3.5 times income	20% of new lending above the LTI limit is allowed ; changing from 01/01/18 to: 20% new mortgage lending to FTBs and 10% of new mortgage lending to non-FTB PDH customers
Exemptions	**From LTV limit:** Borrowers in negative equity	**From LTI limit:** Borrowers for investment properties	**From both limits:** Switcher mortgages Restructuring of mortgages in arrears

Source: Central Bank of Ireland

of rented properties. Figures from the Residential Tenancies Board show that the standardised national average rent for new tenancies was EUR 1,054 per month in Q4 2017, up 6.4% on one year earlier. 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.

MORTGAGE MARKETS

BPFI mortgage data show that there were 34,798 mortgage drawdowns valued at EUR 7.3 bn in 2017 compared to 29,498 drawdowns valued at EUR 5.7 bn in 2016 – representing an 18% increase in volume terms and 29% increase in value terms. First-time buyer (FTB) activity grew significantly faster with the value of mortgages drawn down up by 37.2% to almost EUR 3.6 bn. Re-mortgaging activity, where borrowers switch from one lender to another, rose by 34.3% to EUR 0.7 bn.

Mortgage approval activity also significantly increased in volume terms by 23% in 2017 bringing the total number of approvals to 43,074. In value terms, activity increased by around 34% in 2017 with the total value of approvals reaching EUR 9.3 bn in 2017.

Total residential and commercial mortgage debt outstanding, including securitisations, declining from about EUR 106.7 bn at the end of 2016 to about EUR 101.9 bn a year later, according to the Central Bank of Ireland (CBI). Some 46.3% of the value of personal mortgages outstanding was on tracker rates linked to the ECB base rate. The share of mortgages on fixed rates over one year increased from 10.4% to 14.2% between Q4 2016 and Q4 2017. More than half of new mortgages issued on fixed rates exceeded half of the total in 2017 – for the first time since the data series began in 2003.

The CBI amended its loan-to-value (LTV) and loan-to-income (LTI) limits for new mortgage lending in January 2017 by removing a sliding LTV limit based on the purchase price. A proportion of loans are allowed to exceed the limits. It announced in late 2017 that it would change the proportion of LTI allowances available to FTBs and second and subsequent buyers (SSBs). CBI research indicates that the average LTV increased in 2017 to 79.8% from 78.8% in 2016, while the average LTI rose to 3 from 2.9. For SSBs (mostly home movers), the average LTV rose to 67.6% from 66.4%.

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, with claimants accessing up to EUR 20,000 towards the deposit for a new home. At the end of 2017, 5,392 HTB claims had been made, of which 4,824 were approved. The estimated total value of approved HTB claims was EUR 68.9 mn, of which EUR 16.7 mn were claims for activity in 2016.

In line with the improving economic environment and lender efforts to agree sustainable solutions for mortgage customers in difficulty, the number of mortgage accounts for Principal Dwelling Houses (PDH) in arrears of more than 90 days fell to 6.6% of all PDH mortgage accounts by the end of Q4 2017, down from 7.4% a year earlier. Some 14.9% of BTL mortgage accounts were in arrears of more than 90 days.

Mortgage lenders actively assist borrowers who experience repayment difficulties, which is demonstrated by the fact that 16.2% of all PDH accounts and 18.2% of all BTL accounts had an active restructure by the end of 2017. The number of repossessions remained low by international standards with 3,413 repossessions in 2017, or 0.4% of mortgage accounts at year end. About 76% were voluntarily surrendered or abandoned, while the remainder were repossessed on foot of a court order.

MORTGAGE FUNDING

Banks in Ireland rely mainly on retail funding sources (household and corporate deposits) for mortgage lending. Irish private sector deposits (mainly from households and non-financial corporations) represented 34% of bank liabilities in Ireland in 2017, up from 13% in 2008.

Some EUR 27.3 bn in mortgages outstanding were securitised at the end of 2017 according to the CBI.

Mortgage covered bonds outstanding in Ireland fell by 4% in 2017 to EUR 16.4 bn. Some EUR 3.3 bn in new mortgage covered bonds was issued during 2017.

	IRELAND 2016	IRELAND 2017	EU 28 2017
Real GDP growth (%) (1)	5.0	7.2	2.4
Unemployment Rate (LSF), annual average (%) (1)	8.4	6.7	7.6
HICP inflation (%) (1)	-0.2	0.3	1.7
Outstanding Residential Loans (mn EUR) (2)	86,195	84,045	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	24,354	23,409	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	91.0	85.5	73.8*
Gross residential lending, annual growth (%) (2)	16.7	28.8	3.5
Typical mortgage rate, annual average (%) (2)	3.3	3.2	2.4**
Owner occupation rate (%) (1)	69.8	n/a	66.4*
Nominal house price growth (%) (2)	7.3	10.9	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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, but most new lending is believed to be published by credit institutions (mainly banks).
Proportion of outstanding mortgage loans of the mortgage issuances:	Non-bank lenders accounted for 7.2% of the number and 9.2% of the value residential mortgage outstanding (principal dwelling home and buy-to-let - BTL) at the end of 2017 according to the Central Bank of Ireland. Retail credit firms, which are non-deposit taking regulated lenders, held 5.1% of the number and 5.9% of the value of loans outstanding, while unregulated loan owners held 2.1% of the volume and 3.2% of the value of loans. Non-bank lenders had a relatively large share of the BTL market, with 11.1% of the volume and 13.3% of the value of mortgages outstanding.
Typical LTV ratio on residential mortgage loans:	The mean average LTV ratio for first-time buyer mortgages in Ireland was 79.1% in 2017 according to Central Bank of Ireland data, up from 78.8% a year earlier. The average LTV for subsequent private dwelling home (PDH) buyers was much lower at 67.6%, up from 66.4% in 2016. BTL LTVs rose by 1.7 percentage points to 57.6%. Note: These figures exclude the 7% of loans that were exempt from the Central Bank of Ireland's macroprudential regulations in 2017, including switcher loans 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, is the most popular product among new customers, although a growing number of customers are choosing fixed-rate mortgages. More than half of existing mortgages have tracker rates mainly linked to the ECB base rate.
Typical maturity of a mortgage:	For first-time buyers the median term for a mortgage is about 30 years. For second-time home buyers it is about 25 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:	Not available

Italy

By Marco Marino, Italian Banking Association

IN A NUTSHELL

- → The Italian residential housing market registered the fourth positive and consecutive increase.
- → Housing transactions with a mortgage continued to increase.
- → Borrowers confirmed their preference for fixed-rate mortgages.
- → The residential house prices continued to decrease (the sixth consecutive) and the average rate on new transactions for house purchasing also reached a new record low of 1.90% (5.72% at the end of 2007).
- → In general, net non-performing loans at the end of 2017 fell to EUR 64.4 bn (EUR 86.8 bn at the end of 2016).

MACROECONOMIC OVERVIEW

In 2017 the Italian economy consolidated its recovery, under way almost with no interruptions since the second quarter of 2013. However, it is proceeding at a slower pace than in previous recoveries and with a lower rate of growth than in the other main Euro area economies. GDP growth reached 1.5% (from 0.9% of the previous year) exceeding the expectations of the main forecasters.

According to the Bank of Italy, growth was driven mainly by domestic demand and exports.

More in detail, demand reflected the positive performance of investment, which rose by 3.8%, and consumption. Investment accelerated, especially in plant, machinery and transport equipment, thanks also to the tax incentives and the increase in business confidence about demand prospects.

Growth in consumption was partly attributable to that in employment, which in turn was driven by the measures supporting labour demand; unemployment decreased from the peak of just under 13%, recorded in 2014, to about 11%. The growth in households' disposable income strengthened, mostly thanks to the ongoing recovery in employment, and supported the growth in consumption.

Exports continue to be a major driver of growth. In 2017 they expanded by 5.4%, more than in the other major Euro area countries.

Overall, consumer price inflation returned to positive territory in 2017, reaching 1.3%, while with regard to public finance, general government net borrowing fell from 2.5 to 2.3% in 2017, thanks in part to a reduction in interest expenses and the debt-to-GDP ratio decreased to 131.8%.

Finally, in 2017 Italian banks strengthened capital and financial and economic situation. According to the Bank of Italy, the stock of non-performing loans (NPLs) was considerably smaller, both as a result of numerous bad-loan sales and because there were fewer new defaults which, in relation to total loans, returned to the levels recorded before the global financial crisis.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

In 2017, the Italian residential housing market registered the fourth positive and consecutive trend of the previous years.

Housing transactions amounted to circa 543,000, and the growth was equal to 4.9% compared to 2016. The number of dwellings in new buildings increased by 16.5% in third quarter 2017 (last data available) with respect to third quarter 2016.

In particular, the analysis of transactions across macro geographical areas (Central, North, South, Islands) showed that in 2017 the North West – which represents more than 1/3 of the market – and the South registered the highest growth, with respectively 5.3% and 5.8%; in the Central areas the increase was equal 3.5% compared to 2016, while in the North East and in the Islands the housing transactions increases by circa 4.9%, in line with the national trend. With reference to the size class of the cities, the analysis shows in particular that the growth of transactions in the major cities (4.4%) was lower than that registered in the other no-capital cities (5.2%).

In 2017, the residential house prices decreased by 0.4%, contributing to an improvement in the performance of sales. This sixth consecutive decrease was the result on one hand of the slight increase y-o-y of the prices of new dwellings (+0.1%) and on the other hand of the further decrease of the prices of the existing dwellings (-0.6%). The analysis of regional differences in terms of house prices developments shows that the major cities of Liguria (a region of the North of Italy) registered, in average, the largest decrease, with 3.95% y-o-y, followed by the major cities of Lazio (a region of Central Italy) with -3.21%.

MORTGAGE MARKETS

In 2017, new loans for residential housing purchase decreased with respect to 2016. This trend appears as a physiological consequence of the excellent growth registered in the previous years.

Gross residential loans amounted to more than EUR 71.4 bn at the end of the year, while outstanding residential loans continued to show a progressive growth, started in 2015, reaching circa EUR 375.4 bn in 2017 (EUR 368.1 bn in 2016).

According to a Bank of Italy's research, the good conditions of supply and demand were also confirmed in 2017. Looking ahead, the good conditions of the real estate market – driven by the improvement of the Italian consumer confidence indexes, favourable conditions of mortgage loans for housing purchases and the reduction of house prices – can support the growth of residential loans in the next years.

In 2017, housing transactions with a mortgage continued to increase. They amounted to circa 260,000 units, with a rate of increase of 7.8% with respect to 2016.

Considering the total number of houses purchased, those with mortgages represent circa 50% of the total, recording the maximum value of the incidence observed since 2011.

The South and Island regions registered the highest increase y-o-y (10.8% and 9.2%). The average mortgage amount increased to EUR 126,000. As regards maturity, in 2017 analysis confirmed the preference for mortgages with a maturity of over 26 years (35%).

Borrowers confirmed their preference for fixed-rate mortgages. With interest rates at historic lows, many families preferred not to expose themselves to the risk of future increases, choosing the certainty of a constant rate over the life of the contract.

The average interest rate on short term loans (with maturity <1 year) fell to 1.53%, from 1.7% at year-end 2016 while interest rates with a maturity of over 1 year remained stable at 2.12%; the average rate on new transactions for house purchasing also reached a new record low of 1.90% (1.97% in November 2017, 5.72% at the end of 2007).

NON-MARKET LED INITIATIVES

Tax breaks related to house renovation – extended in 2018 – may have had a positive impact on purchasing decisions.

This measure is applicable on payments made for extraordinary maintenance and restorations of properties and it has been extended several times. Over the years, the bonus has shifted from 36% (with a maximum limit of EUR 48,000) to 50% (with a maximum limit of EUR 96,000) for the costs paid from 26 June of 2012 to 31 December of 2018.

Other important facilities have been introduced over the years. In particular, the ability to pay VAT to a reduced extent, the increase of the maximum limit of the interest expense paid on mortgages to bring in deduction, the fiscal benefit for the purchase of furniture items.

In 2017, the request to access to the Mortgage Guarantee Fund continued to increase. The Fund amount is equal to EUR 650 mn and it supports credit access for all consumers willing to buy a first house and buy and renovate their first house with an improvement in energy efficiency (but it must not be measured). Upon request of the consumer, if all criteria are met and the adhering bank decide to underwrite the mortgage, the public guarantee covers 50% of the total amount of the financing.

The consumer applies both for (i) a mortgage loan to the bank that must be adherent to the initiative and (ii) the public guarantee through the bank that sends to the Consap Ltd., the State Agency that manages the initiative. 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 and the amount of the requested mortgage loan is lower than EUR 250.000.

Banks are always independent in the decision to finance the applicants relying on creditworthiness assessment.

In March of 2018 the Fund admitted more than 40,000 applications for a total amount of mortgage value of EUR 4.5 bn.

ANY FURTHER IMPORTANT EVOLUTION

In general, net non-performing loans[1] (to households and businesses) at the end of 2017 fell to EUR 64.4 bn, compared to EUR 65.9 bn recorded in the previous month, but fell sharply compared to the figure of December 2016 (EUR 86.8 bn). Therefore, in just one year they fell by 25.8%. In particular, they decreased by nearly EUR 24.5 bn compared to the highest level of net non-performing loans reached in November 2015 (EUR 88.8 bn). The ratio of net non-performing loans to total loans dropped to 3.71% in December 2017 (4.89% at the end of 2016).

MORTGAGE FUNDING

In Italy, deposits (current accounts, certificates of deposit, repurchase agreements) increased at the end of 2017, by more than EUR 50.5 bn compared to the previous year (an increase of +3.6%, y-o-y), while medium and long-term funding, i.e. through bonds, confirmed a decrease of about EUR 50.7 bn, in absolute terms, over the last 12 months (equal to -15.2%). The trend of total funding (deposits from resident 7 customers + bonds) at the end of 2017 remained stable at -0.01% y-o-y, compared to +0.2% in the previous month. Since late 2007, before the onset of the crisis, to date, customers' deposits rose from EUR 1,549 bn to almost EUR 1,728 bn, an increase – in absolute terms – of more than EUR 179 bn.

In 2017, Italian Covered Bonds issues backed by mortgages amounted to circa EUR 17.8 bn (EUR 41.8 bn in 2016), while the volume of outstanding bonds increased to around EUR 139 bn.

	ITALY 2016	ITALY 2017	EU 28 2017
Real GDP growth (%) (1)	0.9	1.5	2.4
Unemployment Rate (LSF), annual average (%) (1)	11.7	11.2	7.6
HICP inflation (%) (1)	-0.1	1.3	1.7
Outstanding Residential Loans (mn EUR) (2)	368,169	375,398	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	7,268	7,407	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	32.4	32.5	73.8*
Gross residential lending, annual growth (%) (2)	26.4	-14.4	3.5
Typical mortgage rate, annual average (%) (2)	2.0	1.9	2.4**
Owner occupation rate (%) (1)	72.3	n/a	66.4*
Nominal house price growth (%) (2)	-0.7	-1.9	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

[1] Net of the write-downs and provisions already made by the banks against own resources.

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 not available.
Typical LTV ratio on residential mortgage loans:	71% as for 2017.
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 represented by unsecured bank bonds which, in turn, represents also 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 existing), 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) of government subsidies for house purchases:	Regarding tax benefits, homeowners can benefit some fiscal advantages for the "first home" purchase, which consist of smaller indirect taxes than 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 EUR 650 mn and will offer guarantees on mortgage financing for an estimated amount of EUR 14 bn.

Latvia

By Anna Kasjanova, Daina Paula, Andrejs Kurbatskis, Latvijas Banka

IN A NUTSHELL

- → In 2017, the economic growth accelerated, driven by the recovering investment activity and supported by higher-income-led private consumption growth as well as by improving export opportunities.
- → Growth was largely supported by recovery of construction as well as robust growth of trade and manufacturing, allowing for a further decrease in unemployment, while implying labour shortages as well.
- → Housing market is gradually reviving with slight pickup in new loans for house purchase in 2016 and 2017, partially supported by the state guarantee program for first home buyers (extended and broadened in 2018).
- → Number of construction permits issued in 2017 point to pick up in residential construction after several sluggish years and numerous projects have been recently announced in the economy segment.

MACROECONOMIC OVERVIEW

In 2017, the real economy growth of 4.5% was largely driven by investment recovery from the previous year's low base including the EU funds absorption and a large number of private investment projects. Investment in dwellings remained on a decreasing trend. However, such trend is expected to reverse given the number of construction permits issued in 2017. Investment growth and better export opportunities contributed to increase in imports, whereas the strength of external demand was reflected by growth of exports of goods and services by 4.5%. Stable income growth kept private consumption growth robust.

Employment and labour participation rates reached historical maximums. Unemployment declined to 8.7%, close to its natural level. The share of entrepreneurs reporting labour shortage as a limiting factor for their business development increased. Construction sector recovered from the drop in 2016 – the growth was broad-based including infrastructure and private sector projects domestically and abroad. Growth remained robust also in manufacturing and trade sectors and experienced positive spill-over effect from construction recovery and export opportunities.

After four years of low inflation, harmonized consumer price index picked up at 2.9% in 2017, reflecting price development in the global commodities market as well as the higher domestic demand and growing labour costs. Inflation excluding indirect taxes, energy, food and administrative prices was 1.3% in 2017.

In 2017, Latvia ran a slight general government budget deficit of 0.5% of GDP. The budget deficit was mainly driven by the intensifying government spending due to the acceleration of the EU funds' absorption. Meanwhile, the tax revenue grew by 8% reflecting healthy economic growth. The general government debt shrank to 40.1% of GDP in 2017.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKETS

The real estate market is supported by economic growth, rising household income (real wage grew by 4% in 2017) and savings, as well as a state housing guarantee program for families with children and young specialists. Although the activity in the real estate market was broadly stable, the real estate prices continued to grow. In 2017, the Central Statistical bureau's (CSB) house price index increased by 8.1% (including, existing dwellings – by 8%, new dwellings – by 8.8%). The existing housing prices grew due to the demand for affordable homes, the limited supply of such housing, as well as state housing guarantee program. In the new housing segment, developers are trying to adapt to the purchasing power of local households, offering a smaller space economy-class housing (compared to 2016, the number of newly built apartments increased by 8.7%, while the total area of newly built apartments fell by 3.5%). On the market of new housing, there are also some private sector solutions to the lack of a sufficient down payment for home purchase – the rent is fully or partially accumulated as a part of the purchase transaction to be completed after a couple of years of rent. The upward pressure on the prices of new housing may ease, given that the market is forced to focus on the local buyer and the supply of new dwellings is gradually increasing (according to the issued building permits, in 2018, the planned area of multi-apartment buildings is by 18.9% higher than in 2017).

Very few official data are available on the commercial real estate market in Latvia. The data may be impacted by large projects and transactions, and heterogeneity is a peculiar feature of the commercial property market. In general, a low interest rate environment and a faster economic development in the region have created the preconditions for the renewal of the risk appetite for the development of the commercial property. According to the CSB data, the increase of activity is observed in the segment of retail space, where the construction of new and expansion of the existing shopping malls takes place. In 2017 the area of commercial buildings for commissioning increased five times as compared to the previous year.

MORTGAGE MARKETS

The outstanding amount of banking sector residential and commercial mortgage loans decreased in 2017 by 4.2% (compared to 4.1% growth in 2016). However, the drop to a large extent is attributed to one-off structural changes of the Latvian banking sector (M&A related movements of portfolio). The outstanding amount of the residential mortgage loans decreased by 1.1% (compared to -2% in 2016). The decrease slowed as issuance of new residential mortgage loans has peaked up (15.5% y-o-y in 2017) facilitated by rise in household income, decrease of interest rates and extension of the state housing guarantee program (in 2017, close to 40% of the new residential mortgages were granted within the program). Meanwhile, the repayment of the long-term residential mortgages granted in the pre-crisis boom period is still weighing on the loan portfolio dynamics.

The total residential mortgage loans comprised only 16.2% of GDP in 2017 and household indebtedness overall was low (20.6% of GDP in 2017). Effective interest rates on EUR-denominated residential mortgage loans are gradually declining (2.82% in 2017, compared to 3.18% in 2016) facilitated by the accommodative stance of the monetary policy of the European Central Bank.

The quality of the banking sector loan portfolio continues to improve – the residential mortgage loans over 90 days past due made 2.6% of the respective portfolio, while over 90 days past due loans of resident corporate loan portfolio stood at 2.8% in the end of 2017.

MORTGAGE FUNDING

Credit institutions in Latvia obtain funding mostly from depositors and from parent banks. The importance of domestic deposits as a source of funding is growing, and the share of domestic deposits was 43.0% (compared to 41.4% the year before) of banks' total liabilities by the end of 2017, while the share of liabilities to foreign parent MFIs was 9.7% (close to the 9.1% of the year before). In 2017, there were no mortgage covered bonds issued by Latvian MFIs.

	LATVIA 2016	LATVIA 2017	EU 28 2017
Real GDP growth (%) (1)	2.2	4.5	2.4
Unemployment Rate (LSF), annual average (%) (1)	9.6	8.7	7.6
HICP inflation (%) (1)	0.1	2.9	1.7
Outstanding Residential Loans (mn EUR) (2)	4,412	4,363	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	2,729	2,738	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	28.8	26.8	73.8*
Gross residential lending, annual growth (%) (2)	33.9	15.5	3.5
Typical mortgage rate, annual average (%) (2)	3.2	2.8	2.4**
Owner occupation rate (%) (1)	80.9	81.5	66.4*
Nominal house price growth (%) (2)	7.8	8.1	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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 (over 99% of total mortgage loans).
Typical LTV ratio on residential mortgage loans:	According to the Latvian legislation LTV cannot exceed 90%. For the programme of state-issued guarantees for construction or purchase of first homes, 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).
Most common mortgage product(s):	The most common mortgage product is that issued for the purchase of a home or an apartment.
Typical maturity of a mortgage:	The typical maturity of a mortgage is 20 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, while the stamp duty is reduced to 0.5% under the state guarantee programme for families with children. 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 the home purchase, there are also some additional registration fees but they are usually small and their amount is fixed (does not depend on the loan amount or real estate price). For home purchases under the state guarantee programme buyers face additional costs: • for families with children, the one-time fee is applied - 2.5% of the outstanding amount of the guarantee; • 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 20% of the loan amount (but not exceeding EUR 50,000) for families with children and young specialists (individuals up to 35 years old who have acquired higher education). The reduced cost of the guarantee is applied only to families with children.

Lithuania

By Jonas Grincius[1], AB Citadele Bankas

IN A NUTSHELL

→ Healthy GDP growth of 3.8%, with tendency to continue;

→ Housing market is growing, but starts to experience slow down;

→ Mortgage lending is growing 10% y-o-y.

MACROECONOMIC OVERVIEW

Lithuania's economy growth in 2017 continued to accelerate compared to the previous year and was highest since 2011. In 2017, GDP grew by 3.8%, while in 2016 it was 2.3%. Noteworthy to mention last year the forecast for 2017 was around 2.6%, so the actual higher growth rate indicate that economy has adjusted to the market conditions better than expected. Single biggest contributors are undoubtedly transportation, retail and wholesale trade, all production contributed 20% of GDP, while construction and real estate operation 12%. Highest year on year industry growth was observed in construction sector 7.8%. For 2018, GDP is forecasted to grow to about 3.0% level.

The unemployment continued the 2016 trend and in 2017 decreased to 7.1% from 7.9% in 2016, the downward trend continues from 2010 high of 17.8%. Cities can boast with 5.4% unemployment while the rural area is at the 11.1% level. Major employment decrease is noted in the 15-29 age bracket, which corresponds to the work force need fastest growing industry. The forecast for 2018 is at the 7% level. Salary growth in 2017 was higher than expected and reached 8.6%, with productivity growth lacking behind this put a pressure on inflation growth.

Annual inflation at the end of 2017 was 3.7%, considerable increase from 0.7% in 2016. Main increase drivers were food products, energy and alcohol/tobacco, while in clothing, furnishings and other daily maintenance goods had only nominal CPI increase. For 2018 inflation is believed to be at about 3%.

HOUSING AND MORTGAGE MARKETS

Homeownership rate in Lithuania continues to be among highest in European countries, above 90%, reason being relatively easy privatisation of housing stock after Lithuania regained its independence in 1990. In 2017 the apartment prices grew more modestly compared to 2016, the highest price growth rate dropped from 6.8% to 4.8%. Noteworthy to mention that the biggest growth was observed in Kaunas second largest city, while capital city of Vilnius having highest apartment price growth for the last six year was behind. This does show that the market has reached some saturation. Number of completed dwellings validate this point, in 2017 it was 6,420, while in 2016 it was a record high of 7,051. Similar dip is also observed in number of permits issued, which further reiterates this point and allows to project more moderate apartment price of around 3% next year.

MORTGAGE MARKETS

Despite the cooling down of the housing construction market the mortgage market in 2017 remained vibrant. According to the statistics of Bank of Lithuania, at the end of 2017 the amount of outstanding mortgage loan was EUR 7,173 mn, while in 2016 it was EUR 6,584 mn, this constitutes 8.94% growth, compared with the 2016/2015 growth of 6.76%. New loan issuance in 2017 grew by 9.8% from EUR 1,218 mn to EUR 1,337 mn, with the growth rate gradually decreasing form the hike of 19.9% in 2015/2014. The slower growth rate should be attributed to the above-mentioned saturation and to some extend increase in mortgage rates. The Bank of Lithuania statistics indicates that the average mortgage rates increased from 0.06 pps to 2.01% in 2017.

The market growth happened despite enforced by Bank of Lithuania Responsible Lending Guidelines. The guidelines set a cap on Loan-to-Value of 85%, Debt-to-Income (DTI) 40% and maximum maturity of 30 years (decrease by 10 years from max available in the market). For DTI calculations banks have to use actual interest rate, but not below 5%, to offset current low rate environment. Just for reference, before DTI introduction, the industry standard was flat DTI amount based on the family size, which varied from bank to bank. Use of DTI had limiting effect on larger size mortgages, as the previous flat rate system allowed for more income to be left for mortgage payment. The above statistics show that in spite of all said the market adjusted to the change and continued to grow.

MORTGAGE FUNDING

In 2017 as in previous years, deposit financed lending remained primary source of mortgage funding. Despite majority banks offering close zero rate for EUR term deposits, deposit volume in the market continued to grow. The competitive landscape is dominated SEB, Swedbank, Luminor (merged DNB and Nordea banks). The above four 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. Current economic landscape, especially total size of the market and prevailing rates, precludes banks from use of innovating mortgage funding instruments like securitisation or covered bonds issues.

[1] The views expressed in this article are those of the author alone and should not be interpreted as representing the views and/or positions of AB Citadele Bankas.

	LITHUANIA 2016	LITHUANIA 2017	EU 28 2017
Real GDP growth (%) (1)	2.3	3.8	2.4
Unemployment Rate (LSF), annual average (%) (1)	7.9	7.1	7.6
HICP inflation (%) (1)	0.7	3.7	1.7
Outstanding Residential Loans (mn EUR) (2)	6,584	7,173	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	2,778	3,069	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	26.8	28.1	73.8*
Gross residential lending, annual growth (%) (2)	16.0	9.9	3.5
Typical mortgage rate, annual average (%) (2)	2.0	2.0	2.4**
Owner occupation rate (%) (1)	90.3	n/a	66.4*
Nominal house price growth (%) (2)	5.4	8.9	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

LITHUANIA FACT TABLE

Entities which can issue mortgage loans:	Banks and banks' 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. Second mortgage tends to be treated as an investment with rental purpose.
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 Fabio Mandorino, The Luxembourg Bankers' Association

IN A NUTSHELL

- → Sound economic development thanks to the financial and construction sector together with public infrastructure projects.
- → Mortgage market grows though at a decelerating pace.
- → In 2017 mortgage loans with fixed-rate loans overtook those with variable ones.
- → House prices continue to steeply rise due to migration-induced demographic pressures and due to bottle necks on the supply side.

MACROECONOMIC OVERVIEW

In 2017, GDP in Luxembourg continued on a steady pace to reach 2.3%. The drivers of this growth over the last decade have been overall private and public consumption and net export, especially in relation to financial services. The financial sector remains the main economic engine of the country accounting for 26% of its economic activity in terms of gross value added. The fund industry achieved a record high with EUR 4.2 tn assets worth managed by Luxembourgish funds in June 2018, the highest level to date and more than twice the amount recorded at the trough of the financial crisis. At the same time, the private sector benefitted from buoyant credit from banks which supported solid investment, notably in the real estate and non-residential construction sectors. Also public investment in relation to significant infrastructure projects rebounded sharply in recent years after a subdued period.

After showing strong resilience throughout the crisis, the pace of job creation accelerated in 2017 to 3.3% from 3.0% in 2016. All sectors have posted positive growth rates since 2016; however, cross-border workers benefited the most from this development as employment across non-resident workers. Moreover, the unemployment rate, though relatively low, stagnated around 5.5%. Despite an overall positive picture of the labour market, the employment rate remains persistently low especially among the younger and older workers, both below the EU average.

Overall, public finances remain sound. The general government surplus reached EUR 358.3 mn. This positive development is due to low inflation combined with the incremental impact of fiscal consolidation and expenditure savings.

HOUSING AND MORTGAGE MARKETS

The mortgage market in Luxembourg continues to grow at a sustained, though slightly decelerating pace, with outstanding and gross mortgage loans increases, thus reaching all-time highs in both cases. Besides sound underlying fundamentals, this increase can be also explained by the easing of lending criteria of Luxembourg banks, in line with the same trend observed across the Euro area. These eased conditions, principally due to the fierce competition among the few active banks in mortgage lending in the Grand Duchy, will continue to contribute to the high demand in the Luxembourg real estate market. Mortgage interest rates have continued to fall (in line with the general trend) for the sixth consecutive year, reaching 1.7% p.a. in 2017 and remaining among the lowest in Europe. This development has resulted in an increase in per capita indebtedness to more than EUR 60,000 for every resident older than 18 years, the highest in the EU. Potential risks in relation to vulnerabilities of the housing market have been counterbalanced by the introduction of macro-prudential measures, such as more demanding capital requirements for mortgages with an LTV equal to 80%, by the adequate capitalisation of Luxembourgish banks and by the low proportion of NPLs.

In 2017, the Luxembourg market for mortgage loans has seen the number of fixed-rate loans overtake the variable-rate loans. The dynamism of real estate market is driven by both demand and supply factors. Excessive demand has contributed to this steep price development, which is exacerbated by migration-induced demographic pressures, the relatively strong purchasing power of resident households as well as 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.

On the supply side, the principal factors are related to land availability and to the constraints of permit issuances due to administrative burdens. Notwithstanding the increased demand, the number of housing permits reached 5,048 in 2017, increasing by 4.16% with respect to 2016, but still far away from the estimated 6,300 new dwellings needed to keep up with the growing demand. The Doing Business Survey highlights scope for improvement particularly in the time required to complete the administrative procedure, which sees Luxembourg performing 63rd out of 190 countries in 2017. Another slowing factor is the relative lack of land availability. To overcome this issue, in 2008 the government introduced a piece of legislation known as the Housing Pact, which granted financial incentives for municipalities to encourage housing development and introduced some new housing policy tools to compensate for the limited amount of land owned by the municipalities. This plan showed mediocre effects in a survey of 2014, and the government is currently planning to reform the Pact, paying particular attention to the actual allocation and continuous monitoring of the funds.

MORTGAGE FUNDING

Mortgages in Luxembourg are principally funded through deposits.

	LUXEMBOURG 2016	LUXEMBOURG 2017	EU 28 2017
Real GDP growth (%) (1)	3.1	2.3	2.4
Unemployment Rate (LSF), annual average (%) (1)	6.3	5.5	7.6
HICP inflation (%) (1)	0.0	2.1	1.7
Outstanding Residential Loans (mn EUR) (2)	28,314	30,656	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	61,324	64,541	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	141.1	146.2	73.8*
Gross residential lending, annual growth (%) (2)	12.4	1.6	3.5
Typical mortgage rate, annual average (%) (2)	1.7	1.7	2.4**
Owner occupation rate (%) (1)	73.9	n/a	66.4*
Nominal house price growth (%) (2)	6.0	5.6	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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:	Not available
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.
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 Mariosa Vella Cardona, Malta Bankers' Association

IN A NUTSHELL

→ Malta experienced a high level of economic growth in 2017, mainly driven by increase in exports and private consumption.

→ Residential property prices continued to increase in 2017.

→ Mortgages for house purchases grew 7.14% in 2017, totalling EUR 4.5 bn.

MACROECONOMIC OVERVIEW

Malta's economy continued to grow in 2017, with GDP increasing by 6.6% during the year, from 5% and 7.4% in 2016 and 2015 respectively. The rate of growth was almost three times as much as that recorded in the Euro area. Growth in 2017 was mainly driven by a 1.6% increase in exports of goods and services, and private consumption expenditure.

The increased economic activity was reflected in employment rates, which rose by 1.4 pps to 67% in 2017. The unemployment rate as measured by the Labour Force Survey also improved, continuing to decline from 4.8% in 2016 to a historic low of 4.1%.

The Maltese Government sustained its efforts to improve public finances, with gross public debt falling to 57.6% of GDP by the end of 2017, and a budget **surplus** equal to 3.9% of GDP being recorded in 2017. Price pressures remained contained, with the inflation rate, based on the Harmonised Index of Consumer Prices, averaging 1.2%.

HOUSING AND MORTGAGE MARKETS

In Malta, the home-ownership rate stands at around 80%. The number of permits issued in 2017 for the construction of dwelling units increased to 9,822, as against 7,508 in 2016 and 3,947 in 2015. Apartments were by far the largest residential category, accounting for 87% of new building permits issued in 2017. Sales of the three residential property types (apartments, maisonettes and terraced houses) during 2017 totalled 6,532, with a relative value of EUR 1,036 bn.

Residential property prices continued to increase in 2017. According to the Property Price Index published by the National Statistics Office, and which is based on actual transactions involving apartments, maisonettes and terraced houses, prices increased at an average annual rate of around 5.3%, slightly slower than the 5.5% increase recorded in 2016. The robust growth in residential prices in Malta is the result of a number of factors such as:

- The Government scheme for first-time buyers, who are exempt from stamp duty on the first EUR 150,000 of the value of the property.
- The low interest rate environment, which makes property more attractive to purchase.
- Strong growth in disposable incomes.
- The continued increase in foreign workers which now exceed 37,000, and which has created increased demand for the renting or purchase of property. This figure is expected to continue to increase in the coming years.
- The Individual Investor Programme which allows foreigners to acquire Maltese citizenship subject to certain conditions, including the purchase of property with a minimum value of EUR 350,000 or lease of property at an annual rent of at least EUR 16,000 for a period of no less than five years.

Mortgages to residents for house purchase totalled EUR 4.5 bn at the end of 2017, up 7.14% from EUR 4.2 bn in 2016. Some 48% of total credit extended by the domestic banks takes the form of mortgages, and the average loan-to-value ratio stands at around 73.5%. Average interest rates on new residential loans reduced further to 2.83% in 2017.

MORTGAGE FUNDING

Mortgage loans are provided by the domestic banks, predominantly Bank of Valletta plc and HSBC Bank Malta plc, which account for over 80% of the domestic retail market. These banks rely mainly on resident deposits for their funding, with such deposits increasing by 5% to EUR 18.43 bn in 2017. With a loan-to-deposit ratio as low as around 59%, deposits provide ample liquidity to the banks, without recourse to securitisation or covered bonds being called for.

	MALTA 2016	MALTA 2017	EU 28 2017
Real GDP growth (%) (1)	5.2	6.4	2.4
Unemployment Rate (LSF), annual average (%) (1)	4.7	4.0	7.6
HICP inflation (%) (1)	0.9	1.3	1.7
Outstanding Residential Loans (mn EUR) (2)	4,204	4,548	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	11,280	11,910	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	n/a	n/a	73.8*
Gross residential lending, annual growth (%) (2)	n/a	n/a	3.5
Typical mortgage rate, annual average (%) (2)	2.8	2.8	2.4**
Owner occupation rate (%) (1)	81.4	n/a	66.4*
Nominal house price growth (%) (2)	5.5	5.3	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

MALTA FACT TABLE

Entities which can issue mortgage loans:	Main issuers are APS Bank Ltd; Bank of Valletta plc; Banif Bank (Malta) plc; HSBC Bank Malta plc; Lombard Bank Malta plc; Mediterranean Bank Group.
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 almost 90% of domestic retail banking in Malta. All banks' mortgage and consumer credit loans to household and individuals totaled EUR 4.5 bn as at end 2015, with 86.1% of this figure relating to mortgages. The following breakdown of this figure is based on the published financial information of the Banks found on their corporate web sites: BOV €1.96 billion, HSBC EUR 1.77 bn, APS Bank EUR 461 mn, Banif Bank EUR 199 mn, Lombard Bank EUR 35 mn, Mediterranean Bank EUR 10 mn. It is worth noting that on average the mortgage market increased by 8.7% during 2015. A report by the European Commission in 2013 reveal that 52% of all loans generated by domestic banks in Malta, particularly HSBC Bank Malta and Bank of Valletta, are tied to housing mortgages.
Typical LTV ratio on residential mortgage loans:	The LTV ratio for loans backed by residential property was 74% as of 2014; the ratio for loans backed by commercial property was 69%. Source: IMF Country Report No. 16/20 January 2016 page 13 https://www.imf.org/external/pubs/ft/scr/2016/cr1620.pdf
Any distinction made between residential and non-residential loans:	The banks in Malta make a clear difference between mortgages for residents and commercial/business loans involving property development.
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 are only issued on condition that mortgage is repaid before the borrower reaches the age of 65.
Most common way to fund mortgage lending:	Mortgage funding in Malta remain mainly deposit-based. Core domestic banks, with assets of about 2½ times the GDP, provide around 97% of bank lending to residents in Malta, and collect around 94% of resident 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. 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 With effect from 1st 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 will be replaced by one final withholding tax of 8% on the value of the property sold. More information is found on: https://ird.gov.mt/faq/newproptax/newproptaxfaq.aspx
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; and (h) Redemption of Ground Rent . The Maltese Housing Authority is embarking 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. 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 web site: http://www.eib.org/projects/pipeline/2015/20150802.htm

The Netherlands

By Marcel Klok (ING), Ruben van Leeuwen (Rabobank), Paul de Vries (Land Registry) and Nico de Vries (ING)

IN A NUTSHELL

- → Real GDP rose 3.2% in 2017, highest economic growth since 2007.
- → Unemployment rate declined to 4.9%.
- → Mortgage debt increased to EUR 672 bn (+1.2%).
- → Mortgage interest rates stable at low level.

MACROECONOMIC OVERVIEW

In 2017, the economy expanded at the highest rate since 2007. According to data from Statistics Netherlands (CBS), real GDP rose by 3.2%. The increase was primarily driven by domestic demand. Helped by a stronger labour market, private consumption increased by 1.9% compared to the previous year. Gross fixed capital formation surged 5.6%, largely on the back of residential investment (+13%). Investment by businesses rose by 3.2%, while public investment increased with 4.8%. Public consumption increased by 1.2%, the same growth rate as in 2016. Next to domestic factors, net exports contributed positively too, adding 1.2 pps to GDP growth.

In terms of sectors, commercial services was the main growth driver. Particularly trade and temporary employment agencies provided a strong growth stimulus. Manufacturing, especially firms producing machinery, transport equipment and electronics, and construction output strongly rose too, but the energy sector was negatively impacted by the government's decision to further lower the maximum allowed gas production. The decline in energy production shaved off almost 0.2 pps of GDP in 2017, similar to 2016.

Rising output levels induced businesses to hire more people. Employment (total hours worked) expanded by 1.7% in 2017. The unemployment rate declined from 6.0% at the start of the year to 4.9% at year-end. Wage growth picked up too, but still modestly, preventing a strong acceleration of prices. In fact, core inflation fell from 0.8% to 0.6%. Nevertheless, the headline inflation rate (as measured by the Consumer Price Index) rose from 0.1% in 2016 to 1.3% in 2017, primarily as the result of higher prices for food and energy & fuel. Industrial producer prices rose 5.5%, after a decline of 3.4% in 2016.

The government budget balance remains in surplus. From 0.4% in 2016, the fiscal balance improved to 1.1% in 2017. Increased economic activity boosted tax income. Excluding interest payments, the surplus was 2.3%. Falling gas revenues prevented the primary deficit from improving further. Government debt was 56.7% of GDP at the end of 2017.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

In 2017 a new record of 241,860 homes were sold, an increase of 12.6%. The number of sales decreases or rises less rapidly in the big cities than outside. For the second consecutive year the number of sales in Amsterdam declined (-9%) and for the first year after the end of the crisis, less homes were sold in Utrecht (-3%). The Hague and Rotterdam are growing, but lag behind the average Dutch growth. In North and South Netherlands the number of sales increased by more than 18%. This is a turnover, as in particular in recent years, the number of sales in the cities increased and urban areas lagged behind.

This development seems to be related to house price development. Housing prices rose on average 7.5% in 2017. We see large differences between the urban and rural that are mirrored by the development of sales. House prices in the big cities as Amsterdam (14%), Rotterdam (13%), Utrecht (12%) and The Hague (11%) rose twice as fast as in rural areas (around 6%). This price development reflects the desire of living in a city. At the same time, we see that more city dwellers are moving to the rural areas. Partly because the lack of suitable homes in the urban areas, and partly because they can sell their city dwelling with a good profit and thereby move to a cheap rural home.

According to the Dutch Land Registry, a total of 59,210 new homes were delivered. That is an increase of 5% compared to 2016. In Amsterdam 7,160 homes (+ 53% compared to 2016) more homes were realised. Nearly half (44%) are homes up to 50 m^2. Both smaller and larger new homes were delivered. The average surface area of newly built homes has increased by 0.3 m^2 to 112.5 m^2.

MORTGAGE MARKET

The residential mortgage market faced a strong year in 2017. Mainly driven by a high transaction volume on the housing market, total new mortgage originations amounted to EUR 101 bn, according to the Land Registry. This was an increase of 24.7% compared to 2016 and the origination volume was highest since the financial crisis. According to Statistics Netherlands, total outstanding mortgage increased to EUR 672 bn in 2017, the highest amount ever recorded. Despite these strong numbers, developments on the mortgage market still lagged developments on the housing market and broader economy. The increase of the mortgage volume lagged the strong appreciation of house prices, resulting that the average LTV at origination actually declined. Strict legal underwriting criteria, mainly concerning the debt-to-income (DTI), are increasingly resulting in relatively less debt taking when purchasing a home. Indeed, the usage of own funds is on the rise, especially in the bigger cities where the house price appreciation has been the strongest.

The statutory underwriting norms changed only slightly in 2017. As planned, the maximum LTV was lowered to 101% at the beginning of the year, followed by the final decrease to 100% as of 1 January 2018. The new government coalition has agreed not to lower this legal LTV limit further. The DTI norms hardly changed in 2017, even though double-income households were allowed to borrow slightly more mortgage debt. The new government took an important further step to decrease the deductibility of interest payments from taxable income. Currently, the highest deduction rate decreases by 0.5 pps per annum (2017: maximum of 50%). From 2019, this reduction speed will be increased, to 3 pps per annum. As of 2023, the maximum deduction rate will remain stable at 36.9%, 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 tariffs.

Mortgage interest rates stabilised at low levels in 2017. According to DNB, the average mortgage interest on new originations was 2.41%, which was 18 bps lower than in 2016. The average interest rate on outstanding mortgages was 3.4%, down by 34 bps compared to 2016. The interest rate term fixings shifted to longer tenors. Especially 10-year and increasingly also 20-years fixings were popular amongst mortgage borrowers. On the back of the mortgage reforms in 2013, the majority of new originations is amortising (i.e. full annuity or linear loans). About 1/3 of new originations consists of interest-only loan (parts), of which the favourable tax treatment is still possible for borrowers who had a mortgage pre-2013. These tax benefits are still grandfathered in case of refinancing and/or relocation.

MORTGAGE FUNDING

The rise of non-bank lenders continued in 2017, even though banks were able to regain some market share at the end of year. On the basis of Land Registry data, the markets share of banks averaged 57% in 2017. On a relative basis, insurers were less active in new originations and held an average market share of 19%. Third-party originators, mainly acting on behalf of domestic pension funds but increasingly also for foreign parties, were responsible for approximately 24% of all new mortgage originations. From the funding side, whole-loan transfers or mandates continue to dominate, especially on the non-bank side. Banks increasingly opted for the issuance of covered bonds instead of securitisations (RMBS), not only because of more favourable funding conditions in the latter market, but also to have to opportunity to raise long-term funding.

	NETHERLANDS 2016	NETHERLANDS 2017	EU 28 2017
Real GDP growth (%) (1)	2.2	3.2	2.4
Unemployment Rate (LSF), annual average (%) (1)	6.0	4.9	7.6
HICP inflation (%) (1)	0.1	1.3	1.7
Outstanding Residential Loans (mn EUR) (2)	664,416	672,235	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	48,989	49,149	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	197.1	193.4	73.8*
Gross residential lending, annual growth (%) (2)	27.6	24.7	3.5
Typical mortgage rate, annual average (%) (2)	2.6	2.4	2.4**
Owner occupation rate (%) (1)	69.0	n/a	66.4*
Nominal house price growth (%) (2)	5.0	7.5	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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 licence from the Netherlands Authority for the Financial Markets. There are strict regulations for licence holders to protect the consumer.
The market share of the mortgage issuances:	Not available
Proportion of outstanding mortgage loans of the mortgage issuances:	Not available
Typical LTV ratio on residential mortgage loans:	Unknown; max LTV in 2018 is 100%.
Any distinction made between residential and non-residential loans:	A mortgage is registered at the Kadaster (Land Registry and Mapping Agency). There is registered 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:	Not available
Level of costs associated with a house purchase:	2% taxes; 4% other transaction cost (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 payback of the remaining mortgage debt in case of foreclosure (again at certain conditions).

Poland

By Agnieszka Nierodka , Polish Mortgage Credit Foundation

IN A NUTSHELL

- Strong macroeconomic fundamentals support demand for residential properties in Poland.
- Construction market is booming, but supply tensions begin to arise.
- Mortgage lending, influenced by low interest rates and good economy, recorded its best results since 2008.
- Mortgage lending remains mostly deposit-funded, but covered bonds are increasingly gaining in importance.

MACROECONOMIC OVERVIEW

According to the Eurostat estimates, the increase of real GDP in Poland in 2017 was 4.6% (in comparison to 2.9% in 2016), with domestic demand still being the main driver of the GDP growth.

Total gross value added in the national economy in 2017 increased by 4.3% y-o-y versus 2.8% in 2016. Industrial gross value added was 6.2% higher than in 2016 compared with the increase of 3.6% in 2016. Gross value added in the construction sector recorded a 11.5% increase in comparison to the year before, compared with a decrease of 7.2% in 2016.

The annual average unemployment rate in Poland amounted in December 2017 to 4.9% (as compared to 6.2% in Dec. 2016).

After 3 years of deflation, in 2017 inflation picked up in Poland. In 2017, the annual consumer price index amounted to 1.6% y-o-y, in December 2017, the CPI amounted to 2.1% (y-o-y).

In 2017 Poland's budget revenues amounted to PLN 350.5 bn (increase of 11.4% y-o-y in nominal terms), and expenditures amounted to PLN 375.8 bn (increase of 4.1%). General government deficit in 2017 stood at -1.7% GDP (-2.4% in 2016) and general government debt amounted to 50.6% GDP (from 53.4% in 2016).

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

In 2017 the housing and mortgage markets in Poland continued to grow. The activity in the housing market was very high on both the supply and demand sides. The growing demand in the property market generated modest price increases.

The number of building permits amounted to nearly 90,000 units (an increase of 11% in comparison to 2016) and around 178,000 new dwellings were completed (an increase of 9%). More than 205,000 were still in the construction phase. These were the best results recorded in construction business since 2008. High demand contributed to a considerable rise in the prices of land for developers' construction – particularly in city districts. Emerging problems with the availability of laborers for construction and the shortage of building materials also pose the challenge for maintaining the housing supply at stable prices. The pool of unsold housing in Poland's six biggest markets amounted to ca. 48.2 thousand dwellings at the end of 2017. The home selling time in the primary market decreased to less than 2.7 quarters in the analysed period.

The average offer and transaction prices on the both primary and secondary markets rose in 2017. The observed increase on the primary market was caused by: (i) the sale of a larger number of higher quality dwellings in better locations' and (ii) the rapid growth of the costs of developers' production. The price changes on the secondary market were similar to those in primary market.

MORTGAGE MARKETS

Market dynamics

The total value of residential mortgage portfolio stood at nearly PLN 388 bn at the end of 2017. During that year banks granted nearly 191,000 residential loans, worth around PLN 45 bn – the best result since 2008.

Generally good economic position of Polish households (low unemployment, growing wages), combined with historically low interest rates (reference rate of 1.50%) resulted in huge demand for mortgage loans. Due to the fact that interest rate on bank deposits is also very low (even below the inflation level), real estate purchase is considered as a good investment opportunity.

Apart from the growing mortgage market it's worth stressing that around 60-65% housing purchase transactions in Poland's six biggest markets were financed by buyers' own funds. The quality of residential mortgage credit portfolio remained good in 2017. At the end of the year the share of NPLs denominated in Polish zlotys amounted to 2.5%.

Non-market led initiatives

Regarding the non-market led initiatives, the mortgage market remained also under strong influence of the government-subsidised "Flat for Youth" scheme. As the funds are activated in the beginning of every year, and get disbursed within days, it has created an additional incentive for customers considering home purchase. The fact that the scheme will be disactivated after 2018 supported the demand even more.

MORTGAGE FUNDING

The main funding instruments for mortgage loans in Poland are deposits and covered bonds. After the amendment of Covered Bonds and Mortgage Banks Act in 2016, the year of 2017 brought a considerable growth in covered bonds market. The outstanding volume of Polish covered bonds exceeded PLN 16.5 bn, and new issues in 2017 exceeded PLN 8.5 bn.

According to the law, only specialised mortgage banks are eligible to issue covered bonds in Poland. There are currently 3 issuers active: mBank Hipoteczny S.A., PKO Bank Hipoteczny S.A. and Pekao Bank Hipoteczny S.A. Another 3 banking groups are considering the possibility of establishing mortgage banks.

It is worth noticing that in 2017 the biggest covered bonds issue in Polish market history was made by mBank Hipoteczny S.A. (in the amount of PLN 1 bn). On the other hand, in 2017 PKO Bank Hipoteczny S.A. made 3 benchmark issues on the euro market (EUR 500 mn each) – also the first ones in the Polish market history.

	POLAND 2016	POLAND 2017	EU 28 2017
Real GDP growth (%) (1)	3.0	4.6	2.4
Unemployment Rate (LSF), annual average (%) (1)	6.2	4.9	7.6
HICP inflation (%) (1)	-0.2	1.6	1.7
Outstanding Residential Loans (mn EUR) (2)	92,015	93,111	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	2,957	2,991	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	35.6	33.8	73.8*
Gross residential lending, annual growth (%) (2)	-4.7	13.9	3.5
Typical mortgage rate, annual average (%) (2)	4.4	4.4	2.4**
Owner occupation rate (%) (1)	83.4	n/a	66.4*
Nominal house price growth (%) (2)	2.5	4.7	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, 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 99.93% – banks, 0.07% – credit unions (Dec. 2017)
Typical LTV ratio on residential mortgage loans:	45.80% of new loans granted in 2017 had LTVs over 80% 33.08% – LTVs between 50-80% 6.90% – LTVs between 30-50% 14.22% – 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 (around 63% of new lending in 2017 belonged to that range; this share has been quite stable in recent years).
Most common way to fund mortgage lending:	Banking deposits + interbank lending
Level of costs associated with a house purchase:	• establishment of a mortgage – 0,1% of the secured amount • notary fee (depends on the value of property) – usually: PLN 1,010 + 0,4% over the value of PLN 60,000 (+ VAT 23%) • additional notary documents – PLN 6 per page • entry do mortgage register – PLN 200; if there's no mortgage register for the property - establishment of mortgage register costs additionally PLN 60 • tax on civil law transactions (paid only if the property is purchased on secondary market) – 2% of the value of property • property valuation (sometimes covered by the bank) – usually PLN 300-600 • commission for the broker (if needed) – around 3% + VAT
The level (if any) of government subsidies for house purchases:	The most important government subsidy is "Flat for youth". The basic subsidy amounts to 10% of the construction value of the apartment up to 75 square meters (100 sq. m for houses). Higher aid is available for families with children: subsidy of 15% – for families with 1 child, 20% – with 2 children, and 30% – with 3 children (in the last case the square metrage of the eligible property will be: 85 sq. m for flats and 110 sq. m for houses). The beneficiaries of the programme are families and single persons up to 35 years of age, who do not own a housing yet. The subsidy makes a part of the borrower's own equity required by a bank granting a mortgage. In 2017, the total amount of this subsidy was around PLN 746 mio PLN.

Portugal

By Caixa Económica Montepio Geral

IN A NUTSHELL

- → Portuguese GDP grew by 2.7% in 2017, 0.1 pps above the Euro area growth, and was accompanied by a sustained downward trend of unemployment, a significant reduction in public debt and a sharp reduction in the budget balance.
- → After registering a cumulative decline of 13% in nominal terms between 2008 and 2013 (20% in real terms), residential real estate prices have recovered an average of 5.3% per year since 2014 and are currently returning to levels close to those prior to the financial crisis. Real estate sales have increased by double digit since the beginning of 2015.
- → The demand by non-residents has also stimulated the real estate market, as a result of the introduction in 2009 of a more favourable tax treatment for "non-habitual" European foreigners and the approval in 2012 of the Visa Gold regime, implemented with the aim of attracting investors and non-European professionals.
- → The recovery of the real estate market is also a consequence of the good performance of the tourism sector, stimulating the demand of real estate by investors to cope with the growing demand for accommodation (Local Accommodation).
- → Despite the strength of mortgage credit for residential real estate, household debt was at 75.4% of GDP in mid 2017 and continues to decline from its peak level (reached in 2013), although it remains above the euro area average (58.4%).

MACROECONOMIC OVERVIEW

In 2017, GDP recorded a growth in volume of 2.7% compared to 1.6% in 2016, representing an acceleration of 1.1 pps. Portuguese GDP growth in 2017 was 0.1 pps above the Euro area growth, but Portuguese GDP level still is 1.3% lower than that recorded in 2008, the year in which the last international economic and financial crisis began. Portuguese economic growth was accompanied by a sustained downward trend of unemployment, a significant reduction in public debt and a sharp reduction in the budget balance.

Economic activity was supported solely by domestic demand, with a strong positive contribution of 2.9 pps, with the acceleration of this contribution (+1.6 pps in 2016) mainly reflecting the behaviour of the investment, in a context of a slight acceleration of the already strong growth rate of private consumption and a slight fall of public consumption. Investment was critical to the growth of the economy in 2017. Gross fixed capital formation increased 9.2%, in strong acceleration compared to the growth of 1.5% observed in 2016.

The Government debt ratio in 2016 reached 129.9% of GDP, but in 2017 it fell to 125.7% of GDP. In December 2017, the balance of the International Investment position stood at EUR -204.1bn, corresponding to -106.2% of GDP (-106.3% of GDP by December 2016).

A decrease in the unemployment rate of 2.2 pps was registered, from 11.2% in 2016 to 9.0% in 2017, therefore continuing the trend of reduction from the historic peak reached in early 2013 (17.5%).

Inflation, measured by the annual average change in the Harmonised Index of Consumer Prices (HICP), was 1.6% in 2017 (+0.6% in 2016 and +0.5% in 2015). A slight rise in the savings rate to 5.9% was registered in 2016 (5.3% in 2015), but the rate went back down to 5.4% in 2017. In 2017, the non-performing loans ratios of households and enterprises declined, although they remain at high levels (4.2% and 13.5%, respectively).

HOUSING AND MORTGAGE MARKETS

OVERVIEW

Since the period of crisis and financial assistance program, the real estate market has been recovering. This recovery is reflected in the evolution of residential real estate prices, which, after registering a cumulative decline of 13% in nominal terms between 2008 and 2013 (20% in real terms), have recovered an average of 5.3% per year since 2014 and are currently returning to levels close to those prior to the crisis.

The dynamism of this sector is also reflected in the evolution of real estate sales, which have increased by double digit since the beginning of 2015. This behaviour has contributed to a more positive internal economic environment, reflected in the good performance of the labour market, increased income and very positive evolution of confidence indicators. The demand by non-residents has also stimulated the market, as a result of the introduction in 2009 of a more favourable tax treatment for "non-habitual" European foreigners and the approval in 2012 of the Visa Gold regime, implemented with the aim of attracting investors and non-European professionals.

The recovery of the real estate market is also a consequence of the good performance of the tourism sector, stimulating the demand of real estate by investors to cope with the growing demand for accommodation (Local Accommodation). As a result, there are deep differences in property prices between premium areas, such as historic city centres (Lisbon and Porto) or in areas with more tourist tradition (Algarve) and the rest of the country. The revival of the longer rental market (domestic and foreign students, younger people who advocate greater mobility) has also supported the demand for residential real estate.

The proportion of households that allocate more than 40% of their disposable income to housing costs stood at 7.5% at the end of 2016 according to Eurostat, well below the euro area average (11.0%). Similarly, the ratio of property transaction prices to average gross disposable income is about 7.5, a level that is similar to the average in the last eight years (7.0). An alternative indicator to assess the demand for residential real estate is the level of domestic debt. Despite the strength of mortgage credit for residential real estate, household debt was at 75.4% of GDP in mid 2017 and continues to decline from its peak level (reached in 2013), although it remains above the euro area average (58.4%).

At the same time, the current momentum in the domestic real estate market is not being fuelled by an increase in household leverage. In fact, the volume of new home loans remains well below the levels prior to the international financial crisis, although there is a clear trend towards acceleration. It is also important to note that although most mortgages have been granted at a variable rate, the impact of higher interest rates on households' financial burdens should be contained as the ECB should normalize its monetary policy very much gradually.

DETERMINANTS OF HOUSING PRICES IN PORTUGAL

Interest rates, activity growth and the degree of restriction of the criteria for granting housing loans are the variables with the greatest impact on the growth of housing prices. Housing prices in Portugal have increased in the recent past, and only surpassed the pre-crisis level in the third quarter of 2017, accordingly the INE index with a retropolation using ECB/BIS/Confidencial Imobiliário data before 2009 (but we have to keep in mind that the last available data for ECB/BIS/Confidencial Imobiliário, October 2017, is still 3.2% below the peak of this index in September 2007). Between 2007 and 2011, the fact that residential investment contraction may have prevented further price during this period, thus reducing the demand for housing. The growth of investment by foreigners in over that period may also have contributed to this same effect, i.e. to avoid a further fall in housing prices. Between 2011 and mid-2017, low interest rates (or even negative) may be affecting housing prices via options savings alternatives. It should also be noted that investment in housing by non-residents slowed down after the years of the sovereign debt crisis.

MORTGAGE MARKETS

During the year 2017, Banco de Portugal reported that 89,249 new housing loan agreements were signed, 33% above that of 2016, almost double that of 2015 and three times more than that of 2013. By looking at the number of houses sold in Portugal in 2017 (153,292 according to INE data), one concludes that only 58% of the homes sold are bought using housing loans. This figure is far below the 92% registered in 2009. At that time, almost all housing transactions were financed, while in 2017 only slightly more than half. This is a very relevant fact. Additionally, if by comparing the credit granted with realised sales, but in value, one concludes that the leverage of the sector is even lower. In 2017, a total of EUR 8.26 bn was granted, compared to approximately EUR 19 bn traded, i.e. only 43% of the volume of transactions in housing in Portugal was leveraged, which is also well below the 66% registered in 2009. The leverage in value is much lower than the number of transactions, mainly due to the weight of sales made to foreigners, typically of a higher value and not leveraged. If, on the one hand, foreign demand for housing in Portugal has contributed to strong price growth, it is also fair to say that it contributes to lower leverage in the sector. Despite the tightening rules on the part of the Bank and the restrictions imposed by Banco de Portugal, namely at the level of the effort rate, credit continues to rise. The average LTV of the market is at 70%, very close to the 73% registered in 2009, which greatly contributes to the growth of the average value of banks assessment.

As regards credit granted for construction and for promotion of real estate activities, there is an increase in bank loans, which is offset by the reduction in securities in the portfolio. However, there is evidence of different dynamics in these two branches of activity. With regard to construction credit, in 2017, the downward trend continued started in 2010, albeit at a slower pace. There has, however, been a recovery in the credit granted to promote real estate activities in the last quarter of 2017.

FURTHER IMPORTANT EVOLUTION

The Financial Stability Report, published by Banco de Portugal (Banco de Portugal), pointed to the high real estate prices in the market and financial sector risks and mentions that "price growth in the residential real estate segment has been particularly strong" and that "in the second half of 2017 some signs began to appear, although very limited, price overvaluation in this segment".

And "even though Portuguese banks are not the main drivers of the real estate market, a marked decrease in prices in this market would have a negative effect on the banking sector, affecting the sale of properties owned by credit institutions and, on the other hand, the decrease of non-performing loans (NPL) associated with secured credit for real estate".

Banco de Portugal highlights the fact that "there has also been a strong growth in consumer credit and new housing lending operations, which shows less restrictiveness in the lending criteria".

The flexibilisation of some credit granting criteria, such as the rate of effort (relation between yield and cost of the loan) led Banco de Portugal to adopt a macroprudential measure (recommendation that introduces limits on some of the criteria which the institutions must observe when assessing the creditworthiness of the borrower when granting this type of credit), which will come into force in July 2018.

MORTGAGE FUNDING

In 2017, a deleveraging trend of the banking sector balance sheet was still seen, with total assets decreasing by c.1% from 2016. The banks' financing structure showed, overall, a decrease in liabilities (around -3.1%, contribution of -2.9 pps for the change in total assets) and an increase in equity (+20.8%, contribution of 1.2 pps to the change in total assets), thus reflecting an improvement in the capital position in the banking system. The evolution of liabilities translated into an increase in customer deposits, more than offset by the decrease in financing through securities and in the interbank market and central bank. The ratio of loans to customer deposits decreased in 2017 from the previous year (-3 pps to 92.6%), reflecting the increase in deposits and the decrease in net loans to customers. In 2017, there was also a marked decrease in financing through securities, whose decrease in contribution to total assets was around 1.5 pps. Financing obtained from central banks declined in the whole of 2017 (around -3.1%, reaching 6.3% of total assets), maintaining the downward trend, and the interbank financing net of investments and deposits of other institutions remained virtually unchanged from 2016 (-0.8%, to around EUR 20.5 bn).

	PORTUGAL 2016	PORTUGAL 2017	EU 28 2017
Real GDP growth (%) (1)	1.6	2.7	2.4
Unemployment Rate (LSF), annual average (%) (1)	11.2	9.0	7.6
HICP inflation (%) (1)	0.6	1.6	1.7
Outstanding Residential Loans (mn EUR) (2)	95,377	94,093	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	11,169	11,032	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	74.1	71.0	73.8*
Gross residential lending, annual growth (%) (2)	44.3	42.6	3.5
Typical mortgage rate, annual average (%) (2)	1.9	1.6	2.4**
Owner occupation rate (%) (1)	75.2	n/a	66.4*
Nominal house price growth (%) (2)	7.1	13.2	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

PORTUGAL FACT TABLE

Entities which can issue mortgage loans:	In Portugal, credit institutions have the competence to grant financing according to Decree-Law No. 349/98 of November 11 and within the limits established in articles 3 and 4 of Decree-Law No. 34/86, of March 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:	According to Banco de Portugal retail banking report, in 2016 57,912 new mortgage loans were celebrated (+34.2% comparing to 2015) in a total amount of €5.5 bn (+39.6% comparing to 2015) with an average term of 32.8 years per contract (+9 months comparing to 2015). The six largest institutions concluded 84.9% of new mortgage contracts, which represent 86.7% of the contracted amount, comparing with 84.2% and 83.1%, respectively, in 2015. At December 31, 2016, the ten largest credit institutions had 96.8% of mortgage contracts and 95.5% of outstanding mortgage amount.
Proportion of outstanding mortgage loans of the mortgage issuances:	The seven largest institutions in Portugal are Millennium BCP, CGD, BPI, Santander Totta, Novo Banco, Montepio and Crédito Agricola, and hold: CGD (28.6%); Millennium BCP (18.5%); Santander Totta (20.3%); BPI (11.8%); Novo Banco (10.4%); Montepio (7.0%); Crédito Agricola (3.0%).
Typical LTV ratio on residential mortgage loans:	The national macroprudential authority considers that, on the one hand, in the current economic environment, household indebtedness is still high by international standards, and the financial system is highly exposed to credit relating to residential immovable property. On the other hand, this credit's new business has increased strongly and the stock of consumer credit has grown significantly. In addition, the recent economic recovery, amid very low interest rates and a rebound in house prices, has been accompanied by an easing of credit standards, in an environment of increased competition among institutions. The national macroprudential authority has issued a recommendation on new credit agreements for consumers, in particular credit relating to residential immovable property, credit secured by a mortgage or equivalent guarantee. The macroprudential measure includes a set of recommendations on limits to the ratio of the loan amount to the value of the property pledged as collateral (LTV – loan to-value ratio) that, for the purpose of this measure, should be calculated based on the minimum of the property's purchase price and appraisal value. In accordance with the recommendation on the LTV ratio, new credit agreements relating to residential immovable property and credit secured by a mortgage or equivalent guarantee should observe the following limits: • Limit to the LTV of 90% for credit for own and permanent residence; • Limit to the LTV of 80% for credit for purposes other than own and permanent residence; • Limit to the LTV of 100% for credit for purchasing immovable property held by the credit institutions themselves and for property financial leasing agreements. This recommendation enters into force on July 1, 2018.

Any distinction made between residential and non-residential loans:	Loans for residential purpose comprise (i) mortgage loans and (ii) other related-mortgage loans. (i) Mortgage loans cover credit agreements for the acquisition or construction of permanent, secondary or for-rental housing. They also include credit agreements for the acquisition or maintenance of property rights over existing or projected land or buildings and credit for the payment of the signal due under the future acquisition of property for permanent, secondary or for-rental housing. This is typically a credit with a long term, in which, in general, the mortgage of the house is given as a guarantee of repayment. (ii) Other mortgage-related loans are loans celebrated with individuals that are subject to the mortgage loans rules. Thus, they are covered by the following rules: • Credit agreements that, while not corresponding to a mortgage loan, are secured by a mortgage or other equivalent guarantee usually used on real estate; • The leasing of immovable property for permanent, secondary or rental purposes.
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 2016 had an average maturity of 32.8 years (+9 months per contract when compared to 2015), 10 months higher comparing to the contracts portfolio. The maximum term contracted in 2016 was 50 years, equal to the verified during the previous three years. Although, In accordance with recommendation of the regulatory entity that enters into force on July 1, 2018, new credit agreements should observe the following limits: • Limit of 40 years to the original maturity and gradual convergence towards an average maturity of 30 years by the end of 2022 for new agreements for credit relating to residential immovable property or credit secured by a mortgage or equivalent guarantee; • Limit of 10 years to the original maturity for new consumer credit agreements. In line with international guidelines, and in recognition of the importance of ensuring that the original maturity of loans allows some flexibility in case of default or difficulties in the payment of credit agreements, limits should be applied to the original maturity, depending on the type of credit.
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 of funding (LTD ratio of 94% as of September 2017). On the customer perspective, commercial banks are the most common providers of mortgage.
Level of costs associated with a house purchase:	The banks usually charge commissions related to study and to open the process. Often these commissions include the costs of evaluation, because the bank always requires a report with the evaluation of the property, carried out by a technician. There are also other bureaucratic charges related with the necessary procedure with the registration, at the Land Registry, with Municipality Council and Notarial Office. Also there are specific taxes related with house transaction, as the payment of municipal tax on real estate (IMI) and municipal tax on onerous transfer of property (IMT).
The level (if any) of government subsidies for house purchases:	Since September 30, 2012 it is not any more 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 November 9).

Romania

By Christian Dragos and Ştefan Dina, Romanian Association of Banks

IN A NUTSHELL

- → The stock of housing loans increased by 10.3% y-o-y.
- → The price of residential properties increased by 6% y-o-y.
- → Due to sustained wage increases and low interest rates, housing loans became more affordable than ever.

MACROECONOMIC OVERVIEW

In 2017 growth has continued for the seventh consecutive year pushed up by consumption and gross capital formation. The share of gross residential fixed capital formation in total gross fixed capital formation registered the highest post 2008 level (13.6%), up by 5.4 pps compared to 2008. The GDP annual growth rate at 6.9% was the highest of the period despite of the fact that import growth outpaced that of exports and net exports almost tripled compared to the last year denting 0.8 pps from the overall GDP growth. The GDP per capita reached EUR 9,500 and represented 32% of EU average.

The expansionary budgetary stance, the strong consumer confidence in most part of the year, the solid growth in the EU, which is the main export destination of Romania, the outstanding agricultural year, all contributed to the accelerated growth rate.

The strengthened job creation pushed the employment rate to the highest level in the last 20 years, but the accelerated growth of wages, driven by a minimum wage hike, public wage increase and historically low unemployment ignited inflation, which was close to the upward limit of the targeted interval (2.5%±1%) by end of the year.

2017 was the second year when the deficit of the general consolidated budget approached the maximum level of 3% of GDP stipulated in the Stability and Growth Pact (2.9% in 2017 and 3% in 2016). Nevertheless, the gross public debt to GDP ratio declined for the third consecutive year in 2017 up to 35% of GDP, one of the lowest ratio in the EU, but the current account deficit was pushed up to 3.4% of GDP from 2.4% of GDP in 2016 and the domestic currency weakened in relation with euro.

HOUSING AND MORTGAGE MARKETS

In 2017 the rise of finished dwellings has continued, but at a slower pace than in the previous year. The number of licenses issued for residential constructions, on the contrary, accelerated and rose by 7.6% y-o-y, especially due to licenses issued in rural areas. The price of residential properties increased by 6% y-o-y, led by the new dwellings since the price of the old dwellings stayed still. The price increase was broad based with a slight difference between the prices of apartments located in the capital (up by 8.3% y-o-y) and the ones outside (up by 7.9% y-o-y). The double-digit growth of wages coupled with the double-digit growth of housing loans at historical low interest rates contributed to the rise in prices. In 2017 the number of years paid with average net wage necessary to buy an old 3 rooms apartment in capital was 13-14 years compared to 33-34 years in 2008. This context determined the central bank to carefully monitor the evolution of residential property prices, considered since May 2017 a low systemic risk. Moreover, since the median value of housing loan rose by 13% between April 2017 and Mar 2018 compared to April 2016 and Mar 2017, according to Financial Stability Report (June 2018) the changing trend in the interest rate on domestic currency loans may put pressure on the vulnerable borrowers' capacity to service their debt. This situation prompted the central bank to consider as high systemic risk the default risk for loans to the private sector and to households in particular.

The housing loans stock reached EUR 14.2bn by end 2017, up by 10.3% y-o-y. The whole increase was due to expansion of housing loans denominated in domestic currency up by 32.6% y-o-y representing 59% of total housing loans by end 2017. The housing loans denominated in foreign currency declined for the fourth consecutive year in 2017 by 11.2% y-o-y. Despite the fact that the compound annual growth rate post 2008 was 11.7%, housing loans in GDP reached just 7.6%, the lowest share in EU. The Romanian housing loans market is young (the first housing loans were granted in 2001) and has a significant growth potential. The first reason is that the percentage of population living in overcrowded houses[1] is high (47% in 2017 compared to 17% the EU average in 2016) and the second reason is that the dwelling stock is old (50% of dwellings are at least 50 years old compared to 35% in EU).

The government guaranteed loans for first home buyers (Prima Casa) launched in mid-2009 supported significantly the expansion of housing loans. The low advance payment required and the ceiling on the price of the house which could be acquired maintained the affordability of house acquisitions[2]. The stock of house loans guaranteed by the state in total housing loans reached around 60% by end 2017. The systemic size of loans granted through Prima Casa and the higher indebtedness of first home buyers during March 2017 - March 2018 compared to standard mortgage loans buyers might require the revision of the eligibility criteria in order to assure the sustainability of the degree of indebtedness.

The average effective annual rate charged for new housing loans denominated in domestic currency was 4.83% in December 2017 up from 3.83% in December 2016. The rising interest rates in the last quarter of 2017 increased the offer of housing loans with fixed interest rates for up to 10Y, such that by end year the weight of these loans in total new housing loans granted reached 25% compared to 5% in December 2016. According to Financial Stability Report (June 2018) the non-performing rate for housing loans declined from 4.7% in Mar 2017 to 3.2% in Mar 2018.

[1] The overcrowding rate is defined as the percentage of the population living in an overcrowded household. A person is considered as living in an overcrowded household if the household does not have at its disposal a minimum number of rooms equal to: one room for the household; one room per couple in the household; one room for each single person aged 18 or more; one room per pair of single people of the same gender between 12 and 17 years of age; one room for each single person between 12 and 17 years of age and not included in the previous category; one room per pair of children under 12 years of age.

[2] Main features: reduced margins, 5% advance payment, 50% guarantee offered by the National Guarantee Fund for Small and Medium Enterprises.

During 2017 according to the bank lending surveys of the NBR while the housing loans credit standards were broadly maintained, the terms and conditions for loans to households for house purchase had mixed evolutions. While the debt service to income and maturity were tightened, the LTV and the non-interest rate charges were relaxed. LTV was 76% for the new housing loans in the last quarter of 2017 compared to 80% in the first quarter of 2017.

NON-MARKET LED INITIATIVES

Several legislative proposals aiming at consumers' protection were initiated during 2017 with significant potential impact on the banks' lending activity. The intention to cap the average effective annual rate charged for housing and consumer loans, the attempt to limit the recoverable amount of the non-performing households' loans sold by credit institutions, the endeavour to remove the enforceability title of a loan contract and oblige banks and non-bank financial institutions to obtain a court sentence in order to initiate enforcement procedures and the volatility of fiscal treatment of sold non-performing loans determined banks to qualify the uncertain and unpredictable legislative framework in the financial area as the main systemic risk in the last quarter of 2017.

MORTGAGE FUNDING

Deposits are the primary source for mortgage funding. During the last years residents' deposits increased faster than non-government loans such that the loan-to-deposits ratio declined from the maximum 1.3 reached in December 2008 to 0.77 in Dec 2017. External financing followed a declining trend, the banks' share of foreign liabilities (out of which funding from parent bank represents around 60%) in total liabilities reached 9.8% in December 2017 down from 11.8% in December 2016.

	ROMANIA 2016	ROMANIA 2017	EU 28 2017
Real GDP growth (%) (1)	4.8	6.9	2.4
Unemployment Rate (LSF), annual average (%) (1)	5.9	4.9	7.6
HICP inflation (%) (1)	-1.1	1.1	1.7
Outstanding Residential Loans (mn EUR) (2)	12,893	14,262	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	804	895	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	10.6	10.8	73.8*
Gross residential lending, annual growth (%) (2)	-1.8	7.5	3.5
Typical mortgage rate, annual average (%) (2)	3.5	3.7	2.4**
Owner occupation rate (%) (1)	96.0	96.9	66.4*
Nominal house price growth (%) (2)	6.0	6.0	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

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. Currently, in Romania, there are 35 credit institutions of which are 7 foreign banks' branches. In addition, according to the National Bank of Romania's General Registry, a total of 152 non-bank financial institutions carry out multiple lending activities, including mortgage loans.
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 grant the majority of mortgage loans in Romania.
Typical LTV ratio on residential mortgage loans:	In 2017/Q4, the average LTV ratio for new loans given in the past three months was around 76%, and the average LTV ratio for the total amount of loans for real estate investments was approximately 83. (Source: www.bnr.ro Bank Lending Survey December 2017)
Any distinction made between residential and non-residential loans:	Romanian credit institutions grant: • mortgage loans (including loans within the "First House" Programme), which are dedicated to residential purposes, more specifically to the acquisition or construction of houses for rental purposes. • consumer loans meant to address consumers' financing needs, with some of the most common being the loans for personal needs.
Most common mortgage product(s):	Currently, in Romania, mortgage lending is driven by loans granted within the "First Home" Programme, launched in 2009 (reduced margins, 5% advance payment, 50% guarantee offered by the National Guarantee Fund for Small and Medium Enterprises (in Ro: FNGCIMM).
Typical maturity of a mortgage:	The maximum lending period for the loans granted within the "First Home" Programme is 30 years. As for standard mortgage loans, other than the ones mentioned above (associated to the First House Programme), the maximum lending period can reach 35 years.
Most common way to fund mortgage lending:	In Romania, the loan / deposit ratio stands at approximately 75%. Thus, credit institutions mainly use funds attracted from clients in order to grant loans. Credit institutions have gradually reduced their dependence on parent banks by increasing their deposits volumes.
Level of costs associated with a house purchase:	A series of costs are applicable to mortgage loans. The most important ones include: • an analysis fee, • 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 about EUR 80-150 plus VAT; • costs related to obtaining the land book extract necessary for signing the mortgage real estate: RON 40 (approximately EUR 9). • notary/legal costs related to signing the mortgage contract, varying based on a number of 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. • 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 either to purchase a house or to build one. The "First Home" programme supports young people who want to purchase their first home via Romanian Government guarantees. The programme was extended to cover home acquisition or building by Romanians living abroad, thus helping them to purchase or build a house in Romania. In 2015, the legislation regarding the "First Home" programme have been further improved to include the opportunity to acquire a second (larger) home, under certain conditions (selling their initial house, a higher new house value or surface compared to the initial house etc.). Also, certain credit institutions have concluded agreements with the National Housing Agency to offer loans for the acquisition or construction of homes. NHA was the first institution to grant mortgage loans, and The Rental Housing Units for Young People Constructions Programme addresses the needs of young people aged 18 to 35, who cannot afford to buy or rent a housing unit on the free market. The Rental Housing Units for Young People are built through the National Housing Agency. On their completion, these housing units are handed over to the local councils which assign them to eligible young applicants. The lands where the housing units are built as well as the necessary utilities are provided by the local councils. 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 Jacek Kubas, European Bank for Reconstruction and Development

IN A NUTSHELL

→ The real GDP growth increased along with private consumption.

→ The real estate market is robust and house prices have surged.

→ Covered bonds are a favourable market tool for mortgage loan financing.

MACROECONOMIC OVERVIEW

Slovakian real GDP growth increased at 3.4% in 2017 compared to 3.3% in 2016 and it is expected to reach 4% in 2019. On an annual basis, investment rate decreased to 2.7% in 2017 from 9.3% in 2016. Hinders of investment are the slow absorption of EU investment funds and delays in infrastructure projects because of litigation.

Unemployment rate for Slovakia in 2017 was 8.1%, but it is expected to fall below 7% in 2019. Annual average growth in industrial output fell from 6% in July to 4.5% in August due to a contraction in the mining, quarrying and manufacturing sector. Low unemployment rates and waste growth contributed to the increase of consumer spending from 2.6% in 2016 to 3.7% in 2017.

The strongest increases in prices were recorded for food, alcoholic and non-alcoholic beverages, tobacco and transport. Lower prices were recorded in communications and education. Annual inflation rate stood at 1.4% in June 2017, up from -0.5% in the same period last year. Core inflation rate stood at 2.8% in Q4, while consumer price index reached 1.8% in December 2017.

In April 2017 Slovakia's public deficit rate reached a mere 1.04% of GDP, which was well below the Finance Ministry's projected goal of 1.29% of GDP. It was the lowest deficit ever, but also the first primary surplus, as the Ministry of Finance reported. This positive development is due to a combination of collection of levies and the positive situation on the labour market.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

Slovakia is the country with the third highest homeownership rate in the EU. With 90.3% of the population owing houses, Slovakia exceeds by far the EU average (<70%).

In Bratislava region, which has the country's most expensive housing, residential property prices rose by 6.7% y-o-y to EUR 1,904 (USD 2,283) per sq. m. during the year to Q2 2017, up from y-o-y rises of 6.3% a year earlier and 2.6% in Q2 2015.

- **Trencin** experienced the biggest rise of about 15.9% y-o-y to EUR 744 (USD 892) per sq. m.
- In **Nitra** house prices surged 15% y-o-y to EUR 668 (USD 801) per sq. m.
- In **Presov** house prices rose by 10.3% y-o-y to EUR 838 (USD 1,005) per sq. m.

The strong economic growth positively affected the real estate market. House prices have surged but so has growth in lending. Household indebtedness in Slovakia is now one of the highest in central and eastern Europe. In early July the Central Bank decided to increase banks' countercyclical capital buffers and tighten mortgage regulations. The measure will come into force in August 2019 and aims to squeeze credit supply and cool the real estate market.

MORTGAGE MARKET

According to the National Bank of Slovakia (NBS), the total outstanding amount of housing loans to households rose by 14.2% to almost EUR24 bn (USD 28.7 bn) from the same period last year. The minimum loan period is usually four years and the maximum is up to 30 years. The maximum loan amount is now 85% of the valuation or the purchase price.

In 2010 interest rates on loans ranged between 3 and 7%. However, due to the Act on Housing Credits – in effect since March 2016 – banks could impose on clients a statutory cap on fees for moving their mortgage loans between them, i.e. early repayment of a mortgage loan through refinancing by another bank. The market reacted by vigorous competition leading to a steep drop in interest rates. As a result, mortgage loan interest rates are currently at historic lows.

Asset quality remains strong with non-performing loans at 4.6%. The authorities are encouraged to impose higher risk weights on mortgage loans with LTV ratios over 80% or on mortgage loans for investment properties.

MORTGAGE FUNDING

Deposits are for the banks one main source and for the Bausparkassen the only source of funding for their mortgage market activities. Short-term deposits and current checking accounts continue to offer a stable, low cost source of funding for the banks and Bausparkassen. Banks also fund the lending activities through issuance of Covered Bonds. Currently a modest EUR 4.2 bn in size and just 0.2% of the total outstanding mortgage covered bond volume in Europe, Slovakia's covered bond market is growing by around 10% a year. 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. This is because they are asset-backed and are perceived as lower risk by investors. The current legal reform will make covered bonds even more attractive funding tool for banks.

	SLOVAKIA 2016	SLOVAKIA 2017	EU 28 2017
Real GDP growth (%) (1)	3.3	3.4	2.4
Unemployment Rate (LSF), annual average (%) (1)	9.7	8.1	7.6
HICP inflation (%) (1)	-0.5	1.4	1.7
Outstanding Residential Loans (mn EUR) (2)	22,508	25,383	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	5,085	5,726	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	46.6	51.0	73.8*
Gross residential lending, annual growth (%) (2)	55.1	-18.3	3.5
Typical mortgage rate, annual average (%) (2)	2.0	1.7	2.4**
Owner occupation rate (%) (1)	89.5	90.3	66.4*
Nominal house price growth (%) (2)	4.2	6.4	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

SLOVAKIA FACT TABLE

Entities which can issue mortgage loans:	Housing finance is raised from (mortgage) banks, Bausparkassen and the State funds.
The market share of the mortgage issuances:	Not available
Proportion of outstanding mortgage loans of the mortgage issuances:	Banks had a market share of 47%, Bausparkassen of 42% and the state funds of 11%.
Typical LTV ratio on residential mortgage loans:	The typical loan to value (LTV) ratio is 70%, but a maximum LTV ratio of 85% is possible.
Any distinction made between residential and non-residential loans:	Not available
Most common mortgage product(s):	Most mortgage loans taken out are loans with a variable rate or with short-term fixed rates.
Typical maturity of a mortgage:	Mortgage loans have maturity of at least 4 years and maximum of 30 years.
Most common way to fund mortgage lending:	Deposits are for the banks one main source and for the Bausparkassen the only source of funding for their mortgage market activities. Banks also fund their lending activities through issuance of Covered Bonds. The current legal reform will make covered bonds even more attractive funding tool for banks.
Level of costs associated with a house purchase:	The round trip transaction costs include all costs of buying and then re-selling a property - lawyers' fees (1% of the property value), notaries' fees (0.01-0.50% (+20% VAT), registration fees, taxes, agents' fees (3% - 6%).
The level (if any) of government subsidies for house purchases:	Subsidies cover up to 30% of construction costs, excluding land price, and soft loans have an annual interest rate of 1% with a repayment period of up to 30 years and with maximum 80% LTV.

Slovenia

By Andreja Cirman, University of Ljubljana

IN A NUTSHELL

- → Slovenian economy characterised by dynamic economic growth and favourable business expectations.
- → Rapid growth in turnover and prices on the housing market.
- → Rigidity in housing supply along with rising speculative investment based demand for residential real estate could contribute to a bubble in residential real estate prices in the future.
- → Steady growth in housing loans.
- → Banks made no significant changes to the credit standards for housing loans.

MACROECONOMIC OVERVIEW

Economic growth in Slovenia remains among the highest in the Euro area in 2017 and stood at 5.0% in year-on-year terms. Exports with real growth of 10.6% remain a strong engine of economic growth, and are strengthening as a result of growth in foreign demand, favourable export structure and companies' improved competitiveness. Domestic demand, which rose by 4%, is gaining in importance as well, with private consumption seeing a rise of 3.2%. Growth in investment in 2017 outpaced the average across the euro area with growth in gross fixed capital formation of 10.3% in year-on-year terms although the ratios of gross fixed capital formation and investment in research and development to GDP remain below average (Financial Stability Report, 2018). With the further relaxation of austerity measures and employment growth in the general government, government consumption also rose by 2.3% in 2017.

Economic climate in the country is continuing to improve and the value added in most sectors increased. The total growth of 5.3% was significantly higher than in 2016 (3.2%) and was attributable to the strengthening of activity in most sectors, particularly manufacturing and construction (Spring Forecast of Economic Trends, 2018).

Last year's increase in demand and favourable business expectations also translated into dynamic growth in employment and gradual strengthening in the growth of gross wages. Employment was up in most private sector activities especially in manufacturing, trade, accommodation and food service activities as well as professional, scientific and technical activities (Spring Forecast of Economic Trends, 2018). Unemployment rate, measured according to the Labour Force Survey, (ILO) stood at 6.6% at the end of 2017.

Consumer prices (HICP) increased by 1.6% overall in 2017 and industrial producer price index was up 2.2% compared to the previous year.

Favourable economic situation also improved country's fiscal position. The general government deficit was 0% in 2017 compared to -1.6% of GDP in 2016. Public debt decreased to 73.6% of GDP (78.6% in 2016). The high economic growth and the fiscal consolidation measures helped Slovenia to earn a sovereign upgrading from two rating agencies (Financial Stability Report, 2018).

HOUSING AND MORTGAGE MARKETS

In 2017 rapid growth in sales continued in the Slovenian Real Property Market and the number of transactions reached a record level. The predominant part of transactions is done on the secondary market as new dwellings contribute only 6% of total volume of transactions on the market. According to Statistical Office figures, the prices of used flats in Slovenia were up 9% in comparison to 2016 and 13% in the capital city Ljubljana. With low interest rates and prevailing optimism on the Real Estate Market further price growth is expected in the future as there is a large gap between supply and demand on the market. Despite favourable economic situation and high demand for housing, housing completions and housing starts continue to be on a very low level. Housing construction remains on the level comparable to 2016 while housing starts increased by 9%, however they are still only a third of the pre-crisis level. The number of issued building permits is gradually increasing (4% in 2017), although no major increase in the supply of housing is expected at least for two or three years yet (especially outside the capital city). Rigid housing supply along with rising speculative investment based demand for Residential Real Estate could in the future contribute to a bubble in Residential Real Estate Prices (Financial Stability Report, 2018).

According to Eurostat only 10% of homeowners in Slovenia had a mortgage at the end of 2016 which is one of the lowest rates in the Euro area (Financial Stability Report, 2018). Growth in the stock of housing loans to households remained stable in 2017 with 4.5% in y-o-y terms and new housing loans increased by 5.5%. Borrowers are continuing to largely opt for housing loans with longer maturities (average maturity in 2017 was 19 years). Although banks gradually started to reduce their offers of fixed rate mortgages, their share continues to grow as more than half of new housing loans are granted on fixed rate (Poročilo o finančni stabilnosti, 2018).

According to the Financial Stability Review (2018) the indicators of the sustainability of housing lending at banks remain stable, and do not suggest any increased risk to the banking system. In general, the banks in 2017 left their credit standards on housing loans unchanged. The average LTV for housing loans remained around 60%.

In 2016 the Bank of Slovenia issued a macroprudential recommendation for the Real Estate Market that includes the recommended maximum level of the LTV ratio and the recommended maximum level of the DSTI (debt service-to-income) ratio. The recommended maximum level of the LTV ratio is 80%, while the recommended maximum level of the DSTI ratio is between 50% and 67%, depending on the monthly income. The macroprudential measures are being introduced as a non-binding recommendation. In 2018 the Bank of Slovenia made a survey on housing loans advanced in period 2015-2018 and banks' compliance with the recommendation. The survey revealed that housing loans are predominantly secured by a mortgage and only 16% is insured by insurance companies. Average DSTI is around 32% and average LTV around 69%. In 2017 there were 27% of the loans not compliant with the recommendation; however the proportion decreased from 32% in 2015 in 2016 (Poročilo o finančni stabilnosti, 2018).

MORTGAGE FUNDING

The mortgage industry in Slovenia is predominantly an integral part of universal banking. Although legislation allows banks to issue mortgage backed securities, no securitisation of residential mortgages has yet taken place. Before the economic crisis in 2008, banks acquired funding on international financial markets to fuel high lending activity, however, the situation changed afterwards.

Nowadays, lending activity is mostly financed by means of rising deposits by the non-banking sector and the LTD ratio for the non-banking sector has stabilised at 72% in 2017. Given the excess of liquidity and the increase in deposits by the non-banking sector, the banks have no need for additional borrowing from the Eurosystem or on wholesale markets, for which reason the importance of these two sources of funding on bank balance sheets is diminishing. Wholesale funding accounted for 7.7% of all funding as at October 2017, just a fifth of its pre-crisis figure. However, the maturity mismatch between investments and funding is continuing to increase as a result of the lengthening maturities of loans and the simultaneous growth in sight deposits by the non-banking sector, which is introducing a certain level of potential instability into the banking system's funding structure (Financial Stability Review, 2018).

References:

Financial Stability Review, January 2018 (2018). Ljubljana: Bank of Slovenia.
Poročilo o finančni stabilnosti, junij 2018 (2018). Ljubljana: Bank of Slovenia.
Spring Forecast of Economic Trends 2018 (2018). Ljubljana: Institute of Macroeconomic Analysis and Development.

	SLOVENIA 2016	SLOVENIA 2017	EU 28 2017
Real GDP growth (%) (1)	3.1	5.0	2.4
Unemployment Rate (LSF), annual average (%) (1)	8.0	6.6	7.6
HICP inflation (%) (1)	-0.2	1.6	1.7
Outstanding Residential Loans (mn EUR) (2)	5,717	5,976	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	3,359	3,512	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	23.2	23.0	73.8*
Gross residential lending, annual growth (%) (2)	19.5	5.6	3.5
Typical mortgage rate, annual average (%) (2)	2.3	2.5	2.4**
Owner occupation rate (%) (1)	75.1	n/a	66.4*
Nominal house price growth (%) (2)	3.3	8.1	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

SLOVENIA FACT TABLE

Entities which can issue mortgage loans:	Commercial banks, savings banks, National Housing Fund
The market share of the mortgage issuances:	Data on market share not available
Proportion of outstanding mortgage loans of the mortgage issuances:	Commercial banks and savings banks close to 100%, share of the NHF is negligible
Typical LTV ratio on residential mortgage loans:	The typical LTV ratio on new residential mortgages is 60%
Any distinction made between residential and non-residential loans:	Residential loan is designated for purchase or renovation of housing
Most common mortgage product(s):	20 year variable rate mortgage & 15 year fixed rate mortgage
Typical maturity of a mortgage:	Average maturity in 2017 is 19 years
Most common way to fund mortgage lending:	Mortgage funding in Slovenia is mainly deposit-based
Level of costs associated with a house purchase:	2-4% (2% transfer tax, up to 2% for real estate agency fee if realtor was used)
The level (if any) of government subsidies for house purchases:	No subsidies

Spain

By Leyre Lopez, Spanish Mortgage Association

IN A NUTSHELL

- → The Spanish macroeconomic dynamics continued the positive path seen in 2016, contributing to the consolidation of the financial system in terms of new production, whilst two challenges have further remained alive: bank profitability and the market deleveraging.
- → The real estate market has continued gaining momentum, as a result of the domestic and external demand.
- → Continuous demand has had its incidence in housing price, in less or more degree, depending on the geographical area.

MACROECONOMIC OVERVIEW

The Spanish economic activity maintained the favourable behaviour seen in the past years, concluding 2017 with an average annual variation in real GDP of 3.1% (EU 2.5%). In quarterly terms, the economy has recorded four years in a row with positive variations. This favourable trend is likely to persist in the coming years, albeit at a slower pace, given the expected stabilisation of private consumption, resulting from the slowdown in the job creation, in a context of gradual withdrawal of monetary stimulus. The political situation may also play an important role in the economy performance.

On the expenditure side, the well performance of economy was underpinned by domestic demand. To this progress has also contributed the positive development of gross fixed capital formation (5.0%), boosted by the increase in the national and external demand, especially the residential market showed a great dynamism, growing by 8.3%. The input to the economy by the external sector was of 0.3%, given that the import rate (4.7%) was surpassed by the export rate (5.0%).

With regard to the labour market, the unemployment rate stood at 17.2% in 2017, the lowest level reached since the bursting of the crisis. On the other hand, the figure of job creation amounted to 490,300 according to the Labour Force Survey. Despite these efforts, the aftermath of the crisis continued to be visible, especially in job quality.

Inflation rose in the first months of 2017, as a consequence of the increase in fuel and energy prices, gradually slowing on a monthly basis, setting the harmonized consumption prices index (HICP) in average terms at a rate of 2% in 2017.

On the liabilities side, Spain met with the objective committed in terms of public deficit (3.1%). However, the volume of government debt maintained its upward course, closing 2017 in EUR 1,144.3 bn (+3.3% y-o-y) although the ratio of public debt in relation with the GDP dropped by 0.7% y-o-y, up to a rate of 98.3%. Even so, two tenths higher than the EU Commission commitment.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

The real estate sector continued featuring the expansive path started four years ago. The key drivers lied in the ongoing strength of the economy context during these last years, coupled with a stronger business and consumer confidence under a scenario of financing consolidation. Because of these fundamentals, there was an acceleration in housing transactions, amounting to 532,367 units in 2017, from 457,738 transactions in 2016 (+ 16.3%). Of these figures, 16.8% were foreigners, while 82.8% were Spanish residents (a more marginal share of 0.4% corresponded to non-identified buyers). First time buyers (FTB), who used to play an important role in the market before the crisis, currently play a more residual role due to the difficult access to finance.

Housing prices continued to drive up given the supply-demand imbalance. The faster growth was in the major cities and coastal regions. Housing market-price (measured as appraisal value) improved by 2.4% y-o-y nationally and it can be considered the best figure seen since 2007.

While demand has been increasing (up), supply remains tight, mainly due to the lack of buildable land. New housing starts slid by91% from the peak of the real estate bubble (2006: EUR 865,561) to 80,786 units in 2017, despite there was a double-digit growth of 26.2% during the last year.

Market dynamic has put the spotlight back to developers and SOCIMIS (the Spanish version of REITs[1] created in 2009) enabling partly to meet costumers needs, both for housing ownership and renting.

MORTGAGE MARKETS

Market dynamics

Since 2014 the positive trend in the macro-economic framework fostered by expansionary monetary and financial conditions have driven the consolidation of the mortgage market, especially in terms of production of new credit.

2017 showed an increase of 3.7% in gross residential lending, amounting to EUR 38.9 bn. Over the last two years, gross lending figures have recorded a remarkably deceleration in the upward trend with respect to the turning point (2014/2015), which can be mainly explained by the fall of remortgaging loans, which assembled from 25.9% in 2015 to 6.1% in 2017 (17,1% in 2016).

With respect to the outstanding residential mortgage portfolio, the growth in new lending was not enough to compensate amortisations and cancelations of loans, which decreased by 2.6% y-o-y with respect to the figure observed in 2016, up to EUR 497.7 bn. Even so, Spain continued the ongoing deleveraging started in 2009, which appears to be closer to its end.

[1] Real Estate Investment Trust

In tune with the monetary policy adopted by the ECB by injecting liquidity to help markets operate and hence, by lowering rates for an extended period of time, the weighted average interest rate for new loans in 2017 came to 1.95% maintaining the downward trend started in 2011, when the interest rate was a 1.42 pps over up to 3.37%.

However, this has had concerning secondary effects on Spanish bank profitably, due to the high proportions of floating interest rates agreements in the outstanding portfolio.

The market share of new fixed interest rate loans represented about 58% in 2017, from 11% in 2009, given the stability they offer to financial entities and to family economy, under the competitive financial offer that the monetary framework has enabled.

Regarding to other mortgage dynamics, the maturity period of new residential loans in 2007 stood at 23.4 years, showing a slight increase from the figure seen in 2016 (23.1 years). LTV ratio for new credits closed 2017 in average terms at 65.1% from 63.9% observed in 2016, although loans with a LTV over 80% have dropped slightly from 14.3% in 2016 to 14.0% in 2017.

The active policy of divestment of Non-Performing Assets (NPAs) adopted by financial entities, together with the favourable scenario of the Spanish economy may explain the improvement in the financial system and, especially, in their doubtful portfolios. In 2017, NPLs of Spanish private-sector credit had continued the positive path started in early 2014, with a doubtful ratio of 7.8%, compared to the 9.1% observed in 2016. However, NPL ratio for housing purchase did not improved roughly compared to 2015 or 2016, setting its rate at 4.7% in 2017 (4.7% in 2016, 4.8% in 2015) due partly to the suspension of foreclosure process in this activity.

Non-market led initiatives

The Bill regulating real estate credit contracts was passed in November 2017 by the Spanish Government, with the conservative Mariano Rajoy as Prime Minister.

This piece of legislation introduces significant innovations on the mortgage regulation currently in force, in order to incorporate to the Spanish legal system, the content of the Mortgage Credit Directive (Directive 2014/17/EU), albeit belatedly. Nevertheless, the intention has been to go one step further and to reinforce the legal certainty, the transparency and the balance in the mortgage credit contracts.

Some of the new provisions introduced by this Bill are those regarding the enhancement of transparency throughout the contractual stage, the reinforce of the control by Notaries and Registrars, and the provisions regulating controversial issues, such as binding practices, the consumer rights referred to multi-currency mortgages, the interests on arrears, the accelerated repayment or early repayment.

The Bill, which was being studied by the Spanish Parliament, is now pending on the new political phase.

MORTGAGE FUNDING

In 2017 no significative changes in the source of funding occurred. Mortgage bank funding depends mainly on saving deposits and Spanish CBs.

Saving deposits of real estate sector[2] at a national level amounted to EUR 1.15 bn (+0.5% y-o-y), representing near to 95% of the entire portfolio with respect to the remaining 5% of government and local authorities. Due to the moderate profitability that this funding mechanism offers to clients (nearly zero rates as the deposit facility remain at -0.4%), there has been a substitution from fixed-term deposits (-32.4% y-o-y) into call deposits (+13.7% y-o-y).

The downward credit trend, although much more moderate, and the recovery of private sector resident deposits in recent years has allowed for a significant reduction of the credit/deposits ratio at a steady pace. Thus, Loans-to-deposits ratio (considering the private sector residents) stood at 109.3% by the end of 2017, while during the real estate upswing (2007) recorded a rate of 168.9%.

In terms of outstanding mortgage lending, covered bonds portfolio that accounts for near 39%[3], fall by 6.5% y-o-y in 2017 to EUR 216.5 bn.

The MBS market plays a more marginal role, ending 2017 with an outstanding amount of EUR 112.9 bn (-8.5% y-o-y). This funding mechanism that has historically enabled the freeing up of regulatory capital, remains on a high fluctuation path, both in positive and in negative terms, but still far from pre-crisis levels.

The standardisation process of the monetary policy is likely to have a positive impact in terms of mortgage funding issues over the coming quarters.

	SPAIN 2016	SPAIN 2017	EU 28 2017
Real GDP growth (%) (1)	3.3	3.1	2.4
Unemployment Rate (LSF), annual average (%) (1)	19.6	17.2	7.6
HICP inflation (%) (1)	-0.3	2.0	1.7
Outstanding Residential Loans (mn EUR) (2)	511,253	497,711	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	13,421	13,039	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	73.0	69.7	73.8*
Gross residential lending, annual growth (%) (2)	5.0	3.7	3.5
Typical mortgage rate, annual average (%) (2)	2.0	2.0	2.4**
Owner occupation rate (%) (1)	77.8	n/a	66.4*
Nominal house price growth (%) (2)	1.9	2.4	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

2 The updated data on this chapter have been adapted to the new European framework criteria followed by the Bank of Spain.To this end, there has been a break in the statistics series, which lead to variations with respect to the past exercises.

3 Latest data known of total outstanding mortgage loans correspond to March 2017.

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 specially 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:	In 2017 around an 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, the LTV ratio on new residential mortgage loans stands at around 65% (according to Bank of Spain statistics). The most common LTV for first time buyers is 80%.
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 is 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). Since the end of 2008, initial-fixed interest rate mortgage loans, with a fixation period up to 5 year, have gaining increasing importance in the market, representing nowadays around a 27% of gross lending. As well, 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 gaining momentum, representing around 27% of gross lending.
Typical maturity of a mortgage:	The average maturity for a mortgage loan in Spain is 20-25 years. Although the real amortisation period is usually lower, between 10 to 15 years.
Most common way to fund mortgage lending:	Deposits, covered bonds and RMBS/CMBS.
Level of costs associated with a house purchase:	The main transactions cost associated with house purchase are VAT for new housing, that represents a 10% of the value of the house and the Tax on property transfer for second hand dwellings (normally between 6-10%, depending on the geographical area). Other transaction costs like land property registration, certified legal documents tax, notary fees, and costs related with the mortgage can come to a 3-5% of the housing value.
The level (if any) of government subsidies for house purchases:	In 2013 the tax relief that had been into force for home buyers ended. In 2018 has come into force a new State Housing Plan for 2018-2021 which seeks to facilitate access to housing property for vulnerable young people under 35 years old whilst at the same time tries to boost the regeneration of urban and rural areas affected by depopulation.

Sweden

By Christian Nilsson, Swedish Bankers' Association

IN A NUTSHELL

- → Construction figures increased further in 2017 and reached the highest numbers since the beginning of the 1990s.
- → House prices grew slower in the end of 2017 and apartment prices even fell at the end of the year.
- → Authorities introduced an additional amortisation requirement for loan-to-income ratios higher than 450% (gross income), which entered into force in March 2018.
- → Residential mortgage lending growth levelled off in 2017 at 7.1%.
- → Mortgage interest rates continued being low and stable in 2017.

MACROECONOMIC OVERVIEW

Sweden's GDP increased by 2.3% in 2017 according to Eurostat. The household consumption contributed to the total GDP growth with 1.1 pps and public consumption contributed with 0.1 pps. Gross fixed capital formation increased by 6% and added to the GDP growth with 1.5pps. The high level of residential construction is an important factor behind the increasing gross fixed capital formation. Changes in inventories added to the GDP growth by 0.1 pps. Imports increased more than exports and, therefore, net exports held back GDP growth by 0.3 pps.

Market production of goods and services increased by 2.9% in 2017. Production of goods rose by 3.8% and service-producing industries rose by 2.4%. The number of employed in the economy increased by 2.3%. The employment rate, measured as the total number of hours worked, increased by 1.2%. The unemployment rate fell to 6.7% in 2017 from 7.0% in 2016. Even though unemployment is falling due to robust growth, it is higher now than in the previous cyclical peak, according to the NIER (National Institute of Economic Research).

Inflation has increased slightly during 2017 and was 1.7% at the end of the year. The same development has been observed for the core inflation, which was 1.9% at the end of 2017.

Government debt as a percentage of GDP was 29% in 2017, down from 31% in 2016, according to the Swedish National Debt Office. The Swedish central government showed a budget surplus of SEK 61.8 bn in 2017, compared with a surplus of SEK 85.3 bn in 2016. Among other things, rising employment and high housing investment contributed to the development according to the Debt Office.

HOUSING AND MORTGAGE MARKETS

HOUSING MARKET

Housing completions have increased for four years in a row and reached around 48,200 dwellings in 2017 compared to 42,400 dwellings in 2016 (+13.6%). The figures are expected to level off as housing prices have started to decline in 2018. Housing starts have increased by 5.5% in 2017 to around 63,600 dwellings. This is the highest figure since the beginning of the 1990s, but the pace of growth has slowed down. Similarly, building permits have continued to increase in 2017 by 7.6% to 70,000 permits. Even though the housing market has cooled down, there is a lack of housing, especially in the larger cities. However, prices are high and new amortisation rules have limited the possibilities for some demographic groups to enter the housing market.

Prices on one-family homes increased by 8.3% during 2017, which is about the same as in 2016. The Stockholm region is the part of Sweden where one-family homes are most expensive. In the autumn of 2017, the market for housing started to change and the cooling off started in Stockholm where one-family homes increased by a more moderate 5.5% in 2017. However, the trend of increasing prices seemed to continue at the end of 2017 in the Gothenburg and Malmö regions, where prices increased by 10.8% and 10.2% respectively.

The prices for tenant-owned apartments increased by around 5% in 2017 compared to around 9% in 2016. The slowdown in prices for tenant-owned apartments in 2017 is due to the apartment prices standing still in the autumn and even starting to fall at the end of 2017.

House prices started to cool off in the autumn of 2017 and falling prices have continued in 2018. One factor which has influenced the market is that amortisation rules have been introduced to curb interest-only loans. Another factor is that construction has reached relatively high levels and has created a larger supply of housing in certain segments.

MORTGAGE MARKETS

Residential mortgage lending grew by 7.1% in 2017, which is only marginally slower than in 2016. The growth rate of residential loans has been levelling off for the last two years, however at a relatively high level.

Several factors, which have been similar for a number of years, explain the increase in residential lending. The Swedish population is growing in record numbers due to high immigration and relatively high birth rates. The internal migration rate towards the south and larger cities has driven the housing markets in expanding areas. This, in combination with a long period of comparably low residential housing construction, has created a severe lack of housing and housing imbalances. Another factor is the dysfunctional rental market in the growth regions due to a general rent control, which results in many years of queuing to get a rental apartment on the first-hand market. If you move to a city in a growth region in Sweden, you normally have to buy an apartment or rent a second-hand apartment, usually at a cost far higher than rents on the first-hand market. An additional factor is historically low mortgage interest rates. In addition, the high construction figures over recent years of, above all, tenant-owned apartments, have created a demand to finance all the new apartments with mortgage loans.

The authorities have tried to restrain the development of increasing household debt with different measures. An LTV-roof of 85% on new mortgage lending has been imposed and risk weights on mortgage lending have been increased.

For several years, interest-only loans have been curbed by the banks. In June 2016, an amortisation law was imposed which means that all new mortgage loans above 50% LTV must amortise. Finansinspektionen (the Swedish Financial Supervisory Authority) added new amortisation rules in March 2018 when additional amortisations for LTIs above 450% (gross income) entered into force.

Mortgage interest rates have been relatively stable for the last three years. The variable (three-month) mortgage interest rate has varied between 1.5% and 1.6% during 2017, which is about the same level as in 2015 and 2016. The initial fixed mortgage interest rates, one to five years, have varied between 1.6% and 1.7% in 2017. which is also the same levels as previous years. Initial fixed mortgage interest rates for periods over five years were at record lows in 2017 and reached levels below 2% in the second half of 2017.

Finansinspektionen, writes an annual report on the mortgage lending market. The report is an important part of Finansinspektionen's analysis of the mortgage market and the debt situation of Swedish households. Finansinspektionen writes in the latest report that the amortisation on new mortgage loans has increased continuously since 2011. The share of households amortising and the average size of the amortisations increased markedly in 2016 as the new amortisation rules entered into force. The share of households with new loans that amortise was 79% in 2017, which is slightly higher than in 2016. The average LTV for new mortgage loans is 63% in 2017, which is lower than in 2016.

The credit losses on mortgage loans have been very low in Sweden for many years. The credit loss ratio has been very close to zero for several years, including 2017.

MORTGAGE FUNDING

Covered bonds are the most common form of funding used in the Swedish market for funding of mortgages. During 2017, the Swedish stock of covered bonds increased by 1.6% (in SEK) to EUR 219 bn. The Swedish mortgage institutions issued new covered bonds amounting to EUR 50 bn in 2017.

	SWEDEN 2016	SWEDEN 2017	EU 28 2017
Real GDP growth (%) (1)	3.2	2.3	2.4
Unemployment Rate (LSF), annual average (%) (1)	7.0	6.7	7.6
HICP inflation (%) (1)	1.1	1.9	1.7
Outstanding Residential Loans (mn EUR) (2)	387,000	402,250	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	49,451	50,797	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	164.5	167.4	73.8*
Gross residential lending, annual growth (%) (2)	-2.3	0.9	3.5
Typical mortgage rate, annual average (%) (2)	1.6	1.6	2.4**
Owner occupation rate (%) (1)	65.2	n/a	66.4*
Nominal house price growth (%) (2)	8.4	8.3	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

SWEDEN FACT TABLE

Entities which can issue mortgage loans:	There are no specific limitations as regards issuing mortgages. In practice 99,9% of all mortgage lending in Sweden is issued by banks and credit market institutions. New non-bank actors are entering the market, but have yet a limited stock of mortgage loans.
The market share of the mortgage issuances:	There is an approximate share of 75% for credit market institutions (mortgage credit institutions) and 25% for banks. Other actors are not measured by the authorities yet, but probably have limited market shares.
Proportion of outstanding mortgage loans of the mortgage issuances:	Approximately the same as in question 2 above.
Typical LTV ratio on residential mortgage loans:	According to Finansinspektionen the average LTV for new mortgage loans in 2017 was 63%.
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 is the most common interest rate on mortgages.
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.
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.

United Kingdom

By James Tatch, UK Finance

IN A NUTSHELL

→ Benign labour market conditions and low interest rates continue to underpin housing market resilience.

→ Regional disparities continue, with activity and prices in the south and London beginning to moderate.

→ First time buyer activity regained 2007 levels, but home movers have been left behind.

→ Regulation and taxation have had a significant negative effect on buy-to-let activity.

→ Arrears and possessions continue to fall and are at historic lows.

MACROECONOMIC OVERVIEW

Economic growth in the UK notched down slightly in 2017, growing by 1.8%, compared to 1.9% in 2016. Despite the fall this still exceeded the public forecast of 1.5% produced by the Office for Budgetary Responsibility. Towards the end of the year growth was boosted by the service sector and production, however the construction sector saw a modest contraction.

The labour market continued to perform strongly in 2017; the unemployment rate fell from 4.7% at the end of 2015 to 4.3% by the end of 2017. In level terms, there was a fall of some 127,000 employed people lowering the total to 1.45 million. Employment numbers rose by a little over 400,000 over the course of 2017, leading to an employment rate of 75.4%, up from 74.6% at the start of the year. This employment rate is the highest in half a century.

Inflation started the year at 1.8%, but in February it breached the government's 2% target rate and rose fairly steadily throughout the rest of the year, reaching 3.0% in December, Sterling depreciation has exerted steady pressure on import costs, which has fed through to store prices.

In November 2017 the Bank of England raised interest rates from its record low of 0.25% back to 0.5%, where it had been since 2009, whilst reiterating its previous statement that future interests would be both gradual and limited.

The government continued in its push to reduce public borrowing. At the time of the Spring 2018 Statement the Office for Budget Responsibility (OBR) was projecting that the government will reduce its net borrowing position to below 2% of GDP by the end of 2018-19, and that borrowing will continue to fall to under 1% by 2022-23.

HOUSING AND MORTGAGE MARKETS

MORTGAGE MARKETS

The UK housing market remains unbalanced, with the long term gap between demand and supply of housing continuing to place upwards pressure on prices and rents. There has however been a pick up in construction, boosted by government initiatives focused on new build. In the homeowner sector, the Help to Buy Equity Loan scheme for home buyers (FTBs in particular) has provided a boost to purchases of new build properties, although the evidence of any additionality to homebuilding is mixed. In the rented sector, the Build to Rent scheme has helped stimulate construction activity across a range of property types, for both affordable housing and market rent.

Against this background construction has increased such that there were 190,000 housing starts in the UK last year, the strongest numbers in a decade. This level is still short of the levels needs to start closing the supply gap, with around 250,000 additional households projected per year on average.

Following the housing market downturn of the late 2000s, prices overall recovered relatively quickly. At the UK level prices had recovered to their pre-downturn levels by 2014. However regionally there are, as always, some quite substantial differences in markets. The southern areas of England, and most significantly London, grew strongly. The average price in the capital, as measured by the Land Registry index, was GBP 481,000 in 2017, 67% above its previous (2007) peak. However, in those regions that saw the most pronounced negative economic impacts in the downturn, prices have yet to recover. Most significantly prices in Northern Ireland, which saw the greatest housing boom and bust across the UK, remain some 40% below their peak levels.

Responding to the growth in prices, affordability in the Southern regions has become more restrictive and, in 2017, price growth has slackened off. Throughout 2017, house price inflation in London fell from 5% to under 2% by the end of the year, the lowest growth rate across all UK regions. However almost all other regions were still showing growth better than twice that rate.

MORTGAGE MARKETS

Market dynamics

The mortgage market remains dominated by fixed rate lending, with over 90% of new lending (both residential and buy-to-let) at fixed rates. Historically, UK borrowers have tended to opt for 2 and 3 year fixed rates, however there has more recently been a significant shift towards lending fixed for 5 years or more (but predominantly at 5 years). Lenders are not required to assess borrowing at a stressed interest rate for loans where the rate will be fixed for 5 years or more, however it is also relevant that the lower cost of funding longer term fixed rates has driven down pricing, and so five year fixed rate deals are historically very favourably priced.

With the continuing benign labour market and ultra-low interest rate environment, mortgage arrears and possessions have fallen year on year since 2009. In 2017 there were 88,000 mortgages in arrears of over 2.5% of the mortgage balance, and 7,400 possessions. This is the lowest arrears number since this measure was first collected in 1995, and the lowest annual number of possessions since 1980.

Non-market led initiatives

There was a significant diversion of trends within house purchase activity in the UK in 2017. The homeowner sector continued to grow and, in particular, the number of mortgages for first time buyer purchases reached 363,000, a level not seen since 2006. But although mortgages for home movers also increased, the 375,000 loans in 2017 was still only around half the level seen in 2006.

Buy-to-let saw a markedly different path. The sector has been the subject of a number of government and regulatory measures aimed at moderating BTL activity, which have made a significant impact.

Since Spring 2016 all buy-to-let purchases are subject to an additional 2% Stamp Duty on the property value. In 2016 this had the effect of bringing forward a significant volume of activity into the first three months, with a compensating drop off thereafter. In 2017 however, with the surcharge in effect for the full year, there was no such bunching of activity at the front end.

Secondly, since January 2017, BTL mortgages have been subject to underwriting requirements set out by the Prudential Regulation Authority. These stipulate that the majority of BTL loans must satisfy affordability requirements, both at the initial interest rate and under a higher stressed rate. In Q3, additional requirements came into place with respect to BTL loans to portfolio landlords (borrowers with 4 or more mortgaged BTL properties).

Finally, in fiscal year 2017-18, the government began its staged phasing out of interest rate relief for BTL mortgages. This process, which will complete in fiscal year 2020-21, reduces the long-term profitability of BTL as an investment and is probably the most powerful brake on activity of the three measures.

As a result of these measures, BTL activity fell dramatically in 2017. There were 75,000 BTL house purchase mortgages, down 27% on 2016.

MORTGAGE FUNDING

The Bank of England's Term Funding Scheme continued in 2017, enabling lenders to continue to access cheap finance and pass on the low price in lending to the real economy. This, as well as continuing relatively healthy levels of retail deposits, have resulted in muted levels of funding required from capital markets outside the TFS. The end of the TFS, in February 2018, will likely result in a commensurate increase in access to these markets.

	UK 2016	UK 2017	EU 28 2017
Real GDP growth (%) (1)	1.8	1.7	2.4
Unemployment Rate (LSF), annual average (%) (1)	4.8	4.4	7.6
HICP inflation (%) (1)	0.7	2.7	1.7
Outstanding Residential Loans (mn EUR) (2)	1,546,503	1,539,979	7,013,738
Outstanding Residential Loans per capita over 18 (EUR) (2)	29,985	29,673	16,872
Outstanding Residential Loans to disposable income ratio (%) (2)	94.7	98.7	73.8*
Gross residential lending, annual growth (%) (2)	-1.5	-2.6	3.5
Typical mortgage rate, annual average (%) (2)	2.3	2.0	2.4**
Owner occupation rate (%) (1)	63.4	n/a	66.4*
Nominal house price growth (%) (2)	7.0	4.6	6.0

* The aggregate EU figure is from 2016.
** Please note that this value is the simple average of the typical interest rate of the EU 28 countries.

Sources:
(1) Eurostat
(2) European Mortgage Federation - Hypostat 2018, Statistical Tables.

UNITED KINGDOM FACT TABLE

Entities which can issue mortgage loans:	Monetary and Financial Institutions (MFIs), which includes banks and building societies. 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). Other (anything not covered elsewhere).
The market share of the mortgage issuances:	**MFIs** – 92% **Other specialist lenders** – 7% **Other** – 1%
Proportion of outstanding mortgage loans of the mortgage issuances:	**MFIs** – 87% **Other specialist lenders** – 9% **Other** – 4%
Typical LTV ratio on residential mortgage loans:	77%
Any distinction made between residential and non-residential loans:	*[We have taken non-residential loans to mean commercial in this context]* The distinction is based on the property being purchased and the purpose it will be used for. A residential loan is used to purchase a property that a person will live in. 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 **Valuation fee** – ranges from GBP 150 to GBP 1,500, depending on property value **Surveyor's fee** – ranges from GBP 250 to GBP 600 **Legal fees** – ranges from GBP 500 to GBP 1,500 **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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	61,793	65,897	72,061	73,455	80,008	83,960	86,281	87,622	90,710	96,925	101,168	104,296
BELGIUM	114,105	126,383	137,016	151,738	161,723	172,049	183,615	189,484	196,877	207,117	220,114	233,224
BULGARIA	n/a	2,795	3,806	3,798	3,714	3,589	3,573	3,507	3,499	3,522	3,700	4,190
CROATIA	5,201	6,473	7,501	7,663	8,258	8,363	8,293	8,059	7,865	7,734	6,947	7,101
CYPRUS	5,421	6,935	8,501	10,388	11,921	12,545	12,679	11,854	11,655	11,661	11,515	11,123
CZECH REPUBLIC	8,675	12,539	14,786	20,942	24,128	25,556	27,851	27,222	28,732	32,085	34,940	45,160
DENMARK	177,868	195,693	207,267	216,697	224,036	228,743	230,741	231,850	234,518	238,848	243,751	248,776
ESTONIA	4,278	5,626	6,209	6,111	5,973	5,882	5,846	5,896	6,064	6,323	6,661	7,107
FINLAND	55,307	62,172	67,632	71,860	76,747	81,781	86,346	88,313	89,762	91,955	94,056	96,129
FRANCE	572,600	646,500	700,200	730,500	795,200	843,200	870,040	814,627	833,120	866,401	899,358	954,226
GERMANY	1,183,834	1,155,742	1,145,404	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
GREECE	57,145	69,363	77,700	80,559	80,507	78,393	74,634	71,055	69,408	67,593	61,397	58,812
HUNGARY	13,688	17,397	22,346	22,463	24,659	21,950	19,985	18,499	17,146	14,943	14,024	13,602
IRELAND	123,988	140,562	148,803	147,947	103,043	100,588	97,462	94,862	90,593	87,898	86,195	84,045
ITALY	244,314	265,454	264,288	280,337	352,111	367,645	365,588	361,390	359,137	362,332	368,169	375,398
LATVIA	4,639	6,702	7,192	6,870	6,559	5,991	5,334	5,062	4,703	4,503	4,412	4,363
LITHUANIA	2,997	4,849	6,055	6,027	5,983	5,866	5,811	5,836	5,996	6,168	6,584	7,173
LUXEMBOURG	12,018	14,676	15,940	17,077	18,591	20,255	21,715	23,389	25,038	26,599	28,314	30,656
MALTA	1,770	2,015	2,220	2,458	2,666	2,893	3,088	3,278	3,592	3,905	4,204	4,548
NETHERLANDS	548,141	584,967	615,125	638,045	655,737	667,331	671,166	654,023	651,607	656,015	664,416	672,235
POLAND	20,480	32,733	46,573	52,545	67,526	71,883	79,434	80,812	82,555	90,901	92,015	93,111
PORTUGAL	91,896	101,094	105,209	110,685	114,515	113,916	110,520	106,585	102,469	98,516	95,377	94,093
ROMANIA	2,176	4,203	5,270	5,733	6,763	7,596	8,767	9,257	10,105	11,522	12,893	14,262
SLOVAKIA	5,209	6,773	8,536	9,469	10,849	12,320	13,701	15,304	17,364	19,714	22,508	25,383
SLOVENIA	1,956	2,670	3,398	3,933	4,844	5,164	5,259	5,307	5,348	5,525	5,717	5,976
SPAIN	509,144	580,722	611,483	611,813	620,433	612,657	594,405	569,692	552,613	526,105	511,253	497,711
SWEDEN	205,210	217,881	206,210	238,424	292,263	308,498	334,922	340,379	339,152	375,277	387,000	402,250
UNITED KINGDOM	1,567,072	1,576,978	1,245,107	1,342,736	1,392,970	1,439,814	1,501,265	1,483,422	1,612,453	1,755,387	1,546,503	1,539,979
EURO AREA 19	3,597,558	3,844,252	3,996,917	4,100,214	4,253,622	4,350,352	4,392,532	4,316,566	4,347,471	4,418,543	4,511,735	4,638,134
EU 28	5,600,925	5,915,794	5,761,839	6,017,242	6,303,920	6,472,211	6,613,174	6,525,409	6,689,492	6,954,931	6,860,092	7,013,738
AUSTRALIA	253,447	283,394	267,804	401,294	536,739	596,014	621,219	533,808	563,057	625,225	694,017	739,544
BRAZIL	n/a	16,790	18,393	33,567	59,210	78,394	94,454	103,519	134,023	115,872	155,791	142,240
ICELAND	9,287	11,253	6,743	7,055	8,977	8,370	8,140	8,937	9,165	9,694	11,851	12,014
JAPAN	1,214,463	1,137,966	1,470,511	1,398,345	1,651,781	1,788,765	1,785,755	1,393,105	1,341,706	1,460,267	1,679,192	1,522,503
NORWAY	151,401	175,091	157,299	187,720	209,586	227,272	260,725	245,449	241,128	242,633	274,257	270,151
RUSSIA	6,744	16,985	28,216	25,951	30,340	37,267	51,549	60,339	50,243	50,812	71,762	77,016
SINGAPORE	n/a	n/a	n/a	n/a	n/a	56,695	76,850	83,310	87,728	101,021	104,109	106,172
SOUTH KOREA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	288,175	347,678	383,224	430,012	451,945
TURKEY	11,739	17,500	16,431	19,513	28,429	29,989	36,146	37,048	44,270	45,096	44,167	42,105
USA	8,473,576	8,114,598	8,622,907	8,185,478	7,822,706	7,888,477	7,561,392	7,215,575	8,186,393	9,232,847	9,754,767	8,829,982

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)
- 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:
- Belgium
- France
- Russia
- Bulgaria
- Spain

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	6,965	4,104	6,164	1,394	6,553	3,952	2,321	1,341	3,088	6,215	4,243	3,128
BELGIUM	13,013	12,277	10,634	14,722	9,985	10,326	11,566	5,869	7,393	10,240	12,997	13,110
BULGARIA	n/a	n/a	1,011	-8	-85	-125	-16	-66	-8	23	178	491
CROATIA	1,382	1,272	1,028	162	595	105	-70	-234	-194	-130	-787	153
CYPRUS	1,291	1,514	1,566	1,886	1,533	624	134	-825	-199	6	-146	-392
CZECH REPUBLIC	2,920	3,865	2,246	6,156	3,186	1,428	2,296	-630	1,510	3,353	2,855	10,220
DENMARK	20,761	17,825	11,574	9,430	7,339	4,707	1,998	1,110	2,668	4,331	4,903	5,025
ESTONIA	1,660	1,348	584	-98	-138	-91	-36	51	168	259	338	446
FINLAND	6,818	6,865	5,460	4,228	4,887	5,034	4,565	1,967	1,449	2,193	2,101	2,073
FRANCE	74,300	73,900	53,700	30,300	64,700	48,000	26,840	-55,413	18,493	33,281	32,957	54,868
GERMANY	21,246	-28,092	-10,338	1,565	5,226	11,588	21,070	23,969	28,588	42,046	47,445	51,909
GREECE	11,725	12,218	8,337	2,859	-52	-2,114	-3,759	-3,579	-1,646	-1,815	-6,196	-2,585
HUNGARY	3,124	3,709	4,948	117	2,196	-2,708	-1,965	-1,486	-1,353	-2,203	-919	-423
IRELAND*	24,572	16,574	8,241	-856	-44,904	-2,455	-3,126	-2,600	-4,269	-2,695	-1,703	-2,150
ITALY	27,167	21,140	-1,166	16,049	71,775	15,534	-2,057	-4,198	-2,253	3,195	5,837	7,229
LATVIA	2,150	2,063	490	-321	-312	-568	-657	-272	-359	-200	-91	-49
LITHUANIA	729	1,852	1,206	-29	-44	-117	-55	25	160	172	416	589
LUXEMBOURG	1,432	2,658	1,264	1,137	1,514	1,664	1,460	1,674	1,649	1,561	1,715	2,342
MALTA	249	245	205	238	208	227	195	190	314	313	299	344
NETHERLANDS	37,270	36,826	30,158	22,920	17,692	11,594	3,835	-17,143	-2,416	4,408	8,401	7,819
POLAND	7,312	12,253	13,840	5,972	14,981	4,357	7,551	1,378	1,743	8,346	1,114	1,096
PORTUGAL	12,444	9,198	4,115	5,476	3,830	-599	-3,396	-3,935	-4,116	-3,953	-3,139	-1,284
ROMANIA	1,410	2,027	1,068	463	1,029	833	1,171	490	848	1,417	1,371	1,369
SLOVAKIA	2,131	1,564	1,763	933	1,380	1,471	1,381	1,603	2,060	2,350	2,794	2,875
SLOVENIA	588	714	728	535	911	320	95	48	41	177	192	259
SPAIN	93,879	71,577	30,762	330	8,620	-7,776	-18,252	-24,713	-17,079	-26,508	-14,852	-13,542
SWEDEN	28,659	12,671	-11,671	32,214	53,838	16,236	26,424	5,457	-1,227	36,125	11,722	15,250
UNITED KINGDOM	190,049	9,906	-331,872	97,630	50,234	46,844	61,450	-17,842	129,031	142,933	-208,884	-6,524
EURO AREA 19	338,898	246,694	152,665	103,297	153,408	96,730	42,179	-75,966	30,905	71,072	93,192	126,399
EU 28	595,245	314,869	-153,955	255,404	286,678	168,291	140,963	-87,764	164,082	265,439	-94,839	153,647
AUSTRALIA	18,826	29,947	-15,590	133,490	135,446	59,274	25,205	-87,411	29,249	62,168	68,792	45,527
ICELAND	-544	1,966	-4,510	312	1,922	-607	-230	797	228	529	n/a	n/a
JAPAN	-109,791	-76,497	332,545	-72,166	253,436	136,985	-3,010	-392,650	-51,399	118,561	218,925	-156,688
NORWAY	15,861	23,690	-17,792	30,421	21,866	17,686	33,453	-15,275	-4,322	1,506	31,624	-4,107
RUSSIA	5,187	10,241	11,231	-2,265	4,389	6,927	14,282	8,790	-10,096	569	20,950	5,254
TURKEY	4,299	5,762	-1,069	3,082	8,916	1,560	6,157	902	7,222	827	-930	-2,062
USA	-35,282	-358,978	508,309	-437,429	-362,772	65,771	-327,085	-345,816	970,818	1,046,453	521,921	-924,785

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	9,467	10,765	11,130	11,761	12,941	14,501	15,441	15,874	16,877	21,166	20,363	28,097
BELGIUM	24,323	22,825	21,531	22,076	26,768	28,074	25,994	25,077	29,441	36,155	36,554	33,568
BULGARIA	n/a	1,783	1,648	617	669	656	599	635	697	973	1,157	1,620
CROATIA	n/a	n/a	n/a	n/a	n/a	n/a	781	583	595	892	2,606	1,422
CYPRUS	n/a	n/a	n/a	2,098	3,017	1,907	1,518	1,399	525	644	866	857
CZECH REPUBLIC	4,094	5,395	4,935	2,689	3,216	4,757	4,566	6,404	7,081	8,646	11,109	11,838
DENMARK	42,049	35,796	31,340	44,593	41,386	24,095	43,199	24,700	35,303	50,700	40,526	40,661
ESTONIA	2,339	2,136	1,433	446	419	490	566	686	819	942	1,038	1,206
FINLAND	27,000	28,931	26,669	19,739	20,972	22,537	21,400	17,514	17,540	33,307	29,511	30,982
FRANCE	150,142	154,887	128,600	109,600	138,437	145,546	117,093	109,954	111,170	127,776	144,157	164,150
GERMANY	133,600	132,000	132,800	131,300	142,700	150,600	162,900	170,100	177,100	208,600	209,400	214,300
GREECE	15,444	15,199	12,435	7,966	n/a	n/a	n/a	n/a	n/a	447	471	518
HUNGARY	4,197	5,787	6,240	1,907	1,398	1,294	1,214	623	885	1,343	1,688	2,352
IRELAND	39,872	33,808	23,049	8,076	4,746	2,463	2,636	2,495	3,855	4,848	5,656	7,286
ITALY	82,148	83,604	74,102	64,021	67,800	59,196	32,683	28,904	34,861	66,058	83,468	71,454
LATVIA	n/a	n/a	n/a	n/a	119	160	176	221	247	271	363	419
LITHUANIA	1,171	1,852	1,808	1,050	706	876	856	856	876	1,050	1,218	1,338
LUXEMBOURG	4,374	4,669	3,979	4,456	5,095	5,065	5,523	4,817	5,694	6,347	7,134	7,250
MALTA	266	245	205	238	210	227	n/a	n/a	n/a	n/a	n/a	n/a
NETHERLANDS	126,079	115,297	98,062	65,302	65,719	68,942	46,664	36,700	48,550	63,474	80,977	100,972
POLAND	n/a	n/a	n/a	n/a	2,666	n/a	6,646	7,716	8,003	9,850	9,389	10,695
PORTUGAL	18,391	19,630	13,375	9,330	10,107	4,853	1,935	2,049	2,313	4,013	5,790	8,259
ROMANIA	3,648	2,256	7,827	921	1,458	1,472	1,455	1,521	1,542	2,516	2,470	2,656
SLOVAKIA	n/a	n/a	n/a	2,332	3,329	3,922	3,803	4,873	5,840	6,362	9,865	8,055
SLOVENIA	n/a	n/a	672	1,456	1,213	928	705	597	633	886	1,059	1,118
SPAIN	170,297	145,294	87,074	73,155	69,479	37,448	32,279	21,857	26,800	35,721	37,492	38,861
SWEDEN	41,290	43,895	33,776	39,909	45,077	38,887	40,616	46,498	51,168	60,761	59,341	59,871
UNITED KINGDOM	500,100	521,381	311,202	157,779	155,981	159,303	178,217	209,257	252,301	305,547	300,881	293,154
EURO AREA 19	804,648	770,897	636,719	532,066	570,549	545,600	470,653	442,574	482,616	617,423	674,515	717,833
EU 28	1,400,292	1,387,435	1,033,891	782,817	825,628	778,198	749,464	741,910	840,715	1,059,296	1,104,549	1,142,960
AUSTRALIA	97,128	108,455	88,274	104,737	108,197	117,497	131,817	132,369	135,060	156,230	161,756	n/a
BRAZIL	5,938	9,391	15,076	17,806	34,901	48,575	47,059	52,100	49,791	34,678	29,718	28,270
ICELAND	n/a	n/a	n/a	n/a	n/a	n/a	n/a	858	994	1,769	11,562	13,978
JAPAN	145,129	121,445	129,575	148,236	169,821	180,760	197,864	159,624	137,448	149,988	204,740	169,059
RUSSIA	7,726	15,891	18,006	3,455	9,439	17,536	25,847	31,980	34,623	17,065	19,873	30,664
TURKEY	8,626	8,696	8,057	9,811	15,939	12,728	12,305	19,893	12,566	15,464	18,134	11,969
USA	1,174,737	1,773,076	1,019,853	1,319,186	1,229,539	1,073,994	1,650,062	1,423,086	978,547	1,563,767	1,865,571	1,678,479

Sources:

European Mortgage Federation National Experts, European Central Bank, Japan Housing Finance Agency, National Central Banks, Federal Reserve, Inside Mortgage Financ

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:

- Belgium
- Netherlands
- Brazil

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 Japanse Fiscal year, from April to March

4. Representative Interest Rates on New Residential Loans

Annual average based on monthly figures, %

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	TYPE
AUSTRIA	3.80	4.79	5.32	3.71	2.71	2.86	2.71	2.39	2.29	2.02	1.92	1.89	1
BELGIUM	4.08	4.71	5.09	4.25	3.59	3.81	3.63	3.45	3.17	2.49	2.11	2.09	1
BULGARIA	n/a	7.90	8.28	9.04	8.47	7.93	7.59	7.05	6.69	5.89	4.99	4.00	1
CROATIA	4.81	4.94	5.78	6.36	6.32	5.48	5.45	5.04	5.05	5.07	4.78	3.50	1
CYPRUS	5.45	5.61	6.47	5.01	5.16	5.73	5.32	4.67	4.36	3.28	3.03	2.53	2
CZECH REPUBLIC	4.18	4.69	5.61	5.61	4.90	4.04	3.52	3.26	2.56	2.42	2.22	2.38	1
DENMARK	4.28	5.36	5.77	3.21	2.17	2.41	1.41	1.20	1.29	1.09	1.15	1.00	1
ESTONIA	4.28	5.49	5.82	3.87	3.50	3.42	2.86	2.54	2.43	2.25	2.28	2.34	1
FINLAND	3.72	4.71	5.01	2.45	1.98	2.50	1.97	1.98	1.80	1.35	1.16	0.95	1
FRANCE	3.71	4.26	4.84	4.09	3.42	3.80	3.56	3.01	2.72	2.11	1.61	1.52	1
GERMANY	4.61	5.09	5.22	4.26	3.69	3.84	3.06	2.76	2.49	1.95	1.76	1.83	4
GREECE	4.30	4.45	4.81	3.94	3.68	4.33	3.26	2.82	2.94	2.62	2.74	2.78	2
HUNGARY	9.82	9.98	10.91	11.55	10.88	10.46	10.51	9.85	8.48	6.21	5.32	4.70	2
IRELAND	4.06	4.93	5.17	3.14	3.13	3.46	3.28	3.44	3.42	3.49	3.26	3.19	1
ITALY	4.87	5.72	5.09	2.88	2.97	4.03	3.69	3.50	2.83	2.50	2.02	1.90	1
LATVIA	4.96	6.10	7.02	4.95	4.09	4.12	3.66	3.53	3.44	3.43	3.21	2.82	1
LITHUANIA	4.06	5.40	5.83	4.17	3.70	3.71	2.97	2.39	2.15	1.88	1.95	2.01	1
LUXEMBOURG	3.95	4.74	4.90	2.49	2.16	2.40	2.23	2.13	2.03	1.86	1.68	1.70	2
MALTA	n/a	n/a	3.84	3.51	3.43	3.38	3.40	3.03	2.85	2.99	2.84	2.83	1
NETHERLANDS	4.38	4.97	5.34	4.86	4.52	4.55	4.27	3.78	3.37	2.93	2.59	2.41	1
POLAND	5.74	6.09	8.05	7.23	6.48	6.70	6.95	5.14	4.10	4.40	4.40	4.40	1
PORTUGAL	3.98	4.78	5.42	2.69	2.43	3.74	3.89	3.26	3.21	2.38	1.90	1.59	2
ROMANIA	n/a	6.60	6.67	7.16	5.31	5.84	5.03	4.73	5.06	3.99	3.46	3.70	2
SLOVAKIA	n/a	n/a	6.04	5.90	5.24	4.84	4.74	4.10	3.38	2.70	2.03	1.70	1
SLOVENIA	5.83	6.50	6.73	4.45	3.34	3.77	3.37	3.20	3.21	2.53	2.33	2.50	1
SPAIN	4.05	5.10	5.67	3.25	2.53	3.37	3.30	3.04	2.96	2.24	2.01	1.95	2
SWEDEN	3.59	4.58	5.25	2.06	2.39	3.87	3.48	2.75	2.24	1.66	1.60	1.58	2
UNITED KINGDOM	5.05	5.69	5.75	4.21	3.81	3.62	3.69	3.24	3.12	2.62	2.34	2.03	1
AUSTRALIA	7.61	8.20	8.91	6.02	7.28	7.74	6.98	6.18	5.95	5.58	5.42	5.24	2
BRAZIL	n/a	n/a	n/a	n/a	n/a	10.30	8.50	8.10	9.30	10.10	10.80	9.10	6
ICELAND	4.69	5.24	6.03	5.67	5.14	4.82	4.24	3.92	3.86	3.98	3.87	3.62	6
JAPAN	2.83	2.82	2.89	2.74	2.36	2.32	1.95	1.87	1.62	1.52	1.06	1.23	6
NORWAY	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3.98	3.78	2.86	2.43	2.50	6
RUSSIA	13.70	12.60	12.90	14.30	13.10	11.90	12.29	12.44	12.45	13.35	12.48	10.64	1
TURKEY	18.27	18.30	18.63	15.60	11.05	11.59	12.37	9.69	11.86	12.31	13.25	12.14	1
USA	6.41	6.34	6.04	5.04	4.69	4.46	3.66	3.98	4.17	3.85	3.65	3.99	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:
- France
- Sweden

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, %

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	57.5	63.7	63.6	72.1	76.3	75.4	79.5	83.5	83.3	74.1	60.5	60.5
BELGIUM	6.5	1.2	2.5	28.3	32.7	9.9	2.2	5.8	4.2	0.6	0.9	1.4
BULGARIA	n/a	94.0	98.4	99.3	97.1	97.1	94.6	96.5	95.6	93.5	97.2	98.5
CROATIA	n/a	n/a	n/a	n/a	n/a	n/a	63.7	71.1	71.4	82.0	64.9	29.9
CZECH REPUBLIC	43.0	45.0	43.0	56.0	56.0	56.4	n/a	34.2	37.3	30.6	25.4	20.5
DENMARK	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	23.0	14.1	17.8	19.2
ESTONIA	40.1	18.7	8.1	3.7	6.6	8.3	6.6	9.2	6.0	6.6	6.0	6.0
FINLAND	n/a	n/a	n/a	n/a	n/a	n/a	n/a	95.8	93.7	92.9	92.5	95.2
GERMANY	15.4	15.0	15.1	17.0	16.6	16.9	15.0	16.3	15.8	12.4	12.0	11.4
GREECE	62.0	27.5	29.4	68.5	76.5	79.2	88.6	87.8	90.3	92.4	85.6	82.0
HUNGARY	n/a	n/a	n/a	n/a	83.4	75.6	61.5	44.1	47.1	45.0	41.9	41.0
IRELAND	78.5	71.9	82.3	88.5	70.2	78.4	87.7	83.6	86.6	66.0	65.4	49.5
ITALY	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	77.7	47.9	37.5	33.3
LUXEMBOURG	100.0	100.0	100.0	88.0	86.9	85.3	72.4	68.8	74.8	52.1	45.0	42.1
NETHERLANDS	23.0	17.2	14.8	24.7	20.8	21.9	23.1	24.3	19.6	14.5	13.7	13.7
POLAND	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PORTUGAL	98.9	99.0	95.7	98.0	99.2	98.9	94.6	91.2	92.3	92.1	66.4	60.3
ROMANIA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	88.0	85.0	93.0	93.0
SPAIN	93.7	89.5	90.9	89.2	86.4	81.8	77.8	67.7	64.5	62.9	46.3	42.4
SWEDEN	56.8	47.3	65.4	87.7	69.8	53.8	56.3	64.3	75.7	73.0	76.0	71.7
UNITED KINGDOM	51.7	41.8	52.4	37.8	56.9	44.1	35.9	19.0	13.2	15.8	16.0	11.5
JAPAN	15.7	26.7	36.0	49.0	52.5	54.5	58.0	49.7	52.5	56.5	50.2	n/a
NORWAY	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	93.0	90.0	92.0	94.0
SOUTH KOREA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	61.0	71.1

Sources:
European Mortgage Federation National Experts, National Central Banks

Notes:
- This dataset has been newly introduced in Hypostat 2018

6. Average amount of a Mortgage granted

EUR

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BELGIUM	n/a	n/a	n/a	125302	129815	132246	136062	134975	138,084	144,159	149,126	154,717
CZECH REPUBLIC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	41,833	40,703	47,913	62,866	n/a
DENMARK	n/a	n/a	119,073	122,730	126,849	129,030	131,649	130,288	132,820	138,767	142,238	145,861
FINLAND	79,838	85,377	87,391	90,626	93,186	93,990	94,502	94,416	94,171	95,735	97,215	98,735
FRANCE	116,674	121,281	120,515	110,098	127,016	135,352	137,241	142,563	145,313	149,018	157,915	n/a
GERMANY	n/a	n/a	n/a	175,000	n/a	n/a	185,000	n/a	n/a	212,000	n/a	236,000
HUNGARY	n/a	n/a	n/a	n/a	n/a	16,358	15,108	13,945	15,322	17,032	18,944	21,670
IRELAND	195,496	213,841	208,962	176,258	171,561	172,462	166,056	166,450	174,269	180,963	191,719	209,373
LATVIA	n/a	n/a	n/a	n/a	39,041	30,709	25,445	27,438	30,315	31,390	25,206	34,276
POLAND	35,714	49,499	58,421	46,781	51,557	50,445	47,493	47,604	49,364	50,633	50,562	57,369
ROMANIA	n/a	n/a	n/a	39,606	38,954	36,880	29,153	24,209	33,306	34,418	35,632	39,299
SLOVAKIA	42,705	47,937	51,921	53,195	52,401	55,141	53,692	59,267	62,091	59,035	n/a	n/a
SPAIN	140,324	148,865	139,655	117,804	116,934	111,922	103,438	100,011	102,253	106,736	109,766	116,721
UNITED KINGDOM	174,556	185,571	152,012	126,266	139,886	138,268	151,226	150,131	169,328	199,016	183,165	176,805
AUSTRALIA	134,619	148,387	147,680	159,145	210,965	224,878	240,677	220,343	220,594	239,968	244,373	245,927
BRAZIL	12,662	18,210	26,727	28,583	40,662	51,313	51,025	52,260	50,171	38,763	37,930	43,003
ICELAND	n/a	n/a	n/a	n/a	n/a	n/a	n/a	72,842	72,003	52,278	n/a	n/a
JAPAN	203,191	186,853	204,723	239,527	269,959	286,139	312,713	244,794	231,274	253,220	290,624	270,053
NORWAY	n/a	n/a	n/a	n/a	n/a	n/a	131,236	n/a	n/a	116,653	n/a	n/a
RUSSIA	n/a	n/a	51,520	26,561	31,315	33,492	37,367	38,761	34,185	24,396	23,201	28,211
TURKEY	24,899	25,247	25,695	20,281	26,643	23,310	23,932	23,782	21,509	22,530	22,476	19,247

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:
- United Kingdom
- Brazil

7. Total Outstanding Non-Residential Mortgage Loans

Total Amount, End of the Year, EUR million

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
CZECH REPUBLIC	8,269	11,275	13,682	12,099	12,356	12,010	12,023	12,035	13,544	14,435	16,446	10,820
DENMARK	95,633	106,379	118,637	127,141	130,405	133,754	138,160	145,158	151,264	143,427	148,532	150,540
ESTONIA	3,109	3,943	4,111	3,937	3,658	3,395	3,371	3,223	3,250	3,339	3,509	9,471
FINLAND	6,049	7,811	11,148	14,027	15,441	16,473	16,854	18,174	19,501	20,713	22,117	24,129
GERMANY	256,332	260,008	254,862	255,721	251,450	259,134	254,014	250,631	247,345	250,310	249,295	261,102
GREECE	4,194	4,774	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
HUNGARY	3,609	4,744	7,401	7,838	8,380	7,051	6,805	6,112	n/a	n/a	n/a	n/a
IRELAND	15,437	17,828	16,193	15,147	32,734	29,979	29,269	27,710	25,108	22,737	20,493	17,890
ITALY	63,752	69,150	66,240	71,311	74,303	73,234	93,216	87,260	79,915	87,372	81,591	n/a
LATVIA	2,917	3,770	4,600	4,370	3,658	3,144	2,582	2,298	2,034	1,898	2,255	2,025
NETHERLANDS	25,065	23,440	23,772	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
POLAND	5,627	9,765	11,582	12,192	12,125	11,722	13,693	13,116	13,055	13,952	13,616	18,532
ROMANIA	n/a	n/a	17,935	17,742	19,264	20,140	19,966	19,244	17,763	16,887	15,409	14,189
SPAIN	339,620	400,765	414,512	420,669	396,719	339,739	235,151	159,599	134,581	129,690	115,889	n/a
AUSTRALIA	233,954	257,177	219,616	274,616	351,844	375,709	398,830	355,417	422,679	426,910	445,847	n/a
BRAZIL	n/a	904	1,112	3,013	3,367	13,329	15,885	16,508	20,555	16,862	20,783	15,034
ICELAND	18,153	22,416	23,042	21,925	22,958	13,660	11,430	11,332	11,092	n/a	n/a	n/a
JAPAN	n/a	n/a	n/a	188,721	239,740	259,354	230,744	182,518	184,009	209,937	231,543	219,540
NORWAY	n/a	n/a	n/a	9,100	11,943	12,391	14,195	13,626	13,550	13,027	13,752	13,399
RUSSIA	3,353	4,066	4,841	3,936	4,068	3,492	3,119	2,573	1,791	819	693	469
SINGAPORE	n/a	n/a	n/a	n/a	n/a	45,963	51,791	52,103	52,817	58,110	59,779	62,087
USA	1,662,263	1,668,705	1,950,780	1,827,364	2,527,915	2,544,633	2,496,135	2,445,870	2,916,811	3,478,185	3,831,895	4,153,133

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:
- Australia
- Japan

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

%

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	23.1	23.2	24.5	25.5	27.0	27.1	27.1	27.1	27.2	28.1	28.6	28.2
BELGIUM	34.9	36.7	38.7	43.5	44.3	45.4	47.4	48.3	49.2	50.5	52.1	53.3
BULGARIA	n/a	8.6	10.2	10.2	9.7	8.7	8.5	8.3	8.2	7.8	7.7	8.3
CROATIA	13.0	14.7	15.6	17.0	18.3	18.7	18.9	18.4	18.1	17.3	14.9	14.5
CYPRUS	33.3	39.4	44.7	55.6	61.8	63.6	65.1	65.3	66.2	65.7	63.2	57.9
CZECH REPUBLIC	7.0	9.1	9.2	14.1	15.4	15.6	17.3	17.3	18.3	19.0	19.8	23.6
DENMARK	78.9	83.9	85.8	93.7	92.1	92.3	90.6	89.6	88.2	87.9	87.8	86.1
ESTONIA	31.6	34.6	37.6	43.2	40.6	35.3	32.6	31.1	30.7	31.1	31.6	30.9
FINLAND	32.0	33.3	34.9	39.7	41.0	41.5	43.2	43.4	43.7	43.9	43.5	42.9
FRANCE	31.0	33.3	35.1	37.7	39.9	41.0	41.7	38.5	38.8	39.4	40.4	41.6
GERMANY	49.5	46.0	44.7	46.6	44.7	43.1	43.0	42.8	42.2	42.0	42.2	42.3
GREECE	26.2	29.8	32.1	33.9	35.6	37.9	39.0	39.3	38.9	38.3	35.2	33.1
HUNGARY	14.9	17.0	20.7	23.8	25.0	21.7	20.1	18.2	16.2	13.5	12.3	11.0
IRELAND	67.0	71.3	79.2	87.0	61.4	58.8	55.6	52.7	46.4	33.5	31.5	28.6
ITALY	15.8	16.5	16.2	17.8	21.9	22.5	22.7	22.5	22.1	21.9	21.9	21.9
LATVIA	26.9	29.6	29.5	36.6	36.9	29.7	24.2	22.2	19.9	18.5	17.7	16.2
LITHUANIA	12.4	16.7	18.5	22.4	21.3	18.8	17.4	16.7	16.4	16.5	17.0	17.1
LUXEMBOURG	35.5	39.5	41.8	46.2	46.3	46.9	49.2	50.3	50.1	51.1	53.4	55.4
MALTA	32.9	35.0	36.2	40.0	40.4	42.3	43.1	42.9	42.4	41.0	41.2	40.9
NETHERLANDS	93.8	94.5	95.0	102.1	102.6	102.6	102.8	99.0	97.0	95.1	93.8	91.2
POLAND	7.5	10.4	12.7	16.6	18.7	18.9	20.4	20.5	20.1	21.1	21.6	20.0
PORTUGAL	55.3	57.6	58.8	63.1	63.6	64.7	65.6	62.6	59.2	54.8	51.4	48.7
ROMANIA	2.2	3.3	3.6	4.6	5.4	5.7	6.6	6.4	6.7	7.2	7.5	7.6
SLOVAKIA	11.4	12.0	12.9	14.8	16.1	17.4	18.8	20.6	22.8	25.0	27.7	29.9
SLOVENIA	6.2	7.6	9.0	10.9	13.4	14.0	14.6	14.6	14.2	14.2	14.1	13.8
SPAIN	50.5	53.7	54.8	56.7	57.4	57.2	57.2	55.5	53.2	48.7	45.7	42.8
SWEDEN	61.3	61.1	58.5	77.0	79.2	76.2	79.1	78.1	78.4	83.6	83.2	84.3
UNITED KINGDOM	72.9	70.0	62.8	77.8	75.3	76.0	71.8	71.5	70.5	67.2	64.3	66.2
EURO AREA 19	40.4	40.9	41.5	44.1	44.5	44.4	44.6	43.4	42.8	42.0	41.8	41.5
EU 28	45.6	45.5	44.0	48.8	49.1	49.0	49.0	48.0	47.6	46.9	46.0	45.7
AUSTRALIA	44.6	48.9	35.3	62.4	62.8	55.5	53.3	47.0	46.8	50.6	60.7	67.0
BRAZIL	n/a	1.8	1.5	2.9	3.6	3.9	5.1	5.8	6.6	7.0	9.1	8.3
ICELAND	68.1	72.3	62.5	76.5	89.7	79.4	73.6	76.7	70.8	64.1	65.4	60.3
JAPAN	35.3	37.1	40.6	38.5	38.7	37.6	38.0	37.3	33.6	36.3	35.8	37.5
NORWAY	55.0	59.7	49.7	67.4	64.8	63.4	65.7	62.4	64.1	69.7	81.9	81.2
RUSSIA	0.9	1.9	2.4	3.1	2.7	2.4	3.1	3.7	3.0	4.1	5.9	5.9
TURKEY	n/a	n/a	n/a	n/a	n/a	28.6	34.0	36.3	37.4	36.9	37.2	37.0
SINGAPORE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	29.3	32.7	30.7	33.6	33.4
SOUTH KOREA	2.8	3.8	3.0	4.4	4.9	4.7	5.5	5.4	5.8	5.7	5.4	5.9
USA	80.5	82.5	81.5	81.8	69.9	65.8	61.8	59.6	57.1	55.7	55.4	45.5

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

2) The series has been revised for at least two years in:

Belgium
- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Greece
- Hungary
- Ireland
- Latvia
- Malta
- Poland
- Slovakia
- Spain
- UK
- Norway
- Russia
- Turkey
- USA

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.
- See Tables 1 and 27 for further information on the data used.

9. Total Outstanding Residential Loans to Disposable Income of Households Ratio

%

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	36.6	37.2	39.5	40.2	43.4	44.3	43.8	44.4	44.9	47.1	47.4	47.7
BELGIUM	59.1	62.3	63.9	69.6	73.7	76.9	80.5	82.1	84.4	88.0	91.3	94.2
BULGARIA	n/a	15.3	17.1	16.7	16.1	14.6	14.5	13.9	14.0	12.8	12.2	13.1
CROATIA	20.8	24.4	25.7	26.3	28.0	28.2	28.2	28.2	27.5	20.1	18.0	n/a
CYPRUS	48.3	58.3	64.3	80.5	89.3	91.9	94.5	92.9	100.2	100.2	94.7	88.7
CZECH REPUBLIC	13.2	17.6	17.3	25.3	27.6	28.4	31.4	31.6	34.2	36.3	37.9	45.0
DENMARK	171.3	185.5	192.0	196.2	191.8	189.4	186.9	184.6	184.2	179.4	174.7	172.6
ESTONIA	61.6	67.7	66.0	71.5	70.3	63.6	59.6	56.4	55.1	54.6	54.8	55.1
FINLAND	59.8	63.6	65.4	67.7	69.5	71.0	72.8	72.4	73.1	73.7	73.9	73.9
FRANCE	48.1	51.6	54.2	56.4	59.9	62.3	63.9	59.6	60.2	61.9	63.1	65.4
GERMANY	74.2	71.1	68.7	69.4	68.0	66.7	66.1	66.4	66.4	66.8	67.3	67.3
GREECE	37.8	43.0	45.7	46.5	50.4	53.7	55.9	58.2	57.3	57.9	53.9	51.6
HUNGARY	25.8	30.2	37.5	42.2	45.0	37.7	34.6	31.7	29.1	25.1	22.7	20.0
IRELAND	145.0	152.1	152.1	163.3	118.6	119.5	111.6	108.8	103.0	96.3	91.0	85.5
ITALY	22.9	24.0	23.5	25.5	32.1	32.6	33.4	32.9	32.5	32.3	32.4	32.5
LATVIA	42.4	49.9	45.7	53.6	55.7	50.7	41.6	38.0	34.0	30.8	28.8	26.8
LITHUANIA	18.5	27.7	29.0	31.4	30.9	28.8	27.6	26.2	26.4	26.4	26.8	28.1
LUXEMBOURG	88.2	101.1	104.4	108.5	113.8	121.1	122.7	127.8	132.1	136.4	141.1	146.2
NETHERLANDS	193.1	198.1	202.5	210.0	214.9	213.8	214.1	206.7	201.9	200.5	197.1	193.4
POLAND	11.7	16.9	20.6	26.3	29.8	31.1	33.4	33.5	33.2	35.6	35.6	33.8
PORTUGAL	79.1	83.0	83.0	87.7	88.3	91.1	91.7	88.6	85.3	79.3	74.1	71.0
ROMANIA	3.7	5.5	6.1	7.8	8.8	9.9	11.9	9.1	9.3	9.8	10.6	10.8
SLOVAKIA	19.7	20.7	22.0	23.2	26.2	29.2	31.6	34.8	38.5	42.0	46.6	51.0
SLOVENIA	10.1	12.7	14.9	17.2	21.0	21.9	22.9	23.1	22.9	23.3	23.2	23.0
SPAIN	81.4	89.2	89.1	87.5	90.1	88.2	88.6	85.7	82.3	76.6	73.0	69.7
SWEDEN	132.8	131.7	121.7	149.3	157.8	150.3	151.2	148.3	149.5	164.4	164.5	167.4
UNITED KINGDOM	110.5	106.3	94.3	110.9	109.3	112.4	104.4	104.3	104.5	96.7	94.7	98.7
EURO AREA 19	63.3	65.0	65.4	67.4	69.3	69.6	70.1	68.5	68.0	67.9	67.8	n/a
EU 28	72.1	72.9	70.0	74.9	76.6	77.2	77.1	75.5	75.5	74.9	73.8	n/a
NORWAY	135.9	145.5	125.4	150.4	147.4	147.7	154.0	142.9	142.8	143.2	159.4	153.6
USA	103.6	103.7	113.0	102.1	90.2	91.0	76.6	75.4	81.4	73.4	75.4	67.6

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:
- 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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	9,296	9,851	10,707	10,845	11,749	12,255	12,506	12,602	12,930	13,664	14,075	14,391
BELGIUM	13,695	15,051	16,172	17,752	18,749	19,648	20,787	21,322	22,109	23,134	24,422	25,779
BULGARIA	n/a	444	607	608	597	581	581	574	577	585	620	709
CROATIA	1,495	1,855	2,146	2,190	2,361	2,397	2,381	2,318	2,266	2,234	2,017	2,075
CYPRUS	9,595	11,959	14,205	16,781	18,604	18,954	18,518	17,158	16,962	17,205	16,949	16,196
CZECH REPUBLIC	1,040	1,494	1,741	2,442	2,800	2,958	3,213	3,137	3,317	3,703	4,036	5,216
DENMARK	42,180	46,228	48,651	50,462	51,869	52,589	52,702	52,546	52,703	53,198	53,692	54,311
ESTONIA	3,937	5,179	5,710	5,614	5,490	5,418	5,406	5,477	5,656	5,909	6,231	6,668
FINLAND	13,321	14,884	16,086	16,969	18,003	19,059	19,990	20,311	20,519	20,917	21,307	21,693
FRANCE	11,683	13,091	14,083	14,602	15,812	16,677	17,132	15,966	16,236	16,759	17,318	18,289
GERMANY	17,440	16,978	16,783	16,788	16,865	17,379	17,636	17,926	18,280	18,792	19,272	19,968
GREECE	6,358	7,675	8,559	8,833	8,796	8,553	8,173	7,840	7,710	7,545	6,893	6,616
HUNGARY	1,679	2,131	2,737	2,747	3,012	2,681	2,453	2,269	2,106	1,837	1,728	1,683
IRELAND	39,076	42,763	44,098	43,317	30,081	29,324	28,380	27,542	26,156	25,146	24,354	23,409
ITALY	5,076	5,499	5,433	5,727	7,168	7,454	7,401	7,277	7,094	7,147	7,268	7,407
LATVIA	2,577	3,731	4,014	3,872	3,758	3,494	3,150	3,019	2,841	2,750	2,729	2,738
LITHUANIA	1,154	1,878	2,359	2,355	2,356	2,368	2,375	2,404	2,487	2,573	2,778	3,069
LUXEMBOURG	32,851	39,460	42,102	44,094	47,089	50,225	52,227	54,839	57,208	59,127	61,324	64,541
MALTA	5,563	6,275	6,814	7,445	7,964	8,578	9,061	9,468	10,174	10,768	11,280	11,910
NETHERLANDS	42,983	45,724	47,835	49,241	50,208	50,733	50,679	49,115	48,676	48,696	48,989	49,149
POLAND	676	1,074	1,521	1,707	2,195	2,328	2,564	2,602	2,656	2,921	2,957	2,991
PORTUGAL	10,817	11,854	12,289	12,892	13,292	13,180	12,791	12,382	11,951	11,523	11,169	11,032
ROMANIA	130	252	320	347	412	465	539	570	624	714	804	895
SLOVAKIA	1,229	1,588	1,988	2,192	2,498	2,824	3,124	3,477	3,937	4,460	5,085	5,726
SLOVENIA	1,186	1,607	2,041	2,333	2,851	3,039	3,089	3,117	3,140	3,244	3,359	3,512
SPAIN	14,034	15,732	16,249	16,078	16,232	15,973	15,455	14,853	14,480	13,808	13,421	13,039
SWEDEN	28,848	30,348	28,438	32,520	39,391	41,152	44,281	44,624	44,089	48,348	49,451	50,797
UNITED KINGDOM	33,076	32,979	25,794	27,569	28,347	29,025	30,019	29,467	31,801	34,317	29,985	29,673
EURO AREA 19	13,501	14,333	14,791	15,089	15,598	15,980	16,085	15,763	15,795	15,996	16,265	16,674
EU 28	14,055	14,756	14,278	14,825	15,478	15,887	16,181	15,918	16,248	16,833	16,543	16,872
AUSTRALIA	16,055	17,810	16,455	24,087	31,635	34,634	35,406	29,833	30,935	33,816	36,990	38,832
BRAZIL	n/a	129	139	249	431	561	665	717	913	777	1,029	926
ICELAND	42,910	50,259	29,266	29,572	37,886	35,162	33,956	36,915	37,310	38,917	46,845	46,463
JAPAN	11,406	10,654	13,738	13,047	15,388	16,684	16,669	13,010	12,534	13,640	15,687	14,233
NORWAY	43,363	49,636	43,231	50,793	55,903	59,714	67,408	62,481	60,540	60,047	67,159	65,455
RUSSIA	59	147	243	223	260	319	441	517	431	437	621	669
TURKEY	n/a	n/a	n/a	n/a	n/a	1,139	1,513	1,613	1,668	1,885	1,907	1,934
SINGAPORE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	66,803	79,125	85,738	94,554	98,924
SOUTH KOREA	312	460	427	501	721	749	891	902	1,064	1,071	1,039	982
USA	37,724	35,714	37,493	35,186	33,256	33,172	31,454	29,714	33,372	37,263	39,104	35,031

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:
- Czech Republic
- Denmark
- Finland
- Greece
- Ireland
- UK
- Norway
- Turkey
- USA

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

%

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	n/a	59.2	57.9	57.6	57.4	52.4	57.5	57.3	57.2	55.7	55.0	n/a
BELGIUM	73.7	72.9	73.1	72.7	71.6	71.8	72.4	72.3	72.0	71.4	71.3	72.7
BULGARIA	85.4	87.6	87.1	86.8	86.9	87.2	87.4	85.7	84.3	82.3	82.3	82.9
CROATIA	n/a	n/a	n/a	n/a	88.2	90.1	89.6	88.5	89.7	90.3	90.0	n/a
CYPRUS	n/a	74.1	72.3	74.1	73.1	73.5	73.2	74.0	72.9	73	72.5	n/a
CZECH REPUBLIC	74.1	74.5	75.8	76.6	78.7	80.1	80.4	80.1	78.9	78	78.2	n/a
DENMARK	67.4	67.1	66.5	66.3	66.6	68.7	66.0	64.5	63.3	62.7	62.0	62.4
ESTONIA	87.8	86.8	88.9	87.1	85.5	83.5	82.2	81.1	81.5	81.5	81.4	n/a
FINLAND	73.3	73.6	73.2	74.1	74.3	74.1	73.9	73.6	73.2	72.7	71.6	71.4
FRANCE	62.5	60.5	62.1	63.0	62.0	63.1	63.7	64.3	65	64.1	64.9	n/a
GERMANY	n/a	n/a	n/a	n/a	53.2	53.4	53.3	52.6	52.5	51.9	51.7	n/a
GREECE	n/a	75.6	76.7	76.4	77.2	75.9	75.9	75.8	74.0	75.1	73.9	n/a
HUNGARY	87.6	88.5	89.0	89.8	89.7	89.3	89.8	88.7	88.2	86.3	86.3	85.3
IRELAND	78.0	78.1	77.3	73.7	73.3	70.2	69.6	69.9	68.6	70	69.8	n/a
ITALY	72.9	73.2	72.8	72.8	72.6	73.2	74.2	73.3	73.1	72.9	72.3	n/a
LATVIA	n/a	86.0	86.0	87.2	84.3	82.8	81.5	81.2	80.9	80.2	80.9	81.5
LITHUANIA	91.8	89.4	92.2	91.5	93.6	92.2	91.9	92.2	89.9	89.4	90.3	n/a
LUXEMBOURG	n/a	74.5	73.8	70.4	68.1	68.2	70.8	73.0	72.5	73.2	73.9	n/a
MALTA	80.1	79.8	79.9	78.5	79.5	80.2	81.8	80.3	80	80.8	81.4	n/a
NETHERLANDS	65.4	66.6	67.5	68.4	67.2	67.1	67.5	67.1	67	67.8	69.0	n/a
POLAND	n/a	62.5	66.0	68.7	81.3	82.1	82.4	83.8	83.5	83.7	83.4	n/a
PORTUGAL	75.5	74.2	74.5	74.6	74.9	75.0	74.5	74.2	74.9	74.8	75.2	n/a
ROMANIA	n/a	96.1	96.5	96.5	97.5	96.6	96.6	95.6	96.2	96.4	96.0	96.9
SLOVAKIA	88.9	89.1	89.3	89.5	90.0	90.2	90.4	90.5	90.3	89.3	89.5	90.3
SLOVENIA	84.5	81.3	81.3	81.3	78.1	77.5	76.2	76.6	76.7	76.2	75.1	n/a
SPAIN	n/a	80.6	80.2	79.6	79.8	79.7	78.9	77.7	78.8	78.2	77.8	n/a
SWEDEN	68.8	69.5	68.8	69.7	70.8	69.7	70.1	69.6	69.3	66.2	65.2	n/a
UNITED KINGDOM	71.4	73.3	72.5	69.9	70.0	67.9	66.7	64.6	64.4	63.5	63.4	n/a
EURO AREA 19	n/a	71,2	71,5	71,6	66,6	66,7	67,0	66,6	66,7	66,2	n/a	n/a
EU 28	n/a	71,4	71,7	71,9	66,8	66,9	67,2	66,9	66,9	66,4	66,4	n/a
ICELAND	86.2	86.4	85.8	84.2	81.3	77.9	77.3	77.5	78.2	77.8	78.7	n/a
NORWAY	83.7	83.8	86.1	85.4	82.9	84.0	84.8	83.5	84.4	82.8	82.7	n/a
TURKEY	60.7	60.8	60.9	60.8	n/a	59.6	60.7	61.1	60.4	n/a	n/a	n/a

Source:
Eurostat

2) The series has been revised for at least two years in:
- Romania

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 2015 owner occupation rates were not yet available.

12. Building Permits

Number issued

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	39,200	38,200	38,500	38,300	42,000	46,000	40,900	46,600	49,500	50,800	58,000	62,700
BELGIUM	61,083	53,923	52,651	45,456	49,872	44,352	46,811	49,141	54,903	46,181	51,528	50,414
BULGARIA	53,049	64,185	49,407	20,166	12,832	10,973	10,616	12,278	15,848	17,264	18,157	5,562
CROATIA	25,517	24,877	24,585	17,018	13,378	13,470	9,742	7,744	7,743	6,950	9,398	12,509
CYPRUS	9,794	9,521	8,896	8,950	8,777	7,506	7,172	5,341	4,933	5,014	5,354	5,728
CZECH REPUBLIC	49,777	47,298	47,389	41,954	39,158	39,656	34,006	29,475	28,127	28,886	31,002	32,069
DENMARK	35,528	22,599	16,126	9,847	17,048	18,919	13,669	12,263	17,309	24,079	28,328	21,296
ESTONIA	12,863	8,925	5,468	2,081	2,581	2,830	3,035	3,049	3,941	5,588	6,021	7,877
FINLAND	35,418	31,902	25,721	26,697	32,836	34,554	31,752	26,583	29,310	31,597	39,031	47,273
FRANCE	602,300	571,300	476,200	380,200	476,500	517,800	480,800	421,900	379,700	403,000	462,400	497,700
GERMANY	247,541	182,336	174,595	177,939	187,667	228,311	241,090	272,433	285,079	313,296	375,388	347,882
GREECE	45,406	41,790	34,021	27,447	23,380	15,114	9,066	5,675	4,620	4,618	4,305	4,930
HUNGARY	44,826	44,276	43,862	28,400	17,353	12,488	10,600	7,536	9,633	12,515	31,559	37,997
IRELAND	85,820	92,130	75,042	43,752	20,022	12,522	6,741	7,199	7,411	13,044	16,375	20,776
ITALY	261,455	250,271	191,783	141,587	119,409	112,391	82,058	53,408	46,796	42,920	44,848	37,300
LATVIA	6,461	5,877	3,749	2,244	1,844	2,022	2,262	2,369	2,295	2,193	1,998	2,766
LITHUANIA	7,482	8,869	8,189	5,994	5,876	4,951	5,768	7,118	6,868	7,152	8,458	7,734
LUXEMBOURG	4,411	4,934	4,017	3,693	3,892	4,323	4,305	3,761	6,360	4,558	4,846	5,048
MALTA	10,409	11,343	6,836	5,298	4,444	3,955	3,064	2,705	2,937	3,947	7,508	9,822
NETHERLANDS	96,447	87,918	87,198	72,646	61,028	55,804	39,354	27,233	41,320	55,599	53,567	69,501
POLAND	67,692	92,240	99,794	90,632	87,593	85,270	75,923	67,175	65,449	72,293	80,796	89,888
PORTUGAL	71,921	65,828	45,981	27,298	25,002	17,481	11,430	7,416	6,858	8,169	8,219	14,044
ROMANIA	51,065	56,618	61,092	48,833	42,189	39,424	37,852	37,776	37,672	39,112	38,653	41,603
SLOVAKIA	18,028	16,253	25,956	18,155	14,466	11,641	11,614	13,180	14,310	17,642	20,224	18,472
SLOVENIA	8,000	9,000	8,000	5,209	4,225	3,285	2,700	2,675	2,197	2,179	2,521	2,641
SPAIN	734,978	633,430	267,876	130,418	91,509	75,894	57,486	31,213	33,643	36,059	57,182	60,888
SWEDEN	45,233	27,572	21,215	17,973	27,554	26,735	21,327	30,558	36,740	47,863	60,277	63,581
AUSTRALIA	155,440	160,796	150,002	149,995	181,960	153,755	156,634	181,248	208,556	238,289	233,883	223,528
NORWAY	n/a	32,402	25,917	19,576	21,278	27,735	30,142	30,252	27,130	30,927	36,530	35,294
SINGAPORE	11,863	16,345	13,350	10,506	16,892	21,100	19,702	19,593	9,275	7,073	7,132	4,072
SOUTH KOREA	469,503	555,792	371,285	381,787	386,542	549,594	586,884	440,116	515,251	765,328	726,048	653,441
TURKEY	491,230	481,058	389,468	412,758	746,779	563,073	664,533	730,149	937,209	804,446	897,365	1,219,272
USA	1,838,900	1,398,400	905,400	583,000	604,600	624,100	829,700	990,800	1,052,124	1,182,582	1,206,600	1,282,000

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
- Belgium
- Denmark
- France
- Netherlands
- Sweden

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BELGIUM	57,907	54,450	50,380	44,929	47,569	41,574	44,818	44,696	52,826	43,520	n/a	n/a
BULGARIA	20 592	18 116	28 321	20,325	16,211	12,740	13,090	14,758	15,836	19,640	21,441	19,930
CZECH REPUBLIC	43,747	43,796	43,531	37,319	28,135	27,535	23,853	22,108	24,351	26,378	27,224	31,521
DENMARK	35,515	25,392	16,966	11,099	15,902	18,705	15,151	11,369	16,964	20,308	24,823	15,813
ESTONIA	n/a	n/a	n/a	n/a	n/a	1,150	1,577	2,343	3,841	3,882	2,706	3,611
FINLAND	35,578	32,044	23,360	23,467	33,641	32,962	29,930	27,764	25,081	32,262	37,250	44,773
FRANCE	493,900	489,200	399,100	346,100	413,800	431,100	382,800	359,000	335,300	336,500	369,400	427,700
GREECE	125,387	103,865	79,601	61,490	52,344	29,974	18,817	11,748	9,619	9,264	9,286	10,335
HUNGARY	29,208	27,396	22,314	8,985	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
IRELAND	75,602	48,876	22,852	8,599	6,391	4,365	4,042	4,708	7,717	8,747	13,234	17,572
ITALY	295,201	281,740	219,143	163,427	131,184	123,499	n/a	n/a	n/a	n/a	n/a	n/a
MALTA	10,409	11,343	n/a	n/a	n/a	3,955	n/a	n/a	n/a	n/a	n/a	n/a
POLAND	137,962	185,117	174,686	142,901	158,064	162,200	141,798	127,392	148,122	168,403	173,932	205,990
ROMANIA	66,817	87,643	143,139	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SLOVAKIA	20,592	18,116	28,321	20,325	16,211	12,740	12,740	13,090	14,758	15,836	19,640	21,441
SLOVENIA	9,000	11,000	7,447	6,019	4,831	3,844	3,066	3,142	2,762	2,749	2,975	3,231
SPAIN	865,561	651,427	264,795	111,140	91,662	78,286	44,162	34,288	34,873	49,695	64,038	80,786
SWEDEN	45,264	27,572	21,215	17,973	27,554	26,735	21,327	30,558	36,740	47,863	60,277	63,581
UNITED KINGDOM	223,260	233,770	141,910	115,400	138,630	138,810	125,320	149,740	170,260	179,570	187,310	190,710
AUSTRALIA	151,006	150,923	145,129	135,827	158,229	150,018	151,373	168,337	201,073	223,066	230,230	216,427
BRAZIL	n/a	n/a	159,058	162,793	328,341	395,434	371,688	343,981	295,520	268,428	229,916	247,353
ICELAND	3,746	4,446	3,172	192	321	142	466	769	582	1,612	1,133	2,836
JAPAN	1,285,246	1,035,598	1,039,214	775,277	819,020	841,246	893,002	987,254	880,470	920,537	974,137	946,396
NORWAY	32,559	31,893	25,083	19,021	22,226	28,225	29,202	27,634	25,404	30,150	31,278	30,719
SINGAPORE	11,295	12,432	14,239	8,603	17,864	20,736	21,395	20,357	11,571	8,082	6,918	5,397
SOUTH KOREA	n/a	n/a	n/a	n/a	n/a	424,269	480,995	425,944	507,666	716,759	657,956	544,274
USA	1,801,000	1,355,000	906,000	554,000	587,000	609,000	780,000	925,000	1,003,000	1,112,000	1,174,000	1,203,000

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:
- France
- Sweden
- UK

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	41,900	47,700	48,000	38,400	35,800	37,400	40,600	40,500	36,800	42,100	43,900	50,500
BULGARIA	14,444	16,473	17,184	18,834	17,076	14,608	15,255	15,100	14,985	15,471	15,672	16,946
CROATIA	8,657	8,480	8,148	6,733	6,108	5,468	4,948	4,566	3,841	3,678	3,811	n/a
CYPRUS	16,647	16,501	18,195	16,644	13,434	9,091	6,565	3,833	2,718	2,390	n/a	n/a
CZECH REPUBLIC	30,190	41,649	38,380	38,473	36,442	28,630	29,467	25,238	23,954	25,095	27,322	28,575
DENMARK	29,071	31,291	26,770	19,017	12,277	13,339	17,567	16,592	15,589	14,938	21,084	23,358
ESTONIA	5,068	7,073	5,300	3,026	2,324	1,918	1,990	2,079	2,756	3,969	4,732	5,890
FINLAND	33,082	34,650	30,340	21,362	24,408	32,383	32,365	28,815	28,987	28,199	29,630	34,931
FRANCE	410,579	458,039	470,976	395,103	347,166	381,620	399,056	404,355	413,627	399,564	n/a	n/a
GERMANY	249,436	210,739	175,927	158,987	159,832	183,110	200,466	214,817	245,325	247,722	277,691	284,816
GREECE	123,250	137,391	104,621	51,955	54,545	53,099	37,336	23,162	13,559	8,540	6,655	6,282
HUNGARY	33,864	36,159	36,075	31,994	20,823	12,655	10,560	7,293	8,382	7,612	10,032	14,389
IRELAND	93,419	78,027	51,724	26,420	14,602	10,480	8,488	8,301	11,016	12,666	14,932	19,271
ITALY	295,201	281,740	219,143	163,427	131,184	123,499	n/a	n/a	n/a	n/a	n/a	n/a
LATVIA	5,865	9,319	8,084	4,187	1,918	2,662	2,087	2,201	2,630	2,240	2,197	2,271
LITHUANIA	7,286	9,315	11,829	9,400	3,667	3,733	3,198	3,467	4,456	5,707	7,051	6,420
LUXEMBOURG	2,266	3,023	4,444	3,740	2,824	2,162	2,304	2,642	3,357	n/a	n/a	n/a
NETHERLANDS	72,382	80,193	78,882	82,932	55,999	57,703	48,668	49,311	44,041	48,381	54,849	62,982
POLAND	115,187	133,778	165,192	160,019	135,818	131,148	152,904	145,388	143,235	147,821	163,394	178,460
PORTUGAL	68,764	67,463	59,256	47,915	35,442	26,069	19,302	12,430	7,794	6,611	7,256	8,636
ROMANIA	39,638	47,299	67,255	62,520	48,862	45,419	44,016	43,587	44,984	47,017	52,206	53,301
SLOVAKIA	14,444	16,473	17,184	18,834	17,076	14,608	15,255	15,100	14,985	15,471	15,672	16,946
SLOVENIA	8,000	8,000	9,968	8,530	6,355	5,468	4,307	3,484	3,163	2,776	3,163	3,044
SPAIN	585,583	641,419	615,072	366,887	240,920	157,405	114,991	64,817	46,822	45,152	40,119	54,610
SWEDEN	29,832	30,527	32,021	22,821	19,500	20,064	25,993	29,225	29,164	34,603	42,441	48,227
UNITED KINGDOM	208,970	223,590	187,330	157,130	135,960	140,680	141,550	135,430	145,100	171,920	170,880	n/a
AUSTRALIA	143,374	149,538	142,886	144,254	146,896	143,104	141,705	150,591	174,166	194,035	209,942	213,078
ICELAND	3,294	3,348	2,978	893	1,148	565	1,076	934	1,149	1,120	1,513	1,768
NORWAY	27,744	31,056	28,640	21,705	18,090	20,046	26,275	28,456	28,072	28,265	29,286	31,470
RUSSIA	609,000	722,000	768,000	702,000	717,000	786,000	838,000	929,000	1,124,000	1,195,000	1,167,000	1,139,000
SINGAPORE	6,520	6,513	10,122	10,488	10,399	12,469	10,329	13,150	19,941	18,971	20,803	16,449
SOUTH KOREA	n/a	n/a	n/a	n/a	n/a	338,813	365,053	395,519	431,339	460,153	514,775	569,209
TURKEY	218,408	247,386	263,402	329,861	316,223	455,209	461,446	613,286	679,759	657,418	665,776	735,816
USA	1,979,000	1,502,000	1,120,000	794,000	651,000	585,000	649,000	764,000	884,000	968,000	1,059,000	1,153,000

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
- Latvia
- Portugal
- Spain
- United Kingdom
- Turkey

3) Notes
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a: figure not available

15. Real Gross Fixed Investment in Housing

Annual % change

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	0.4	1.9	0.8	-5.7	0.6	2.9	-1.4	-0.2	-0.7	1.1	0.3	2.5
BELGIUM	6.9	2.9	-1.4	-8.6	2.6	-2.4	0.2	-3.3	5.6	0.5	3.1	0.9
BULGARIA	97.4	-7.2	22.4	-20.4	-40.8	-14.2	-26.7	-4.0	-3.3	-10.3	102.1	3.9
CYPRUS	18.2	8.1	-0.3	-19.6	-14.4	-16.8	-19.5	-23.1	-2.0	3.9	15.4	25.4
CZECH REPUBLIC	8.0	26.2	-1.5	-4.6	10.3	-5.9	2.7	-7.7	10.2	22.5	5	4.7
DENMARK	11.4	-5.5	-16.7	-20.4	-8.9	15.8	-5.5	-7.8	6.8	8.2	7.1	8.7
ESTONIA	43.6	-3.2	-29.2	-35.9	-9.4	9.9	9.0	19.0	19.6	13.6	15.6	-2.2
FINLAND	3.8	-0.4	-10.6	-13.9	24.1	5.3	-3.5	-5.3	-6.6	2	10.5	5.9
FRANCE	5.4	4.0	-3.0	-9.2	2.1	0.9	-2.2	-0.4	-1.9	-1.3	2.6	3.4
GERMANY	6.1	-1.8	-3.2	-3.4	4.3	10.0	3.4	-0.8	3.1	-0.7	4	2.8
GREECE	17.7	14.4	-23.9	-19.6	-26.2	-14.6	-37.9	-31.1	-53.3	-25.8	-12.5	-8.8
HUNGARY	-16.6	6.6	6.2	-3.4	-24.7	-27.4	-9.9	-6.0	11	-16.8	9.7	n/a
IRELAND	3.8	-8.0	-16.7	-37.6	-32.9	-31.5	-24.8	7.3	14.5	6	21.6	19.5
ITALY	4.9	1.4	-1.7	-9.2	0.0	-6.9	-7.5	-4.5	-7.0	-1.3	2.6	1.9
LATVIA	34.4	41.4	-11.9	-52.4	-28.9	1.3	13.8	-1.3	9.7	7.6	-23.2	-8.4
LITHUANIA	21.2	14.9	24.3	-7.2	-29.7	1.0	2.3	11.5	16.9	14.9	6.8	-4.6
LUXEMBOURG	23.7	37.0	8.7	-22.3	-11.7	8.3	4.7	17.0	-7.1	-1.1	6.4	-5.5
MALTA	12.4	12.3	-21.4	-26.6	-16.1	0.5	-9.7	-7.8	1.3	26.4	34	44
NETHERLANDS	5.8	5.1	0.8	-14.7	-16.0	-3.6	-12.9	-12.2	6.1	20	21.7	12.0
POLAND	9.6	13.1	6.2	-2.3	-4.2	1.2	5.1	0.9	8.4	-11.5	-2.9	16.3
PORTUGAL	-6.3	-4.8	-13.1	-14.3	-10.4	-11.5	-7.7	-14.3	-1.1	1.1	1.7	6.3
ROMANIA	-6.3	50.6	40.9	-14.2	2.2	-10.2	5.1	-11.2	-0.7	5.2	12.1	n/a
SLOVAKIA	-12.3	13.8	2.0	14.0	-10.3	-3.6	0.1	17.8	-14.3	2.2	9.2	3.2
SLOVENIA	10.3	14.1	12.4	-20.5	-20.4	-12.4	-12.5	-7.9	-6.4	0.8	0	7.6
SPAIN	6.7	1.3	-9.2	-20.3	-11.6	-13.3	-10.3	-10.2	11.3	-1	4.4	8.3
SWEDEN	14.5	6.8	-13.2	-19.0	12.7	8.0	-11.8	0.9	15.6	18	14.3	13.2
UNITED KINGDOM	-3.8	-1.5	-9.7	-20.3	4.2	3.9	-3.7	6.7	9.5	6.5	8.2	8.5
EU 28	5.0	1.7	-5.6	-12.6	-2.0	-0.6	-3.8	-2.3	2.1	1.5	5.4	5.4
EURO AREA 19	5.9	1.7	-5.3	-11.6	-2.4	-1.3	-3.7	-3.3	0.3	0.1	4.4	4.2
ICELAND	16.5	13.2	-21.9	-55.7	-18.0	5.4	6.9	10.8	14.8	-3.1	26.4	21.6
NORWAY	4.0	2.7	-9.0	-8.1	-1.6	17.0	10.9	5.3	-1.4	3.2	9	n/a
TURKEY	17.8	6.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
USA	-7.6	-18.8	-24.0	-21.2	-2.5	0.5	13.5	9.5	1.6	6.9	n/a	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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	4,011	4,044	4,084	4,124	4,154	4,441	4,470	4,501	4,533	4,506	4,506	4,600
BELGIUM	4,903	4,950	4,996	5,043	5,087	5,131	5,180	5,229	5,277	5,319	5,361	5,412
BULGARIA	3,729	3,747	3,767	3,789	3,804	3,900	3,909	3,918	3,928	3,935	3,944	3,951
CROATIA	n/a	n/a	n/a	n/a	n/a	1,924	n/a	n/a	n/a	n/a	n/a	n/a
CYPRUS	359	376	394	410	421	431	437	441	444	446	n/a	n/a
CZECH REPUBLIC	4,516	4,558	4,596	4,635	4,671	4,700	4,729	4,754	n/a	n/a	n/a	n/a
DENMARK	2,658	2,670	2,696	2,722	2,770	2,786	2,797	2,812	2,827	2,844	2,861	2,878
ESTONIA	633	638	645	651	654	656	658	n/a	n/a	n/a	n/a	n/a
FINLAND	2,454	2,477	2,499	2,517	2,537	2,556	2,580	2,600	2,618	2,634	2,655	n/a
FRANCE	31,060	31,449	31,819	32,174	32,520	32,860	33,212	33,575	33,917	34,225	34,537	34,800
GERMANY	39,753	39,918	40,058	40,184	40,479	40,630	40,806	40,995	41,221	41,446	41,703	41,970
GREECE	6,023	6,161	6,265	6,317	6,372	6,425	6,462	6,485	6,499	6,508	6,514	6,521
HUNGARY	4,209	4,238	4,270	4,303	4,331	4,349	4,394	4,402	4,408	4,415	4,420	4,427
IRELAND	1,838	1,912	1,960	1,982	1,992	1,999	2,003	2,007	2,014	2,022	2,004	1,974
ITALY	30,360	31,211	29,598	30,112	30,580	31,791	31,576	n/a	n/a	n/a	n/a	n/a
LATVIA	1,018	1,036	1,042	1,035	n/a	1,019	n/a	n/a	n/a	n/a	n/a	n/a
LITHUANIA	1,307	1,316	1,328	1,337	1,341	1,283	1,289	1,298	1,396	1,408	1,417	7,734
LUXEMBOURG	n/a	n/a	175	n/a	n/a	223	n/a	n/a	n/a	n/a	n/a	n/a
MALTA	n/a	n/a	n/a	n/a	n/a	224	n/a	n/a	n/a	n/a	n/a	n/a
NETHERLANDS	6,967	7,029	7,105	7,172	7,218	7,266	7,386	7,449	7,535	7,588	7,641	7,741
POLAND	12,987	12,994	13,150	13,302	13,422	13,560	13,723	13,853	13,983	14,119	14,272	n/a
PORTUGAL	5,706	5,744	5,793	5,826	5,852	5,879	5,898	5,910	5,920	5,926	n/a	n/a
ROMANIA	8,231	8,271	8,329	8,385	8,428	8,722	8,761	8,800	8,841	8,882	8,929	n/a
SLOVAKIA	1,955	1,970	1,987	2,006	2,023	2,036	n/a	n/a	n/a	n/a	n/a	n/a
SLOVENIA	812	820	830	838	845	850	854	857	860	n/a	n/a	n/a
SPAIN	23,458	24,027	24,591	24,938	25,131	25,209	25,271	25,245	25,209	25,171	25,126	25,094
SWEDEN	4,403	4,435	4,466	4,488	4,508	4,524	4,551	4,634	4,669	4,717	4,796	4,859
UNITED KINGDOM	26,516	26,772	27,047	27,266	27,448	27,614	27,767	27,914	28,073	n/a	n/a	n/a
AUSTRALIA	n/a	n/a	n/a	n/a	n/a	7,760	n/a	n/a	n/a	n/a	n/a	n/a
BRAZIL	54,747	56,339	58,181	59,253	57,324	62,117	63,768	65,130	67,039	68,037	69,223	69,773
ICELAND	121	126	129	130	131	131	132	132	134	135	136	138
JAPAN	n/a	n/a	57,586	n/a	n/a	n/a	n/a	60,629	n/a	n/a	n/a	n/a
NORWAY	2,215	2,243	2,274	2,301	2,343	2,369	2,399	2,427	2,456	2,485	2,516	2,548
SOUTH KOREA	n/a	n/a	n/a	n/a	n/a	17,739	18,082	18,414	18,742	19,161	19,559	19,877
RUSSIA	58,000	58,600	59,000	59,500	60,100	60,800	61,500	61,300	62,900	64,000	64,900	n/a
TURKEY	n/a	n/a	n/a	n/a	n/a	19,482	n/a	n/a	n/a	n/a	n/a	n/a
USA	127,296	129,064	130,415	131,269	131,776	132,168	132,600	133,199	133,946	134,764	135,660	136,570

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:
- Greece
- Austria

3) Notes
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a : figure not available

17. Number of Transactions

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
BELGIUM	121,312	125,718	121,604	115,069	128,094	128,621	124,358	124,356	135,180	105,632	115,351	125,678
CROATIA	3,389	3,110	3,025	2,861	2,319	2,169	2,357	1,997	2,410	1,672	2,791	2,429
CYPRUS	16,953	21,245	14,667	8,170	8,598	7,018	6,269	3,767	4,527	4,952	7,063	8,734
DENMARK	71,905	70,225	53,248	46,215	52,955	44,064	45,506	46,566	52,490	63,186	63,679	69,325
ESTONIA	44,929	40,008	28,738	20,809	23,747	23,327	26,760	30,141	31,093	33,081	33,410	51,780
FINLAND	83,848	87,411	70,483	71,012	70,689	69,099	71,645	63,440	58,520	61,578	61,228	62,198
FRANCE	1,176,300	1,179,600	965,900	829,400	1,040,300	1,092,500	938,900	943,300	912,100	1,025,600	1,105,200	1,241,000
GERMANY	442,000	468,000	467,000	485,000	525,000	571,000	576,000	565,000	562,000	577,000	581,000	564,000
GREECE	172,897	167,699	157,978	135,967	117,948	83,665	57,650	49,774	43,443	54,631	60,540	n/a
HUNGARY	225,734	191,170	154,097	91,137	90,271	87,730	85,957	88,713	103,697	134,101	146,302	134,216
IRELAND	151,620	121,844	87,565	44,375	28,618	26,818	31,802	34,662	47,238	56,178	55,153	61,180
ITALY	845,051	806,225	686,587	609,145	611,878	598,224	444,018	403,124	417,524	448,893	533,741	542,480
LATVIA	79,165	63,537	42,828	34,042	36,604	42,051	43,941	49,141	49,973	48,397	52,152	52,640
LUXEMBOURG	n/a	5,091	4,409	4,509	5,165	5,749	5,474	5,471	6,477	6,269	6,333	7,404
MALTA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6,502	n/a
NETHERLANDS	209,767	202,401	182,392	127,532	126,127	120,739	117,261	110,094	153,511	178,293	214,793	241,860
POLAND	67,936	65,792	77,526	60,894	76,698	86,897	116,555	124,685	130,656	160,789	173,467	n/a
PORTUGAL	285,483	281,367	241,040	205,442	129,950	93,618	76,398	79,775	84,215	107,302	127,106	153,292
ROMANIA	682,000	521,000	484,000	352,000	352,324	371,569	434,954	473,319	454,001	483,699	521,805	587,017
SLOVENIA	n/a	n/a	6,994	5,705	7,923	6,882	6,336	5,783	7,448	9,317	10,652	10,788
SPAIN	955,186	836,871	564,464	463,719	491,287	349,118	363,623	300,568	365,621	401,713	457,738	532,367
SWEDEN	151,448	163,676	146,882	146,582	152,072	144,946	143,675	151,582	159,536	168,298	160,200	162,929
UNITED KINGDOM	1,670,450	1,613,810	900,200	858,350	885,770	884,790	932,480	1,074,450	1,218,750	1,229,580	1,235,020	1,220,060
BRAZIL	468,888	515,705	563,706	622,859	858,374	946,637	922,283	996,941	992,429	894,614	783,511	657,394
ICELAND	9,876	13,163	5,218	3,039	4,012	5,887	6,690	7,431	8,314	10,067	11,074	12,106
JAPAN	167,300	150,500	170,800	168,800	164,600	166,800	154,900	169,467	n/a	n/a	n/a	n/a
NORWAY	78,455	74,926	65,241	70,995	100,177	110,844	113,276	109,437	112,147	119,681	121,578	114,382
RUSSIA	1,332,607	1,727,813	1,787,209	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
SINGAPORE	25,042	40,654	13,642	33,663	38,900	32,640	37,873	22,728	12,848	14,117	16,378	25,010
TURKEY	n/a	n/a	427,105	555,184	607,098	708,275	701,621	1,157,190	1,165,381	1,289,320	1,341,453	1,409,314
USA	7,529,000	5,816,000	4,595,000	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

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:
- Belgium
- Cyprus
- Denmark
- France
- Germany
- Brazil
- Norway
- 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.
- 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

2007=100

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	95.9	100.0	101.1	105.0	111.6	116.3	130.7	136.7	141.5	147.3	158.1	166.5
BELGIUM	91.1	100.0	105.2	104.9	110.2	114.8	118.1	120.6	122.0	124.7	129.6	133.5
BULGARIA	77.6	100.0	125.0	99.5	89.3	84.4	82.8	81.0	82.2	84.4	90.4	98.2
CROATIA	79.4	100.0	107.5	106.2	97.5	104.6	102.8	92.7	93.5	95.0	89.2	95.4
CYPRUS	79.8	100.0	118.6	112.8	111.9	108.7	102.6	96.3	88.1	84.5	83.0	83.4
CZECH REPUBLIC	83.8	100.0	111.8	103.2	103.5	102.9	102.1	102.2	106.1	110.5	122.6	135.2
DENMARK	95.8	100.0	95.8	85.8	88.2	85.0	81.2	81.8	83.1	88.6	91.9	96.1
ESTONIA	82.8	100.0	90.4	56.8	60.0	65.1	69.8	77.2	87.8	93.9	98.4	103.7
FINLAND	94.8	100.0	100.6	100.3	109.1	112.0	113.8	115.7	115.0	114.1	115.0	116.3
FRANCE	94.6	100.0	96.2	92.3	99.3	102.9	100.7	98.9	96.4	95.9	97.4	100.7
GERMANY	100.2	100.0	103.3	102.6	103.2	105.7	108.9	112.2	115.7	121.0	128.2	135.6
GREECE	94.4	100.0	101.7	97.9	93.4	88.3	78.0	69.5	64.3	61.1	59.6	59.0
HUNGARY	95.4	100.0	101.0	94.7	89.8	88.2	85.6	80.4	83.0	98.0	115.0	129.3
IRELAND	93.0	100.0	93.0	75.2	65.1	54.0	46.7	47.3	55.1	61.5	66.0	73.2
ITALY	95.7	100.0	100.5	100.4	100.7	101.5	98.6	93.0	88.9	86.6	86.0	84.4
LATVIA	81.2	100.0	82.2	58.1	56.7	60.0	63.6	68.9	65.8	70.1	75.6	81.7
LITHUANIA	79.2	100.0	109.0	76.4	70.7	75.4	75.2	76.1	81.0	84.0	88.5	96.4
LUXEMBOURG	93.5	100.0	103.4	102.2	107.7	111.7	116.3	122.1	127.5	134.4	142.5	150.4
MALTA	82.6	100.0	111.1	106.2	107.4	105.9	110.1	108.6	114.6	117.0	130.0	136.4
NETHERLANDS	96.0	100.0	103.0	99.5	97.3	94.9	88.8	83.0	83.7	86.1	90.4	97.2
POLAND	77.2	100.0	98.9	92.2	90.1	89.5	82.1	81.3	82.8	83.7	85.8	89.8
PORTUGAL	98.6	100.0	103.8	102.8	103.6	98.5	91.6	89.8	93.7	96.5	103.4	117.0
ROMANIA	n/a	n/a	n/a	100.0	92.5	81.1	77.0	76.8	75.2	77.4	82.0	86.9
SLOVAKIA	80.8	100.0	122.1	108.6	104.3	101.1	99.9	99.0	98.2	99.1	103.3	109.9
SLOVENIA	81.7	100.0	107.0	96.8	96.9	99.5	92.7	87.9	82.1	82.7	85.4	92.3
SPAIN	94.5	100.0	100.7	93.3	89.6	84.6	77.2	72.7	71.0	71.7	73.1	74.8
SWEDEN	90.2	100.0	103.0	104.7	112.3	113.2	111.9	115.7	123.8	137.0	148.5	160.9
UNITED KINGDOM	91.0	100.0	95.5	87.0	92.0	90.7	91.0	93.4	100.8	106.9	114.3	119.6
EU 28 (simple average)	88.9	100.0	103.4	95.2	94.8	94.3	92.9	92.2	93.7	96.9	101.9	108.0
EURO AREA 19 (simple average)	90.0	100.0	102.8	94.3	94.7	94.8	93.9	93.5	94.3	96.4	100.7	105.9
AUSTRALIA	90.5	100.0	103.9	108.2	120.8	118.2	117.8	125.6	137.0	149.3	157.6	172.6
BRAZIL	83.7	100.0	123.7	155.9	192.4	223.7	246.2	267.7	279.5	274.9	268.7	266.3
ICELAND	85.6	100.0	106.2	95.9	93.0	97.3	104.1	110.1	130.5	141.2	155.1	186.1
JAPAN	n/a	n/a	100.0	94.6	95.6	95.1	94.0	95.6	95.2	95.7	96.7	96.9
NORWAY	95.7	100.0	92.0	104.1	111.5	120.6	129.8	128.9	140.0	146.4	164.6	162.7
RUSSIA	75.4	100.0	117.4	112.2	110.3	118.1	133.3	143.0	151.4	152.0	147.9	146.5
SINGAPORE	80.9	100.0	112.3	91.0	120.9	132.3	135.4	139.7	135.7	130.5	126.4	125.0
SOUTH KOREA	95.4	100.0	95.9	105.1	106.8	113.7	110.8	115.7	121.6	129.6	133.8	133.8
TURKEY	n/a	n/a	n/a	n/a	100.0	103.6	115.3	128.6	143.5	160.0	178.5	199.1
USA	100.0	100.0	92.0	86.6	84.0	80.5	82.9	88.9	93.6	98.7	104.7	111.8

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:

- Belgium
- Denmark
- Germany
- Romania
- Norway

3) Notes:

- For Hypostat 2018 the base year has been postponed to 2007
- 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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA												
Vienna	89.1	100.0	109.3	108.9	115.3	126.6	135.4	140.5	141.9	148.6	163.6	166.5
Rest of the country	96.1	100.0	103.5	104.2	108.1	104.4	106.6	108.9	96.7	97.1	104.8	106.9
BELGIUM												
Brussels	n/a	n/a	n/a	n/a	100.0	106.1	110.7	115.3	110.4	113.6	117.0	118.5
BULGARIA												
Sofia	91.1	100.0	128.5	95.8	86.5	81.0	80.1	79.4	81.7	87.9	97.6	108.2
Varna	82.3	100.0	133.1	100.5	90.7	85.0	81.8	81.1	83.3	90.6	97.5	107.8
Plovdiv	74.7	100.0	120.1	103.0	89.6	84.4	81.1	78.9	78.1	86.0	90.8	99.7
CROATIA												
Zagreb	74.4	100.0	116.3	114.6	100.1	100.3	101.8	90.2	97.2	95.8	84.8	98.3
Rest of the country	88.3	100.0	99.0	103.1	98.0	110.7	104.3	96.8	94.7	98.1	97.8	98.7
CYPRUS												
Nicosia	84.1	100.0	117.9	113.1	112.5	111.1	106.3	98.8	90.4	85.6	83.6	84.2
Limassol	81.9	100.0	122.5	114.9	117.4	112.0	107.8	102.6	94.4	90.6	89.8	91.7
Larnaca	78.5	100.0	113.8	111.7	109.7	104.7	96.2	87.7	79.5	75.8	74.9	74.5
CZECH REPUBLIC												
Prague	78.0	100.0	116.0	103.7	99.6	97.9	97.2	98.3	100.5	103.2	n/a	n/a
DENMARK												
Copenhagen	103.4	100.0	91.9	79.0	88.0	87.7	85.1	91.2	98.7	109.2	115.7	123.4
Aarhus	98.8	100.0	94.2	87.4	93.6	92.3	92.0	93.5	94.7	102.1	105.1	107.7
Odense	92.5	100.0	98.7	89.1	91.1	87.5	84.9	86.8	88.8	93.5	97.8	100.0
FINLAND												
Helsinki	93.7	100.0	100.4	101.0	113.0	117.4	120.3	125.0	125.7	126.1	129.6	134.0
Tampere	95.6	100.0	100.0	98.9	106.9	109.7	111.6	113.3	114.4	115.5	116.8	119.0
Turku	96.7	100.0	97.3	97.8	104.5	106.3	108.2	110.3	113.8	114.8	115.8	119.7
FRANCE												
Paris	90.6	100.0	102.1	98.2	115.8	132.2	130.8	129.0	126.0	126.5	131.9	143.2
Marseille	98.6	100.0	94.2	91.7	96.9	99.0	95.0	90.6	87.5	85.2	83.0	87.3
Lyon	95.6	100.0	93.1	94.0	105.7	112.4	117.0	116.8	115.1	116.4	120.4	131.8
GERMANY												
Aggregate Berlin, Hamburg, Munich	98.9	100.0	100.8	102.7	107.8	114.2	122.4	130.5	139.5	152.9	168.4	189.2
GREECE												
Athens	94.2	100.0	100.9	96.3	93.2	87.2	76.9	67.5	61.1	57.9	56.8	56.3
Thessaloniki	93.4	100.0	101.5	95.4	88.4	82.4	71.2	64.7	60.5	57.2	55.3	54.5

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
HUNGARY												
Budapest	97.6	100.0	103.2	98.8	93.3	92.3	88.6	80.7	86.7	110.4	136.6	157.4
Debrecen	93.4	100.0	95.1	90.6	86.5	85.2	88.5	78.4	83.3	99.2	116.9	130.8
Szeged	96.1	100.0	98.1	98.8	93.4	92.4	89.7	83.4	86.6	101.7	115.7	136.9
IRELAND												
Dublin	94.7	100.0	90.8	68.6	57.0	47.8	42.3	46.4	57.6	63.4	66.6	72.9
NETHERLANDS												
Amsterdam	90.0	100.0	108.0	101.8	101.4	101.1	95.3	90.3	94.9	104.2	118.3	134.9
The Hague	95.6	100.0	103.5	100.6	99.2	97.5	90.8	84.5	86.6	90.0	97.5	108.3
Rotterdam	96.8	100.0	102.7	100.9	100.2	99.5	94.5	89.3	90.7	94.7	101.4	114.6
POLAND												
Cracovia	79.1	100.0	100.1	94.1	88.8	87.3	80.1	79.6	81.8	81.9	83.6	83.8
Lodz	94.5	100.0	97.2	91.7	93.6	92.7	91.1	86.8	86.9	88.4	88.6	93.4
Warsaw	53.5	100.0	99.5	90.0	97.2	97.5	82.7	84.2	86.4	82.7	84.6	93.6
PORTUGAL												
Lisbon	n/a	100.0	n/a	99.6	100.5	95.6	86.9	84.5	85.0	88.5	91.2	96.1
ROMANIA												
Bucarest	n/a	n/a	n/a	100.0	84.2	67.3	68.7	62.3	62.2	64.3	69.2	74.9
SLOVAKIA												
Bratislava	82.6	100.0	118.4	105.0	103.6	100.7	99.7	99.6	98.9	101.6	107.4	113.8
Košice	71.6	100.0	140.0	113.5	115.9	120.1	119.6	114.3	113.3	116.5	114.8	125.0
Prešov	81.9	100.0	140.7	120.3	110.6	110.0	107.5	105.4	102.4	99.7	105.0	111.5
SLOVENIA												
Ljubliana	83.4	100.0	100.1	90.8	90.3	93.1	87.5	77.3	71.4	75.2	79.7	90.3
SPAIN												
Barcelona	97.0	100.0	97.1	88.8	84.3	77.2	69.3	67.4	67.1	69.1	72.3	76.3
Madrid	94.5	100.0	102.7	96.1	93.1	87.4	78.0	71.0	69.9	70.8	75.2	80.0
Valencia	93.9	100.0	104.2	97.8	91.2	84.9	74.9	70.2	68.5	68.8	70.6	70.0
SWEDEN												
Stockholm	87.4	100.0	102.3	102.7	112.6	114.2	113.8	118.4	130.7	149.0	162.1	171.3
Malmö	90.5	100.0	100.0	102.1	109.5	108.5	104.2	106.3	110.6	118.0	131.3	143.7
Göteborg	91.2	100.0	103.5	105.3	114.5	116.2	115.4	119.7	126.8	139.9	149.1	164.5
UNITED KINGDOM												
London	87.5	100.0	98.6	89.8	99.1	101.2	105.9	114.6	134.5	148.1	162.8	167.4

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRALIA												
Canberra	89.4	100.0	103.4	108.6	121.4	120.4	119.7	120.5	123.2	128.1	135.0	131.5
Sydney	95.4	100.0	100.7	104.3	117.2	116.6	118.2	129.6	148.4	172.8	184.2	193.2
Melbourne	86.8	100.0	108.1	115.8	134.8	131.6	127.8	134.7	145.0	156.6	170.6	172.2
BRAZIL												
São Paulo	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	100.0	104.2	104.8	102.2
Rio de Janeiro	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	100.0	101.8	100.7	96.3
Belo Horizonte	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	100.0	99.3	96.5	94.0
ICELAND												
Reykjavik	92.0	100.0	106.3	95.5	91.9	95.7	104.0	112.0	123.5	134.8	148.9	178.7
JAPAN												
Tokyo	94.9	100.0	91.1	85.7	87.7	86.4	84.4	86.5	85.8	89.3	96.8	97.7
Osaka	96.7	100.0	95.2	89.2	89.7	89.1	87.3	87.4	86.2	87.0	90.3	91.2
Aichi	97.7	100.0	99.4	93.7	92.6	91.0	89.1	89.6	89.1	91.3	95.9	96.3
NORWAY												
Oslo	101.5	100.0	88.3	102.4	111.4	122.7	137.4	129.2	146.8	163.0	205.4	183.7
Bergen	101.7	100.0	88.0	102.0	110.6	119.7	129.2	130.1	144.6	146.3	147.7	147.7
Trondheim	100.4	100.0	92.7	104.5	114.1	127.4	139.8	142.5	151.9	156.1	163.3	167.1
RUSSIA												
Moscow	82.5	100.0	115.4	118.1	120.5	126.9	135.0	143.2	150.7	159.4	161.1	158.6
St. Petersburg	76.0	100.0	131.4	126.3	120.2	125.3	139.9	146.6	150.7	151.2	154.6	156.2
SOUTH KOREA												
Seul	94.5	100.0	89.8	108.9	105.4	102.2	94.7	97.8	102.1	111.4	120.9	135.2
Busan	96.1	100.0	104.1	115.9	136.6	159.0	154.8	160.3	166.7	182.5	202.3	202.1
TURKEY												
Ankara	n/a	n/a	n/a	n/a	100.0	102.6	112.0	122.4	133.7	146.1	159.6	174.4
Istanbul	n/a	n/a	n/a	n/a	100.0	104.5	118.5	134.3	152.3	172.6	195.6	221.8
Izmir	n/a	n/a	n/a	n/a	100.0	103.8	117.6	133.3	151.2	171.3	194.2	220.2
USA												
Washington - DC	97.1	100.0	95.3	92.6	95.6	97.7	105.5	118.4	129.2	137.1	143.1	149.3
New York	99.5	100.0	97.9	94.7	94.0	91.5	91.4	93.4	95.2	98.0	101.5	106.8
Los Angeles	105.8	100.0	76.7	67.8	68.5	64.9	67.3	78.5	85.9	92.5	99.6	108.7

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:
- Bucarest

3) Notes:
- For Hypostat 2018 the base year has been postponed to 2007
- 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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	5.3	4.3	1.1	3.8	6.3	4.2	12.4	4.6	3.5	4.2	7.3	5.3
BELGIUM	13.3	9.8	5.2	-0.4	5.1	4.2	2.8	2.1	1.2	2.2	4.0	3.0
BULGARIA	14.7	28.9	25.0	-20.4	-10.2	-5.5	-1.9	-2.2	1.4	2.8	7.0	8.7
CROATIA	0.3	25.9	7.5	-1.2	-8.1	7.2	-1.6	-9.9	0.9	1.6	-6.1	6.9
CYPRUS	n/a	25.3	18.6	-4.9	-0.8	-2.9	-5.6	-6.2	-8.5	-4.0	-1.8	0.4
CZECH REPUBLIC	8.5	19.4	11.8	-7.7	0.3	-0.6	-0.8	0.1	3.8	4.1	11.0	10.3
DENMARK	22.2	4.4	-4.2	-10.5	2.8	-3.6	-4.5	0.8	1.5	6.7	3.7	4.5
ESTONIA	49.5	20.8	-9.6	-37.2	5.7	8.5	7.3	10.7	13.7	6.9	4.8	5.4
FINLAND	7.5	5.5	0.6	-0.3	8.8	2.7	1.6	1.6	-0.6	-0.8	0.9	1.1
FRANCE	10.0	5.7	-3.8	-4.1	7.6	3.7	-2.1	-1.8	-2.5	-0.5	1.6	3.3
GERMANY	0.2	-0.2	3.3	-0.7	0.6	2.4	3.0	3.0	3.1	4.6	6.0	5.8
GREECE	13.2	6.0	1.7	-3.7	-4.6	-5.5	-11.7	-10.9	-7.5	-5.0	-2.5	-1.0
HUNGARY	5.2	4.8	1.0	-6.3	-5.2	-1.8	-3.0	-6.1	3.3	18.1	17.3	12.4
IRELAND	14.8	7.5	-7.0	-19.1	-13.4	-17.1	-13.5	1.3	16.5	11.6	7.3	10.9
ITALY	5.6	4.5	0.5	-0.1	0.3	0.8	-2.9	-5.7	-4.3	-2.6	-0.7	-1.9
LATVIA	n/a	23.1	-17.8	-29.3	-2.4	5.8	6.1	8.2	-4.5	6.6	7.8	8.1
LITHUANIA	28.4	26.3	9.0	-29.9	-7.4	6.6	-0.2	1.2	6.4	3.7	5.4	8.9
LUXEMBOURG	11.1	7.0	3.3	-1.2	5.4	3.7	4.2	5.0	4.4	5.4	6.0	5.6
MALTA	19.7	21.1	11.1	-4.4	1.1	-1.4	4.0	-1.4	5.5	2.1	11.1	4.9
NETHERLANDS	4.6	4.2	3.0	-3.4	-2.2	-2.4	-6.5	-6.6	0.9	2.9	5.0	7.5
POLAND	n/a	29.5	-1.1	-6.8	-2.3	-0.6	-8.3	-1.0	1.8	1.1	2.5	4.7
PORTUGAL	2.0	1.4	3.8	-0.9	0.8	-4.9	-7.1	-1.9	4.2	3.1	7.1	13.2
ROMANIA	n/a	n/a	n/a	n/a	-7.5	-12.3	-5.1	-0.3	-2.1	2.9	6.0	6.0
SLOVAKIA	16.9	23.8	22.1	-11.1	-4.0	-3.1	-1.2	-0.9	-0.8	0.9	4.2	6.4
SLOVENIA	17.6	22.4	7.0	-9.5	0.1	2.7	-6.8	-5.2	-6.6	0.7	3.3	8.1
SPAIN	10.4	5.8	0.7	-7.4	-3.9	-5.6	-8.7	-5.8	-2.4	1.1	1.9	2.4
SWEDEN	11.0	10.8	3.0	1.7	7.3	0.8	-1.1	3.4	7.0	10.7	8.4	8.3
UNITED KINGDOM	7.9	9.9	-4.5	-8.9	5.7	-1.5	0.4	2.6	8.0	6.0	7.0	4.6
AUSTRALIA	6.9	10.5	3.9	4.0	11.7	-2.2	-0.3	6.6	9.1	9.0	5.1	6.0
BRAZIL	13.6	19.5	23.7	26.0	23.4	16.3	10.1	8.7	4.4	-1.6	4.4	5.2
ICELAND	17.7	16.9	6.2	-9.7	-3.0	4.6	7.0	5.8	18.5	8.2	9.8	20.0
JAPAN	n/a	n/a	n/a	-5.4	1.0	-0.5	-1.2	1.6	-0.3	0.5	5.5	9.5
NORWAY	16.5	4.5	-8.0	13.1	7.1	8.2	7.6	-0.7	8.7	4.6	-2.3	-0.9
RUSSIA	35.8	32.6	17.4	-4.5	-1.6	7.0	12.9	7.3	5.9	0.4	9.8	20.0
SINGAPORE	7.2	23.6	12.3	-19.0	32.9	9.5	2.3	3.2	-2.9	-3.9	-3.1	-1.1
SOUTH KOREA	17.8	4.8	-4.1	9.6	1.6	6.4	-2.6	4.5	5.1	6.6	3.2	0.0
TURKEY	n/a	n/a	n/a	-5.4	1.0	-0.5	-1.2	1.6	-0.3	0.5	1.1	0.1
USA	5.9	0.0	-8.1	-5.9	-3.0	-4.1	3.0	7.2	5.2	5.5	12.4	-1.2

Sources:
European Mortgage Federation, National Statistics Offices, OECD, ECB (for the euro area)

1) Time series breaks
- See Table16

2) The series has been revised for at least two years in:
- See Table16

3) Notes
- For further details on the methodologies, please see "Annex: Explanatory Note on data"
- n/a : figure not available
- See Table 16 for further notes.

21. Nominal House Price to Disposable Income of Households Ratio

2007 = 100

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	100.4	100.0	98.1	101.6	107.0	108.7	117.5	122.6	124.0	126.8	131.0	134.6
BELGIUM	95.6	100.0	99.6	97.6	101.9	104.1	105.0	106.0	106.1	107.4	109.1	109.4
BULGARIA	88.1	100.0	102.5	79.8	70.5	62.6	61.1	58.6	59.8	56.2	54.5	56.1
CROATIA	84.1	100.0	97.6	96.7	87.5	93.6	92.7	85.8	86.8	65.4	61.3	n/a
CYPRUS	84.5	100.0	106.6	104.0	99.6	94.7	91.0	89.7	90.1	86.4	81.2	79.1
CZECH REPUBLIC	91.0	100.0	93.7	89.1	84.7	81.7	82.1	84.8	90.2	89.2	95.0	96.3
DENMARK	97.3	100.0	93.6	81.9	79.6	74.2	69.4	68.7	68.9	70.2	69.5	70.3
ESTONIA	99.1	100.0	79.8	55.2	58.7	58.5	59.1	61.4	66.4	67.3	67.3	66.9
FINLAND	100.3	100.0	95.1	92.3	96.5	95.0	93.9	92.7	91.6	89.3	88.3	87.4
FRANCE	99.5	100.0	93.3	89.3	93.7	95.2	92.7	90.7	87.2	85.8	85.7	86.4
GERMANY	102.2	100.0	100.8	100.9	99.1	98.5	98.9	100.3	100.9	102.8	105.8	107.7
GREECE	100.7	100.0	96.4	91.1	94.3	97.5	94.1	91.8	85.7	84.5	84.3	83.5
HUNGARY	103.8	100.0	97.9	102.5	94.5	87.3	85.4	79.4	81.4	94.8	107.5	109.8
IRELAND	100.5	100.0	87.9	76.7	69.2	59.3	49.4	50.1	57.9	62.3	64.4	68.8
ITALY	99.3	100.0	98.7	101.0	101.4	99.6	99.4	93.4	88.8	85.3	83.6	80.7
LATVIA	99.8	100.0	70.3	61.0	64.7	68.2	66.7	69.5	63.9	64.5	66.3	67.4
LITHUANIA	85.5	100.0	91.5	69.6	63.9	64.7	62.5	59.8	62.5	62.9	62.9	66.2
LUXEMBOURG	99.6	100.0	98.2	94.2	95.7	96.9	95.4	96.9	97.6	100.0	103.0	104.1
NETHERLANDS	99.9	100.0	100.1	96.7	94.1	89.8	83.7	77.4	76.6	77.7	79.2	82.6
POLAND	85.4	100.0	84.5	89.2	76.9	74.8	66.7	65.1	64.3	63.4	64.2	63.1
PORTUGAL	103.4	100.0	99.8	99.2	97.3	96.0	92.5	91.0	95.0	94.7	97.8	107.5
ROMANIA	n/a	n/a	n/a	100.0	88.4	77.4	76.2	55.3	50.7	48.2	49.4	48.2
SLOVAKIA	99.8	100.0	103.1	87.1	82.4	78.4	75.4	73.7	71.3	69.1	70.0	72.3
SLOVENIA	88.9	100.0	98.7	88.9	88.1	88.9	84.9	80.3	73.9	73.4	72.7	74.8
SPAIN	98.3	100.0	95.5	86.9	84.7	79.3	74.9	71.2	68.7	68.0	67.9	68.2
SWEDEN	96.6	100.0	100.5	108.4	100.3	91.2	83.6	83.4	90.3	99.3	104.4	110.8
UNITED KINGDOM	95.1	100.0	107.2	106.5	107.1	104.9	93.8	97.3	96.9	87.3	103.8	113.6
JAPAN	n/a	n/a	100.0	81.9	73.6	70.5	64.3	82.9	88.9	84.2	75.4	77.8
NORWAY	100.0	96.8	85.4	97.0	91.2	91.2	89.2	87.3	96.6	100.6	111.3	107.7
UNITED STATES	100.0	100.0	92.0	86.6	84.0	80.5	82.9	88.9	93.6	98.7	104.7	111.8

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 2018 the base year has been postponed to 2007
- 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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	3,880	4,125	4,973	5,317	7,645	17,174	17,010	18,854	22,450	27,345	30,894	31,915
BELGIUM	—	—	—	—	—	—	2,590	8,188	10,575	15,105	16,700	15,250
CYPRUS	—	—	—	—	—	5,200	4,550	1,000	1,000	650	650	650
CZECH REPUBLIC	5,543	8,213	8,091	8,179	8,234	8,546	9,056	10,355	11,106	11,656	13,060	15,522
DENMARK	260,367	244,696	255,140	319,434	332,505	345,529	359,560	359,646	369,978	377,903	389,200	393,447
FINLAND	3,000	4,500	5,750	7,625	10,125	18,839	26,684	29,783	32,031	33,974	33,822	34,625
FRANCE	43,012	63,555	119,092	134,757	156,239	189,395	208,297	202,822	188,925	188,669	177,813	185,820
GERMANY	223,306	206,489	217,367	225,100	219,947	223,676	215,999	199,900	189,936	197,726	207,338	215,199
GREECE	—	—	5,000	6,500	19,750	19,750	18,046	16,546	14,546	4,961	4,485	10,100
HUNGARY	5,924	5,987	7,105	7,375	6,323	5,175	4,958	4,016	3,272	3,022	2,189	2,641
IRELAND	11,900	13,575	23,075	29,725	29,037	30,007	25,099	20,827	18,473	16,916	17,062	16,416
ITALY	—	—	6,500	14,000	26,925	50,768	116,405	122,099	122,464	122,135	138,977	139,937
LATVIA	63	90	90	85	63	37	—	—	—	—	—	—
LUXEMBOURG	150	150	150	—	—	—	—	—	—	—	—	—
NETHERLANDS	7,477	15,093	20,534	27,664	40,180	51,970	59,822	61,015	58,850	61,101	67,604	72,880
POLAND	453	676	561	583	511	527	657	707	882	1,230	2,216	3,959
PORTUGAL	2,000	7,850	15,270	20,270	27,690	33,248	34,321	36,016	33,711	34,461	32,970	35,530
SLOVAKIA	2,214	2,738	3,576	3,608	3,442	3,768	3,835	4,067	3,939	4,198	4,197	5,118
SPAIN	214,768	266,959	315,055	336,750	343,401	369,208	406,736	334,572	282,568	252,383	232,456	216,498
SWEDEN	55,267	92,254	117,628	133,903	188,750	208,894	220,374	217,854	209,842	221,990	222,444	219,212
UNITED KINGDOM (regulated)	—	—	125,764	109,473	125,250	121,623	147,425	114,395	114,654	106,674	97,127	89,509
UNITED KINGDOM (non regulated)	54,265	84,874	78,092	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
ICELAND	467	478	492	685	807	808	893	803	927	1,205	1,902	2,506
NORWAY	—	6,371	21,924	53,582	70,401	91,852	107,242	105,202	102,704	107,694	113,051	113,359
SINGAPORE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	919	1,963	5,576
SOUTH KOREA	—	—	—	773	1,120	2,171	2,407	2,536	1,349	1,954	2,490	2,619
TURKEY	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	128	628	1,923
USA	4,000	12,859	12,937	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:
- France

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	2,176	1,959	1,321	1,442	3,600	3,664	3,805	6,093	7,111	5,457	7181	3,165
BELGIUM	—	—	—	—	—	—	2,590	5,598	2,387	4,530	2345	1,050
CYPRUS	—	—	—	—	—	5,200	—	—	—	—	—	—
CZECH REPUBLIC	956	3,501	938	738	723	770	1,309	1,791	2,188	2,729	1693	4,074
DENMARK	114,014	70,955	103,230	125,484	148,475	145,147	185,845	149,989	154,310	163,050	130,329	123,205
FINLAND	1,500	1,500	1,250	2,125	5,250	9,964	9,368	3,771	6,469	7,425	4,679	5,550
FRANCE	21,269	33,511	64,009	37,285	51,525	88,776	53,310	21,386	17,558	33,903	19,482	28,347
GERMANY	35,336	26,834	57,345	56,852	42,216	40,911	38,540	33,583	29,145	40,369	35,070	36,841
GREECE	—	—	5,000	1,500	17,250	5,000	—	—	750	—	3,675	7,375
HUNGARY	1,418	331	3,331	3,209	542	2,264	1,140	559	91	888	625	1,166
IRELAND	7,753	1,675	9,506	14,801	6,000	9,290	5,500	3,235	2,535	5,225	3,542	3,250
ITALY	—	—	6,500	7,500	12,925	29,261	70,768	24,520	39,475	27,650	41,780	19,180
LATVIA	20	19	25	—	—	—	—	—	—	—	—	—
LUXEMBOURG	150	—	—	—	—	—	—	—	—	—	—	—
NETHERLANDS	5,477	7,648	5,355	7,725	13,660	14,143	10,738	4,478	3,910	7,908	9,908	11,925
POLAND	52	206	197	88	138	269	228	116	269	416	1,099	2,048
PORTUGAL	2,000	5,850	7,420	6,000	11,570	8,450	4,850	4,500	3,825	8,675	5,950	8,200
SLOVAKIA	676	803	1,414	707	1,179	867	785	841	654	1,159	751	1,316
SPAIN	69,890	51,801	54,187	43,580	51,916	72,077	98,846	22,919	23,038	31,375	31,393	30,000
SWEDEN	17,569	36,638	43,488	53,106	79,910	69,800	48,936	51,633	48,424	60,729	52,187	48,525
UNITED KINGDOM (regulated)	—	—	10,145	8,254	25,000	36,983	37,109	1,480	12,529	15,015	9,599	11,563
UNITED KINGDOM (non regulated)	25,813	31,673	110,761	22,177	900	—	—	—	—	—	—	—
AUSTRALIA	—	—	—	—	—	2,478	33,484	15,868	13,253	10,004	11,382	7,351
ICELAND	467	—	321	—	—	25	113	51	91	414	560	850
NORWAY	—	6,458	15,660	30,105	21,062	28,135	22,946	18,339	14,474	17,750	23,058	21,256
SINGAPORE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	919	1,014	3,753
SOUTH KOREA	—	—	—	773	347	1,051	178	466	—	919	949	417
TURKEY	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	128	500	1,334
USA	4,000	8,859	—	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 % of GDP, backed by Mortgages

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	1.4	1.5	1.7	1.8	2.6	5.5	5.3	5.8	6.7	7.9	8.7	8.6
BELGIUM	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.1	2.6	3.7	4.0	3.5
CYPRUS	0.0	0.0	0.0	0.0	0.0	26.4	23.3	5.5	5.7	3.7	3.6	3.4
CZECH REPUBLIC	4.5	5.9	5.0	5.5	5.3	5.2	5.6	6.6	7.1	6.9	7.4	8.1
DENMARK	115.4	104.8	105.6	138.1	136.7	139.4	141.2	139.0	139.2	139.0	140.3	136.1
FINLAND	1.7	2.4	3.0	4.2	5.4	9.6	13.4	14.6	15.6	16.2	15.7	15.5
FRANCE	2.3	3.3	6.0	7.0	7.8	9.2	10.0	9.6	8.8	8.6	8.0	8.1
GERMANY	9.3	8.2	8.5	9.1	8.5	8.3	7.8	7.1	6.5	6.5	6.6	6.6
GREECE	0.0	0.0	2.1	2.7	8.7	9.5	9.4	9.2	8.1	2.8	2.6	5.7
HUNGARY	6.5	5.9	6.6	7.8	6.4	5.1	5.0	3.9	3.1	2.7	1.9	2.1
IRELAND	6.4	6.9	12.3	17.5	17.3	17.5	14.3	11.6	9.5	6.4	6.2	5.6
ITALY	0.0	0.0	0.4	0.9	1.7	3.1	7.2	7.6	7.6	7.4	8.3	8.2
LATVIA	0.4	0.4	0.4	0.5	0.4	0.2	0.0	0.0	0.0	0.0	0.0	n/a
LUXEMBOURG	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n/a
NETHERLANDS	1.3	2.4	3.2	4.4	6.3	8.0	9.2	9.2	8.8	8.9	9.5	9.9
POLAND	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.5	0.9
PORTUGAL	1.2	4.5	8.5	11.6	15.4	18.9	20.4	21.2	19.5	19.2	17.8	18.4
SLOVAKIA	4.9	4.9	5.4	5.6	5.1	5.3	5.3	5.5	5.2	5.3	5.2	6.0
SPAIN	21.3	24.7	28.2	31.2	31.8	34.5	39.1	32.6	27.2	23.4	20.8	18.6
SWEDEN	16.5	25.9	33.4	43.2	51.1	51.6	52.1	50.0	48.5	49.4	47.8	45.9
UNITED KINGDOM (regulated)	0.0	0.0	6.3	6.3	6.8	6.4	7.1	5.5	5.0	4.1	4.0	3.8
UNITED KINGDOM (non regulated)	2.5	3.8	3.9	5.3	4.2	3.3	1.8	0.9	0.7	0.3	0.0	0.0
AUSTRALIA	0.0	0.0	0.0	0.0	0.0	0.2	3.1	4.6	5.4	5.6	6.2	5.8
ICELAND	3.4	3.1	4.6	7.4	8.1	7.7	8.1	6.9	7.2	8.0	10.5	12.6
NORWAY	0.0	2.2	6.9	19.2	21.8	25.6	27.0	26.7	27.3	30.9	33.7	34.1
TURKEY	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.1	0.1
SINGAPORE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3	0.7	1.9
SOUTH KOREA	n/a	n/a	n/a	0.1	0.1	0.3	0.3	0.3	0.1	0.2	0.2	0.2
USA	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	n/a

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

	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	2,099	2,015	1,869	1,815	1,702	1,576	1,438	1,292
BELGIUM	61,679	70,998	71,237	63,318	55,813	47,729	44,817	45,070
FINLAND	4,449	3,677	0	0	0	0	0	0
FRANCE	12,839	19,325	17,687	10,237	50,147	59,336	63,008	78,996
GERMANY	40,557	34,762	28,092	23,793	20,158	26,563	26,016	28,141
GREECE	6,785	6,311	6,422	4,274	3,658	2,600	1,315	1,208
IRELAND	68,900	59,508	51,183	37,626	36,159	31,532	30,282	27,895
ITALY	144,365	122,062	101,739	90,205	80,685	69,473	60,816	60,435
NETHERLANDS	290,052	287,326	269,518	250,142	239,768	209,590	192,470	164,846
PORTUGAL	43,186	37,800	29,149	27,621	26,051	22,736	19,237	17,369
SPAIN	191,241	171,914	127,685	118,040	122,570	118,604	126,112	126,644
SWEDEN	96	96	96	380	302	499	611	0
UNITED KINGDOM	455,517	409,738	301,776	254,807	217,984	160,668	146,197	142,546
RUSSIA	2,931	2,728	1,725	1,281	505	380	1,004	1,868

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

	2010	2011	2012	2013	2014	2015	2016	2017
BELGIUM	7,860	19,029	4,699	2,018	0	1,216	3,636	6,680
FRANCE	5,000	13,841	2,628	0	47,216	11,362	10,360	28,210
GERMANY	363	0	0	0	40	20,487	0	2,500
GREECE	0	1,750	1,343	0	0	0	0	0
IRELAND	4,157	0	890	1,021	2,072	206	4,377	4,210
ITALY	9,965	9,202	35,826	4,914	4,756	6,589	6,760	12,880
NETHERLANDS	124,093	82,945	47,196	39,462	14,231	19,359	32,380	14,850
PORTUGAL	9,352	1,340	1,107	1,373	0	1,192	0	0
SPAIN	18,215	14,094	3,302	7,322	17,321	9,566	20,337	14,450
SWEDEN	96	0	0	284	0	358	214	310
UNITED KINGDOM	87,149	80,782	40,075	8,399	25,201	30,687	41,630	33,130

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:
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

D — MACROECONOMIC INDICATORS

27. GDP at Current Market Prices

EUR million

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	267,825	283,978	293,762	288,044	295,897	310,129	318,653	323,910	333,063	344,493	353,297	369,686
BELGIUM	326,662	344,713	354,066	348,781	365,101	379,106	387,500	392,340	400,058	410,291	422,678	437,204
BULGARIA	27,211	32,449	37,200	37,318	38,231	41,292	41,947	42,012	42,762	45,287	48,129	50,430
CROATIA	40,159	43,947	48,139	45,145	45,156	44,826	43,983	43,779	43,431	44,606	46,640	48,990
CYPRUS	16,264	17,591	19,006	18,674	19,300	19,731	19,490	18,141	17,606	17,742	18,219	19,214
CZECH REPUBLIC	123,943	138,303	161,313	148,682	156,718	164,041	161,434	157,742	156,660	168,473	176,370	191,643
DENMARK	225,531	233,383	241,614	231,278	243,165	247,880	254,578	258,743	265,757	271,778	277,489	288,981
ESTONIA	13,522	16,246	16,517	14,146	14,717	16,668	17,935	18,932	19,766	20,348	21,098	23,002
FINLAND	172,614	186,584	193,711	181,029	187,100	196,869	199,793	203,338	205,474	209,604	216,111	223,843
FRANCE	1,848,151	1,941,360	1,992,380	1,936,422	1,995,289	2,058,369	2,088,804	2,117,189	2,149,765	2,198,432	2,228,568	2,291,705
GERMANY	2,393,250	2,513,230	2,561,740	2,460,280	2,580,060	2,703,120	2,758,260	2,826,240	2,932,470	3,043,650	3,144,050	3,263,350
GREECE	217,862	232,695	241,990	237,534	226,031	207,029	191,204	180,654	178,657	176,312	174,199	177,735
HUNGARY	91,792	102,169	108,122	94,263	98,826	101,317	99,502	101,887	105,574	110,723	113,731	123,495
IRELAND	184,994	197,202	187,769	170,101	167,721	171,140	175,216	179,922	195,293	262,466	273,238	294,110
ITALY	1,548,473	1,609,551	1,632,151	1,572,878	1,604,515	1,637,463	1,613,265	1,604,599	1,621,827	1,652,622	1,680,948	1,716,935
LATVIA	17,264	22,679	24,355	18,749	17,789	20,202	22,058	22,829	23,618	24,320	24,926	26,857
LITHUANIA	24,079	29,041	32,696	26,935	28,028	31,275	33,349	34,960	36,568	37,427	38,668	41,857
LUXEMBOURG	33,808	37,179	38,129	36,977	40,178	43,165	44,112	46,500	49,993	52,102	53,005	55,378
MALTA	5,386	5,758	6,129	6,139	6,600	6,840	7,168	7,641	8,467	9,535	10,197	11,126
NETHERLANDS	584,546	619,170	647,198	624,842	639,187	650,359	652,966	660,463	671,560	690,008	708,337	737,048
POLAND	274,603	313,874	366,182	317,083	361,804	380,242	389,377	394,734	411,005	430,055	425,942	465,605
PORTUGAL	166,249	175,468	178,873	175,448	179,930	176,167	168,398	170,269	173,079	179,809	185,494	193,072
ROMANIA	98,419	128,618	146,106	124,141	125,736	132,590	133,511	143,802	150,458	160,298	170,893	187,940
SLOVAKIA	45,530	56,242	66,003	64,023	67,577	70,627	72,704	74,170	76,088	78,896	81,154	84,985
SLOVENIA	31,561	35,153	37,951	36,166	36,252	36,896	36,076	36,239	37,615	38,837	40,418	43,278
SPAIN	1,007,974	1,080,807	1,116,225	1,079,052	1,080,935	1,070,449	1,039,815	1,025,693	1,037,820	1,079,998	1,118,522	1,163,662
SWEDEN	334,877	356,434	352,317	309,679	369,077	404,946	423,341	435,752	432,691	449,015	465,186	477,383
UNITED KINGDOM	2,150,268	2,252,451	1,983,971	1,725,383	1,850,539	1,894,900	2,089,628	2,073,979	2,287,867	2,611,924	2,403,383	2,327,730
EURO AREA 19	8,906,014	9,404,645	9,640,650	9,296,219	9,552,205	9,805,604	9,846,765	9,944,029	10,168,787	10,526,891	10,793,127	11,174,047
EU 28	12,272,815	13,006,272	13,085,613	12,329,191	12,841,455	13,217,636	13,484,067	13,596,457	14,064,992	14,819,049	14,920,888	15,336,243
AUSTRALIA	567,633	579,964	758,306	643,599	855,319	1,074,702	1,165,829	1,136,378	1,202,206	1,235,770	1,142,791	1,103,495
BRAZIL	841,033	949,042	1,218,527	1,157,170	1,653,100	2,021,950	1,868,416	1,793,058	2,022,892	1,656,703	1,704,000	1,713,921
ICELAND	13,629	15,566	10,787	9,228	10,009	10,541	11,065	11,647	12,953	15,134	18,130	19,936
JAPAN	3,439,922	3,067,227	3,619,967	3,631,392	4,265,902	4,758,837	4,701,541	3,738,465	3,993,685	4,025,973	4,685,878	4,062,484
NORWAY	275,290	293,128	316,814	278,386	323,587	358,248	396,678	393,397	375,894	348,332	335,035	332,554
RUSSIA	751,656	882,892	1,193,393	848,704	1,141,233	1,570,267	1,644,796	1,617,450	1,699,747	1,254,584	1,217,306	1,315,371
SINGAPORE	117,710	131,325	130,695	137,947	178,337	198,252	226,240	229,241	234,505	274,085	279,848	286,720
SOUTH KOREA	805,828	819,175	681,411	646,641	825,601	863,839	951,749	983,062	1,062,351	1,246,295	1,278,168	1,355,007
TURKEY	419,518	459,041	549,201	447,492	577,666	643,440	662,409	689,287	769,432	789,367	813,726	709,666
USA	10,520,796	9,834,682	10,575,973	10,008,843	11,199,201	11,993,142	12,244,395	12,103,196	14,325,923	16,567,142	17,616,071	19,390,604

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

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	168,992	176,993	182,542	182,849	184,504	189,427	196,893	197,446	201,955	205,681	213,596	218,826
BELGIUM	193,186	202,895	214,355	217,919	219,432	223,822	228,163	230,799	233,361	235,380	241,024	247,579
BULGARIA	16,077	18,253	22,245	22,747	23,127	24,615	24,722	25,236	25,069	27,410	30,242	31,951
CROATIA	25,034	26,505	29,193	29,082	29,533	29,606	29,404	28,624	28,574	38,473	38,557	n/a
CYPRUS	11,236	11,890	13,225	12,900	13,356	13,652	13,414	12,765	11,626	11,633	12,163	12,537
CZECH REPUBLIC	65,785	71,428	85,248	82,793	87,288	89,960	88,816	86,096	84,069	88,429	92,203	100,269
DENMARK	103,858	105,498	107,929	110,434	116,829	120,795	123,467	125,613	127,320	133,106	139,499	144,153
ESTONIA	6,945	8,310	9,412	8,552	8,493	9,249	9,814	10,460	11,001	11,590	12,152	12,891
FINLAND	92,410	97,727	103,375	106,157	110,416	115,207	118,536	121,939	122,713	124,816	127,313	129,992
FRANCE	1,191,558	1,253,616	1,292,714	1,295,810	1,327,338	1,354,343	1,362,508	1,367,421	1,385,053	1,400,515	1,425,256	1,459,787
GERMANY	1,594,486	1,626,612	1,666,687	1,653,881	1,693,870	1,746,060	1,791,315	1,819,332	1,864,894	1,913,990	1,970,801	2,047,235
GREECE	151,210	161,288	170,167	173,297	159,701	145,918	133,568	122,151	121,095	116,675	114,009	113,897
HUNGARY	53,016	57,669	59,518	53,288	54,832	58,216	57,776	58,385	58,822	59,605	61,660	67,865
IRELAND	85,507	92,403	97,811	90,602	86,899	84,162	87,345	87,169	87,918	91,235	94,739	98,256
ITALY	1,065,441	1,105,076	1,125,256	1,099,071	1,097,977	1,126,308	1,095,744	1,100,092	1,106,394	1,122,473	1,137,017	1,156,381
LATVIA	10,941	13,441	15,733	12,812	11,783	11,818	12,822	13,318	13,848	14,612	15,311	16,279
LITHUANIA	16,197	17,495	20,846	19,200	19,366	20,383	21,072	22,277	22,693	23,345	24,612	25,491
LUXEMBOURG	13,624	14,512	15,268	15,744	16,338	16,723	17,703	18,297	18,957	19,498	20,071	20,969
NETHERLANDS	283,912	295,333	303,807	303,818	305,193	312,078	313,461	316,442	322,683	327,139	337,048	347,576
POLAND	174,875	193,424	226,510	199,854	226,640	231,436	237,996	241,551	248,931	255,208	258,370	275,137
PORTUGAL	116,190	121,784	126,704	126,182	129,750	124,984	120,492	120,269	120,066	124,154	128,768	132,603
ROMANIA	59,300	76,535	86,251	73,086	76,422	76,615	73,860	101,505	108,417	117,259	121,232	131,912
SLOVAKIA	26,492	32,715	38,728	40,788	41,409	42,176	43,342	43,950	45,068	46,902	48,252	49,737
SLOVENIA	19,322	21,017	22,785	22,885	23,106	23,528	22,940	23,000	23,341	23,681	24,687	25,946
SPAIN	625,737	650,731	686,071	698,867	688,396	694,231	670,551	664,377	671,813	686,629	700,113	714,129
SWEDEN	154,556	165,420	169,477	159,710	185,233	205,266	221,565	229,526	226,786	228,219	235,318	240,223
UNITED KINGDOM	1,418,385	1,482,878	1,320,843	1,211,261	1,274,008	1,281,002	1,438,321	1,422,703	1,542,558	1,814,808	1,633,276	1,560,275
EURO AREA 19	5,686,503	5,914,513	6,109,955	6,081,611	6,134,466	6,251,321	6,267,639	6,301,798	6,393,785	6,511,719	6,654,314	n/a
EU 28	7,763,136	8,116,193	8,228,274	8,037,182	8,224,706	8,386,548	8,577,901	8,643,709	8,856,299	9,290,791	9,292,897	n/a
ICELAND	6,590	7,959	5,627	4,434	4,221	4,645	5,088	5,323	5,995	n/a	n/a	n/a
JAPAN	2,232,675	2,034,660	2,142,002	2,473,467	2,782,398	2,892,664	3,132,761	2,470,666	2,294,365	2,433,859	2,747,423	2668983
NORWAY	111,374	120,297	125,414	124,848	142,225	153,901	169,302	171,764	168,830	169,384	172,096	175882
TURKEY	n/a	n/a	n/a	317,720	402,592	414,031	465,628	498,142	492,414	536,097	n/a	n/a
USA	8,180,800	7,827,780	7,634,240	8,015,230	8,669,500	8,672,410	9,872,670	9,564,810	10,062,470	12,577,680	12,944,850	13068640

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

18 years of age or over

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AUSTRIA	6,647,030	6,689,506	6,730,188	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
BELGIUM	8,331,936	8,396,748	8,472,359	8,547,467	8,625,749	8,756,344	8,833,129	8,886,633	8,905,031	8,952,757	9,012,839	9,047,019
BULGARIA	6,308,770	6,288,980	6,268,322	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
CROATIA	3,478,511	3,488,997	3,494,947	3,498,699	3,497,844	3,489,108	3,482,850	3,475,931	3,470,956	3,461,959	3,443,950	3,422,613
CYPRUS	564,986	579,869	598,457	619,004	640,785	661,878	684,689	690,884	687,113	677,766	679,378	686,783
CZECH REPUBLIC	8,340,176	8,395,089	8,490,760	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
DENMARK	4,216,893	4,233,174	4,260,307	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
ESTONIA	1,086,620	1,086,180	1,087,380	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
FINLAND	4,151,882	4,177,242	4,204,459	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
FRANCE	49,010,534	49,384,484	49,720,834	50,026,691	50,289,714	50,561,775	50,783,443	51,023,819	51,312,166	51,697,009	51,931,888	52,175,394
GERMANY	67,880,591	68,072,756	68,247,754	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
GREECE	8,988,268	9,037,249	9,077,944	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
HUNGARY	8,150,716	8,162,060	8,164,552	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
IRELAND	3,173,018	3,286,982	3,374,379	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
ITALY	48,135,168	48,271,301	48,644,498	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
LATVIA	1,800,478	1,796,373	1,791,626	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
LITHUANIA	2,598,042	2,582,404	2,567,153	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
LUXEMBOURG	365,836	371,924	378,602	387,286	394,805	403,289	415,783	426,500	437,663	449,861	461,711	474,986
MALTA	318,159	321,101	325,754	330,123	334,759	337,240	340,819	346,271	353,065	362,652	372,709	381,876
NETHERLANDS	12,752,453	12,793,540	12,859,287	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
POLAND	30,293,256	30,464,912	30,627,711	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
PORTUGAL	8,495,894	8,528,160	8,561,019	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
ROMANIA	16,748,292	16,661,834	16,481,177	16,539,284	16,417,888	16,336,812	16,254,443	16,234,182	16,204,893	16,135,980	16,038,136	15,942,312
SLOVAKIA	4,238,819	4,266,375	4,293,057	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
SPAIN	36,280,525	36,913,705	37,631,695	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
SWEDEN	7,113,513	7,179,337	7,251,275	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
UNITED KINGDOM	47,377,251	47,817,442	48,271,326	48,704,715	49,140,673	49,605,268	50,010,040	50,341,143	50,705,117	51,152,202	51,576,620	51,898,789
EURO AREA 19	266,468,972	268,217,167	270,231,542	271,743,269	272,697,912	272,236,147	273,077,607	273,843,602	275,244,435	276,219,610	277,393,386	278,164,322
EU 28	398,496,350	400,908,992	403,541,919	405,895,887	407,271,568	407,400,128	408,710,564	409,927,302	411,723,468	413,161,899	414,674,359	415,703,271
AUSTRALIA	15,786,140	15,911,922	16,275,266	16,660,075	16,966,518	17,208,699	17,545,387	17,893,033	18,201,113	18,488,839	18,762,227	19,044,914
BRAZIL	127,633,815	130,139,078	132,582,921	135,000,068	137,398,556	139,772,511	142,117,374	144,460,737	146,814,536	149,186,801	151,418,202	153,662,507
ICELAND	216,428	223,902	230,418	238,587	236,948	238,035	239,724	242,099	245,631	249,094	252,974	258,565
JAPAN	106,477,696	106,814,604	107,036,814	107,175,120	107,341,582	107,212,809	107,127,805	107,077,566	107,048,517	107,057,595	107,041,211	106,967,268
NORWAY	3,491,469	3,527,520	3,638,529	3,695,771	3,749,112	3,805,995	3,867,852	3,928,408	3,982,920	4,040,722	4,083,702	4,127,266
RUSSIA	115,120,529	115,680,174	116,199,402	116,585,375	116,753,200	116,881,564	116,859,270	116,716,952	116,490,214	116,183,089	115,635,142	115,153,538
TURKEY	45,378,517	46,288,945	47,037,840	47,765,432	48,693,930	49,792,317	50,790,105	51,665,075	52,602,800	53,591,387	54,590,569	54,906,614
SINGAPORE	3,383,651	3,543,606	3,757,671	3,891,912	3,982,471	4,091,579	4,220,060	4,313,782	4,394,042	4,469,714	4,547,811	4568615
SOUTH KOREA	37,651,560	38,012,280	38,511,624	38,956,094	39,443,455	40,041,977	40,569,154	41,064,064	41,614,612	42,093,670	42,505,405	42,875,316
USA	224,622,198	227,211,802	229,989,364	232,637,362	235,223,828	237,801,767	240,392,551	242,834,652	245,308,220	247,773,709	249,454,440	252,063,800

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
- Greece
- Poland
- Romania
- UK

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 THE YEAR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EU 28												
Bulgarian lev	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.9558	1.9558	1.9558	1.9558
Croatian kuna	7.350	7.331	7.356	7.300	7.383	7.537	7.558	7.627	7.658	7.638	7.560	7.44
Czech koruna	27.49	26.63	26.88	26.47	25.06	25.79	25.15	27.43	27.735	27.023	27.02	25.535
Danish krone	7.456	7.458	7.451	7.442	7.454	7.434	7.461	7.459	7.4453	7.4626	7.434	7.4449
Hungarian forint	251.8	253.7	266.7	270.4	278.0	314.6	292.3	297.0	315.54	315.98	309.8	310.33
Polish zloty	3.831	3.594	4.154	4.105	3.975	4.458	4.074	4.154	4.2732	4.264	4.410	4.177
Romanian leu	3.384	3.608	4.023	4.236	4.262	4.323	4.445	4.471	4.4828	4.524	4.539	4.6585
Swedish krona	9.040	9.442	10.87	10.25	8.966	8.912	8.582	8.859	9.393	9.190	9.553	9.8438
UK pound sterling	0.672	0.733	0.953	0.888	0.861	0.835	0.816	0.834	0.7789	0.73395	0.856	0.88723
NON-EU												
Australian dollar	1.6691	1.6757	2.0274	1.6008	1.3136	1.2723	1.2712	1.5423	1.4829	1.4897	1.4596	1.5346
Brazilian real	2.8141	2.5914	3.2436	2.5113	2.2177	2.4159	2.7036	3.2576	3.2207	4.3117	3.4305	3.9729
Canadian dollar	1.5281	1.4449	1.6998	1.5128	1.3322	1.3215	1.3137	1.4671	1.4063	1.5116	1.4188	1.5039
Icelandic krona*	93.75	91.64	169.33	179.76	153.78	158.98	168.89	158.29	154.31	141.38	119.15	124.30
Japanese yen	156.93	164.93	126.14	133.16	108.65	100.20	113.61	144.72	145.23	131.07	123.40	135.01
Norwegian krone	8.238	7.958	9.750	8.300	7.800	7.754	7.348	8.363	9.042	9.603	9.086	9.8403
Russian rouble,	34.68	35.99	41.28	43.15	40.82	41.77	40.33	45.32	72.337	80.67	64.30	69.392
Singapore Dollar	1.99	2.06	2.08	2.02	1.81	1.75	1.61	1.66	1.6823	1.53	1.53	1.5588
South Korean won	1224.81	1377.94	1837.13	1666.97	1499.06	1498.69	1406.23	1450.93	1324.8	1280.78	1269.34	1279.61
Swiss franc	1.6069	1.6547	1.485	1.4836	1.2504	1.2154	1.2072	1.2276	1.2024	1.0835	1.0739	1.1702
Turkish lira	1.864	1.717	2.149	2.155	2.069	2.443	2.355	2.961	2.832	3.177	3.707	4.5464
US dollar	1.317	1.472	1.392	1.441	1.336	1.294	1.319	1.379	1.2141	1.089	1.054	1.1993

YEARLY AVERAGE	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EU 28												
Bulgarian lev	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.956	1.9558	1.9558
Croatian kuna	7.325	7.338	7.224	7.340	7.289	7.439	7.522	7.579	7.634	7.614	7.5333	7.464
Czech koruna	28.342	27.766	24.946	26.435	25.284	24.590	25.149	25.980	27.536	27.279	27.034	26.326
Danish krone	7.459	7.451	7.456	7.446	7.447	7.451	7.444	7.458	7.455	7.459	7.4452	7.445
Hungarian forint	264.260	251.350	251.510	280.330	275.480	279.370	289.250	296.870	308.710	310.000	311.44	309.190
Polish zloty	3.896	3.784	3.512	4.328	3.995	4.121	4.185	4.198	4.184	4.184	4.3632	4.257
Romanian leu	3.526	3.335	3.683	4.240	4.212	4.239	4.459	4.419	4.444	4.445	4.4904	4.569
Swedish krona	9.254	9.250	9.615	10.619	9.537	9.030	8.704	8.652	9.099	9.354	9.4689	9.635
UK pound sterling	0.682	0.684	0.796	0.891	0.858	0.868	0.811	0.849	0.806	0.726	0.81948	0.877
NON-EU												
Australian dollar,	1.632	1.6668	1.6348	1.7416	1.7727	1.4423	1.3484	1.2407	1.3777	1.4719	1.4777	1.4883
Brazilian real	3.036	2.7333	2.6633	2.6737	2.7674	2.3314	2.3265	2.5084	2.8687	3.1211	3.7004	3.8561
Canadian dollar	78.210	87.920	87.690	127.480	172.730	161.950	161.490	160.930	162.200	154.850	144.390	131.010
Icelandic krona	136.850	146.020	161.250	152.450	130.340	116.240	110.960	102.490	129.660	140.310	134.310	120.2
Japanese yen	8.009	8.047	8.017	8.224	8.728	8.004	7.793	7.475	7.807	8.354	8.9496	9.2906
Norwegian krone	35.188	34.112	35.018	36.421	44.138	40.263	40.885	39.926	42.337	50.952	68.072	74.1446
Russian rouble	1.677	1.809	1.787	1.906	2.163	1.997	2.338	2.314	2.534	2.907	3.0255	3.3433
Singapore Dollar	1.244	1.256	1.371	1.471	1.395	1.326	1.392	1.285	1.328	1.329	1.110	1.1069
South Korean won	1.677	1.809	1.787	1.906	2.163	1.997	2.338	2.314	2.534	2.907	3.0255	3.3433
Swiss franc	1.244	1.256	1.371	1.471	1.395	1.326	1.392	1.285	1.328	1.329	1.110	1.1069
Turkish lira	1.677	1.809	1.787	1.906	2.163	1.997	2.338	2.314	2.534	2.907	3.0255	3.3433
US dollar	1.244	1.256	1.371	1.471	1.395	1.326	1.392	1.285	1.328	1.329	1.110	1.1069

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 EU28 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 EU28 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 amortisation 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 28 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.*

Czech Republic: 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 securitisation 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

110. 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; *Source: 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:
EU28
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 EU28
USA: number of existing home sales..

18. NOMINAL HOUSE PRICES INDICES, 2007=100
Indices computed to reflect the changes in house prices observed over the period. 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:
EU28
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 m2 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.*
Czech Republic: 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 fomento.*
Sweden: one- and two-dwellings buildings annual average.
United Kingdom: All dwellings. *Source: Office for National Statistics*
NON EU28
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.*
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 States: Data on house prices, in percentage change over previous period. *Source: OECD.*

19. NOMINAL HOUSE PRICE INDEX – CITIES (2007=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:

EU 28

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 m2 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*

United Kingdom: All dwellings. *Source: Office for National Statistics*

NON EU 28

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 collateralised 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. The sources are the Associations of Real Estate Appraisers of respectively Tokyo, Osaka and Aichi

Norway: *Source: Real Estate Norway*

Turkey: *Source: Central Bank of the Republic of Turkey*

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, 2007=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

2018

A REVIEW OF EUROPE'S MORTGAGE AND HOUSING MARKETS

September 2018

EMF

FUNDING THE REAL ECONOMY