

EMF

HYPOSTAT 2013



HYPOSTAT 2013 A REVIEW OF EUROPE'S MORTGAGE AND HOUSING MARKETS



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The Hypostat, published by the European Mortgage Federation, presents annual statistics on EU mortgage and housing markets, as well as data and information from a number of third countries, such as the United States. The present edition, the Hypostat 2013, focuses on developments till early 2013. It should be noted that the edition presenting developments in housing and mortgage markets till early 2012 was the Hypostat 2011; therefore, there is no "Hypostat 2012".

In the statistical tables, data is presented in EUR. This may, however, introduce exchange rate distortions for countries outside the euro area.

Finally, although the Hypostat aims to publish consistent data across countries and over time, not all data can be compared between countries, owing to some

methodological differences. For further information on the definitions used, please refer to the Annex "Explanatory Note on Data".

Please note that:

- Date: "Q1 2013" stands for "the first quarter of 2013";
- Diminutive: "bps" stands for "basic points"; "LTV" stands for "loan to value"; "EC" stands for the European Commission, "EP" stands for the European Parliament and "NPL" stands for "Non-performing loans";
- Figures: "bn" stands for billion; "mn" stands for million and "td" stands for thousand;
- Variation: "q-o-q" stands for "quarter-on-quarter"; "h-o-h" stands for "half-on-half" and "y-o-y" stands for "year-on-year".

Key Facts

Real GDP returned to negative territory in 2012

- In 2012, real GDP in the EU27 turned back to recession (-0.4%), driven by the worsening sovereign-debt crisis in the first half of the year and the ensuing general loss of business and consumer confidence. Despite the improved financial market conditions since the summer 2012, partly resulting from substantial monetary policy easing, the euro area registered its sixth consecutive q-o-q economic recession in Q1 2013, revealing the weaknesses of the real economy. (pp. 6)
- Owing to a better control of government expenditures and a stronger environmental taxation in several countries, public deficit in the euro area fell by 2.5 percentage points between 2010 and 2012. However, subdued public expenditure and increasing revenue of governments affect real GDP through diverse channels: final consumption expenditure of general government and public investment are more likely to slow down or even contract, whereas the heightened tax burden discourages private consumption of household and private investment. (pp. 6)

Divergent cross-country developments remained in housing markets

- In Q4 2012, based on their annual performances, countries can be linked to three different groups in terms of nominal house prices¹. Some countries observed noticeable y-o-y growths: Germany, Belgium, the UK and Sweden. On the other hand, nominal house prices decreased somewhat in Denmark and France, and substantially in Portugal, Hungary, Ireland, Italy, the Netherlands and Spain. (pp. 6)
- Besides the exception of the French market, these differentiated performances are in line with the trends observed between Q2 2009 and Q4 2012. (pp. 6)
- Among the factors behind the national price dynamics, disposable income per capita and the average construction cost for a new dwelling seemed to have played a significant role between 2002 and 2012. The former relates to demand and tends to be significantly correlated with the observed house prices variations in the EU27. On the supply side, construction costs might have also influenced nominal house prices, through the new housing segment. (pp. 7)

- Noticeable differences across regions and market segments characterised some national markets at the end of 2012. (pp. 8)
- In 2012, the number of building permits decreased in most EU27 countries for which data is available: Denmark, Spain, Ireland, Hungary and Poland. Nonetheless, it increased noticeably in Latvia, Belgium and Germany. Compared to 2007, the number of building permits per 1,000 inhabitants² contracted in all countries (excluding Germany), albeit at different paces: it decreased by less than half in Belgium, Czech Republic, France, Poland and Sweden, whereas the contraction exceeded this threshold in Denmark, Hungary, Ireland, Portugal and Spain. (pp. 8)
- One of the main factors behind the cross-sectional heterogeneity of building permits' dynamics proves to be the differentiated dynamics in nominal house prices observed between 2007 and 2012. It appears that nominal house prices have played a significant role in the activity of the residential construction sector, by shaping the behaviour of investors. (pp. 8)
- On an aggregate basis³, construction markets have gone through different phases between Q1 2004 and Q4 2012. (pp. 8)

Subdued performances in mortgage markets

- In Q4 2012, the total amount of outstanding mortgage lending in the EU27⁴ increased by +2.1% y-o-y (vs. +2.3% in Q4 2011, +3.7% in Q4 2010, +4.1% in Q4 2009 and -3.3% in 2008), but contracted by -0.4% q-o-q (i.e. the first decrease since Q1 2011), and reached 109.4% of its 2007 average. (pp. 9)
- The y-o-y figures have been partly distorted by the bilateral nominal exchange rate movements between the Pound Sterling and the euro. While the UK mortgage market grew by +3.3% in Q4 2008, by +0.8% in Q4 2009, by +0.3% in Q4 2010, by +0.5% in Q4 2011 and by +1.6% in 2012 in domestic currency, the variation in its value in EUR was -20.5%, +8.1%, +3.5%, +3.6% and +4.0%, respectively⁵. As a result, the contribution of the UK to the EU27 mortgage market growth in EUR stood at -6.2% in 2008, +2.0% in 2009, +0.9% in 2010, +0.9% in 2011 and +1.0% in 2012. (pp. 9)

¹ The sample used to calculate national house prices is available in the glossary of the Hypostat.

² The population concerns the inhabitants over 18 years old.

³ The aggregate indexes for building permits, housing starts and housing completions include countries for which data is available over the Q1 2004-Q4 2012 period: Czech Republic, Denmark, Ireland, Poland, Spain and Sweden.

⁴ This data does not cover the whole market of the EU27: the sample related to the amount of outstanding residential lending in the EU27 includes Denmark, France, Germany, Hungary, Ireland, the Netherlands, Poland, Portugal, Romania, Spain, Sweden and the UK (i.e. 76.2% of the EU27's GDP at current prices in 2012).

⁵ The calculations are based on the bilateral exchange rate at the end of the period.

- Gross residential lending in the EU27⁶ performed poorly in 2012, as it contracted by -7.4% compared to 2011⁷ and stood at only 45.8% of the amount recorded in 2007. However, these figures concealed diverse growth dynamics at country level. The main positive contributors were the UK (with +2.4%), mirroring the depreciation of the euro exchange rate, and Denmark (with +4.1%), where remortgaging activity has almost doubled compared to 2011, mainly resulting from the flexibility in the Danish mortgage system and the environment of very low interest rates. By contrast, gross lending in France, Italy and the Netherlands substantially dragged down the EU27 figure, since their cumulative contribution stood at -12.4% in 2012. (pp. 10)
- Gross lending in the EU27 contracted y-o-y every quarter of 2012: -5.8% in Q1, -10.3% in Q2, -6.6% in Q3 and -6.9% in the last quarter. In quarterly terms, the variation was -10.8%, -0.5%, -0.1% and +4.9%, respectively. Nevertheless, owing to the usual strong seasonal effect in new residential lending, the q-o-q figures were quite different once seasonally adjusted⁸: +7.7% in Q1; -11.7% in Q2; +0.2% in Q3 and -2.6% in Q4. (pp. 10)
- As regards the determinants of gross lending, specific national one-off factors, such as the implementation of new subsidies or taxes, may have distorted several domestic mortgage markets during 2012. (pp. 10)
- When considered from Q1 2007, gross lending dynamics vary widely across countries. The contributing countries can be roughly divided into two groups: one with national mortgage markets where gross lending has followed a positive or stagnant trend between 2007 and 2012; the other composed of countries where gross lending has moved along a downward trend in the same period. The first group includes Belgium and Sweden, as well as Denmark and France. It is worth noting that gross lending in Denmark and France has admittedly followed a positive or stagnant trend between 2007 and 2012, but the time series has been much more volatile in these two countries than in Belgium and Sweden. (pp. 10)
- The second subclass contains Hungary, Ireland, Italy, Portugal, Spain and the UK. Regarding the UK, gross lending did remain below 2008 levels in Q4 2012; nonetheless, contrary to the other countries of the group, the trend has not been downwards since 2009. Gross lending in the UK has been flat at a low level between 2009 and 2011, and has even increased slowly in 2012. (pp. 10)
- Over the 2007-2012 period, different macroeconomic factors could explain this marked heterogeneity across countries in terms of gross lending dynamics. Based on the empirical studies developed in the Hypostat, gross domestic product at current prices (which can partially reflect the demand for new loans) seems to have played a significant role in this dynamics. However, the findings revealed that nominal house prices could be the most important driver of gross lending in the EU27, perhaps because prices affect gross lending via the channels of both lending standards and demand for new loans. (pp. 11)
- The level of gross lending generally correlates with outstanding lending. However, this relation can be partially distorted by the amount of remortgaging included in gross lending. (pp. 11)

Significant easing in mortgage interest rates

- Amid poor macroeconomic performance and fading inflationary pressures, most central banks across the EU lowered their policy rates in 2012. (pp. 12)
- As a consequence of these monetary policy actions, in Q1 2013, representative mortgage rates decreased y-o-y in all national markets excluding Ireland, where the increase was nonetheless very low, at +3 bps. (pp. 12)
- At end-2012, the amount of “adjustable-rate residential mortgages” (ARMs) relative to gross residential mortgage lending reached 35.8% in the EU⁹, down from 43.0% one year earlier and 48.9% at end-2010. (pp. 12)
- In the EU27, the high heterogeneity across countries and over time in terms of “ARM share” can result from several factors: the current spreads between fixed mortgage rate (FRM) and ARM; historical volatility in inflation; the stability of the household income; the amount of the mortgage; the default costs and the moving probabilities. (pp. 12)

⁶ In 2012, the sample includes Belgium, Denmark, France, Hungary, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the UK (i.e. around 66% of the EU27's GDP at current prices). Please note that gross lending includes new mortgage loans and external remortgaging (i.e. remortgaging with another bank) in all of these countries except Spain.

⁷ The inclusion of Germany into the sample softens this decrease, which then stood at -4.1%.

⁸ The time series have been deseasonalised with E-views 8.0 (Census X-13).

⁹ The sample contains Belgium, Denmark, Ireland, the Netherlands, Portugal, Spain, Sweden and the UK (i.e. more than 56% of the EU27's GDP at current prices).

Housing and Mortgage Markets in 2012

By Sylvain Bouyon, European Mortgage Federation

1. Macroeconomic Overview

In 2012, real GDP in the EU27 turned back to recession (-0.4%), driven by the worsening sovereign-debt crisis in the first half of the year and by the ensuing general loss of business and consumer confidence. Despite the improved financial market conditions since the summer 2012, partly resulting from substantial monetary policy easing, the euro area registered its sixth consecutive q-o-q economic recession in Q1 2013 (Chart 1), revealing the weaknesses of the real economy. Among the best performers in the euro area, only Estonia and Slovakia registered real GDP growth above +1% in 2012. As regards the non euro economies, real GDP in domestic currency grew in Poland (+1.9%), Bulgaria (+0.8%), Sweden (+0.7%), Romania (+0.7%) and the UK (+0.2%), while it decreased in Denmark (-0.4%) and Hungary (-1.7%)¹.

Even though exports slowed down noticeably in 2012 (to +2.4% from +6.5% in the previous year), net exports were the only positive contributor to real GDP in the EU27², with the German economy generating almost half of the EU27 value. The main reason for this positive performance was the first contraction in imports since 2009, due to poor domestic demand. Nevertheless, net exports lost momentum between Q4 2011 and Q1 2013 in the euro area and even provided a negative contribution to the EU27 real GDP Q4 2012 and Q1 2013. Amid depressed labour markets with the unemployment rate rising by 1.2 percentage point in the euro area, significant household deleveraging and low consumer confidence, household final consumption expenditure contracted in 2012 by -1.4% in the euro area and -0.8% in the EU27. After growing by +1.6% in 2011, gross fixed capital formation plunged in 2012 in the euro area, mirroring corporate deleveraging and subdued economic prospects.

In the euro area, reflecting the deep recession in 2009 and the successive rescue interventions in response to the financial crisis, the government that to GDP ratio

increased from 66.4% in 2007 to 80.0% in 2009 (and from 62.3% to 74.6% respectively in the EU27). This upward trend started to ease in 2010 (85.6%) and reached 93.1% in the euro area in 2012. Further easing is expected in coming years, as a better control of government expenditures and a stronger environmental taxation in several countries reduced the public deficit from -6.2% in 2010 to -3.5% in 2012. However, subdued public expenditure and increasing revenue of governments³ affect real GDP through diverse channels: final consumption expenditure of general government and public investment are more likely to slow down or even contract, whereas the heightened tax burden discourages private consumption of household and private investment.

2. Housing markets

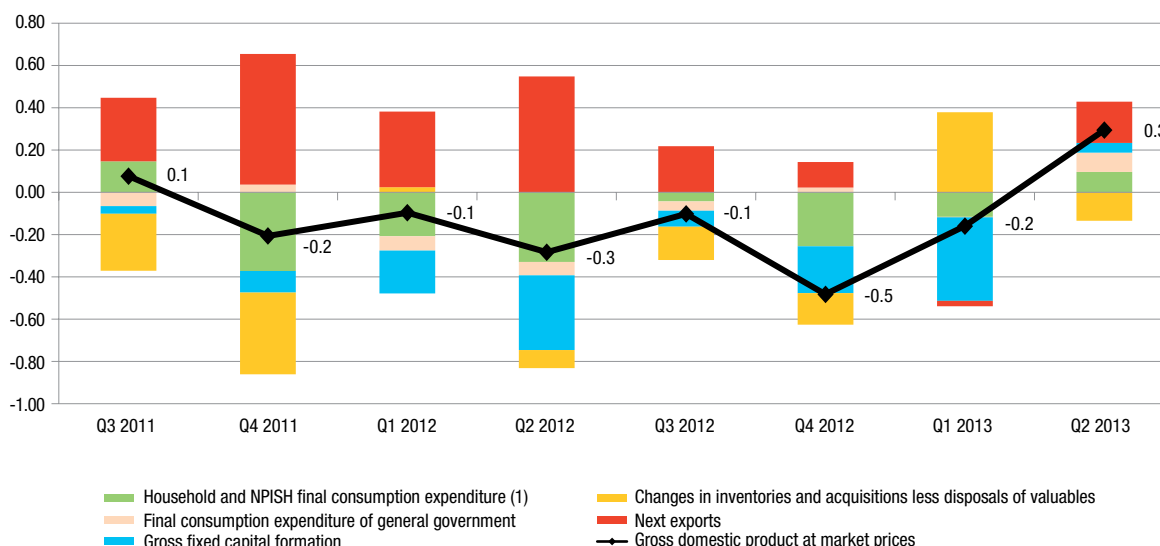
2.1 Trends in house prices

2.1.1 Cross-country observations

In Q4 2012, based on their annual performances, countries can be linked to three different groups in terms of nominal house prices⁴. Some countries observed noticeable y-o-y growths: Germany (+3.1%), Belgium (+2.7%), the UK (+1.6%) and Sweden (+2.3%). On the other hand, nominal house prices decreased somewhat in Denmark (-1.0%) and France (-1.9%) and substantially in Portugal (-2.7%), Hungary (-4.0%), Ireland (-4.5%), the Netherlands (-7.4%) and Spain (-10.0%).

Besides the exception of the French market, these differentiated performances are in line with the trends observed between Q2 2009 and Q4 2012 (Chart 2). After decreasing in Q1 2009 in all countries except Poland, nominal house prices developed in a heterogeneous manner till Q4 2012, following two broad trends.

CHART 1 ► Contributors to the real GDP growth in the euro area (q-o-q contribution to real GDP growth)



Source: Eurostat

Note:

- Millions of EUR, chain-linked volumes, reference year 2005
- (1): NPISH: Non-profit institutions serving households
- Please note that the time series have been deseasonalised

¹ In 2012, growth differentials in the EU27 remained high, as standard deviation for real GDP variation reached 2.4 (vs. 2.7 in 2011 and 2.2 in 2010).

² In 2012, the contribution of final consumption expenditure of general government to real GDP in the EU27 stood at -0.008%

³ In the euro area, the average growth in public expenditure decreased from +2.0% in the period 2006-2010 to +1.1% between 2010 and 2012; the figures were +1.6% and +2.6% respectively for public revenue.

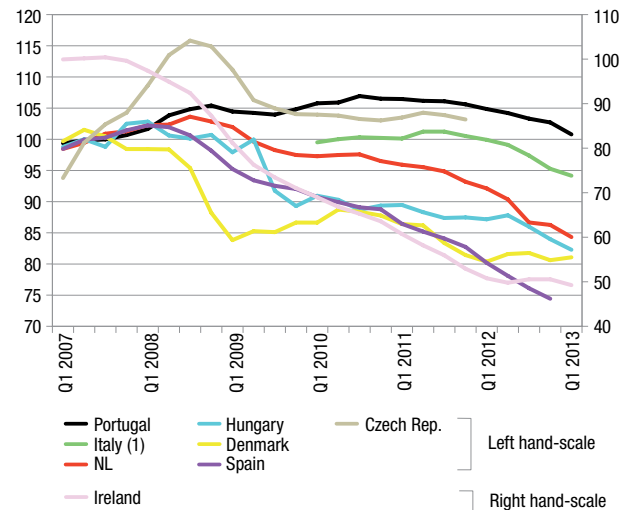
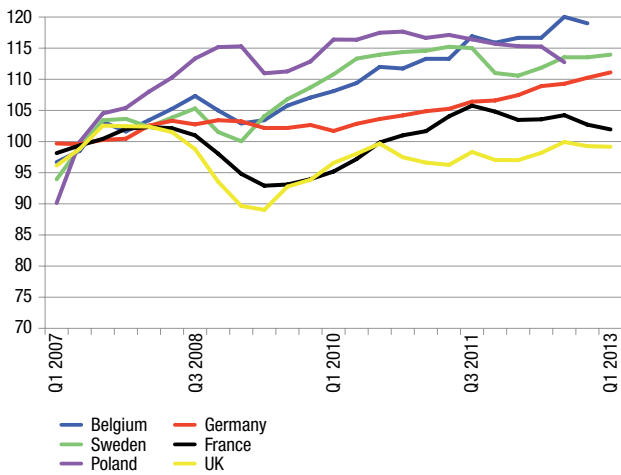
⁴ The sample used to calculate national house prices is available in the glossary of the Hypostat.

In some domestic markets, nominal house prices have followed a positive trend, while in some others prices have moved along a downward path. As a result, in Q4 2012, prices were above their Q2 2009 levels in Belgium (+15%), the UK (+11.5%), Sweden (+9.1%) and Germany (+7.9%); by contrast, they stood below in Portugal (-1.5%), Denmark (-6.4%), the Netherlands (-13.4%), Hungary (-15.9%), Spain (-20.3%) and Ireland (-33.7%). In real terms⁵, compared with Q2 2009, house prices increased by +7.0% in Belgium, +5.3% in France, +4.4%

in Sweden, +1.3% in Germany and remained stable in the UK. It contracted by -7.2% in Portugal, -11.6% in Denmark, -18.2% in the Netherlands, -26.0% in Spain, -26.5% in Hungary and -33.7% in Ireland.

Among the factors behind the national price dynamics, disposable income per capita and the average construction cost for a new dwelling seemed to have played a significant role between 2002 and 2012 (Chart 3). The former relates to demand

CHART 2 ► Nominal house prices (2007 = 100)



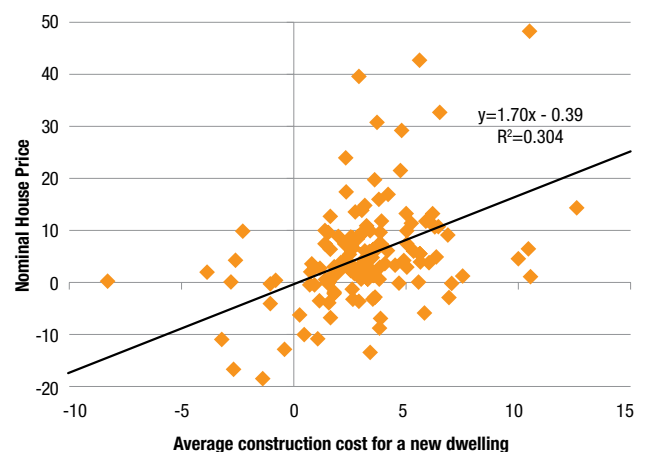
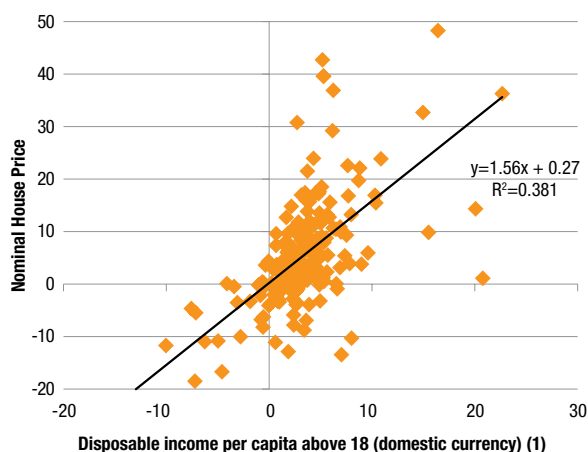
Source: European Mortgage Federation

Note:

- (1): 2010 = 100

- The criteria used to create the categories are available in the Annex II (pp. 15).

CHART 3 ► Determinants of national nominal house prices in the EU27 countries (2002-2012), (annual variation, in %)



Source: European Mortgage Federation and Eurostat

Note:

- Panel for the chart with disposable income: Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the UK

- Panel for the chart with average construction cost: Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, the Netherlands, Poland, Portugal, Spain, Sweden and the UK

- (1): it concerns gross disposable income of households and NPISH (provided by Eurostat)

⁵ The Real House Price Index is the nominal house price (provided by the EMF) adjusted for inflation, using the HICP - All-items excluding housing, water, electricity, gas & other fuels (provided by Eurostat).

and tends to be significantly correlated with the observed house prices variations in the EU27 (the correlation is 0.3814). On the supply side, construction costs might have also influenced nominal house prices, through the new housing segment.

2.1.2 Regional differences

Noticeable regional differences characterised some national markets at the end of 2012. For example, in France, the overall y-o-y decrease of -1.7% was mainly the result of the contraction recorded in the “province” (i.e. outside of the Paris metropolitan area), since house prices fell by -0.7% in the « Île de France » (the Paris metropolitan area), and -1.0% in Paris. In Romania, prices for apartments increased by +2.0% in Bucharest, while they continued to fall significantly in the rest of the country (by -7.2%). Regarding Sweden, in contrast to the regions of Stockholm and Gothenburg, house prices fell in the region of Malmö, owing to negative spillover effects from housing developments in Copenhagen⁶. Finally, in the UK, the largest increases have been registered in some parts of southern England, especially in London (i.e. +4.9% y-o-y increase), whereas prices in Northern Ireland fell by -8.5% y-o-y.

2.1.3 Segment differences

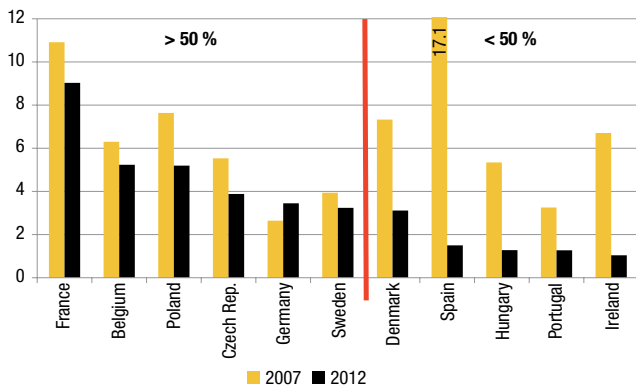
In addition, there were some differences across national market segments. In Q4 2012, in Belgium, prices contracted by -0.3% y-o-y for houses and increased by +3.4% for apartments. In Denmark, price differentials were also pronounced: despite the robust y-o-y growth registered for owner-occupied flats (+3.9% on a yearly basis), prices for single family homes decreased on average by -2.8% y-o-y. In France, the overall decrease was not spread equally across market segments, since prices for new dwellings increased moderately (by +0.8%), partly mirroring the new regulation boosting construction costs.

2.2 Housing supply developments

2.2.1 Across countries

In 2012, the number of building permits decreased in most EU27 countries for which data is available: Denmark (-30.9%), Spain (-24.3%), Ireland (-23.6%), Hungary (-15.1%) and Poland (-10.2%). Nonetheless, it increased noticeably in Latvia (+16.6%), Belgium (+5.9%) and Germany (+5.0%). Compared to 2007, the number of building permits per 1,000 inhabitants⁷ contracted in all countries (excluding Germany), albeit at different paces (Chart 4): it decreased by less than half in Belgium, Czech Republic, France, Poland and Sweden, whereas the contraction exceeded this threshold in Denmark, Hungary, Ireland, Portugal and Spain.

CHART 4 ► Building permits per 1,000 inhabitants (population over 18)



Source: European Mortgage Federation

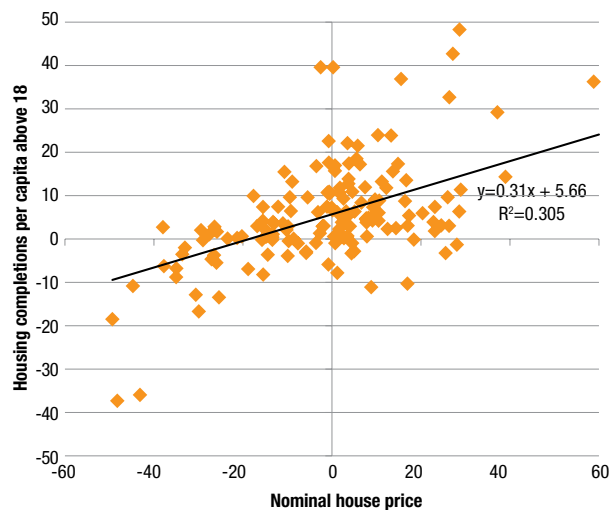
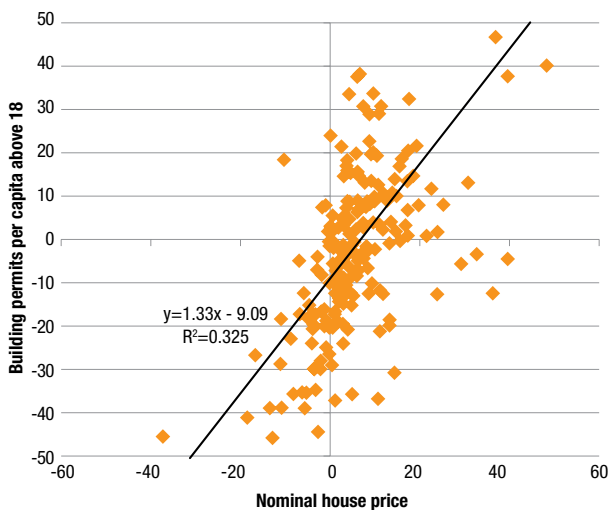
One of the main factors behind this heterogeneity across countries proves to be the differentiated dynamics in nominal house prices observed between 2007 and 2012. Indeed, in the first group of countries, with lower contraction in the number of building permits per 1,000 inhabitants, house prices developed rather positively, whilst the other group generally observed long-term downward trends in nominal house prices (Chart 2).

Considering yearly variations over the period 2001-2012, the correlation between nominal housing prices and building permits per capita is estimated at 0.325 (Chart 5); the R-squared reached 0.305 with housing completions per capita. Therefore, it appears that nominal house prices have played a significant role in the activity of the residential construction sector, by shaping the behaviour of investors.

2.2.2 Aggregate level

On an aggregate basis⁸, construction markets have gone through different phases between Q1 2004 and Q4 2012. Before mid-2007, building permits, housing starts and

CHART 5 ► Nominal house prices and construction activity in the EU27 countries (2001-2012), (annual variation, in %)



Source: European Mortgage Federation

⁶ Malmö is situated close to Copenhagen, Denmark, and has to a large extent been influenced by the Copenhagen housing market since the construction of the bridge between the two cities in 2000.

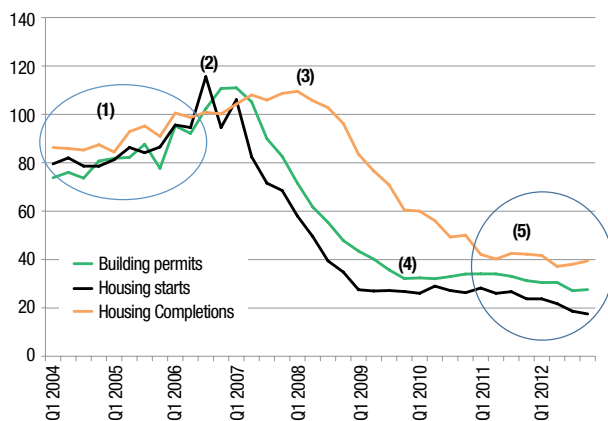
⁷ The population concerns the inhabitants over 18 years old.

⁸ The aggregate indexes for building permits, housing starts and housing completions include countries for which data is available over the Q1 2004-Q4 2012 period: Czech Republic, Denmark, Ireland, Poland, Spain and Sweden.

housing completions recorded fast-track performances (1) on Chart 6, partly boosted by the pace of growth in Spain and Poland. In the first half of 2007, prior to the financial crisis, the number of building permits and housing starts abruptly contracted (2), and moved along a sharp downward path until the first half of 2010 (4). Building permits and housing starts seemed to be mired in a low level equilibrium over the period mid-2009 mid-2011 (4), with slight fluctuations occurring around an average of roughly 30% of 2006 levels. However, mirroring the worsening sovereign debt economic crisis in the euro area and the subsequent poor macroeconomic performance in the EU27, housing starts followed another noticeable downward trend from the second half of 2011.

As regards housing completions, data did not reflect some of the developments recorded in building permits and housing starts, as completions typically respond belatedly- at least with a one-year lag- to upswings in residential construction activity. Housing completions continued to grow y-o-y until Q1 2008 at a steady

CHART 6 ► Housing starts, building permits and completions (2006 = 100)



Source: European Mortgage Federation

Note:

- The data has been deseasonalised with Eviews 8.0 (method Census X-13)
- The aggregate indexes for building permits, housing starts and housing completions include Czech Republic, Denmark, Ireland, Poland, Spain and Sweden.

pace; thereafter, it initiated a marked decline (3) and stabilised somewhat only in the first half of 2011, to reach approximately 40% of its 2006 level (5).

3. Mortgage markets

3.1 Outstanding residential mortgage lending

In Q4 2012, the total amount of outstanding mortgage lending in the EU27⁹ increased by +2.1% y-o-y (vs. +2.3% in Q4 2011, +3.7% in Q4 2010, +4.1% in Q4 2009 and -3.3% in 2008), but contracted by -0.4% q-o-q (i.e. the first decrease since Q1 2011), and reached 109.4% of its 2007 average.

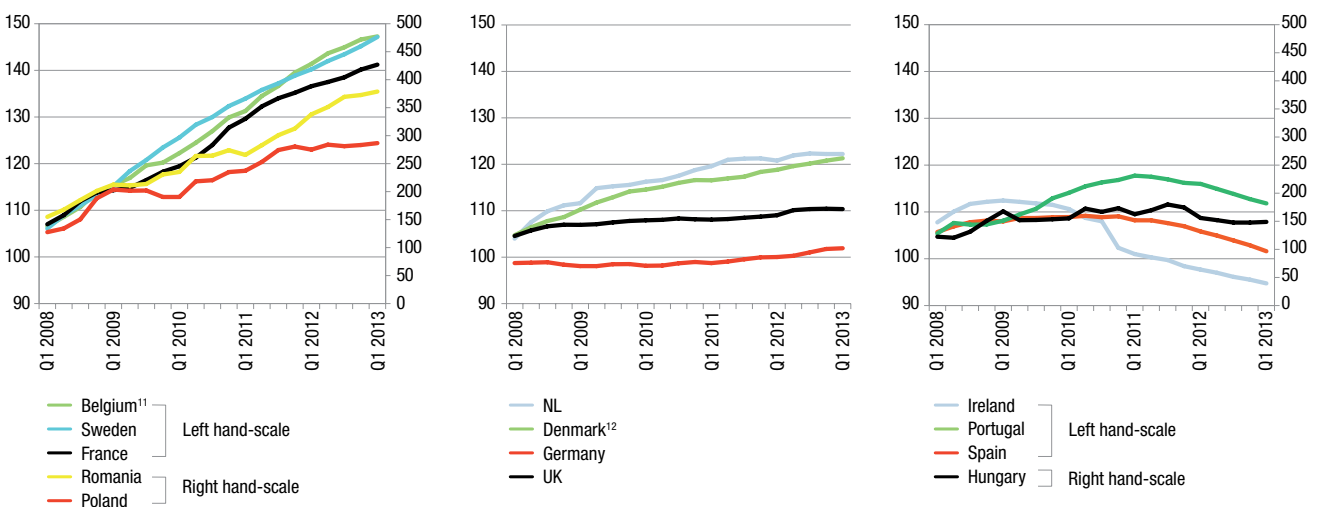
The y-o-y figures have been partly distorted by the bilateral nominal exchange rate movements between the Pound Sterling and the euro. While the UK mortgage market grew by +3.3% in Q4 2008, by +0.8% in Q4 2009, by +0.3% in Q4 2010, by +0.5% in Q4 2011 and by +1.6% in Q4 2012 in domestic currency, the variation in its value in EUR was -20.5%, +8.1%, +3.5%, +3.6% and +3.9%, respectively. As a result, the contribution of the UK to the EU27 mortgage market growth in EUR stood at -6.2% in 2008, +2.0% in 2009, +0.9% in 2010, +0.9% in 2011 and +1.0% in 2012.

In the euro area¹⁰, outstanding residential loans increased y-o-y by +0.7% in Q4 2012, down from +1.5% in Q4 2011. This slowdown is partly explained by the 2012 aggregate contribution of Ireland and Spain, which was significantly negative (-0.8% vs. -0.5% one year earlier). On the other hand, the aggregate contribution of France and Germany remained robust and stood at +1.5% in Q4 2012 (vs. +1.7% in Q4 2011).

Regarding non-euro economies, in 2012, outstanding mortgage loans generally increased y-o-y in domestic currency: +19.2% in Romania, +4.5% in Sweden, +1.6% in Denmark and +1.0% in Poland.

In Q4 2012, for most countries in the EU27, national performances in local currency were broadly in line with previous years (Chart 7). Belgium, France, Romania and Sweden experienced almost continuous robust y-o-y growth in outstanding mortgage loans between Q1 2008 and Q4 2012. Some other domestic mortgage markets also registered growth in the same period, albeit at a slower pace (i.e. Denmark, Germany, the Netherlands and the UK). Finally, within the context of economic recession and household deleveraging, in Q1 2013, outstanding residential lending has contracted q-o-q for 16 consecutive quarters in Ireland, 8 in Portugal and 7 in Spain.

CHART 7 ► Total Outstanding Residential Lending (2007 = 100; in domestic currency)



Source: European Mortgage Federation

Note:

- The criteria used to create the categories are available in the Annex II (pp. 15).

⁹ This data does not cover the whole market of the EU27: the sample related to the amount of outstanding residential lending in the EU27 includes Denmark, France, Germany, Hungary, Ireland, the Netherlands, Poland, Portugal, Romania, Spain, Sweden and the UK (i.e. 76.2% of the EU27's GDP at current prices in 2012).

¹⁰ The sample includes France, Germany, Ireland, the Netherlands, Portugal and Spain (i.e. more than 70% of the euro area's GDP at current prices).

¹¹ Contrary to the yearly data published in the Hypostat, the quarterly data on residential lending in Belgium excludes several types of loans (such as the "social credits").

¹² The data provided on the Chart 7 includes data only for EMF Members.

3.2 Gross residential mortgage lending

3.2.1 Performance in 2012

Gross residential lending in the EU27¹³ performed poorly in 2012, as it contracted by -7.4% compared to 2011¹⁴ and stood at only 45.8% of the amount recorded in 2007. However, these figures concealed diverse growth dynamics at country level. The main positive contributors were the UK (with +2.4%), mirroring the depreciation of the euro exchange rate, and Denmark (with +4.1%), where remortgaging activity has almost doubled compared to 2011, mainly resulting from the flexibility of the Danish mortgage system and the environment of very low interest rates. By contrast, gross lending in France, Italy and the Netherlands substantially dragged down the EU27 figure, since their cumulative contribution stood at -12.4% in 2012.

Gross lending in the EU27 contracted y-o-y every quarter of 2012: -5.8% in Q1, -10.3% in Q2, -6.6% in Q3 and -6.9% in the last quarter. In quarterly terms, the variation was -10.8%, -0.5%, -0.1% and +4.9%, respectively. Nevertheless, owing to the usual strong seasonal effect in new residential lending, the q-o-q figures were quite different once seasonally adjusted¹⁵: +7.7% in Q1; -11.7% in Q2; +0.2% in Q3 and -2.6% in Q4.

As regards the determinants of gross lending, specific national one-off factors may have distorted several domestic mortgage markets during 2012.

Some of them might have had a positive impact on gross lending. In Ireland, in Q4 2012, there was an increase in activity, as prospective house buyers rushed to meet the 31 December 2012 deadline for the end of tax relief on mortgage interest payments (after that date, relief is not available for new mortgages). In Hungary, under the early repayment scheme¹⁶ (ERS), remortgaging activities rose dramatically in Q1 2012, leading to a y-o-y increase of +187% in gross lending. Nevertheless, the termination of the ERS at the end of Q1 2012 led to a sharp decline in gross lending in Q2 2012. In Poland, a slight revival could be observed in the second half of 2012, as it appeared that households tried to use their last chance to qualify for the subsidised programme "Family on their own" (this scheme was ceased at the end of 2012). In Portugal, in Q4 2012, the first q-o-q increase

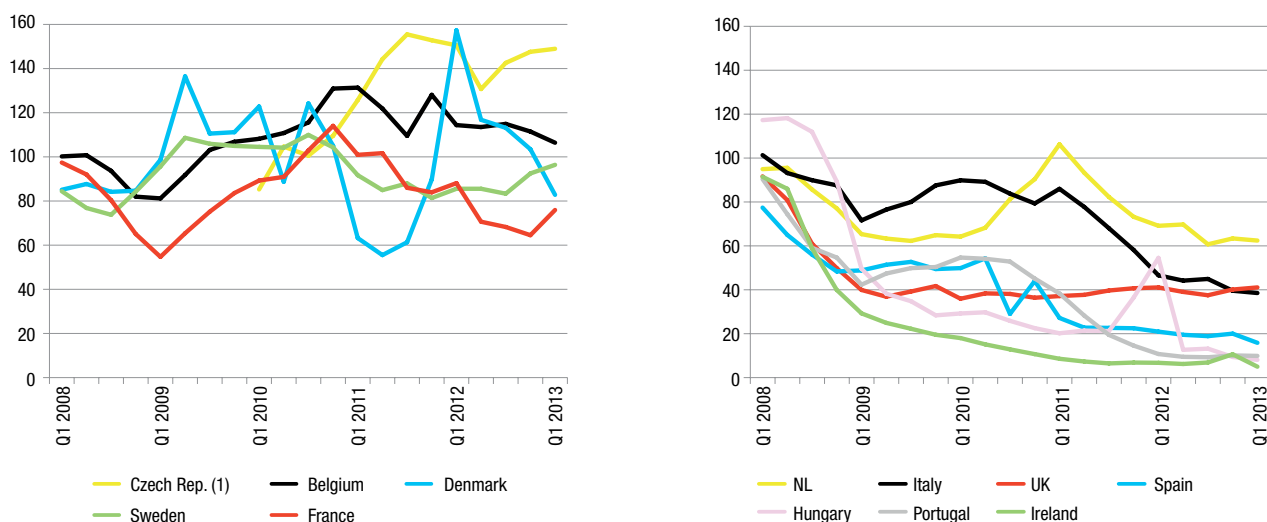
registered in gross lending since Q2 resulted somewhat from the softening in the implementation of several measures in the financial sector under the "Financial Assistance Programme to Portugal". In Spain, the combination of a rise in VAT for housing purchase and the deletion of subsidies for first-time home buyers, both announced by the government for 1 January 2013, prompted a rise in housing demand during the last months of the year. Finally, in the UK, two one off factors might have raised gross lending in 2012. Firstly, the end of the first-time buyer stamp duty holiday in March had the expected effect of increasing house purchase lending at the end of Q1 2012. Secondly, the introduction by the Bank of England of its new Funding for Lending Scheme (FLS) in August, which aims to increase lending to the real economy by making funding available to banks and Building Societies, might have partly contributed to the gradual easing in mortgage interest rates during the second semester.

Other one-off factors have probably weighed on the potential gross lending in 2012. In Belgium, the continuous y-o-y decrease registered in both the number of new mortgage lending credit agreements and the amounts of new residential lending can be partly explained by the lagged effects of the cancellation of numerous measures aimed at promoting energy-saving investments at end-2011. In France, the uncertainties surrounding the national elections in April-June and the repercussions of the substantial cuts in expenditures on subsidies in combination with the hikes in some taxes seemed to have induced several distortions on gross lending, mainly in Q2 2012. Last, but not least, regarding Italy, the reintroduction in January 2012 of a wealth tax on real estate property located in Italy (the new tax is called "IMU" - the Italian acronym for "United Municipal Tax") is likely to have further depressed gross mortgage lending throughout 2012.

3.2.2 Trends between 2007 and 2012

When considered from Q1 2007, gross lending dynamics vary widely across countries (Chart 8). The contributing countries can be roughly divided into two groups: one with national mortgage markets where gross lending has followed a positive or stagnant trend between 2007 and 2012; the other composed of countries where gross lending has moved along a downward trend in the same period. The first group includes Belgium and Sweden, as well as Denmark and

CHART 8 ► Gross Residential Lending (2007 = 100; in domestic currency)



Source: European Mortgage Federation

Note:

- The time series have been deseasonalised with Eviews 8.0 (method Census X-13)
- (1): 2010 = 100
- The criteria used to create the categories are available in the Annex II (pp. 15).

¹³ In 2012, the sample includes Belgium, Denmark, France, Hungary, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the UK (i.e. around 66% of the EU27's GDP at current prices). It should be noted that gross lending includes new mortgage loans and external remortgaging (i.e. remortgaging with another bank) in all of these countries except France and Spain.

¹⁴ The inclusion of Germany into the sample softens this decrease, which then stood at -4.1%.

¹⁵ The time series have been deseasonalised with E-views 8.0 (Census X-13).

¹⁶ Under the ERS, new HUF loans were issued for repayment of CHF and EUR loans, at a fixed preferential CHF/HUF or EUR/HUF exchange rate, which was significantly lower than the market price.

France. It is worth noting that gross lending in Denmark and France has admittedly followed a positive or stagnant trend between 2007 and 2012, but the time series has been much more volatile in these two countries than in Belgium and Sweden. The second subclass contains Hungary, Ireland, Italy, Portugal, Spain and the UK. Regarding the UK, gross lending did remain below 2008 levels in Q4 2012; nonetheless, contrary to the other countries of the group, the trend has not been downwards since 2009. As shown in Chart 8, gross lending in the UK has been flat at a low level between 2009 and 2011, and has even increased slightly in 2012.

For the period 2007-2012, different macroeconomic factors could explain this marked heterogeneity across countries in terms of gross residential lending dynamics. The econometric analyses introduced in Annex 1 analyse the impact of GDP at current prices (which can partially reflect the demand for new residential loans), nominal house prices and representative mortgage interest rates on new residential loans. The regressions are based on a balanced panel model, which includes ten EU27 national mortgage markets (i.e. Belgium, Denmark, France, Germany, Hungary, Ireland, Portugal, Spain, Sweden and the UK) and 23 time observations (from Q1 2007 to Q3 2012). After controlling for time effects, random effects and fixed effects, the findings of these econometric analyses reveal that

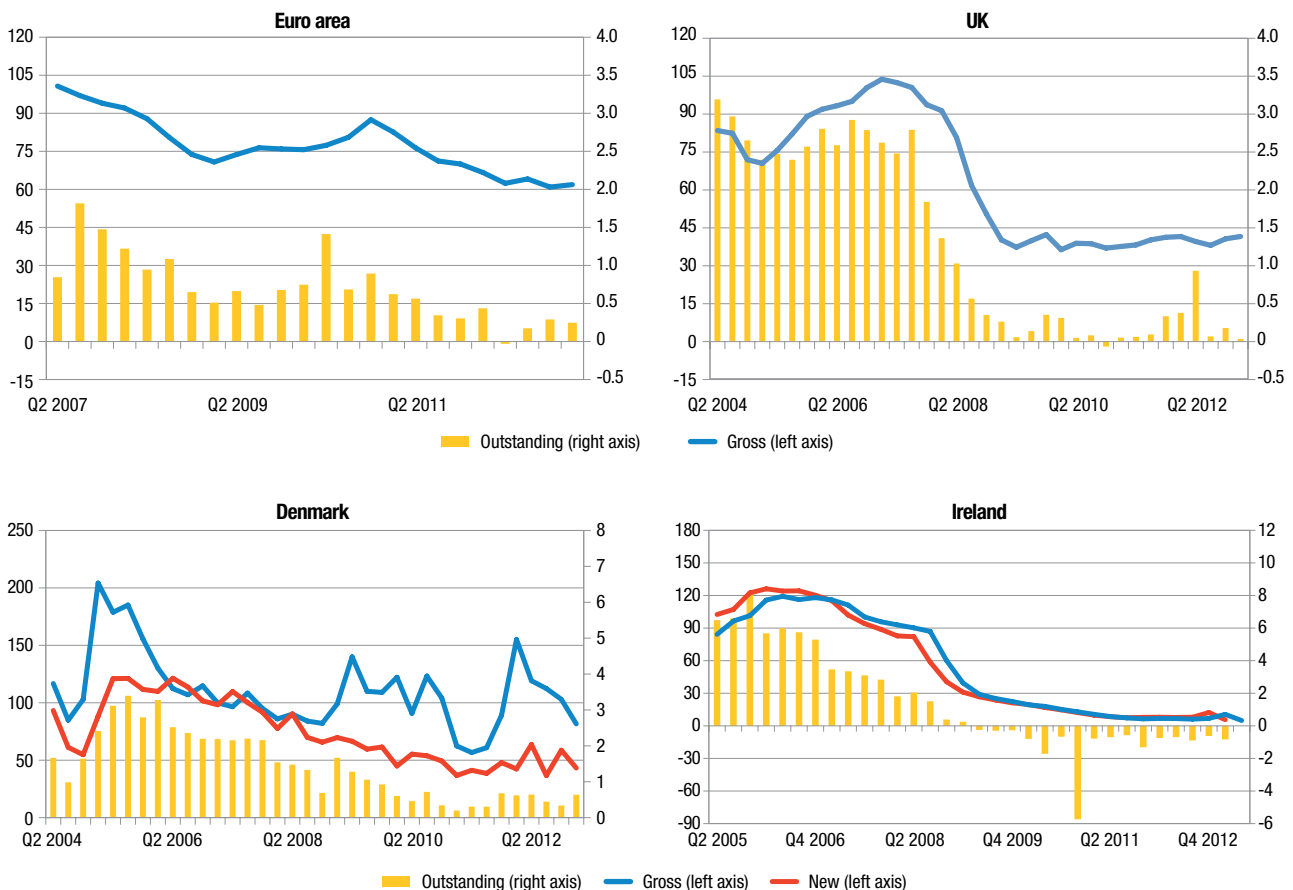
GDP at current prices has played a noticeable role in this dynamics. Nevertheless, nominal house prices could be the most important driver of gross residential lending in the EU27, perhaps because house prices affect gross residential lending via the channels of both lending standards and demand for new residential loans.

3.2.3 Relation between gross and outstanding residential lending

In the euro area and the UK (Chart 9), as expected, the level of gross residential lending appears to have a significant positive impact on the q-o-q variation of outstanding residential lending. For instance, in the UK, the substantial contraction in gross lending between Q3 2007 and Q2 2009 (the amount of gross lending in Q2 2009 reached roughly 37% of its Q3 2007 level) had an almost immediate effect on the dynamics of outstanding residential lending (the q-o-q variation decreased from +2.8% in Q3 2007 to +0.1% in Q2 2009). In the subsequent years, the quarterly amounts of new lending still more than offset repayments¹⁷. As a result, outstanding residential lending continued to grow q-o-q, albeit at a slower pace.

In Denmark, it is worth noting that gross lending is typically much more volatile than new lending, mainly due to the high flexibility of the Danish mortgage system and the numerous opportunities of remortgaging. Based on the results of simple

CHART 9 ► : Gross, New and Outstanding Residential Lending (2007= 100 for gross lending and new lending and q-o-q variation in % for outstanding lending)



Source: European Mortgage Federation

Note:

- Figures are calculated based on values expressed in local currencies
- Time series have been deseasonalised with Eviews 8.0 (method Census X-13)
- The panel for the euro area is: Belgium, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain and Sweden (i.e. more than 90% of the GDP at current prices of the euro area)

¹⁷ Excluding in Q4 2010.

econometric regressions, new lending appears to be a more powerful determinant of outstanding lending than gross lending. This finding is explained by the large share of remortgaging in gross lending which has no impact on the stock of debt since the new repayment scheme is broadly similar.

In Ireland, the paths of gross lending and new lending have been rather similar, owing mainly to the low activity of remortgaging¹⁸. From Q2 2009, new lending has been below repayments and has led to continuous q-o-q contractions in outstanding lending¹⁹.

The level of gross lending generally correlates with outstanding lending. However, this relation can be partially distorted by the amount of remortgaging included in gross lending; therefore, in case of high remortgaging, new residential lending proves to be a more resilient factor of the stock of mortgage debts.

3.3 Interest rates' developments

3.3.1 Monetary policy and mortgage interest rates

Amid poor macroeconomic performance and fading inflationary pressures, most central banks across the EU lowered their policy rates between Q1 2012 and Q1 2013. In the euro area, annual headline inflation (excluding energy and unprocessed food) gradually lessened in 2012 to stand at +1.6% in Q4 2012, while real GDP contracted y-o-y every quarter of 2012, reflecting continuous decline in domestic demand. Against this backdrop, the ECB cut its policy rate on 11 July 2012 to the all-time low of 0.75%. In response to abating inflation pressures and a noticeable GDP contraction in 2012, the Czech Central Bank reduced its repo rate to historical lows (i.e. to 0.05%). As regards Sweden, contained inflation pressures and the pronounced slowdown in real GDP growth (+0.8% in 2012 vs. +3.7% in 2011) led the Swedish Central Bank to cut its repo rate by a total of 75 bps in 2012. In a context of marked stagflation, with a noticeable GDP decrease and persistently high inflation, the Hungarian Central Bank lowered the base rate eleven times between Q1 2012 and Q2 2013, decreasing the rate from 7.00% to 4.25%. Finally, the pronounced slowdown observed in Polish real GDP over last quarters, declining y-o-y from +4.5% in Q4 2011 to +0.5% in Q1 2013, was accompanied by a rapid fading out of HICP inflation over the same period (+4.5% and +1.0%, respectively) and led the Polish National Bank (BNP) to lower the reference rate five times in Q4 2012 and Q1 2013, by a total of 150 bps.

In spite of economic recession and low inflation pressures, the Danish central bank raised the lending rate by 10 bps on 25 January 2013, after lowering it by 50 bps in 2012. The main reason behind this reversal of monetary policy is the

will of the Danish central bank to keep its currency stable against the euro: in the months preceding the increase, the krone had weakened, mirroring the growing investors' optimism over the prospects for the euro zone, and the Danish central bank had been buying its own currency to support it.

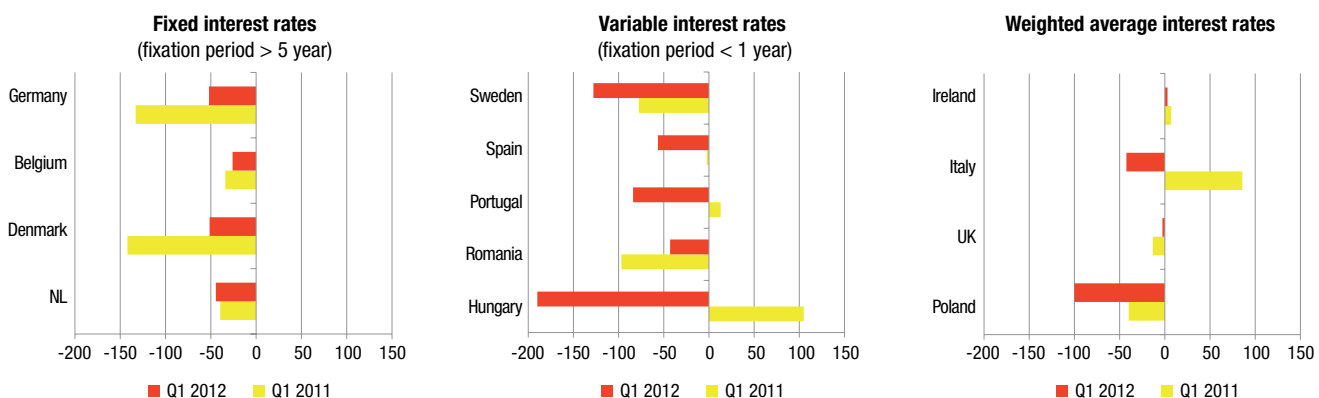
As a consequence of these monetary policy actions, in Q1 2013, representative mortgage rates contracted q-o-q in all countries for which data is available, except Italy (+4 bps) and Spain (+24 bps). This decrease was above 20 bps in Hungary (-80 bps), Poland (-60 bps), the UK²⁰ (-33 bps) and Ireland (-27 bps). In comparison with Q1 2012, mortgage interest rates fell down in all national markets excluding Ireland, where the increase was nonetheless very low, at +3 bps (Chart 10). The yearly contraction was substantial in Hungary (-190 bps), Sweden (-128 bps), Poland (-100 bps), Romania (-97 bps), Portugal (-84 bps) and France (-70 bps).

3.3.2 Different types of mortgage interest rates

At end-2012, the amount of "adjustable-rate residential mortgages" (ARMs) relative to gross residential mortgage lending reached 35.8% in the EU²¹, down from 43.0% one year earlier and 48.9% at end-2010. In Q1 2013, this share fell to 28.2%, the lowest level in more than seven years. However, this aggregate figure covers marked heterogeneity across countries. In some domestic markets, the "ARM share" is structurally high: between Q1 2007 and Q1 2013, the average share stood at 84.8% in Spain, 79.6% in Ireland, 79.5% in Portugal, 65.3% in Denmark, 64.0% in Romania and 63.1% in Sweden. On the other hand, this average share was only 20.5% in the Netherlands, 15.6% in Germany and 14.4% in Belgium. Surprisingly, some euro area countries exhibit very different "ARM shares", despite common monetary policy. At national level, the average "ARM share" can also vary significantly over time: for instance, in Belgium, it reached 2.5% in 2008, 33.4% in 2010 and 2.2% in 2012. In the UK, these figures were 41.4%, 50.4% and 31.1%, respectively.

Heterogeneity in "ARM share" can result from several factors. Simple econometric regressions show that the "ARM share" tends to be significantly correlated with the current spreads between fixed mortgage rate (FRM) and ARM in Belgium, Denmark, Germany, the Netherlands, Sweden and the UK (Chart 11). Therefore, current spreads are likely to be one of the main drivers of household mortgage choice (Badariza et al. (2013)). A high share of households with borrowing constraints is likely to reinforce this impact of spreads on the "ARM share". Regarding other determinants, empirical simulations developed by Campbell et al. (2003) proved that borrowers who

CHART 10 ► Representative mortgage interest rates in EU27 countries (variation in Q1 2013 in comparison with Q1 2012 and Q1 2011, in bps)



Source: European Mortgage Federation

¹⁸ For example, in 2012, remortgaging accounted for 4.4% of total gross residential lending in Ireland and 80.9% in Denmark. In 2012, the share was 19.7% and 54.4%, respectively.

¹⁹ The figure for Q4 2010 includes a change in the methodology of the Central Bank of Ireland, moving to figures reported net of impairment provisions. The Q4 2010 figures are also affected by the exit of a credit institution from the market.

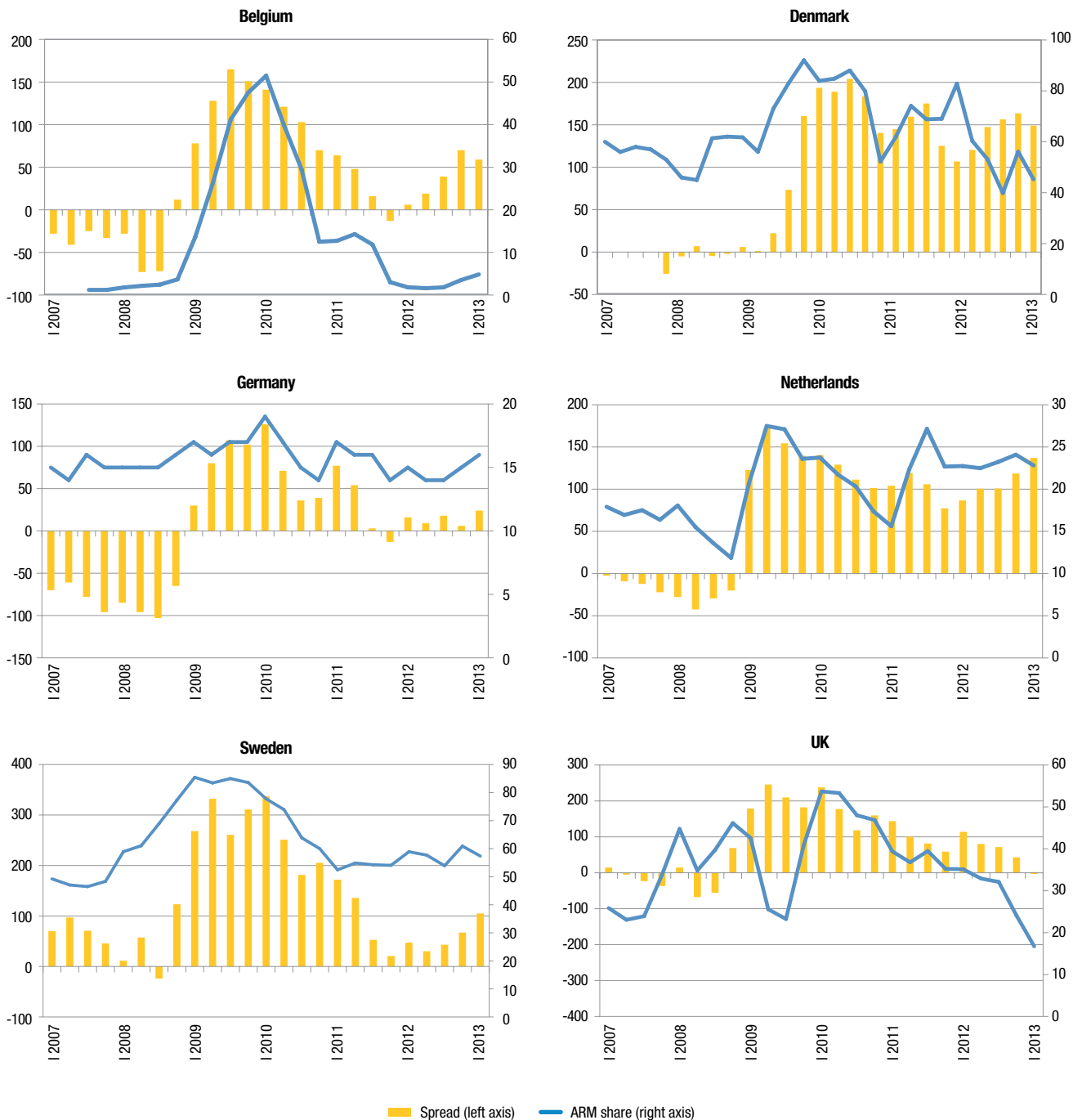
²⁰ This marked decrease was partly due to the Bank of England Funding for Lending Scheme.

²¹ The sample contains Belgium, Denmark, Ireland, the Netherlands, Portugal, Spain, Sweden and the UK (i.e. more than 56% of the EU27's GDP at current prices).

have relatively small mortgages, stable income, low default costs, and high moving probabilities should choose ARMs over FRMs. Finally, according to Badarinza et al. (2013), historical volatility in inflation is structurally associated with high “ARM share”,

since inflation volatility makes long-term nominal contracts risky for borrowers and lenders, or risky for lenders and correspondingly expensive for borrowers in the case where the FRMs can be refinanced with minimal prepayment penalties.

CHART 11 ► Spread between fixed rate mortgage (FRM) and adjustable rate mortgage (ARM) and proportion of ARM loans (ARM Share), new loans (in % for the “ARM share” and in bps for the spread)



Source: European Mortgage Federation

Note:

- (1): Variable rate mortgages in Denmark are linked to the CIBOR rate (Danish equivalent to LIBOR), which is the unsecured money market rate.
- (2): The fixed mortgage rate (FRM) used to calculate the spread is the FRM with an initial period of fixation between 5 (<) and 10 years (>=) in all countries except in Belgium and Germany where the initial period of fixation is more than 10 years (<).
- (3): The ARM used to calculate the current spread is the ARM with initial fixed period up to 1 year (>=).

Which variables can explain gross residential lending?

Gross lending, which includes new loans and remortgaging for most countries²⁰, is the result of a confrontation between the demand and availability of mortgage loans. Regarding the former, gross domestic product at current prices, which provides an index for the economic activity, is likely to be one of the main drivers, while the level of mortgage interest rates typically reflect the availability of housing credits to households. As modelled by the Bank Lending Survey of the European Central Bank, housing prices affect new businesses via demand and availability of mortgage loans, since both borrowers and lenders will consider housing prices when getting involved in a mortgage contract.

Therefore, gross residential lending GL_{it} (for the national market i and at the quarter t) is determined by GDP at current prices GDP_{it} , nominal house prices HP_{it} and real mortgage interest rates MIR_{it} , such as:

$$GL_{it} = GDP_{it} + HP_{it} + MIR_{it} + \varepsilon_{it} \quad (1)$$

with ε_{it} the error terms which are normally distributed.

Table 1 ► Contribution of different variables to the variation in gross residential lending (time and individual effect)

| Endogenous Variable | | Random effect | Fixed effect |
|---------------------|------------|---------------------|---------------------|
| Exogenous variables | Constant | -6.991** (1.022) | |
| | HP_{it} | 3.528** (0.282) | 1.700** (0.350) |
| | MIR_{it} | 0.165 (0.113) | -0.483** (0.127) |
| | GDP_{it} | 0.752** (0.170) | 5.558** (0.948) |
| R-squared | | 0.492 | 0.968 |
| Adjusted R-squared | | 0.486 | 0.963 |

Note: ** and * denotes significance at 1% and 5% respectively

A static panel regression model will be used to assess which of these variables can explain the trends in gross lending. This regression will be based on a balanced panel model, which includes ten EU27 national markets (i.e. Belgium, Denmark, France, Germany, Hungary, Ireland, Portugal, Spain, Sweden and the UK) and 23 time observations (from the first quarter of 2007 to the third quarter of 2012). The model specification is log-log²¹ and time series have been deseasonalised²².

To ensure the robustness of the estimated coefficients, the regressions will be conducted with different assumptions. The model specification (1) does not integrate the role played by national structures, which might influence significantly the amount of new businesses. For example, the coefficient for mortgage interest rates might vary noticeably across countries, resulting from the different possibilities for remortgaging. In countries where there are many legal restrictions for remortgaging, the coefficient might be low, while high possibilities for remortgaging could push the coefficient up. Fixed-effect models assist in controlling for this unobserved heterogeneity, when this heterogeneity is constant over time and correlated with exogenous variables. Conversely, random-effect models are used when no fixed effects are assumed.

Another effect which is not considered in equation (1) is related to time: a specific external shock, such as the 2009 crisis might have significantly distorted the amount of gross lending in all countries, no matters the values of the different determinants. As such, a trend correlated to time will be added to the regressions.

Overall, different tests (Table 1) conclude that the model specification with random-effects, time and individual effects is the most appropriate²³. The preference for random effects might imply that national specificities do not significantly influence the impact of GDP, nominal house prices and mortgage interest rates on gross residential lending. The importance played by time-effects should mean that some external shocks appearing between Q1 2007 and Q3 2012 might have affected some or all of the domestic mortgage markets of the sample at the same time.

Regarding determinants, the coefficients for nominal house prices and GDP at current prices are estimated at 3.53 and 0.75 respectively and are both significant. This means that 1% increase in house prices will lead to a 3.53% increase in gross residential lending. The elasticity between house prices and gross residential lending is greater than 1 and shows that nominal house prices remain a key determinant of mortgage activities. The coefficient of mortgage interest rates is more ambiguous: it is negative within the fixed-effect model and positive within the random-effect model; however, it is significant only within the former. As a consequence, mortgage interest rates should not be considered as significant within the empirical model developed in this analysis.

²⁰ All countries of the sample except France and Spain.

²¹ The dependent variable and the explanatory variables are in logarithmic form.

²² Although instructive, the findings of this study should be interpreted carefully, since no significant tests have been implemented for handling endogeneity in the empirical model.

²³ The significance of individual and time effects is tested by F-tests, whereas the Hausman specification test (1979) evaluates the significance of random effects versus fixed effects (these tests are conducted with Eviews 8.0).

Annex II: Criteria for the groups of countries (Q1 2008 - Q1 2013)

(2007 = 100; in domestic currency)

| GROSS RESIDENTIAL LENDING | | | | | |
|--|---|--|---|--|--|
| Group 1 | | Group 2 | | | |
| Annual variation (geometric mean; Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) | Annual variation (geometric mean; Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) | | |
| Above -4.0% | Above -0.05 | Below -7.5% | Below -0.6 | | |

Note: in the group 1, only France has a negative annual variation (-3.9%), due to the high instability of its time series; the annual variation is +2.2% in Belgium, +0.9% in Denmark, +2.5% in Sweden and +3.0% in Germany.

| OUTSTANDING RESIDENTIAL LENDING | | | | | |
|--|---|--|---|---|--|
| Group 1 | | Group 2 | | Group 3 | |
| Annual variation (geometric mean; Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) | Annual variation (geometric mean; Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) | In Q1 2013, outstanding residential lending had decreased y-o-y for more than 4 consecutive quarters. | |
| Above +5.5% | Above 1.75 | Between 0% and 3.5% | Between 0 and 0.9 | | |

| NOMINAL HOUSE PRICES | | | | | |
|--|---|--|---|---|---|
| Group 1 | | Group 2 | | Group 3 | |
| Annual variation (geometric mean; Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) | Annual variation (geometric mean; Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) | Slope of the linear trend (Q1 2008-Q1 2013) |
| Above +1.5% | Above 0.40 | Between -0.70% and +0.70% | Between -0.1 and 0.39 | Below -3.5% | Below -0.69 |

Note: for Belgium and Spain, the considered period is Q4 2007-Q4 2012.

Source: European Mortgage Federation

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Green investments and green mortgages in Germany

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1. Background

The building stock has a key role to play in fulfilling the climate protection goals set at European and national levels. Every member state of the EU has promised to reduce its energy consumption considerably and to boost the usage of renewable energy resources. Since new buildings consume only one third of the energy required for existing buildings, the building stock offers a high potential for reducing energy consumption and thus preventing carbon dioxide emissions. However, to raise the energy standard of the existing stock, massive investments will be needed. In addition, from an individual perspective, investing in energy saving is often unattractive, because outlays seem to outweigh potential revenues. Therefore, the availability of green mortgages for refinancing investment in energy efficiency is essential if climate goals are to be reached.

In this article we present the extent of green investments and the use of green mortgages in Germany. For clarity, we concentrate on the residential market since the circumstances and concerns of owners of commercial properties are much more diverse. First, the level and development of investments is presented and compared with the targets set by the government. Then, we discuss the profitability of energetic building refurbishments in view of the barriers and obstacles to green investments. Next, the possibilities of financing green investments are discussed. Here we focus particularly on the KfW, a German government-owned bank that offers subsidised loans for green investments. Finally, the German approach is contrasted with the experience of other countries, such as the United States and Australia. The article ends with a summary and conclusions.

2. Green investments in Germany

Increasing the energy efficiency of buildings – renovation, retrofit and refurbishment are the terms used – has, in recent years, been one of the most controversial issues in Germany. This is not only because Germany aims to be a leader in climate change policy and has set itself – and the building sector – very ambitious targets. Debate has also been fuelled by the government's decision, in the wake of the catastrophic Fukushima nuclear power plant accident in Japan in 2011, to speed up the country's nuclear energy exit. As a result, both energy efficiency issues and renewable energies are gaining in importance.

German climate change policy is embedded in the European framework, and also in the European emissions trading system. Energetic building refurbishments play a key role within Germany's climate change strategy, as the building sector accounts for about 40% of Germany's final energy consumption and about one third of CO₂ emissions. The building sector is correspondingly playing a very significant role in the transformation of the German energy system, the so-called *Energiewende*. In 2010, the German government set the following ambitious targets for the property sector (Energy Concept 2050):

- By 2020: a reduction of 20% in Final Energy Consumption
- By 2050: a reduction of 80% in Primary Energy Consumption (also called "near-zero-carbon building stock")

In order to meet these targets, Germany has this year also implemented the EU Directive on the Energy Performance of Buildings, which requires that, from the year 2021 onwards, every new building must operate without fossil fuels and with near-zero emissions. However, new building will not be enough to reduce emissions in the building sector, because the German construction rate, i.e. new buildings compared to the building stock, is currently around 0.4% per

year. Therefore substantial energy savings will have to come from the existing building stock.

Over the last few years, investments have been shifting from construction to renovation. In 2011, EUR 307 bn went into the building sector, 60% (EUR 183 bn) of which was invested in the stock (BMVBS, 2012). At the same time, green renovations are becoming more and more popular. As Table 1 shows, 29% (EUR 53.5 bn) of all building stock investments can be classified as green investments, in the sense that building refurbishment includes measures which explicitly improve energy efficiency.

Although green investments are increasing, climate targets are still unlikely to be reached. One reason for this is the predominance of partial renovations. As a study by the Institut für Wohnen und Umwelt (Institute for Housing and the Environment) points out, most investors restrict their investments to specific energetic improvements, such as modernising the heating system, renewing the roof, cellar or wall insulation or replacing windows (IWU, 2010). Only a small fraction of investors – be they households or enterprises – undertake all the measures necessary to reach the government's planned energy consumption level. As a result of this preference for piecemeal refurbishment, the overall renovation rate amounts to only 1% of the stock, while it would have to be twice this to attain the climate goals (Henger and Voigtländer, 2012). One important reason for this reluctance to fully modernise residential properties lies in the limited profitability of energetic investments.

Table 1 ► Share of green building stock investments (in EUR)

| | Residential buildings | | Non-residential buildings | | Total | |
|--|-----------------------|----------------|---------------------------|----------------|----------------|---------------|
| | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 |
| Construction work on existing building stock | 118.9 bn | 125.3 bn | 55.6 bn | 57.8 bn | 174.5 bn | 183.2 bn |
| Green investments (share in brackets) | 38.6 bn (33 %) | 38.4 bn (31 %) | 14.3 bn (26 %) | 15.1 bn (26 %) | 52.9 bn (30 %) | 53.5 bn (29%) |

Source: BMVBS (2011, 2012)

3. Profitability of energetic building refurbishments

The profitability of energetic building refurbishments depends on technical, socio-economic and regulatory factors (e.g. ASBEC, 2012). One of the most important technical criteria is the current energy performance of the building in question, which is determined by its age and the date of the last renovation. The type of building, e.g. detached or semi-detached, also affects the energy saving potential. Socio-economic factors such as energy prices and interest rates set the general financial framework for the investment. The many studies which have focused on such factors find that higher energy prices, a shorter amortisation period, and the prospect of increasing the property value or rent are key drivers for investing in a retrofit (e.g. Kok et al., 2011). Regulatory factors include building codes and regulations, financial incentives and the availability of information (e.g. energy certificates). In Germany, minimum performance requirements and energy standards are defined in the German Energy

Saving Ordinance (*Energieeinsparverordnung – EnEV*). Financial incentives include subsidies and tax deductions. Such measures are particularly effective in lowering the key barriers to refurbishment: the high upfront investment costs and the long wait for a return. The strategies adopted and the level of public funding vary considerably from country to country (Hamilton et al, 2010).

The average energy consumption is 172 kWh/m²yr for a single family house (weather-adjusted and including hot water) and 145 kWh/m²yr for multi-unit buildings, some 20 % less (ARGE, 2012). The consumption level is considerably higher for homes built before 1979, when the first Energy Saving Ordinance was introduced. Without renovation, their energy consumption average 220 kWh/m²yr. The current minimum standard for new buildings is 90 to 100 kWh/m²yr.

Chart 1 shows selected case-study calculations carried out over the last few years. Although not representative, they give a good impression of the range of energy savings. There are 10 calculations from the 6 most important case studies conducted on this issue in recent years in Germany (Henger and Voigtländer, 2012). The first four calculations refer to single-unit houses, the remaining six to multi-unit buildings. Almost all examples concern buildings built between 1945 and 1970. The energy requirement immediately before a refurbishment is in most cases over 200 kWh per square meter and year. After an energetic refurbishment the final energy demand falls below 100. In some cases, where high KfW standards have been met, the energy demand is substantially lower. In all cases, the energy savings greatly exceed 50%, and are quite often in a range of 70 to 80%.

As Chart 2 illustrates, expenditures on energy efficient refurbishments also differ significantly across buildings and measures. The difference between the total costs and the costs for saving energy or achieving energy efficiency also varies greatly. Total costs are all investments for the whole refurbishment, whilst energy efficient costs are only those connected with the energy savings. For example, triple-glazing can represent a substantial proportion of energy efficiency costs (e.g. 50%), depending on the exact price of new windows with only a single pane. As Chart 2 shows, the energy efficiency costs are at most 50% of total costs.

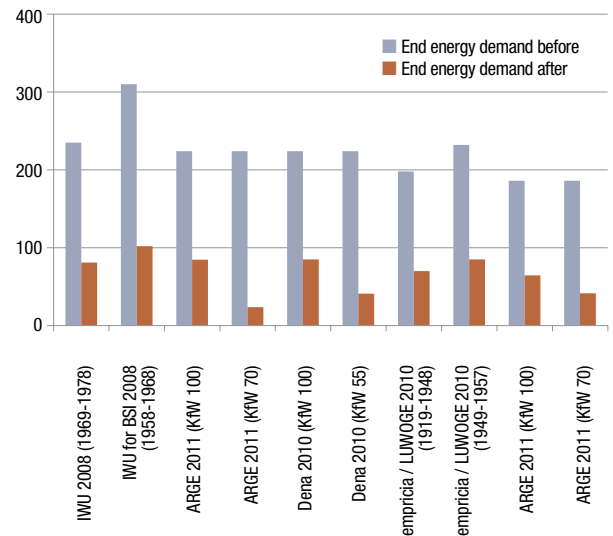
Chart 3 compares the costs with the energy savings shown in the first two charts. For their comparison, Henger and Voigtländer (2012) translated the costs into a loan (in other words into an annuity) for a period of 20 years at an interest rate of 4%. They also had to assume a price for energy, which was done by choosing the current price of seven eurocents per kilowatt hour. They also account for the KfW subsidies, including soft loans (discussed in the next section). The amount of the subsidy depends on the standard achieved. In 2012, KfW paid up to 20 % of the total costs up to a maximum of EUR15,000. The KfW schemes are also translated into an annuity and are subtracted from the costs. In Chart3 the full costs are displayed in blue, the energy efficiency costs in yellow, and the cost saving in green bars. It can be seen that the full costs are too high ever to be recouped with future energy savings. Under these circumstances, energetic refurbishments should not be carried out outside the regular “renovation cycle” of a building. However, the result is quite different for the energy efficiency costs, which are much closer to the energy savings. In 7 out of the 10 calculations the energy savings are higher than the energy efficiency costs reduced by the amount of the subsidy.

The conclusion to be drawn here is that the profitability of energetic refurbishments essentially depends on whether they are carried out in combination with already-planned or necessary modernisations, i.e. within the renovation cycle. Normally, residential buildings are completely renovated every 30 to 40 years. If energetic measures are included in this investment, there is a chance of recouping the investment if (i) homes are in a bad condition, i.e. energy consumption is high, (ii) (KfW) subsidies can be claimed, and (iii) investment costs can be shifted to tenants (by increasing rents).

4. Green mortgages and more: the German KfW programs

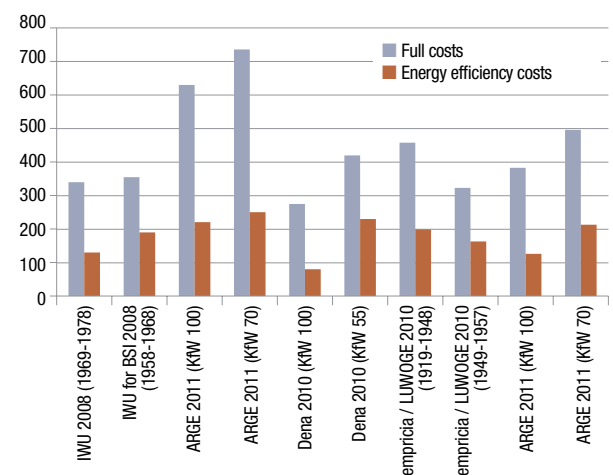
Germany has a range of policies and programs which support a variety of different measures to improve energy efficiency. Though Germany’s building stock is already relatively efficient, there remains such a huge savings potential that the German government has made the building sector a focus of its climate change

Chart 1 ▶ How much energy can be saved by refurbishment? (Demand in kWh/m²yr)



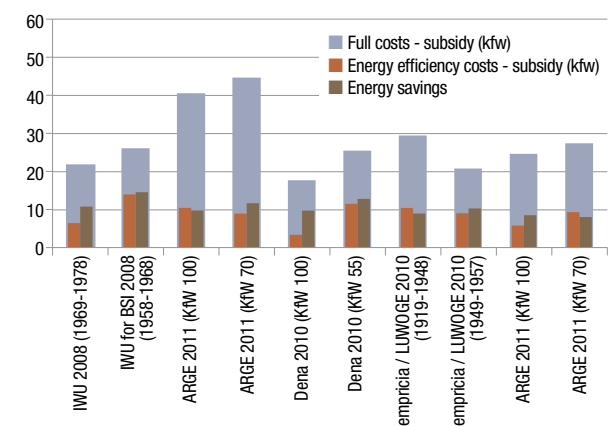
Source: Henger and Voigtländer (2012)

Chart 2 ▶ Energy efficiency costs in relation to total costs (Costs in EUR/m²)



Source: Henger and Voigtländer (2012)

Chart 3 ▶ Do energetic building refurbishments pay off? (Costs and energy savings in EUR/m²yr)

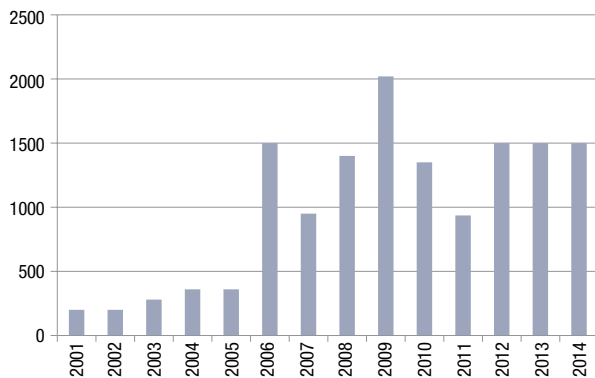


Source: Henger and Voigtländer (2012)

policy. The government's central strategy for reducing carbon emissions takes the form of subsidies and soft loans (green mortgages) granted by the KfW, which itself receives subsidies to offer loans below market prices. In Germany, mortgages are typically offered by private banks, but these private mortgages can be combined with KfW programs, so that in fact a significant part of the investment is financed by the KfW. The most important of the KfW's programs with respect to energy efficiency are *Energieeffizient Sanieren* (Energy-Efficient Renovation) and *Energieeffizient Bauen* (Energy-Efficient Construction), which are part of the government's *CO₂-Gebäudesanierungsprogramm* (CO₂ Building Refurbishment Program). Besides comprehensive refurbishments this program also subsidises single measures, such as the insulation or replacement of building components or upgrades of the heating system. To meet the technical requirements of the program, a certificate from an approved energy consultant is required (Schröder et al. 2011). The KfW subsidies are not meanstested.

Compared to similar programs in other countries, the KfW programs are financially well endowed. Chart 4 shows the federal expenditures for the KfW programs. The recent volatility stems from the fact that this support for green mortgages is part of the federal budget and must therefore always compete with other government policies, such as cutting taxes, investing in traffic infrastructure or increasing social security benefits. Spending rose significantly in 2006, when the decision was made to supplement the soft loans with a subsidy program for those not needing a loan. Investors have to decide which kind of support is more helpful for them. Table 2 offers an overview of the programs offered by the KfW for renovations. Soft loans are combined with a redemption subsidy in Program 151. Alternatively, homeowners can apply for a subsidy within Program 430. The amount of the subsidies varies according to the energetic measures undertaken. All in all, the programs have an important impact on all green investments in the property stock. For instance, nearly half of all low carbon refurbishments in Germany receive support from the *Energieeffizient Sanieren* program (see also Schimschar et al., 2011).

Chart 4 ► Federal expenditures for the KfW programs for energy-efficient renovation and construction (In EUR bn)



Source: Henger and Voigtländer (2012)

Table 2 ► KfW conditions depending on different energy efficiency standards

| Efficiency House standard | Program 151 Redemption subsidy | | Program 430 Subsidy | |
|---------------------------|---|--|---|---|
| | Proportion of loan that can be covered by KfW subsidy (%) | Maximum redemption subsidy per housing unit (in EUR) | Proportion of investment costs that can be covered by KfW subsidy (%) | Maximum subsidy per housing unit (in EUR) |
| 115 | 17.5% | 13,125 | 10% | 7,500 |
| 100 | 12.5% | 9,375 | 12.5% | 9,375 |
| 85 | 7.5% | 5,625 | 15% | 11,250 |
| 70 | 5% | 3,750 | 20% | 15,000 |
| 55 | 2.5 % | 1,875 | 25 % | 18,750 |
| Individual measures | -- | -- | 10% | 5,000 |

Source: KfW 2013a, 2013b

There are also other kinds of funding schemes, such as the market incentive programs offered by the Bundesamt für Wirtschaft und Ausfuhrkontrolle (Federal Office of Economics and Export Control - BAFA), which is more focused on renewable energy. In addition, at a local level there are over 500 different programs offered by regional banks and utility companies (Henger and Voigtländer 2012), but even their total impact is low compared to the KfW programs.

5. Green mortgages in other countries

Green mortgages are based on the idea that energy efficient measures reduce the future expenditures of homeowners, enabling them to pay higher monthly mortgage rates. In other words, they allow borrowers to qualify for bigger loans, as lenders permit the estimated savings on utility bills to be added to the borrower's income. However, there is no standard definition of green mortgages. Some countries, such as Belgium and the Netherlands, have started national programs to promote and to stimulate energy efficiency. In most other countries, though no such formal programs have yet been implemented, a market for green financial products has been established and individual lenders will offer a discount on their standard variable rate if your home is energy efficient or you are borrowing to invest in energy efficiency improvements. As the KfW subsidies in Germany are available independently of an applicant's income, they are not, strictly speaking, green mortgages. However, as most of the loans are not drawn directly from the KfW, but come from a credit institution, they manifest similar characteristics.

In the United States, the Energy Policy Act of 1992 introduced two types of green mortgage – one for new construction and one for existing buildings. The "Energy Efficient Mortgage (EEM)" for home buyers uses energy savings from a new energy-efficient home to increase the home-buying power of consumers and capitalises the energy savings in the appraisal. The "Energy Improvement Mortgage (EIM)" for home owners finances the energy upgrading of an existing home using monthly energy savings. For both types of mortgage, it is necessary to have an evaluation of your home's energy efficiency and expected energy costs with the Home Energy Rating System (HERS) (Amram et al., 2010). This national scheme is flanked with several state- and lender-specific loan programs. Homebuyers can also benefit from tax breaks as the interest on mortgage payments is tax deductible. Although this financing scheme has been available in the United States for 20 years, the uptake has remained low (ASBEC, 2010), possibly due to the relatively modest interest rate reductions and the fact that the soft loans are not combined with (redemption) subsidies, as is the case in Germany.

In Australia, the government launched a "Green Loans Programme" in 2009 to assist residents with energy efficient refurbishments of their existing homes (ANO, 2010). One element of the program is a loan subsidy that covers all the interest on loans from participating financial institutions up to AUD 10,000 for four years. As in the US, applicants must have a "Home Sustainability Assessment" conducted by certified assessors. Experience with the program suggests that it has encouraged the renovation of energy and water systems, but has not so far proved a strong driver for energy efficient refurbishments, e.g. retrofit measures. The reason for this is that the rebates are given only for a narrow set of individual measures rather than comprehensive refurbishments. However, detailed information on the effects of this program is lacking.

6. Conclusion

Over the last few years, many countries have implemented programs to encourage people to purchase greener homes and to make renovations to existing homes greener. This article has focused on Germany, describing the extent of green investments and discussing the availability of green mortgages. With the KfW programs, offering either direct subsidies or indirect subsidies combining green mortgages with redemption subsidies, Germany has a more sophisticated subsidy scheme for green investors than most other countries. The programs are continuously monitored, and adjusted if necessary, but nevertheless offer scope for improvement. In particular, the role of the KfW itself could be questioned, since state-owned enterprises of all kinds tend to waste money by creating oversized administrations. Instead of funding and operating a state-owned bank, the government could directly subsidise the granting of green mortgages by private banks, awarding subsidies, for instance, to those banks offering their customers the best conditions. Thus, competition would insure that public money is used most efficiently. A second and more important drawback of the German approach is the unpredictable funding of green mortgages from the federal budget. With constant debate on cutting subsidies of all kinds, investors can never be sure whether the federal government will grant subsidies for green investments the following year, and it is difficult for them to draw up long-term plans. Moreover, even the current level of funding is insufficient to reach the government's climate goals. Despite subsidies amounting to EUR 1.5 bn per year, only half of the necessary green investments have been made. The primary reason is that most such investments offer investors a poor return, even if KfW programs are included in their calculations. To boost the renovation rate, therefore, even more subsidies – and probably other kind of incentives, such as taxes based on energy consumption – will be needed to ensure that the climate goals are reached.

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Asian mortgage markets

By Masahiro Kobayashi, Japan Housing Finance Agency (JHF)

1. Introduction

Compared to Europe, the Asian mortgage market is extremely heterogeneous and it is therefore difficult to summarise its characteristics and the related ongoing trends in a nutshell. In a number of Asian countries, the mortgage market is dramatically changing providing opportunities as well as challenges.

To give a flavor, there are two countries with a population of over 1 bn people: China and India. In terms of size of economies (i.e. GDP), the countries with the biggest economies after the USA are China and Japan.

Asia is regarded as the centre of growth for the global economy for decades to come; however, as of today, mortgage markets are still at a developing stage in many countries in the region.

In terms of size of the mortgage market (**Figure 1**, where Asian countries are in pink and European countries are in green), excluding the USA, Japan has the largest mortgage market. China, which is the second largest economy in the world, follows the UK, Germany and France and has a GDP almost equivalent to these three major European countries combined. The market size is much smaller in countries such as India, although its population is twice as large as the combined population of the EU27 countries.

The smaller market size in some Asian countries can be attributed to the lower stage of development of the economy as a whole. There are several countries in Asia where per capita GDP exceeds USD 30,000 (approximately EU27 average in 2011): Japan, Singapore, and Brunei Darussalam. Nevertheless, per capita GDP for the vast majority of Asian countries is far less than USD 10,000.

In advanced economies, the mortgage market size to GDP ratio has no correlation with the GDP per capita, as is illustrated in **Figure 2** with pink circles. Some countries prefer to provide social housing or rent assistance rather than promoting homeownership. However, in emerging economies, there is a strong correlation observed between outstanding mortgage to GDP ratio and GDP per capita.

At the embryonic stage of development, when poverty alleviation is a priority, housing policy tends to focus on improving the accommodation in slums and/or on intervention by the government through direct provision of affordable rental housing. As middle class formation advances, the promotion of homeownership becomes the new priority with employment markets moving from informal to formal, thereby expanding the possibilities for banks to extend mortgages.

Another driver of mortgage market development is urbanization. Demand for accommodation is increasing due to people looking for better job opportunities and therefore moving from rural areas to urban cities. In some cases, these people illegally occupy lots along roads, railways or rivers and form slums as squatters. However, the new workforce, with improving job opportunities and improving standards of living represents a significant potential demand for housing and mortgages. Addressing rapid urbanization is one of the major challenges in many Asian countries, not only in terms of housing but also in terms of urban infrastructure. However, this challenge is also an opportunity, especially observed in those countries where the mortgage market has already matured: Japan.

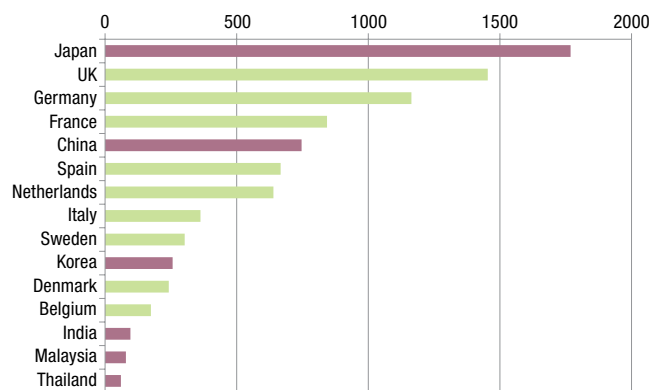
2. Governmental Financial Institutions (GFIs)

In many Asian countries, so-called governmental financial institutions (GFIs) have been set up with a role of providing housing loans to households. The existence of a relatively high number of GFIs in Asia may be surprising compared to advanced



Source: Ministry of Foreign Affairs, Japan

Figure 1 ▶ Outstanding Mortgage Balance (EUR billion)



Source: EMF, JHF, FRB, PBOC, GHB, NHB and other country sources

European markets, but, contrary to the European economies, many countries in the region do not have well-developed capital markets and intermediation by the government to finance homeownership is also politically justified.

The GFIs have the possibility to borrow from the government to promote homeownership. They have a competitive advantage compared with private banks due to the government guarantee, whether explicit or implicit.

As a higher level of economic development is reached, however, private lenders are expected to claim that GFIs are unfairly depriving them from lending opportunities and will likely push for reform (as was the case in Japan).

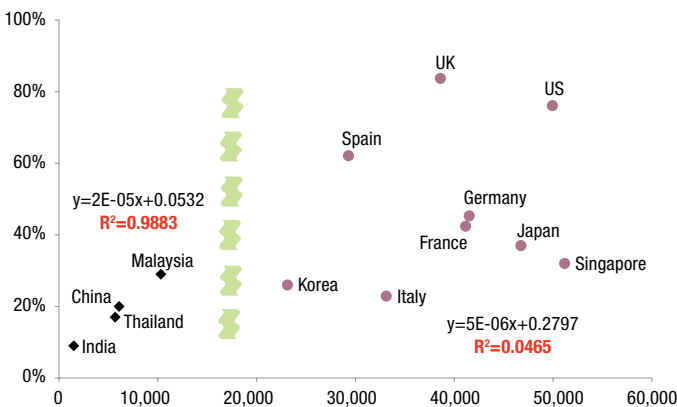
As an example of the role of GFIs, after the Asian Currency Crisis in 1997, a number of new GFIs were established or replaced existing GFIs. These new GFIs mainly operate in the secondary mortgage markets, rather than in the primary lending markets. However, some areas remain which need government intervention (due to the fact that the private sector does not necessarily have the capacity), including, the funding of the improvement of energy-efficiency and assistance to victims of natural disasters.

3. MBS markets in Asia

Many GFIs established after the Asian Currency Crisis were intended to provide liquidity to mortgage markets by issuing MBS like Fannie Mae or Freddie Mac in the US. Nevertheless, there are not many Asian countries where the development of MBS market has been successful.

Japan is one of the most successful countries in Asia regarding the development of the secondary mortgage market and MBS market. The first MBS in Japan was issued by a private bank (Hokkaido Takushoku Bank) in 1997, which was bailed out

Figure 2 ▶ Outstanding mortgage balances per GDP and per capita GDP (per Capita GDP: USD)



Source: EMF "Hypostat 2011", JHF, NHB, and IMF WEO Database

▶ **List of GFIs in Asian countries in the order of year established**

- 1950:** Government Housing Loan Corporation, Japan (Abolished in 2007)
- 1953:** Government Housing Bank, Thailand
- 1954:** People's Construction Bank of China, China (privatized in 2004)
- 1967:** Korea Housing Bank, Korea (privatized in 1997)
- 1977:** National Home Mortgage Finance Corporation, Philippines
- 1984:** Cagamas, Malaysia
- 1988:** National Housing Bank, India
- 1997:** Hong Kong Mortgage Corporation Limited, Hong Kong
- 1997:** Secondary Mortgage Corporation, Thailand
- 1999:** Korea Mortgage Corporation, Korea (Abolished in 2004)
- 2004:** Korea Housing Finance Corporation, Korea
- 2005:** SMF, Indonesia
- 2006:** Mongolian Mortgage Corporation, Mongolia
- 2007:** Japan Housing Finance Agency, Japan
- 2013:** Construction and Housing Development Bank, Myanmar

just after the issuance. The oldest MBS was issued by Sanwa Bank (now merged with Tokyo-Mitsubishi UFJ Bank) in 1999. Before the onset of the US Subprime Crisis, the development of the MBS market appeared to be promising. However, since 2006, the issuance of private label securities has been declining and still remains at a very low level.

In 2000, the Government Housing Loan Corporation (GHLG) started to issue MBSs in order to transfer prepayment risk and diversify funding sources. Initially, GHLG MBS was issued to fund outstanding mortgages, but the GHLG also initiated secondary market operations in a pilot program in 2003. Additionally, the GHLG purchased conforming¹ mortgages originated by private financial institutions and repackaged these mortgages into MBSs to be sold to investors. The Japan Housing Finance Agency (JHF), the successor of the GHLG continued these operations from 2007 onwards.

As of today, the outstanding amount of JHF MBS is more than JPY 10 trillion (USD 100 bn) making JHF MBS one of the most important funding tools with high, secondary market liquidity, just after the Japanese Government Bond (JGB) and Municipal Bonds.

In recent years, the level of new issuance remains stable at around JPY 2 trillion per annum. In May 2011, JHF MBS issues amounted to JPY 500 bn (USD 5 bn) in a single deal, which is the largest issuance on record in Japanese capital markets, with the exception of JGB. Although JHF MBSs are not guaranteed by the Japanese Government, their rating at issuance by S&P is AAA, owing to the good stand-alone credit provided by a government agency and to the good quality assets in the overcollateralisation. As a result of the highest rating, the spread of JHF MBS compared to 10 year JGB was 44 bps, and Option Adjusted Spread (OAS) was 16 bps in July 2013.

The unique characteristic of GHLG/JHF MBS is that JHF retains mortgage assets on the balance sheet and issue pass-through certificates backed by those mortgages (**Figure 3**). It is a hybrid of US Agency MBS and European Covered Bonds. The rationale for JHF to retain mortgages on the balance sheet is to extend flexible modification in case borrowers face payment troubles for whatever reasons. As was demonstrated by the US subprime crisis, it is very difficult to extend loan modifications to borrowers if the loan is transferred from the originator to SPVs. In the US, Fannie Mae and Freddie Mac have changed their accounting treatment and have consolidated the vast majority of trusts as of January 2010, making the structure similar to that of the JHF model.

The second largest MBS market in Asia is **Korea**. The outstanding amount of MBS issued by the Korea Housing Finance Corporation (KHFC) at the end of 2011 was KRW

Figure 3 ▶ MBSs and covered bonds in light of the balance sheet

| | | Pattern of Cash Flow | |
|-----------------------------------|-------------|---|--|
| | | Bullet (Straight Bond) | Pass-through (with Amortization and prepayment) |
| Balance Sheet Treatment of Assets | On-Balance | Pfandbrief (Germany) Cédulas Hipotecarias (Spain) | JHF MBS (Japan) Særligt Dækkede Obligationer (Denmark) Fannie Mae MBS, Freddie Mac PC (US) As of Jan 2010 |
| | Off-Balance | Obligations Foncières (France) Obbligazioni Bancarie Garantite (Italy) | Fannie Mae MBS, Freddie Mac PC (US) Ginnie Mae MBS (US) Private Label Securities |

Source: EMF "Hypostat 2011", JHF, NHB, and IMF WEO Database

¹ JHF purchased mortgages which meet underwriting criteria set by JHF, including borrower qualification as well as property qualification.

² "Financial Markets in Korea" published by Bank of Korea (2012).

23,690.0 bn (USD 21 bn). KHFC accounts for 35% of the total MBS issuance in Korea³. In other countries, including **Malaysia, Thailand, the Philippines, India and Hong Kong**, the primary MBS market remains very small. In 2012, Cagamas in Malaysia issued RMBS of RM 6.03 bn (USD 1.9 bn) of which Islamic RMBS was RM 2.8 billion (USD 0.9 bn) and the Hong Kong Mortgage Corporation Limited had and issuance of HKD 214.7 mn (USD 28 million).

Compared to the US and Europe, even the biggest Asian (i.e. the Japanese) MBS market is smaller, not only in terms of absolute size but also in terms of relative share in the funding mix. MBSs and covered bonds represent less than 10% of the source of funding for mortgages in Japan; the most important funding tool is deposits. (Figure 4)

Contrary to Europe, where the banking sector depends heavily on interbank, wholesale funding markets, Japanese banks can satisfy their lending needs mainly through deposits (Figure 5), partly as a result of the weak funding demand from corporate and household sector and partly because of the strong financial position of households and their preference for safe financial products. Less developed capital markets in Japan represent the opposite of safe and sound financial system to some extent. Recently, taking advantage of their strong financial position, some banks in Japan have been expanding their cross-border transactions in the Asian market.

4. Covered Bond Initiatives

After the recent financial crisis, covered bonds in many Asian countries have been in the spotlight. European covered bonds have attracted a number of Asian investors for many years, but the recent developments suggest that Asian issuance will play a significant role in investor decisions.

The first Asian covered bond issuance was initiated by the Japanese Shinsei Bank, which tried to launch a structured covered bond in 2008. According to an industry expert, however, Shinsei could not finalize this issuance partly due to the turbulence in the market condition after the bailout of Bear Sterns in the US and the subsequent requested spread which was significantly (i.e. “a couple of hundreds bps”) higher than expected. The Ministry of International Trade and Industry of Japan assembled a roundtable to study covered bonds in 2009 and the Development Bank of Japan (DBJ) also launched a similar initiative; in addition, DBJ released a report in July 2011 to advocate legislation for covered bonds in Japan. The Cabinet Office under the Noda Administration released a strategic plan to revitalize the Japanese financial sector, which included the possibility of enacting the legal framework for covered bonds with the feasibility study for DBJ to be concluded by December 2012. However, since 2012, when Prime Minister Noda lost the elections, the new Abe Administration has not issued any further comments regarding the direction of the covered bond legislation.

On the one hand, some industry experts are of the opinion that there is no immediate need for covered bond funding since the banking sector has abundant liquidity; nowadays, national champion banks can raise funds with just one single digit bps above JGBs, with corresponding maturities by senior unsecured debt instruments. On the other hand, other industry experts claim that prompt enactment is critical, considering the possibility of abrupt changes in the market environment in the future. They also claim that covered bonds may attract foreign investors if denominated in currency other than JPY.

Korea is the forerunner of the covered bond market in Asia.

The first (structured) covered bond in Asia was issued by Koomin Bank in 2009, on the basis of general law. The first statutory covered bond in Asia was also issued in Korea by KHFC under KHFC law in 2010. KHFC have also issued covered bonds in the US market. The deal executed on 15 July 2010 had the following characteristics:

- 144A / Reg S
- USD 500 mn notes with 5.5-year maturity and 4.125% coupon
- KHFC's first ever overseas funding in the international capital markets
- Asia's very first statutory covered bonds
- Book size was USD 2.75bn with orders from 130 accounts

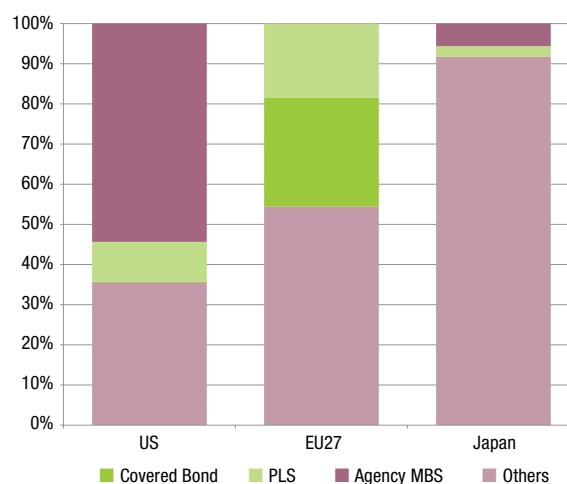
In order to expand the issuer base, the Korean government has been advocating the following legislation:

- 23 October 2012: Legislation Notice of Covered Bond Act
- 29 January 2013: Approval from Cabinet Meeting
- 26 June 2013: Approval from Sub Committee of National Assembly

Although these pieces of legislation are not yet enacted, the framework is quite similar to many European jurisdictions;

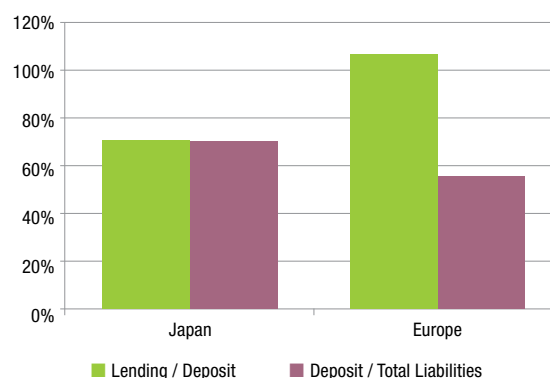
| | |
|--|---|
| Eligible Issuer | Banks Korea Housing Finance Corporation / Korea Finance Corporation Equity capital of KRW 100bn (USD 92mn) Capital ratio of 10% or above |
| Cover Assets | Residential mortgage loans (LTV 70% or lower) Loans extended to central / local governments Government bonds and municipal bonds Cash or certificate of deposits (not exceeding 15% of total cover pool) |
| Minimum Collateralization Ratio | 105% of the outstanding amount of the covered bond |
| Issuance Limit | Within 8% of the issuer's total assets |

Figure 4 ▶ Funding sources of mortgages



Source: EMF, ECBC, AFME, FRB, JHF

Figure 5 ▶ Deposit in the Balance Sheet in Japan and Europe 2011



Source: ECB, BOJ

³ The Koomin Bank deal was done with structured covered bond (there was no legislation in place at that time). The KHFC deal was done with statutory covered bonds, since it was based on KHFC

Law. However, under the KHFC Law, KHFC is the only eligible issuer of covered bond and new legislative initiative is under way to expand the issuer base in Korea.

KHFC estimates that potential market size for Korean covered bond could reach the equivalent of USD 72 bn.

In other countries, such as Singapore, Thailand, Mongolia and India, as well, the possibility of introducing covered bond legislation is being examined. In some countries, cover assets may include SME loans and infrastructure development loans.

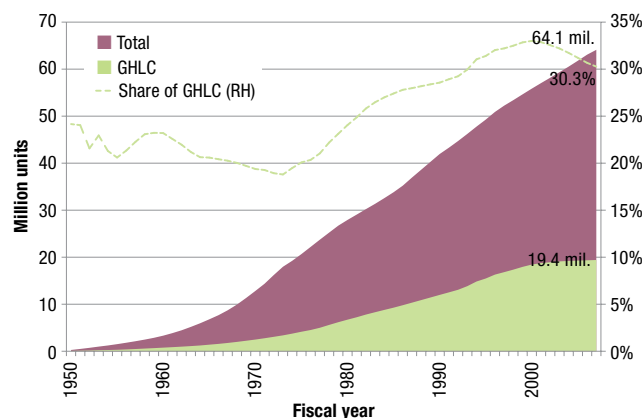
5. Country specific issues: Japan

From primary markets to secondary markets

In Japan, the GHLC was established in 1950 to originate fixed rate mortgages funded and subsidized by the Government of Japan and enhance the quality of housing. From 1950 to 2007, GHLC has financed 19.4 million housing units amounting to JBY 187 trillion, which represents around 30% of the market share in Japan. (Figure 6)

The GHLC provided fixed rate mortgages at a concessional rate by borrowing from the Fiscal Investment and Loan Program under the Ministry of Finance and using a subsidy from the General Appropriation of the Government of Japan. In the late 1990s, prepayment surged on outstanding GHLC originated mortgages amid a liberalization of mortgage markets, coupled with the declining interest rate and an accommodative monetary policy. Borrowers of the GHLC could prepay the loan without penalty, however, the GHLC was required to pay a penalty to the FILP if it were to prepay, resulting in an increase in the loss of the GHLC.

Figure 6 ► Housing starts and GHLC's share



Source: MLIT, JHF

Figure 7 ► From GHLC to JHF

| | GHLC | JHF |
|----------------------------|--|---|
| Established | 1950 | 2007 |
| Ownership | 100% Owned by the Government of Japan | |
| Mission | <ul style="list-style-type: none"> ■ Provide liquidity to mortgage markets to low and medium income household ■ Enhance quality of housing | |
| Main Products | Fixed Rate Mortgages | |
| Main Business | Origination in primary mortgage market (Compete with private sector) | Secondary market operation (Support private sector) |
| Main Funding Source | Borrowing from the Government (MOF FILP) | Mortgage Backed Securities (MBS) |
| Subsidy | Yes | No (in principle) |

Note: JHF still originates mortgages for such exceptional cases as disaster mitigations. In such cases, JHF still have access to funding from the MOF FILP and subsidies from General Appropriations

However, it became difficult for the Government of Japan to appropriate the subsidies to compensate the deficit of the GHLC because fiscal conditions deteriorated in the aging society. A series of economic stimulus measures to sustain economic growth after the collapse of the bubble also contributed to the fiscal constraints.

Criticism from private financial institutions, mainly commercial banks, also intensified for the over presence of GHLC, because they wanted to expand retail lending as demand from corporate sector weakened.

However, commercial banks which depend on retail deposits for their funding found it difficult to provide fixed rate mortgages, for which there was strong consumer demand.

Against this background, reform of the Japanese mortgage market became necessary in order to achieve the public mission of providing fixed rate mortgages and enhancing the quality of housing by collaborating with the private sector.

In 2001, the Government decided to wind down the GHLC and in 2007 it was replaced by the JHF. Both the GHLC and the JHF are government-owned, share common missions to provide fixed rate mortgages and enhance the quality of housing. But their business model is different. The GHLC was competing with commercial banks in the primary mortgage market, while the JHF supports commercial banks and mortgage banks via its secondary market operations. (Figure 7)

Recovery from the Great East Japan Earthquake on 11 March 2011

Figure 8 ► Tsunami affected areas



(Photo taken by JHF staff in Tohoku Regional Office: © JHF 2013)

On 11 March 2011, a massive earthquake with a magnitude of 9.0 M_w struck the Northeast of Japan (Tohoku region). It was the largest earthquake on record in Japanese history. The Great East Japan Earthquake was an unprecedented national crisis; it was also a compound disaster of earthquakes, tsunami and a nuclear accident and impacted the whole nation.

The number of dead is 15,858, and the number of missing is 3,067 (as of 1 May 2012). There was massive destruction of public infrastructures, including electricity, gas and water supplies. Immediately after the Earthquake, nearly half a million people were evacuated. There was also significant damage to the housing stock: 129,520 units are identified as being totally destroyed and another 256,420 units were heavily damaged as of 1 May 2012.

The Government has been mobilizing all its efforts towards recovery from the Earthquake. 52,858 emergency shelters were completed by 1 May 2012 and many evacuation centers have already closed.

Compared to the Haiti Earthquake in 2010, the number of houses destroyed was almost the same in Japan, but the death toll was significantly lower. This is partly because most of the destruction of houses in Japan was caused by the tsunami, not by the earthquake.

The tsunami came 30 to 90 minutes after the earthquake and people had enough time to evacuate, as long as they were not trapped in the collapsed houses. An amendment of the construction code in 1981 required enhanced resilience to seismic shock for building structures in Japan, and this contributed to saving tens of thousands of lives on this occasion. This illustrates the importance of ex-ante Disaster Approaches

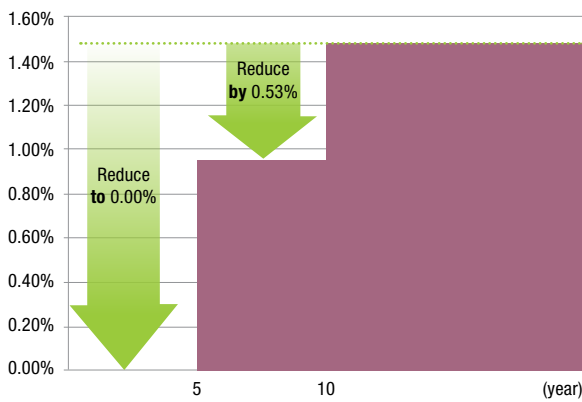
Just before the earthquake in Japan, there was another earthquake in Chile, and a tsunami alert was issued. However, no major tsunami came across the Pacific. In retrospect, this caused some people to think this would be the same case, which was not. It is vital to enhance the methods of disseminating tsunami alerts as well as the methods of evacuation, especially for elderly people, who need special assistance.

In relation to the 2011 natural disaster, as a government agency, the JHF has been offering two types of support. The first is designed for new borrowers. The JHF is providing special concessional mortgages for those who will purchase or construct a house with subsidies (Figure 9). The second is for existing borrowers. The JHF is extending borrower outreach programs to modify outstanding mortgage terms as well. These include a five year grace period. The JHF receives a subsidy from General Appropriations of the Government of Japan to implement these programs.

In order to extend borrower outreach, the JHF needs to allocate significant human resources as well. The JHF expanded capacity at its Tohoku-regional office to provide better consultation to the victims as significant attention has to be paid to psychological conditions.

The housing market faces other major challenges as well. Most of those houses destroyed were located along the seaside. Many of those houses survived the earthquake, but were wiped away by the tsunami. Considering the recurrence of tsunami in the region, it is recommended that houses should be reconstructed on higher ground rather than at the seaside which may suffer a further inundation. If the victims have a sustainable source of income, they may transfer to owner-occupied houses. Otherwise, public rental houses may be constructed. Another proposal is to construct a medium and high rise building along the seashore which could accommodate people when there is not enough time to evacuate to a higher site. However, relocation of this scale is unprecedented and there are constraints regarding availability of housing sites in these regions on top of the cost associated with the site developments. Fishermen used to live along the seaside because of accessibility to ports where they made their living. How livelihoods can be secured is an integral part of reconstruction, together with constructing housing. We cannot ignore the dignity of these people.

Figure 9 Interest rate reduction for disaster mitigation loan



Note: interest rate is as of August 16, 2013

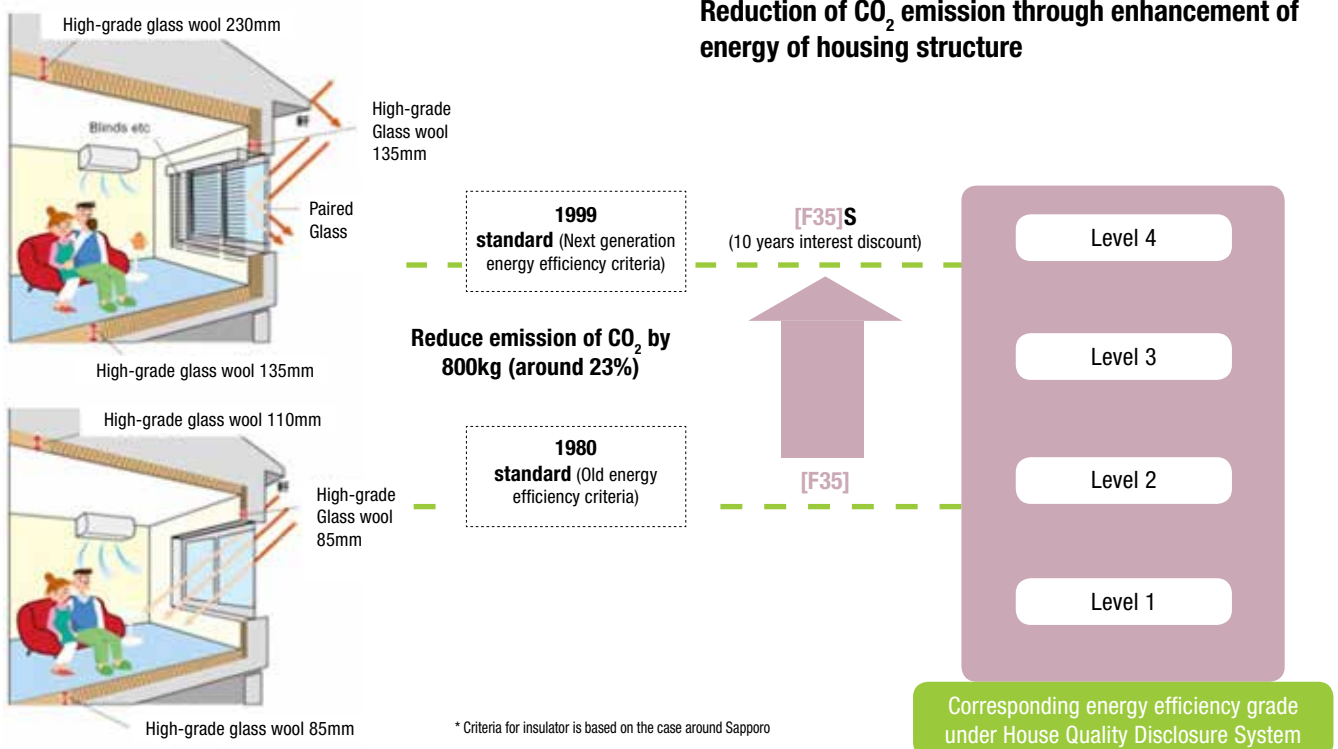
Disaster prevention and mitigation play a significant role in financing housing markets and are of great interest for many Asian countries; Volcano eruption at Pinatubo, Philippines in 1991, Sumatra-Andaman earthquake in 2004, flooding in Thailand in 2011 and so on.

Enhancement of energy efficiency – green mortgages

Japan has an extremely energy-efficient society; Japanese energy consumption per GDP is the lowest in the world. However, Japan is committed to further enhancing energy efficiency. Incidentally, the 11 March earthquake triggered constraints for the electricity supply and this also necessitated the acceleration of policy reactions to some extent.

In order to address policy issues to alleviate global warming and improve resilience of houses to earthquakes, the JHF received grants from the government to lower the interest rate for borrowers who construct or purchase higher quality houses (Figure 10). These subsidies contributed to enhancing the competitiveness between fixed rate mortgages (FRMs) and adjustable rate mortgages (ARMs). However, these subsidies were intended to be transferred to borrowers, and not to balance out the deficit of the JHF.

Figure 10 Enhancement of energy efficiency



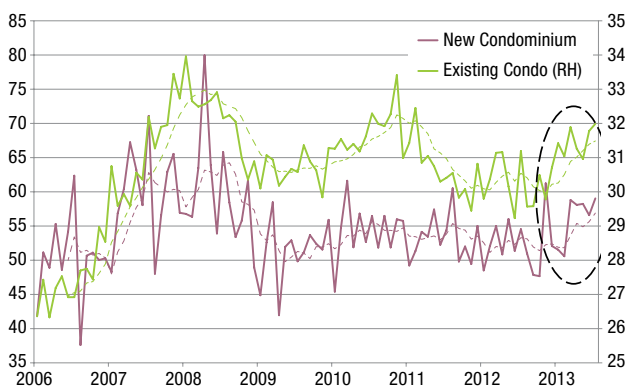
Abenomics

After the collapse of the bubbles in the early 1990s, the Japanese economy has been suffering from the “lost decades”, and 15 years of deflation. In the meantime, Japanese society has faced demographic challenges; i.e. an aging population. Pessimistic views have circulated on the future of Japanese economy and these have been reinforced by a self-fulfilling, negative feedback loop (Kobayashi, 2009).

In order to exit such a negative feedback loop, the Japanese Government, after the inauguration of new administration, launched a strategy composed of three elements called “Abenomics”. One of the elements is a new phase of monetary easing by the Bank of Japan announced on 4 April 2013.

The confidence of Japanese consumers has been improving recently, with expectation of inflation picking up. Capital markets appear to be stabilizing after facing some turbulence. Housing markets are booming once again (Figure 11) and hopefully this trend will continue as confidence in the future of Japanese economy strengthens.

Figure 11 ▶ Average price of condominium unit in Tokyo (in mn of JPY)



Source: Real Estate Information Network System, Real Estate Economic Institute Co., Ltd

6. Country specific issues: other Asian countries

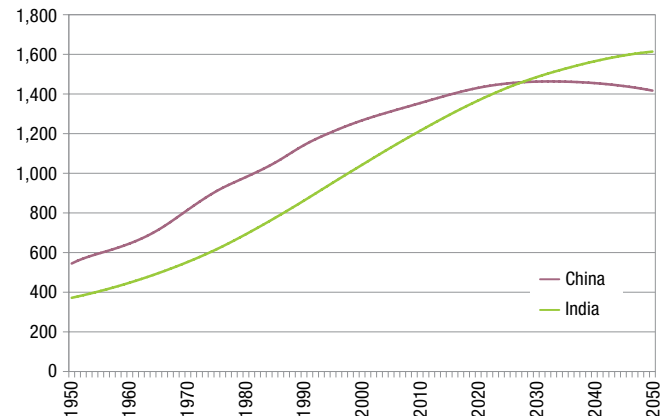
India

India has the second largest population in the world and its population is expected to exceed that of China in 15 years (Figure 12). The growth of the population and migration to large cities are strong drivers of housing demand. According to the National Housing Bank of India (NHB), a shortage of housing units is 19 million in urban areas and 44 million in rural areas estimated for the period 2012-2017. The disparity of income levels between urban and rural areas has been accelerating urbanisation despite the fact that 25% of residents in urban areas live in slums.

The volume of transactions of existing housing stock is very low due to the complicated registration system. The mortgage market is still at an embryonic stage partly due to the small proportion of the middle-class employed by the formal sector. Extending mortgages to the informal sector entails significant concerns regarding credit risk management. Two third of mortgages are originated by commercial banks which are regulated by the Reserve Bank of India (central bank) and one third are originated by housing finance companies which are regulated by the National Housing Bank (NHB).

One of the major challenges for the development of mortgage markets is the availability of long-term funding. The securitization market is still at a very nascent stage and very stagnant after the recent financial crisis. The development of new funding instruments such as covered bonds is being also encouraged. Recently, the International Finance Corporation (IFC) extended its technical assistance to introduce a mortgage insurance system in India.

Figure 12 ▶ Populations of India and China (Million)



Source: United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects: The 2010 Revision (June 2011)

Thailand

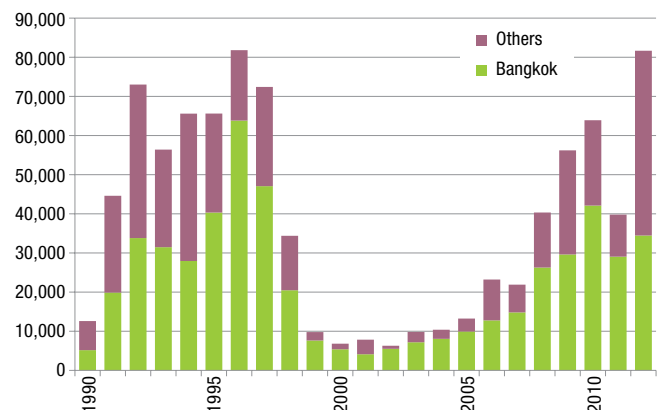
The Thai economy is at a transitory stage: shifting from being a developing country to being a developed one. Per capita GDP (USD 6,000) and outstanding mortgage balance per GDP (20%) is almost at the same level as China. The only difference is population (65 million in Thailand) which is only one twentieth of China's population (1.3 billion). As more people ascend to the middle class, demand for housing and mortgages will increase.

The Thai economy was heavily hit by the Asian Currency Crisis in 1997. Since then, the supply of housing has declined significantly. From the beginning of the 21st century, the supply of housing started to recover. (Figure 13) In 2011, there was a temporary decline due to flooding and, in 2012, the supply of apartments reached the pre-crisis level.

Thailand has one of the oldest GFIs in Asia: the Government Housing Bank. The GHB was established in 1953, only 3 years after the establishment of the GHLC in Japan. The main funding source for the GHB is deposits through its 185 branches nationwide. The GHB is competing with commercial banks, but maintains around 30% of market share (Figure 14) due to a good reputation backed by a long history.

Following the Asian Currency Crisis, the Secondary Mortgage Corporation (SMC) was established in 1997 with the aim of developing the secondary market. Since its establishment, SMC has issued 3 MBS. The Ministry of Finance which supervises both GHB and SMC is supportive of the developments of the Thai secondary market and is advocating the introduction of covered bonds, mortgage insurance and reverse mortgages.

Figure 13 ▶ Number of condominiums registered in Thailand (units)



Source: Bank of Thailand

Figure 14 ▶ Market share in Thailand by outstanding mortgage balance

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------|-------|-------|-------|-------|-------|
| Commercial Banks | 53.6% | 54.7% | 57.0% | 58.0% | 58.9% |
| GHB | 38.3% | 37.2% | 34.7% | 33.2% | 31.1% |
| GSB | 7.2% | 7.4% | 7.6% | 8.1% | 9.3% |
| Others | 0.9% | 0.7% | 0.7% | 0.7% | 0.7% |

Source: GHB

Malaysia

Per capita GDP in Malaysia has exceeded USD 10,000, which is the highest among the south-east Asian countries, except for Singapore. The outstanding mortgage balance per GDP is above 30%, which is comparable to other advanced Asian countries, such as Korea, Japan and Singapore. The relatively well-developed mortgage market in Malaysia can be partly attributed to Cagamas which was established in 1986 to develop the secondary mortgage market. The creation of the secondary mortgage market was a result of the liquidity crunch in the 1980s and the public policy objective of a “homeownership democracy”.

As of 2012, there are 27 Commercial Banks and 16 Islamic Banks in Malaysia. Commercial Banks’ contribution to housing loans was 85%. The average growth in Islamic home financing has been 26% in 5 years, and as of 2012, it represented 15.7% of primary mortgages.

Cagamas Berhad, the National Mortgage Corporation, commenced operations in 1987 to promote home ownership and the growth of the Malaysian secondary mortgage market. Cagamas issues debt securities to finance the purchase of housing loans from financial institutions and non-financial institutions. Funding at a reasonable cost encourages further expansion of financing for houses at an affordable price.

Cagamas purchases both conventional and Islamic loans and other financing tools and funds the purchases through the issuance of conventional and Islamic debt securities. Loans and other financing tools are purchased either on a “without-recourse to the originator basis” (PWR); or on a “without-recourse” basis (PWOR). Mortgage Guarantee Program (MGP) offers ‘first loss’ protection on a mortgage portfolio while the mortgage assets remain on the Originator’s books. (Figure 15) The Cagamas model is well regarded by the World Bank as a successful secondary mortgage liquidity facility.

Mongolia

In Mongolia, the mortgage market was virtually non-existent during the socialist regime. Housing was provided by the government directly to citizens. However, a market economy was introduced in the late 1990s and the mortgage market started to develop, together with the establishment of the Mongolia Mortgage Corporation (MIK) in 2006. As of 2011, the outstanding amount of mortgage loans in Mongolia stood at MNT 656 bn (USD 0.5 bn).

Under the old land ownership tradition, people were entitled to own a lot of up to 700 square meters. However, rapid urbanisation and migration into Ulaanbaatar created “Ger” area around the nation’s capital. It is extremely cold in winter and heating depends mainly on coal but at the same time smog is a major concern for human health. In this regard, the upgrading of housing units together with the development of urban infrastructure, including supply of electricity, is essential. Many donors, including IFC, the Bank aus Verantwortung (KfW), USAID, the Asia Pacific Union for Housing Finance (APUHF), the European Bank for Reconstruction and Development (EBRD), have extended technical and financial assistance. If the mining industry continues to boom, the Mongolian economy will expand rapidly and mortgage markets are expected to expand accordingly.

Korea

Per capita GDP in Korea is USD 23,000, just half of the Japanese, and close to the level of Portugal or Greece. Korea has a population of 50 million 10 million of which live in Seoul and 15 million live in the Seoul metropolitan area. There is a strong demographic concentration in the capital region.

The Korean Government established the Korea Housing Finance Corporation (KHFC) in 2004 to replace the Korea Mortgage Corporation (KoMoCo) under the joint ownership of the Ministry of Strategy and Finance, the Bank of Korea and the Ministry of Land, Infrastructure & Transport.

The vast majority of mortgage products in Korea were adjustable rate mortgages. According to KHFC, market share of fixed rate mortgages was 3.1% in 2011, but increased to 14.2% in 2012 due to favorable regulatory provisions on LTVs. A new regulation was introduced to differentiate the maximum LTV for ARMs (60%) and FRMs (70%) which is expected to encourage the use of the latter. The Korean government has set a goal to increase fixed rate mortgage loans up to 30% of the total mortgage loans by 2016 in order to control household debt. The KHFC is promoting reverse mortgages as well.

China

China became the second largest economy in 2011. It has the largest population in the world, but population growth is decelerating due to the one child policy introduced in 1979. Unlike other Asian countries, migration to the urban area is restricted, though urbanization is inevitable.

The first residential mortgage loan in China was issued by the China Construction Bank (CCB) in 1986⁴. The CCB used to be a state owned bank, but was privatised in 2004. The CCB issued the first MBS in China in 2005.

The outstanding mortgage balance was RMB 6.6 trillion (USD 1.04 trillion) at the end of 2011⁵, and the annual growth rate was 14.8%. Non-performing loan rates appeared to be stable at 0.3% for 2011.

Controlling house prices is one of the major challenges for policy makers in China. Relevant authorities have introduced measures, but Chinese residents have a strong propensity to invest in tangible assets, such as real estate, to hedge inflation. China learned a lot from the Japanese experience in the 1980s and is trying to avoid the rapid change of the foreign exchange regime that may trigger unintended consequences on property markets. So far, the adjustment of the RMB against the USD has been conducted in a controlled manner and appreciation of the RMB to the USD is gradual. The intervention in the foreign exchange market, however, has led to tremendous accumulation of foreign exchange reserves and has resulted in disruption of monetary policy to some extent. Recently, attention has focused on the unregulated financial intermediation sector, similar to the US shadow banking system, and whether or not it could trigger another financial crisis.

▶ Regional Initiative at APUHF

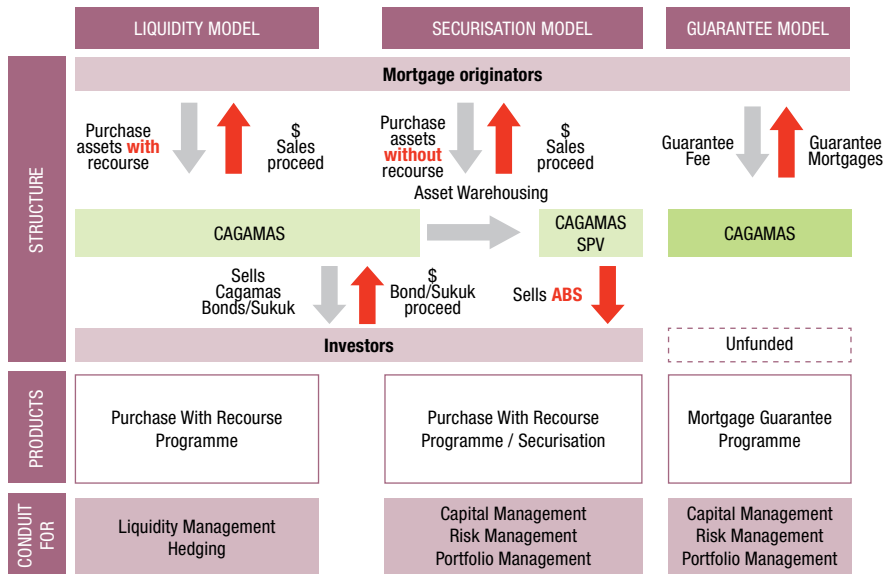
Until recently, regional mortgage industry representations did not exist in Asia, due to the heterogeneous nature of mortgage markets and the heterogeneous needs regarding mortgage market policies. However, it was soon recognized that many developing countries in the region have common challenges such as rapid urbanisation and the need to finance housing for the poor. Several international organizations including UN-ESCAP, UN-Habitat, the World Bank and others have extended assistance on these challenges in the region and such initiatives resulted in the creation of Asia-Pacific Union for Housing Finance (APUHF) in 2010.

The secretariat function of APUHF is undertaken by NHB, India, and a number of international conferences have been held to provide a basis and a platform for exchange of ideas, views, experiences, events, practices, products, products in different countries of Asia.

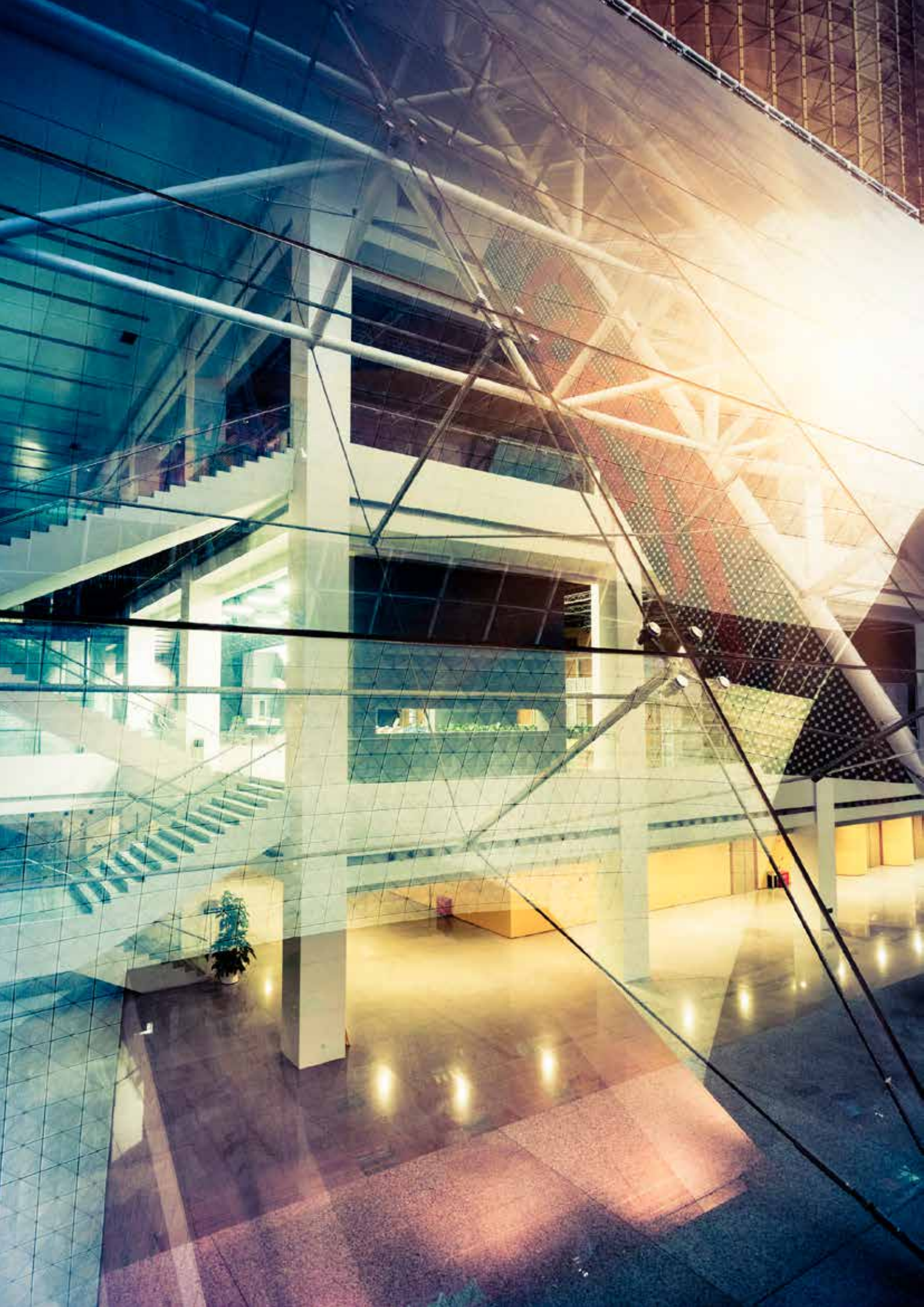
⁴ An Early Assessment of Residential Mortgage Performance in China
http://www-rcf.usc.edu/~yden/papers/DengZhengLing_ChinaMortgage_Lusk.pdf

⁵ “China Financial Stability Report” published by Peoples Bank of China (PBOC), which is the central bank of Peoples Republic of China.

Figure 15 ► The role of Cagamas in Malaysia mortgage market



Source: Cagamas



Austria

By Wolfgang Amann, Institut für Immobilien, Bauen und Wohnen GmbH and Karin Wagner, Central Bank of Austria

Macroeconomic Overview

Austria's economy expanded by +0.8% in 2012, while the Euro Area slipped once again into recession. The moderate growth in Austria was driven both by domestic demand and net exports. While the economic outlook for the Euro Area remains clouded for 2013 as well, Austrian economic growth is likely to accelerate in the first half of 2013.

The construction sector developed positively in 2012, with an increase of production by +4.7%. Production in the residential sector even increased by +11%, compared to 2011.

Recently, Austrian property prices soared markedly. In Q4 2012, they rose by +11.5% (y-o-y). The rise was particularly pronounced in Vienna at +14.9% y-o-y. The rise in property prices was however only to a limited degree credit financed. Loans for housing purposes decreased to a y-o-y change of +1.7% in Q1 2013. Factors behind these increases since the end of 2007 could be continuing immigration, flight into real assets ("safe haven"), expected low or negative return of alternative investments, low credit interest rates and expectation of further price increases. On balance, there appears to be no strong signs of overheating in the real estate sector, with the possible exception of some «hot spots».

The biggest project of urban development in this respect is the area of *Aspern*, which comprises 2.4 million square meters and will, in the next decades, provide for 8,500 housing units for 20,000 inhabitants, as well as approximately 20,000 workplaces. The aim is to keep up with mixed tenure and social housing in terms of cooperatives, non-profit housing developers, free market rent and ownership. In late 2013, the first flats will be handed over. Currently, numerous infrastructure projects are in the pipeline to ensure the availability of public transport in the area.

Housing and Mortgage Markets

Austria has a housing stock of 4.2 million units, with altogether 3.67 million households living in their own homes (2012). Slightly more than one quarter of the stock was built before 1945, 42% between 1945 and 1980, and one third after 1981. Vienna in particular has a large, old housing stock, which is in relatively good condition.

The predominant housing tenure in Austria is home ownership associated with a single family home (accounting for 45% of the total housing tenure). Together with 11% of apartments, the total home ownership rate reaches 57.4%. As for the rental tenure, most of the stock is affordable housing at approx. 24% (Limited Profit Housing Associations and municipal housing), while only approx. 18% is private rental.

Building permits were at a stable level of 42,200 units in 2011 and 41,600 in 2012 (only new dwellings in new residential buildings). The level of 4.9 permits per 1,000 inhabitants is well above the average of "Euroconstruct" countries¹ of 3.3. Housing completions are developing in a similarly stable manner with 4.7 units per 1,000 inhabitants. This trend is expected to continue in 2013 and 2014.

The housing market in Austria has developed smoothly on average, but rather dynamically in the capital city, Vienna, and some other provincial capitals, such as Salzburg and Innsbruck. While the average national rental market recorded changes of close to the inflation rate, i.e. at around 7.00 €/m² (excluding taxes and maintenance costs), rents in some metropolitan areas and particularly in the upscale market increased much strongly.

The y-o-y growth of mortgage loans granted to households by domestic MFIs slowed down since the beginning of the financial crisis, starting at a rate of around +7.5% in March 2008 and slowing down to +2.4% in May 2010. Till the end of 2012 it remained at the level of around +3.0% and came in August 2013 to +1.9%. The Euro Area average exhibits the same trend, but it is much more pronounced than in Austria.

In Austria, foreign currency loans are still quite popular. In August 2013, 32% of housing loans in Austria were denominated in a foreign currency. Although the foreign currency component has decreased since its peak in October 2008 (38.5%), it accounted for around 32% of the outstanding housing loan volume in the second quarter of 2013. However, this was probably mostly due to exchange rate effects.

As regards Austria's housing policy, in 2012 no changes were observed compared to 2011. 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 2012, the main emphasis was also put on state and regional supply-side subsidies, which aim at fostering affordable housing. Public subsidies accounted for around 0.8% of GDP out of which around 50% was spent on new construction, 26% on renovation and 15% on housing allowances. Due to the focus on the affordable rental sector with its generous income limits – which are high enough to allow access to this sector for households up to the 8th income decile – an integrated rental market is still being promoted. Remarkably enough, housing became a main topic of the electoral campaign for the federal elections in 2013.

| | Austria 2011 | Austria 2012 | EU27 2012 |
|---|--------------|--------------|-----------|
| Real GDP, growth (%) (1) | 2.7 | 0.8 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 4.2 | 4.3 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.6 | 2.6 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 83,960 | 86,161 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 12,041 | 12,261 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 45.0 | 44.3 | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 2.86 | 2.71 | n/a |
| Owner occupied rate (%) (4) | 57.4 | 57.4 | 78.3 |
| Nominal house prices, growth (%) (2) | 3.1 | 11.5 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ Euroconstruct countries are EU15 + CH, CZ, HU, NO, PL, SK.

Belgium

By Frans Meel, *Union Professionnelle du Crédit*

Macroeconomic Overview

According to the annual report of the National Bank of Belgium, in 2012 the Belgian economy felt the effects of the crisis in the euro area, with a contraction of -0.2%, mainly as a result of a fall in domestic demand. More particularly, the decline in private consumption (-0.7% in volume) and investment in housing persisted in 2012, in a context of stagnating purchasing power, considerable uncertainty among households, and a deterioration in the labour market.

Construction, which accounts for an estimated 6% of total value added, clearly suffered in 2012 from the weakness of domestic demand, and more particularly the low level of household investment in housing. This was reflected in clearly deteriorating order book assessments and in rather pessimistic demand forecasts.

Employment went down by 17,000 units. The harmonised unemployment rate stood at 7.4% at the end of 2012, compared to 7.2% a year earlier. 67.2% of the population in the 20-64 age group have a job in Belgium. That proportion remained relatively unchanged throughout 2012. The total employment rate is still below the European average, which is at 68.5%. At regional level, the employment rate increased in Brussels and Wallonia, reaching 58.9% and 62.2% respectively, whereas in Flanders participation in employment was unchanged at 71.6%.

In parallel to the weakness of private consumption expenditure, investment in housing also displayed a downward trend for the second consecutive year. It dropped by -2.9% in 2012, having already fallen by -5.3% in 2011. That decline occurred despite historically low interest rates which made mortgage loans available at highly advantageous rates. In the absence of specific support measures such as the temporary VAT cut applicable up to 2010, the decrease in housing investment took place against the backdrop of a stabilisation of real disposable income and of uncertainty with regard to the outlook for the economy and property prices in Belgium.

In Belgium, inflation responds strongly to commodity price fluctuations. Consequently, inflation in 2012 was again higher than in the three main neighbouring countries. Despite a marked deceleration from Q2 2012, inflation over the year as a whole was still running at +2.6%.

In 2012, pension and labour market reforms were implemented and measures were taken to cut the public deficit. As a result, the structural primary balance improved in 2012 by around 1.0 percentage point of GDP and the deficit worked out at 3.7% of GDP, the 0.8%-of-GDP capital injection in favour of Dexia included.

Housing and Mortgage Markets

The property market in Belgium has not undergone any significant adjustments in the wake of the financial crisis since 2009, unlike in Spain and Ireland, in particular, or, beyond the euro area, the United States. In fact, viewed over fifteen years, house prices have generally followed a pattern comparable to that seen in most other European countries, but the increase has been steady, with no exaggerated boom and no abrupt correction. Even at the height of the financial crisis, the fall in house prices was modest and short-lived. Prices began rising again in 2010 and continued to rise slightly in the course of 2012.

Average house prices went up to EUR 193,555 in 2012, as compared to EUR 188,416 in 2011 (+2.7%).

Villa prices stabilised in 2012. In 2012, the average purchase price for a villa amounted to EUR 329,899, as compared to EUR 330,881 in 2011, i.e. a -0.3% decrease.

The average price for apartments has been going up since 2010 and has now reached approximately EUR 202,066, as compared to EUR 195,498 in 2011, i.e. a +3.4% increase.

The volume of residential mortgage lending outstanding reached about EUR 180 bn at the end of 2012 (against EUR 172 bn at the end of 2011).

2012 saw the total amount of new mortgages granted (including refinancing operations) drop by -7.4% as compared to 2011 (it was +4.9% in 2011 compared to 2010). The number of contracts granted decreased by -27.5% compared to 2011 (still +18.5% in 2011 compared to 2010). If refinancing operations are not taken into account, the number of new mortgages granted decreased by -32.3% compared to 2011, the corresponding amount decreased by -10.1%.

This decrease is almost entirely due to the cancellation, at the end of 2011, of a large number of the measures aimed at promoting energy-saving investments, in addition to the social-economic context and the low level of consumer confidence. One of the measures that has been cancelled is the support given to "green loans" with a 1.5% interest rate subsidy provided by the government since 2009 for a certain category of energy-saving investments. During the last quarters of 2011, many consumers sought to benefit from those measures, explaining the substantial increase in production during those quarters.

Consequently, lending returned to a more normal level in 2012: in 2012, the total amount of mortgage credit granted was slightly more than EUR 21 bn. This puts 2012 in third place after 2010 and 2011, which were two exceptional years for the Belgian mortgage credit market.

Nevertheless, the level of indebtedness of Belgian private persons remains low, as compared to the levels in other European countries.

Looking at each quarter separately, it is clear that the number of credits granted showed a strong decrease from the beginning of 2012 onwards.

As mentioned before, this decrease is almost entirely due to the cancellation, at the end of 2011, of a large number of the measures aimed at promoting energy-saving investments, as shown primarily by the strong decrease (almost -60%) of loans for renovation in particular. However, there was also a considerable drop in the number of construction credits (-36%) and the number of credits for the purchase of houses (-10%).

«Purchases» represented 46.3% of the number of contracts signed in 2012, and this corresponds to 58.5% of the amounts granted. The market share of «construction loans» stood at 10.1% regarding the number of contracts, and at 12% in proportion to the loans granted. The market share of «renovations» dropped significantly, reaching 24.9% of the number of contracts (compared to almost 48% in 2011), due to the cancellation of the government's stimulating measures for energy saving investments.

The average amount of mortgage loans for "purchases" stood at EUR 136,000 EUR, about EUR 4,000 (or +2.9%) more than in 2011 (EUR 132,272). The average amount of mortgage loans for renovation purposes increased by +44% to EUR 38,000. The reason for this is the fact that, until the end of 2011, there was a EUR 15,000 limit per person and per year (as well as per house) on the government measure for 'green credits with an interest subsidy' resulting in a drop in the average amount. Since the beginning of 2012, the average amount of mortgage loans for renovation purposes has regained its normal level.

In 2012, the market share of new fixed interest rate loans and loans with an initial fixed rate for more than ten years represented more or less 87% of newly provided loans. The share taken up by new loans granted with an initial fixed rate for 1 year, remained at a low level of approximately 2.2% of the credits provided. There was a particular increase in the number of credits with an initial period of variable interest rate between 3 and 10 years.

The increase of lending in 2011 was mainly a result of the government measures that were abandoned at the end of 2011, and so one could reasonably expect a drop of mortgage lending in the course of 2012, as the market returned to a

more normal level. At the beginning of 2013, this situation did not change and new credit production even showed a new decrease of more than -13% in Q1 2013. Therefore, it is possible that 2013 will also turn out to be a difficult year for mortgage credit lending, due to the unfavourable economic climate and the persistent low level of consumer confidence.

| | Belgium 2011 | Belgium 2012 | EU27 2012 |
|---|-----------------|-----------------|--------------|
| Real GDP, growth (%) (1) | 1.8 | -0.2 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 7.2 | 7.4 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.4 | 2.6 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 172,049 | 180,467 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 19,736 | 20,145 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 76.7 | 78.6 | 81.8 |
| Gross residential lending, growth (%) (2) | 4.9 | -7.4 | n/a |
| Typical mortgage rate (%) (2) | 3.95 | 3.73 | n/a |
| Owner occupied rate (%) (4) | 78.0 | 78.0 | 66.8 |
| Nominal house prices, growth (%) (2) | 3.7 | 2.7 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Bulgaria

By Sylvain Bouyon, European Mortgage Federation

Macroeconomic Overview

In 2012, the Bulgarian economy expanded by +0.8%, broadly in line with the growth recorded in 2010 (+0.4%) and 2011 (+1.8%). Compared with pre-crisis trends, a significant slowdown has been observed, since real GDP grew by +20.3% between 2006 and 2008. In 2012, domestic demand and inventories took over from net exports as the main engines of growth. The combined growth of private consumption and gross fixed capital formation overcame the decrease in public consumption and led to a noticeable positive contribution from domestic demand (+1.7%). As a result, imports continued to increase, while exports suffered from the downturn in the EU27 domestic demand.

The relatively healthy public finances are likely to uphold consumer confidence in coming years, which could have a beneficial impact on private consumption. In addition, the low public deficit (1.0% in 2012) and debt (18.9% in 2012) provide room for discretionary stimulus. In the meantime, the hysteresis-induced increases in the structural rate of unemployment since 2009 could drag down the level of potential private consumption on a more permanent basis. Resulting from the deep contraction in real GDP in 2009 and the slowdown observed since then, the unemployment rate stood at 10.3% in 2010, up from 5.6% in 2009, and has slightly increased in 2011 and 2012, reaching 12.2% by the end of 2012.

Housing and Mortgage Markets

In 2012, nominal house prices¹ contracted for the fourth consecutive year; however, this downward trend significantly eased (-21.4% in 2009, -10.1% in 2010, -6.1% in 2011 and -2.7% in 2012). The average annual variation between 2009 and 2012 was -10.3%, significantly lower than the +26.0% average observed over the period 2004-2008. As a result, in 2012, nominal house prices reached 64.6% of their peak registered in 2008. Nevertheless, this overall decrease was not spread equally across district centres, since prices stood at 96.9% of their 2008 value in the Sofia metropolitan area, 66.5% in Burgas, 60.0% in Varna and 52.8% in Plovdiv.

On the construction market, there has been an overreaction of the number of issued building permits to falling housing prices: in 2007-2012, the number of building permits deteriorated by -83.5% for the whole country. The 28 main district² centres in Bulgaria all experienced marked decreases: -70.1% in Plovdiv, -77.9% in Sofia metropolitan area, -79.9% in Varna; -86.2% in Pleven and -90.3% in Ruse.

As a result of these developments on the housing markets, gross residential lending contracted again in 2012 (-8.6% vs. -2.0% in the previous year) and, as such, contributed to the decrease in outstanding residential lending (-0.4% in 2012 vs. -3.4% in 2011 and -2.2% in 2010). In 2012, the average mortgage interest rate for loans in BGN was below loans in EUR for the first time in more than six years. Therefore, against the backdrop of a stable bilateral exchange rate EUR/BGN, the real cost was for the first time higher for loans in EUR. Despite this shift in real costs, loans in EUR were still preferred to loans in BGN, since 59.0% of new businesses in 2012 were in EUR, 40.9% in BGN and 0.1% in USD. Nevertheless, in 2012, the share of new loans in BGN was the highest since 2007 (20.2% in 2011, 23.3% in 2010, 29.7% in 2009 and 34.3% in 2008). Regarding outstanding residential lending, the currency distribution in 2012 was broadly similar to that for gross lending: 39.7% in BGN, 60.2% in EUR and 0.04% in USD (the currency distribution in 2011 was 40.6%, 59.4% and 0.05%, respectively).

| | Bulgaria 2011 | Bulgaria 2012 | EU27 2012 |
|---|---------------|---------------|-----------|
| Real GDP, growth (%) (1) | 1.8 | 0.8 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 11.3 | 12.2 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.4 | 2.4 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 7,019 | 6,993 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 1,124 | 1,126 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | n/a | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | -2.0 | -8.6 | n/a |
| Typical mortgage rate (%) (2) | 8.22 | 7.49 | n/a |
| Owner occupied rate (%) (4) | 86.9 | 86.9 | 78.3 |
| Nominal house prices, growth (%) (2) | -6.1 | -2.7 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ The data refers to the price per square meter for flats in the district centres.

² Excluding Vidin.

Cyprus

By Sylvain Bouyon, European Mortgage Federation

Macroeconomic Overview

The contraction in real GDP stood at -2.4% in 2012 and is expected to reach -8.7% in 2013, essentially driven by the pronounced decline in domestic demand. Amid a deteriorating labour market, with an increase of 4 percentage points of the unemployment rate in 2012, and a decreasing consumer confidence, resulting from high economic uncertainty concerning Cyprus' request for financial assistance in June 2012, and due to the dampened – by unemployment and fiscal consolidation - disposable income, final consumption of households decreased by -2.0% in 2012 and should fall by -8.2% in 2013.

Gross fixed capital formation also decreased in 2012 (by -23.0%) and is expected to contract further in the following year (by -29.5%), owing to low business confidence, poor economic prospects and highly indebted non-financial corporations (the NFC debt to GDP ratio was the highest in the EU27 in 2012 and stood at 150.4% vs. 100.6% in 2007). Investment contracted markedly for both construction (by -20.3% in 2012 and by -30.9% in 2013) and equipment sectors (by -30.3% and by -26.0%, respectively). Within the context of fiscal consolidation, final consumption of expenditure of government should decrease by -1.8% in 2013. In 2012, the combination of a sharp decline in imports, resulting from the weak performance of domestic demand and lower import propensity, and an increase in exports (especially in tourism services) led to a positive contribution of net exports to real GDP. In 2013, despite the expected contraction of -2.4% in exports, the positive contribution of net exports to GDP should be even stronger, at 5.3% (vs. 4.7% in the previous year), owing to the collapse in imports (-7.6%).

Even though the primary balance of government is projected to turn into a slightly positive territory in 2013, general government deficit should remain high, at 4.5%, mirroring substantial interest expenditure for the government (at 4.6% of GDP, it will be the third highest value in the EU27). Due to the low market sentiment and the rapid deteriorating macroeconomic outlook, the ten year government spreads on the secondary market (versus Germany) were high throughout 2012 and remained above 5.45% in the first five months of 2013.

Housing and Mortgage Markets

Nominal housing prices recorded a decline of -5.4% in 2012, up from -4.1% in 2011, -1.4% in 2010 and -4.6% in 2009, and stood at 85.4% of their 2008 level. The recession-induced fall in demand for housing seems to be the main factor behind this poor performance. Decreasing housing prices affected negatively the construction activity: the number of building permits contracted by -4.4% in 2012 and -14.5% in 2011.

On the mortgage market, the outstanding residential loans responded to the economic downturn and contracting housing prices, but with lags reflecting the maturity structure of the debt. In December 2012, outstanding residential lending continued to increase y-o-y (by 1.1% vs. +5.2% in 2011, +14.8% in 2010, +22.2% in 2009; +22.6% in 2008; +27.9% in 2007 and +31.2% in 2006). However, it started to decrease during 2013 (by -0.4% in March and -3.3% in April), for the first time in many years. According to the euro area Bank Lending Survey, between Q1 2012 and Q1 2013, tighter funds and balance sheet constraints had serious consequences for the availability of mortgage loans in Cyprus. In parallel, the demand for loans worsened significantly throughout 2012, sapped by low consumer confidence and poor housing market prospects. The y-o-y decrease by 41 bps of the representative mortgage interest rate in December 2012 could not reverse depressed demand.

| | Cyprus 2011 | Cyprus 2012 | EU27 2012 |
|---|-------------|-------------|-----------|
| Real GDP, growth (%) (1) | 0.5 | -2.4 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 7.9 | 11.9 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.5 | 3.1 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 12,545 | 12,679 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 17,727 | 18,029 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 112.6 | 116.4 | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 5.31 | 5.33 | n/a |
| Owner occupied rate (%) (4) | 73.8 | 73.8 | 66.8 |
| Nominal house prices, growth (%) (2) | -4.1 | -5.4 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Czech Republic

By Juraj Holec, Hypoteční banka

Macroeconomic Overview

In the middle of 2011, the Czech Republic started to see its economic activity decelerate significantly. In early 2012, the Czech economy officially slid into a recession, which will most likely persist this year. Last year's GDP fall by -1.2% was primarily due to reduced domestic demand, which was hit by the fiscal restriction and related moves, such as the increase in the reduced VAT rate (from 10% to 14%). This was followed by another increase, this time in both the reduced VAT and the standard one, to 15% and 21% respectively, at the beginning of this year. Last year also saw budget cuts, which affected the development of public sector investment, notably in infrastructure and the related construction sector, the long-term recession of which consequently worsened. The economy was also hit by the impacts of curbed European demand, which subsequently affected the performance of industry, exports and labour market. While industrial output was down by only -0.7% in 2012, the very first quarter of 2013 signalled that the decline in industrial output was far from over (-5.4% y-o-y). The downturn even affected the largest and so far very successful sector – car production (-11.9%). Even so, most carmakers operating in the Czech Republic are still succeeding in raising their shares in the European market, which has been plagued by a long-term fall.

Although the majority opinion is that the economy should start to bottom out in the second half of the year, no signs of an improvement are evident at the moment. The confidence of the business sector is still deteriorating slightly, SMEs remain weak, and orders in industry are continuing to fall, with no influx of good news even from Germany, the destination for over 30% of Czech industry. In addition, the curbed domestic demand is unlikely to recover this year, as real income is most probably continuing to fall, unemployment is on the rise, and households are opting to continue a period of savings and the postponement of consumption, as well as investment. After all, businesses are also investment-inactive, which is evidenced not only by surveys but also by the credit activity of the banking sector. This is why it is believed that the stabilisation in the second half of the year will not outweigh the anticipated adverse performance in the first half of the year, and thus the economy will show another consecutive fall, this time by approximately -0.4%.

A strong disinflation trend has been evident in the Czech Republic since the spring of last year, primarily based on the subsidence of administrative moves, i.e. tax changes, and on poor domestic demand. The record-breaking drop in household consumption (-3.5%) significantly reduced the scope for including this year's increase in both VAT rates into prices. Inflation thus fell below the Czech National Bank (CNB) target of +2.0%, with a tolerance band of $\pm 1.0\%$, in early 2013. Monetary relevant inflation, which is adjusted for the effect of the tax changes, has even been below that band since February. Hence the CNB may continue to keep its base interest rate at the record-low level of 0.05%, and will continue to do so for a prolonged period, until stronger inflation pressures occur. This is why it is expected that the central bank's earliest rate hike might not occur before late 2014. Reflections on negative rates remain purely at the level of theoretical discussions, because as the central bank has previously announced, it could use forex interventions focused on weakening the exchange rate of the Czech currency as another instrument, if it needed to ease monetary conditions.

Housing and Mortgage Markets

The 2012 mortgage market increased y-o-y by more than 2.0% and reached a volume of CZK 121.6 bn. Low interest rates and stable prices generated client interest in purchasing housing by means of mortgage loans.

According to official statistics from the Ministry for Regional Development, a total of CZK 121.6 bn in mortgage loans was provided by banks. 2012 was therefore the second most successful year in the history of the mortgage market in the Czech Republic, and this is in a period when the financial crisis was being discussed more and more often. The past year saw more than 73,000 clients finance family homes with mortgage loans.

In contrast with previous years, 2012 proved to be exceptional from the very outset. There was increased interest in mortgage loans and the end of the year saw record lows in interest rates, which reached an average of 3.17%, the lowest rate in the past ten years.

The low interest rates and stable prices of 2012 have the lion's share of responsibility for facilitating client willingness to use mortgages to purchase homes.

Last year, mortgage loans most often financed the purchase of second-hand properties. Whereas second-hand apartments up to 60 square meters were preferred in cities, family homes up to 135 square meters tended to be chosen in towns and villages in the countryside. Sale prices offered by developers in Prague led to interest mainly in new apartments up to 60 square meters.

By far the highest volume of mortgages were provided in Prague (CZK 38 bn), followed by the South Moravian, Moravian-Silesian and Hradec Kralové regions. The biggest mortgages were in Prague (on average, CZK 2,150,000) and the smallest in the Zlín region (on average, 1,351,000). Together with loans from buildings societies, housing loans in the Czech Republic in 2012 reached a combined total of approximately CZK 166 bn.

As regards mortgage market conditions in 2012, the mortgage market was driven by stable property prices and low interest rates. Interest rate development was influenced especially by a range of sales offered by banks. Clients in the past year were able to take advantage of both product novelties and advantageous mortgage loans. According to the Hypoindex indicator, mortgage loan interest rates gradually decreased from an average of 3.59% in January, 2012, to the level of 3.17% per annum at the end of 2012. In December, average interest rates reached record lows of just over 3 per cent, the lowest rate in the past ten years.

Another factor which had an indirect influence on the development of the mortgage market in 2012 is the development in 2T repo rates, where there were three changes over the course of the year. At the end of June, the Czech National Bank lowered the 2T repo rate from 0.75% to 0.50%. A further change occurred during the fall of last year, when the 2T repo rate was lowered to 0.25% from 1 October. This rate was valid until the start of November, when the Czech National Bank made another adjustment and from 2 November revised the rate to 0.05%, its lowest value since 1995.

20 mortgage providers operated in the Czech mortgage market last year. The total includes the newcomers AXA Bank and Fio bank, who entered the market during the first half of the year. As during previous years, there was fierce competition. The main advantage was enjoyed by those institutions who have long been specialised in mortgages. The largest and most stable three providers of mortgage loans were Hypoteční banka, Česká spořitelna and Komerční banka. These three lenders provided approximately 80% of all mortgage loans on the Czech market in 2012.

| | Czech Rep. 2011 | Czech Rep. 2012 | EU27 2012 |
|---|--------------------|--------------------|--------------|
| Real GDP, growth (%) (1) | 1.9 | -1.2 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 6.7 | 7.0 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.1 | 3.5 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 19,761 | 21,750 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 2,262 | 2,483 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 22.7 | 24.9 | 81.8 |
| Gross residential lending, growth (%) (2) | 47.9 | -4.0 | n/a |
| Typical mortgage rate (%) (2) | 3.56 | 3.17 | n/a |
| Owner occupied rate (%) (4) | 78.7 | 78.7 | 78.3 |
| Nominal house prices, growth (%) (2) | 0.2 | n/a | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Denmark

By Kaare Christensen, Association of Danish Mortgage Banks

Macroeconomic Overview

The slow recovery of the Danish economy came to a halt in 2012. Real GDP contracted by -0.4% over the year. The contraction was caused by a combination of deteriorating net exports and slow growth in consumption. Imports of goods and services increased by +1.0%, while exports only rose by +0.2%. Meanwhile, private consumption remained subdued, only rising by +0.5% over the year. Public consumption was held back, mainly at the regional level, increasing by +0.7% over the year. Gross capital formation contracted by -0.1% over the year, while residential construction however decreased by -8.6%.

In 2012, consumer and business spending remained constrained despite decreasing interest rates and several initiatives from the Danish government to try to ignite the economy. Interest rates hit new record lows as Denmark maintained its status as a “safe haven”. 1 year interest reset mortgages were refinanced at around 0.42% during the year, and 30 year fixed rate mortgages were issued with a coupon of 3.00%. Meanwhile, the low rates combined with an easing of income taxes, tax incentives on real investments, a proactive labour policy and immediate payout of early retirement pension schemes were not enough to lift consumption and investments to a significant level. The supporting effects were overshadowed by a negative real growth in wages, deteriorating export markets and depressed consumer and business confidence among other factors due to fear of job loss and uncertainty about the housing market. Hence, consumers and businesses consolidated, storing away spare cash in current and savings accounts.

The unemployment rate remained relatively constant at 6.2% (7.5% OECD Harmonised) during 2012. In the meantime, the labour market saw an overall decrease in employment of -0.7%. Employment decreased by -0.4% in the private sector and by -0.9% in the public sector.

Consumer prices rose by +2.4% in 2012, outpacing unit labour costs increases in most sectors.

Housing and Mortgage Markets

While nominal house prices decreased from 2011 to 2012 by -3.2% due to falling prices in the second half of 2011, house price development through 2012 was much more stable, including increasing prices on owner occupied flats. In the Copenhagen area, owner occupied flats increased by +5.8% between Q4 2011 and Q4 2012.

Developments in the Danish housing market remain divided between those in the Copenhagen Region and the rest of the country. While the Copenhagen Region experienced larger price drops compared to the rest of the country in the aftermath of the financial crisis, developments have favoured the Copenhagen region within the past year. One major reason is the recent developments in the number of homes bid for sale in the market. All over Denmark, the number of owner occupied homes for sale has been decreasing since the historic high in the summer of 2011. However, the decrease has been larger in the Copenhagen region compared to elsewhere. Consequently, the overhang of detached and terraced houses outside the Copenhagen region remains high in a historic perspective (the number of owner occupied flats in large cities outside Copenhagen has come down, however not quite as much as in Copenhagen). In the Copenhagen region, the picture is the opposite. The number of detached and terraced houses for sale has come down to its historic average, while the number of owner occupied flats for sale is at a record low in the central part of the city. Developments in the region have been influenced by a net population increase of around 1,000 per month in recent years. This has also supported prices in the region.

The owner occupation rate decreased by 1.1 percentage point from 2011 to 2012. Since 2007, the owner occupation rate has decreased by a total of 1.8 percentage point. The relatively large decrease in 2012 contrasts visibly with the costs of owner occupation. Falling house prices (since 2007) accompanied by decreasing finance costs for the best part of the last three years has brought user costs on owner occupied homes down to a level last experienced in the latter part of the 1990s. Transaction activity increased slightly in 2012, but remains low in a historic context. For now, potential home buyers have adopted a wait and see approach.

As a consequence of the large overhang of detached and terraced houses for sale and slightly increasing construction costs, construction activity has remained very low in 2012.

The amount of outstanding mortgage loans increased by +2.1% from Q4 2011 to Q4 2012. By year end 2012, outstanding mortgage loans amounted to DKK 2,457 bn. Residential mortgage loans make up about 75% of the total amount of mortgage loans outstanding.¹ Hence, the Danish mortgage sector remained a stable source of funding to households and businesses in 2012. Outstanding mortgage loans are typically split between fixed rate mortgages (27% by year end 2012), adjustable rate mortgages with an interest rate cap (8% by year end 2012), interest reset mortgages with interest reset intervals between 1 and 10 years (56% by year end 2012) and adjustable rate mortgages, which are not available to private households (9% by year end 2012).

Gross lending activity soared in 2012 due to decreasing interest rates creating attractive remortgaging opportunities to borrowers. As transaction activity in the housing market remained low in 2012, new lending for house purchases only counted for a small part of total gross lending, which reached DKK 482 bn - the highest amount in a year since 2005. Residential mortgages counted for 81.3% of gross lending.

Fixed rate mortgages (typically fixed for 30 years) accounted for 47% of gross lending in 2012. This is the highest share of gross lending which can be attributed to fixed rate mortgages since 2007. Adjustable rate mortgages and interest reset mortgages accounted for 51% and adjustable rate mortgages with an interest rate cap accounted for 2% of gross lending in 2012.

Early redemptions and amortisation amounted to DKK 430 bn in 2012, and net lending thus came in at DKK 51 bn, which is an increase of +21% compared to 2011, but still less than one third of the level seen in the years 2005-2008.

While the popularity of fixed rate mortgages increased to a level comparable to adjustable rate mortgages and interest reset mortgages, a movement within the interest reset segment also started to happen in 2012. Borrowers began moving out on the yield curve, favouring interest reset mortgages with a larger interest reset interval – typically 3 or 5 year intervals – to the shorter 1 year intervals. There are several reasons for that development, but one reason stands out. Mortgage banks separately implemented their own measures, which better encompass future capital requirements in their respective business models. Though different in nature, all implementations have made adjustable rate mortgages (including interest reset mortgages with short interest reset intervals) and deferred amortisation mortgages more expensive. On the margin, this has given borrowers an incentive to choose mortgages with a longer interest rate fixation. One other possible reason for borrowers preferring mortgages with a longer interest rate fixation could be borrowers' expectations of future interest rate increases. The 30 year fixed rate mortgage 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, thereby neutralising possible value deterioration.

¹ These figures concern only the EMF Members.

Mortgage Funding

Mortgage loans are solely funded by 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 short term bullet bonds or convertible 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. The largest refinancing date has traditionally been and remains to be December, although new bullet bonds have not been issued with maturity in December in recent years spreading refinancing activity and, hence the point risk more evenly across the year. In 2012, short term bullet bonds worth DKK 434 bn were refinanced in December. This compares to DKK 454 bn in 2011. In 2010, 2009 and 2008, the amounts refinanced in December were DKK 575 bn, DKK 453 bn and DKK 357 bn, respectively. In December 2012, the sale of new bullet bonds went according to plan. Strong demand saw a bid-to-cover ratio of about three to one. The shortest bullet bonds (one year maturity) were sold at an interest rate of 0.42%

In 2012, long term convertible bonds which fund fixed rate mortgages were issued with a coupon of 3.00%

| | Denmark 2011 | Denmark 2012 | EU27 2012 |
|---|-----------------|-----------------|--------------|
| Real GDP, growth (%) (1) | 1.1 | -0.4 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 7.6 | 7.5 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.7 | 2.4 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 242,178 | 246,415 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 54,768 | 55,398 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 205.4 | 205.7 | 81.8 |
| Gross residential lending, growth (%) (2) | -37.4 | 76.9 | n/a |
| Typical mortgage rate (%) (2) | 4.76 | 3.67 | n/a |
| Owner occupied rate (%) (4) | 53.7 | 52.6 | 66.8 |
| Nominal house prices, growth (%) (2) | -2.8 | -3.2 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Estonia

By Evelin Viilmann, Bank of Estonia and Sylvain Bouyon, European Mortgage Federation

Macroeconomic Overview

Despite the economic recession in the euro area, real GDP in Estonia increased by +3.2% in 2012. Growth was entirely due to domestic demand, whose positive contribution to real GDP stood at +8.2%. In 2012, gross fixed capital formation expanded by +21.0% (+25.7% in 2011), mainly supported by public investment, and provided the largest positive contribution to GDP (+5.2%). Gross fixed capital formation of the general government reached 5.6% of GDP in 2012 (i.e. the highest ratio in the EU27). However, in 2013, investment growth is projected by the OECD and the EC to slowdown markedly, mirroring the expected contraction in public investment, as EU-co funded projects have been completed and the majority of projects financed through the revenue from the sale of excesses greenhouse gas emission certificates will terminate. As regards the external sector, exports slowed down more significantly than imports in 2012, notably reflecting the weak economic performances recorded for two of the main export partners (Finland and Sweden). The contribution was also negative from inventories (-2.1%), partly owing to an acceleration in household consumption (+4.4% in 2012 vs. +3.5% in 2011). Private consumption is forecast by the OECD and the EC to become the main contributor to economic growth in 2013, on the back of improving labour market conditions and consumer confidence.

Housing and Mortgage Markets

Activity in the Estonian housing market has been increasing since the economic recovery. In the last two years, the liquidity of the residential market improved and prices have rose gradually. Both the number of transactions and property prices increased with stability, and in 2012 they were respectively +17% and +8% higher than in the previous year. Although the relatively high growth rates in transaction volumes and prices indicate enhanced market activity, this can mainly be attributed to the post-crisis decline and the subsequent recovery from low levels. The residential market still operates at the level of 2005, which is approximately one third below the peak of the real estate boom in 2007.

The real estate market has moved quite heterogeneously in different regions of Estonia and has been livelier in bigger towns, while the market in small towns has not yet recovered from the crisis. The biggest impact on the overall development of the market comes from Tallinn, the capital of Estonia, where the median square metre price in residential apartment transactions and the number of transactions increased y-o-y by 10% and 13% respectively in Q4 2012.

The rise in real estate prices was partly due to a change in the structure of transactions as better quality and more expensive properties have been bought and sold. Factors contributing to the rising price of the transactions include the improved financial position of households and positive labour market dynamics, as well as low interest rates, favourable loan conditions from banks and a recovery of activity in the construction market.

Even so, Estonia has witnessed a drop in real estate supply since the end of 2011 with a nearly -10% decrease. The demand will fuel new developments, while the rise in constructions prices will be the balancing factor, preventing the initiation of rapid development.

In 2012, there was also an increase in the activity of non-residents in the local real estate market, which had been in steady decline during and particularly after the real estate boom. Non-residents put around +19% more in terms of value into the Estonian real estate market during the year than they did in the preceding year, with the number of transactions increasing by +17%. Transactions by non-residents accounted only 11% of the total.

Real estate affordability has improved considerably from the years of rapid economic growth. According to the affordability indicator (the ratio between the median price per square meter of an apartment and average gross wages) used for analysing the pricing of the residential market, affordability indicator has been relatively stable (below one) for almost three years. In the boom years, the ratio was more than twice as high.

An idea of the amount of new residential housing is given by the number of building and use permits issued. In 2012, building permits were issued for 3035 living spaces, which is the highest number in the last four years and +7% higher than in the previous year. Last year, 1990 permits for using living spaces were issued, which is only +4% more than in 2011. The number of living spaces that have been completed in the last two years is also the lowest in the last decade. Real estate companies estimate that several developers are preparing projects which were difficult to bring to the market previously because of the high costs of construction.

The real estate market was also affected to a small degree by forced sales caused mainly by difficulties in loan repayments in crisis years. Since the first signs of recession appeared in 2007, more than 4000 real estate properties belonging to indebted private individuals have been put up for auction, 1300 of them in 2012. Based on the banks' estimation, 2012 was the peak in the forced sale of properties. The effect of forced sales on the real estate market as a whole is estimated to be very small, as they account for less than 4% of all transactions.

| | Estonia 2011 | Estonia 2012 | EU27 2012 |
|--|--------------|--------------|-----------|
| Real GDP, growth (%) (1) | 8.3 | 3.2 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 12.5 | 10.2 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 5.1 | 4.2 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 5,869 | 5,848 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 5,302 | 5,288 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 68.2 | 64.3 | 81.8 |
| Gross residential lending, growth (%) (2) | 16.9 | n/a | n/a |
| Typical mortgage rate (%) (2) | 3.42 | 2.89 | n/a |
| Owner occupied rate (%) (4) | 85.5 | 85.5 | 78.3 |
| Nominal house prices, growth (%) (2) | 9.9 | 8 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Finland

By Elina Salminen, Federation of Finnish Financial Services

Macroeconomic Overview

In 2012, the variation in economic activity in Finland turned negative. GDP decreased by -0.2% on annual basis compared to relatively strong growth of +2.8% in 2011. The deterioration in 2012 was mainly driven by weak exports which declined by -1.4% on annual basis, as well as low growth in investments, which declined by -2.9%. Economic uncertainty was reflected in lowering consumer expectations towards the end of the year. On annual basis, private consumption increased by +1.6%.

The current account balance remained negative in 2012 and showed a deficit of 1.6% of GDP. In euros, the current account deficit was over EUR 3 bn because of weak service trade and the factor incomes and current transfers deficit. The Finnish export is suffering from the global economic slowdown, since major part of the export is industrial products. The most important countries for Finnish export are Sweden, Germany and Russia.

The weakening economic environment has put increasing pressure on Finnish public finances. Due to the GDP contraction, public finances deteriorated further in 2012. Deficit was 1.9% of GDP in 2012. Lower employment and weaker private consumption is reducing tax revenues. As a result, the government's borrowing needs will continue to be substantial. The debt-to-GDP ratio of general government climbed to 53.0% in 2012 from 49.1% in 2011. Based on economic forecasts, general government debt is expected to grow in the near future.

Unemployment turned upwards in mid-2012 and ended up at 8.0% in December. However, the annual average unemployment rate was 7.7%, down from 7.8% in 2011. One factor helping to hold back an increase in unemployment is that the labour force continues to shrink due to ageing of population. However, the rapid ageing of the population is one of the main challenges faced by the Finnish economy in the future.

In 2012, inflation remained higher in Finland than in the euro area as a whole. The national consumer price index went up by +3.2% on annual basis. Household real income remained effectively unchanged in 2012. Stagnant purchasing power of households allows them to increase consumption only moderately, which will result in weak growth for private consumption in the near future.

Housing and Mortgage Markets

Housing construction continued to decline in 2012 and, according to a forecast by the Bank of Finland, will contract further in 2013. In 2012, new housing starts decreased as much as -8.9% from previous year and were 28,334 units in total. Also housing completions decreased by -1.2% on annual basis. However, renovation investments continued to grow.

Housing prices continued to grow in nominal terms, but were more or less stagnant in real terms. Compared to December 2011, prices rose by +3.7% in the whole country. In Greater Helsinki, prices went up by +5.2% and in the rest of the country by +2.4%, in nominal terms. The housing market is supported by the healthy Finnish banks as well as historically low interest rate level. In December 2012, the average price per square metre of an old dwelling was EUR 2,162 in the whole country, EUR 3,459 in Greater Helsinki and EUR 1,653 elsewhere in the country.

Around 75% of Finnish households live in owner-occupied housing. Approximately 57% of those families have a housing loan. The average size of a loan is EUR 89,500, for those families who have a housing loan. Typical maturity for a new housing loan is 20 years.

At the end of 2012, the total housing loan portfolio stood at EUR 86 bn (44.2% of GDP), and the average annual growth rate in 2012 was +5.6%, which means a slightly declining trend. Decline in household borrowing reflects an increase in economic uncertainty as well as an upswing in unemployment.

In 2012, Finnish households were granted new housing loans for a total amount of EUR 19 bn, which translates to a monthly average of EUR 1.6 bn. This monthly average figure was 5% smaller than in 2011, when the new loans totalled EUR 20 bn.

In December 2012, the average interest rate on new housing loans in Finland stood at 1.84%, which is a historically low rate. Due to the high prevalence and low level of Euribor rates, interest rates on housing loans in Finland on average are considerably lower than in the euro area on average.

Mortgage Funding

Deposits are the main source of mortgage funding for Finnish banks. At the end of December 2012, credit institutions' deposit stock amounted to EUR 135 bn. About 60% of non-MFI deposits are overnight deposits, in practice deposits on current accounts. Deposits grew relatively rapidly in 2012: the non-MFI deposit stock grew by +6.6% on average.

The share of bonds as a funding source continued to increase in 2012. At the end of 2012, the stock of total debt securities issued by credit institutions stood at EUR 88 bn. The stock grew by 10% during the year, reflecting a strong increase in long-term bonds. The outstanding amount of bonds increased by EUR 11 bn during 2012 and the total bond stock stood at EUR 65 bn at the end of 2012. On the contrary, the stock of short-term debt securities, that is certificates of deposit, has been decreasing for several years. The stock of outstanding certificates of deposit (CDs) contracted in 2012 from EUR 26 bn to EUR 22 bn.

The importance of covered bonds as a funding source for credit institutions has increased notably in recent years. Covered bonds worth EUR 7.8 bn were issued in 2012, slightly less than last year. The covered bond stock stood at EUR 25 bn at the end of 2012. Deposit-taking banks have also been allowed to issue covered bonds since 2010. In Finland, no active RMBS markets exist.

| | Finland 2011 | Finland 2012 | EU27 2012 |
|---|-----------------|-----------------|--------------|
| Real GDP, growth (%) (1) | 2.8 | -0.2 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 7.8 | 7.7 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.3 | 3.2 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 81,781 | 86,346 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 18,778 | 19,707 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 71.1 | 72.9 | 81.8 |
| Gross residential lending, growth (%) (2) | 8.6 | -5.0 | n/a |
| Typical mortgage rate (%) (2) | 2.49 | 1.97 | n/a |
| Owner occupied rate (%) (4) | 74.1 | 74.1 | 78.3 |
| Nominal house prices, growth (%) (2) | 1.8 | 3.0 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

France

By Jean-Marie Gambrelle and Olivier Nicolas, *Crédit Immobilier de France*

Macroeconomic Overview

In 2012, the French economy was affected by two major elements: the French presidential election and the overall feeling of pessimism experienced by all economic stakeholders.

The presidential election delayed many individual and collective decisions, economic as well as political. Nonetheless, the economic and fiscal policy remained significantly unchanged. As a matter of fact, most state budget decisions will only impact on the French economy in H2-2013.

As the economy is stalling, the feeling of negativity is reinforced and companies and individuals are more likely to downsize or postpone their projects and investments.

This situation negatively impacted the housing and mortgage markets.

After 2 years of moderate growth (+1.4% in 2010 and +1.7% in 2011), French real GDP was stable (+0.0%) in 2012. It was thus moderately higher than the EU27 GDP growth (-0.3%).

2012 was clearly a difficult year with a GDP decrease in 3 out of 4 quarters. As regards the traditional drivers of GDP growth, inventory and final consumption were positively oriented only during the first quarter. Exports were positively oriented during H1. Consequently, all GDP components decreased somewhat during Q3 and Q4.

In such an environment, it is not surprising that unemployment in France rose steadily by 0.8 percentage point to reach 10.2%¹, notably amongst young people who experienced an increase of 3.4 percentage points.

In 2012, the inflation rate was +2.0% on annual average, slightly lower than in 2011 (+2.3%). Household income increased by +0.9% in real terms, but decreased by -0.9% once inflation-adjusted. The average-household income decreased by 1.9%, reflecting the increasing number of households.

The household saving rate decreased by 0.4 percentage point, to reach 15.9% on average.

The government deficit decreased for the second year in a row, to stand at 4.8%, mostly due to a rise in taxes.

Housing and Mortgage Markets

After reaching a peak in 2011 (805,000), transactions for existing homes decreased significantly to 709,000 units, i.e. a -12% decrease.

However, these figures have been affected by adverse state decisions. On one side, they were boosted by very high sales in January and February due to a change in fiscal regulations regarding real estate capital gains for property to rent or for leisure purposes. On the other side, they decreased significantly as 0% state-supported loans – which accounted for nearly one sale out of 4 – were restricted to new homes financing. Consequently, in 2012, the production of new homes was 53.2% lower than in 2011.

House prices decreased by 1.7% y-o-y. Prices are now stabilised in Ile-de France (-0.7 % y-o-y) and, for the first time in many years, in Paris (-1.0%). Previously, the growth rate was +8.6% y-o-y in Ile-de France (and +14% in Paris) at the end of 2011. In January 2013, y-o-y transactions only reached 665,000 units, hence a -17% variation.

The number of housing starts decreased by -19%, to 304,000 dwelling units. This figure is unlikely to be high enough to meet household growth. On average, rents grew by +2.2%, which is above the rate of inflation (+2.0%). Notably, rents for 5-room houses rose faster with a +3.1% increase.

The combination of uncertainty over economic decisions preceding the presidential election, the economic downturn inducing low confidence and restricted access to 0% state-subsidized loans all led to a significant decrease in the sale of new homes (apartments and houses) by developers: -18% (86,000 units).

Nevertheless, prices for new homes, especially apartments, are still increasing, even if moderately (+0.8%), as new regulations boosted construction costs (energy efficient buildings)

Since the number of sales (new and existing homes) is still decreasing, prices remain somewhat stable.

Based on diverse research, the French mortgage market is influenced by 3 major factors. Financial terms, notably interest rates, remain historically attractive, since the average rate was close to 3.2%.

However, this situation partly stems from a shortening in mortgage loans' initial duration. The share of mortgages with an initial duration of 25 years or more has decreased from 24.2% in 2011 to 18% in 2012, while 15-year mortgages are more frequent.

As regards the way buyers and sellers interacted in 2012, the latter clearly adopted a "wait-and-see" approach. Most of them decided not to accept offers which were much below their initial selling price. Simultaneously, potential buyers, especially the less affluent ones, faced harder lending requirements and progressively took into account lower real estate gain expectations. In such circumstances, younger households are becoming less sizeable in the market share: they accounted for 47.6% of new housing loans in 2012 vs. 52.4% in 2007, whereas high revenue households are more frequent.

The average initial deposit increased significantly for the third year in a row (by +4.1% in 2012 vs. +9.8% in 2011 and +6.4% in 2010), an indication that new mortgage subscribers are becoming increasingly affluent.

Thus, gross residential lending decreased for the second year in a row, to 106,525 bn euro in mortgages outstanding, compared to 136,253 bn in 2011, a -21.8% decrease after a -7.4% decrease in 2011.

Mortgage lending did decrease at the same rate for both new and used home segments. Renovation was hit moderately harder (-26.8%), due to a change in fiscal policy for this segment.

In November and December, purchases are usually boosted for fiscal reasons. Owing to the growing instability over recent years in the tax measures for real estate, promotion campaigns in the real estate and financial sectors encourage taxed households to take advantage of a specific fiscal package which is likely to disappear on the 31st of December. As a consequence, the volume of housing transactions for new dwellings generally swells in the last quarter.

Banks have seemingly adopted a wait-and-see behaviour. They offer low interest rates but request perfect financial profiles from would-be purchasers. Aggressive campaigns to get customers from competitors through re-mortgaging have been stopped.

Simultaneously, during Q4 2012, the total residential loans outstanding increased by 1.2%. Yearly growth amounted to +3.7% but is slowing down. Residential loans outstanding evolved quicker than GDP.

¹ 10.6% including overseas territories.

Mortgage Funding

The French household saving ratio is high compared to European standards, with French households' liquidity being sufficient to fund the total outstanding loans subscribed by households. The total household liquidity in bank accounts (current accounts and savings accounts with time deposits included) rose by +4% in 2012, to EUR 1,127 bn.

However, the fast growth of residential outstanding loans since 2000 strongly reduced the liquidity surplus, from EUR 271 bn in 2001 to EUR 51 bn in 2011.

Furthermore, part of these liquidities is used to fund public projects, notably through the bank "Caisse des Dépôts et Consignation (CDC)", which proposed two very popular tax-free saving accounts: "Livret A (or Livret bleu)" and "LDD". 65% of the liquidities used for public projects are centralised at the CDC (EUR 223 bn at the end of 2012). In 2012, the deposits on these accounts rose quickly for two reasons: yields are higher than inflation and are net of income and social taxes; the new government decided to increase the deposit ceiling from EUR 6,000 to EUR 12,000 for the LDD and from EUR 15,300 to EUR 19,125 for the "Livret A".

In 2012, household deposits grew by EUR 56 bn, but the deposits at the disposal of the banks increased by only EUR 20 bn. On the other hand, household loans outstanding increased by EUR 44 bn.

Consequently, deposits are no longer sufficient and the banks need to fund mortgage loans by bonds or by other funding possibilities like the Long-term refinancing operations (LTRO) of the ECB.

| | France 2011 | France 2012 | EU27 2012 |
|---|-------------|-------------|-----------|
| Real GDP, growth (%) (1) | 1.7 | 0.0 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 9.6 | 10.2 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.3 | 2.0 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 843,200 | 874,000 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 16,421 | 16,939 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 61.7 | 63.0 | 81.8 |
| Gross residential lending, growth (%) (2) | -7.4 | -21.8 | n/a |
| Typical mortgage rate (%) (2) | | | n/a |
| Owner occupied rate (%) (4) | 58.0 | 58.0 | 66.8 |
| Nominal house prices, growth (%) (2) | 3.7 | -1.9 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Germany

By Thomas Hofer, Association of German Pfandbrief Banks

Macroeconomic Overview

The upturn of the German economy was interrupted in 2012. Gross Domestic Product (GDP) increased in real terms by +0.7% y-o-y (after +3.0% in the previous year). The economic activity suffered a noticeable dampener caused by a weakening of demand. Especially declining exports and investments in machinery and equipment were the main drivers behind the subdued development. Despite the economic slowdown, the labour market remained robust. The unemployment rate continued to decline somewhat and reached 5.5% in 2012. Growing wages, assumed low risk of unemployment, favourable financing conditions and the positive sentiment among private households all combined so as to make investment in housing more attractive.

Housing and Mortgage Markets

In 2012, residential investment and construction activity grew at a slower pace than in the previous year. Residential investment increased by +2.8%. The number of building permits rose by +5% on the previous year. The number of transactions has been relatively stable for several years. Since housing market activity picked up, transactions increased by +8% to 613,000 in 2012.

The growth of construction and transaction activities has been accompanied by increasing residential lending. In 2012, gross residential lending rose by +8.2% y-o-y. The volume of residential loans outstanding amounted to EUR 1,185 bn, which corresponded to an increase of +1.8% on 2011.

Prices for residential properties continued to rise in 2012. The Price Index for Owner- Occupied Dwellings published by the Association of German Pfandbrief Banks (vdp) increased by +3.1% on 2011. Equally, both sub-indices recorded positive developments: prices for single family houses and for condominiums increased by +2.7% and +3.9% respectively.

For almost one decade (2000-2009), housing construction declined year by year. The completion of new dwellings has fallen to a level lower than the number of new households entering the housing market. Especially in economically prospering cities the number of inhabitants has seen strong growth in recent years. This development has led to shortages and rising rents in several regional markets. In parallel with this, interest rates for residential mortgage loans have experienced a strong decrease. In 2012, mortgage interest rates in Germany were again lower than in the previous year. The typical mortgage rate went down to 2.99% from 3.91% in 2011. The combination of rising rents, falling interest rates and the shortage of lucrative alternative investments has resulted in a pronounced increase in demand for houses, especially in the larger dynamic cities.

Although the prices for residential properties have gone up, the affordability of owner occupied housing has not been negatively affected. This is because the rise in prices has been outweighed by the decline in interest rates and by a rise in incomes. A study on the financing structures of home ownership creation conducted by the Association of German Pfandbrief Banks in 2012 shows that the main characteristics of mortgage loans for house purchases have been rather stable. The house-price-to-income-ratio went up slightly from 5.6 in 2009 to 5.7 in 2012. The debt burden ratio (monthly debt service in relation to the net household income) declined from 27% to 23% during the same period. Since alternative investments seem less attractive, buyers used more own capital than in 2009. Hence the average LTV was 71%, which was even a little bit lower than in the previous study (74%).

Mortgage Funding

In Germany, the main funding instruments for housing loans are savings deposits and mortgage bonds. Germany has the largest covered bond market in Europe, accounting for almost one quarter of the total market. The market for mortgage bonds is also strong in Germany and accounted for almost one eighth of the total EU market.

In the year under review, *Pfandbriefe* totalling EUR 56.6 bn were brought to the market (in 2011 the figure was EUR 72.8 bn). Public *Pfandbriefe* worth EUR 14.3 bn were sold (EUR 31bn in 2011), and mortgage *Pfandbriefe* sales accounted for EUR 38.5 bn (EUR 40.9 bn in 2011). Ship and Aircraft *Pfandbriefe* worth EUR 3.6 bn were issued in 2012 (EUR 0.9 bn in 2011).

As repayments exceeded new sales, the outstanding volume of *Pfandbriefe* decreased to EUR 524.9 bn in 2012 (from EUR 586 bn in 2011). Whereas the volume outstanding of mortgage *Pfandbriefe* decreased slightly from EUR 223.7 bn in 2011 to EUR 216 bn in 2012, Public *Pfandbriefe* experienced a strong decline from EUR 355.7 bn to EUR 301.1 bn. In 2012, Ship and Aircraft *Pfandbriefe* accounted for EUR 7.8 bn (EUR 6.6 bn in 2011).

| | Germany 2011 | Germany 2012 | EU27 2012 |
|---|--------------|--------------|-----------|
| Real GDP, growth (%) (1) | 3.0 | 0.7 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 5.9 | 5.5 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.5 | 2.1 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 1,163,783 | 1,184,853 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 16,820 | 17,065 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 66.5 | 66.2 | 81.8 |
| Gross residential lending, growth (%) (2) | 5.5 | 8.2 | n/a |
| Typical mortgage rate (%) (2) | 3.94 | 3.07 | n/a |
| Owner occupied rate (%) (4) | 45.8 | 45.8 | 66.8 |
| Nominal house prices, growth (%) (2) | 2.5 | 3.1 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Greece

By Theodore Mitrakos¹, Bank of Greece

Macroeconomic Overview

Over the past three years, Greece has made considerable progress in dealing with its twin - fiscal and external - deficits. The Eurogroup along with the Troika assess that programme implementation remains on track, while the Concluding Statement of the IMF Mission for the 2013 Article IV consultation highlights the magnitude of the adjustment effort undertaken, especially on the fiscal front, and stresses the need to pursue recovery built primarily on deepening structural reforms. The primary fiscal deficit as a % of GDP has fallen by more than 9 percentage points (excluding the net one-off costs of banking sector support) and the current account deficit by 12 percentage points.

The contraction of the Greek economy is into its sixth year, but there are some signs that confidence is returning. In 2012, real GDP contracted by -6.4% y-o-y, (Q4: -5.7%, Q3: -6.7%, Q2: -6.4% Q1: -6.7%) against -7.1% in 2011 and -4.9% in 2010. The cumulative fall in annual GDP during the current crisis, i.e. over a five-year period 2007-12, has come to 20.1% while unemployment now stands at 27% with the long-term unemployed accounting for over 65%. On the demand side private consumption in 2012 and 2011 fell in real terms by -9.1%, and -7.7% respectively, government consumption by -4.2% and -5.2%, and gross fixed capital formation fell dramatically by -19.2% and -19.6%. On the supply side, gross value added (at basic prices) at constant prices fell by -6.2% in 2012 and by -6.6% in 2011. On the income side, compensation of employees received by households and NPISHs fell by -12.8% in 2012 after having fallen by -9.1% on average in 2011, while compensation of employees paid by general government fell by -6.3% in 2012 and by -6.9% in 2011.

According to provisional estimates published by the National Statistical Institute in June 2013, real GDP fell by -5.6% y-o-y in 2013-Q1 while nominal GDP fell by -7.8% which implies a -2.3% fall in the GDP deflator (the private consumption deflator fell by -0.8%). On the basis of these figures for Q1 2013, the fall in real GDP mainly reflects the decrease in private consumption expenditure by -8.7% and gross fixed capital formation by -11.4% (reflecting a -34.5% fall in residential investment), as well as the decrease in government consumption by -7.0% and the decrease in exports of services by -12.4%. These developments were only partly offset by the overall improvement in the real external balance of goods and services.

Total employment fell by -8.0% in 2012, -6.8% in 2011 and -2.7% in 2010 (dependent employment fell by -8.5%, -7.5% and -3.0% respectively), while the unemployment rate rose from 12.5% in 2010 and 17.7% in 2011 to 24.3% on average in 2012. According to the last available figures from Labour Force Survey, in Q1 2013 total employment fell by -6.3% y-o-y and the unemployment rate reached 27.4% (equating with 1,355,000 people in absolute terms).

Inflation in Greece in 2012 dropped below the euro area average for the first time since Greece's entry into the eurozone. Disinflation can largely be attributed to the waning impact of indirect taxation and the deep economic recession, coupled with falling ULCs. HICP headline inflation followed a steady decelerating trend in the course of 2012 falling from +3.1% in 2011 to +1.0% in 2012 and -0.3% in June 2013, while core inflation (HICP excluding energy and unprocessed food) has been in negative territory since September 2012 and dropped to -1.6% in June 2013.

Housing and Mortgage Markets

The Greek housing market has been in recession since the end of 2008 with a continuous shrink, as medium-term expectations remain negative. It continues to be characterized by excessive supply and very low demand.

Reduced demand in the Greek housing market reflects household and business expectations for further decline in property prices and, mainly, increased uncertainty about employment and future returns. The more cautious and selective attitude of banks in granting new loans has also contributed to the decline in demand. Moreover, the significant increase of the tax burden on real estate during the last three years, in the context of the fiscal consolidation effort to increase the public revenues, is estimated to have significantly limited relative demand and intensified the recession in this market.

On the supply side, the Greek housing market continues to show excessive supply, combined with a large stock of unsold property and dramatic reduction in the number of real estate transactions. Indeed, according to the National Statistical Institute data collected by notaries throughout the country, the number of sales acts in real estate fell from 158 td in 2008 to 136 td in 2009, 117.9 td in 2010 and 83.7 td in 2011 (with a Bank of Greece' estimation of about 45 td in 2012). Private construction activity in terms of building permits continues to show dramatic rates of decline (-10.9% in 2010, -28.4% in 2011, -36.9% in 2012 and -44.2% in Q1 2013), similar to the investment in total construction (-19.2%, -21.0%, -22.7% and -21.4% in 2010, 2011, 2012 and 2013-Q1, respectively). Business expectations in construction reached their lowest point in mid-2011 but have rebounded along with the general economic climate.

Based on data collected by the Bank of Greece from commercial banks, nominal residential property prices in Greece declined by -4.7% on average in 2010 and -5.5% in 2011, followed by a stronger decline of -11.7% in 2012 and -11.5% in Q1 2013. As a cumulated adjustment, house prices fell at a total rate of -29.4% in nominal terms since the beginning of the current financial crisis (Q3 2008 Q3 - Q1 2013) while a greater decline was recorded for «old» apartments (i.e. over 5 years old), as well as for the two major urban centers, Athens and Thessaloniki, compared to other regions. According to data broken down by geographical area, apartment prices have declined y-o-y in 2012 by -11.8% in Athens, -13.4% in Thessaloniki, -10.9% in other cities and -11.7% in other areas of Greece (Q1 2013: -12.6%, -8.2%, -11.0% and -10.9% respectively). It is estimated that the rate of change of nominal property prices will remain in negative territory in 2013 as well as in 2014. The prospects for recovery in the Greek real estate market depend, inter alia, on improving business' and households' expectations, improving bank financing conditions, containing uncertainty, boosting the recovery prospects and reducing tax burdens on real estate. However, this recovery is also directly linked to the overall prospects of successfully dealing with the fiscal and structural problems of the Greek economy.

After steadily decelerating since 2008, the volume of credit to the private sector contracted in the last three years. This decrease can be partly attributed to a reduced demand for credit as a result of the economic recession, and the liquidity squeeze experienced by commercial banks, as the loss of confidence has grown noticeably, stemming from the fiscal crisis and the significant losses inflicted on banks by sovereign debt restructuring measures. Credit expansion remains negative and both supply and demand side developments point to a further negative path, even though its pace has moderated in the first months of 2013, mainly due to the positive impact of the inflows of deposits in the Greek banking system. The outstanding balances of loans from domestic MFIs to households (end of period amounts, including loans and securitised loans) declined at an annual rate of -1.2% in 2010, -3.9% in 2011, -3.8% in 2012 and -3.8% in May 2013. The respective annual changes for housing loans were -0.3%, -2.9%, -3.4% and -3.1%. The annual growth rate both of corporate loans and of loans to households bottomed-out around mid-2012 and since then have been gradually becoming less negative. Lending rates reversed course and started declining at certain periods of time from mid-2011 for different loan categories (interest rate on bank loans 7.02% in October 2011, 6.29% in June 2012 and 5.78% in March 2013). One important factor behind this development is likely to have been loan restructuring.

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

The strong economic 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 (i.e. +10.0% in 2010, +14.9% in 2011, +21.8% in 2012 and +22.9% in Q1 2013, end of period data from Bank of Greece), despite the increased attempt of commercial banks to restructure loans in order to avoid new capital losses. According to the Hellenic Bank Association data up until the end of 2012, commercial banks in Greece have restructured more than 250 td housing loans.

Mortgage Funding

The Greek banking system during the current crisis lost about EUR 90 bn of its deposits. However, deposit flows of non-financial corporations and households became virtually consistently positive after June 2012 and about EUR 15 bn of deposits returned to the banking system as perceived redenomination and bank default risks abated. Moreover, recourse to central bank financing by commercial banks has been gradually declining since mid-2012, reflecting among others deposit inflows and deleveraging (from June 2012 to May 2013, the total central bank financing of commercial banks decreased by EUR 47 bn).

Developments in credit to the domestic private sector are expected to remain negative during the rest of 2013, as the weakness of economic activity is dampening demand for loans. According to the Bank Lending Survey results for Q1 2013, acceleration in tightening of credit standards for housing loans is reported, mainly through a reduction in the loan-to-value ratio. The main factor explaining the tightening is banks' expectations of economic developments including the housing market. The demand for loans subsided, mainly reflecting adverse housing market prospects. Acceleration is also reported in tightening of credit standards to enterprises mainly through stricter loan covenants. The most important factor behind this development was the capital-cum-liquidity crunch. The decline in the demand for loans also accelerated, as reduced financing needs for fixed investment offsets the positive effects on the demand for bank credit of the lack of internal funds and of the need to refinance so as to restructure outstanding debt.

| | Greece 2011 | Greece 2012 | EU27 2012 |
|---|----------------|----------------|--------------|
| Real GDP, growth (%) (1) | -7.1 | -6.4 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 17.7 | 24.3 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.1 | 1.0 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 78,393 | 74,634 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 8,286 | 7,901 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 52.5 | 55.6 | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 4.28 | 3.32 | n/a |
| Owner occupied rate (%) (4) | 80.1 | 80.1 | 66.8 |
| Nominal house prices, growth (%) (2) | -5.5 | -11.7 | n/a |

Notes:

- (1): Source: Eurostat
- (2): Source: European Mortgage Federation
- (3): Source: European Mortgage Federation; Eurostat and EC (AMECO)
- (4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Hungary

By Gyula Nagy, FHB Mortgage Bank

Macroeconomic Overview

The Hungarian economy turned into recession in 2012 featuring a -1.7% GDP contraction in contrast with 2011, when the economy was still growing (+1.7%).

Both household consumption and public consumption have decreased (-0.73% and -0.5% respectively). Gross fixed capital formation was negative for the 4th consecutive year in 2012 (-0.69%).

The only positive trend was shown in the export sector, as net exports grew by +1.73% in 2012.

In Q1 2013, some – long awaited – good news came at last, GDP has grown by +0.7% compared to Q4 2012. Regarding the labour market in 2012, unemployment rate was 10.9%, slightly less than in 2011 (10.9%).

Households' income decreased (-1.0% decrease in nominal and -4% decrease in real terms) in 2012. The annual inflation rate (based on the consumer price index) was +5.7%.

The Central Bank base rate stood at 7.0% at the end of 2011. Benefiting from the good international investor sentiment during 2012, the Central Bank has decreased the base rate in small gradual steps to 5.75% by the end of 2012. In the first 5 months of 2013, a further one and a quarter percentage point decrease was introduced in 5 steps bringing down the base rate to 4.5% by the end of May 2013. As a result of the the government's policy set as priority to bring down the budget deficit, the budget deficit in 2012 was only 1.9%, which is acceptable when comparing Hungary to other EU countries and which allowed Hungary to be released from the EDP (Excess Deficit Procedure) of the EU in 2013. These strict corrective measures include posing taxes on banks and on the energy sector, the telecom tax, financial transaction tax etc.

As regards to government debt, it stood around 79.0% of the GDP at the end of 2012 down from 81.8% in 2010. The question, however, remains whether the first encouraging signs in the economy will remain for the rest of the year of 2013 and whether the economy will turn into positive territory, or the recession experienced in 2012 will remain.

Housing and Mortgage Markets

Hungary has a stock of approx. 4.4 million housing units. Hungary has one of the highest ownership ratio in the EU (above 90%), i.e. most of the dwellings are privately owned.

Around 60% of the houses were built before 1980 and only about 10% of the flats were built in the last 15 years. As a result, the quality of the existing dwelling stock is rather obsolete.

New house building in 2012 was at historical low since World War II. In 2012 altogether 10,560 housing units were built in Hungary and only 1,972 in Budapest.

As regards to the sales transactions on the housing market, experts were expecting a turning point in 2012, but after the temporary growth of transactions in Q1 2012 (as a result of the early repayments scheme), the number of transactions at annual level reached the absolute minimum of the decade. According to the latest information, the 73,400 transactions in 2012 (National Statistical Office data) did not even reach one-third of the transactions recorded during the peak in 2003.

The households' expectations regarding investments (i.e. buying and building houses) could only develop in case of a permanent improvement both in the employment conditions of the different labour market segments and in most geographic areas of the country. Such tendency has not been observed so far.

According to the 2012 FHB House Price Index data, house prices declined in 2012 by -2.2% (-7.4% in real terms) compared to the previous year. House prices have decreased in every year since 2008. However the rate of decline was slowing down between 2009 and 2011. The decrease of -2.2% recorded in 2012 was almost equal to the 2011 decrease.

The total outstanding residential mortgage loan portfolio decreased significantly in 2012 compared to the previous year (from HUF 6,905 bn to HUF 5,841 bn, a decrease of approx. -15.5%). Apart from the continuing deleveraging efforts of households, it was mainly a result of the early repayment scheme. The scheme was announced by the government in 2011 and lasted from September 2011 to April 2012. The main purpose was to allow debtors to repay their foreign currency (mostly CHF) denominated mortgage loans at a preferential exchange rate.

Around 56% of the outstanding mortgage loan portfolio was denominated in CHF before the start of the early repayment scheme (September 2011). The proportion decreased until the end of 2012 to 45%. The HUF proportion has increased during the same period from 34% to 46%. The scheme helped those families that were able to repay in a lump sum their FX (mostly CHF) mortgage loans, because the fixed exchange rate was approx 30% better than the actual CHF/HUF exchange rate. The difference in the exchange rate had to be financed by the lenders (i.e. banks).

This legislation temporarily stimulated also the refinancing activity, as some debtors financed the repayment from a new HUF denominated mortgage loan. Other debtors have sold their property to repay the FX mortgage loans at the preferential rate.

In the first half of 2012, the above factors were positively influencing the mortgage market, (growing remortgaging activities and increased property sales). However, in the rest of the year, the trend has turned into negative again. In the second half of 2012, the willingness of borrowing was almost completely absent from the market. Not only did the outstanding volume of loans shrink, but the number of new loans decreased further in the second half of the year.

New lending in foreign currency is prohibited by the government; therefore, new mortgage loans are issued only in HUF. To stimulate the mortgage market and to mitigate the negative effect of the high interest rates (above 10%), the government has introduced a new subsidy scheme from September 2012. Since the first results were not very encouraging (new lending did not grow in Q4 2012), the subsidy conditions were further improved from January 2013 (fixed proportional interest rate subsidy is granted for the first 5 years).

The "lump sum" house construction/house buying subsidy also known as "social subsidy for housing purpose" is also accessible for first time buyers. This government contribution currently starts from the amount of HUF 800 td, and, based on the number of children, the house's energy classification and size, it could surpass HUF 3 mn.

Share of non-performing loans (90 days past due) within the outstanding mortgage portfolio stood at around 20% for FX mortgage loans and at around 10% for HUF denominated mortgage loans at the end of 2012.

There were a series of negotiations and joint programs organized by the government and the Hungarian Banking Association for helping the mortgage debtors that had difficulties in servicing their mortgage loans. One of the ongoing program intends to help mortgage borrowers with FX currency exposure with the so called "Exchange Rate Cap Scheme". The program helps borrowers to cover themselves against future exchange rate risks for their future mortgage instalments. Although this voluntary entry in the program was planned to expire at the beginning of 2013, it is further extended. Until February 2013, around 38% of all FX mortgage borrowers joined the scheme.

The establishment of the National Asset Management Agency (NAMA) was also aimed at helping borrowers that were unable to pay their FX mortgage instalments.

NAMA, who buys the properties of defaulted mortgage debtors from their lenders and rents it to the debtors at preferential rates, has finally started its activity in 2012. Until the end of the year, they purchased 600 properties, although 1970 offers were received during the same period from the financing banks. Participants hope that the program will accelerate in 2013. The budget allocated to this program would, anyway, allow the buying of approx. 10 td properties.

Mortgage Funding

Covered bonds are a common form of mortgage finance in Hungary. The legal act that was introduced for Mortgage Banks and Mortgage Bonds in 1997, helped significantly to establish the covered bond market and provided support to mortgage lending activity. Covered bonds were the main source of funding for HUF-denominated mortgage loans until 2005. Due to the increase in foreign-denominated mortgage lending (EUR and mainly CHF) from 2006 onwards, the proportion of covered bonds for mortgage lending started to decline, but covered bond finance to total mortgage loan portfolio still stood at 25% at the end of 2012. This proportion is higher for the HUF denominated mortgage loans: at the end of the year approx. 33% of HUF mortgage loans were financed by covered bonds. The overall covered bond volume (both HUF-denominated and foreign-denominated) at the end of 2012 amounted to HUF 1,447 bn (around EUR 5 bn). Its volume decreased by around -9% year on year.

Mortgage backed securities are not used for mortgage funding in Hungary.

Given the increased importance of foreign-denominated mortgage loans over the years, the importance of deposit funding or cost effective foreign funds from parent banks (in the case of foreign-owned banks) was quite significant before the outburst of the crisis, but this growing trend came to a halt in 2009.

The loan to deposit ratio of the banking sector in Hungary peaked at its maximum around 160% in January 2009. As a result of the financial crisis and due to the deleveraging efforts made by households and by the government, it decreased to around 115% by the end of 2012.

| | Hungary 2011 | Hungary 2012 | EU27 2012 |
|--|-----------------|-----------------|--------------|
| Real GDP, growth (%) (1) | 1.7 | -1.7 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 10.9 | 10.9 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.9 | 5.7 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 21,950 | 19,985 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 2,645 | 2,411 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 37.5 | 34.8 | 81.8 |
| Gross residential lending, growth (%) (2) | -7.4 | -6.2 | n/a |
| Typical mortgage rate (%) (2) | 10.59 | 12.77 | n/a |
| Owner occupied rate (%) (4) | 92.0 | 91.5 | 66.8 |
| Nominal house prices, growth (%) (2) | -2.1 | -4.0 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Ireland

By Anthony O'Brien, Irish Banking Federation

Macroeconomic Overview

The Irish economy grew for the second year in succession in 2012, following three years of contraction. Gross domestic product (GDP) at constant (2010) prices grew by +0.2% in 2012, building on growth of +2.2% in 2011, according to the Central Statistics Office (CSO). Growth is expected to continue, with the International Monetary Fund (IMF) and the European Commission (EC) forecasting GDP growth of about +1.1% in 2013 and +2.2% in 2014.

The troika of the IMF, EC and the European Central Bank (ECB) reported in May that Ireland's "economic program remains on track, the gradual recovery is continuing and there have been further improvements in market conditions for the sovereign and the banks. The authorities have made significant progress on financial sector repair and restoring sustainability to the public finances".

A general government deficit (GGD) of 7.6% of GDP is now estimated for 2012, well within the ceiling set by the ECOFIN Council of 8.6%, while a GGD of 7.4% is anticipated for 2013, according to the Department of Finance (DoF). A better-than-expected end-2012 fiscal position, the replacement of the Irish Bank Resolution Corporation (IBRC) promissory notes with long-term government bonds and the sales of interest-bearing stakes in the financial sector have all had an impact on the GGD estimates. General government debt is expected to peak at 123.3% of GDP this year, reducing to 110.8% by 2016.

The export sector, enhanced by improving competitiveness, continued to expand in 2012 and remains the key driver of economic growth. Total exports (merchandise and services) at current market prices grew by +6.5% in 2012, compared with +5.7% growth in 2011 and resulted in a trading surplus of EUR 39.3 bn, the largest recorded by the Central Statistics Office (CSO), which provides data from 1998 onwards. Services exports grew by +10.8% in 2012 and produced a services trading surplus for the first time. Solid export growth also contributed to a current account surplus for the third consecutive year, jumping from EUR 1,785 mn in 2011 to EUR 8,090 mn in 2012. The DoF expects strong export growth to continue through to 2016, producing growth in net exports of +1.0/+1.9% over that period.

The domestic economy continued to struggle. Personal consumption fell by -0.9% and forecasts for 2013 range from modest growth (+0.2%) to slight contraction (-0.5%). The volume of retail sales fell by -1.1% in 2012, which means that retail sales have contracted in four of the past five years. Retail sales volumes in 2012 were -14% less than the volume in 2008.

Construction output fell by -7.6% in 2012, according to Eurostat, whose figures indicate that construction activity last year was only 21% of its peak volume in 2006. Industrial production fell by -1.6% in 2012, with manufacturing production down -1.5%.

Government expenditure contracted for the fourth successive year in 2012, although the rate of contraction has been falling since 2009. The DoF expects the decline in government expenditure to slow from -3.7% in 2012 to -1.5% in 2015 before levelling off in 2016.

The standardised unemployment rate declined throughout 2012 from 15% in January to 14.1% in December, according to the CSO. Some 295,000 people were unemployed in the fourth quarter of 2012 down from 322,000 a year earlier. The labour force continued to shrink, -0.8% over the year ended Q4 2012.

The Consumer Price Index grew by +1.2% in 2012, following growth of +2.5% in 2011.¹ The nominal harmonised competitiveness indicator (HCI) - a nominal effective exchange rate for the Irish economy that reflects, on a trade weighted basis, movements in the exchange rate vis-à-vis trading partners - fell by 1.3% and the real HCI (deflated by consumer prices) fell by 1.9%, as Ireland's relative

competitiveness improved as a result of falls in relative prices and favourable exchange rate movements.

Housing and Mortgage Markets

The housing and mortgage markets experienced another challenging and volatile year against the difficult macroeconomic environment outlined above. Demand for home loans continued to be dampened by subdued consumer sentiment as the government continued with fiscal re-balancing measures such as expenditure cuts and changes to the tax system. However, the expiry of tax relief on mortgage interest payments for new buyers provided a short-term fillip to mortgage lending in the final months of the year.

The housing market began to stabilise in 2012. The stock of properties for sale fell below 50,000 for the first time since 2008, according to the property website daft.ie. The number of properties newly listed for sale in 2012 was 36,650, 18% fewer than in 2011.

The total number of new dwellings completed during 2012 fell by almost -20%, from 10,500 in 2011 to 8,500 in 2012, according to the IBF Housing Market Monitor. In Dublin, the fall was in line with the national average, with just 1,266 new dwellings completed in 2012, compared to almost 1,600 in 2011. However, in Munster, Connacht and Ulster, the fall in new construction during 2012 was closer to -25%.

New dwellings commenced fell by -7% to 4,359 and there was a clear distinction between trends in urban and rural areas. In Ireland's five cities, 910 new homes were started in 2012, more than double the 371 started in 2011. Elsewhere in the country, there were 3,125 new homes started in 2012, down almost one quarter from 2011, when almost 4,000 new homes were started.

There were some 23,350 residential property transactions in 2012, where the buyer paid the market price, some 36% more than in 2011. Dublin accounted for 35% of transactions in 2012 and the four commuter counties around Dublin for 13%. Elsewhere, Cork accounted for 11% and Galway for 5%. Only 13% of properties sold in 2012 were new, down from 26% in 2010. The growth trend has continued so far into 2013, with 14% more property transactions in the first three months of 2013 than in Q1 2012, rising from 3,900 to 4,450. This is the sixth consecutive quarter of y-o-y gains in the volume of transactions.

The speed at which house prices, based on transactions funded through mortgages, fell slowed considerably during 2012. House prices nationally fell by -17% in 2011 and by -4.5% in 2012. The apparent stabilisation in prices was stronger in Dublin, where annual falls eased from -19% to -2.5%, than in the rest of the country (where falls eased from -15% to -6%).

While there remains considerable supply of residential properties in most parts of the country, there are concerns that a shortage of suitable family homes (primarily three-bed semi-detached houses) may be developing in the capital.

The rural-urban divide in Ireland's property markets is also evident in the rental markets, where rent prices rose by about +2% nationally in 2012. Rents increased by +6% y-o-y in Dublin in 2012 and properties for rent are at their lowest levels since early 2007, according to the DAFT Rental Report, while average rents in Cork City and Galway City also rose. In Connacht-Ulster, there were five times as many properties available to rent as there were five years earlier and rents fell by -2.2% in 2012.

In terms of net lending, the trend of household deleveraging continued with the total amount of residential mortgage debt outstanding, including securitisations, declining from about EUR 131 bn in December 2011 to about EUR 127 bn at the end of 2012. However, the contraction in net lending (after repayments and other adjustments) slowed, with net lending down by -1.6% in the year ended

¹ The Irish harmonised CPI inflation rate published by Eurostat was +1.2% and +1.9%, respectively.

December 2012, compared with -2.5% a year earlier. More than half (51%) of the value of personal mortgages outstanding was on tracker rates linked to the ECB base rate, while a further 38% was on variable rates.

The number of approvals for house purchases increased substantially in 2012, rising by almost one quarter from just under 13,000 during 2011 to just over 16,000 during 2012. There was a noticeable peak in approvals in Q4 (up 40% y-o-y), driven by a rush to obtain loan approval and draw down funds before the deadline for tax relief on mortgage interest, which expired for new loans on 31 December 2012. All reliefs for current property owners will expire at the end of 2017.

There was also a clear spike in mortgage drawdowns in Q4 2012, up +73% on the same figure for 2011. For the year as a whole, the number of drawdowns for house purchase (first-time buyer, mover-purchaser or residential investment) rose by +28%, from 11,131 in 2011 to 14,160 in 2012.

The National Asset Management Agency (NAMA), which is the asset recovery vehicle for property development loan books of domestic lenders, launched its Deferred Payment Initiative in 2012. This aims to protect buyers from decreases of up to +20% in the value of their property over the following five years. By the end of 2012, sales had been agreed on over 100 of these properties with an aggregate value in excess of EUR 18 mn. The initiative will be extended on a phased basis during 2013 up to a maximum of 750 properties.

The government announced two new measures in December 2012:

- the introduction of a local property tax, payable by owners of residential properties, including rental properties, and based on the market value of the property as assessed by the owner;
- the development of a tax framework for real estate investment trust (REIT) companies, with the aim of developing a new source of capital for the rental investment market.

The difficult macroeconomic environment, and in particular the employment situation, continued to impact on the level of mortgage arrears for owner-occupied properties. The proportion of such mortgages in arrears of more than 90 days increased from 9% at end-2011 to 11.9% one year later. However, arrears of 91-180 days began to level off in 2012 and fell slightly in Q4 2012, indicating a slowdown in the growth of arrears. Some 18.9% of buy-to-let (BTL) mortgages were in arrears of more than 90 days.

Mortgage lenders are active in assisting borrowers who experience repayment difficulties which is demonstrated by the fact that more than 10% of owner-occupied mortgages and 14.5% of BTL mortgages had been restructured by the end of 2012. Some 53% of owner-occupied restructures and 62% of BTL restructures were performing and not in arrears. The Central Bank published a revised Code of Conduct on Mortgage Arrears (CCMA) in June through which it aims to strengthen the CCMA's protections for borrowers, while ensuring it allows for effective and timely resolution of individual arrears situations.

In 2012, banks began implementing their mortgage arrears resolution strategies (MARS) as they shifted from short-term management of arrears to long-term, sustainable solutions for mortgage customers. The Central Bank of Ireland (CBI) also set targets for participating banks to propose and agree sustainable or durable solutions for mortgage customers in arrears.

New legislation was passed in December to provide for new processes for dealing with debt and change the law on bankruptcy. The Act also establishes the Insolvency Services of Ireland which will implement the three new debt resolution processes: Debt Relief Notice (DRN) for debts of up to EUR 20,000, subject to a three-year supervision period, for people with limited assets and income; Debt Settlement Arrangement (DSA) for the resolution of unsecured debts over a period of five years; and Personal Insolvency Arrangement (PIA) for the agreed settlement of secured debt of up to EUR 3 mn and unsecured debt over a period of six years. The new service is expected to launch by mid-2013.

The CBI also announced a pilot scheme for the restructuring of secured and unsecured distressed consumer debt across multiple lenders in May 2013.

There were 604 repossessions in 2012, down from 608 in 2011. Some 68% of these were surrendered or abandoned with the rest repossessed on foot of a court

order. Repossessions remain low by international standards and the IMF and the EC have expressed concern at the length, predictability and cost of repossession proceedings. The government introduced the Land and Conveyancing Law Reform Bill 2013 to address an unintended consequence of the Land and Conveyancing Law Reform Act 2009 which had in certain cases the effect of restricting lending institutions from asserting their repossession rights.

More broadly, the government expects that domestic banking institutions, with strengthened capital positions and deleveraged balance sheets, will be better positioned to service the credit and savings needs of the domestic economy in the future.

Mortgage Funding

Mortgage funding conditions improved for Irish lenders despite the ongoing difficulties in European debt markets and the weak Irish economy.

Banks operating in Ireland (including both Irish-owned and foreign banks) continued to reduce their level of borrowing from the ECB. During December 2012 alone, the funding drawn via the ECB refinancing operations declined by EUR 4.8 bn to EUR 70.9 bn – its lowest level since September 2008, due in part to the recapitalisation of domestic banks, bank deleveraging and wholesale funding transactions, according to the DoF. Drawings from the ECB by Irish-owned banks (excluding IBRC) fell by -37% in 2012 to EUR 49 bn by year-end.

AIB and Bank of Ireland both issued three-year unguaranteed covered bonds in November 2012 with a combined value of EUR 1.5 bn. Some EUR 41.8 bn in mortgages outstanding were securitised at the end of 2012, down from EUR 50.2 bn a year earlier, according to the Central Bank of Ireland. In Q2 2012, banks in Ireland also issued residential mortgage-backed securities (RMBS) for the first time since Q4 2010, issuing €0.9 bn in RMBS. The government also planned to close the Eligible Liabilities Guarantee Scheme in 2013.

Competition for deposits remained intense in 2011, particularly in the retail sector, with banks offering attractive rates on longer-term deposit products. However, Irish-owned banks increased their deposits in Irish and international operations by EUR 15.7 bn or about +11.3% since the recapitalisation of the banks was completed in 2011.

| | Ireland 2011 | Ireland 2012 | EU27 2012 |
|--|--------------|--------------|-----------|
| Real GDP, growth (%) (1) | 2.2 | 0.2 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 14.6 | 14.7 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 1.2 | 1.9 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 130,568 | 126,744 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 37,456 | 36,412 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 155.1 | 140.7 | 81.8 |
| Gross residential lending, growth (%) (2) | -48.1 | 7.0 | n/a |
| Typical mortgage rate (%) (2) | 3.44 | 3.25 | n/a |
| Owner occupied rate (%) (4) | 70.0 | 70.0 | 66.8 |
| Nominal house prices, growth (%) (2) | -13.1 | -12.9 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Italy

By Marco Marino, Associazione Bancaria Italiana

Macroeconomic Overview

In 2012, Italy's GDP fell by -2.4%. The contraction of the Italian economy, both in the industrial and service sectors, was the consequence mainly of the deterioration of the sovereign debt crisis and the negative dynamics of domestic demand.

In 2012, all the components of domestic demand decreased. Private consumption, which provided a negative contribution to GDP (-2.6%), fell by -4.3%, reflecting the weakness in gross disposable income and weak prospects for the labour market; gross fixed capital formation, with a negative contribution to real GDP of -1.6%, decreased by -8.0%, while public spending fell by -2.9%, with a contribution to GDP of -0.6%. Changes in inventories also contributed negatively to the GDP performance (-0.6%). Net Exports continued to show a positive contribution to real GDP (+3.0%) and rose by +2.3% (y-o-y). Imports decreased by -7.7% reflecting the negative trend in domestic demand.

In 2012, the average employment rate in Italy reached 56.8% (down from 56.9% in 2011).

The unemployment rate increased from 9.6% (January 2012) to 11.2% (December 2012); regarding young people, the unemployment rate remained high, (36.6% in 2012, from 31.7% in 2011). However, in 2012, the average unemployment rate stood at 10.6% and remained lower than the average eurozone unemployment rate (11.4%).

The Industrial Production Index showed a decreasing trend during 2012, contracting by -6.5% in H2 with respect to the previous year. In December, the latest available data showed a slight increase of +0.4% compared to November.

The consumer price index rose to +3.3% on average in 2012 (+2.9% on average in 2011), with a slowdown recorded in the last three months of the year. Also, the core inflation index marked a decrease in the last months of 2012, from 2.4% in January to 1.7% in December. The production price index showed an average increase of +2.6% in 2012 (+5% 2011).

In 2012, public deficit decreased to 3.0% of GDP (from 3.8% in 2011), while the public primary balance stood at 2.5% of GDP (i.e. an increase of 1.3 percentage point compared with 2011). The debt to GDP ratio was, in 2012, around 127%.

Housing and Mortgage Markets

In 2012, the Italian real estate market recorded the worst result in terms of number of transactions since 2004.

More specifically, the housing transactions amounted to 444.018, with a reduction of circa -26% compared to 2011; in this context, house prices index of all residential properties that are purchased by households, both new and existing, fell by -2.7% compared to 2011.

The decrease of housing transactions recorded in 2012 involved all the Italian cities, regardless of their dimensions, and all the three macro geographical areas (Central, North and South of Italy). In particular, in the North-East area, the transactions registered the highest decrease, equal to -28.3%; in the North-West, the reduction of house sales was also elevated (-25.4% in comparison with 2011). In the Central and South areas, the decrease was respectively -26% and -21.5% y-o-y.

The aggregate value of transactions also recorded a significant decrease, equal to circa -26% y-o-y, in line with the negative trend of housing purchase. The reduction involved all the Italian Regions: in the North and the Central areas, the value decreased by around -27%, in the Islands by -28.1% and in the South by circa -22.2%.

The number of building permits issued for the construction of new homes continued to decrease, reaching 112,570 in 2011 (provisional data), with a reduction of -5.7% compared to 2010 and of -20.5% compared to 2009. In the first six months of 2012 (latest information available), around 45,500 new building permits were issued, which was 22% lower than in the same period of 2011.

In this context, the residential investments for new houses and extraordinary maintenance amounted to EUR 69,577 bn (i.e. a reduction of -4.5% y-o-y).

The analysis on the mortgage markets focusing on outstanding residential mortgage loans shows that, after the slight annual growth recorded in 2011 (+4.4%), the y-o-y growth rate stagnated throughout 2012 (-0.1%) and outstanding residential reached EUR 365,588 mn.

In terms of new lending, new mortgage activity for house purchase continued to decrease. In 2012, the gross residential lending amounted approximately to EUR 29 bn and registered a significant y-o-y decrease of -46% in comparison to 2011.

A number of factors led to this poor performance. Firstly, the decrease in gross lending reflected the marked contraction in the number of housing transactions, which decreased by -26% y-o-y, and the negative dynamic of the domestic demand. During the 2008-2012 period, the index of demand for new loans for house purchase continued to decrease, with the exception of 2010, when a moderate expansion was registered. In addition, numerous investment decisions of households have been postponed, as the labour market prospects worsened and the disposable income of households deteriorated. Finally, regarding one-off factors, the reintroduction, in January 2012, of a wealth tax on real estate property located in Italy (called "IMU" – the Italian acronym for "Unified Municipal Tax") is likely to have further depressed gross mortgage lending throughout 2012, mainly regarding to the "second home" purchase.

Against this background, the average LTV on new loans was about 67% at the end of 2011 and the average mortgage loan decreased to around EUR 126,000 by the end of 2012 (from EUR 136,000 in 2011).

Risk indicators remained stable. In September 2012 (latest data available), the low-risk arrears (1 to 2 months) fell to 1.8% of total outstanding loans compared to 2% in both September 2011 and September 2010; in the same period, the high-risk arrears (3 to 5-months) accounted for 1.3% of total outstanding loans, which has increased compared to the figures recorded in September 2011 (1.1%) and in September 2010 (1.2%).

The loan insolvency rate (calculated on the basis of more than 6 unpaid instalments) remained stable at 3.0%, while the default rate marked a slight increase, from 1.6% in September 2011 to 1.9% in September 2012.

Mortgage Funding

In 2012, the trend in funding activities in Italy showed signs of growth. More specifically, deposits of all Italian banks in euro, including resident customer deposits, recorded a rate of growth of +1.6% (+0.9% in December 2011), with a total increase of EUR 28 bn.

A focus on the various components shows that resident customer deposits grew by +6.2% (-0.4% in December 2011), while bank bonds decreased by -6.8% (+3.2% in December 2011).

The Italian covered bond market continued to grow. In 2012, covered bond issuances increased by +66% compared to the same period of the previous year: issuances amounted to more than EUR 58 bn, while the outstanding volume reached more than EUR 104 bn.

Regarding the securitisation market, in 2012, the volume of RMBS issuances was three times greater than in 2011, amounting to EUR 47 bn (22 deals). Almost all of ABS transactions in the Italian market were «retained» and used as collateral with the ECB.

| | Italy 2011 | Italy 2012 | EU27 2012 |
|---|---------------|---------------|--------------|
| Real GDP, growth (%) (1) | 0.4 | -2.4 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 8.4 | 10.6 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.9 | 3.3 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 367,645 | 365,588 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 7,215 | 7,147 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 33.5 | 33.9 | 81.8 |
| Gross residential lending, growth (%) (2) | -15.7 | -43.3 | n/a |
| Typical mortgage rate (%) (2) | 3.32 | 4.02 | n/a |
| Owner occupied rate (%) (4) | 80.0 | 80.0 | 66.8 |
| Nominal house prices, growth (%) (2) | 0.3 | -4.6 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Latvia

By Mikus Arins, Bank of Latvia

Macroeconomic Overview

The Latvian economy, being one of the hardest hit by the crisis in the EU, continued to recover in 2012. In 2011, real GDP increased by +5.5%, which was the third best attainment in the EU; in 2012, the economy continued to develop buoyantly and its growth rate was the highest in the EU (+5.6%). Private consumption supported by growing disposable income and improving household confidence increased by +5.4%. Increase in gross fixed capital formation decelerated in 2012 (increase by +12.3% compared to the +27.9% increase in 2011), mostly on account of both higher base and uncertainty surrounding future external developments. As exports (+8.3%) grew notably faster than imports (+2.9%), net export contribution was 2.0 percentage points in 2012.

The current account of Latvia's balance of payments in 2012 had a deficit of 1.7% of GDP (2.2% in 2011). The goods and services trade balance improved y-o-y, with its deficit standing at 3.0% of GDP. This was mainly triggered by a notable expansion of exports of goods, while import growth remained moderate.

In 2012, inflation decreased notably from +3.6% in January to +1.6% in December (+2.3% annual average), due to both global developments (slower annual average growth of global food and energy prices) and domestic factors (for instance, smaller impact of indirect taxes). The effects of increased demand on prices were set off by productivity and wages rising commensurately.

The situation in the labour market improved gradually – registered unemployment dropped by -1.0 percentage point over the year and stood at 10.5% of economically active population at the end of the year, while average wages and salaries increased by +3.7%.

In 2012, government balance continued to improve further and ran a deficit of 1.2% of GDP (down from 3.5% a year before), as tax collections were higher-than-planned. Public debt decreased to 40.7% of GDP.

Housing and Mortgage Markets

Overall, activity in the real estate market continued to increase – the total number of purchase contracts increased by +5.7% in 2012.

Residential housing market continued to recover in 2012, albeit at a slower pace than a year before – housing price index¹ increased by +3.8% on average (+9.9% a year before), mostly due to increase in prices for new dwellings (+14.3%). Growth in new dwellings' prices has two main driving forces. First, as households' income is recovering, demand for economy-class dwellings in recently-built apartment blocks increases. Second, demand from non-resident (non-EU) customers for upper-class apartments (apartments in recently built or renovated apartment blocks in the centre of the capital city) increased, partly as the amendments to the national law (effective

as of July 2010) allows non-resident customers to acquire a temporary permit of residence in Latvia if they invest into eligible projects, including real estate (lower bound for an eligible transaction varies from EUR 71 td to EUR 142 td depending on the region the property is located). As the supply of such apartments is quite limited, increased demand fostered rapid price growth of upper-class apartments. On the other hand, demand for older apartments still remains subdued, and the average price level is still low (approximately at 34% of peak prices). Although such apartments are relatively much cheaper than apartments in recently-built apartment blocks, potential buyers have to take into account extra cost of refurbishing or renovation of such apartments as their quality tends to be quite poor. Furthermore, credit institutions are still very prudent regarding easing of credit standards². The loan-to-value ratios on new loans remain relatively low. Therefore, buying a new apartment requires higher savings for the down-payment or additional collateral.

Since households' ability to purchase property remained relatively low, but income continued to grow, demand for better living conditions fuelled the increase of activity in the rental market – on average, level of rent asked increased by +9.6% (+5.6% a year before). The increase in rents also increased rental yields. Gross yield for renting an apartment in soviet-era building in the capital city increased to 7.6% (6.1% a year before).

Housing construction activity remained relatively low in 2012. Housing completions, after increase in 2011, decreased again by -21.6% in 2012. Construction of new housing grew by +2.7%; however, the growth was mainly due to the increase in construction of one-dwelling buildings³.

While activity in housing market continued to recover, the outstanding amount of mortgage loans to residents continued to decrease as loan amortisation significantly exceeded the amount of new mortgage loans. In 2012, the total amount of outstanding mortgage loans to residents (households and non-financial enterprises) decreased by -13.3%⁴ and stood at EUR 7.9⁵ bn or 35.8% to GDP. The amount of housing loans decreased by -10.7% and stood at EUR 5.4 bn or 24.2% to GDP.

Mortgage loans are predominantly EUR denominated – at the end of 2012, 92.6% of housing loans were EUR denominated (93.1% a year before). EURIBOR having decreased, effective interest rates on EUR-denominated housing loans⁶ decreased to an average of 3.66% in 2012 (4.12% a year before).

Mortgage Funding

Banks in Latvia fund their mortgage books mostly with deposit and funds obtained from parent banks. The importance of domestic deposits as a source of financing has been increasing for the last four years, and the share of domestic deposits reached 31.5% (up from 27.9% a year before) of the total banks' liabilities by end-2012, while the share of liabilities to foreign MFIs decreased to 19.3% (down from 22.8% a year before). At the moment there are no mortgage covered bonds issued by Latvian MFIs.

¹ House price index and changes, available on <http://www.csb.gov.lv/en>

² Bank of Latvia «Survey of Credit Institution Lending», available on <http://www.bank.lv/en/publications/survey-of-credit-institution-lending/3789>

³ Central Statistical Bureau «Construction and repair of residential, non-residential buildings and civil engineering structures», available <http://data.csb.gov.lv/DATABASEEN/rupnbuvm/Short%20term%20statistical%20data/17.%20Construction/17.%20Construction.asp>

⁴ Decrease in amount of loans outstanding was magnified by revocation of banking licences for two credit institutions – their housing loans were excluded from the banking statistics.

⁵ Bank of Latvia «Lending to resident financial institutions, non-financial corporations and households», available <http://www.bank.lv/en/statistics/data-room/main-indicators/mfi-balance-sheet-and-monetary-statistics>

⁶ Bank of Latvia «Weighted average interest rates charged by MFIs in transactions with resident non-financial corporations and households» available on <http://www.bank.lv/en/statistics/data-room/main-indicators/weighted-average-interest-rates-charged-by-mfis-in-transactions-with-resident-non-financial-corporations-and-households>

| | Latvia 2011 | Latvia 2012 | EU27 2012 |
|---|----------------|----------------|--------------|
| Real GDP, growth (%) (1) | 5.5 | 5.6 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 16.2 | 14.9 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 4.2 | 2.3 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 6,019 | 5,373 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 3,471 | 3,144 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 49.0 | 40.0 | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 4.12 | 3.66 | n/a |
| Owner occupied rate (%) (4) | 81.0 | 81.0 | 78.3 |
| Nominal house prices, growth (%) (2) | 9.8 | 3.8 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Lithuania

By Jonas Grincius, Parex Bank

Macroeconomic Overview

In 2012, the Lithuanian economy experienced a positive GDP growth of +3.6%, which was below the +5.6% growth of 2011. For 2013, a +3.0% growth is forecasted. Lithuanian exports continued to grow in 2012, by +14.5%, although the growth rate slowed down compared to the +28.8% growth in exports in 2011 and +33.2% in 2010. In 2012, retail turnover grew by +4.5%, but at a slower pace than in 2011 (+8.8%) and increased turnover was registered in a wide range of companies from food to the appliances sectors.

The unemployment dropped again in 2012 to 13% from 14.8% in 2011. The unemployment rate is forecasted to drop to 11.5% in 2013 and to 10% in 2014.

The annual inflation rate in 2012 was +3.2% after decreasing from +4.1% in 2011 back to the level of 2010. The forecast for CPI in 2013 is around +3.0%.

The Lithuanian currency, the litas (LTL) remains pegged to EUR. Lithuania aims to adopt the euro in 2015, thus the government is keen on meeting all the convergence criteria, which explains the efforts made to keep the already mentioned inflation and the deficit below 3%. The 3% budget deficit condition proves to be a difficult challenge considering the ambitions and election promises of the new left-leaning coalition government.

Housing and Mortgage Markets

The effects of the economic downturn of 2009 were still noticeable during 2012, although much weaker than in 2011. Flat prices in the capital of Lithuania – Vilnius dropped by -1.4% in 2012, after an increase of +0.7% in 2011, going down to the 2010 levels. Despite the negative trend, houses prices in the center and old town of Vilnius rose by +1-2%.

The statistical data for the construction and real estate sectors shows improving results. The majority of the new developments were located in the capital city of Vilnius, the number of newly-built apartments increased from about 800 in 2011 to about 2,000 in 2012.

The amount of outstanding housing loans to households decreased only by -1% in 2012, down to EUR 5,874 mn at year-end. Loan balances to households remained almost unchanged for the third consecutive year, with the last positive growth rate of +23.5% in 2008.

Total residential mortgages as a proportion of GDP were 20% in Lithuania in 2012, close to the levels recorded in 2010 and 2011.

Interest rates on new loans for house purchase fell slightly in 2012, as more banks returned to the mortgage lending business. The competitive landscape is quite fragmented as banks are offering margins ranging from 1.5% to 4%.

The weighted average interest rate on EUR denominated loans to households for house purchase was 3.00% in December 2012 (3.75% in December 2010). Most mortgages are denominated in EUR.

Mortgage Funding

In 2012, the two major sources of mortgage funding remained the interbank funding from parent banks of multinational banks and deposits. Restrained optimism about the economic outlook prevented banks from using other forms of funding. Owing to the conditions of the banking market in Lithuania, it should be assumed that deposits and funds from parent banks will remain the main funding source in 2013 for the banking sector in general and mortgages in particular.

| | Lithuania 2011 | Lithuania 2012 | EU27 2012 |
|---|----------------|----------------|-----------|
| Real GDP, growth (%) (1) | 5.9 | 3.6 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 15.3 | 13.3 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 4.1 | 3.2 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 5,934 | 5,874 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 2,359 | 2,371 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 30.2 | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | 24.0 | n/a | n/a |
| Typical mortgage rate (%) (2) | 3.71 | 2.97 | n/a |
| Owner occupied rate (%) (4) | 93.1 | 93.1 | 78.3 |
| Nominal house prices, growth (%) (2) | n/a | n/a | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Luxembourg

By Sylvain Bouyon, European Mortgage Federation

Macroeconomic Overview

After decreasing h-o-h in both semesters in 2011, real GDP recovered in 2012 and increased by +0.24% in H1 2012 and +0.56% in H2 2012. Overall, growth for the year 2012 stood at +0.3%, noticeably above the performance registered in the euro area (-0.6%). The Luxembourgish economy avoided recession mainly thanks to the counter-cyclical economic policy implemented by the government, which concentrated on public consumption and investment. The severe contraction in internal demand in the euro area (-2.1%) led to a sudden retrenchment of Luxembourgish exports, resulting in a negative contribution of net exports to real GDP (-1.4%). Despite the considerable merchandise trade deficit (13.2% of GDP in 2012), the current-account surplus remained the highest in the EU27, excluding the Netherlands, partly owing to the substantial service trade surplus. The value added at constant prices created by the financial sector¹ contracted by -3.7% in 2012; meanwhile, this value fell by -7.4% in the manufacturing sector, following a robust recovery in 2010 and 2011, and reached 66% of its 2007 level at end-2012.

Public deficit slightly deteriorated in 2012, pushed up by the noticeable expansion in government spending. However, public finances remained strong, with contained public debt in 2012 (20.5% of GDP) and an expected decrease in public deficit for 2013, as a result of the consolidation package adopted by the government within the 2013 budget. Against this backdrop, in April 2013, the ten year government spreads on the secondary market (versus Germany) were the lowest in the EU27.

Housing and Mortgage Markets

Nominal housing prices continued to grow at a steady pace in 2012, partly upheld by supply shortages for dwellings. Nominal house prices increased y-o-y by +7.6% in Q4 2012, +8.2 in Q4 2011 and +3.0% in Q4 2010. Gross fixed capital formation in dwellings increased by a modest +3.0%, while the number of issued building permits stagnated somewhat (-0.4%) at a relatively high level (4,307 units). This subdued performance in the construction markets could partially explain the substantial growth in nominal prices of new dwellings (+11.9% y-o-y in Q4 2012).

Outstanding residential lending expanded by +7.2% in 2012, mirroring the noticeable increase in housing prices (+7.6%) and the number of transactions (+11.7%). At the end of 2012, the yearly decline of 39 bps in the representative mortgage interest rate (reflecting both variable rate and initial fixed period rate up to 1 year) might have alleviated the negative effects of poor real GDP growth. Generally, the growth in outstanding residential lending remained close to trend levels observed in the two previous years (+8.9% in 2010 and +9.0% in 2011).

The last Bank Lending Surveys published by the European Central Bank draw a mixed banks' perception of mortgage activities in 2012. In reaction to rising banks' risk perception regarding the economic environment, lending standards have been gradually tightened thorough 2012 and stabilised only in Q1 2013. Demand for mortgage loans exhibited a saw-tooth profile in 2012 and Q1 2013, when it contracted in Q1 2012, increased in Q2 2012 and Q3 2012, declined again in Q4 2012 and significantly expanded in Q1 2013, partly reflecting q-o-q GDP growth, albeit with lags (q-o-q real GDP variations were as follows: -0.5% in Q4 2011; 0.0% in Q1 2012; +0.5% in Q2 2012; -0.5% in Q3 2012 and +1.6% in Q4 2012).

| | Luxembourg 2011 | Luxembourg 2012 | EU27 2012 |
|---|-----------------|-----------------|-----------|
| Real GDP, growth (%) (1) | 1.7 | 0.3 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 4.8 | 5.1 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.7 | 2.9 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 20,255 | 21,715 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 49,466 | 51,425 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 126.1 | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 2.25 | 2.14 | n/a |
| Owner occupied rate (%) (4) | 68.1 | 68.1 | 78.3 |
| Nominal house prices, growth (%) (2) | 8.2 | 7.6 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ The financial sector creates roughly one quarter of the national value added at constant prices and employs around 11% of the total labour force.

Malta¹

By Peter James Sant, Bank of Valletta plc

Macroeconomic Overview

Malta has shown remarkable resilience in the face of a major crisis in Europe, and its main challenge is to preserve this macroeconomic stability. Average growth of the Maltese economy has been the best in the euro area since the beginning of the crisis, and the unemployment rate remains one of the lowest in the EU. Labour market statistics for 2012 show that on an annual basis, employment continued to increase. Meanwhile, the unemployment rate based on the labour force survey declined slightly on an annual basis. In 2012, the labour supply stood at 185,426 with 173,456 employed. The activity rate was 63.6%, employment rate 59.5% and unemployment rate of 6.4%.

During 2012, real Gross Domestic Product growth continued to expand at a lower rate of +1.0% and remained below potential, reflecting a weak external environment and subdued domestic demand. Net exports provided the stimulus to growth as domestic demand declined owing to a fall in investment and inventories.

The fiscal position has deteriorated and the level of public debt is uncomfortably high, constraining the fiscal space for maneuver in the event of further shocks. The Maltese Government's deficit to GDP in 2012 was 3.3% compared to 2.8% in 2011, and the EU placed Malta under the excessive deficit procedure. The Maltese authorities plan to reduce the deficit under the 3% in 2013 and the initial indications are very encouraging. In fact, during the first five months of 2013, the shortfall between recurrent revenue and total expenditure of Central Government amounted to EUR 190.8 mn, down from EUR 234.4 mn in the corresponding period of last year.

Going forward, domestic demand is expected to become a larger contributor to economic growth. A moderate acceleration in real GDP growth is expected in 2013 -15, which means that Malta would continue to outperform the euro area average.

Housing and Mortgage Markets

The number of household dwellings in Malta is over 150,000. During 2012, the Malta Environment and Planning Authority approved the following number of permits: 2,489 for apartments, 2,489 for maisonettes, 202 for terraced houses and 75 for other structures. Residential permit data for the period under review shows an annual drop of -27.3%. This was reflected in declines of both one-dwelling and two and more dwelling residential permits of -12.5% and -29.9%, respectively.

Based on the Central Bank of Malta's Quarterly Review property price index, the average price of residential properties fell at an annual rate of -2.2% in the last quarter of 2012, following a drop of -1.2% in the previous quarter. On the other hand, for the whole year, the quarterly property prices increased on average by +0.5% y-o-y, as a rise in prices in H2 offset the declining trend in subsequent quarters. This marginal increase in the index was well below the increases recorded in the previous two years. The annual drop in the overall index during Q4 2012 reflected diverging movements in prices of different segments of the residential property market. Whereas prices for maisonettes and terraced houses increased on an annual basis, those for apartments and property in the "other" category, which consists of townhouses, houses of character and villas, dropped.

According to the Central Bank of Malta's Quarterly Review, the annual growth in loans to the non-bank private sector extended its downward trend, falling from +3.0% in September to +2.1% three months later. Once again, growth was entirely driven by lending to households. Nevertheless, y-o-y growth declined steadily during Q4 2012, reaching +5.2% in December compared with +5.6% in September. In turn, mortgage lending, which constitutes more than four-fifths of all loans to households, expanded at an annual rate of +6.7% in December, down from +7.0% three months earlier.

Interest rates paid by households (on mortgages) fell by 2 bps, reaching 3.39%.

Household debt has been increasing at a fast pace, but, starting from a low level, it remains below the euro area average. At the time of EU accession in 2004, household debt in Malta was relatively low by EU standards, standing at 45% of GDP. Since then, it has increased at a fast pace to peak at nearly 63% of GDP in 2011, broadly catching up with the EU average, before moderating slightly in 2012. This has, to a large extent, been driven by strong demand for loans for house purchases, typically granted at variable rates, and is reflected in the strong increase in house prices.

The loan-to-value ratio granted by banks was relatively low, at about 40%, until 2008, which helped to keep household debt in check. However, as demand for housing remained strong, the loan-to-value ratio for new loans has increased to between 70% and 80%. Demand for new mortgage and consumer loans has been more subdued recently, as evidenced by the results of the ECB's regular Bank Lending Survey, although it remains more dynamic than the average for the euro area.

Furthermore, the amounts of mortgages increased y-o-y by EUR 195.3 mn. The total number of outstanding housing loans with the commercial banks in 2012 amounted to EUR 3,088.2 mn.

Recently, the Maltese authorities have launched the new Global Residence programme, that will allow people who buy or rent a property in Malta and transfer their income to Malta to benefit from a residence permit.

Mortgage Funding

Practically, all mortgage loans originated by commercial banks are funded through local deposits. The loans to deposits ratio is around 70%.

| | Malta 2011 | Malta 2012 | EU27 2012 |
|--|------------|------------|-----------|
| Real GDP, growth (%) (1) | 1.7 | 1.0 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 6.5 | 6.4 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.5 | 3.2 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 2,914 | 3,111 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 8,496 | 8,996 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | n/a | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | 8.0 | n/a | n/a |
| Typical mortgage rate (%) (2) | 3.44 | 4.03 | n/a |
| Owner occupied rate (%) (4) | 80.1 | 80.1 | 78.3 |
| Nominal house prices, growth (%) (2) | 6.1 | -2.2 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ Sources of content: Quarter Review of the Central Bank of Malta, IMF Malta Report, National Office of Statistics, Papers Issued by DG Ecfm, Government of Malta web site

The Netherlands

By Sylvain Bouyon, European Mortgage Federation and Anneloes van Ulden, Nederlandse Vereniging van Banken

Macroeconomic Overview

In 2012, the contraction of -1.9% recorded in domestic demand pushed the Dutch economy back into recession. In Q2 2013, private consumption declined q-o-q for the tenth quarter in a row. This downward trend can partially be explained by the continuous q-o-q decline in house prices since Q4 2010, leading to wealth losses and lower consumer confidence. The expected deterioration of the labour market situation and real gross disposable income of households, as well as fiscal consolidation and decreasing prices is set to continue to weigh on household consumption in 2013. Following a robust recovery in 2011, gross fixed capital formation decreased by -4.0% in 2012, mirroring the steep contraction in construction activity. Despite being a drag for the economy in Q1 2012 and Q3 2012, next exports delivered a marginally positive contribution to GDP for the whole 2012.

Persistent public deficit keeps feeding into public debt, which reached 70.8% of GDP in 2012, namely 10 percentage points above its 2009 level. Nevertheless, the general government deficit slightly decreased in 2012, on the back of several consolidation measures such as the 2 percentage points increase in the standard VAT as of October 2012. According to the EC, further measures in 2013 are likely to be offset by the deficit-increasing impact of the nationalisation of the bank-insurance company SNS Reaal.

Housing and Mortgage Markets

In Q1 2013, nominal house prices decreased y-o-y by -8.4% for single-family dwellings and by -8.3% for all dwellings. Regarding the latter, the overall decrease was not spread equally across the 12 Dutch provinces, since it stood at -4.3% in Zeeland, -5.9% in Groningen, -9.3% in Noord-Holland (the province of Amsterdam) and -10.0% in Drenthe. Nevertheless, in comparison with the 2005 average, the differences across provinces were rather limited in Q1 2013, since house prices for all dwellings ranged between 85.1% (Noord-Brabant) and 91.7% (Zeeland), and 8 out of 12 provinces were between 86% and 89%.

Outstanding residential lending continued to grow at a sluggish pace, to stand at EUR 650.4 bn at end-2012. Gross residential lending declined by -25.6% in 2012, after expanding by a cumulative +38.1% in the period of 2010-2011. There was significant heterogeneity over time, since the q-o-q change in gross residential lending was -16.7% in Q1 2012, +15.0% in Q2 2012, -13.5% in Q3 2012 and +4.3% in Q4 2012. The figures for the two first quarters were nevertheless markedly distorted by seasonal effects, since the seasonally adjusted data were -5.6% in Q1 and +0.9% in Q2. The main factors behind the weak performance in gross lending were, on one hand, worsening consumer confidence and poor housing prospects, which both substantially dampened demand, and, on the other hand, depressed construction activities. Within the context of relatively high LTVs and contracting house prices, about 30% of households are locked in negative equity. Therefore, many households postpone the sale of their dwellings, contributing to this poor demand and the low level of transactions.

In 2012 and 2013, a package of measures has affected the dynamics of new residential loans. Some of these new rules have probably partially boosted new loans. For example, the transfer tax (stamp duty) was temporally reduced from 6% to 2% on 1 July 2011. With effect from 15 June 2012, it will remain permanently at 2%.

At the same time, most new measures are likely to dampen further new mortgage businesses. Since 1 January 2013, within the context of the fiscal consolidation implemented by the government, new mortgagees have to repay their mortgages

in full in 30 years and at least on an annuity basis in order to be eligible for tax relief. In addition, on 29 October 2012, the government adopted another measure under which, as from 2014, the maximum tax relief will be brought down from 52% to 38%, at an annual rate of 0.5 percentage point. Finally, in January 2013, legislative measures were introduced to gradually lower the loan to value ratio from 105% to 100%, at an annual rate of 1 percentage point¹

Mortgage Funding

Over the last years, one of the main concerns of Dutch mortgage banks has been to fill a large gap between deposits and loans. This gap remained large, mainly because Dutch savings are predominantly held in the country's pension funds and those funds invest most of their liquidities in assets outside the Netherlands. Furthermore, the market for RMBS has noticeably weakened in the context of the 2008-2009 financial crisis. As a result, mortgage interest rates remained relatively high on the Dutch mortgage market, in comparison with euro area counterparts, while borrowing rates for Dutch government bonds are among the lowest in the euro area.

In September 2013, the Dutch government was in negotiation with banks and pension funds to set up an institution that will sell mortgage bonds backed by the country's top credit rating.

| | Netherlands 2011 | Netherlands 2012 | EU27 2012 |
|--|---------------------|---------------------|--------------|
| Real GDP, growth (%) (1) | 1.0 | -1.0 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 4.4 | 5.3 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.5 | 2.8 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 644,450 | 651,200 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 48,280 | 48,460 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 223.1 | 227.4 | 81.8 |
| Gross residential lending, growth (%) (2) | 15.5 | -25.6 | n/a |
| Typical mortgage rate (%) (2) | 4.92 | 4.73 | n/a |
| Owner occupied rate (%) (4) | 55.5 | 55.5 | 66.8 |
| Nominal house prices, growth (%) (2) | -3.4 | -7.4 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ In 2012, the average market LTV in the Netherlands was about 70%.

Poland

By Agnieszka Nierodka, Mortgage Credit Foundation

Macroeconomic Overview

In 2012, Polish GDP increased by +1.9% in real terms, which represented a decline in comparison to 2011 results (+4.3%). The level of investments decreased by an estimated -0.8% y-o-y (a visible change reversal in comparison with last year's +8.5%), while domestic demand fell by -0.2% y-o-y (in 2011 domestic demand grew by 3.6%). According to estimations, Polish GDP growth may further slow down to 1.1% in 2013.

In 2012, the strongest contribution to GDP growth came from external demand, while domestic demand shrunk by 0.2% y-o-y and had a negative impact on GDP (-0.2%). In terms of sectoral activity, the fastest development was recorded in the service sector (added value growth of +3.0%).

In 2012, PLN-denominated exports in current prices increased by +6.9% y-o-y (amounting to PLN 597.1 bn), while imports grew by +2.4% (PLN 638.3 bn). The foreign trade deficit declined to PLN 41.2 bn at the end of 2012, compared with PLN 64.6 bn as of 2011.

According to Eurostat data, the unemployment rate in Poland grew in 2012, starting the year at 9.9% in January and ending at 10.4% in December. The employment rate in Poland amounted to 64.75% (as compared to 64.8% in 2011).

Inflation in Poland followed a downward trend through 2012, with the CPI in December 2012 decreasing to 2.4%. Core inflation net administered prices (HICP excluding administered prices) fell by -1.9% while core inflation net of most volatile prices (HICP excluding most volatile prices) rose by +2.3% (all y-o-y). The fastest growth was observed in prices of fuels which increased by +10.9%, with the fastest decrease observed in prices of clothing and footwear (-4.2%). Simultaneously, the producer price index grew by +3.3% y-o-y.

In 2012, Poland's budget revenues amounted to PLN 262.9 bn (an increase of +3.1% y-o-y in nominal terms), and expenditures amounted to PLN 293.4 bn (representing growth of +6.1%). The biggest input into revenues came from indirect taxes (around 64% of the total revenues), whereas the most significant expenditure was foreign debt servicing (around 11% of total expenditures). The budget balance in 2012 stood at PLN -30.5 bn.

Housing and Mortgage Markets

The number of building permits issued in 2012 amounted to approximately 165,000 units (representing a -10% decrease in comparison to 2011). Around 153,000 dwellings were completed in 2012 and about 142,000 were under construction (+17% increase and -12% decrease y-o-y, respectively).

The activity of the construction industry in 2012 was heavily influenced by the new Act on protecting the rights of housing units or single family house purchasers ("Developers' Act"), which came into force on 29 April 2012. A large number of developers decided to launch new projects before the new regulations entered into force, and thus the number of investments started in the following months of the implementation of the new regulation decreased. After a large number of new constructions started in Q2

2012 (particularly in April), the end of the year brought decreases both in the number of housing units under construction and in the number of new building permits.

Property prices (dwelling transaction prices) fell slowly but continuously on all regional markets. Without any further changes, the activity of the housing market will remain low, as dwellings are still hardly accessible at current prices – the number of square meters available for purchase for an average monthly salary was between 0.57 and 0.59.

At the end of 2012, there were over 1,732,000 residential mortgage loan contracts outstanding, with more than 196,000 new loans being granted in 2012. At the end of the year, outstanding residential debt exceeded PLN 316.3 bn. Around 95% of new lending in 2012 was PLN-denominated.

In 2012, mortgage market performance was heavily influenced by regulatory issues. First of all, at the beginning of the year, the Polish Financial Supervision Authority (KNF) amended Recommendation S, which introduced further restrictions in banks' lending policy. The new regulation restricted the FX loan installment rate to a maximum level of 42% of the client's net income (for PLN loans, DTI limits amount to 50/65%). Furthermore, if the mortgage credit's maturity exceeds 25 years, an amended Recommendation obliges banks to calculate the borrower's creditworthiness as if the loan were granted for 25 years. New provisions obviously lowered the clients' creditability for FX loans and caused changes in banks' credit policies in FX loans.

The second regulatory change was the termination of the State subsidy programme "Family on Its Own" at the end of 2012. This perspective obviously encouraged potential borrowers to take a mortgage loan until the end of the year. The growth in mortgage credit demand was especially visible in the last quarter when almost 16 td loans were granted under the programme (over 41% more than in Q3 2012). Additionally, at the end of 2012, there were over 26 td of subsidised loan applications waiting to be proceeded.

The quality of mortgage portfolios deteriorated in 2012. The share of housing loans overdue by up to 30 days increased by +13.4% in December 2012 (from +11.4% in December 2011), and the share of loans overdue by over 30 days increased by +10.6% (from +9.1%). Meanwhile, the share of NPL amounted to 2.8% (in comparison to 2.3% at the end of 2011). The main reasons for this performance were the maturation of mortgage portfolio, the deterioration of the labour market situation and the excessive credit risks taken by some customers.

During the first half of 2012, high inflationary pressures persisted in the Polish economy which resulted in maintaining a restrictive monetary policy. As a consequence, in May 2012, interest rates were raised by 25 bps. This course of action was changed however in the second half of the year and two interest rates cuts followed in November and December (of 25 bps each). At the end of the year the reference rate amounted to 4.25%.

Mortgage Funding

The Polish Financial Supervision Authority started to actively encourage banks to develop other sources of funding than deposit-based ones. However, the abolishment of the "specialised banks" principle is quite unlikely.

| | Poland 2011 | Poland 2012 | EU27 2012 |
|---|----------------|----------------|--------------|
| Real GDP, growth (%) (1) | 4.3 | 1.9 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 9.7 | 10.1 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.9 | 3.7 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 71,883 | 79,434 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 2,266 | 2,497 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 31.2 | 33.7 | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 6.60 | 6.98 | n/a |
| Owner occupied rate (%) (4) | 81.3 | 81.3 | 78.3 |
| Nominal house prices, growth (%) (2) | -1.7 | n/a | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Portugal

By Maria Lúcia Bica, Caixa Económica Montepio Geral

Macroeconomic Overview

In 2012, the Portuguese authorities continued the implementation of the Economic and Financial Assistance Program (EFAP) that was agreed in 2011 with the troika (European Commission, European Central Bank and International Monetary Fund) in order to reduce the public deficit, to maintain fiscal consolidation over the medium term up to a balanced budgetary position, implement structural reforms to improve economic competitiveness conditions and to restore market confidence.

This three-year EFAP requires a decrease in taxes and the implementation of restrictive monetary and fiscal conditions, the results of which have been monitored and evaluated on a quarterly basis by the troika. So far, the reviews and evaluations of the program implementation by the troika have been positive and satisfactory, with the quantitative performance criteria being met despite the revision of the fiscal targets and some delays in the structural targets.

In the context of fiscal consolidation and restrictive policies (namely the credit restriction combined with the ongoing global economic slowdown and the recession in the euro-zone economy), the Portuguese economy was negatively affected with GDP decreasing by -3.2% in 2012.

There was a sharp decline in the domestic demand components: private consumption and gross fixed capital formation have reinforced the downward trend, decreasing annually by -5.6% and -14.5%, respectively. The negative contribution of domestic demand to real GDP (-7.0%) was partly offset by the positive contribution of net exports (+3.9%), as exports increased and imports contracted.

The difficult financing conditions of the economy, the fall in consumer confidence indicators and economic climate indicator (figures registered in December 2012 were historical lows) have fostered the increase of households' savings rate, reaching 11.6% of disposable income in 2012 (9.1% in 2011).

The contraction of domestic demand, the increase in exports, the increase in savings and the reduction of the financing needs of the public sector resulted in significant progress in closing external imbalances. In 2012, there was a rebalancing of the external accounts, with the balance of current and capital account recorded a surplus of 0.8% of GDP, after deficits of 5.8% in 2011 and 9.4% in 2010.

However, the strong downturn in economic activity and consequent deterioration on the labour market resulted in an increase in unemployment which reached an historical maximum of 15.7% in 2012 (compared to 12.7% in 2011).

Housing and Mortgage Markets

In 2012, as expected, the activity of the housing market continued to decline, reflecting the difficult economic situation and its forecasts, as well as the particular restrictions of the EFAP agreed with the troika. Uncertainty and risks underlying the economic growth forecasts, credit restrictions and the high levels of indebtedness strained housing demand and, consequently, the house price index, both for new and used dwellings.

Residential house prices, for all dwellings, recorded a decrease of -2.2% in 2012.

Given the rising joblessness, higher household indebtedness, the increase of fiscal charges for homeowners, credit constraints by banks and lower expectations, a clear fall in demand for credit for house purchases was observed, which had the effect of pulling down the number of transactions of purchase and sale, giving more prominence to the rental market.

2012 saw a fall in the rate of home-ownership and a clearly higher demand for used dwellings which offer lower and more negotiable prices.

The recent revision of the rental market law has resulted in an increased interest from investors, namely international investors, on the Portuguese housing market, with a major impact on the promotion of residential tourism.

The combined factors of the current oversupply of houses, the connected drop in prices, the increase in construction costs as a result of the rise in expenses for resources such as goods, equipments, energy consumption and the higher taxation on transactions have all contributed to the downward trend in housing completions and the number of issued building permits. In 2012, both registered the largest annual rate of decrease since data is collected (-38.6% and -30.0%, respectively).

The mortgage lending market continued its downward trend with the total outstanding residential loans registering an annual rate of change of -3.0% in 2012.

The requirements imposed on the eight major Portuguese banks under the Economic and Financial Assistance Programme such as the deleveraging process, with medium term targets (credit to deposits ratio of 120% by the end of 2014) and higher capital requirements (a core tier 1 ratio of 10%), to maintain the banks' liquidity and preserve stability, have contributed to the decline of housing market lending.

The combination of the contraction in economic activity, continued rise in unemployment, higher household indebtedness and higher weight of mortgage loans over GDP, together with higher charged spreads by banks in an uncertain and riskier environment have contributed to a clear fall in credit demand for house purchases. Gross residential lending (which concerns new loans granted) registered historical lows in 2012, reaching EUR 1,935 mn and an annual rate of change of -60.1%.

The described economic conditions were reflected in the worsening of households' financial conditions and in the increase of non-performing loans, which led to the publication of specific legislation that established an extra protection plan for families with credit for housing, who are in a very difficult economic situation. This is to promote proactive monitoring and solutions and responsible lending in a context of negative economic outlook, lower disposable income and higher risk.

Mortgage Funding

Since mid-2012, tensions in the international financial markets have been easing with the contribution of European Central Bank's (ECB) non-conventional policy measures and a better evaluation of sovereign debt risk from market operators and as a consequence of fiscal consolidation results.

Since then, a significant reduction of public debt yields has been observed, but, despite several issuances, access to the financial international market for Portuguese banks is not yet normalised.

In this market situation, the ECB funding still plays an important role in the funding structure of banks, despite the reduction observed in 2012.

Nevertheless, Portuguese banks improved their liquidity situation through the deleveraging process, increased capital requirements and took advantage of higher household savings, recovering customer deposits as the main source of funding.

The implementation of measures that ensure responsible lending and positive reaction from financial markets, allowed the use of instruments of funding covered by mortgage at mid-2012.

| | Portugal 2011 | Portugal 2012 | EU27 2012 |
|---|------------------|------------------|--------------|
| Real GDP, growth (%) (1) | -1.6 | -3.2 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 12.9 | 15.7 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.6 | 2.8 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 113,916 | 110,520 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 12,987 | 12,612 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 91.1 | 89.2 | 81.8 |
| Gross residential lending, growth (%) (2) | -52.0 | -60.1 | n/a |
| Typical mortgage rate (%) (2) | 3.74 | 3.89 | n/a |
| Owner occupied rate (%) (4) | 73.5 | 73.5 | 78.3 |
| Nominal house prices, growth (%) (2) | -0.2 | -2.2 | n/a |

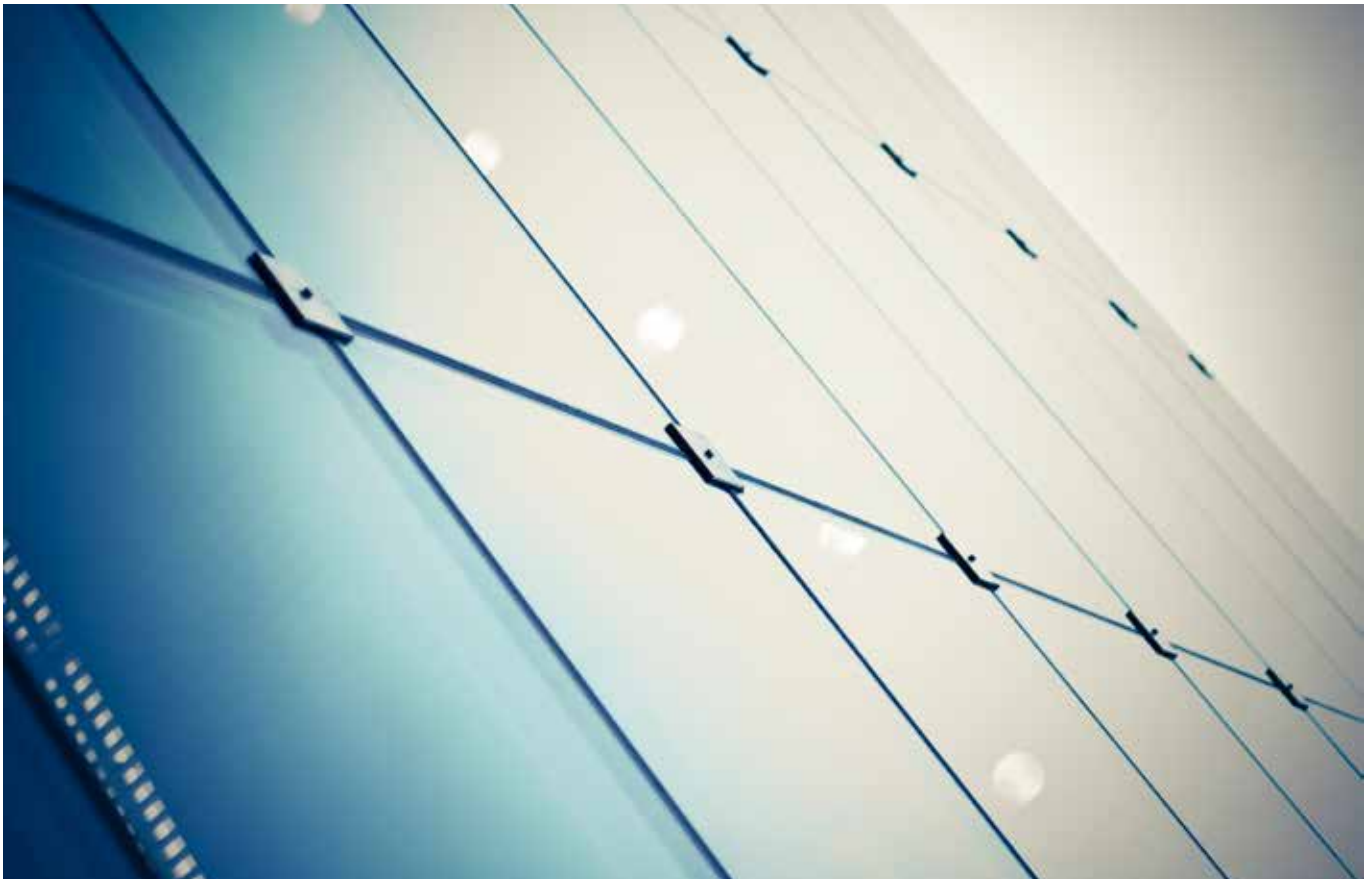
Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).



Romania

By Stefan Dina, Romanian Banking Association

Macroeconomic Overview

Last year, Romania's economy had a growth of +0.7% in real terms, compared to 2011, while the real quarterly GDP dynamics oscillated y-o-y between -0.5% and +1.9% in 2012.

There was a pickup of economic activity in Q4 (increase by +1.1% of the real GDP against a drop by -0.5% in Q3), generated by the intensification of the internal absorption dynamics – due to the consumption demand. As regards external demand, although the exports of goods and services continued to shrink, the negative contribution of the net position in the real GDP dynamics narrowed visibly, compared to the previous quarter, considering the more significant drop of imports of goods and services, according to the data of the National Institute for Statistics. As regards domestic demand, positive dynamics were registered only in final consumption of households, which was insufficient to compensate for the contraction of the gross government fixed capital formation. The year-end marked some consolidation of the upward trend of the unemployment rate, which stood at 5.6%.

Romania's public debt increased to 37.8% of the GDP in 2012, according to the Eurostat data. Last year, the weight of the government deficit against the GDP stood at 2.9%.

The annual inflation rate stood at +5.0% at the end of 2012, outside the variation range of $\pm 1\%$ around the annual target of +3.0%. The correction of volatile food prices, the downward trend of the international crude prices and the appreciation of our national currency against the euro served the curbing of the annual inflation. The adjusted CORE2 inflation rate is forecasted to have a downward trend, from +3.3% at the end of 2012, to a minimum of +2% at the end of 2013.

The non-government credit balance granted by credit institutions shrank last year compared to the end of 2011 (-3.5%, variation in real terms) to RON 225.9 bn (EUR 51 bn), in the context of the deterioration of expectations as regards economic recovery, and banks' increasing concern to adjust their own balance sheets, contemplating a possible persistence of disintermediation in the euro area.

This development was generated by the increase of +3.8% in the lei component (-1.1% in real terms) and the drop of -0.2% in the foreign exchange component denominated in lei (denominated in euros, foreign exchange credit shrank by -2.6%).

According to the National Bank of Romania, the shrinking of household credit was mainly related to the contraction of consumer credit (up to -10.8%), but the halving of the annual growth rate of mortgage credit also represents a significant factor (up to +5.8% compared to the end of 2011) in this trend. Stricter lending standards and terms provided by banks during the year, required by the most recent regulations, discouraged lending denominated in foreign currency for debtors exposed to foreign currency risk, and incentivised growth of consumer credit.

Housing and Mortgage Markets

According to the latest breakdown by housing ownership results, private property has maintained its leading position, with 98.2% of all conventional dwellings (97.5% in municipalities and towns, and 99.1% in communes), followed by state property which accounts for 1.5% (2.1% in municipalities and towns, and 0.7% in communes); other forms of property account for the remaining of 0.3% of the total number of conventional dwellings.

The number of houses built in 2012 dropped by 1,890 compared to 2011, to 42,566. The number of residential construction permits issued in 2012 was 37,863, 4% lower than in the previous year. The number of real estate transactions increased in 2012, reaching 471,432.

As for the average selling property prices, according to some unofficial statistics and analysis, by the end of 2012, property prices hit their lowest level in the last 5 years (absolute terms), reaching EUR 978 per square meter (based on figures released by real estate firm, imobiliare.ro). For comparison, in 2011, also a relatively stable year in real estate, the prices recorded a -4.0% decrease. Furthermore, residential property prices evolved differently across the country. By the end of December 2012, in the southeastern side of the country, in the city of Constanta, the price per square meter reached EUR 856, while in the West of the country, in Timisoara, the average selling price was of EUR 785 per square meter. In Bucharest, at the end of last year, the average selling price dropped by -3.5% compared y-o-y, to EUR 1,138 per square meter.

The stock of housing credit stood at RON 37.168 bn (EUR 8.4 bn) at the end of 2012. As regards mortgage credit, in 2012 a more pronounced increase of the lei component against the foreign exchange was experienced, the exposure before the latter being high (95.1% against total mortgage credit). On the one hand the household segment was supported by the «Prima casă» ('First Home') government programme. On the other hand, lending standards were characterized by many restrictions in the last quarter of 2012 leading to tighter standards on mortgage credit applied by banks, according to a survey conducted by the Romanian Central Bank (NBR). Expectations regarding the general economic environment further stricken mortgage lending.

As in previous years, over 95% of mortgage loans was foreign currency-denominated. The interest rates applied to mortgage loans denominated in foreign currency were lower than the interest rates on RON-denominated mortgage loans. Therefore, borrowers opted for foreign currency-denominated mortgage loans, so as to access larger amounts of mortgage credit.

As regards the total stock of mortgage credit, the LTV (loan to value) value grew marginally in Q4, to 82%, from 81% in the previous quarter.

The average indebtedness registered slight changes in Q4 2012 for the new loans granted standing around 46%, while if we contemplate the total real estate credit portfolio, it remained relatively unchanged, namely about 50%. As for real estate credit and for consumer loans secured with mortgages, the average loss given default (LGD) for loans is around 20%, for real estate and consumer loans it is around 30%.

Mortgage Funding

In 2012, most of the mortgage loans were funded by deposits and private financial institutions.

The banking community of Romania has initiated steps to raise the awareness of the authorities regarding the need to align the legal and institutional framework, so as to allow the issuance of mortgage-backed bonds. This could help raise resources with longer maturities and at lower costs. Romania is the only country in the EU that does not have such an issuance set forth by law, although the outstanding amount of mortgage loans of about EUR 7.8 bn is above the amount recorded in several countries where, paradoxically, the issuance of mortgage-backed bonds is allowed.

| | Romania 2011 | Romania 2012 | EU27 2012 |
|---|-----------------|-----------------|--------------|
| Real GDP, growth (%) (1) | 2.2 | 0.7 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 7.4 | 7.0 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 5.8 | 3.4 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 7,711 | 8,736 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 435 | 494 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 10.5 | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 5.61 | n/a | n/a |
| Owner occupied rate (%) (4) | 97.5 | 97.5 | 66.8 |
| Nominal house prices, growth (%) (2) | -17.1 | -1.3 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Slovakia

By Sylvain Bouyon, European Mortgage Federation

Macroeconomic Overview

Following a robust recovery in 2010 (+4.4%), economic activity started to decelerate since, expanding by +3.2% in 2011 and +2.0% in 2012. Between Q1 2010 and Q1 2013, real GDP slowed down y-o-y in every quarter excluding Q4 2011. In 2012, the negative contribution from both domestic demand (-1.3%) and inventories (-2.2%) was offset by the robust positive contribution from net exports (+5.5%). Private consumption was dampened by rising tax burden for high incomes and part-time complementary labour contracts, and continued to be adversely affected by rampant unemployment, which remained noticeably above the euro area average.

Gross fixed capital formation in equipment expanded by +46.7% in 2011, reflecting the significant investment in the automotive sector, and contracted by -3.0% in 2012. As a result, private investment exerted a drag on GDP growth in 2012 (-0.9%). Benefiting from the depreciating effective euro exchange rate, exports continued to grow robustly in 2012 (+8.6%), while the growth in imports eased markedly (+2.8%, from +10.1% in the previous year). The significant gains in net exports should boost private investment in coming years.

In 2012, fiscal consolidation weighted on the economy, notably on private consumption and public consumption, but reduced the general government deficit from 5.1% of GDP in 2011 to 4.3% in 2012. As a result of further consolidation efforts in 2013, in May 2013, the ten year government spreads on the secondary market (versus Germany) were the lowest in the NMS12¹, excluding the Czech Republic.

Housing and Mortgage Markets

At end-2012, housing prices contracted y-o-y by -2.9% (vs. -2.3% in 2011, -1.8% in 2010 and -11.2% in 2009) and stood at 76% of the peak recorded in Q2 2008. Therefore, following the sharp y-o-y decline observed in quarterly data in 2009, house prices have been on a slow y-o-y downward path since then. Owing to very high owner occupation rate (89.5% in 2011), relatively low turnover rate of existing dwellings and the subsequent narrow second-hand housing market, the new housing segment has played a significant role in the determination of house prices. As a result, trends in the construction sector have affected house prices noticeably over last years: in 2009, while real GDP decreased by -4.9%, gross fixed capital formation in dwellings (GFCFD) increased by +21.2% and was almost half above the 2006 level. This significant growth led to an oversupply of dwellings and could partly explain the marked contraction in house prices for that year. However, the decreases registered in GFCFD over the period 2010-2012 (-11.4% in 2010, -1.0% in 2011 and -3.5% in 2012) have contributed to the easing in the the downward trend in house prices.

The residential mortgage market, which was still at embryonic stages in the mid-2000s², continued to grow markedly y-o-y in 2012 (+11.2% at the end of the year vs. +13.6% in 2011, +14.6% in 2010 and +10.9% in 2009). This steady growth was partly supported by the gradual easing in mortgage interest rates since Slovakia joined the euro area in 2008. Indeed, the yearly average mortgage interest rate on new residential loans decreased by 130 bps between the end of 2008 and the end of 2012 (it was 6.04% in 2008; 5.90% in 2009; 5.24% in 2010; 4.84% in 2011 and 4.74% in 2012). Nevertheless, notably due to the narrow interbank market³, mortgage interest rates remained high in comparison with euro area counterparts.

| | Slovakia 2011 | Slovakia 2012 | EU27 2012 |
|---|---------------|---------------|-----------|
| Real GDP, growth (%) (1) | 3.2 | 2.0 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 13.6 | 14.0 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 4.1 | 3.7 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 12,320 | 13,701 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 2,785 | 3,082 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 28.5 | 31.2 | 81.8 |
| Gross residential lending, growth (%) (2) | 0.0 | n/a | n/a |
| Typical mortgage rate (%) (2) | 5.21 | 5.24 | n/a |
| Owner occupied rate (%) (4) | 89.5 | 89.5 | 78.3 |
| Nominal house prices, growth (%) (2) | -2.3 | -2.9 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ NMS12 stand for the 12 new member states.

² In 2005, the outstanding residential lending to GDP at current price ratio stood at 8.0% in Slovakia, while it reached 46.2% in the EU27.

³ In 2012, according to the ECB, the interbank market dependence of domestic banks (in % of total assets) stood at 1.6% in Slovakia, whereas it was 24% in Germany, 12% in Italy, 8.8% in France, 7.8% in Spain, 8.3% in Belgium and 4.1% in the Netherlands.

Slovenia

By Andreja Cirman, University of Ljubljana, Faculty of Economics

Macroeconomic Overview

Economic activity in Slovenia has been declining since the second half of 2011, with -2.3% drop in 2012. As exports stagnated, last's year fall in gross domestic product was the result of a significant decline in domestic consumption. Uncertainty, rising unemployment, real decline in average gross wages and social transfers fiscal austerity measures, a fall in consumer confidence and constraints on financing have contributed to a large decline in private sector demand. Moreover, fiscal consolidation measures have additionally contributed to the decline in domestic demand. The situation in industry is relatively favourable, including exports. Medium-term consolidation of public finances and the restructuring of bank and corporate balance sheets remains vital (Bank of Slovenia, 2013). Average inflation as measured by the HICP stood at +2.6% in 2012 (+1.8% in 2011). Inflation increased at the end of the year due to the growth in energy prices, while core inflation remained low due to the deterioration of the macroeconomic situation. The unemployment that started to rise already by the end of 2008, has reached 9.6% in the last quarter of 2012 (ILO methodology, BS Monthly Bulletin 2013).

Housing and Mortgage Markets

At the end of 2011, there were about 850,000 dwellings in Slovenia, 52% of them in urban areas. Average floor space of a dwelling in Slovenia was 80 m² and on average there were 413 dwellings per 1000 inhabitants. According to the 2011 census data 78% of inhabited dwellings are in homeownership and in 13 % of inhabited dwellings the households use dwellings of their parents or relatives. The share of non-profit rental housing and private rented accommodation is low and mostly concentrated in larger towns.

Housing construction has peaked in 2008, when almost 10,000 new dwellings were completed. However, after 2008 housing construction started to decrease and has hit its lowest level in 2012 with only 4,307 units completed. The turnaround was apparent also in building permits for new construction, decreasing from the peak of 9.5 tdttd housing units in 2007 to only 2.7 tdttd in 2012. The decrease in the volume of construction of new property development projects for the market is a logical response to the financial situation and the conditions on the primary housing market. Due to the low demand for newly built housing units, construction for the market faces low profit and high risk. However, this will result in a substantially lower supply of housing in future years and might be a source of potential pressure on housing prices when the macroeconomic situation is stabilized.

In Slovenia, a downward trend in real property prices, which was established in 2011, continued and even worsened in 2012. According to the Statistical Office of Republic of Slovenia prices of existing housing in Slovenia decreased by -6.1% compared to the previous year (Q4 2012/ Q4 2011), while prices of newly built houses decreased by -13.5% over the same period. Due to the depressed demand and low volume of new housing construction, the liquidity of the primary market is relatively low, while the liquidity of secondary real estate market is comparable to the year 2011.

In 2012, household disposable income declined by -1.7% (for the first time since 1995). Reduced demand and enforcement of stricter banks' credit standards have caused that new housing loans in 2012 recorded its lowest figure of all the years, since the outbreak of the crisis and were down -23% on the previous year (Financial Stability Report, 2012).

Around 45% of new housing loans in 2012 were approved with a maturity of more than 20 years. The average maturity is shortening as a result of the smaller volume of loans being approved and reduced demand from clients with less favourable financial constructions. Three-quarters of housing loans are variable-rate (primarily tied to the EURIBOR). Interest rate on housing loans fell slightly in 2012 in line with the fall in market interest rates, but by significantly less, the banks having raised their premiums (Financial Stability Report, 2013).

The proportion of newly approved housing loans for which the LTI ratio was more than 33% declined by 6.7 percentage points to 43.6% confirming the increased prudence on the part of households with regard to additional borrowing. The average LTV ratio on housing loans rose from 47% to 54%.

In contrast to Slovenian corporate sector is the indebtedness of Slovenian households relatively low. Debt amounts to just below 53% of annual disposable income, while household debt in the euro area overall stands at 108%. Slovenian households' financial liabilities declined by almost 3% last year to 34.5% of GDP. Housing loans are equivalent to 22.6% of household disposable income and account for more than 57% of Slovenian households' total liabilities to the banking sector. With only 3.8% of their classified claims more than 90 days in arrears (14.6% is the proportion for the whole banking system), households remain relatively low-risk, partly as a result of the low level of indebtedness (Financial Stability Report, 2013).

The housing affordability indicators as measured by prices of used housing and the LTV ratio at banks suggest a slight improvement in housing affordability for households.

Mortgage Funding

The mortgage industry in Slovenia is predominantly an integral part of universal banking. Although legislation permits banks to issue mortgage backed securities, no securitisation of residential mortgages has taken place yet. Before the financial and economic crisis banks acquired funding on international financial markets to fuel high lending activity, however, the situation afterwards changed. As a result of repayments of liabilities on the wholesale financial markets and their relatively low capital adequacy, the banks were facing a contraction in their balance sheets (more than 6% last year) and the tightening of credit standards during recession conditions. Last year the banks made net repayments of liabilities on the wholesale financial markets amounting to 10% of GDP, which they were only able to partly compensate for by increased borrowing at the Eurosystem. Funding on the wholesale markets was also made more expensive by the downgradings of Slovenia's sovereign long-term debt and of Slovenian banks. The proportion of total funding that the liabilities to the Eurosystem account for has increased by 5.2 percentage points to 8.7% in 2012. The increasing constraints on funding on the financial markets also led to an increase in the importance of the funding via deposits on the domestic market.

| | Slovenia 2011 | Slovenia 2012 | EU27 2012 |
|---|------------------|------------------|--------------|
| Real GDP, growth (%) (1) | 0.6 | -2.3 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 8.2 | 8.9 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.1 | 2.8 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 5,172 | 5,259 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 3,009 | 3,055 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 21.9 | 22.6 | 81.8 |
| Gross residential lending, growth (%) (2) | -23.5 | -24.0 | n/a |
| Typical mortgage rate (%) (2) | 4.03 | 3.63 | n/a |
| Owner occupied rate (%) (4) | 78.1 | 78.1 | 78.3 |
| Nominal house prices, growth (%) (2) | -0.7 | -6.1 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Spain

By Irene Peña Cuenca, Asociación Hipotecaria Española

Macroeconomic Overview

The Spanish economy went into a double-dip recession in 2012, against a background of fiscal consolidation, reduction of public deficit and very volatile financial markets. By the end of the year, real GDP reduced by -1.4% on annual terms, after the slight increase of 0.4% recorded the year before. The information available for 2013 evidences a further decline in GDP for the first half of the year.

The drop in internal demand and investment remained the main drivers of shrinking GDP, while foreign demand outperformed recording an annual increase in exports of +3.1% and a decrease of -5.0% in imports. The weakness in internal consumption (both public and private) and in investment was largely explained by:

- the efforts made by the Government to reduce public deficit, which meant general cuts in public spending and tax rises;
- the decrease in households' net income in the context of high unemployment levels; and
- the deteriorating confidence of the private sector within the context of high volatility in capital markets and a limited access to banking funding.

As a result, final consumption reduced by -2.5% on annual terms and firms' investment dropped by -9.1% at the end of the year.

In 2012, public deficit as a percentage of GDP (without considering the aids to the financial sector) was 6.8%, below 2011 levels (8.9%), although still slightly higher than the EU-agreed national target of 6.3%.

The labour market continued to deteriorate and the unemployment rate increased from 22.8% at the end of 2011 to 26.0% by the end of 2012. However, signs of deceleration in the path of job destruction were observed in H1 2013.

Regarding inflation, the rise of VAT taking effect on 1 of September 2012 caused a steep increase in Consumer Price Index, which stood at +3.5% on annual terms. However, after this peak, the Index started a decreasing trend, with a scenario of low internal consumption, and it finished the year at +2.9%. In April 2013, CPI growth reduced to +1.4% and is likely to remain moderate in the absence of new increases in taxes.

Housing and Mortgage Markets

Housing transactions reduced in annual terms during the first three quarters of the year, however, in Q4, the volume of housing transactions doubled due to a number of factors. On the one hand, the rise of VAT for housing purchase and the end of tax deduction for first house purchase taking effect on 1 January 2013 resulted in decisions to bring forward the housing purchases in the period. On the other hand, the gradual recovery of stability observed in the capital markets at the end of the year helped to normalise the lending supply and, therefore, it may have improved the access to mortgage credit of households.

As a result, the total amount of housing transactions in 2012 was 363,623, which in relative terms represents an annual increase of +4.2%.

In terms of housing production, residential investment declined for the 5th consecutive year. The number of housing starts in 2012 reduced to less than 45,000, markedly below the volumes close to 780,000 observed during the peak of the cycle in 2006. Also, the number of housing completions continued to contract, reflecting the lack of activity of the last years. In 2012, 120,206 dwellings were finished, -28% less than in 2011.

Regarding prices, the trend of decline in housing prices which started in 2008 accelerated during the last year, partly as a consequence of the pressure from the sales of the financial institutions. In annual terms, the average housing price index fell by -10% by the end of the year. From their 2008 peak, nominal housing prices have suffered a deep correction of around -27% on average.

Across regions, price adjustments above the national average were observed in the areas with more oversupply of dwellings: the south-east regions, still mainly due to the sharper decline in second houses, in Madrid surroundings and in Castile-la Mancha.

It is worth to mention that the Spanish "bad bank" named SAREB by its Spanish acronym (Asset Management Company) started operating in early 2013 by selling, renting, completing or even demolishing, finished or unfinished troubled assets of recapitalised banks. Its introduction may help to reach the equilibrium of the market, due to a combination of factors such as an additional adjustment of housing prices and the increase of the lending offer (as a consequence of the cleaning up of banks' balance sheets). However this transmission to the market will be slow and will not mean, in any case, a harsh pressure on residential prices due to its statutory returns objectives.

Mortgage lending activity in 2012 was framed in the context of high volatility in the wholesale markets and large regulatory pressure for financial institutions.

The worsening of the sovereign debt crisis in the middle of the year rapidly passed through financial institutions, making it difficult for them to access the wholesale funding markets. Besides, in order to limit the banking exposure to the real estate sector and to restore the confidence in the market, the Spanish Government approved the Royal Decrees 2/2012 and 18/2012, by which credit institutions were required to make an extraordinary provision of their real estate exposures before the end of the year (i.e. around 50% in the case of land). This, coupled with the increase in credit institutions' capital requirements (up to 9% by the end of the year) in the context of the Memorandum of Understanding (MoU) between Spain and the EU, meant for financial institutions consuming resources that were already scarce enough. These factors affected lending supply over the period and mortgage lending conditions.

Credit demand, on the other hand, was also notably discouraged by the uncertainty about the performance of the economy. Besides, households' solvency was also dismissed by the deterioration of the labour market, the reductions in the labour costs, and the adjustment in the housing prices (which deteriorated households' housing wealth).

Against this background, the gap between mortgage lending offer and demand widened during the year, resulting in a new decrease in gross mortgage lending after the upwards movement observed in 2010. At the end of 2012, the total number of new mortgage loans fell by -17% to 441,340, of which 214,399 were for house purchase. In volume terms, gross mortgage lending (residential and commercial) also fell by -23% on a yearly basis, corresponding to EUR 65,909 mn. In accordance with the above data, the average mortgage loan in 2012 decreased to around EUR 121,600 and the average LTV ratio for new lending was 58.3%.

Outstanding mortgage lending continued the decreasing path started at the end of 2009. In relative terms, total outstanding mortgage lending decreased by -13% compared to December 2011, down to EUR 876,660 mn. By credit branches, commercial mortgage lending (mostly composed of mortgage lending to real estate developers) recorded a higher decrease (-25%), whilst residential mortgage lending only decreased by -4%.

It is worth mentioning that this reduction in outstanding volumes was intensified by the transfer in December of loans linked to real-estate development activities from the so-called group 1 institutions (nationalized institutions) to the SAREB, the gross amount of which was approximately EUR 36 bn.

Doubtful loans continued to trend upwards in 2012. This increase was especially sharp in the credit related to real estate developers and construction sector, where the share of doubtful assets increased from 21% to 28% in the period of 2011-2012. On the contrary, the ratio of doubtful loans in mortgage residential lending to households remained relatively stable, increasing from 3% in 2011 to 4% at the end of 2012. The growth observed in the period of doubtful assets to households

is related to the prolonged situation of crisis and job destruction, despite the fall in interest rates since the end of 2008, which has notably contributed to moderating this upward path.

Mortgage Funding

As already mentioned, the funding environment in 2012 was significantly affected by the tensions in the sovereign markets. In the second half of the year, however, a progressive improvement of the confidence was observed among agents after the ECB's statement of '*doing whatever it takes to preserve the euro*'.

The access dysfunctions to wholesale market led to an increase in the recourses to the Eurosystem financing facilities, especially in the summer, when the tensions arising from the sovereign debt crisis reached fierce intensity. In the last months of the year and in the beginning of 2013, the recourse to the ECB was reduced, at the time the access of Spanish banks to the wholesale funding improved.

The issuance of Spanish covered bonds (*cédulas hipotecarias*) remained active throughout the year, and proved to be a resilient funding tool in spite of the severe situation described above. New issuance of *cédulas hipotecarias* recorded historical highs of EUR 104,470 mn, 41% above the 2011 issuance levels. The outstanding volume of *cédulas hipotecarias* amounted to EUR 401,540 mn at the end of the year, which represents a 46% of total outstanding mortgage lending.

Securitisation activity, however, was notably affected by the downturn in the funding markets, and the issuance of Mortgage Backed Securities in 2012 was below EUR 3,000 mn.

| | Spain 2011 | Spain 2012 | EU27 2012 |
|---|---------------|---------------|--------------|
| Real GDP, growth (%) (1) | 0.4 | -1.4 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 21.7 | 25.0 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 3.1 | 2.4 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 666,946 | 641,510 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 17,406 | 16,745 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 95.7 | 94.7 | 81.8 |
| Gross residential lending, growth (%) (2) | -47.2 | -16.4 | n/a |
| Typical mortgage rate (%) (2) | 3.23 | 3.15 | n/a |
| Owner occupied rate (%) (4) | 82.0 | 82.0 | 66.8 |
| Nominal house prices, growth (%) (2) | -6.8 | -10.0 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Sweden

By Christian Nilsson, Swedish Bankers' Association

Macroeconomic Overview

GDP grew by +0.8 % in 2012 after a period of stagnated growth at the end of the year. In Sweden, the recession has entered its fifth year. The National Institute of Economic Research (NIER), writes that after the sharp drop in housing demand connected to the financial crisis of 2008/2009, the economy is still far from full resource utilisation despite the quick recovery in 2010. The principal reason why the Swedish recession has been so prolonged is the European debt crisis. An aggregate effect has been that demand for Swedish exports of goods has been and still is unusually low. Uncertainty about the resolution of the crisis has also contributed to the lacklustre development of domestic demand since Swedish households and firms have been holding back on consumption and investment.

The number of people employed increased during 2012, but unemployment rose nonetheless because of a relatively substantial increase in the labour force according to NIER. For the full year 2012, unemployment averaged 8.0 %, compared to 7.8 % in 2011.

Inflation as measured by the CPI, (the CPI with a constant mortgage interest rate) has remained below the Riksbank's inflation target of +2.0% since 2010. The rate of increase in consumer prices is predicted to be modest because of low resource utilisation, one effect of which is to hold down pay increases in the future as well.

Sweden's public finances have been affected by the economic slowdown and slowing tax revenues, as well as by the expansionary measures included in the 2013 Budget Bill. Lacklustre growth pushed the general government balance from a surplus into a deficit of 0.5% in 2012. The structural budget balance is expected to swing from a surplus of 0.2% of GDP in 2012 to a slight deficit of 0.1% of GDP in 2013. Gross government debt is projected to remain low, at around 40% of GDP in 2013 and 2014.

Housing and Mortgage Markets

Housing completions increased during 2012 to 26,000 dwellings from 20,100 in 2011. However, housing completion figures are comparably low in comparison to demand and have been so for many years. Housing starts on the other hand have diminished further during 2012 and amounted to 20,100 compared to 26,100 in 2011. The National Board of Housing expects that better growth prospects for the Swedish economy in 2013 will increase construction. These prospects are uncertain however. The construction figures are low in Sweden compared to many other countries and in expanding regions there is a shortage of housing in many cases.

In 2012, transactions of one-family homes decreased by -4.0%. The housing market cooled off further during 2012 and prices for one-family homes fell by -1.3% compared to an increase of +0.7% in 2011. However, towards the end of the year and in the beginning of 2013, house prices have started to increase again. House prices are influenced by an LTV roof of 85% on new mortgages which was introduced by the Swedish FSA in 2010 and increased demands from banks on amortisations on mortgage loans above 75% LTV.

The larger cities of Sweden such as Stockholm, Gothenburg and Malmö have been leading the house price increase which has prevailed since the mid-1990s. Other cities or regions with a vigorous economy and/or a university have had similar developments. However, there are many cities and regions where the price development has been more modest or even negative, especially cities with high unemployment or regions with sparse or diminishing populations.

In recent years, Malmö and the wider Malmö-region have had a slightly different price development than the other large cities in Sweden. Malmö is situated

close to Copenhagen, Denmark, and has to a large extent been influenced by the Copenhagen housing market since the bridge between the two cities was constructed in year 2000. As the housing market in Copenhagen boomed after the year 2000, the prices for houses and apartments were also influenced in Malmö. However, for almost two years, prices in Malmö have fallen more than in Stockholm and Gothenburg. This is to a large extent influenced by the fact that housing prices in Copenhagen have fallen and fewer Danes are moving to the Malmö-region or are even moving back to Denmark.

Despite the low construction figures and a housing market that has cooled off, residential construction costs increased during 2012 by +2.5%. In 2011, the construction costs increased by +3.4%.

Residential mortgages grew by +4.5% during 2012, which is only slightly lower than +4.9% in 2011. The growth rate has been declining for several years and is now at the lowest level for at least 10 years. The lower growth rate has several causes but the sovereign debt crisis in Europe and a slower economic development are important factors. Other important factors that cool the level of lending is the above mentioned LTV-roof of 85 % on new mortgages and banks' increasing demand on borrowers to amortise.

The variable (3-month) mortgage interest rate has decreased during 2012 from 4.20% in December 2011 to 2.90% in December 2012. The variable mortgage interest rate has continued to decrease in 2013. Fixed mortgage interest rates have also decreased during 2012. Fixed mortgage rates between 1 to 5 years have decreased to 2.95% in December 2012 compared to 3.85% during the same month in 2011.

In a regular mortgage market report by Finansinspektionen (Swedish FSA), the authority writes that the LTV-roof (85%) has been working well. The household LTV for new loans decreased during 2011 for the first time in since 2002 (the first year with comparable data). The average LTV for new loans was around 70% in 2011 and 2012.

The amount of mortgage credit institutions' doubtful loans is comparably low in Sweden. The level of doubtful loans in the mortgage credit institutions did not increase in Sweden during the financial crisis and amounted during 2008 and first half of 2009 to only 0.02% of total lending to the public, according to figures from Finansinspektionen. During 2012, the share of doubtful loans has increased slightly to 0.03%.

The share of net credit losses in mortgage credit institutions increased slightly after the financial crisis in 2008. However, before the financial crisis, the share of credit losses was negative, or in other words the recoveries were larger than the gross credit losses. The net credit losses are still very low after the financial crisis and amount to 0% of the mortgage credit institutions total lending to the public in 2012 and 2011, compared to 0.01% in 2010.

Mortgage Funding

Covered bonds are the most common form of funding used in the Swedish market for mortgages. Despite the weak global financial markets during the financial crisis, the Swedish institutions managed to issue covered bonds on the Swedish and global market. During 2012, the Swedish stock of covered bonds increased by 1.6% (in SEK) to EUR 220 bn.

One reason for the increasing stock of covered bonds is that residential lending has increased. Another important reason is that the Swedish institutions, due to the new Basel III rules, have reduced short-term funding such as non-secured certificates in favour of more long-term funding.

| | Sweden 2011 | Sweden 2012 | EU27 2012 |
|---|----------------|----------------|--------------|
| Real GDP, growth (%) (1) | 3.7 | 0.8 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 7.8 | 8.0 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 1.4 | 0.9 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 308,498 | 334,922 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 40,557 | 43,686 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 155.0 | 156.5 | 81.8 |
| Gross residential lending, growth (%) (2) | -13.7 | 4.4 | n/a |
| Typical mortgage rate (%) (2) | 3.69 | 3.54 | n/a |
| Owner occupied rate (%) (4) | 63.5 | 63.7 | 66.8 |
| Nominal house prices, growth (%) (2) | 0.7 | -1.3 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

United Kingdom

By Caroline Purdey, Council of Mortgage Lenders

Macroeconomic Overview

The path of the economy following the 2008/09 recession continues to be a bumpy one – three quarters of (small) negative growth in Q4 2011, Q1 2012 and Q2 2012 mean that the UK economy had returned to recession at the start of the year, but a positive Q3 (when the economy received a boost from hosting the Olympic Games) was the main driver of the (small) increase in GDP in the year overall. Looking through the influence of temporary factors, overall output appears to have been broadly flat, in 2012 overall GDP increased by +0.3%.

After lagging behind in the recession, the unemployment rate increased to 8.4% at the end of 2011. During 2012, the unemployment rate eased back marginally and has been stable at around 7.8% since September. On the other hand, there has been a small increase in the employment rate during 2012, from 70.4% at the end of 2011 to 71.6% at the end of 2012.

Inflation continued to run above the Bank of England's +2% target but did fall during 2012 as past rises in energy and other import prices and in VAT dropped out of the y-o-y comparison. The inflation rate (as measured by the CPI) was +2.8% in 2012, compared to +4.5% in 2011. There was an increase in the inflation rate in the last three months of the year, largely reflecting increases in university tuition fees and retail energy bills.

Despite the above target inflation rate, the Bank rate was maintained at 0.5% throughout 2012. Expectations for base rate change pushed further outwards as 2012 progressed – it is now regarded unlikely that the Bank will increase the rate before 2014.

A period of austerity remains for UK public finances. At the time of the March 2013 Budget, the OBR were projecting that the government will meet its fiscal mandate – to balance its underlying structural borrowing position by the end of a rolling five-year period, which is now 2017-18 a year ahead of target. Its supplementary debt target has been pushed another year into the future however; public sector net debt follows a higher trajectory than envisaged at the time of the 2012 Autumn Statement, peaking at 85.6% (up from 79.9% previously), before falling in 2017-18.

Housing and Mortgage Markets

The UK housing market can be characterised as dysfunctional and highly diverse. The underlying picture is of housing demand outstripping new supply for more than a decade with heightened affordability pressures as a consequence, particularly for first-time buyers. However, there are large differences across the UK, with some areas experiencing particularly high demand with limited supply response, while other areas have the opposite problem.

The supply-demand imbalance has grown since the financial crisis. Housing completions in the UK peaked at 226,000 in 2007, but dropped back to 142,000 in 2011 – significantly lower than the projected growth in the number of households of 221,000 per year.

During the first three quarters of 2012, new housing supply in England¹ remained subdued. While completions increased by +4% compared to the same period in 2011, new starts were 15% lower suggesting the pipeline and completions in future periods could drop back.

UK house prices fell by -14% from the peak in 2007 following the financial crisis, although prices have since increased and are now 3% lower than the peak. During

2012, there was moderate growth in UK house prices, with overall prices 1.6% higher than in 2011 and in the final quarter prices were 2.3% higher than in the final quarter of 2011 (as measured by the ONS house price index at mortgage completion stage).

The UK wide figures hide significant variations across the UK. Parts of southern England have experienced the largest increases – particularly in London where, at the end of 2012, prices were 4.9% higher than a year earlier. On the other hand, prices in Northern Ireland have continued to weaken and fell by -8.5% in the same period, although the rate of price falls in Northern Ireland eased through 2012. There has been a mixed picture in other parts of the UK with a general trend for weaker growth in northern parts of England and in Scotland compared to the south, but with some locations within regions bucking this overall trend.

After peaking at 70% in 2002, the UK home-ownership rate has drifted downwards. In 2011², 65% of dwellings in the UK were owner-occupied.

At the end of 2012, outstanding mortgage lending in the UK totalled GBP 1,266 bn, a small increase from GBP 1,246 bn at the end of 2011, while gross mortgage lending totalled GBP 142.9 bn in 2012, up marginally from GBP 141.3 bn in 2011.

The growth in total gross mortgage lending was driven by the Buy-to-let (BTL) sector and by house purchase lending, offset to some extent by subdued activity amongst borrowers remortgaging. There was a +19% increase in BTL lending, albeit from a low base, to GBP 16.4 bn. House purchase lending (excluding BTL activity) increased by +8% through 2012.

2012 can be characterised as a year of two parts when considering mortgage interest rates. Mortgage interest rates increased through the first eight months of the year from a recent low at the start of 2012. The average mortgage interest rate on new lending reached 3.84% in August (up from 3.40% in January). Since the summer, mortgage interest rates have trended downwards as a result of the impact of improvements in wider funding conditions and the Bank of England Funding for Lending Scheme. The latter was launched in August 2012 and is designed to enable access to cheaper funding than might otherwise be available to banks and building societies to support lending growth. By the end of the year the average interest rate on new mortgage lending had fallen to 3.65%.

Consistent with the increase in house purchase lending, the number of property transactions also increased in 2012 – totalling 932,000 in 2012 up from 885,000 in 2011, but still only just over half of the level seen before the financial crisis when around 1,600,000 transactions in a year was more typical.

The end of the first-time buyer stamp duty concession at the end of March 2012 provided a boost to house purchase activity in the first quarter as borrowers pushed through their transactions in order to take advantage of the concession. This effect was particularly strong among first-time buyers who benefited directly, but with knock-on effects to other borrower groups due the effect of property transactions typically involving chains. While this distorted activity in the first quarter, a subsequent dip in activity at the start of the second quarter means that the annual totals are largely unaffected.

Following the financial crisis lenders reduced the availability of mortgages at high LTVs, and as a result, the average LTV for new mortgages has fallen since 2007. For the past two years, average LTVs on new lending have been stable. In 2012, the median LTV ratio for all house purchase loans was 75%, unchanged compared to 2011 but down from 80% in 2007. While first-time buyers typically borrowed 80% of the properties' value, this is in comparison to a longer term average of around 90%. The stability in the average LTV does however mask a modest but discernible increase in lending at higher LTV ratios during the second half of 2012.

¹ Data is not yet available for the UK overall.

² The most recent date available has been updated in December.

Meanwhile the performance of the outstanding mortgage book continued to trend down modestly during 2012. Loans with arrears representing more than 2.5% of the outstanding balance fell to 1.40% of all loans outstanding (from 1.42% at the end of 2011). Also showing an improvement, the number of properties taken into possession totalled 33,900 in 2012, down from 37,300 in 2011 and the lowest total since 2007.

Mortgage Funding

UK lenders continue to experience relatively good funding conditions in both the retail deposit and wholesale funding markets. Retail deposits continued to grow despite the low interest rates in the UK. Investors have continued to look for “safe haven” assets rather than invest in riskier assets e.g. the stock market. As a result, lenders have been able to grow their retail deposit base without raising the cost of funding. This has helped banks and building societies rebalance their liability profile reducing the reliance on wholesale funding by substituting this for retail deposits.

At the same time, UK lenders have been faced with an improving funding position in the wholesale funding markets. Credit spreads in both the mortgage securitisation and covered bond markets have tightened over the year and both have gone through the levels seen prior to the collapse of Lehman Brothers in 2008. Lenders have taken advantage of these conditions to issue both mortgage securitisations and covered bonds at a variety of maturities and across currencies improving the maturity profile, liability mismatch and adding investor diversification, although issuance levels remain relatively low. This trend of tightening credit spreads has been caused by a number of factors. Importantly, demand has outstripped supply. As mentioned above, UK lenders have been able to raise funds cost effectively from the retail market but also through government initiatives, i.e. the introduction of the Funding for Lending Scheme (FLS) has caused issuers to curtail activity in the wholesale markets and substitute this for funding via the FLS.

| | UK 2011 | UK 2012 | EU27 2012 |
|---|-----------|-----------|-----------|
| Real GDP, growth (%) (1) | 1.0 | 0.3 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 8.0 | 7.9 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 4.5 | 2.8 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 1,491,974 | 1,550,903 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 29,793 | 30,716 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 128.5 | 119.1 | 81.8 |
| Gross residential lending, growth (%) (2) | 2.9 | 8.5 | n/a |
| Typical mortgage rate (%) (2) | 3.62 | 3.69 | n/a |
| Owner occupied rate (%) (4) | 64.7 | 64.7 | 66.8 |
| Nominal house prices, growth (%) (2) | -1.0 | 1.6 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

Non-EU country reports

Croatia

By Sylvain Bouyon, European Mortgage Federation

Macroeconomic Overview

In 2012, the Croatian economy was mired in stagflation, with economic recession, growing unemployment and higher inflation. Real GDP decreased by some -2.0% in 2012, on the back of the steep decline in domestic demand (i.e. -2.9%). Gross fixed capital formation fell by -4.6% in 2012, but could resume in 2013, partly boosted by Croatia's accession to the EU on 1 July 2012. The significant drag of domestic demand on GDP was partially counterbalanced by the external sector, with exports expanding significantly in the second half of 2012. Reflecting the Okun's law, which indicates that employment is markedly sensitive to value added fluctuations, the unemployment rate increased by 2.3 percentage points in 2012, to reach 15.9% and is expected to stagnate in 2013. Finally, the harmonised index of consumer prices increased by +1.2 percentage point in 2012, due to the VAT hike in March and a surge in the price of energy and unprocessed food (from +4.2% in 2011 to +8.5% in 2012 vs. +7.6% and +5.5%, respectively, in the EU27). As a result of VAT adjustments in connection with EU accession, high inflation should persist in 2013.

Housing and Mortgage Markets

According to the Hedonic Real Estate Price Index published by the Croatian National Bank, nominal house prices contracted by -4.8% y-o-y in Q4 2012 and reached 82.3% of their 2008 average. This marked cumulative contraction mainly reflected the poor macroeconomic performance of the domestic economy since 2008, as real GDP in 2012 stood only at 90.5% of its 2008 level. Nevertheless, developments in house prices have varied noticeably across regions: in comparison with their 2008 average, nominal house prices contracted in Q4 2012 by -19.3% in Zagreb and -12.4% in the Adriatic Coast, which includes the regions of Dalmatia, Istria and Kvarner. Compared to the averages recorded in 1998, nominal house prices increased by +34.8% at country level, +19.2% in Zagreb and +111.8% in the Adriatic Coast.

One of the factors behind these substantial growth differentials is that the Adriatic Coast is traditionally a popular vacation-home destination for foreign buyers. Nevertheless, the economic recession in the EU27, especially in the euro area, seemed to have prevented the expected surge in demand in the 12 months prior to joining the European Union. On the contrary, after a robust y-o-y increase in Q2 2012 (+9.8%), nominal house prices in Coastal Croatia decreased by -3.6% in Q3 2012 and -7.7% in Q4 2012. In quarterly terms, the cumulative decrease registered between Q2 2012 and Q4 2012 reached (seasonally adjusted¹) -18.7% in the Adriatic Coast.

Construction activity reacted strongly to the decreasing house prices: the number of permits issued for residential buildings decreased by -4.1% in 2011 and -21.8% in 2012, and the corresponding floor area contracted by -7.5% and -28.7%, respectively.

On the mortgage market, a noticeable deleveraging process has been observed between July 2012 and April 2013, with 10 consecutive y-o-y monthly decreases in outstanding residential lending. At the end of Q1 2013, outstanding residential lending contracted by -0.7% y-o-y (vs. -1.2% in Q4 2012 and -1.9% in Q3 2012) to HRK 107.5 bn (i.e. EUR 14.2 bn). The main reason for these consecutive contractions was the combination of economic recession and somewhat stable mortgage interest rates. Regarding the latter, in December 2012, interest rates increased y-o-y by 10 bps on Kuna credits indexed to foreign currencies and decreased by 2 bps on Kuna credits not indexed to foreign currencies.

| | Croatia 2011 | Croatia 2012 | EU27 2012 |
|---|--------------|--------------|-----------|
| Real GDP, growth (%) (1) | 0.0 | -2.0 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (1) | 13.5 | 15.9 | 10.5 |
| Harmonised index of consumer price, annual average growth (%) (1) | 2.2 | 3.4 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 14,466 | 14,248 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | n/a | n/a | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | n/a | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 5.48 | 5.31 | n/a |
| Owner occupied rate (%) (4) | n/a | n/a | n/a |
| Nominal house prices, growth (%) (2) | -1.1 | -4.8 | n/a |

Notes:

(1): Source: Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ The time series has been deseasonalised within the Census X-13 methodology (Eviews 8.0).

Iceland

By Magnus Arni Skulason, Reykjavik Economics ehf

Macroeconomic Overview

The Icelandic economy grew by +1.4% in 2012 compared to +2.9% in 2011. GDP amounted to ISK 1,708 bn or EUR 10.6 bn in 2012. This is an improvement from the loss of output that Iceland experienced after the banking crisis in the autumn of 2008, but less than was expected. Based on the Statistics Iceland forecasts, the economy is expected to grow at +1.7% in 2013¹.

Consumption has been picking up and it increased by +2.7% in 2012, but government consumption decreased by -0.2% in 2012. Gross capital formation increased in 2012 by +4.4%, but it is expected to decrease by -3.6% in 2013.

The housing market has been frozen after the collapse in 2008 and housing investments have been low since. In 2012, housing investments picked up and grew by +6.9% and are expected to soar by +23.7% in 2013.

Registered unemployment in Iceland in 2012 was 6%, 1 percentage point lower than the previous year. Even though Iceland experienced historically high unemployment post banking crisis, labour participation has always been high. The activity rate, in 2012, was 80.5%, the same as the year before, but lower than pre-crisis level. It is worth mentioning that due to high emigration the labour force consists of fewer individuals than before the crisis and the number of employed persons has decreased by -5.5% since 2008.

Inflation has been decreasing, but the collapse of the Icelandic krona in 2008 pushed up inflation on CPI level to 12% in 2009-2010. Inflation was considerably lower in 2012 (5.2%), but still above the Central Bank of Iceland target, which was set at 2.5%.

Production price index increased by +1.1% in 2012, but it had soared by +9.2% in the previous year.

Inflation is particularly important for Icelandic households, since majority of mortgages are CPI-linked annuity mortgages. High inflation can therefore have great effects on household wealth.

The central government's debt increased dramatically in the economic collapse in 2008. At year-end 2012 the gross central government's debt with pension obligation amounted to 110.6% of GDP compared to pre-crisis level of 42.3% at year-end 2007².

The primary balance of the central government was positive of 1.1% of GDP in 2012, but was negative (-2.6% of GDP) in 2011. This outcome is worse than expected, and the difference can be mainly explained by the write-down of the Treasury's holding in the Housing Financing Fund.

Housing and Mortgage Markets

The Icelandic housing market has been in a slow recovery and nominal house prices rose by +5.8% in the Reykjavik capital region in 2012. In real terms the house prices rose by +1.5%, which is considerably less than a year earlier when real house price increased by +4.4%.

1,082 housing units were completed in 2012 which means 3.4 housing units per 1000 inhabitants. The long-term average since 1970 to 2012 has been just over

7.1 housing units per 1,000 inhabitants. The building industry has been dormant since 2009, but picked up in 2012, which was much better than the year before when only 565 housing units were completed. At year-end 2012, there were 3,877 housing units in building process, which is close to the long-term average since 1983.

Transaction activity increased from the years earlier, but total number of transaction for residential housing amounted to 6,690 in 2012, slightly below the long-run average of 7,727 (1990-2012).

The Icelandic mortgage market has slowly recovered, and the commercial banks re-entered the mortgage market in 2011. The number of mortgage products has increased and now the banks offer CPI-linked mortgages and nominal interest mortgages that are tracked by the Central Bank of Iceland's policy rate and fixed nominal interest rates for 3 to 5 years. In August 2013, real interest rates on CPI linked loans are from 3.5% a year and nominal interest are from 6.75%. The government-owned Housing Financing Fund offers CPI-linked residential loans with a 4.70% interest rate in real terms.

LTV is usually around 70-80%; homeowners are offered lower rates if the LTV is below 70% and there is a higher premium for loans from 70 to 80% of LTV.

It is difficult to estimate the amount of outstanding residential mortgages, due to legal disputes over FX-linked mortgages denominated in Icelandic krona that were offered prior to the collapse of the Icelandic economy in the autumn of 2008. Those loans have been ruled illegal, but there is still dispute over the terms of the loans. In addition there are also legal disputes over CPI-linked mortgages that will be resolved in court, expectedly later in 2013.

According to the Central Bank of Iceland's most recent estimate, household debt peaked at 134% of GDP in Q1 2009. Household debt has been declining from 2009 and it was estimated to be 114% of GDP at the end of 2011 and 109% of projected GDP at the end of 2012.

Restructuring of household debt has helped a number of households facing negative equity on their properties. The banks and the Housing Financing Fund agreed to write-off mortgages that were higher than 110% of the LTV subject to certain conditions. A combination of price fall in the housing market in addition to higher principal amount of CPI-linked loans, and the high inflation are the main causes that the equity of many Icelandic households evaporated. Many feel that not enough has been done. In response to this, the newly elected government that took office in the spring of 2013 announced that it would continue to assist households to lower their debt level either through a special fund or with cash generated from the real estates of the old banks, which are expected to go through restructuring in 2014.

Mortgage Funding

Banks fund their mortgages mainly via deposit. Although the draconian capital controls in Iceland lead to limited investment options for investors, banks have slowly introduced covered bonds, which were well received.

The government-owned Housing Financing Fund has not been very active in financing its mortgages, but traditionally the HFF finances itself by issuing housing bonds that are guaranteed by the sovereign of Iceland.

¹ <http://www.statice.is/lisalib/getfile.aspx?ItemID=15246>

² [http://www.fjs.is/upload/files/Rikisreikn%20bls%201-161\(1\).pdf](http://www.fjs.is/upload/files/Rikisreikn%20bls%201-161(1).pdf)

| | Iceland 2011 | Iceland 2012 | EU27 2012 |
|---|-----------------|-----------------|--------------|
| Real GDP, growth (%) (1) | 2.9 | 1.4 | -0.4 |
| Unemployment rate, annual average (%) (1) | 5.0 | 6.0 | 10.5 |
| Consumer price index, annual average growth (%) (1) | 4.0 | 5.2 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | n/a | n/a | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | n/a | n/a | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | n/a | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | 4.76 | 4.11 | n/a |
| Owner occupied rate (%) (4) | 76.9 | 76.9 | n/a |
| Nominal house prices, growth (%) (2) | 9.9 | 5.8 | n/a |

Notes:

(1): Source: Central Bank of Iceland and Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).



Norway

By Odd Kristiansen and Camilla Landsverk, Norwegian State Housing Bank

Macroeconomic Overview

In 2012, economic growth in the OECD area and a number of emerging economies continued to be weak, but in Norway, the economic growth was the strongest since 2004. GDP and GDP Mainland Norway increased respectively by +3.2% and +3.5%, from 2011 to 2012.

Norway has experienced a weak exports development, but in 2012 the total export grew by +2.2% compared to 2011: the export growth was high in the first half of the year and negative in H2 2012. The activity in the petroleum sector is important to the Norwegian economy, contributing to secure economic growth, and the petroleum investments increased by more than +10% in 2012.

Norway experienced a rather low inflation in 2012. Consumer price index (CPI) rose by +0.8%. The low increase in CPI was due to both the effects of the strong krone and the low imported inflation. CPI is also affected by the low and falling interest rate level, which has reduced financial costs and thereby house renting prices and margins in other sectors.

As for interest rates, the average three-month money market rate was 2.2% in 2012, i.e. -0.7 percentage point lower than in 2011.

The number of those employed increased by almost +27,000 people during the last year. The increase in employment was particularly large in the administrative and support service activities. On average, 3.2% of the labour force was registered as unemployed in 2012, compared to 3.3% in 2011.

Housing and Mortgage Markets

Despite a slight fall during Q4 2012, house prices increased by approx. +7% measured as a yearly average, according to Statistics Norway's quarterly statistics. This price growth is mainly due to a considerable increase in the population and continuing low interest rates. As house prices rise markedly, house-building becomes more profitable. Consequently, housing investment showed an increase also in 2012 (+7.4%). The number of housing starts rose from 27,700 in 2011 to 30,200 housing units in 2012. More housing starts are triggered by a larger population growth, growth in income, low interest rates and high growth in housing prices. Thus, more than 40% of the new housing production consisted of flats, while detached houses – the most common type of building in Norway - represented 30%. The growth in employment in the building and construction sector continued in 2012 (+3%) compared to the year before. Among the employees in this industry, there are relatively many immigrants from Eastern European EU-countries. As a consequence of ascending housing starts in the last two years, an increase occurred in the number of completed houses – from a little more than 20,000 housing units in 2011 to approx. 26,000 units last year (i.e. on average 5.3 units per 1 000 inhabitants). The increase in building costs amounted to +3.1% in 2012, compared to +3.7% in the year before. However, there are still moderate price changes in construction costs.

The total mortgage loans portfolio has increased by +7–8% yearly in the last three years. In 2012, the increase was even higher, almost +14%. However, the growth in the popular lending scheme, "mortgage framework loans", almost stopped in 2012 (only +1%) and traditional mortgage loans (+18%) contributed most to this growth. The share of mortgage loans out of total households' debt amounted to 84% in 2012, which is almost the same share as registered in the previous year.

Norwegian households had an average debt of NOK 1,048,000 (EUR 135,156) in 2011. This corresponds to 1.6 times the average household income. The average debt increased by +5.7% from 2010. Households with the highest incomes had the strongest increase in debt. The number of Norwegian households with debt more than three times the size of their household income increased slightly

from 2010 to 2011. A total of 14.6% of the households had such a relationship between debt and income.

The vigorous growth in house prices and household debt increases the risk of financial instability. The "Residential loan survey 2011", issued by the Financial Supervisory Authority of Norway, shows that the proportion of residential mortgages with a high loan-to-value ratio is on the increase, and a round of inspections of mortgage lending practice at a selection of banks shows that credit assessments need to improve. This situation has led to changed guidelines for the banks' lending practise. The Supervisory Authority recommended lowering the level of what is considered a prudent loan-to-value ratio from 90% to 85% of the property's market value; this ratio covers all loans secured on the property. In addition, banks will need to make allowance for an interest rate increase of +5 percentage points when assessing a borrower's debt-servicing ability. In 2012, the government followed these guidelines and made these rules for the private lending sector.

Mortgage Funding

In Norway, 461 issues of bonds (from Norwegian banks) valued at NOK 82.3 bn were registered during the year 2012. The corresponding figures for 2011 were 344 issues valued at NOK 66.9 bn. Thus the increase of issues amounted to +33%.

Banks finance their operations through different sources of credit, such as deposits, inter-bank loans, bond debt, short-term security loans and loans from the Norwegian Central Bank. Customer deposits are often regarded as the most stable of these financing sources. In December 2012, the Norwegian banks' deposit-to-loan ratio¹ was 71.2%. In December 2012, the bank's total deposits amounted to NOK 1,819 bn. This is an increase of NOK +90 bn, or +5%, compared to the corresponding period last year.

| | Norway 2011 | Norway 2012 | EU27 2012 |
|---|-------------|-------------|-----------|
| Real GDP, growth (%) (1) | 1.4 | 3.2 | -0.4 |
| Unemployment rate (%) (1) | 3.3 | 3.2 | 10.5 |
| Harmonised index of consumer price, growth (%) (1) | 1.2 | 0.8 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 240,424 | 275,754 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 62,121 | 70,114 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 149.1 | 156.4 | 81.8 |
| Gross residential lending, growth (%) (2) | n/a | n/a | n/a |
| Typical mortgage rate (%) (2) | n/a | n/a | n/a |
| Owner occupied rate (%) (4) | 85.0 | 85.0 | n/a |
| Nominal house prices, growth (%) (2) | 8.0 | 6.6 | n/a |

Notes:

(1): Source: OECD and Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

¹ The deposit-to-loan ratio is the amount of banks' loans divided by the amount of its deposits at any given time.

Russia

By Evgenia Zhelezova and Andrey Tumanov, Agency for Housing Mortgage Lending

Macroeconomic Overview

In 2012, the global oil price trends were very positive for Russia, with Urals reaching USD 111/barrel – its new peak since 1990. However, according to the 2012 data, Russia was not able to fully capitalise on the high oil prices during the year, partly due to the eurozone debt crisis impairing the banking sector's liquidity. The IMF forecasts the end of the eurozone recession by 2014, noting that, in 2013, the continued uncertainty in the region will remain the main source of risk for the global economy including Russia.

Against this background, the Russian economic growth statistics gave rise to pessimistic expectations among the general public and the business community. According to a preliminary estimate of the Federal State Statistics Service, the GDP growth was +3.4%, the lowest since 1999 (excluding the crisis year of 2009). The slowdown can be partly attributed to crop losses resulting from a drought, which later triggered inflation, and to lower investment demand.

The main driver of the national economy in 2012 was domestic private consumption, which slowed down y-o-y in Q2–Q4 to +4.9%, compared to 9.2% in 2011. A booming retail lending occurred, resulting from a strong increase in household disposable income and real income (which increased by +4.2% and +7.8% respectively in comparisons with +0.4% and +2.8% in 2011). According to the Bank of Russia, in 2012, the retail loan portfolio grew by +39.4% y-o-y, outpacing even the previous year's impressive performance (+35.9%).

The Federal State Statistics Service's consumer confidence index was going down in H2 2012, while retail trade volume rose by +5.9%, compared to +7.0% in 2011.

The slowdown in economic growth shows that the potential of stimulating consumer demand as a lever to maintain high growth rates reached its limit in 2012. The decline in consumer confidence in H2 was partly offset by the record low unemployment rate (annual average of 5.5% compared to 6.5% in 2011, according to the new Federal State Statistics Service methodology introduced in early 2011).

The volatility of financial markets and the higher funding costs for banks resulted in increasing interest rates across the full spectrum of both retail and corporate loans with a term longer than 1 year. This cooled down the credit market and contributed to the economy's further slowdown. As a result, corporate loan portfolio growth decelerated from almost +25% at mid-2012 to +12.7% at the end of the year. Retail loan portfolio growth followed the same pattern in H2 2012.

Housing and Mortgage Markets

The number of property rights registered in housing deals by the end of 2012 reached 4.2 mn, which means a +8.5% y-o-y increase. An overarching driver for the housing market was the growing share of mortgage deals. According to the Federal Registration Service, every fifth property right (20.9%) registered in housing deals in 2012 was purchased with a mortgage loan. This is an all-time high since the beginning of active mortgage lending in Russia in 2006. The second important driver of the housing market is the prevailing share of "chain" deals. However, investment demand was starting to gain traction again as housing assets were perceived among the very few, safe, long-term investment instruments in the times when financial markets are unstable.

The recent market rebound also boosted housing prices, which grew in real terms after a long stagnation of 2009–2011. By the end of 2012, housing prices rose by more than +12.0% y-o-y, while the inflation rate over the period was +5.1%. Overall, the housing price growth largely followed the upward trend of domestic personal income and did not affect housing affordability.

The housing construction market was also growing in 2012. According to the Federal State Statistics Service, 826.8 td houses and apartments with a total floor area of 65.2 mn square meters were commissioned in 2012 (104.9% and 104.7% of the 2011 performance, respectively). This volume of construction is Russia's all-time high since 1991. The contribution of construction by developers, however, declined accounting for only 48% of total housing construction growth compared to 69% in 2011.

In 2012, developers chose Russia's major investment-rich and industrially developed regions to build the largest volumes of housing. Of the total floor area of housing commissioned across the country, the Moscow Region accounted for 12.1%, St Petersburg – 6.7%, Moscow – 6.6%, Krasnodar Territory – 6.5%, and the Tyumen Region – 5.4%. Looking at the whole market, the top 10 regions accounted for 53.0% of total floor area of housing commissioned across Russia in 2012, pointing to the fact that construction in the country reflects the high concentration of its economic activity.

The Russian mortgage market maintained its impressive growth trend throughout 2012, having completely recovered from the consequences of the 2008 crisis. Notably, this growth occurred on the back of a continued upward trend in mortgage loan rates.

Over the year, 690.7 td mortgage loans were issued with a total value of RUB 1,029 bn, which was 1.3 times as many as in 2011 in terms of volume and 1.4 times as much in terms of value. This level of origination is a record, both in the post-crisis period and the entire mortgage lending history traced by the Bank of Russia so far¹. For comparison, in the pre-crisis 2008, 349.5 td mortgage loans were issued with a total value of RUB 655.8 bn, which was almost twice lower than in 2012 in terms of volume and 1.6 times lower in terms of value.

The headline trend of 2012 was market growth against the increasing mortgage interest rates. In January–December 2012, the monthly new RUB denominated loan rate grew by 90 bps (from 11.8% to 12.7%). Rates on rouble loans issued in December 2012 grew by 110 bps y-o-y. The weighted average rate for rouble mortgage loans issued in 2012 was 12.3% (compared to 11.9% in 2011).

The positive trend in mortgage lending was fuelled by increased competition among market players, mainly through slackening their borrower requirements.

This potentially sets the scene for a significant mortgage market growth slowdown in 2013. The recent growth appears to be mainly explained by the increasing mortgage loan prices, which are expected to continue to grow, and by the increasing demand of those households which would have otherwise chosen to buy property at a later point in time. A household survey carried out by the AHML in Q3 2012 showed that potential mortgage lenders tend to reconsider their housing needs and purchase fewer properties, including those intended for their immediate and extended families. This was most likely caused by the fact that the real value of properties increased for the first time since 2009, as well as that mortgage rates have been moving up.

Among other notable trends in the mortgage market was the expansion of mortgage portfolio on banks' balance sheets which, on 1 January 2013, stood at RUB 1,982.4 bn, after a +34% y-o-y increase. The analysis of the mortgage portfolio structure demonstrates a steady decline in foreign currency mortgage debt. Its share was only 6% in 2012, down by -5.1 percentage points.

Mortgage debt analysis by days overdue points to consistently good portfolio quality. Reinforcing this view, even as banks continued to aggressively build up their mortgage portfolios, the volume of non-performing loans (90+ days overdue) shrank both in relative and absolute terms (2.5% and RUB 50.0 bn on 1 January 2013 compared to 4.1% and RUB 60.0 bn on 1 January 2012, respectively).

¹ Data available to AHML starting 2006.

In parallel to the growth of the total mortgage portfolio on banks' balance sheets, the share of overdue payments in the total portfolio is decreasing. However, the underlying trend of lenders, namely the relaxing of borrowers' proof of income requirements, increases the risk of the overdue debt share growth in the medium term.

Trends observed in the residential mortgage market across Russia, in general, are also typical of most regional mortgage markets. The mortgage volume growth was accompanied by rising mortgage rates compared to those existing at 2011 year-end. The regional rates dispersion was somewhat less pronounced in 2012 (the coefficient of variation was 3.1% compared to 3.4% in 2011).

Mortgage Funding

The increased funding costs in 2012, the growing number of new mortgage loans in 2010–2011, and the implementation of mortgage-backed securities refinancing programmes by AHML and Vnesheconombank fuelled banks' interest in securitisation mechanisms. Following a quiet period in H1 2012, in H2, nine organisations² completed eleven mortgage securitisation issuances, totalling RUB 68.3 bn (47% more than in 2011). In the course of 2012, 64.4 td mortgage loans were included in mortgage pools. In 2012, 6.6% of issued mortgage loans were financed with mortgage-backed securities (compared to 6.5% in 2011). The weighted average rate for the senior tranche of mortgage-backed securities amounted to 8.81% p.a. (excluding the 3% senior tranches issued under the Vnesheconombank programme).

Two leading issuers (VTB24 and AHML) accounted for 63% of the total mortgage-backed securities origination in 2012 (compared to 55% in 2011). This shows that concentration remains strong in this market, with just a few players.

| | Russia 2011 | Russia 2012 | EU27 2012 |
|---|----------------|----------------|--------------|
| Real GDP, growth (%) (1) | 4.3 | 3.4 | -0.4 |
| Unemployment rate, annual average (%) (1) | 6.5 | 5.5 | 10.5 |
| Harmonised index of consumer price, growth (%) (1) | 8.4 | 5.1 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 35,412 | 49,522 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 300 | n/a | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | n/a | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | 85.8 | 47.4 | n/a |
| Typical mortgage rate (%) (2) | 11.90 | 12.30 | n/a |
| Owner occupied rate (%) (4) | 84.0 | 84.0 | n/a |
| Nominal house prices, growth (%) (2) | 5.8 | 12.1 | n/a |

Notes:

(1): Source: Federal State Statistics Service; IMF and Eurostat

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

² VTB24, AHML, Asian-Pacific Bank, CREDIT EUROPE BANK, NOMOS-BANK, DeltaCredit, Investstradebank, BANK URALSIB, Housing Finance Bank.

Turkey

By Umur Guven, Garanti Bank

Macroeconomic Overview

Regarding the Turkish economy, 2012 was the year in which the soft landing, following the rapid domestic demand driven growth figures after the global crisis, began to manifest itself. The economy grew by +2.2% in annual rate. Looking at the components of the growth in this period, the contribution of the internal demand was negative at -1.9%, whilst the external demand made a positive contribution of +4.1%. The abovementioned growth rate remained below the potential growth rate of Turkey which was calculated at around +5%, but lessening of the fragility of the economy thanks to the changing growth dynamics was a positive development in 2012.

As imports decreased due to the weakening domestic demand, the foreign trade deficit and, consequently, the current account deficit also narrowed in 2012. The foreign trade deficit decreased from USD 106 bn in 2011 to USD 84 bn in 2012. Similarly, the current account deficit rapidly decreased in 2012 from 9.7% of real GDP in 2011 to around 6%. Additionally, steps taken in 2012 to reduce the current account deficit in the medium and long term, such as the new incentive scheme and the new regulations made in the private pension system, led to positive developments.

Inflation rate showed positive developments in 2012. With the contribution of the decrease in the core inflation and of the food inflation which remained below the average rate in the previous years, the inflation decreased rapidly during the last quarter of the year. Consequently, the consumer inflation rate which was above +10% in 2011 decreased to +6.2% in 2012, still remaining above the target inflation rate of +5%. In 2012, the Central Bank of Turkey (CBT) continued its reactive monetary policy. Actively employing the interest rate corridor without changing the policy interest rate after September 2011, the CBT set the funding cost high at an average of 8.7% in H1 2012, with the aim of suppressing the inflationist pressures. By taking into account the positive outlook of inflation and the weak internal demand during the rest of the year, the CBT reduced the funding cost below the policy interest rate during the last month of the year.

In addition, as the interest rate corridor was narrowed over the last months of the year, the policy interest rate was reduced slightly in December as a step taken to relax the monetary policy. In order to balance the expansive effect of the reduction in the interest rate during the last month of the year, the CBT tightened the money supply by raising the required reserves and signaled that it would keep taking steps in this direction. As the benchmark interest rate decreased to historically low levels, especially after the credit rating agency, Fitch, upgraded Turkey's rating to "investable", the Central Bank, aiming to prevent the appreciation of the TRY through a predicted increased entry of capital, announced its adoption of a cautious policy and, thus, ensured the stable outlook of the TRY.

As for the central government budget, the realisation of the budget in 2012 was more positive than the forecast of the government in the Medium Term Plan announced in October 2012. For the whole year, the budget deficit remained at TRY 28.8 bn, below the government's forecast of TRY 33.5 bn, while the primary surplus was TRY 19.6 bn, above the government's forecast of TRY 15.5 bn. In 2012, the budget deficit to the estimated GDP ratio in 2012 was 2.0%, while the primary surplus to GDP ratio stood at 1.4%. In parallel with the continuing positive developments in the public finance performance, the ratio of public debt stock to GDP continued to decline throughout 2012, decreasing to 36.7% of GDP as of September.

Housing and Mortgage Markets

The favorable demographic situation of Turkey was again the main catalyst for the growth of the Turkish housing market in 2012. The population grew by +1.2% to

75.6 mn, where the median age is only 30.1. Urbanisation rate also soared from 76.8% in 2011 to 77.3% in 2012.

In 2011, the Turkish Statistics Institute (TSI) announced for the first time since 2000 the housing statistics for a base year. According to this report, Turkey had 19.5 mn dwellings, which corresponds to an addition of 4.5 mn dwellings compared with 2000. Owner occupation ratio is 67.3%, indicating a drop of one percentage point in the last 11 years. The household size is still on a decreasing trend, dropping to 3.8 from 4.5 in 2000, which automatically translates to demand for new housing.

Although the economic growth was much lower than in 2011, mostly caused by CBT's precautionary policies, there has been a more positive outlook for the housing market. The number of construction permits rose by +14% to 741 td units from 650 td units in 2011. The number of occupancy permits dropped slightly to 540 td from 555 td in 2011, but still accounts for the second highest number in the history. TSI started to publish quarterly housing sales from 2008: the quarterly figures were around 100 td units per quarter and 400 – 500 td units per year. Recently, the institute made an important addition to that publication by announcing mortgage sales figures beginning from Q4 2009 with a more accurate picture for the years 2010 and thereafter. As of 2012, there have been 702 td sales transactions, a decrease of -0.9% from 2011, 38.5% of which were financed with mortgage loans.

The overall house prices increased in Turkey according to both indexes published by REIDIN¹ and CBT. The composite country index rose by +17.4% and +11.5% respectively, reaching index levels of 118.3 (100 as of June 2007) and 128.6 (96.9 as of January 2010). Considering the inflation rate of 6.16% for 2012, there was a real appreciation of +5 to +10% of house prices in 2012. The appreciation was "across-the-board", meaning that there was a significant housing demand almost in every city or city group, and that the demand was caused mostly by domestic housing needs. But this trend must be watched carefully, as it could lead to a bubble in the market, especially if the interest rates remain at their historical low levels.

Following the economic trend, the Turkish residential mortgage market continued to grow in 2012, albeit at a slower pace than in 2010 and 2011. The market increased by +15% or TRY 11.3 bn (EUR 4.9 bn) and reached the total outstanding amount of TRY 85.9 bn (EUR 37.1 bn). The mortgage volume to GDP ratio also increased, but, with a ratio of 6.1%, the market is still very small in comparison with the European counterparts.

In 2012, two different trends were detected regarding the mortgage market: the market grew only by +1.1% in Q1 and by +5.1% in H1. In Q2 2012, the market accelerated and, especially in the last quarter, reached a growth rate of +6.5%. The main reason for the slow start in the first half and the gained pace in the last quarter was the different levels of interest rates. In January 2012, the average mortgage rate in the market was 14.5%. Due to the monetary policy of the CBT as explained above, the interest rates started to fall swiftly, ending the year with an average mortgage rate of 10.1%. The market experienced "historically low" levels of interest rates during a stretch of 8 months started at the end of 2010, which was accompanied by the record high mortgage volumes.

According to the data published by the Banking Association of Turkey, the total gross mortgage lending in 2012 (excluding the Islamic banks with a market share of approximately 7.5%) was TRY 28.5 bn (EUR 12.3 bn), which corresponds to a drop of -4.3% in comparison with the volumes in 2011. The number of borrowers also dropped by -10.0% to 372 td. The average loan size was approximately TRY 76 td (EUR 33 td). Although there is no data regarding the average term, according to data provided by the CBT, more than 80% of the disbursements have a maturity of up to 120 months. The ruling by the Banking Regulation and Supervision Agency ("BRSA"), which limited the maximum LTV at 75%, was still effective and

¹ REIDIN is a private organisation providing data and information on real estate in emerging markets.

therefore the average LTV in the sector remained below this threshold. Although the banks are allowed to disburse floating-rate loans with a base rate pegged to CPI, almost all loans have a fixed rate during their entire term.

The NPL ratio also showed two different patterns during the year. It started the year with a steady decline from 0.9% to 0.81%, but then, as of June 2012, it changed direction, climbing to the level of 0.85% and remaining at that level until the end of the year.

As mentioned above, the net growth in the mortgage market in 2012 was TRY 11.3 bn (EUR 4.9 bn), which constitutes a drop of -17.8% from 2011, while the decline in the disbursements was limited to -4.3%. The reason for this difference is the tendency of the borrowers to refinance, either by changing their financial institutions or repricing their existing loans. The decline of 400 bps in the interest rates and the fixed rate nature of the market are the main contributors of this tendency. It is believed that almost 5-7% of the total mortgage portfolio was refinanced during the last three months of 2012, and that this trend will also continue in 2013, ending with a ratio of around 15-20% of the total outstanding mortgage volume.

Mortgage Funding

Since the share of mortgages in banks' balance sheets is almost flat at 11% for the last couple of years, most banks do not use special funding schemes for the mortgages. The main funding instrument is deposits, which constitutes 56,3% of the total liabilities as of 2012. The deposits' share lost 80 bps compared with the previous year, while the credits/deposits ratio climbed to 103%, from 98.2% in 2011. Therefore, the banks are looking more and more for alternative funding instruments and the new frontier seems to be the unsecured corporate bonds and bills. The ratio of this source of funding grew by +105.2% in 2012 but, with a ratio of 2.8%, it still constitutes a minor component of banks' balance sheets. With credit growth exceeding the deposit growth also in coming years and with the Turkey's rating upgrade to investment grade by Moody's, the first residential mortgage backed covered bond could appear in 2013.

| | Turkey 2011 | Turkey 2012 | EU27 2012 |
|---|----------------|----------------|--------------|
| Real GDP, growth (%) (1) | 8.8 | 2.2 | -0.4 |
| Unemployment rate, LFS adjusted data, annual average (%) (5) | 8.1 | 8.8 | 10.5 |
| Harmonised index of consumer price, annual growth (eoy) (%) (1) | 10.4 | 6.2 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 30,530 | 36,535 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | 584 | 686 | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | n/a | n/a | 81.8 |
| Gross residential lending, growth (%) (2) | -20.1 | -3.3 | n/a |
| Typical mortgage rate (%) (2) | 11.6 | 12.4 | n/a |
| Owner occupied rate (%) (4) | 67.3 | 67.3 | n/a |
| Nominal house prices, growth (%) (2) | 7.8 | 17.4 | n/a |

Notes:

(1): Source: Central Bank of the Republic of Turkey

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).

(5): Source: Eurostat

United States

By Dwight Jaffee, University of California, Berkeley, and Sean Wilkoff¹, University of California, Berkeley, U.S. Securities and Exchange Commission

Macroeconomic Overview

During 2012, the United States (US) continued to recover from its deepest recession since the Great Depression, but the rate of recovery continued to be modest based on historical comparisons. Annual real GDP growth rate was +2.2%, a slow rate for the third year of a recovery. Other macroeconomic measures also indicated a slow recovery. The unemployment rate reached 8.1% by year-end 2012, a decline of almost one percentage point from a year earlier, but the improvement reflected in part a decline in the labor participation rate. Under the force of an aggressive monetary policy, interest rates continued to decline to historically extremely low levels. The 10-year Treasury bond rate, for example, remained well below 2.0% at year-end 2012, while the long-term, fixed-rate, mortgage rate fell well below 4.0%. Inflation measured by the consumer price index average +2.1% over 2012, almost a full percentage point lower than the previous year. Government budget deficits, at both the federal and local government levels, expanded as a result of the slow pace of the recovery. The US stock market rose steadily and significantly over the course of 2012, the benefit of generally good corporate earnings exceeding the continuing concerns for the U.S. fiscal budget and European sovereign debt crisis.

Housing and Mortgage Markets

The housing and mortgage markets showed distinct signs of recovery throughout 2012. Home ownership rates continued to decline slightly in 2012, to 65.4%, in part as the result of continuing foreclosures on subprime mortgages. Housing starts and permits showed a distinct improvement, with housing starts rising from 509 td to 780 td units in 2012, although this rate remains far below historical averages. Housing completions and new home sales also showed important improvements in 2012 over the preceding year. Existing home sales also strongly improved in 2012 over 2011 and existing home prices significantly increased for the first time since the start of the crisis. Rising demand in rental markets, already evident in 2011, continued throughout 2012 in many regions of the country.

Throughout 2012, there was steady improvement in reducing the inventory of mortgage loans in the process of foreclosure, thus reducing what had been a major impediment to improvements in the US mortgage and housing markets. Government programmes to modify mortgages, and therefore to avoid delinquency and foreclosure, remained active, but it appeared that sufficient time was the critical factor. The limited success of the government programs reflected inadequacy of the programmes themselves, adverse economic incentives, and technical problems within the banks.

Mortgage Funding

Gross residential mortgage lending volumes showed strong improvement in 2012, increasing by more than +25% relative to the 2011 levels, aided by the historically low mortgage rates and the rising trend in home prices. Net residential lending, however, continued to be negative for the fifth year in a row, as mortgage repayments and termination exceeded the new gross lending. During 2012, delinquency rates continued to fall, with the percentage of seriously delinquent mortgages falling from 7.6% to 7.1% and the percentage of mortgages in foreclosure falling from 4.4% to 3.7%. The volume of commercial property loans outstanding also continued to decline, extending the negative trend to four years.

The dominance of the three federal government programs in residential mortgage lending continued throughout 2012, with almost 85% of all lending associated with one of the programs. The Federal Housing Administration (FHA) and Veterans Administration programs were responsible for almost 20% of all residential lending

and the government sponsored enterprises (GSEs, Fannie Mae and Freddie Mac operating under a government conservatorship) were responsible for 53% of all lending. Almost all of the 2012 mortgage securitisation activity was also associated with these government programs. Private market originators could not expand beyond a small market share because they were crowded out by the subsidised government programs.

Regulatory Reform

The Dodd-Frank Financial Reform Act, passed in 2010, requires fundamental long-term changes in the US housing and mortgage markets (along with its general regulatory reforms for banking and the financial markets). However, the legislation requires the relevant government agencies to determine detailed rules. The frustratingly slow pace of rule-making in 2012 continued the pattern of the previous two years, although more progress was announced in early 2013. The major action was taken by the Consumer Finance Protection Bureau, under which most U.S. mortgage regulations are now centralised. The main progress concerned the detailed rules for a "Qualified Mortgage" (QM). A qualified mortgage will receive "safe harbor" status against various possible legal and regulatory challenges that could otherwise arise if the borrower were to default. While the full QM rule is highly detailed, the basic principle is that the lender must verify that a loan is suitable for the borrower considering a range of underwriting standards. Lenders can still make non-QM mortgages, but they will not receive the safe harbor protections. Action has also been taken on the Dodd-Frank requirement that lenders retain 5% of the risk embedded in any new issues of mortgage-backed securities (MBS), the so-called "skin in the game" rule. This rule for this exemption (called QRM) has now been set to be the same as QM requirement.

In February 2011, the Obama Administration issued its White Paper report to the Congress, titled "Reforming America's Housing Finance Market". This contained the Administration's long awaited proposal for redesigning the role of Fannie Mae and Freddie Mac (the so-called government sponsored enterprises, GSEs) within the US mortgage market. However, no observable progress was made during 2011 or 2012 to implement any aspect of the proposal. The GSEs continue to operate under a Conservatorship that has required large capital infusions from the U.S. Treasury.

The most likely implementation of the White Paper proposal will establish a government catastrophe insurance fund to limit the risk facing investors on mortgage backed securities. In theory, the first loss positions will be held by private investors. In this format, the mortgage plan would echo the insurance structure the U.S. is using to support the market for terrorism insurance on commercial properties. This plan, called TRIA for Terrorist Risk Insurance Act, puts private insurers in the first loss position for terrorist attack losses, but makes the government responsible for claims that exceed the first loss position. In the current version of TRIA, losses would have to exceed the level of the 9/11 attack before any taxpayer money would be at risk. This is the positive view of how a government mortgage insurance plan would work.

The negative form of a government mortgage insurance plan would more closely resemble the U.S. national flood insurance program. The legislation for this flood insurance program initially required risk-based premiums, with the benefit that homeowners would be deterred by high premiums from building homes in risky locations. Over time, however, the program developed subsidies and cross-subsidies such that the premiums were reduced for the most threatened locations. The effect is that the insurance program actually provides an incentive for citizens to place themselves in harm's way. The concern is that a new large-scale government mortgage insurance program would resemble the flood insurance program.

Overall, the implementation of the mortgage market reforms in the Dodd-Frank Act and the decision on how to replace the GSEs is going forward, but slowly.

¹ The Securities and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication or statement by any of its employees. The views expressed herein are those of the author and do not necessarily reflect the views of the Commission or of the author's colleagues upon the staff of the Commission

| | USA 2011 | USA 2012 | EU27 2012 |
|---|-----------|-----------|-----------|
| Real GDP, growth (%) (1) | 1.8 | 2.2 | -0.4 |
| Unemployment rate (%) (1) | 8.9 | 8.1 | 10.5 |
| Harmonised index of consumer price, growth (%) (1) | 3.1 | 2.1 | 2.6 |
| Outstanding residential lending (in mn, EUR) (2) | 8,512,095 | 8,173,336 | 6,727,870 |
| Outstanding residential mortgage lending per capita over 18 (EUR) (3) | n/a | n/a | 16,240 |
| Outstanding residential lending to disposable income ratio (%) (3) | 100.9 | 86.9 | 81.8 |
| Gross residential lending, growth (%) (2) | -14.1 | 40.4 | n/a |
| Typical mortgage rate (%) (2) | 4.46 | 3.66 | n/a |
| Owner occupied rate (%) (4) | 66.1 | 66.1 | n/a |
| Nominal house prices, growth (%) (2) | -3.9 | 6.3 | n/a |

Notes:

(1): Source: Eurostat; IMF; US Bureau of Economic Analysis and US Bureau of Labor Statistics

(2): Source: European Mortgage Federation

(3): Source: European Mortgage Federation; Eurostat and EC (AMECO)

(4): Source: European Mortgage Federation; At country level, the figure is repeated if there is no update; The data for the EU27 is the weighted average of the EU27 countries using the same approach (dwelling or housing approach) in the hypostat 2012; this average has been weighted with the national dwelling stocks recorded in the year of the last update for owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the latest available data).



1. Total Outstanding Residential Loans

Total amount, end of the year, EUR million

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Austria | 29,632 | 35,998 | 39,746 | 48,078 | 53,815 | 60,737 | 65,897 | 72,061 | 73,455 | 80,000 | 83,960 | 86,161 |
| Belgium | 69,240 | 74,460 | 81,344 | 89,414 | 101,092 | 114,105 | 126,383 | 137,016 | 151,738 | 161,723 | 172,049 | 183,616 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | 5,467 | 7,444 | 7,429 | 7,263 | 7,019 | 6,993 |
| Cyprus | 680 | 870 | 1,162 | 1,487 | 4,131 | 5,421 | 6,935 | 8,501 | 10,388 | 11,921 | 12,545 | 12,679 |
| Czech Republic | n/a | 1,493 | 2,395 | 3,854 | 6,178 | 8,306 | 13,056 | 15,099 | 16,623 | 18,356 | 19,761 | 21,750 |
| Denmark | 127,466 | 136,671 | 147,683 | 156,894 | 175,980 | 194,970 | 211,429 | 222,385 | 231,208 | 237,352 | 242,178 | 246,415 |
| Estonia | 387 | 593 | 954 | 1,500 | 2,618 | 4,278 | 5,568 | 6,228 | 6,116 | 5,971 | 5,869 | 5,848 |
| Finland | 27,096 | 30,599 | 36,047 | 41,543 | 48,489 | 55,307 | 62,172 | 67,632 | 71,860 | 76,747 | 81,781 | 86,346 |
| France | 324,600 | 350,700 | 385,400 | 432,300 | 503,600 | 577,800 | 651,900 | 710,000 | 737,600 | 796,600 | 843,200 | 874,000 |
| Germany | 1,122,809 | 1,139,830 | 1,156,341 | 1,157,026 | 1,162,588 | 1,183,834 | 1,155,742 | 1,145,404 | 1,146,969 | 1,152,195 | 1,163,783 | 1,184,853 |
| Greece | 15,652 | 21,225 | 26,778 | 34,052 | 45,420 | 57,145 | 69,363 | 77,700 | 80,559 | 80,507 | 78,393 | 74,634 |
| Hungary | 1,320 | 3,306 | 5,746 | 7,765 | 10,565 | 13,688 | 17,397 | 22,346 | 22,463 | 24,659 | 21,950 | 19,985 |
| Ireland | 38,343 | 47,212 | 59,621 | 77,615 | 99,416 | 123,988 | 140,562 | 148,803 | 147,947 | 135,806 | 130,568 | 126,744 |
| Italy | n/a | n/a | 154,327 | 184,951 | 217,147 | 244,314 | 265,454 | 264,288 | 280,337 | 352,111 | 367,645 | 365,588 |
| Latvia | n/a | n/a | 725 | 1,322 | 2,513 | 4,677 | 6,764 | 7,136 | 6,808 | 6,498 | 6,019 | 5,373 |
| Lithuania | 188 | 337 | 668 | 1,258 | 2,268 | 2,997 | 4,849 | 6,055 | 6,027 | 5,983 | 5,934 | 5,874 |
| Luxembourg | 6,157 | 6,647 | 7,830 | 8,797 | 10,586 | 12,018 | 14,676 | 15,940 | 17,077 | 18,591 | 20,255 | 21,715 |
| Malta | 768 | 878 | 1,030 | 1,256 | 1,522 | 1,775 | 2,021 | 2,228 | 2,472 | 2,684 | 2,914 | 3,111 |
| Netherlands | 327,045 | 373,198 | 400,153 | 433,383 | 480,191 | 510,561 | 549,470 | 591,531 | 614,002 | 631,047 | 644,450 | 651,200 |
| Poland | 5,764 | 7,061 | 8,693 | 9,642 | 14,646 | 22,795 | 36,632 | 51,750 | 53,005 | 67,526 | 71,883 | 79,434 |
| Portugal | 57,365 | 64,838 | 66,425 | 71,101 | 79,452 | 91,896 | 101,094 | 105,209 | 110,685 | 114,515 | 113,916 | 110,520 |
| Romania | n/a | n/a | n/a | n/a | 766 | 2,176 | 4,203 | 5,715 | 5,687 | 6,802 | 7,711 | 8,736 |
| Slovakia | n/a | 1,011 | 1,415 | 2,196 | 3,078 | 5,209 | 6,773 | 8,536 | 9,469 | 10,849 | 12,320 | 13,701 |
| Slovenia | 99 | 201 | 263 | 800 | 1,368 | 1,956 | 2,670 | 3,398 | 3,933 | 4,844 | 5,172 | 5,259 |
| Spain | 220,913 | 261,921 | 312,916 | 384,631 | 475,571 | 571,803 | 646,676 | 674,434 | 678,872 | 680,208 | 666,946 | 641,510 |
| Sweden | 122,275 | 133,314 | 146,200 | 163,713 | 176,551 | 205,210 | 217,881 | 206,210 | 238,424 | 292,263 | 308,498 | 334,922 |
| UK | 971,816 | 1,037,928 | 1,099,022 | 1,244,573 | 1,411,090 | 1,606,490 | 1,618,895 | 1,287,432 | 1,391,257 | 1,440,258 | 1,491,974 | 1,550,903 |
| Euro area (17) | | | | 2,970,130 | 3,290,084 | 3,622,147 | 3,873,356 | 4,038,908 | 4,143,478 | 4,316,320 | 4,405,157 | 4,447,350 |
| EU27 | | | | 4,559,150 | 5,090,640 | 5,683,456 | 6,009,929 | 5,870,481 | 6,122,407 | 6,423,278 | 6,588,693 | 6,727,870 |
| Croatia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 14,500 | 14,466 | 14,248 |
| Iceland | 6,425 | 6,981 | 7,832 | 8,978 | 12,129 | 13,142 | 15,974 | 12,158 | n/a | n/a | n/a | n/a |
| Norway | 81,349 | 100,240 | 98,409 | 113,088 | 135,541 | 151,401 | 175,091 | 157,299 | 197,535 | 222,205 | 240,424 | 275,754 |
| Russia | n/a | n/a | n/a | n/a | 1,558 | 6,744 | 16,985 | 25,927 | 23,425 | 27,667 | 35,412 | 49,522 |
| Turkey | n/a | n/a | n/a | n/a | 8,187 | 12,542 | 18,905 | 18,103 | 20,833 | 29,381 | 30,530 | 36,535 |
| USA | 6,942,017 | 6,590,922 | 6,182,977 | 6,532,927 | 8,536,577 | 8,496,279 | 8,151,688 | 8,577,926 | 8,150,076 | 8,430,100 | 8,512,095 | 8,173,336 |

Sources: European Mortgage Federation National Experts, European Central Bank, National Central Banks, Federal Reserve

1) Time series breaks:

- Italy: 2010 (due to a change of methodology)
- The Netherlands: 2006 (due to a change of methodology)
- Poland: 2007 (due to a change of methodology)
- Romania: 2007 (due to a change of methodology)
- Slovakia: 2006 (due to a change of methodology)
- Sweden: 2004 (due to a change in the statistical source)

2) The series has been revised for at least two years in:

- Bulgaria
- Cyprus
- Czech Republic
- Denmark
- Hungary
- Iceland
- Italy
- Latvia
- Lithuania
- Netherlands
- Norway
- Poland
- Romania
- Russia
- Slovakia
- Sweden
- Turkey
- UK
- 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 conversion to euros is based on the bilateral exchange rate at the end of the period (provided by the ECB)
- For Iceland and Romania, the used bilateral exchange rate is the average or standardised measure for given frequency (provided by the ECB)
- In Croatia, the data is provided by the Croatian National Bank and concerns the loans to households with a maturity above 5 years (more than 80% of all loans to households)
- In Belgium, contrary to the yearly data published in the Hyostat, the quarterly data on residential lending excludes several types of loans (such as the «social credits»).
- In the UK, the data in EUR is significantly more volatile than the data in GBP, due to the significant variations of the bilateral exchange rate EUR/GBP
- In the USA, the data in EUR is significantly more volatile than the data in USD, due to the significant variations of the bilateral exchange rate EUR/USD
- In Sweden, the data concerns both residential mortgage loans and non residential mortgage loans

2. Gross Residential Loans

Total amount, EUR million

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Belgium | 9,622 | 11,688 | 18,134 | 17,264 | 25,198 | 24,323 | 22,825 | 21,531 | 22,076 | 26,768 | 28,074 | 25,994 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | 3,488 | 3,223 | 1,206 | 1,308 | 1,282 | 1,172 |
| Czech Republic | n/a | 735 | 1,202 | 1,590 | 2,609 | 4,094 | 5,395 | 4,935 | 2,689 | 3,216 | 4,757 | 4,566 |
| Denmark | 33,509 | 33,870 | 52,551 | 46,489 | 77,592 | 49,993 | 43,272 | 36,959 | 49,711 | 47,447 | 29,723 | 52,587 |
| Estonia | 176 | 301 | 508 | 806 | 1,471 | 2,339 | 2,137 | 1,434 | 446 | 419 | 490 | n/a |
| Finland | 8,788 | 10,404 | 13,139 | 14,686 | 18,555 | 19,756 | 21,215 | 19,669 | 16,161 | 18,526 | 20,124 | 19,114 |
| France | 66,200 | 78,500 | 95,800 | 113,400 | 134,500 | 149,080 | 146,800 | 122,006 | 103,850 | 147,069 | 136,251 | 106,522 |
| Germany | 110,900 | 103,400 | 123,000 | 114,400 | 123,100 | 133,600 | 132,000 | 132,800 | 131,300 | 142,700 | 150,600 | 162,900 |
| Greece | n/a | n/a | 5,905 | 8,036 | 13,610 | 15,444 | 15,199 | 12,435 | 7,966 | n/a | n/a | n/a |
| Hungary | n/a | n/a | n/a | n/a | 2,931 | 4,197 | 5,787 | 6,240 | 1,907 | 1,398 | 1,294 | 1,214 |
| Ireland | 7,664 | 10,825 | 13,524 | 16,933 | 34,114 | 39,872 | 33,808 | 23,049 | 8,076 | 4,746 | 2,463 | 2,636 |
| Italy | 37,201 | 43,138 | 52,397 | 58,944 | 66,764 | 77,305 | 76,698 | 71,049 | 60,698 | 65,408 | 55,165 | 33,406 |
| Lithuania | 103 | 210 | 348 | 594 | 865 | 1,171 | 1,852 | 1,808 | 1,050 | 706 | 876 | n/a |
| Luxembourg | 1,906 | 2,308 | 2,745 | 3,386 | 3,957 | 4,376 | n/a | n/a | n/a | n/a | n/a | n/a |
| Malta | n/a | n/a | n/a | n/a | 226 | 266 | 245 | 205 | 244 | 210 | 227 | n/a |
| Netherlands | 72,609 | 81,385 | 65,208 | 74,900 | 102,793 | 106,661 | 82,711 | 73,197 | 53,107 | 63,500 | 73,315 | 54,580 |
| Portugal | n/a | n/a | 12,944 | 18,260 | 17,578 | 18,391 | 19,632 | 13,525 | 9,330 | 10,105 | 4,853 | 1,935 |
| Romania | n/a | n/a | n/a | n/a | 2,119 | 3,648 | 7,864 | n/a | n/a | n/a | n/a | n/a |
| Slovakia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 923 | 1,354 | n/a | n/a |
| Slovenia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 672 | 1,456 | 1,213 | 928 | 705 |
| Spain | 55,265 | 70,527 | 91,387 | 109,028 | 139,315 | 156,408 | 135,576 | 83,780 | 68,918 | 60,986 | 32,198 | 26,925 |
| Sweden | 22,292 | 23,735 | 29,558 | 33,299 | 43,885 | 41,290 | 43,890 | 33,748 | 39,950 | 45,149 | 38,854 | 40,607 |
| UK | 257,486 | 351,028 | 400,789 | 429,153 | 421,585 | 506,586 | 530,448 | 321,403 | 160,916 | 158,121 | 162,762 | 176,522 |
| EU27 | 683,722 | 822,056 | 979,138 | 1,061,168 | 1,232,768 | 1,358,801 | 1,330,841 | 983,667 | 741,981 | 800,349 | 744,236 | 711,385 |
| Russia | n/a | n/a | n/a | n/a | 1,601 | 7,726 | 15,891 | 18,006 | 3,455 | 9,439 | 17,536 | 25,847 |
| Turkey | n/a | n/a | n/a | n/a | 6,938 | 8,626 | 8,696 | 8,057 | 9,811 | 15,939 | 12,728 | 12,305 |
| USA | 2,473,202 | 3,050,973 | 3,487,447 | 2,347,456 | 2,507,837 | 2,373,367 | 1,773,076 | 1,019,853 | 1,319,186 | 1,229,539 | 1,056,034 | 1,482,721 |

Sources: European Mortgage Federation National Experts, National Central Banks, Federal Reserve

1) Time series breaks:

- France (2007)
- The Netherlands (2003: change of source; 2004, 2005, 2006 and 2007: change of methodology)

2) The series has been revised for at least two years in:

- Belgium
- Czech Republic
- Denmark
- France
- Germany
- Netherlands
- Sweden
- UK
- 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 conversion to euros is based on the yearly average bilateral exchange rate (provided by the ECB)
- Please note that the aggregate for the EU27 is not consistent over time due to missing data for many countries and years

3. Net Residential Loans

EUR million

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|----------|----------|---------|-----------|---------|----------|----------|----------|---------|---------|----------|
| Austria | 6,366 | 3,748 | 8,332 | 5,737 | 6,922 | 5,160 | 6,164 | 1,394 | 6,545 | 3,960 | 2,201 |
| Belgium | 5,220 | 6,884 | 8,070 | 11,679 | 13,013 | 12,277 | 10,634 | 14,722 | 9,985 | 10,326 | 11,567 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | 1,977 | -15 | -166 | -244 | -27 |
| Cyprus | 190 | 292 | 325 | 2,644 | 1,291 | 1,514 | 1,566 | 1,886 | 1,533 | 624 | 134 |
| Czech Republic | n/a | 902 | 1,459 | 2,324 | 2,128 | 4,750 | 2,044 | 1,523 | 1,733 | 1,405 | 1,989 |
| Denmark | 9,205 | 11,012 | 9,211 | 19,087 | 18,990 | 16,458 | 10,956 | 8,823 | 6,144 | 4,826 | 4,237 |
| Estonia | 206 | 361 | 546 | 1,118 | 1,660 | 1,290 | 660 | -112 | -145 | -102 | -21 |
| Finland | 3,503 | 5,448 | 5,496 | 6,947 | 6,818 | 6,865 | 5,460 | 4,228 | 4,887 | 5,034 | 4,565 |
| France | 26,100 | 34,700 | 46,900 | 71,300 | 74,200 | 74,100 | 58,100 | 27,600 | 59,000 | 46,600 | 30,800 |
| Germany | 17,021 | 16,511 | 685 | 5,562 | 21,246 | -28,092 | -10,338 | 1,565 | 5,226 | 11,588 | 21,070 |
| Greece | 5,573 | 5,553 | 7,274 | 11,368 | 11,725 | 12,218 | 8,337 | 2,859 | -52 | -2,114 | -3,759 |
| Hungary | 1,986 | 2,440 | 2,020 | 2,799 | 3,124 | 3,709 | 4,948 | 117 | 2,196 | -2,708 | -1,965 |
| Ireland | 8,869 | 12,409 | 17,994 | 21,801 | 24,572 | 16,574 | 8,241 | -856 | -12,141 | -5,238 | -3,824 |
| Italy | n/a | n/a | 30,625 | 32,195 | 27,167 | 21,140 | -1,166 | 16,049 | 71,775 | 15,534 | -2,057 |
| Latvia | n/a | n/a | 597 | 1,192 | 2,163 | 2,087 | 372 | -329 | -310 | -479 | -646 |
| Lithuania | 149 | 331 | 590 | 1,010 | 729 | 1,852 | 1,206 | -29 | -44 | -49 | -45 |
| Luxembourg | 490 | 1,183 | 967 | 1,789 | 1,432 | 2,658 | 1,264 | 1,137 | 1,514 | 1,664 | 1,460 |
| Malta | 110 | 152 | 226 | 266 | 253 | 246 | 207 | 244 | 212 | 230 | 197 |
| Netherlands | 46,153 | 26,955 | 33,230 | 46,808 | 30,370 | 38,909 | 42,061 | 22,471 | 17,045 | 13,402 | 6,750 |
| Poland | 1,297 | 1,632 | 949 | 5,004 | 8,149 | 13,837 | 15,118 | 1,255 | 14,521 | 4,357 | 7,551 |
| Portugal | 7,473 | 1,587 | 4,676 | 8,351 | 12,444 | 9,198 | 4,115 | 5,476 | 3,830 | -599 | -3,396 |
| Romania | n/a | n/a | n/a | n/a | 1,410 | 2,027 | 1,512 | -28 | 1,115 | 910 | 1,025 |
| Slovakia | n/a | 404 | 781 | 882 | 2,131 | 1,564 | 1,763 | 933 | 1,380 | 1,471 | 1,381 |
| Slovenia | 102 | 62 | 537 | 568 | 588 | 714 | 728 | 535 | 911 | 328 | 87 |
| Spain | 41,008 | 50,995 | 71,715 | 90,940 | 96,232 | 74,873 | 27,757 | 4,438 | 1,337 | -13,262 | -25,436 |
| Sweden | 11,040 | 12,886 | 17,512 | 12,838 | 28,659 | 12,671 | -11,671 | 32,214 | 53,838 | 16,236 | 26,424 |
| UK | 66,112 | 61,095 | 145,550 | 166,517 | 195,400 | 12,406 | -331,463 | 103,825 | 49,001 | 51,716 | 58,929 |
| Croatia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | -34 | -218 |
| Iceland | 556 | 850 | 1,146 | 3,151 | 1,013 | 2,832 | -3,816 | n/a | n/a | n/a | n/a |
| Norway | 18,891 | -1,831 | 14,680 | 22,452 | 15,861 | 23,690 | -17,792 | 40,236 | 24,670 | 18,219 | 35,330 |
| Russia | n/a | n/a | n/a | n/a | 5,187 | 10,241 | 8,942 | -2,501 | 4,242 | 7,745 | 14,110 |
| Turkey | n/a | n/a | n/a | n/a | 4,355 | 6,363 | -802 | 2,729 | 8,548 | 1,149 | 6,005 |
| USA | -351,095 | -407,945 | 349,950 | 2,003,650 | -40,298 | -344,591 | 426,238 | -427,850 | 280,024 | 81,995 | -338,759 |

Source: European Mortgage Federation National Experts, National Central Banks, Federal Reserve

1) Time series breaks:

- Bulgaria: 2007 (due to a change in the statistical source)
- Italy: 2010 (due to a change of methodology)
- The Netherlands: 2006 (due to a change of methodology)
- Poland: 2007 (due to a change of methodology)
- Romania: 2007 (due to a change of methodology)
- Slovakia: 2006 (due to a change of methodology)
- Sweden: 2004 (due to a change in the statistical source)

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 all the time series have been revised and, at present, are the result of the variation between two consecutive amounts of outstanding mortgage.
- Please note that the conversion to euros is based on the bilateral exchange rate at the end of the period (provided by the ECB)
- For Iceland and Romania, the used bilateral exchange rate is the average or standardised measure for given frequency (provided by the ECB)
- In Croatia, the data is provided by the Croatian National Bank and concerns the loans to households with a maturity above 5 years (more than 80% of all loans to households)
- In Belgium, the value provided for 2012 is an estimation based on an extrapolation of the market share of UPC members; contrary to the yearly data published in the Hypostat, the quarterly data on residential lending in Belgium excludes several types of loans (such as the "social credits").
- In the UK, the data in EUR is significantly more volatile than the data in GBP, due to the significant variations of the bilateral exchange rate EUR/GBP
- In the USA, the data in EUR is significantly more volatile than the data in USD, due to the significant variations of the bilateral exchange rate EUR/USD
- In Sweden, the data concerns both residential mortgage loans and non residential mortgage loans

4. Representative Interest Rates on New Residential Loans

Annual average based on monthly figures, %

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Type | Share |
|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Austria | 5.94 | 5.36 | 4.41 | 3.90 | 3.58 | 3.80 | 4.79 | 5.32 | 3.71 | 2.71 | 2.86 | 2.71 | 1 (o) | |
| Belgium | n/a | n/a | 5.00 | 4.75 | 4.10 | 4.15 | 4.63 | 5.02 | 4.55 | 4.09 | 3.95 | 3.73 | 5 | 72.0 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | 8.38 | 9.13 | 10.10 | 8.97 | 8.22 | 7.49 | 2 (o) | |
| Cyprus | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 5.97 | 6.05 | 4.73 | 5.31 | 5.33 | 2 | |
| Czech Republic | n/a | n/a | 5.00 | 4.74 | 3.98 | 4.36 | 5.34 | 5.69 | 5.61 | 4.23 | 3.56 | 3.17 | 1 | |
| Denmark | 6.77 | 6.29 | 5.45 | 5.28 | 4.36 | 5.12 | 5.69 | 6.50 | 5.52 | 4.54 | 4.76 | 3.67 | 6 (o) | |
| Estonia | 9.03 | 7.41 | 5.64 | 4.47 | 3.27 | 4.26 | 5.53 | 5.83 | 3.87 | 3.50 | 3.42 | 2.89 | 1 (o) | |
| Finland | n/a | n/a | 3.48 | 3.14 | 3.02 | 3.71 | 4.71 | 5.02 | 2.42 | 1.99 | 2.49 | 1.97 | 1 | |
| France | n/a | n/a | 4.22 | 3.87 | 3.52 | 4.10 | 4.84 | 5.32 | 3.90 | 3.44 | 3.95 | 3.42 | 1 | |
| Germany | n/a | n/a | 5.01 | 4.93 | 4.29 | 4.55 | 4.96 | 5.04 | 4.42 | 3.89 | 3.94 | 3.07 | 4 | 40.0 |
| Greece | n/a | n/a | 4.51 | 4.30 | 4.06 | 4.24 | 4.57 | 5.10 | 3.52 | 3.42 | 4.28 | 3.32 | 2 | |
| Hungary | n/a | n/a | 13.54 | 16.07 | 13.15 | 11.05 | 11.34 | 11.67 | 13.45 | 9.93 | 10.59 | 12.77 | 2 (o) | 58.6 |
| Ireland | n/a | n/a | 3.81 | 3.39 | 3.38 | 4.03 | 4.92 | 5.16 | 3.04 | 3.13 | 3.44 | 3.25 | 1 | |
| Italy | n/a | n/a | 4.11 | 3.69 | 3.64 | 4.40 | 5.46 | 5.69 | 3.63 | 2.67 | 3.32 | 4.02 | 1 | |
| Latvia | n/a | n/a | n/a | 5.60 | 4.53 | 4.96 | 6.10 | 7.02 | 4.95 | 4.09 | 4.12 | 3.66 | 1 (o) | |
| Lithuania | n/a | n/a | n/a | n/a | 3.32 | 4.06 | 5.40 | 5.83 | 4.17 | 3.70 | 3.71 | 2.97 | 1 (o) | |
| Luxembourg | n/a | n/a | 3.81 | 3.40 | 3.52 | 3.95 | 4.75 | 4.90 | 2.37 | 2.00 | 2.25 | 2.14 | 2 | |
| Malta | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 3.27 | 3.34 | 3.36 | 3.44 | 4.03 | 1 | |
| Netherlands | 5.88 | 5.33 | 4.92 | 4.80 | 4.11 | 4.44 | 4.91 | 5.27 | 5.37 | 4.86 | 4.92 | 4.73 | 4 | 31.7 |
| Poland | n/a | n/a | n/a | 7.80 | 6.98 | 5.74 | 6.09 | 8.05 | 7.32 | 6.60 | 6.60 | 6.98 | 1 (o) | |
| Portugal | n/a | n/a | 3.79 | 3.45 | 3.34 | 3.98 | 4.78 | 5.42 | 2.69 | 2.43 | 3.74 | 3.89 | 2 | 91.3 |
| Romania | n/a | n/a | n/a | n/a | n/a | n/a | 8.04 | 8.31 | 8.40 | 6.14 | 6.27 | 5.25 | 1 (o) | |
| Slovakia | n/a | n/a | n/a | 7.64 | 6.19 | 6.37 | 6.66 | 6.59 | 6.17 | 5.64 | 5.21 | 5.24 | 1 (o) | |
| Slovenia | n/a | n/a | n/a | n/a | n/a | 5.64 | 6.47 | 7.03 | 4.39 | 3.48 | 4.03 | 3.63 | 1 (o) | |
| Spain | n/a | n/a | 3.59 | 3.19 | 3.18 | 4.03 | 5.06 | 5.64 | 3.16 | 2.44 | 3.23 | 3.15 | 2 | 73.1 |
| Sweden | 4.92 | 5.07 | 4.03 | 3.12 | 2.50 | 3.07 | 4.21 | 5.18 | 1.89 | 1.92 | 3.69 | 3.54 | 6 | |
| UK | n/a | n/a | n/a | 4.95 | 5.17 | 5.05 | 5.69 | 5.75 | 4.21 | 3.81 | 3.62 | 3.69 | 1 | |
| Croatia | n/a | 7.76 | 7.02 | 6.19 | 5.20 | 4.81 | 4.94 | 5.78 | 6.36 | 6.32 | 5.48 | 5.31 | 1 (o) | |
| Iceland | n/a | n/a | n/a | 4.21 | 4.17 | 4.69 | 5.24 | 6.03 | 5.66 | 5.10 | 4.76 | 4.11 | 6 | |
| Russia | n/a | n/a | n/a | n/a | 14.90 | 13.70 | 12.60 | 12.90 | 14.30 | 13.10 | 11.90 | 12.30 | 1 (o) | |
| Turkey | n/a | 48.26 | 40.44 | 27.84 | 17.65 | 18.27 | 18.30 | 18.63 | 15.60 | 11.05 | 11.59 | 12.40 | 1 (o) | |
| USA | 6.97 | 6.54 | 5.82 | 5.84 | 5.86 | 6.41 | 6.34 | 6.04 | 5.04 | 4.69 | 4.46 | 3.66 | 6 | |

Source: European Mortgage Federation National Experts, European Central Bank, National Central Banks, Federal Reserve

1) Time series breaks:

- Czech Republic: 2006 (before 2006, it concerns data for the end of the year)
- Iceland: 2005 (in 2004, the average is based on data between September and December)
- 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)

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
- For national definitions of representative interest rates on new residential loans, please see the methodological Annex ("Explanatory Note on data")
- For some countries, the methodology to calculate the average figure is based on weekly data: Denmark, Iceland and Turkey
- 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 between 1 and 5 years on loans for house purchase
 - (4) Initial fixed period interest rate between 5 and 10 years on loans for house purchase
 - (5) Initial fixed period interest rate of 10 years or more on loans for house purchase
 - (6) Other
- For countries where, in the period 2001-2012, there was, for a least one year, a significant market share of new residential loans in a currency different from the one related to the representative interest rate, the symbol "(o)" is added
- The share of the type of national new residential loans in the total national new residential loans is provided in the column "Share" (at end-2012, in %)

5. Total Outstanding Residential Loans to GDP Ratio

%

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| Austria | 13.8 | 16.3 | 17.7 | 20.5 | 21.9 | 23.4 | 24.0 | 25.5 | 26.6 | 27.9 | 27.9 | 27.7 |
| Belgium | 26.7 | 27.7 | 29.5 | 30.7 | 33.3 | 35.8 | 37.6 | 39.6 | 44.5 | 45.4 | 46.5 | 48.8 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | 17.8 | 21.0 | 21.3 | 20.1 | 18.2 | 17.6 |
| Cyprus | 6.5 | 8.0 | 10.0 | 11.9 | 30.8 | 37.6 | 43.8 | 49.5 | 61.6 | 68.5 | 69.8 | 70.9 |
| Czech Republic | n/a | 1.8 | 2.9 | 4.0 | 5.7 | 6.8 | 9.5 | 10.5 | 11.7 | 12.1 | 13.3 | 14.3 |
| Denmark | 71.0 | 74.0 | 78.5 | 79.6 | 85.0 | 89.1 | 93.0 | 94.5 | 103.4 | 100.5 | 100.5 | 100.8 |
| Estonia | 5.6 | 7.6 | 10.9 | 15.5 | 23.4 | 31.9 | 34.6 | 38.4 | 44.4 | 41.7 | 36.8 | 34.4 |
| Finland | 19.5 | 21.3 | 24.8 | 27.3 | 30.8 | 33.4 | 34.6 | 36.4 | 41.7 | 42.9 | 43.2 | 44.4 |
| France | 21.7 | 22.7 | 24.3 | 26.1 | 29.3 | 32.1 | 34.6 | 36.7 | 39.1 | 41.1 | 42.1 | 43.0 |
| Germany | 53.4 | 53.5 | 53.8 | 52.7 | 52.3 | 51.2 | 47.6 | 46.3 | 48.3 | 46.2 | 44.9 | 44.8 |
| Greece | 10.7 | 13.6 | 15.5 | 18.4 | 23.5 | 27.4 | 31.1 | 33.3 | 34.9 | 36.2 | 37.6 | 38.5 |
| Hungary | 2.1 | 4.6 | 8.0 | 9.2 | 12.1 | 14.6 | 17.7 | 22.5 | 23.7 | 25.8 | 24.8 | 20.7 |
| Ireland | 32.6 | 36.1 | 42.3 | 51.7 | 61.0 | 69.8 | 74.5 | 83.2 | 91.7 | 86.8 | 82.1 | 77.5 |
| Italy | n/a | n/a | 11.5 | 13.2 | 15.1 | 16.4 | 17.1 | 16.8 | 18.4 | 22.7 | 23.3 | 23.3 |
| Latvia | n/a | n/a | 7.7 | 12.4 | 19.4 | 29.3 | 32.0 | 31.4 | 36.9 | 36.1 | 29.5 | 24.2 |
| Lithuania | 1.4 | 2.2 | 4.0 | 6.9 | 10.8 | 12.4 | 16.9 | 18.7 | 22.6 | 21.7 | 19.3 | 17.9 |
| Luxembourg | 27.3 | 27.7 | 30.3 | 32.1 | 35.0 | 35.4 | 39.1 | 42.7 | 47.4 | 46.6 | 47.5 | 48.9 |
| Malta | 18.2 | 19.8 | 22.4 | 27.0 | 30.8 | 34.1 | 36.2 | 37.4 | 41.5 | 42.4 | 44.3 | 45.7 |
| Netherlands | 73.0 | 80.2 | 83.9 | 88.2 | 93.5 | 94.5 | 96.1 | 99.5 | 107.1 | 107.2 | 107.1 | 108.4 |
| Poland | 2.6 | 3.5 | 4.8 | 4.3 | 5.7 | 8.2 | 11.2 | 16.9 | 16.2 | 18.9 | 21.0 | 20.3 |
| Portugal | 42.7 | 46.1 | 46.3 | 47.6 | 51.5 | 57.1 | 59.7 | 61.2 | 65.7 | 66.2 | 66.6 | 66.9 |
| Romania | n/a | n/a | n/a | n/a | 1.0 | 2.2 | 3.4 | 4.1 | 4.8 | 5.5 | 5.9 | 6.6 |
| Slovakia | n/a | 2.7 | 3.5 | 4.9 | 6.2 | 9.5 | 11.0 | 12.8 | 15.1 | 16.5 | 17.8 | 19.2 |
| Slovenia | 0.5 | 0.9 | 1.0 | 2.9 | 4.8 | 6.3 | 7.7 | 9.1 | 11.1 | 13.6 | 14.3 | 14.8 |
| Spain | 32.5 | 35.9 | 40.0 | 45.7 | 52.3 | 58.0 | 61.4 | 62.0 | 64.8 | 64.9 | 62.7 | 61.1 |
| Sweden | 48.4 | 49.9 | 52.2 | 55.5 | 59.9 | 63.0 | 65.8 | 70.0 | 78.7 | 78.5 | 78.6 | 80.7 |
| UK | 57.3 | 62.4 | 67.4 | 72.3 | 75.7 | 79.9 | 83.1 | 83.9 | 87.2 | 83.4 | 81.1 | 81.0 |
| Euro area (17) | | | | 37.7 | 40.3 | 42.2 | 42.9 | 43.7 | 46.4 | 47.0 | 46.7 | 46.9 |
| EU27 | | | | 43.0 | 45.8 | 48.2 | 48.8 | 48.6 | 51.9 | 52.1 | 51.9 | 52.0 |
| Croatia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 33.1 | 33.0 | 32.6 |
| Iceland | 72.8 | 73.7 | 80.6 | 84.1 | 92.5 | 98.7 | 107.0 | 118.1 | n/a | n/a | n/a | n/a |
| Norway | 42.1 | 47.6 | 52.0 | 53.1 | 55.2 | 57.2 | 60.4 | 59.9 | 68.8 | 68.1 | 67.8 | 69.7 |
| Russia | n/a | n/a | n/a | n/a | 0.2 | 0.9 | 1.8 | 2.6 | 2.6 | 2.4 | 2.7 | 3.2 |
| Turkey | n/a | n/a | n/a | n/a | 2.0 | 3.1 | 3.8 | 4.1 | 4.7 | 5.5 | 5.7 | 6.1 |
| USA | 59.5 | 64.9 | 70.1 | 75.1 | 79.8 | 83.6 | 85.5 | 83.5 | 84.0 | 77.7 | 73.1 | 68.8 |

Sources: European Mortgage Federation National Experts, European Central Bank, National Central Banks, Eurostat, Bureau of Economic Analysis, Federal Reserve

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
- Please note that the GDP at current prices for non-euro area countries has been converted to euros with the bilateral exchange rate of the end of the period

6. Total Outstanding Residential Debt to Disposable Income of Households Ratio

%

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Austria | 22.0 | 26.2 | 27.9 | 32.3 | 34.3 | 36.9 | 38.2 | 40.5 | 41.0 | 44.0 | 45.0 | 44.3 |
| Belgium | 41.3 | 43.9 | 47.3 | 50.9 | 55.7 | 59.5 | 62.5 | 64.3 | 69.7 | 73.7 | 76.7 | 80.0 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | 35.0 | 39.1 | 35.4 | 34.2 | n/a | n/a |
| Cyprus | 8.7 | 10.9 | 13.6 | 16.3 | 42.2 | 51.4 | 61.1 | 68.2 | 83.3 | 90.1 | 97.6 | 103.6 |
| Czech Republic | | 3.2 | 5.1 | 7.7 | 10.9 | 13.1 | 18.9 | 18.3 | 20.7 | 21.5 | 22.7 | 24.9 |
| Denmark | 150.8 | 155.7 | 162.4 | 166.2 | 180.3 | 192.2 | 204.3 | 208.2 | 210.7 | 207.2 | 205.4 | 205.7 |
| Estonia | 9.7 | 13.4 | 19.8 | 29.6 | 44.9 | 62.8 | 67.8 | 70.5 | 73.2 | 74.3 | 68.2 | 64.3 |
| Finland | 36.2 | 39.3 | 44.0 | 48.2 | 55.0 | 60.1 | 63.7 | 65.3 | 67.4 | 69.1 | 71.1 | 72.9 |
| France | 32.7 | 33.8 | 36.3 | 39.0 | 44.1 | 48.4 | 51.9 | 54.7 | 56.5 | 59.8 | 61.7 | 63.0 |
| Germany | 78.0 | 78.3 | 77.7 | 76.4 | 75.2 | 74.9 | 71.8 | 69.3 | 69.6 | 68.0 | 66.5 | 66.2 |
| Greece | 14.4 | 18.6 | 21.7 | 25.9 | 32.2 | 37.3 | 41.0 | 45.1 | 46.6 | 50.1 | 52.5 | 55.6 |
| Hungary | 3.7 | 7.8 | 12.9 | 15.8 | 19.7 | 25.8 | 30.1 | 37.3 | 41.9 | 44.5 | 37.5 | 34.8 |
| Ireland | n/a | 75.2 | 88.6 | 107.1 | 124.4 | 143.8 | 152.9 | 153.5 | 163.2 | 157.6 | 155.1 | 140.7 |
| Italy | n/a | n/a | 16.4 | 19.0 | 21.6 | 23.5 | 24.7 | 24.1 | 26.3 | 32.8 | 33.5 | 33.9 |
| Latvia | n/a | n/a | 11.4 | 18.1 | 30.7 | 46.7 | 55.3 | 48.5 | 55.3 | 56.6 | 49.0 | 40.0 |
| Lithuania | 2.0 | 3.3 | 6.1 | 10.5 | 16.6 | 19.2 | 27.7 | 29.2 | 31.5 | 31.0 | 30.2 | n/a |
| Luxembourg | n/a | n/a | n/a | n/a | n/a | 95.2 | 109.0 | 108.9 | 111.9 | 118.1 | 126.1 | n/a |
| Netherlands | 133.7 | 148.7 | 159.3 | 169.4 | 184.0 | 190.1 | 195.7 | 208.7 | 219.1 | 222.3 | 223.1 | 227.4 |
| Poland | 3.6 | 4.6 | 6.3 | 6.9 | 9.0 | 12.8 | 18.6 | 22.5 | 26.6 | 29.8 | 31.2 | 33.7 |
| Portugal | 60.8 | 66.1 | 65.5 | 67.2 | 72.5 | 81.5 | 85.4 | 85.2 | 90.0 | 90.4 | 91.1 | 89.2 |
| Romania | n/a | n/a | n/a | n/a | 1.5 | 3.7 | 5.6 | 6.4 | 7.8 | 9.3 | 10.5 | n/a |
| Slovakia | n/a | 6.2 | 7.9 | 10.6 | 13.2 | 19.8 | 20.9 | 22.3 | 23.5 | 25.8 | 28.5 | 31.2 |
| Slovenia | 0.6 | 1.2 | 1.6 | 4.6 | 7.3 | 9.9 | 12.5 | 14.8 | 17.1 | 20.8 | 21.9 | 22.6 |
| Spain | 49.1 | 54.8 | 61.1 | 70.4 | 80.8 | 90.8 | 96.4 | 94.1 | 94.2 | 97.2 | 95.7 | 94.7 |
| Sweden | 95.0 | 97.9 | 104.3 | 114.2 | 121.6 | 134.3 | 133.2 | 124.3 | 152.4 | 162.6 | 155.0 | 156.5 |
| UK | 86.9 | 90.5 | 100.9 | 108.3 | 119.3 | 129.7 | 127.0 | 113.3 | 132.8 | 127.0 | 128.5 | 119.1 |
| EU27 | | | | 66.4 | 71.3 | 76.0 | 76.9 | 73.8 | 78.7 | 80.4 | 80.9 | 81.8 |
| Norway | 91.6 | 96.4 | 93.9 | 107.8 | 113.3 | 132.5 | 141.5 | 121.3 | 151.9 | 149.4 | 149.1 | 156.4 |
| USA | 81.0 | 77.3 | 82.6 | 90.6 | 113.2 | 106.4 | 106.2 | 113.3 | 104.6 | 98.9 | 100.9 | 86.9 |

Sources: European Mortgage Federation National Experts, European Central Bank, National Central Banks, National Statistics Offices, Eurostat, Federal Reserve, US Bureau of Census

1) Time series breaks:

2) The series has been revised for at least two years in:

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- Please note that the disposable income of households at current prices for non-euro area countries has been converted to euros with the bilateral exchange rate of the end of the period

7. Total Outstanding Residential Loans per Capita

Population over 18 years, EUR

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Austria | 4,580 | 5,515 | 6,049 | 7,261 | 8,051 | 9,004 | 9,705 | 10,535 | 10,659 | 11,544 | 12,041 | 12,261 |
| Belgium | 8,424 | 9,007 | 9,785 | 10,703 | 12,031 | 13,485 | 14,819 | 15,927 | 17,494 | 18,486 | 19,376 | 20,497 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | 848 | 1,157 | 1,158 | 1,139 | 1,124 | 1,126 |
| Cyprus | 1,313 | 1,637 | 2,137 | 2,646 | 7,086 | 8,994 | 11,240 | 13,506 | 16,294 | 18,266 | 18,630 | 18,222 |
| Czech Republic | n/a | 180 | 287 | 459 | 733 | 978 | 1,527 | 1,747 | 1,903 | 2,094 | 2,262 | 2,483 |
| Denmark | 30,025 | 32,157 | 34,720 | 36,821 | 41,206 | 45,513 | 49,163 | 51,349 | 52,977 | 54,045 | 54,768 | 55,398 |
| Estonia | 358 | 547 | 876 | 1,373 | 2,390 | 3,893 | 5,056 | 5,637 | 5,530 | 5,397 | 5,302 | 5,288 |
| Finland | 6,593 | 7,405 | 8,680 | 9,948 | 11,557 | 13,110 | 14,650 | 15,831 | 16,709 | 17,728 | 18,778 | 19,707 |
| France | 6,794 | 7,282 | 7,940 | 8,833 | 10,194 | 11,595 | 12,987 | 14,054 | 14,522 | 15,601 | 16,421 | 16,939 |
| Germany | 16,594 | 16,762 | 16,940 | 16,901 | 16,941 | 17,195 | 16,762 | 16,578 | 16,589 | 16,672 | 16,820 | 17,065 |
| Greece | 1,740 | 2,339 | 2,930 | 3,702 | 4,913 | 6,147 | 7,424 | 8,285 | 8,554 | 8,513 | 8,286 | 7,901 |
| Hungary | 160 | 401 | 697 | 941 | 1,278 | 1,654 | 2,099 | 2,697 | 2,709 | 2,971 | 2,645 | 2,411 |
| Ireland | 13,330 | 16,021 | 19,818 | 25,309 | 31,625 | 38,371 | 42,361 | 44,032 | 43,468 | 39,919 | 37,456 | 36,412 |
| Italy | n/a | n/a | 3,213 | 3,808 | 4,426 | 4,956 | 5,349 | 5,279 | 5,560 | 6,948 | 7,215 | 7,147 |
| Latvia | n/a | n/a | 385 | 700 | 1,329 | 2,469 | 3,572 | 3,770 | 3,603 | 3,449 | 3,471 | 3,144 |
| Lithuania | 70 | 125 | 246 | 462 | 830 | 1,095 | 1,769 | 2,207 | 2,198 | 2,189 | 2,359 | 2,371 |
| Luxembourg | 17,791 | 18,979 | 22,132 | 24,473 | 29,020 | 32,344 | 38,869 | 41,460 | 43,422 | 46,366 | 49,466 | 51,425 |
| Malta | 2,539 | 2,857 | 3,305 | 3,976 | 4,753 | 5,489 | 6,160 | 6,703 | 7,338 | 7,919 | 8,496 | 8,996 |
| Netherlands | 25,869 | 29,317 | 31,273 | 33,727 | 37,209 | 39,404 | 42,275 | 45,292 | 46,669 | 47,589 | 48,280 | 48,460 |
| Poland | 195 | 236 | 288 | 317 | 478 | 739 | 1,182 | 1,662 | 1,695 | 2,151 | 2,266 | 2,497 |
| Portugal | 6,873 | 7,689 | 7,800 | 8,281 | 9,188 | 10,572 | 11,582 | 12,017 | 12,614 | 13,017 | 12,987 | 12,612 |
| Romania | n/a | n/a | n/a | n/a | 44 | 124 | 239 | 323 | 321 | 384 | 435 | 494 |
| Slovakia | n/a | 241 | 335 | 515 | 716 | 1,202 | 1,552 | 1,943 | 2,140 | 2,439 | 2,785 | 3,082 |
| Slovenia | 61 | 123 | 160 | 484 | 824 | 1,170 | 1,586 | 2,016 | 2,306 | 2,818 | 3,009 | 3,055 |
| Spain | 6,587 | 7,694 | 9,024 | 10,905 | 13,252 | 15,659 | 17,423 | 17,860 | 17,785 | 17,791 | 17,406 | 16,745 |
| Sweden | 17,342 | 18,829 | 20,557 | 22,885 | 24,538 | 28,330 | 29,811 | 27,946 | 31,987 | 38,773 | 40,557 | 43,686 |
| UK | 20,956 | 22,252 | 23,418 | 26,343 | 29,627 | 33,427 | 33,407 | 26,352 | 28,256 | 29,012 | 29,793 | 30,716 |
| Euro area (17) | | | | 11,321 | 12,438 | 13,592 | 14,436 | 14,945 | 15,247 | 15,830 | 16,091 | 16,189 |
| EU27 | | | | 11,495 | 12,740 | 14,125 | 14,842 | 14,401 | 14,937 | 15,612 | 15,960 | 16,240 |
| Iceland | 30,727 | 32,886 | 36,514 | 41,434 | 55,345 | 58,334 | 68,629 | 50,662 | n/a | n/a | n/a | n/a |
| Norway | 23,270 | 28,547 | 27,855 | 31,812 | 37,860 | 41,926 | 47,983 | 42,499 | 52,554 | 58,281 | 62,121 | 70,114 |
| Russia | n/a | n/a | n/a | n/a | n/a | 58 | 145 | 221 | 200 | 236 | 300 | n/a |
| Turkey | n/a | n/a | n/a | n/a | 168 | 253 | n/a | 366 | 414 | 574 | 584 | 686 |

Source: European Mortgage Federation National Experts, European Central Bank, National Central Banks, National Statistics Offices, Eurostat, Federal Reserve, US Bureau of Census

1) Time series breaks:

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 population concerns residents who are more than 18 years old

8. Total Outstanding Non Residential Mortgage Loans

Total Amount, End of the Year, EUR million

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Czech Republic | n/a | 539 | 966 | 1,375 | 1,669 | 2,515 | 3,070 | 4,783 | 5,304 | 5,718 | 5,745 | 5,982 |
| Denmark | 37,666 | 40,680 | 43,627 | 46,338 | 50,198 | 54,171 | 61,569 | 71,135 | 76,836 | 79,681 | 81,394 | 82,831 |
| Estonia | 2,601 | 3,193 | 4,420 | 5,915 | 8,018 | 11,369 | 15,307 | 16,626 | 15,642 | n/a | n/a | n/a |
| Finland | n/a | n/a | 33,714 | 36,701 | 39,452 | 42,875 | 48,386 | 57,594 | 54,093 | 56,471 | 60,361 | 63,282 |
| Germany | 223,644 | 232,701 | 257,432 | 258,045 | 258,569 | 256,332 | 260,008 | 254,862 | 255,721 | 251,450 | 259,134 | 254,014 |
| Greece | 2,172 | 2,903 | 3,247 | 4,040 | 4,190 | 4,194 | 4,774 | n/a | n/a | n/a | n/a | n/a |
| Hungary | n/a | n/a | 2,073 | 2,633 | 2,949 | 3,609 | 4,744 | 7,401 | 7,838 | 8,380 | 7,051 | 6,805 |
| Ireland | n/a | n/a | 14,294 | 17,965 | 22,419 | 25,966 | 29,292 | 29,598 | 29,875 | 31,313 | 30,663 | 27,024 |
| Italy | 40,452 | 42,983 | 43,292 | 50,782 | 53,888 | 63,752 | 69,150 | 66,240 | 71,311 | 74,015 | 73,212 | 93,200 |
| Latvia | n/a | n/a | 424 | 673 | 1,518 | 2,941 | 3,805 | 4,564 | 4,330 | 3,624 | 3,159 | 2,601 |
| Netherlands | 13,805 | 18,509 | 20,157 | 23,204 | 24,317 | 25,065 | 23,440 | 23,772 | n/a | n/a | n/a | n/a |
| Poland | n/a | 718 | 1,141 | 1,732 | 2,316 | 3,673 | 5,540 | 8,755 | 8,637 | 14,081 | 13,702 | 15,942 |
| Romania | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 1,858 | 1,951 | 1,887 |
| Spain | 91,200 | 115,092 | 154,952 | 197,801 | 263,763 | 339,620 | 400,765 | 414,512 | 420,669 | 396,719 | 339,739 | 235,151 |
| USA | 1,440,372 | 1,305,998 | 1,184,719 | 1,224,947 | 1,623,718 | 1,678,132 | 1,681,747 | 1,856,578 | 1,726,295 | 1,746,221 | 1,741,479 | 1,680,764 |

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:

- Latvia: 2003 (due to a change in the statistical source)

2) The series has been revised for at least two years in:

- Czech Republic
- Denmark
- Finland
- Hungary
- Ireland
- Latvia
- Poland
- UK
- 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 conversion to euros is based on the bilateral exchange rate at the end of the period (provided by the ECB)
- For Iceland and Romania, the used bilateral exchange rate is the average or standardised measure for given frequency (provided by the ECB)

9. GDP at Current Market Prices

EUR million

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Austria | 214,201 | 220,529 | 224,996 | 234,708 | 245,243 | 259,035 | 274,020 | 282,744 | 276,151 | 286,397 | 300,712 | 310,847 |
| Belgium | 259,803 | 268,620 | 276,157 | 291,287 | 303,435 | 318,829 | 335,815 | 346,375 | 340,739 | 356,069 | 369,981 | 376,229 |
| Bulgaria | 15,567 | 16,980 | 18,311 | 20,361 | 23,250 | 26,477 | 30,772 | 35,431 | 34,933 | 36,052 | 38,505 | 39,668 |
| Cyprus | 10,548 | 10,892 | 11,631 | 12,522 | 13,402 | 14,433 | 15,830 | 17,157 | 16,854 | 17,406 | 17,979 | 17,887 |
| Czech Republic | 76,608 | 81,310 | 82,941 | 96,152 | 107,450 | 121,979 | 137,546 | 143,197 | 141,993 | 151,266 | 148,269 | 152,299 |
| Denmark | 179,602 | 184,786 | 188,138 | 197,099 | 207,125 | 218,838 | 227,299 | 235,303 | 223,708 | 236,280 | 240,983 | 244,469 |
| Estonia | 6,971 | 7,776 | 8,719 | 9,685 | 11,182 | 13,391 | 16,069 | 16,235 | 13,762 | 14,323 | 15,951 | 16,998 |
| Finland | 139,288 | 143,646 | 145,531 | 152,266 | 157,429 | 165,765 | 179,830 | 185,670 | 172,318 | 178,796 | 189,489 | 194,469 |
| France | 1,495,553 | 1,542,928 | 1,587,902 | 1,655,571 | 1,718,047 | 1,798,115 | 1,886,793 | 1,933,195 | 1,885,762 | 1,936,720 | 2,001,398 | 2,032,296 |
| Germany | 2,101,900 | 2,132,200 | 2,147,500 | 2,195,700 | 2,224,400 | 2,313,900 | 2,428,500 | 2,473,800 | 2,374,500 | 2,496,200 | 2,592,600 | 2,644,200 |
| Greece | 146,428 | 156,614 | 172,432 | 185,266 | 193,050 | 208,622 | 223,160 | 233,198 | 231,081 | 222,152 | 208,532 | 193,749 |
| Hungary | 61,603 | 72,451 | 71,384 | 84,014 | 87,074 | 94,034 | 98,490 | 99,525 | 94,765 | 95,727 | 88,646 | 96,655 |
| Ireland | 117,643 | 130,877 | 140,827 | 150,194 | 163,037 | 177,729 | 188,729 | 178,882 | 161,275 | 156,487 | 158,993 | 163,595 |
| Italy | 1,255,738 | 1,301,873 | 1,341,850 | 1,397,728 | 1,436,380 | 1,493,031 | 1,554,199 | 1,575,144 | 1,519,695 | 1,551,886 | 1,578,497 | 1,565,916 |
| Latvia | 9,279 | 9,288 | 9,472 | 10,632 | 12,928 | 15,959 | 21,138 | 22,709 | 18,427 | 18,021 | 20,408 | 22,245 |
| Lithuania | 13,875 | 15,163 | 16,578 | 18,245 | 20,969 | 24,104 | 28,739 | 32,414 | 26,654 | 27,608 | 30,807 | 32,864 |
| Luxembourg | 22,570 | 23,982 | 25,822 | 27,445 | 30,270 | 33,920 | 37,491 | 37,372 | 36,027 | 39,906 | 42,626 | 44,426 |
| Malta | 4,219 | 4,433 | 4,605 | 4,656 | 4,938 | 5,207 | 5,575 | 5,964 | 5,956 | 6,324 | 6,584 | 6,803 |
| Netherlands | 447,731 | 465,214 | 476,945 | 491,184 | 513,407 | 540,216 | 571,773 | 594,481 | 573,235 | 588,740 | 601,973 | 600,638 |
| Poland | 223,032 | 201,089 | 179,322 | 226,353 | 254,741 | 276,698 | 327,463 | 307,092 | 327,569 | 356,374 | 342,783 | 391,572 |
| Portugal | 134,471 | 140,567 | 143,472 | 149,313 | 154,269 | 160,855 | 169,319 | 171,983 | 168,529 | 172,860 | 171,053 | 165,247 |
| Romania | 45,357 | 48,615 | 52,576 | 61,064 | 79,802 | 97,751 | 124,728 | 139,765 | 118,196 | 124,328 | 131,327 | 131,747 |
| Slovakia | 33,881 | 36,807 | 40,612 | 45,161 | 49,314 | 55,002 | 61,450 | 66,842 | 62,794 | 65,870 | 69,108 | 71,463 |
| Slovenia | 20,765 | 23,195 | 25,195 | 27,165 | 28,722 | 31,045 | 34,594 | 37,244 | 35,556 | 35,607 | 36,172 | 35,466 |
| Spain | 680,397 | 729,258 | 783,082 | 841,294 | 909,298 | 985,547 | 1,053,161 | 1,087,788 | 1,048,060 | 1,048,883 | 1,063,355 | 1,049,525 |
| Sweden | 252,486 | 266,982 | 280,272 | 294,987 | 294,975 | 325,702 | 331,093 | 294,786 | 302,945 | 372,264 | 392,719 | 415,043 |
| UK | 1,695,533 | 1,662,513 | 1,629,574 | 1,720,400 | 1,863,042 | 2,009,655 | 1,947,077 | 1,534,982 | 1,595,945 | 1,725,954 | 1,839,982 | 1,914,303 |
| Euro area (17) | 7,092,106 | 7,339,411 | 7,557,279 | 7,871,145 | 8,155,822 | 8,574,642 | 9,036,308 | 9,244,074 | 8,922,294 | 9,174,623 | 9,425,003 | 9,489,755 |
| EU27 | 9,665,049 | 9,898,587 | 10,085,848 | 10,600,451 | 11,107,178 | 11,785,840 | 12,310,654 | 12,089,277 | 11,807,430 | 12,318,497 | 12,699,432 | 12,930,620 |
| Croatia | 26,165 | 27,933 | 29,945 | 32,280 | 36,173 | 39,596 | 43,421 | 46,688 | 45,024 | 43,858 | 43,807 | 43,696 |
| Iceland | 8,830 | 9,474 | 9,711 | 10,674 | 13,112 | 13,316 | 14,932 | 10,292 | n/a | n/a | n/a | n/a |
| Norway | 193,283 | 210,609 | 189,230 | 212,810 | 245,323 | 264,725 | 289,827 | 262,555 | 287,028 | 326,188 | 354,651 | 395,576 |
| Russia | 332,933 | 322,857 | 357,408 | 450,599 | 637,081 | 776,159 | 923,901 | 999,850 | 899,272 | 1,134,782 | 1,336,016 | 1,546,186 |
| Turkey | n/a | n/a | n/a | n/a | 407,518 | 406,862 | 491,077 | 442,356 | 442,084 | 530,975 | 531,153 | 601,157 |
| USA | 11,671,593 | 10,148,088 | 8,822,031 | 8,702,188 | 10,700,136 | 10,157,327 | 9,529,702 | 10,269,131 | 9,699,882 | 10,850,864 | 11,651,345 | 11,887,790 |

Sources : Eurostat, IMF

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
- Please note that the GDP at current prices for non-euro area countries has been converted to EUR with the bilateral exchange rate of the end of the period

10. Gross Disposable Income of Households

EUR million

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Austria | 134,474 | 137,475 | 142,264 | 148,678 | 156,804 | 164,377 | 172,650 | 178,056 | 179,332 | 181,738 | 186,665 | 194,563 |
| Belgium | 167,621 | 169,795 | 171,921 | 175,801 | 181,429 | 191,850 | 202,106 | 213,195 | 217,598 | 219,389 | 224,374 | 229,483 |
| Bulgaria | 8,702 | n/a | n/a | 11,796 | 14,051 | 15,396 | 15,620 | 19,059 | 20,984 | 21,258 | n/a | n/a |
| Cyprus | 7,814 | 7,968 | 8,552 | 9,095 | 9,790 | 10,548 | 11,354 | 12,464 | 12,476 | 13,235 | 12,848 | 12,242 |
| Czech Republic | 40,947 | 47,192 | 47,338 | 49,809 | 56,424 | 63,495 | 69,197 | 82,328 | 80,377 | 85,256 | 87,059 | 87,272 |
| Denmark | 84,535 | 87,793 | 90,948 | 94,374 | 97,629 | 101,463 | 103,468 | 106,788 | 109,716 | 114,572 | 117,895 | 119,781 |
| Estonia | 4,003 | 4,419 | 4,808 | 5,070 | 5,835 | 6,812 | 8,213 | 8,828 | 8,351 | 8,034 | 8,610 | 9,090 |
| Finland | 74,799 | 77,930 | 81,957 | 86,229 | 88,182 | 91,960 | 97,668 | 103,509 | 106,576 | 111,065 | 115,039 | 118,457 |
| France | 991,356 | 1,036,628 | 1,061,858 | 1,108,500 | 1,142,028 | 1,194,511 | 1,255,597 | 1,297,664 | 1,305,151 | 1,331,457 | 1,365,905 | 1,386,206 |
| Germany | 1,438,790 | 1,455,520 | 1,487,740 | 1,513,920 | 1,545,410 | 1,580,620 | 1,608,980 | 1,653,050 | 1,647,450 | 1,695,520 | 1,751,070 | 1,790,980 |
| Greece | 108,711 | 113,992 | 123,476 | 131,279 | 141,221 | 153,402 | 168,987 | 172,153 | 173,033 | 160,586 | 149,235 | 134,162 |
| Hungary | 35,654 | 42,299 | 44,501 | 49,180 | 53,514 | 52,972 | 57,872 | 59,877 | 53,554 | 55,455 | 58,502 | 57,510 |
| Ireland | n/a | 62,781 | 67,311 | 72,502 | 79,942 | 86,210 | 91,903 | 96,928 | 90,680 | 86,161 | 84,195 | 90,074 |
| Italy | 872,480 | 908,999 | 939,467 | 973,383 | 1,003,417 | 1,039,376 | 1,074,440 | 1,095,209 | 1,065,726 | 1,073,912 | 1,098,824 | 1,076,897 |
| Latvia | 5,765 | 6,177 | 6,351 | 7,312 | 8,177 | 10,012 | 12,220 | 14,712 | 12,314 | 11,490 | 12,287 | 13,418 |
| Lithuania | 9,346 | 10,241 | 11,000 | 12,005 | 13,645 | 15,650 | 17,486 | 20,712 | 19,160 | 19,296 | 19,661 | n/a |
| Luxembourg | n/a | n/a | n/a | n/a | n/a | 12,620 | 13,468 | 14,638 | 15,266 | 15,743 | 16,059 | n/a |
| Netherlands | 244,565 | 250,969 | 251,217 | 255,807 | 260,967 | 268,586 | 280,802 | 283,487 | 280,226 | 283,909 | 288,855 | 286,429 |
| Poland | 158,104 | 153,907 | 137,306 | 139,781 | 163,128 | 178,690 | 196,490 | 229,520 | 199,540 | 226,232 | 230,448 | 236,044 |
| Portugal | 94,387 | 98,111 | 101,369 | 105,807 | 109,614 | 112,795 | 118,384 | 123,499 | 122,959 | 126,612 | 125,024 | 123,876 |
| Romania | 31,811 | 32,882 | 31,726 | 39,556 | 49,511 | 59,086 | 74,823 | 89,649 | 72,498 | 73,305 | 73,396 | n/a |
| Slovakia | 14,942 | 16,393 | 17,920 | 20,677 | 23,370 | 26,277 | 32,333 | 38,310 | 40,283 | 42,127 | 43,167 | 43,906 |
| Slovenia | 15,378 | 16,414 | 16,771 | 17,560 | 18,656 | 19,701 | 21,360 | 22,911 | 23,060 | 23,340 | 23,640 | 23,231 |
| Spain | 450,030 | 477,914 | 512,153 | 546,372 | 588,711 | 629,812 | 671,161 | 716,959 | 720,945 | 700,087 | 696,592 | 677,477 |
| Sweden | 128,648 | 136,127 | 140,237 | 143,330 | 145,228 | 152,848 | 163,591 | 165,914 | 156,462 | 179,746 | 198,972 | 213,994 |
| UK | 1,118,087 | 1,146,923 | 1,088,905 | 1,148,670 | 1,182,652 | 1,238,267 | 1,274,812 | 1,136,011 | 1,047,881 | 1,133,647 | 1,160,666 | 1,302,103 |
| EU27 | 6,240,949 | 6,498,847 | 6,587,097 | 6,866,494 | 7,139,337 | 7,477,335 | 7,814,983 | 7,955,432 | 7,781,596 | 7,993,169 | 8,148,988 | 8,227,194 |
| Norway | 88,826 | 103,968 | 104,794 | 104,928 | 119,667 | 114,291 | 123,711 | 129,631 | 130,005 | 148,779 | 161,238 | 176,345 |
| USA | 8,569,391 | 8,523,397 | 7,487,090 | 7,207,560 | 7,539,244 | 7,983,760 | 7,674,329 | 7,572,503 | 7,794,406 | 8,520,599 | 8,436,981 | 9,406,045 |

Source: European Commission (AMECO Database)

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
- The total amount for the EU27 excludes Bulgaria (2002-2003 and 2011-2012); Ireland (2001); Lithuania (2012); Luxembourg (2001-2005 and 2012); Malta (2001-2012) and Romania (2012)
- Please note that the disposable income of households at current prices for non-euro area countries has been directly provided in euros by the European Commission (AMECO)

11. Population over 18

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Austria | 6,470,188 | 6,527,153 | 6,570,788 | 6,621,314 | 6,684,668 | 6,745,430 | 6,790,252 | 6,840,315 | 6,891,381 | 6,930,141 | 6,972,859 | 7,027,306 |
| Belgium | 8,219,307 | 8,267,098 | 8,312,798 | 8,353,990 | 8,402,325 | 8,461,660 | 8,528,338 | 8,602,794 | 8,673,908 | 8,748,390 | 8,879,416 | 8,958,239 |
| Bulgaria | 6,662,067 | 6,497,888 | 6,490,633 | 6,485,490 | 6,480,849 | 6,466,799 | 6,450,180 | 6,432,871 | 6,414,689 | 6,377,177 | 6,246,320 | 6,210,742 |
| Cyprus | 518,410 | 531,386 | 543,750 | 562,018 | 582,946 | 602,769 | 616,986 | 629,450 | 637,510 | 652,637 | 673,386 | 695,814 |
| Czech Republic | 8,333,255 | 8,316,027 | 8,347,339 | 8,395,207 | 8,431,969 | 8,489,677 | 8,549,286 | 8,644,039 | 8,735,148 | 8,767,621 | 8,735,862 | 8,759,775 |
| Denmark | 4,245,369 | 4,250,123 | 4,253,604 | 4,260,968 | 4,270,726 | 4,283,827 | 4,300,571 | 4,330,829 | 4,364,329 | 4,391,774 | 4,421,906 | 4,448,114 |
| Estonia | 1,081,599 | 1,084,974 | 1,089,353 | 1,092,454 | 1,095,592 | 1,098,901 | 1,101,341 | 1,104,922 | 1,105,938 | 1,106,434 | 1,107,006 | 1,105,962 |
| Finland | 4,109,920 | 4,132,344 | 4,152,607 | 4,175,812 | 4,195,642 | 4,218,801 | 4,243,725 | 4,272,133 | 4,300,559 | 4,329,090 | 4,355,192 | 4,381,463 |
| France | 47,779,677 | 48,160,617 | 48,540,159 | 48,943,632 | 49,399,983 | 49,831,887 | 50,194,499 | 50,519,674 | 50,791,887 | 51,059,301 | 51,347,716 | 51,595,586 |
| Germany | 67,664,368 | 67,999,108 | 68,259,443 | 68,458,171 | 68,627,164 | 68,845,959 | 68,949,876 | 69,090,995 | 69,140,524 | 69,110,685 | 69,191,782 | 69,431,267 |
| Greece | 8,995,250 | 9,072,950 | 9,140,733 | 9,198,238 | 9,245,560 | 9,296,733 | 9,342,606 | 9,378,670 | 9,417,341 | 9,456,496 | 9,460,866 | 9,445,650 |
| Hungary | 8,251,092 | 8,252,925 | 8,245,405 | 8,256,544 | 8,269,707 | 8,276,445 | 8,287,446 | 8,284,798 | 8,292,368 | 8,301,090 | 8,298,913 | 8,290,711 |
| Ireland | 2,876,472 | 2,946,907 | 3,008,382 | 3,066,703 | 3,143,633 | 3,231,286 | 3,318,158 | 3,379,423 | 3,403,566 | 3,402,040 | 3,485,860 | 3,480,816 |
| Italy | 47,657,001 | 47,718,799 | 48,030,702 | 48,573,533 | 49,059,106 | 49,297,767 | 49,630,050 | 50,062,399 | 50,421,800 | 50,679,559 | 50,959,030 | 51,153,604 |
| Latvia | 1,879,791 | 1,881,321 | 1,883,887 | 1,886,831 | 1,890,355 | 1,894,164 | 1,893,573 | 1,892,699 | 1,889,175 | 1,883,989 | 1,734,286 | 1,708,821 |
| Lithuania | 2,690,473 | 2,704,659 | 2,716,094 | 2,724,070 | 2,731,357 | 2,737,849 | 2,741,459 | 2,744,292 | 2,741,444 | 2,733,121 | 2,515,432 | 2,483,216 |
| Luxembourg | 346,073 | 350,224 | 353,787 | 359,454 | 364,784 | 371,573 | 377,577 | 384,466 | 393,284 | 400,966 | 409,476 | 422,268 |
| Malta | 302,442 | 307,229 | 311,721 | 315,845 | 320,232 | 323,365 | 328,081 | 332,369 | 336,867 | 338,922 | 342,971 | 345,834 |
| Netherlands | 12,642,495 | 12,729,638 | 12,795,304 | 12,849,675 | 12,905,099 | 12,957,227 | 12,997,559 | 13,060,454 | 13,156,614 | 13,260,326 | 13,348,173 | 13,437,855 |
| Poland | 29,582,189 | 29,861,790 | 30,139,469 | 30,411,914 | 30,642,374 | 30,842,446 | 30,999,699 | 31,132,119 | 31,268,426 | 31,398,907 | 31,724,018 | 31,817,148 |
| Portugal | 8,346,810 | 8,432,316 | 8,515,801 | 8,586,474 | 8,647,061 | 8,692,285 | 8,728,283 | 8,755,295 | 8,774,919 | 8,797,101 | 8,771,844 | 8,762,802 |
| Romania | 17,758,659 | 17,312,412 | 17,372,322 | 17,435,824 | 17,521,180 | 17,563,807 | 17,614,398 | 17,699,906 | 17,727,996 | 17,726,044 | 17,710,609 | 17,691,936 |
| Slovakia | 4,168,047 | 4,194,549 | 4,229,545 | 4,267,215 | 4,301,586 | 4,333,920 | 4,365,191 | 4,393,825 | 4,425,034 | 4,447,519 | 4,422,950 | 4,445,121 |
| Slovenia | 1,623,268 | 1,634,934 | 1,644,852 | 1,654,201 | 1,659,880 | 1,671,220 | 1,683,197 | 1,685,406 | 1,705,876 | 1,718,918 | 1,718,964 | 1,721,713 |
| Spain | 33,540,086 | 34,042,121 | 34,676,557 | 35,271,434 | 35,887,685 | 36,515,717 | 37,116,648 | 37,762,780 | 38,171,468 | 38,233,021 | 38,316,257 | 38,309,531 |
| Sweden | 7,050,871 | 7,080,344 | 7,111,953 | 7,153,615 | 7,195,037 | 7,243,618 | 7,308,788 | 7,378,775 | 7,453,887 | 7,537,815 | 7,606,548 | 7,666,662 |
| UK | 46,374,402 | 46,645,212 | 46,930,287 | 47,244,589 | 47,628,203 | 48,059,906 | 48,460,041 | 48,855,215 | 49,236,959 | 49,643,674 | 50,078,585 | 50,491,014 |
| Euro area (17) | 256,341,413 | 258,132,347 | 260,176,282 | 262,350,163 | 264,522,946 | 266,496,500 | 268,312,367 | 270,255,370 | 271,748,476 | 272,671,546 | 273,763,748 | 274,720,831 |
| EU27 | 389,169,581 | 390,935,048 | 393,667,275 | 396,605,215 | 399,584,703 | 402,355,038 | 404,917,808 | 407,650,913 | 409,872,897 | 411,432,758 | 412,836,227 | 414,288,970 |
| Iceland | 209,092 | 212,283 | 214,482 | 216,680 | 219,152 | 225,284 | 232,760 | 239,981 | 243,375 | 241,562 | 242,458 | 244,224 |
| Norway | 3,495,865 | 3,511,373 | 3,532,907 | 3,554,868 | 3,580,038 | 3,611,153 | 3,649,014 | 3,701,244 | 3,758,680 | 3,812,660 | 3,870,246 | 3,932,917 |
| Russia | n/a | n/a | n/a | n/a | n/a | 116,887,273 | 117,043,982 | 117,272,990 | 117,297,138 | 117,387,716 | 118,105,325 | n/a |
| Turkey | 45,003,393 | 45,888,950 | 46,791,490 | 47,709,028 | 48,631,518 | 49,527,389 | n/a | 49,504,923 | 50,286,200 | 51,220,397 | 52,280,503 | 53,283,456 |

Sources: 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

12. Bilateral Nominal Exchange Rate with the Euro

| End of the year | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| EU27 | | | | | | | | | | | | |
| Bulgarian lev | 1.9463 | 1.9546 | 1.9557 | 1.9559 | 1.9563 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 |
| Czech koruna | 31.962 | 31.577 | 32.410 | 30.464 | 29.000 | 27.485 | 26.628 | 26.875 | 26.473 | 25.061 | 25.787 | 25.151 |
| Danish krone | 7.4365 | 7.4288 | 7.4450 | 7.4388 | 7.4605 | 7.4560 | 7.4583 | 7.4506 | 7.4418 | 7.4535 | 7.4342 | 7.4610 |
| Hungarian forint | 245.18 | 236.29 | 262.50 | 245.97 | 252.87 | 251.77 | 253.73 | 266.70 | 270.42 | 277.95 | 314.58 | 292.30 |
| Latvian lats | 0.5563 | 0.6140 | 0.6725 | 0.6979 | 0.6962 | 0.6972 | 0.6964 | 0.7083 | 0.7093 | 0.7094 | 0.6995 | 0.6977 |
| Lithuanian litas | 3.5228 | 3.4525 | 3.4524 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 |
| Polish zloty | 3.4953 | 4.0210 | 4.7019 | 4.0845 | 3.8600 | 3.8310 | 3.5935 | 4.1535 | 4.1045 | 3.9750 | 4.4580 | 4.0740 |
| Swedish krona | 9.3012 | 9.1528 | 9.0800 | 9.0206 | 9.3885 | 9.0404 | 9.4415 | 10.870 | 10.252 | 8.9655 | 8.9120 | 8.5820 |
| UK pound sterling | 0.6085 | 0.6505 | 0.7048 | 0.7051 | 0.6853 | 0.6715 | 0.7334 | 0.9525 | 0.8881 | 0.8608 | 0.8353 | 0.8161 |
| Non EU27 | | | | | | | | | | | | |
| Croatian kuna | 7.3490 | 7.4750 | 7.6451 | 7.6650 | 7.3715 | 7.3504 | 7.3308 | 7.3555 | 7.3000 | 7.3830 | 7.5370 | 7.5575 |
| Norwegian krone | 7.9515 | 7.2756 | 8.4141 | 8.2365 | 7.9850 | 8.2380 | 7.9580 | 9.7500 | 8.3000 | 7.8000 | 7.7540 | 7.3483 |
| Rouble | 26.863 | 33.511 | 36.956 | 37.788 | 33.920 | 34.680 | 35.986 | 41.283 | 43.154 | 40.820 | 41.765 | 40.330 |
| Turkish lira | n/a | n/a | n/a | n/a | 1.5924 | 1.8640 | 1.7170 | 2.1488 | 2.1547 | 2.0694 | 2.4432 | 2.355 |
| US dollar | 0.8813 | 1.0487 | 1.2630 | 1.3621 | 1.1797 | 1.3170 | 1.4721 | 1.3917 | 1.4406 | 1.3362 | 1.2939 | 1.3194 |

| Average of the year | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| EU27 | | | | | | | | | | | | |
| Bulgarian lev | 1.9482 | 1.9492 | 1.9490 | 1.9533 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 | 1.9558 |
| Czech koruna | 34.068 | 30.804 | 31.846 | 31.891 | 29.782 | 28.342 | 27.766 | 24.946 | 26.435 | 25.284 | 24.590 | 25.149 |
| Danish krone | 7.4521 | 7.4305 | 7.4307 | 7.4399 | 7.4518 | 7.4591 | 7.4506 | 7.4560 | 7.4462 | 7.4473 | 7.4506 | 7.4437 |
| Hungarian forint | 256.59 | 242.96 | 253.62 | 251.66 | 248.05 | 264.26 | 251.35 | 251.51 | 280.33 | 275.48 | 279.37 | 289.25 |
| Latvian lats | 0.5601 | 0.5810 | 0.6407 | 0.6652 | 0.6962 | 0.6962 | 0.7001 | 0.7027 | 0.7057 | 0.7087 | 0.7063 | 0.6973 |
| Lithuanian litas | 3.5823 | 3.4594 | 3.4527 | 3.4529 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 | 3.4528 |
| Polish zloty | 36.721 | 38.574 | 43.996 | 45.268 | 40.230 | 38.959 | 37.837 | 35.121 | 43.276 | 39.947 | 41.206 | 41.847 |
| Romanian leu | n/a | n/a | n/a | n/a | 36.209 | 35.258 | 33.353 | 36.826 | 42.399 | 42.122 | 42.391 | 44.593 |
| Swedish krona | 9.2551 | 9.1611 | 9.1242 | 9.1243 | 9.2822 | 9.2544 | 9.2501 | 9.6152 | 10.619 | 9.5373 | 9.0298 | 8.7041 |
| UK pound sterling | 0.6219 | 0.6288 | 0.6920 | 0.6787 | 0.6838 | 0.6817 | 0.6843 | 0.7963 | 0.8909 | 0.8578 | 0.8679 | 0.8109 |
| Non EU27 | | | | | | | | | | | | |
| Croatian kuna | 7.4820 | 7.4130 | 7.5688 | 7.4967 | 7.4008 | 7.3247 | 7.3376 | 7.2239 | 7.3400 | 7.2891 | 7.4390 | 7.5217 |
| Icelandic krona | 87.420 | 86.180 | 86.650 | 87.140 | 78.230 | 87.760 | 87.630 | 143.83 | n/a | n/a | n/a | n/a |
| Norwegian krone | 8.0484 | 7.5086 | 8.0033 | 8.3697 | 8.0092 | 8.0472 | 8.0165 | 8.2237 | 8.7278 | 8.0043 | 7.7934 | 7.4751 |
| Rouble | 26.151 | 29.703 | 34.670 | 35.819 | 35.188 | 34.112 | 35.018 | 36.421 | 44.138 | 40.263 | 40.885 | 39.926 |
| Turkish lira | n/a | n/a | n/a | n/a | 16.771 | 18.090 | 17.865 | 19.064 | 21.631 | 19.965 | 23.378 | 23.135 |
| US dollar | 0.8956 | 0.9456 | 1.1312 | 1.2439 | 1.2441 | 1.2556 | 1.3705 | 1.4708 | 1.3948 | 1.3257 | 1.3920 | 1.2848 |

Sources: Source: European Central Bank

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

13. Total Outstanding Covered Bonds, Backed by Mortgages

EUR million

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Austria | 4,000 | 4,000 | 4,000 | 3,880 | 4,125 | 4,973 | 5,317 | 7,645 | 17,174 | 17,010 |
| Belgium | - | - | - | - | - | - | - | - | - | 2,590 |
| Cyprus | - | - | - | - | - | - | - | - | 5,200 | 4,550 |
| Czech Republic | 1,638 | 1,956 | 4,452 | 5,543 | 8,213 | 8,091 | 8,179 | 8,234 | 8,546 | 9,056 |
| Denmark | 204,695 | 216,133 | 246,411 | 260,367 | 244,696 | 255,140 | 319,434 | 332,505 | 345,529 | 359,560 |
| Finland | - | 250 | 1,500 | 3,000 | 4,500 | 5,750 | 7,625 | 10,125 | 18,839 | 26,684 |
| Germany | 256,027 | 246,636 | 237,547 | 223,306 | 206,489 | 217,367 | 225,100 | 219,947 | 223,676 | 215,999 |
| Greece | - | - | - | - | - | 5,000 | 6,500 | 19,750 | 19,750 | 18,046 |
| Hungary | 3,568 | 4,962 | 5,072 | 5,924 | 5,987 | 7,105 | 7,375 | 6,323 | 5,175 | 4,958 |
| Ireland | - | 2,000 | 4,140 | 11,900 | 13,575 | 23,075 | 29,725 | 29,037 | 30,007 | 25,099 |
| Italy | - | - | - | - | - | 6,500 | 14,000 | 26,925 | 50,768 | 116,405 |
| Latvia | 35 | 54 | 60 | 63 | 90 | 90 | 85 | 63 | 37 | - |
| Luxembourg | - | - | - | 150 | 150 | 150 | - | - | - | - |
| Netherlands | - | - | 2,000 | 8,132 | 15,973 | 21,667 | 29,057 | 41,273 | 54,115 | 61,515 |
| Poland | 160 | 220 | 558 | 453 | 676 | 561 | 583 | 511 | 527 | 657 |
| Portugal | - | - | - | 2,000 | 7,850 | 14,870 | 22,120 | 28,840 | 34,347 | 34,570 |
| Slovakia | 510 | 1,052 | 1,583 | 2,214 | 2,738 | 3,576 | 3,608 | 3,442 | 3,768 | 3,835 |
| Spain | 57,111 | 94,707 | 150,213 | 214,768 | 266,959 | 315,055 | 336,750 | 343,401 | 369,208 | 406,736 |
| Sweden | n/a | n/a | n/a | 55,267 | 92,254 | 117,628 | 133,903 | 188,750 | 208,894 | 220,374 |
| UK (regulated) | - | - | - | - | - | 125,764 | 109,473 | 125,250 | 121,623 | 147,425 |
| UK (non regulated) | 5,000 | 15,668 | 28,384 | 54,265 | 84,874 | 78,092 | 90,993 | 77,965 | 63,429 | 37,818 |
| Iceland | - | - | - | 467 | 478 | 492 | 685 | 807 | 808 | 893 |
| Norway | - | - | - | - | 6,371 | 21,924 | 53,582 | 70,401 | 91,852 | 107,462 |
| USA | - | - | - | 4,000 | 12,859 | 12,937 | 12,888 | 11,497 | 9,546 | 6,000 |

Source: European Covered Bond Council

1) Time series breaks:

2) The series has been revised for at least two years in:

- Czech Republic
- Netherlands
- Portugal

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- - : the value is zero
- Please note that the conversion to EUR was performed by the ECBC

14. Total Covered Bonds Issuance, Backed by Mortgages

EUR million

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------|--------|--------|---------|---------|--------|---------|---------|---------|---------|---------|
| Austria | 1,029 | n.a. | 214 | 2,176 | 1,959 | 1,321 | 1,442 | 3,600 | 3,664 | 3,805 |
| Belgium | - | - | - | - | - | - | - | - | - | 2,590 |
| Cyprus | - | - | - | - | - | - | - | - | 5,200 | - |
| Czech Republic | 666 | 744 | 2,558 | 956 | 3,501 | 938 | 738 | 723 | 770 | 1,309 |
| Denmark | 99,727 | 95,009 | 149,708 | 114,014 | 70,955 | 103,230 | 125,484 | 148,475 | 145,147 | 185,845 |
| Finland | - | 250 | 1,250 | 1,500 | 1,500 | 1,250 | 2,125 | 5,250 | 9,964 | 9,368 |
| Germany | 57,621 | 40,773 | 33,722 | 35,336 | 26,834 | 57,345 | 56,852 | 42,216 | 40,911 | 38,540 |
| Greece | - | - | - | - | - | 5,000 | 1,500 | 17,250 | 5,000 | - |
| Hungary | 2,961 | 2,381 | 808 | 1,418 | 331 | 3,331 | 3,209 | 542 | 2,264 | 1,140 |
| Ireland | - | 2,000 | 2,000 | 7,753 | 1,675 | 9,506 | 14,801 | 6,000 | 9,290 | 5,500 |
| Italy | - | - | - | - | - | 6,500 | 7,500 | 12,925 | 29,261 | 70,768 |
| Latvia | 11 | 22 | 4 | 20 | 19 | 25 | - | - | - | - |
| Luxembourg | - | - | - | 150 | - | - | - | - | - | - |
| Netherlands | - | - | 2,000 | 6,132 | 7,873 | 5,608 | 7,725 | 13,710 | 14,163 | 10,738 |
| Poland | 123 | 63 | 224 | 52 | 206 | 197 | 88 | 138 | 269 | 228 |
| Portugal | - | - | - | 2,000 | 5,850 | 7,020 | 7,250 | 11,870 | 9,300 | 4,850 |
| Slovakia | 355 | 549 | 584 | 676 | 803 | 1,414 | 707 | 1,179 | 867 | 785 |
| Spain | 28,502 | 37,835 | 57,780 | 69,890 | 51,801 | 54,187 | 43,580 | 51,916 | 72,077 | 98,846 |
| Sweden | n.a. | n.a. | n.a. | 17,569 | 36,638 | 43,488 | 53,106 | 79,910 | 69,800 | 48,936 |
| UK (regulated) | - | - | - | - | - | 10,145 | 8,254 | 25,000 | 36,983 | 37,109 |
| UK (non regulated) | 5,000 | 10,668 | 12,675 | 25,813 | 31,673 | 110,761 | 22,177 | 900 | - | - |
| Iceland | - | - | - | 467 | - | 321 | - | - | - | 113 |
| Norway | - | - | - | - | 6,458 | 15,660 | 30,105 | 21,062 | 28,135 | 22,946 |
| USA | - | - | - | 4,000 | 8,859 | - | - | - | - | - |

Source: European Covered Bond Council

1) Time series breaks:

2) The series has been revised for at least two years in:

- Czech Republic
- Netherlands
- Portugal

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- - : the value is zero
- Please note that the conversion to EUR was performed by the ECBC

15. Total Outstanding Covered Bonds, Backed by Mortgages

As % GDP

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Austria | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 1.8 | 1.9 | 2.7 | 5.7 | 5.5 |
| Belgium | - | - | - | - | - | - | - | - | - | 0.7 |
| Cyprus | - | - | - | - | - | - | - | - | 28.9 | 25.4 |
| Czech Republic | 2.0 | 2.0 | 4.1 | 4.5 | 6.0 | 5.7 | 5.8 | 5.4 | 5.8 | 5.9 |
| Denmark | 108.8 | 109.7 | 119.0 | 119.0 | 107.7 | 108.4 | 142.8 | 140.7 | 143.4 | 147.1 |
| Finland | 0.0 | 0.2 | 1.0 | 1.8 | 2.5 | 3.1 | 4.4 | 5.7 | 9.9 | 13.7 |
| Germany | 11.9 | 11.2 | 10.7 | 9.7 | 8.5 | 8.8 | 9.5 | 8.8 | 8.6 | 8.2 |
| Greece | - | - | - | - | - | 2.1 | 2.8 | 8.9 | 9.5 | 9.3 |
| Hungary | 5.0 | 5.9 | 5.8 | 6.3 | 6.1 | 7.1 | 7.8 | 6.6 | 5.8 | 5.1 |
| Ireland | - | 1.3 | 2.5 | 6.7 | 7.2 | 12.9 | 18.4 | 18.6 | 18.9 | 15.3 |
| Italy | - | - | - | - | - | 0.4 | 0.9 | 1.7 | 3.2 | 7.4 |
| Latvia | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 0.3 | 0.2 | - |
| Luxembourg | - | - | 0.0 | 0.4 | 0.4 | 0.4 | - | - | - | - |
| Netherlands | - | - | 0.4 | 1.5 | 2.8 | 3.6 | 5.1 | 7.0 | 9.0 | 10.2 |
| Poland | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 |
| Portugal | - | - | - | 1.2 | 4.6 | 8.6 | 13.1 | 16.7 | 20.1 | 20.9 |
| Slovakia | 1.3 | 2.3 | 3.2 | 4.0 | 4.5 | 5.3 | 5.7 | 5.2 | 5.5 | 5.4 |
| Spain | 7.3 | 11.3 | 16.5 | 21.8 | 25.3 | 29.0 | 32.1 | 32.7 | 34.7 | 38.8 |
| Sweden | n/a | n/a | n/a | 17.0 | 27.9 | 39.9 | 44.2 | 50.7 | 53.2 | 53.1 |
| UK (regulated) | - | - | - | - | - | 8.2 | 6.9 | 7.3 | 6.6 | 7.7 |
| UK (non regulated) | 0.3 | 0.9 | 1.5 | 2.7 | 4.4 | 5.1 | 5.7 | 4.5 | 3.4 | 2.0 |
| Iceland | - | - | - | 3.5 | 3.2 | 4.8 | - | - | - | - |
| Norway | - | - | - | - | 2.2 | 8.4 | 18.7 | 21.6 | 25.9 | 27.2 |
| USA | - | - | - | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

Source: European Covered Bond Council, Eurostat

1) Time series breaks:

2) The series has been revised for at least two years in:

- Czech Republic
- Denmark
- Finland
- Germany
- Greece
- Ireland
- Netherlands
- Portugal
- Russia
- Spain
- Sweden

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- - : the value is zero
- For a detailed definition of covered bonds, please see the glossary
- Please note that the conversion to EUR was performed by the ECBC

16. Total Outstanding Residential Mortgage-Backed Securities (RMBS)

EUR million

| | 2009 | 2010 | 2011 | 2012 |
|-------------|---------|---------|---------|---------|
| Austria | 2,200 | 2,100 | 2,000 | 1,900 |
| Belgium | 48,500 | 61,500 | 70,800 | 71,200 |
| Finland | 5,700 | 4,400 | 3,700 | n/a |
| France | 11,200 | 11,200 | 17,600 | 16,700 |
| Germany | 17,300 | 22,600 | 19,800 | 17,000 |
| Greece | 9,300 | 6,800 | 6,300 | 6,400 |
| Ireland | 53,900 | 68,900 | 59,500 | 51,200 |
| Italy | 139,100 | 142,700 | 120,700 | 98,300 |
| Netherlands | 197,400 | 289,000 | 286,600 | 269,100 |
| Portugal | 35,800 | 41,900 | 37,500 | 29,100 |
| Spain | 167,600 | 190,000 | 171,000 | 127,700 |
| Sweden | 300 | n/a | n/a | |
| UK | 460,600 | 453,900 | 404,000 | 295,400 |
| Russia | 3,300 | 2,900 | 2,700 | 1,700 |

1) Time series breaks:

2) The series has been revised for at least two years in:

- Italy

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available

Source: European Covered Bond Council

17. Total RMBS Issues

EUR million

| | 2009 | 2010 | 2011 | 2012 |
|-------------|--------|---------|--------|-------|
| Belgium | 19,100 | 11,400 | 19,000 | 4700 |
| France | 200 | 5,000 | 13,900 | 2600 |
| Germany | 1,100 | 400 | n/a | n/a |
| Greece | 1,400 | n/a | 1,700 | 1300 |
| Ireland | 13,700 | 4,200 | n/a | 900 |
| Italy | 53,200 | 10,000 | 8,800 | 31700 |
| Netherlands | 40,800 | 125,000 | 83,400 | 34200 |
| Portugal | 8,700 | 9,400 | 1,300 | 1100 |
| Spain | 26,300 | 17,800 | 14,100 | 2500 |
| UK | 62,300 | 87,900 | 77,900 | 38700 |
| Turkey | 12,100 | n/a | n/a | n/a |

1) Time series breaks:

2) The series has been revised for at least two years in:

- Spain

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available

Source: Association for Financial Markets in Europe (AFME)

18. Owner Occupation Rate

%

| | Latest data available | Owner occupation rate | Methodology |
|----------------|-----------------------|-----------------------|-------------|
| Austria | 2010 | 57.4 | b |
| Belgium | 2007 | 78.0 | a |
| Bulgaria | 2010 | 86.9 | b |
| Cyprus | 2011 | 73.8 | a |
| Czech Republic | 2010 | 78.7 | b |
| Denmark | 2012 | 52.6 | a |
| Estonia | 2010 | 85.5 | b |
| Finland | 2011 | 74.1 | b |
| France | 2011 | 58.0 | a |
| Germany | 2011 | 45.8 | a |
| Greece | 2010 | 80.1 | a |
| Hungary | 2012 | 91.5 | a |
| Ireland | 2011 | 70.0 | a |
| Italy | 2008 | 80.0 | a |
| Latvia | 2012 | 81.0 | b |
| Lithuania | 2010 | 93.1 | b |
| Luxembourg | 2010 | 68.1 | b |
| Malta | 2010 | 80.1 | b |
| Netherlands | 2009 | 55.5 | a |
| Poland | 2010 | 81.3 | b |
| Portugal | 2011 | 73.5 | b |
| Romania | 2011 | 97.5 | a |
| Slovakia | 2011 | 89.5 | b |
| Slovenia | 2009 | 78.1 | b |
| Spain | 2011 | 82.0 | a |
| Sweden | 2011 | 63.7 | a |
| UK | 2011 | 64.7 | a |
| EU27 | / | 66.8 | a |
| EU27 | / | 78.3 | b |
| Iceland | 2009 | 76.9 | |
| Norway | 2003 | 85.0 | |
| Russia | 2010 | 84.0 | |
| Turkey | 2010 | 67.3 | |
| USA | 2010 | 66.1 | |

Source: European Mortgage Federation, National Statistics Office, National Central Banks, US Bureau of Census

1) Time series breaks:

2) The series has been revised for at least two years in:

3) Notes:

- For further details on the methodologies, please see «Annex : Explanatory Note on data»
- n/a : figure not available
- The Hyostat publication uses two types of methodologies to calculate owner occupation rates: one being the “owner occupied homes to total number of homes” ratio (i.e. the “dwelling approach”); and the second being the “inhabitants living in an owner occupied home to total population” ratio (i.e. the “population approach”).
- a: dwelling approach (each dwelling is either owner-occupied, rented or unoccupied)
- b: population approach (people occupy a dwelling either as a owner or as a tenant or do not have any address. This second approach is based on a survey conducted every year by Eurostat: the European Union Statistics on Income and Living Conditions (EU-SILC) (http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/eu_silc))
- The EU27 averages for each approach has been weighted with the national dwelling stocks recorded in the publication year of the last data on owner occupied rate (if this figure of dwelling stock is not available for that year, then it concerns the earliest year).
- The data for Hungary is an estimate.
- Sweden has a new source

19. Building Permits

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|---------|
| Austria | 40,229 | 42,281 | 43,500 | 43,500 | 43,800 | 47,400 | 45,700 | 41,400 | 40,700 | 39,100 | 42,200 | 41,600 |
| Belgium | 41,284 | 43,149 | 45,032 | 52,204 | 59,378 | 61,155 | 53,922 | 52,611 | 45,448 | 49,817 | 44,275 | 46,884 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | 53,049 | 64,185 | 49,407 | 20,166 | 12,832 | 10,973 | 10,616 |
| Cyprus | 6,499 | 6,856 | 7,548 | 8,252 | 9,098 | 9,794 | 9,521 | 8,896 | 8,950 | 8,777 | 7,506 | 7,172 |
| Czech Republic | 45,279 | 45,961 | 51,948 | 51,464 | 47,974 | 49,777 | 47,298 | 47,389 | 41,954 | 39,158 | 39,656 | 34,006 |
| Denmark | 20,646 | 23,963 | 27,521 | 29,777 | 35,952 | 36,371 | 23,433 | 16,605 | 8,944 | 17,036 | 15,828 | 10,942 |
| Estonia | 1,430 | 3,156 | 3,419 | 9,447 | 9,151 | 12,863 | 8,925 | 5,468 | 2,081 | 2,581 | 2,830 | 3,035 |
| Finland | 29,580 | 30,762 | 35,453 | 34,599 | 36,964 | 35,543 | 33,073 | 26,516 | 26,559 | 32,793 | 33,894 | 31,085 |
| France | 356,200 | 350,900 | 385,300 | 460,800 | 511,700 | 561,700 | 547,800 | 455,700 | 348,300 | 396,046 | 465,937 | 429,851 |
| Germany | 291,084 | 274,120 | 296,854 | 268,123 | 240,468 | 247,541 | 182,336 | 174,595 | 177,939 | 187,667 | 228,143 | 239,465 |
| Greece | 40,448 | 45,195 | 45,253 | 43,447 | 56,342 | 45,406 | 41,790 | 34,021 | 27,447 | 23,380 | 15,114 | 9,066 |
| Hungary | 47,867 | 48,762 | 59,241 | 57,459 | 51,490 | 44,826 | 44,276 | 43,862 | 28,400 | 17,353 | 12,488 | 10,600 |
| Ireland | 23,590 | 19,688 | 20,915 | 27,482 | 25,313 | 22,749 | 22,212 | 17,436 | 10,338 | 6,319 | 4,745 | 3,626 |
| Italy | n/a | n/a | 229,526 | 268,385 | 278,602 | 261,455 | 250,271 | 191,783 | 141,587 | 119,409 | na | na |
| Latvia | n/a | n/a | 2,422 | 3,644 | 4,565 | 5,668 | 4,962 | 3,116 | 1,695 | 1,380 | 1,395 | 1,626 |
| Lithuania | 2,053 | 2,415 | 2,989 | 4,155 | 5,500 | 7,482 | 8,869 | 8,189 | 5,994 | 5,876 | 4,824 | n/a |
| Luxembourg | 2,846 | 2,956 | 3,364 | 3,919 | 4,692 | 4,411 | 4,934 | 4,017 | 3,695 | 3,891 | 4,323 | 4,307 |
| Malta | 4,180 | 5,841 | 6,128 | 6,707 | 9,081 | 10,409 | 11,343 | 6,386 | 5,298 | 4,444 | 3,955 | 5,255 |
| Netherlands | 62,326 | 67,183 | 72,454 | 76,180 | 83,273 | 96,447 | 87,918 | 87,198 | 72,646 | 61,028 | 55,804 | n/a |
| Poland | 81,000 | 39,000 | 61,000 | 105,831 | 115,862 | 160,545 | 236,731 | 223,372 | 168,440 | 165,116 | 184,146 | 165,282 |
| Portugal | 43,381 | 41,385 | 36,596 | 33,423 | 32,800 | 31,004 | 28,406 | 22,570 | 16,059 | 14,797 | 11,752 | 8,227 |
| Romania | n/a | n/a | n/a | n/a | 43,542 | 51,065 | 56,618 | 61,092 | 48,833 | 42,189 | 39,424 | 37,863 |
| Slovakia | 12,128 | 14,607 | 14,065 | 16,586 | 19,796 | 20,592 | 18,116 | 28,321 | 20,325 | 16,211 | 12,740 | n/a |
| Slovenia | 4,000 | 4,000 | 5,000 | 6,000 | 6,000 | 8,000 | 9,000 | 8,000 | 5,209 | 4,225 | 3,285 | 2,700 |
| Spain | 393,827 | 403,271 | 471,000 | 543,518 | 603,633 | 734,978 | 633,430 | 267,876 | 130,418 | 91,509 | 75,894 | 57,486 |
| Sweden | 16,300 | 15,200 | 21,100 | 28,374 | 34,275 | 45,120 | 28,777 | 24,745 | 21,592 | 28,545 | 28,242 | 23,873 |
| Croatia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 6,320 | 6,062 | 4,741 |
| Turkey | n/a | 161,431 | 202,239 | 329,777 | 545,346 | 597,797 | 581,030 | 501,020 | 516,234 | 901,716 | 650,302 | 741,621 |
| USA | 1,636,700 | 1,747,700 | 1,889,200 | 2,070,100 | 2,155,300 | 1,838,900 | 1,398,400 | 905,400 | 583,000 | 604,600 | 624,100 | 829,700 |

Source: European Mortgage Federation National Experts, National Statistics Offices, US Bureau of Census

1) Time series breaks:

2) The series has been revised for at least two years in:

- Belgium
- Denmark
- Ireland
- Latvia
- Romania
- Slovakia
- Sweden
- Turkey

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a: figure not available
- Croatian data is provided by the Monthly Statistical Report of the Croatian Bureau of Statistics and concerns the number of permits for residential buildings.

20. Housing Starts

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|---------|
| Belgium | 42,047 | 39,374 | 41,134 | 48,209 | 54,569 | 57,895 | 54,600 | 50,473 | 44,929 | 47,378 | 39,804 | 41,528 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 8,009 | 7,096 | 6,789 |
| Czech Republic | 28,983 | 33,606 | 36,496 | 39,037 | 40,381 | 43,747 | 43,796 | 43,531 | 37,319 | 28,135 | 27,535 | 23,853 |
| Denmark | 20,874 | 22,849 | 27,004 | 28,661 | 34,036 | 36,387 | 25,710 | 17,171 | 10,024 | 15,155 | 14,259 | 10,439 |
| Finland | 26,996 | 27,766 | 31,019 | 32,029 | 33,946 | 33,503 | 30,175 | 22,903 | 22,415 | 32,833 | 31,091 | 28,334 |
| France | 303,000 | 302,900 | 322,600 | 363,400 | 410,200 | 420,900 | 435,400 | 368,600 | 298,800 | 309,744 | 378,561 | 304,234 |
| Greece | 108,021 | 128,296 | 127,051 | 122,148 | 195,207 | 125,387 | 103,865 | 79,601 | 61,490 | 52,344 | 29,974 | 18,817 |
| Hungary | n/a | n/a | n/a | 42,437 | 35,545 | 29,208 | 27,396 | 22,314 | 8,985 | n/a | n/a | n/a |
| Ireland | n/a | n/a | n/a | 77,691 | 77,709 | 75,602 | 48,876 | 22,903 | 8,599 | 6,391 | 4,365 | 4,042 |
| Italy | 189,025 | 209,228 | 229,526 | 268,385 | 278,602 | 261,455 | 250,271 | n/a | n/a | n/a | n/a | n/a |
| Malta | n/a | n/a | 6,128 | 6,707 | 9,081 | 10,409 | 11,343 | n/a | n/a | n/a | 3,955 | n/a |
| Poland | 114,000 | 77,000 | 82,000 | 97,000 | 102,038 | 137,962 | 185,117 | 174,686 | 142,901 | 158,064 | 162,200 | 141,798 |
| Romania | n/a | 32,950 | 31,702 | 37,798 | 49,795 | 66,817 | 87,643 | 143,139 | n/a | n/a | n/a | n/a |
| Slovakia | 12,128 | 14,607 | 14,065 | 16,586 | 19,796 | 20,592 | 18,116 | 28,321 | 20,325 | 16,211 | 12,740 | n/a |
| Slovenia | 6,000 | 5,000 | 7,000 | 6,000 | 8,000 | 9,000 | 11,000 | 7,000 | n/a | 4,831 | 3,844 | 3,066 |
| Spain | 499,605 | 524,182 | 636,332 | 687,051 | 729,652 | 865,561 | 651,427 | 264,795 | 111,140 | 91,662 | 78,286 | 44,162 |
| Sweden | 19,500 | 19,100 | 22,100 | 27,400 | 32,000 | 45,600 | 28,000 | 21,500 | 17,800 | 27,000 | 26,100 | 20,100 |
| UK | 192,070 | 194,370 | 208,570 | 227,990 | 223,910 | 223,980 | 233,820 | 141,970 | 114,130 | 138,880 | 135,820 | n/a |
| Iceland | 1,811 | 2,360 | 2,688 | 2,751 | 4,393 | 3,746 | 4,446 | 3,172 | 192 | 321 | 142 | 474 |
| Norway | 24,191 | 22,216 | 22,263 | 29,399 | 30,800 | 32,730 | 31,223 | 24,921 | 18,281 | 20,148 | 27,507 | n/a |
| USA | 1,602,000 | 1,705,000 | 1,848,000 | 1,956,000 | 2,068,000 | 1,801,000 | 1,355,000 | 906,000 | 554,000 | 587,000 | 609,000 | 780,000 |

Source : European Mortgage Federation National Experts, European Central Bank, National Central Banks, National Statistics Offices, Eurostat, US Bureau of Census

1) Time series breaks:

2) The series has been revised for at least two years in:

- Belgium
- Denmark
- Ireland
- Sweden
- UK

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available

21. Housing Completions

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|
| Bulgaria | n/a | n/a | n/a | 8,267 | 12,059 | 13,270 | 18,864 | 20,924 | 22,058 | 15,771 | 13,953 | n/a |
| Cyprus | 6,641 | 6,059 | 8,734 | 11,013 | 16,416 | 16,647 | 16,501 | 18,195 | 16,644 | 13,434 | 9,091 | n/a |
| Czech Republic | 24,759 | 27,291 | 27,127 | 32,268 | 32,863 | 30,190 | 41,649 | 38,380 | 38,473 | 36,442 | 28,630 | 29,467 |
| Denmark | 17,429 | 18,817 | 23,784 | 26,344 | 27,379 | 29,048 | 31,519 | 27,112 | 18,899 | 11,721 | 11,939 | 13,851 |
| Estonia | 619 | 1,135 | 2,435 | 3,105 | 3,928 | 5,068 | 7,073 | 5,300 | 3,026 | 2,324 | 1,918 | n/a |
| Finland | 30,143 | 26,667 | 27,667 | 30,398 | 33,754 | 33,557 | 34,983 | 29,995 | 21,438 | 25,113 | 31,117 | 30,757 |
| Germany | 326,197 | 289,601 | 268,096 | 278,008 | 242,316 | 249,436 | 210,739 | 175,927 | 158,987 | 159,832 | 183,110 | 215,000 |
| Greece | 86,001 | 90,197 | 106,777 | 120,919 | 120,912 | 135,267 | 163,628 | 121,909 | 89,956 | 65,875 | 48,812 | n/a |
| Hungary | 28,054 | 31,511 | 35,543 | 43,913 | 41,084 | 33,864 | 36,159 | 36,075 | 31,994 | 20,823 | 12,655 | 10,560 |
| Ireland | 52,602 | 57,695 | 68,819 | 76,954 | 80,957 | 93,419 | 78,027 | 51,724 | 26,420 | 14,602 | 10,480 | 8,488 |
| Italy | 195,000 | 210,000 | 214,000 | 238,000 | 296,000 | 317,000 | 309,000 | 281,000 | 246,000 | 204,000 | n/a | n/a |
| Latvia | 800 | 794 | 830 | 2,821 | 3,807 | 5,865 | 9,319 | 8,084 | 4,187 | 1,918 | 2,662 | 2,087 |
| Lithuania | 3,785 | 4,562 | 4,628 | 6,804 | 5,900 | 7,286 | 9,315 | 11,829 | 9,400 | 3,667 | 5,066 | n/a |
| Luxembourg | 2,342 | 2,475 | 2,199 | 2,155 | 1,979 | 2,266 | 3,023 | 3,636 | 3,092 | n/a | n/a | n/a |
| Netherlands | 72,958 | 66,704 | 59,629 | 65,314 | 67,016 | 72,382 | 80,193 | 78,882 | 82,932 | 55,999 | 57,703 | n/a |
| Poland | 106,105 | 97,595 | 162,000 | 108,123 | 114,060 | 115,187 | 133,778 | 165,192 | 160,019 | 135,818 | 131,148 | 152,904 |
| Portugal | 115,118 | 125,603 | 92,039 | 74,085 | 75,840 | 68,473 | 66,910 | 58,257 | 50,588 | 43,309 | 37,427 | 22,996 |
| Romania | 27,041 | 27,722 | 29,125 | 30,127 | 32,868 | 39,638 | 47,299 | 67,255 | 62,520 | 48,812 | 44,456 | 42,566 |
| Slovakia | 10,321 | 14,213 | 13,980 | 12,592 | 14,863 | 14,444 | 16,473 | 17,184 | 18,834 | 17,076 | 14,608 | n/a |
| Slovenia | 7,000 | 7,000 | 7,000 | 7,000 | 8,000 | 8,000 | 8,000 | 10,000 | 8,561 | 6,352 | 5,467 | 4,307 |
| Spain | 365,660 | 426,738 | 459,135 | 496,785 | 524,479 | 585,583 | 641,419 | 615,072 | 387,075 | 257,443 | 167,914 | 120,206 |
| Sweden | 15,400 | 19,900 | 20,000 | 25,300 | 23,000 | 29,800 | 30,500 | 32,000 | 22,800 | 19,500 | 20,100 | 26,000 |
| UK | 174,090 | 181,960 | 190,490 | 203,490 | 209,570 | 212,820 | 226,420 | 188,300 | 158,620 | 137,280 | 141,960 | n/a |
| Iceland | 1,711 | 2,140 | 2,311 | 2,355 | 3,106 | 3,294 | 3,348 | 2,978 | 893 | 1,148 | 565 | 1,082 |
| Norway | 22,147 | 20,856 | 20,526 | 22,809 | 28,398 | 28,103 | 29,677 | 28,083 | 21,238 | 17,446 | 19,067 | n/a |
| Russia | 382,000 | 396,000 | 427,000 | 477,000 | 515,000 | 609,000 | 722,000 | 768,000 | 702,000 | 717,000 | 786,000 | 838,000 |
| Turkey | n/a | 161,376 | 162,781 | 164,734 | 249,337 | 294,278 | 325,255 | 356,358 | 468,134 | 429,561 | 555,189 | 539,989 |
| USA | 1,571,000 | 1,648,000 | 1,678,000 | 1,842,000 | 1,932,000 | 1,979,000 | 1,502,000 | 1,120,000 | 794,000 | 651,000 | 585,000 | 649,000 |

Source: European Mortgage Federation National Experts, National Statistics Offices, US Bureau of Census

1) Time series breaks:

2) The series has been revised for at least two years in:

- Denmark
- Romania
- Turkey
- UK
- USA

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available

22. Real Gross Fixed Investment in Housing

Annual % change

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Austria | -6.8 | -4.8 | -4.1 | 0.8 | 1.4 | 0.4 | 1.9 | 0.8 | -1.6 | 0.5 | 1.4 | 4.0 |
| Belgium | -2.1 | -4.9 | 3.3 | 7.5 | 10.2 | 6.9 | 2.9 | -1.4 | -8.6 | 2.9 | -4.9 | -2.4 |
| Bulgaria | n/a | n/a | n/a | n/a | n/a | 97.3 | -7.2 | 21.3 | -20.4 | -44.4 | -15.4 | n/a |
| Cyprus | n/a | n/a | n/a | n/a | 9.6 | 6.2 | 7.5 | 2.6 | -19.5 | n/a | n/a | n/a |
| Czech Republic | -1.7 | -12.4 | -7.4 | -3.4 | -2.0 | 7.3 | 24.2 | 5.2 | -11.7 | 9.4 | -6.6 | -4.9 |
| Denmark | -9.3 | 0.8 | 11.8 | 11.9 | 17.3 | 9.6 | -6.0 | -15.8 | -21.3 | -0.6 | 14.6 | -9.8 |
| Finland | -9.9 | -0.1 | 11.7 | 11.5 | 5.4 | 4.2 | 0.0 | -9.7 | -13.0 | 24.6 | 5.0 | -4.0 |
| France | 0.7 | 0.8 | 2.4 | 3.1 | 5.0 | 6.4 | 4.8 | -2.8 | -11.5 | -2.3 | 4.0 | 1.1 |
| Germany | -5.9 | -6.0 | -2.0 | -3.4 | -4.3 | 6.0 | -1.8 | -3.5 | -2.6 | 4.6 | 6.3 | 0.9 |
| Greece | 4.3 | 15.2 | 12.1 | -1.0 | -0.5 | 14.8 | 25.6 | -33.6 | -20.7 | -21.6 | -18.0 | -32.9 |
| Hungary | n/a | n/a | 6.8 | 12.5 | -12.9 | -16.6 | 6.6 | -8.0 | -11.9 | -24.5 | -27.4 | -10.0 |
| Ireland | 5.1 | 3.7 | 13.4 | 10.8 | 16.8 | 3.8 | -8.0 | -16.0 | -37.6 | -34.0 | -10.3 | -15.2 |
| Italy | 1.7 | 2.5 | 3.4 | 3.1 | 5.1 | 4.0 | 1.0 | -1.1 | -8.4 | -0.3 | -3.7 | -6.2 |
| Lithuania | n/a | n/a | n/a | n/a | n/a | 21.2 | 14.9 | 24.3 | -7.2 | -38.7 | 1.7 | 1.9 |
| Luxembourg | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 20.4 | 3.0 | 3.0 | 3.0 | 3.0 |
| Netherlands | 3.2 | -6.5 | -3.7 | 4.1 | 5.0 | 5.8 | 4.7 | -0.2 | -14.8 | -13.2 | 6.5 | -9.6 |
| Poland | -6.9 | 7.2 | -3.1 | 4.9 | 8.8 | 9.4 | 12.0 | 6.5 | -4.3 | -3.1 | 4.1 | 3.0 |
| Portugal | -3.0 | -4.2 | -17.0 | -2.6 | -0.3 | -7.3 | -7.5 | -11.7 | -14.6 | -11.9 | -15.3 | -24.6 |
| Romania | 62.4 | 68.9 | 20.4 | -2.2 | 35.7 | -6.3 | 50.6 | 40.9 | -10.3 | 2.2 | 7.0 | 4.2 |
| Slovakia | -21.0 | -1.5 | -3.7 | -2.8 | 8.6 | -13.7 | 9.3 | 11.1 | 21.2 | -11.4 | -1.0 | -3.5 |
| Slovenia | n/a | n/a | n/a | n/a | n/a | 10.3 | 14.1 | 12.4 | -20.5 | n/a | n/a | n/a |
| Spain | 6.7 | 6.1 | 7.6 | 5.2 | 6.4 | 6.6 | 1.4 | -9.1 | -23.1 | -10.1 | -6.7 | -8.0 |
| Sweden | 7.4 | 11.3 | 4.3 | 12.4 | 11.9 | 15.5 | 8.0 | -13.1 | -19.1 | 15.7 | 14.7 | -9.1 |
| UK | 9.6 | 10.3 | 5.4 | 5.1 | 8.8 | 2.2 | 4.1 | -10.7 | -13.7 | -3.9 | 7.7 | 0.3 |
| Euro area (17) | -0.8 | -0.7 | 2.0 | 2.1 | 3.4 | 5.8 | 2.0 | -5.8 | -12.3 | -2.7 | 0.5 | -3.2 |
| Iceland | 12.3 | 12.4 | 3.7 | 14.2 | 11.9 | 16.5 | 13.2 | -21.9 | -55.7 | -18.0 | 5.4 | 6.9 |
| Norway | -0.6 | 0.1 | 1.0 | 9.5 | 10.8 | 5.8 | 14.0 | -1.6 | -7.9 | -5.2 | 9.4 | n/a |
| Turkey | -16.9 | 12.1 | 5.9 | 11.0 | 12.3 | 17.8 | 6.0 | n/a | n/a | n/a | n/a | n/a |
| USA | 0.7 | 5.3 | 8.1 | 9.5 | 6.0 | -7.6 | -18.5 | -23.8 | -22.0 | -3.2 | -2.0 | 12.1 |

Sources: Eurostat, OECD, Bureau of Economic Analysis

1) Time series breaks:

2) The series has been revised for at least two years in:

- All countries, excluding Cyprus, Poland, Slovenia and Turkey

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available

23. Total Dwelling Stock

Thousand units

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Austria | 3,755 | n/a | 3,822 | 3,846 | 3,872 | 3,910 | 3,947 | 3,983 | 4,016 | n/a | n/a | 4,200 |
| Belgium | 4,711 | 4,744 | 4,782 | 4,820 | 4,858 | 4,903 | 4,950 | 4,996 | 5,043 | 5,087 | 5,131 | 5,180 |
| Bulgaria | 3,352 | 3,697 | 3,697 | 3,705 | 3,716 | 3,729 | n/a | 3,767 | n/a | n/a | n/a | n/a |
| Cyprus | 293 | 299 | 305 | 314 | 325 | 341 | 358 | 374 | 392 | 408 | 421 | n/a |
| Czech Republic | 4,366 | 4,394 | 4,421 | 4,453 | 4,486 | 4,516 | 4,558 | 4,596 | 4,635 | 4,671 | 4,700 | 4,729 |
| Denmark | 2,541 | 2,554 | 2,572 | 2,592 | 2,621 | 2,645 | 2,670 | 2,696 | 2,722 | 2,770 | 2,786 | 2,797 |
| Estonia | 622 | 623 | 624 | 626 | 629 | 633 | 638 | 645 | 651 | 654 | 656 | n/a |
| Finland | 2,329 | 2,354 | 2,378 | 2,402 | 2,430 | 2,454 | 2,477 | 2,499 | 2,517 | 2,537 | 2,556 | 2,580 |
| France | 30,143 | 30,490 | 30,845 | 31,206 | 31,582 | 31,978 | 32,375 | 32,756 | 33,135 | 33,497 | 33,842 | n/a |
| Germany | 38,682 | 38,925 | 39,141 | 39,362 | 39,551 | 39,753 | 39,918 | 40,058 | 40,184 | 40,319 | 40,842 | 41,027 |
| Greece | 5,581 | 5,705 | 5,829 | 5,947 | 6,136 | 6,257 | 6,357 | 6,434 | 6,493 | 6,543 | 6,572 | 6,590 |
| Hungary | 3,724 | n/a | n/a | 4,134 | 4,173 | 4,209 | 4,238 | 4,270 | 4,303 | 4,331 | 4,349 | 4,394 |
| Ireland | 1,448 | 1,506 | 1,575 | 1,652 | 1,733 | 1,841 | 1,919 | 1,971 | 1,997 | 2,012 | 2,003 | n/a |
| Italy | 27,864 | 28,329 | 28,813 | 29,289 | 29,771 | 30,360 | 31,211 | 32,574 | n/a | 33,074 | n/a | n/a |
| Latvia | 877 | 958 | 967 | 987 | 998 | 1,018 | 1,036 | 1,042 | 1,035 | n/a | n/a | n/a |
| Lithuania | 1,292 | 1,295 | 1,293 | 1,300 | 1,300 | 1,307 | 1,316 | 1,328 | 1,337 | 1,341 | 1,346 | n/a |
| Luxembourg | 120 | 121 | 122 | 124 | 125 | n/a | n/a | 175 | n/a | n/a | n/a | n/a |
| Malta | n/a | n/a | n/a | n/a | n/a | 125 | 133 | 135 | n/a | n/a | n/a | 153 |
| Netherlands | 6,651 | 6,710 | 6,764 | 6,810 | 6,859 | 6,912 | 6,967 | 7,029 | 7,104 | 7,172 | n/a | n/a |
| Poland | 11,946 | 11,763 | 12,596 | 12,758 | 12,872 | 12,987 | 12,994 | 13,150 | 13,302 | 13,422 | n/a | 13,560 |
| Portugal | 5,107 | 5,232 | 5,325 | 5,398 | 5,474 | 5,540 | 5,604 | 5,661 | 5,705 | 5,743 | 5,773 | n/a |
| Romania | 8,107 | 8,129 | 8,152 | 8,177 | 8,202 | 8,231 | 8,271 | 8,399 | 8,385 | 8,428 | 8,468 | n/a |
| Slovakia | 1,885 | 1,899 | 1,913 | 1,926 | 1,940 | 1,955 | 1,970 | 1,987 | 2,006 | 2,023 | 2,036 | n/a |
| Slovenia | 719 | 785 | 791 | 798 | 805 | 812 | 820 | 830 | 838 | 844 | 850 | 854 |
| Spain | 21,058 | 21,762 | 22,425 | 23,175 | 23,918 | 24,626 | 25,377 | 26,231 | 26,769 | 26,953 | 26,998 | n/a |
| Sweden | 4,308 | 4,329 | 4,351 | 4,380 | 4,404 | 4,436 | 4,470 | 4,503 | 4,527 | 4,508 | 4,524 | 4,551 |
| UK | 25,470 | 25,618 | 25,798 | 25,985 | 26,197 | 26,419 | 26,656 | 26,911 | 27,109 | 27,272 | 27,418 | n/a |
| Iceland | 107 | 109 | 111 | 114 | 117 | 121 | 126 | 129 | 130 | 131 | 131 | n/a |
| Norway | 1,962 | 1,982 | 2,003 | 2,026 | 2,054 | 2,082 | 2,112 | 2,140 | 2,161 | 2,179 | 2,197 | n/a |
| Russia | 55,600 | 56,000 | 56,400 | 56,900 | 57,425 | 57,983 | 58,572 | 59,012 | 59,546 | 60,126 | 60,807 | n/a |
| Turkey | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 19,482 | n/a |
| USA | 121,480 | 119,297 | 120,834 | 122,187 | 123,925 | 126,012 | 127,958 | 130,113 | 130,159 | 130,599 | 132,292 | 132,778 |

Source: European Mortgage Federation National Experts, National Statistics Offices

1) Time series breaks:

2) The series has been revised for at least two years in:

- Czech Republic
- Denmark
- France
- Portugal
- UK

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- Data from most countries comes from irregular surveys. Where data is available, data in this table has been estimated on the basis of previous average growth rates, checked against additions to new supply and projected forward where appropriate.

24. Number of Transactions

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Belgium | 110,973 | 116,142 | 119,935 | 118,777 | 118,669 | 121,136 | 125,565 | 121,423 | 115,011 | 128,022 | 128,392 | 123,450 |
| Denmark | 67,953 | 67,982 | 70,568 | 79,566 | 85,196 | 71,905 | 70,225 | 53,248 | 46,215 | 52,955 | 44,064 | 44,782 |
| Estonia | 41,817 | 40,523 | 46,972 | 50,589 | 62,905 | 62,824 | 49,788 | 34,431 | 26,550 | 31,447 | 32,505 | n/a |
| Finland | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 70,245 | 71,001 | 73,991 | 72,024 | 76,251 |
| France | 778,000 | 792,000 | 803,000 | 804,000 | 802,000 | n/a | 810,000 | 673,000 | 594,000 | 784,000 | 808,000 | 709,000 |
| Germany | 498,000 | 500,000 | 492,000 | 441,000 | 503,000 | 442,000 | 457,000 | 456,000 | 477,000 | 514,000 | 566,000 | 613,000 |
| Greece | 163,619 | 158,599 | 149,629 | 165,988 | 215,148 | 172,897 | 167,699 | 157,978 | 135,967 | 117,948 | 83,665 | n/a |
| Hungary | 178,532 | 230,979 | 270,574 | 171,678 | 193,792 | 225,734 | 191,170 | 154,097 | 91,137 | 90,300 | 87,700 | 73,400 |
| Ireland | 69,062 | 93,136 | 97,888 | 104,305 | 110,495 | 110,790 | 84,194 | 53,616 | 25,097 | 18,313 | n/a | n/a |
| Italy | 681,266 | 761,520 | 762,086 | 804,126 | 833,350 | 845,051 | 806,225 | 686,587 | 609,145 | 611,878 | 598,224 | 444,018 |
| Latvia | 31,647 | 40,524 | 51,306 | 63,600 | 68,700 | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Luxembourg | 4,791 | 5,170 | 5,058 | 4,908 | 5,011 | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Netherlands | 195,737 | 198,386 | 193,406 | 191,941 | 206,629 | 209,767 | 202,401 | 182,392 | 127,532 | 126,127 | n/a | n/a |
| Poland | n/a | 243,000 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 86,897 |
| Portugal | 326,732 | 329,301 | 300,105 | 276,292 | 300,044 | 285,483 | 281,367 | 241,040 | 205,442 | 209,321 | 167,496 | n/a |
| Romania | n/a | n/a | n/a | n/a | 535,000 | 682,000 | 521,000 | 484,000 | 352,000 | 352,324 | 371,569 | 471,432 |
| Slovenia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 4,900 | n/a | 10,788 | 10,578 | 10,850 |
| Spain | n/a | n/a | n/a | 848,390 | 901,574 | 955,186 | 836,871 | 564,464 | 463,719 | 491,287 | 349,118 | 363,623 |
| Sweden | 122,770 | 127,912 | 135,414 | 141,035 | 149,072 | 151,448 | 163,676 | 146,882 | 146,582 | 152,072 | 144,946 | 142,907 |
| UK | n/a | n/a | n/a | n/a | n/a | 1,670,000 | 1,613,000 | 901,000 | 859,000 | 886,000 | 886,000 | 931,000 |
| Iceland | 8,456 | 9,096 | 10,701 | 12,761 | 13,415 | 9,876 | 13,163 | 5,218 | 3,039 | 4,012 | 5,887 | n/a |
| Norway | 156,391 | 158,882 | 161,775 | 167,456 | 177,094 | 179,280 | 183,035 | 166,789 | 166,013 | 173,607 | 180,576 | n/a |
| Russia | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 2,727,906 | 3,270,378 | 3,566,924 |
| Turkey | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 427,105 | 555,184 | 607,098 | 708,275 | 701,621 |
| USA | 6,243,000 | 6,605,000 | 7,261,000 | 7,981,000 | 8,359,000 | 7,529,000 | 5,816,000 | 4,595,000 | 4,715,000 | 4,513,000 | 4,562,000 | 5,017,000 |

Source: European Mortgage Federation National Experts, National Statistics Offices, US Bureau of Census

1) Time series breaks:

2) The series has been revised for at least two years in:

- Belgium
- Russia

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- In Poland, the data for 2012 concerns only the dwellings of the secondary market and excludes single family houses

25. Nominal House Prices Indices

(2006=100)

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| Austria | 95.0 | 94.7 | 95.1 | 92.6 | 97.0 | 100.0 | 103.7 | 103.7 | 106.8 | 112.3 | 115.7 | 129.0 |
| Belgium | 54.8 | 60.1 | 64.5 | 68.4 | 89.5 | 100.0 | 108.6 | 112.2 | 114.4 | 119.4 | 123.8 | 127.1 |
| Bulgaria | 37.9 | 38.6 | 43.3 | 63.8 | 87.2 | 100.0 | 128.9 | 161.1 | 126.7 | 113.9 | 107.0 | 104.1 |
| Cyprus | n/a | n/a | n/a | n/a | n/a | 100.0 | 122.1 | 142.8 | 136.2 | 134.4 | 128.8 | 121.9 |
| Czech Republic | 72.0 | 89.3 | 98.9 | 98.7 | 99.9 | 100.0 | 129.2 | 146.3 | 137.7 | 133.7 | 134.0 | n/a |
| Denmark | 60.2 | 62.5 | 64.4 | 70.1 | 82.3 | 100.0 | 104.9 | 101.1 | 88.1 | 90.5 | 88.0 | 85.1 |
| Estonia | n/a | n/a | n/a | 50.8 | 67.4 | 100.0 | 114.3 | 99.0 | 63.4 | 63.4 | 69.7 | 75.3 |
| Finland | 71.5 | 76.8 | 81.7 | 87.7 | 93.1 | 100.0 | 105.5 | 106.1 | 105.8 | 115.0 | 117.2 | 120.7 |
| France | 55.1 | 60.6 | 68.3 | 79.2 | 91.0 | 100.0 | 105.5 | 101.4 | 97.2 | 104.7 | 108.6 | 106.5 |
| Germany | n/a | n/a | 95.7 | 96.4 | 99.8 | 100.0 | 99.8 | 102.8 | 102.3 | 102.9 | 105.5 | 108.7 |
| Greece | 64.9 | 73.8 | 77.8 | 79.6 | 88.3 | 100.0 | 105.9 | 107.7 | 103.7 | 98.9 | 93.5 | 82.6 |
| Hungary | 62.9 | 72.2 | 86.1 | 92.8 | 95.1 | 100.0 | 104.8 | 105.9 | 99.2 | 93.6 | 91.7 | 88.0 |
| Ireland | n/a | n/a | n/a | n/a | 87.2 | 100.0 | 108.5 | 102.1 | 83.4 | 72.5 | 62.9 | 54.8 |
| Italy | n/a | n/a | n/a | n/a | 94.7 | 100.0 | 104.5 | 105.0 | 104.9 | 105.2 | 105.5 | 100.6 |
| Latvia | n/a | n/a | n/a | n/a | n/a | 100.0 | 136.3 | 137.8 | 86.4 | 76.9 | 84.5 | 87.7 |
| Lithuania | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Luxembourg | n/a | n/a | n/a | n/a | n/a | n/a | 100.0 | 98.7 | 98.6 | 101.5 | 109.9 | 118.2 |
| Malta | 62.0 | 69.5 | 77.7 | 90.4 | 99.1 | 100.0 | 100.1 | 95.7 | 94.4 | 92.5 | 98.2 | 96.0 |
| Netherlands | 81.1 | 85.0 | 88.4 | 92.0 | 95.6 | 100.0 | 104.2 | 105.8 | 100.5 | 99.5 | 96.1 | 89.0 |
| Poland | n/a | n/a | n/a | n/a | n/a | n/a | 100.0 | 109.3 | 107.1 | 111.6 | 109.8 | n/a |
| Portugal | 93.6 | 94.1 | 95.2 | 95.8 | 98.0 | 100.0 | 101.3 | 105.3 | 105.7 | 107.7 | 107.5 | 105.1 |
| Romania | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 100.0 | 88.3 | 73.2 | 72.2 |
| Slovakia | n/a | n/a | n/a | n/a | n/a | 100.0 | 135.1 | 136.4 | 121.2 | 119.0 | 116.3 | 113.0 |
| Slovenia | n/a | n/a | n/a | n/a | n/a | 100.0 | 120.6 | 118.9 | 114.6 | 114.2 | 113.4 | 106.5 |
| Spain | 49.9 | 58.5 | 69.3 | 81.3 | 91.7 | 100.0 | 104.8 | 101.4 | 95.1 | 91.7 | 85.5 | 76.9 |
| Sweden | 65.9 | 70.1 | 74.7 | 81.9 | 89.8 | 100.0 | 110.7 | 113.9 | 116.2 | 124.8 | 125.8 | 124.1 |
| UK | 58.9 | 68.9 | 79.7 | 89.2 | 94.1 | 100.0 | 110.9 | 109.9 | 101.3 | 108.6 | 107.6 | 109.3 |
| Croatia | 59.4 | 62.5 | 63.7 | 77.8 | 84.1 | 100.0 | 109.8 | 111.9 | 106.8 | 97.5 | 96.4 | 91.8 |
| Iceland | 50.3 | 54.1 | 58.9 | 72.7 | 95.2 | 100.0 | 115.0 | 112.0 | 98.6 | 98.8 | 108.6 | 114.8 |
| Norway | 69.1 | 72.5 | 73.7 | 81.2 | 88.0 | 100.0 | 112.6 | 111.3 | 113.5 | 122.9 | 132.7 | 141.5 |
| Russia | 29.7 | 37.2 | 44.2 | 54.9 | 64.8 | 100.0 | 120.6 | 139.1 | 123.8 | 127.1 | 134.5 | 150.7 |
| Turkey | n/a | n/a | n/a | n/a | n/a | n/a | 100.0 | 86.0 | 88.4 | 90.7 | 97.8 | 114.7 |
| USA | 69.0 | 74.4 | 80.6 | 88.1 | 99.0 | 100.0 | 98.7 | 89.3 | 77.7 | 77.9 | 74.9 | 79.6 |

Sources: European Mortgage Federation, National Statistics Offices, REIDIN, OECD, ECB (for the euro area), US Bureau of Census

1) Time series breaks:

- Portugal: 2005

2) The series has been revised for at least two years in:

- Cyprus
- Denmark
- France
- Germany
- Iceland
- Ireland
- Italy
- Latvia
- Malta
- Netherlands
- Norway
- Russia
- Slovakia
- Slovenia
- Turkey
- USA

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- For further details on the methodology used for each country, please see the glossary
- (2007 = 100) in Poland; (2008 = 100) in Luxembourg and (2009 = 100) in Romania
- Latvia and Luxembourg have a new source
- The Greek data for 2012 is provisional

26. Nominal House Prices

Annual % change

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| Austria | -0.3 | 0.4 | -2.7 | 4.8 | 3.1 | 3.7 | 0.0 | 3.0 | 5.1 | 3.1 | 11.5 |
| Belgium | 9.6 | 7.4 | 6.0 | 30.8 | 11.8 | 8.6 | 3.3 | 2.0 | 4.4 | 3.7 | 2.7 |
| Bulgaria | 1.8 | 12.2 | 47.5 | 36.6 | 14.7 | 28.9 | 24.9 | -21.4 | -10.1 | -6.1 | -2.7 |
| Cyprus | n/a | n/a | n/a | n/a | n/a | 22.1 | 16.9 | -4.6 | -1.4 | -4.1 | -5.4 |
| Czech Republic | 23.9 | 10.7 | -0.1 | 1.2 | 0.1 | 29.2 | 13.2 | -5.9 | -2.9 | 0.2 | n/a |
| Denmark | 3.8 | 3.0 | 8.9 | 17.4 | 21.5 | 4.9 | -3.6 | -12.9 | 2.7 | -2.8 | -3.2 |
| Estonia | n/a | n/a | n/a | 32.7 | 48.3 | 14.3 | -13.5 | -35.9 | 0.1 | 9.9 | 8.0 |
| Finland | 7.4 | 6.4 | 7.3 | 6.1 | 7.5 | 5.5 | 0.6 | -0.3 | 8.7 | 1.8 | 3.0 |
| France | 10.0 | 12.7 | 16.0 | 14.8 | 9.9 | 5.5 | -3.9 | -4.1 | 7.7 | 3.7 | -1.9 |
| Germany | n/a | n/a | 0.7 | 3.6 | 0.2 | -0.2 | 3.0 | -0.5 | 0.6 | 2.5 | 3.1 |
| Greece | 13.9 | 5.4 | 2.3 | 10.9 | 13.2 | 5.9 | 1.7 | -3.7 | -4.7 | -5.5 | -11.7 |
| Hungary | 14.7 | 19.3 | 7.8 | 2.4 | 5.2 | 4.8 | 1.0 | -6.3 | -5.7 | -2.1 | -4.0 |
| Ireland | n/a | n/a | n/a | n/a | 14.6 | 8.5 | -5.9 | -18.3 | -13.1 | -13.1 | -12.9 |
| Italy | n/a | n/a | n/a | n/a | 5.6 | 4.5 | 0.5 | -0.1 | 0.3 | 0.3 | -4.6 |
| Latvia | n/a | n/a | n/a | n/a | n/a | 36.3 | 1.1 | -37.3 | -11.0 | 9.8 | 3.8 |
| Lithuania | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Luxembourg | n/a | n/a | n/a | n/a | n/a | n/a | n/a | -0.1 | 3.0 | 8.2 | 0.0 |
| Malta | 12.1 | 11.8 | 16.3 | 9.6 | 1.0 | 0.1 | -4.4 | -1.4 | -2.0 | 6.1 | -2.2 |
| Netherlands | 4.8 | 4.0 | 4.1 | 3.9 | 4.6 | 4.2 | 1.5 | -5.0 | -1.0 | -3.4 | -7.4 |
| Poland | n/a | n/a | n/a | n/a | n/a | n/a | 9.3 | -2.0 | 4.2 | -1.7 | n/a |
| Portugal | 0.6 | 1.1 | 0.6 | 2.3 | 2.1 | 1.3 | 3.9 | 0.4 | 1.8 | -0.2 | -2.2 |
| Romania | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | -11.7 | -17.1 | -1.3 |
| Slovakia | n/a | n/a | n/a | n/a | n/a | 35.1 | 1.0 | -11.2 | -1.8 | -2.3 | -2.9 |
| Slovenia | n/a | n/a | n/a | n/a | n/a | 20.6 | -1.4 | -3.6 | -0.4 | -0.7 | -6.1 |
| Spain | 17.3 | 18.5 | 17.2 | 12.8 | 9.1 | 4.8 | -3.2 | -6.3 | -3.5 | -6.8 | -10.0 |
| Sweden | 6.3 | 6.6 | 9.6 | 9.6 | 11.4 | 10.7 | 2.9 | 2.0 | 7.4 | 0.7 | -1.3 |
| UK | 17.0 | 15.7 | 11.8 | 5.5 | 6.3 | 10.9 | -0.9 | -7.8 | 7.2 | -1.0 | 1.6 |
| Croatia | 5.3 | 1.8 | 22.2 | 8.1 | 19.0 | 9.8 | 1.9 | -4.6 | -8.6 | -1.1 | -4.8 |
| Iceland | 7.5 | 9.1 | 23.3 | 31.0 | 5.0 | 15.0 | -2.5 | -12.0 | 0.2 | 9.9 | 5.8 |
| Norway | 5.0 | 1.7 | 10.2 | 8.3 | 13.7 | 12.6 | -1.1 | 1.9 | 8.3 | 8.0 | 6.6 |
| Russia | 25.3 | 18.8 | 24.1 | 18.0 | 54.4 | 20.6 | 15.3 | -11.0 | 2.7 | 5.8 | 12.1 |
| Turkey | n/a | n/a | n/a | n/a | n/a | n/a | -14.0 | 2.7 | 2.7 | 7.8 | 17.4 |
| USA | 7.8 | 8.4 | 9.3 | 12.4 | 1.0 | -1.3 | -9.5 | -12.9 | 0.2 | -3.9 | 6.3 |

Sources: European Mortgage Federation, National Statistics Offices, REIDIN, OECD, ECB (for the euro area), US Bureau of Census

1) Time series breaks:

- Portugal: 2005

2) The series has been revised for at least two years in:

- Cyprus
- Denmark
- France
- Germany
- Iceland
- Ireland
- Italy
- Latvia
- Malta
- Netherlands
- Norway
- Russia
- Slovakia
- Slovenia
- Turkey
- USA

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- For further details on the methodology used for each country, please see the glossary
- (2007 = 100) in Poland; (2008 = 100) in Luxembourg and (2009 = 100) in Romania
- Latvia and Luxembourg have a new source
- The Greek data for 2012 is provisional

27. Nominal House Price to Disposable Income of Households Ratio (2006=100)

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Austria | 116.2 | 113.3 | 109.9 | 102.3 | 101.7 | 100.0 | 98.7 | 95.7 | 97.9 | 101.5 | 101.9 | 109.0 |
| Belgium | 62.8 | 67.9 | 72.0 | 74.7 | 94.6 | 100.0 | 103.1 | 101.0 | 100.9 | 104.4 | 105.9 | 106.3 |
| Bulgaria | 67.0 | n/a | n/a | 83.3 | 95.5 | 100.0 | 127.1 | 130.1 | 92.9 | 82.5 | n/a | n/a |
| Cyprus | n/a | n/a | n/a | n/a | n/a | 100.0 | 113.5 | 120.9 | 115.2 | 107.1 | 105.8 | 105.1 |
| Czech Republic | 111.7 | 120.1 | 132.6 | 125.8 | 112.5 | 100.0 | 118.6 | 112.8 | 108.8 | 99.6 | 97.7 | n/a |
| Denmark | 72.3 | 72.2 | 71.8 | 75.4 | 85.5 | 100.0 | 102.9 | 96.1 | 81.5 | 80.1 | 75.7 | 72.1 |
| Estonia | n/a | n/a | n/a | 68.3 | 78.7 | 100.0 | 94.8 | 76.4 | 51.7 | 53.8 | 55.2 | 56.4 |
| Finland | 87.9 | 90.7 | 91.7 | 93.6 | 97.0 | 100.0 | 99.3 | 94.3 | 91.3 | 95.3 | 93.6 | 93.7 |
| France | 66.4 | 69.9 | 76.9 | 85.4 | 95.2 | 100.0 | 100.4 | 93.3 | 89.0 | 94.0 | 94.9 | 91.8 |
| Germany | n/a | n/a | 101.7 | 100.6 | 102.1 | 100.0 | 98.0 | 98.3 | 98.1 | 95.9 | 95.2 | 95.9 |
| Greece | 91.5 | 99.4 | 96.7 | 93.1 | 95.9 | 100.0 | 96.2 | 96.0 | 92.0 | 94.5 | 96.1 | 94.4 |
| Hungary | 93.5 | 90.4 | 102.5 | 100.0 | 94.1 | 100.0 | 95.9 | 93.7 | 98.2 | 89.4 | 83.0 | 81.1 |
| Ireland | n/a | n/a | n/a | n/a | 94.1 | 100.0 | 101.8 | 90.8 | 79.3 | 72.5 | 64.4 | 52.5 |
| Italy | n/a | n/a | n/a | n/a | 98.1 | 100.0 | 101.0 | 99.7 | 102.3 | 101.8 | 99.8 | 97.1 |
| Latvia | n/a | n/a | n/a | n/a | n/a | 100.0 | 111.6 | 93.8 | 70.2 | 67.0 | 68.8 | 65.4 |
| Luxembourg | n/a | n/a | n/a | n/a | n/a | n/a | 100.0 | 90.8 | 87.0 | 86.8 | 92.1 | n/a |
| Netherlands | 89.0 | 90.9 | 94.5 | 96.6 | 98.4 | 100.0 | 99.7 | 100.2 | 96.3 | 94.1 | 89.3 | 83.4 |
| Poland | n/a | n/a | n/a | n/a | n/a | n/a | 100.0 | 93.5 | 105.4 | 97.0 | 93.6 | n/a |
| Portugal | 111.8 | 108.2 | 105.9 | 102.1 | 100.8 | 100.0 | 96.5 | 96.2 | 97.0 | 95.9 | 97.0 | 95.7 |
| Romania | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 100.0 | 87.3 | 72.3 | n/a |
| Slovakia | n/a | n/a | n/a | n/a | n/a | 100.0 | 109.8 | 93.6 | 79.0 | 74.2 | 70.8 | 67.6 |
| Slovenia | n/a | n/a | n/a | n/a | n/a | 100.0 | 111.2 | 102.2 | 97.9 | 96.4 | 94.5 | 90.3 |
| Spain | 69.8 | 77.1 | 85.3 | 93.7 | 98.0 | 100.0 | 98.3 | 89.1 | 83.0 | 82.5 | 77.3 | 71.5 |
| Sweden | 78.3 | 78.7 | 81.4 | 87.3 | 94.5 | 100.0 | 103.4 | 104.9 | 113.6 | 106.1 | 96.6 | 88.7 |
| UK | 65.3 | 74.4 | 90.7 | 96.1 | 98.5 | 100.0 | 107.7 | 119.8 | 119.7 | 118.6 | 114.8 | 104.0 |

Sources: European Mortgage Federation, National Statistics Offices, REIDIN, OECD, ECB (for the euro area), US Bureau of Census

1) Time series breaks:

- Portugal: 2005

2) The series has been revised for at least two years in:

3) Notes:

- For further details on the methodologies, please see "Annex : Explanatory Note on data"
- n/a : figure not available
- 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.
- (2007 = 100) in Poland and Luxembourg and (2009 = 100) in Romania
- The Greek data for 2012 is provisional



A. Mortgage Markets

1. Total Outstanding Residential Loans, Total Amount, End of the Year, EUR million

Total residential loans on lender's books at the end of the period. The definition of residential loans can vary somewhat across EU27 countries, depending on the collateral system and the purpose of the loans. Some countries only integrate secured residential loans, while some others include both secured and non-secured loans. In some countries, this collateral is generally the property, whilst some others favour a system of personal guarantees.

Regarding the purpose, a few countries exclude residential loans whose purpose is above all commercial (such as purchasing a building to let). In addition, there are some methodological differences across EU27 countries regarding the statistical treatment of loans made for renovations of existing dwellings: under some assumptions, some of these loans can be considered as consumption loans.

The conversion to EUR is based on the bilateral exchange rate at the end of the period (provided by the European Central Bank).

2. 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.

The conversion to EUR is based on the average bilateral exchange rate during the period (provided by the European Central Bank).

3. Net Residential Lending, Total Amount, EUR million

New residential loans advanced during the period minus repayments. It also corresponds to the change in outstanding residential loans at the end of the period.

4. Representative Interest Rates on New Mortgage Loans, %

National definitions of interest rates used to calculate the average value are the following:

EU27

Austria: Weighted average mortgage rate on loans to households for house purchase; interest rates are defined as the annualised agreed rates in % per annum; the annualised agreed rate covers all intra-year payments on deposits and loans, but no other charges that may apply; in EUR; Source: National Bank of Austria;

Belgium: Long-term initial fixed period interest rate, 10 years or more maturity; Source: National Bank of Belgium;

Bulgaria: 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, BGN (the monthly data is based on the average of observations through the period); Source: European Central Bank;

Cyprus: 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;

Czech Republic: Weighted average mortgage rate on loans to households for house purchase; Source: Hypoindex;

Denmark: Average long bond rate for mortgage bonds denominated in DKK; Source: Realkreditraadet;

Estonia: Weighted average of the annual interest rate on housing loans granted to households; Source: Bank Estonia;

Finland: Weighted average interest rate on housing loans; Source: Bank of Finland;

France: Weighted average interest rate on lending for house purchase excluding revolving loans and overdrafts, convenience and extended credit card debt; Source: Banque de France;

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: Monthly average floating rate and up to 1 year initial rate fixation on loans for house purchase, HUF; Source: Hungarian National Bank;

Ireland: Weighted average interest rate on housing loans; Source: Central Bank of Ireland;

Italy: Total initial rate fixation on loans for house purchase excluding revolving loans and overdrafts, convenience and extended credit card debt; Source: European Central Bank;

Latvia: Total initial rate fixation on loans for house purchase excluding revolving loans and overdrafts, convenience and extended credit card debt; Source: European Central Bank;

Lithuania: Total initial rate fixation on loans for house purchase; Source: Bank of Lithuania;

Luxembourg: Variable interest rate (1 year) on housing loans; Source: Central Bank of Luxembourg;

Malta: Interest rate on loans for house purchase to households and NPISH; Source: Central Bank of Malta;

Netherlands: 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: European Central Bank;

Poland: Weighted average interest rate on housing loans; Source: National Bank of Poland;

Portugal: 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;

Romania: Weighted average interest rate on lending for house purchase excluding revolving loans and overdrafts, convenience and extended credit card debt, EUR; Source: European Central Bank;

Slovakia: Weighted average interest rate on new housing loans; Source: National Bank of Slovakia;

Slovenia: Weighted average annual percentage rate of charge for new loans to households in EUR for house purchase; Source: Bank of Slovenia Monthly Bulletin;

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.

NON EU27

Croatia: Weighted average interest rate on HRK housing credits indexed to foreign currency (to households); Source: Croatian National Bank;

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); Source: Central Bank of Iceland;

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 rates on commitments for 30-year fixed-rate first mortgages; Source: Freddie Mac.

5. Total Outstanding Residential Loans to GDP ratio, %

Residential Mortgage Debt is provided by the European Mortgage Federation. GDP at current prices is provided by Eurostat.

6. Total Outstanding Residential Loans to Disposable Income of Households ratio, %

The data on Disposable Income of Households at current prices is provided by the European Commission (AMECO Database). Regarding the non euro area countries, the conversion to euros is based on the bilateral exchange rate at the end of the year.

7. Total Outstanding Residential Loans per Capita (population over 18), thousand EUR

The data on population is provided by Eurostat and concerns the people over 18 years old.

8. Total Outstanding Non Residential Mortgage Loans, Total Amount, End of the Year, EUR million

Total 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" with "Total Outstanding Non Residential Mortgage Loans" gives the total outstanding housing loans.

The conversion to EUR is based on the bilateral exchange rate at the end of the period (provided by the European Central Bank).

9. GDP at current Market Prices, million EUR

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.

10. Gross Disposable Income of Households, million EUR

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).

B. Funding of the Mortgage Markets

13. Total Outstanding Covered Bonds, Backed by Mortgages, EUR million

Covered bonds are 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.

16. Total Outstanding Residential Mortgage-Backed Securities (RMBS), 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.

C. Housing markets

18. Owner Occupation Rate, %

In the Hypostat, there are two types of methodologies to calculate the owner occupation rate. It concerns either the owner occupied homes to total number of home ratio (i.e. "dwelling approach"), or the inhabitants living in an owner occupied home to total population ratio (i.e. "population approach").

Within the "dwelling approach", each dwelling is either owner-occupied, rented or unoccupied. The "population approach" means that people occupy a dwelling either as an owner or as a tenant or do not have any address. This second approach is based on a survey conducted every year by Eurostat: the European Union Statistics on Income and Living Conditions (EU-SILC) (http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/eu_silc).

19. Building Permits

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 the Hypostat, the building permit concerns only dwellings.

20. Housing Starts

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).

21. Housing Completions

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.

22. 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.

23. Total Dwelling Stock, thousand units

According to the "1993 SNA" ("the 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.

24. Number of Transactions

Total number of new or second hand dwellings purchased or transferred in the period, including those occupied for the first time.

The national methodologies used to calculate this index are the following:

EU27

Belgium: transactions on second hand houses only;

Denmark: excludes self build;

Finland: all dwellings;

France: new apartments as principal and secondary residence or rental;

Ireland: estimate based on mortgage approvals;

Netherlands: includes commercial transactions;

Portugal: urban areas only - includes commercial transactions;

Sweden: from year 2000, not only one-family homes are included in the transaction figures but also apartment transactions;

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USA: number of existing home sales.

25. Nominal House Prices, 2006=100

The price actually paid by the buyer to acquire a dwelling.

The national methodologies used to calculate this index are the following:

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Austria: other areas than Vienna;

Belgium: average prices of existing houses; Source: Stadim;

Bulgaria: annual average market price index of dwellings, flats in the district centres (new flats are excluded); Source: National Statistical Institute;

Cyprus: average price for new and existing houses and flats; Source: ECB (residential property price indicator for the euro area);

Denmark: all dwellings; annual average;

Estonia: new and existing dwellings, whole country;

France: second hand dwellings;

Germany: VDP Price Index for Owner Occupied Housing, calculated by vdpResearch;

Greece: urban areas only;

Hungary: all dwellings, FHB Index;

Ireland: average price of all residential property approved for mortgage; the annual index is calculated as a simple average of the published indices for March, June, September and December of each year; Source: Central Statistics Office;

Italy: Source: Bank of Italy, Istat, Revenue Agency Property Market Observatory (Osservatorio del mercato immobiliare), Consulente Immobiliare and Tecnoborsa;

Latvia: Source: Central Statistics Bureau (House price index and changes);

Luxembourg: Average acquisition prices for apartments (new and former); y-o-y variation in the last quarter of each year; Source: STATEC;

Malta: Property prices index based on advertised prices, total dwellings (including apartments, maisonettes, terraced houses, others); y-o-y variation in the last quarter of each year; Source: Central Bank of Malta;

Netherlands: Price index purchase of existing own homes: this index shows the price movements of all dwellings owned by a private person and intended for permanent residence by a private person; y-o-y variation in the last quarter of each year; Source: Statistics Netherlands (CBS);

Portugal: Annual average; new series from 2005; Source: Confidencial Imobiliário;

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;

Slovakia: y-o-y variation in the last quarter of each year; Source: Eurostat;

Spain: all dwellings; Source: Ministerio de foment;

Sweden: one and two dwellings buildings; Annual average;

UK: House Price Index (all dwellings) from the Office for National Statistics; Mix adjusted house price index at mortgage completion stage; Source: Office for National Statistics;

NON EU27

Croatia: hedonic real estate price index; Source: Croatian National Bank;

Iceland: Reykjavik capital region (excluding Seltjarnarnes & Mosfellsbaer); y-o-y variation in the last quarter of each year; Source: Registers Iceland;

Norway: Price index for new dwellings; new series from 2005; Source: Statistics Norway;

Russia: y-o-y variation in the last quarter of each year;

Turkey: Overall composite house price index; y-o-y variation in the last month of each year; Source: REIDIN;

USA: Residential house prices at national level (all existing dwellings, including condominiums and coops); median; Source: Census Bureau, Department of Commerce.

27. Housing affordability: nominal house price to disposable income per capita ratio, 2006= 100

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.

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