

# Global Housing and Mortgage Outlook – 2016

## Special Report

### Inside This Report

Summary of Market Indicator Outlooks..... 2  
 Cross-Country Market Comparisons ..... 3  
 Country Pages..... 11  
 Summary of Macro Indicator Outlooks..... 33

### Market Coverage Versus 2015 Outlook

**Added:** Norway  
**Removed:** Hong Kong



Kevin Duignan, Global Group Head of Structured Finance, leads the Fitch panel discussing the Global Housing and Mortgage Outlook for 2016.

[See Appendix for Related Research reports and RMBS Criteria](#)

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**Outlooks Mostly Stable; Divergence Increasing:** The outlooks for the mortgage and housing markets for most of the 22 countries in this report are Stable or Stable/Positive. The number of outlooks that have changed (six improving and three deteriorating) has risen since last year, reflecting shifts in relative performance and a greater disparity of conditions globally.

Low mortgage rates, GDP growth and improving employment will support the housing and mortgage market performance of many countries. But where one or more of these are missing – as in Brazil, South Africa, and Singapore – outlooks have worsened since last year. All of the countries with improved outlooks are located in Europe, where the peripheral eurozone markets continue to rebound.

**Rate Impact Generally Muted:** Despite the prospect of rate hikes, we do not expect performance in the US to deteriorate significantly as most mortgages there have fixed rates. UK non-conforming pools are more vulnerable to higher rates than prime portfolios, which benefit from seasoning and stricter affordability testing. In APAC, Singapore is most exposed to rate hikes. Rate increases from already high levels will affect performance in South Africa. Mortgage affordability testing in eurozone variable-rate markets will remain untested this year.

**Slowing House Price Rises:** We expect house prices to rise in 17 of the 22 markets but the pace of increase will either remain unchanged or drop in most markets. Australia, New Zealand and Canada will see sharp decelerations in growth, as affordability limits become a constraint. Price recoveries will be uneven after large corrections, such as Spain's.

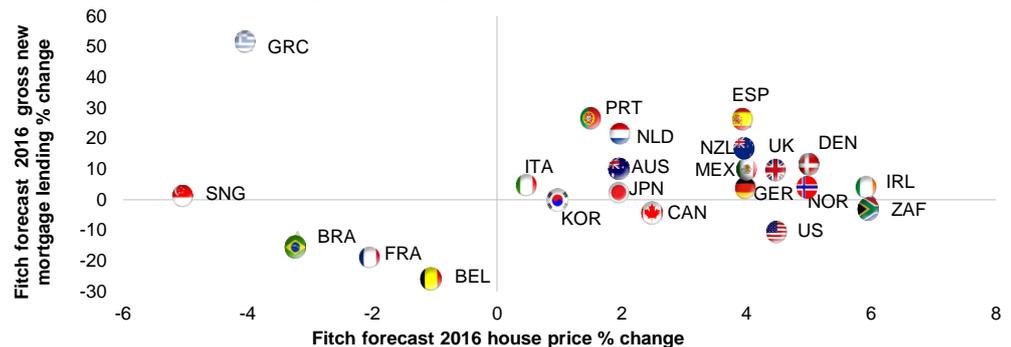
**Housing Getting More Expensive:** Global housing is expensive and getting more so. Most countries where home prices are already above long-term averages compared to incomes and rents will see further rises this year, although prices in France and Belgium will fall. Where they occur, rate rises may slow price increases, but will also weigh on affordability.

**Lending Growth Stable or Slowing:** Gross new mortgage lending will grow in most markets (the US and Canada are among the exceptions) but the rate of increase will either fall or remain unchanged. The boost to lending volumes from increased mortgage refinancing rates in parts of Europe will fade, while APAC lending growth rates will moderate.

**Macro Prudential Investment Focus:** Some regulators are taking a nuanced approach in their efforts to cool housing markets by targeting investment properties while sparing owner-occupiers. Such macro-prudential controls help contain long-term risks, but have generally not offset the impact of low rates.

**Home Ownership Mostly Falling:** Home ownership is at a 25-year low in the US and continues to fall in many major mortgage markets. Affordability constraints, mortgage availability, and consumer preferences, all have a bearing on home ownership rates – although improving funding conditions could act as a mitigant.

### 2016 Gross New Mortgage Lending and House Price Forecast



Source: Fitch

Market Indicators

|                  |  | Nominal House Price<br>yoy Growth (%) |       |                    | Arrears <sup>a, b</sup><br>(%) |       |                    | Gross New Mortgage<br>Lending<br>(% of Previous Year) |       |                    | Overall Market Evaluation |  |
|------------------|--|---------------------------------------|-------|--------------------|--------------------------------|-------|--------------------|---|-------|--------------------|---------------------------|--|
| Country          | Page   | 2015e                                 | 2016f | 2017f <sup>c</sup> | 2015e                          | 2016f | 2017f <sup>c</sup> | 2015e   | 2016f | 2017f <sup>c</sup> | Outlook <sup>d</sup>      | Outlook Change from<br>2015 <sup>e</sup> |
| North America    | USA  (11)   | 5.0                                   | 4.5   | ▲                  | 7.7                            | 6.7   | ▼                  | 115   | 90    | ▼                  | Stable                    | ▶  |
|                  | CAN  (12)   | 5.9                                   | 2.5   | ▲                  | 0.4*                           | 0.4*  | ▶                  | 105   | 95    | ▼                  | Stable                    | ▶  |
| Europe           | UK  (13)    | 9.5                                   | 4.5   | ▲                  | 0.8                            | 1.0   | ▲                  | 110   | 110   | ▲                  | Stable/Positive           | ▲  |
|                  | GER  (14)   | 4.0                                   | 4.0   | ▲                  | 0.5                            | 0.5   | ▶                  | 103   | 103   | ▲                  | Stable                    | ▶  |
|                  | NLD  (15)   | 2.3                                   | 2.0   | ▲                  | 0.7                            | 0.7   | ▶                  | 120   | 120   | ▼                  | Stable/Positive           | ▲  |
|                  | FRA  (16)   | -2.5                                  | -2.0  | ▼                  | 0.2                            | 0.2   | ▶                  | 155   | 80    | ▼                  | Stable                    | ▶  |
|                  | BEL  (17)   | 1.0                                   | -1.0  | ▼                  | 0.3                            | 0.3   | ▶                  | 140   | 100   | ▼                  | Stable                    | ▶  |
|                  | DEN  (18)   | 6.0                                   | 5.0   | ▲                  | 0.2*                           | 0.2*  | ▶                  | 110   | 110   | ▲                  | Stable                    | ▶  |
|                  | NOR  (19)   | 5.0                                   | 5.0   | ▲                  | 0.2*                           | 0.3*  | ▶                  | 107   | 103   | ▲                  | Stable                    | ▶  |
|                  | IRL  (20)   | 8.5                                   | 6.0   | ▲                  | 16.0                           | 14.0  | ▼                  | 120   | 112   | ▲                  | Stable/Positive           | ▲  |
|                  | ESP  (21)   | 5.0                                   | 4.0   | ▲                  | 1.4                            | 1.0   | ▼                  | 125   | 125   | ▲                  | Stable/Positive           | ▲  |
|                  | ITA  (22)  | -0.6                                  | 0.5   | ▲                  | 1.6                            | 1.5   | ▼                  | 145   | 105   | ▲                  | Stable                    | ▲  |
|                  | PRT  (23) | 2.5                                   | 1.5   | ▲                  | 1.2                            | 0.9   | ▼                  | 160   | 125   | ▲                  | Stable/Positive           | ▲  |
|                  | GRC  (24) | -6.0                                  | -4.0  | ▼                  | 7.8                            | 6.3   | ▼                  | 40  | 150   | ▲                  | Negative                  | ▶  |
| Asia Pacific     | AUS  (25) | 10.5                                  | 2.0   | ▲                  | 0.5                            | 0.6   | ▶                  | 115   | 110   | ▲                  | Stable                    | ▶  |
|                  | JPN  (26) | 2.0                                   | 2.0   | ▲                  | 0.3                            | 0.3   | ▶                  | 105   | 102   | ▶                  | Stable                    | ▶  |
|                  | KOR  (27) | 3.0                                   | 1.0   | ▲                  | 0.4*                           | 0.6*  | ▲                  | 102   | 100   | ▶                  | Stable                    | ▶  |
|                  | NZL  (28) | 14.0                                  | 4.0   | ▲                  | 0.6*                           | 0.7*  | ▲                  | 120   | 112   | ▲                  | Stable                    | ▶  |
|                  | SG  (29)  | -3.0                                  | -5.0  | ▼                  | 0.6*                           | 0.9*  | ▲                  | 104   | 102   | ▲                  | Stable/Negative           | ▼  |
| Emerging Markets | ZAF  (30) | 6.0                                   | 6.0   | ▲                  | 8.5*                           | 8.7*  | ▲                  | 105   | 97    | ▼                  | Stable/Negative           | ▼  |
|                  | BRA  (31) | 1.0                                   | -3.2  | ▲                  | 1.9*                           | 2.4*  | ▶                  | 82  | 86    | ▲                  | Stable/Negative           | ▼  |
|                  | MEX  (32) | 4.0                                   | 4.0   | ▲                  | 3.3*                           | 3.3*  | ▲                  | 110   | 110   | ▲                  | Stable                    | ▶  |

Legend

<sup>a</sup> Fitch Rated RMBS 3 months plus arrears excluding defaults (\* or market-wide arrears / impaired loan ratio – market-wide ratio definitions vary)

<sup>b</sup> Markets: US: legacy prime jumbo, UK: prime; France: France retail; Brazil: largest lender CEF

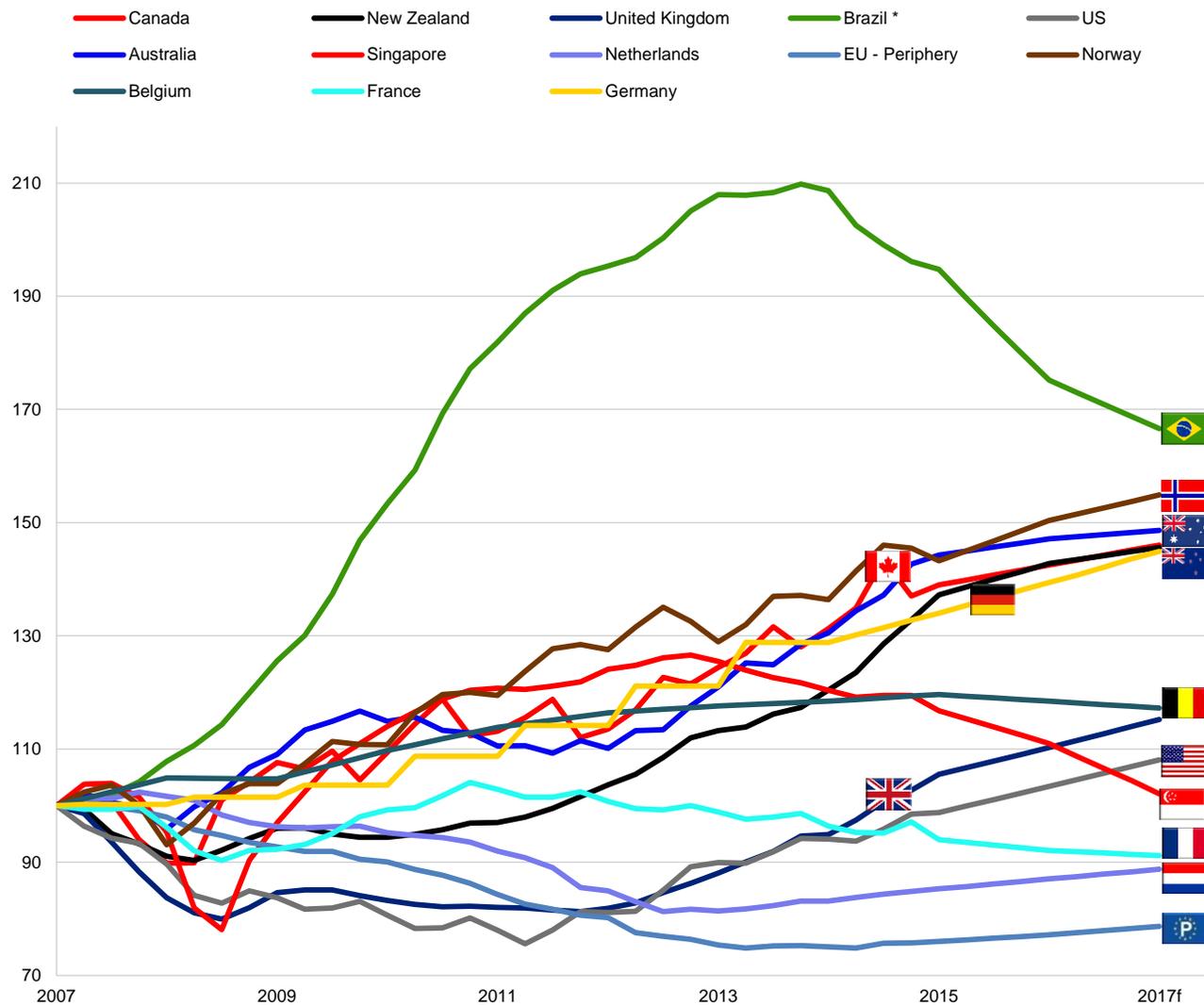
<sup>c</sup> Forecast ranges from: ▲ (increase) ▶ (stable), ▼ (decline). Directional arrows for 2017 house prices and lending forecast vis-à-vis zero change; directional arrows for 2017 arrears forecast vis-à-vis 2016 forecast

<sup>d</sup> Outlook on a 5-notch scale (Positive, Stable/Positive, Stable, Stable/Negative, Negative)

<sup>e</sup> Change of Outlook evaluation is compared with Outlook from a year ago

Source: Fitch

Nominal House Prices



\* Real prices for Brazil given higher inflation  
 Source: Fitch, Halifax, BulwienGesa, INSEE., Case-Shiller, Stadim, BIS (Bank of International Settlements), Fipe (Fundaco Instituto de Pesquisas Economicas), SSB (Statistics Norway), RBNZ (Royal Bank of New Zealand), RP Data

House Price Outlook: Moderation to Continue

**Moderate Growth in US, Canada:** 4%-5% growth is likely in the US, driven by positive economic momentum. The outlook in Canada is more subdued and we expect 2%-2.5% growth. Fitch continues to view Canadian home prices as overvalued, remaining well above long-term sustainable values, but prices and affordability are still buoyed by low mortgage rates and stable employment.

**Australian, NZ Price Rises to Slow:** Decreasing affordability for owner occupiers and further compression of rental yields for investors are likely to soften demand in the Australian housing market, causing price growth to moderate to around 2%, mostly through slower growth in Sydney and Melbourne. Demand outstrips supply in Auckland but regional New Zealand will be subdued.

**Supply Shortage Keeps UK Prices Rising:** UK prices will rise 4%-5%, driven by the housing supply shortage, but stretched affordability will weigh on further increases. In addition, interest rate rises may further dent affordability and test market confidence.

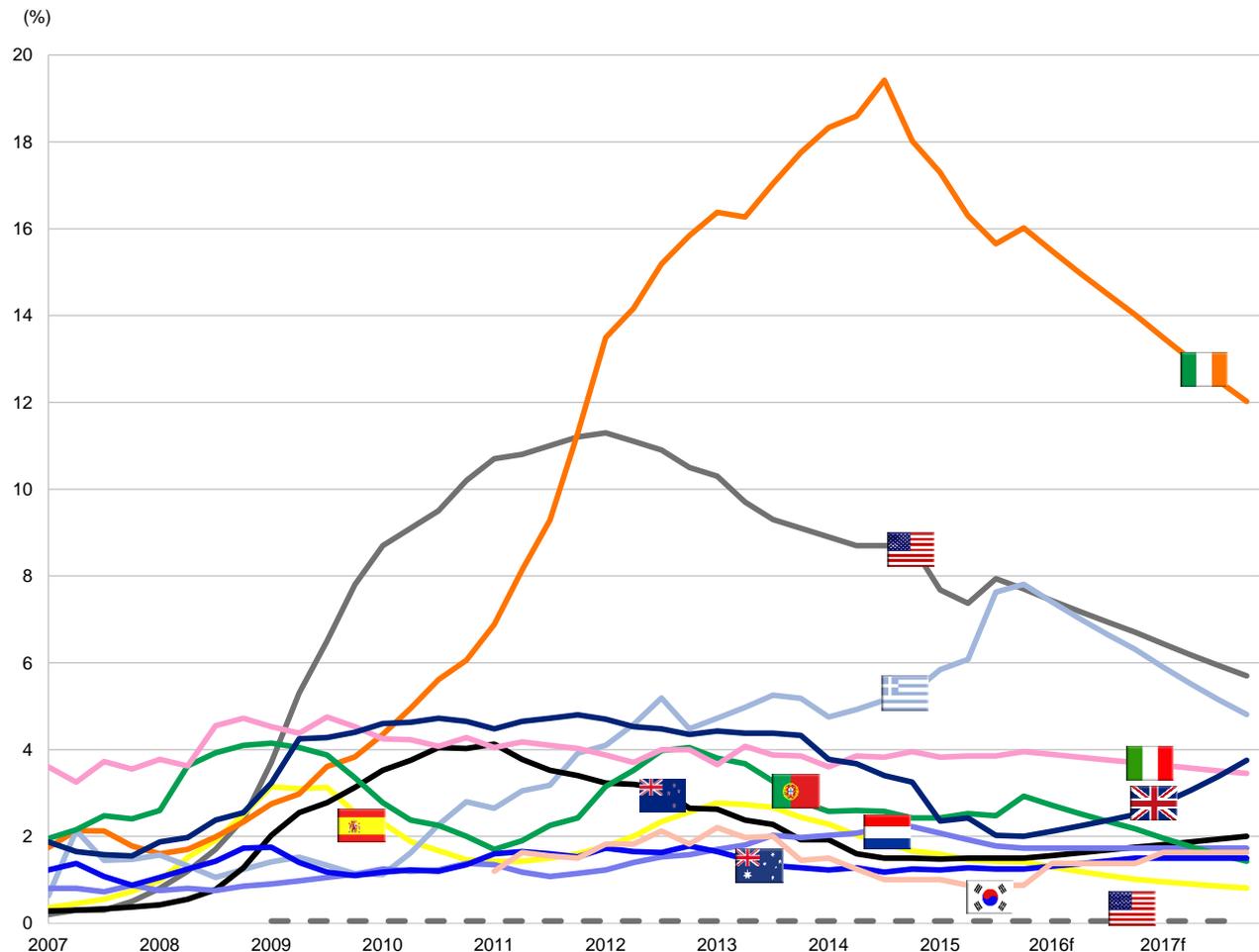
**Italy, Greece Lag Eurozone Periphery Recovery:** Italian house prices will bottom out nationally this year as demand and credit supply slightly improve and the property tax on first homes is removed. Greek prices will keep falling for the next two years due to economic uncertainty and a lack of mortgage credit. Irish prices will continue to grow, but more slowly, at 6%, partly due to central bank lending rules.

**Singapore Correction Continues:** Home prices in Singapore will drop further, by 5%-8% annually in 2016 and 2017, as supply exceeds demand, rates rise, and regulatory cooling continues to be felt.

**Inflation Has an Impact in Some Emerging Markets:** Higher inflation in some emerging markets means real prices diverge from nominal prices. In South Africa we expect stable real prices in 2016 and a 3% fall next year, versus nominal appreciation of 6% and 3%. In Brazil, we expect a 3.2% nominal price decline in 2016, meaning real prices will fall by about 10%.

**Regional Variations Still Notable:** Variations in price outlooks within national housing markets remain notable and in some cases are growing. Higher prices in capital cities or property hotspots like California are a well-established phenomenon. Markets like Spain that are completing major corrections will see uneven recoveries. Price growth in German metropolitan centres is slowing as demand shifts to smaller cities and rural areas. The fall in commodity prices may affect some regions, such as the west of Norway, where we expect prices to fall while the rest of the country will see an increase.

3m+ Arrears



Fitch-rated transactions excluding defaults or \* denotes the market rate for arrears  
 Source: Fitch, RBNZ (Royal Bank of New Zealand), FSS Final Supervisory Service (FSS)

Mortgage Arrears Outlook: Arrears to Remain Low Globally

**US Recovery Continues:** Strong home price gains have improved legacy borrowers' equity positions, although delinquencies on remaining legacy prime loans remain high. This is partly due to stronger borrowers refinancing out of legacy pools. Strict underwriting means performance of recent prime mortgage vintages is exceptionally strong.

**European Core Solid, Periphery Improves:** We forecast flat or declining arrears in all European markets except the UK and Norway. Modest, gradual UK rate rises should not cause major asset performance issues, but older non-conforming pools are more vulnerable than prime portfolios. Lower oil prices are pushing up unemployment in parts of Norway, but arrears will remain very low.

Loose ECB monetary policy, macroeconomic and labour market improvements will keep arrears low in core eurozone markets and see further falls in the periphery. Spanish and Portuguese restructured loan performance is improving. In Belgium, France, and Italy, refinancing to lower rate mortgages has eased affordability for existing borrowers. Irish arrears will fall further, as more borrowers return to positive equity, but remain the highest in Europe. Greek late-stage arrears have hit an all-time high but should gradually return to pre-election levels as the banking system stabilises.

**Australian Arrears Stay Low:** Steady Australian performance reflects increasing levels of servicing buffer from lower interest rates, a stable unemployment rate, and price appreciation opening up additional equity for borrowers. Low wage growth and rising living costs would mean performance coming under pressure if rates rise, but this is unlikely in 2016.

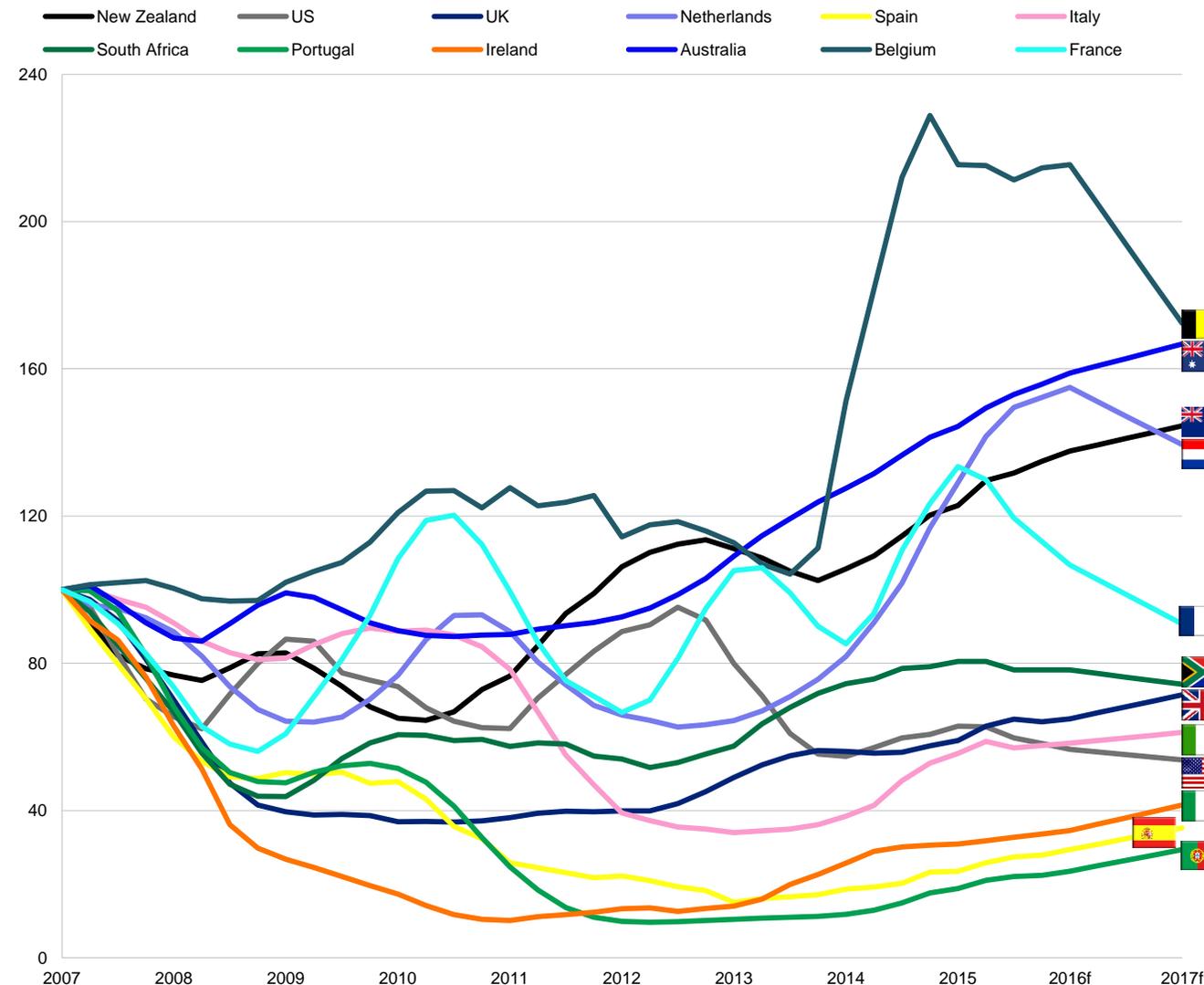
**South Korea Arrears to Tick Up:** A strong labour market and tight LTV restrictions will keep delinquencies close to their historical lows in South Korea, but we expect early stage arrears to increase slightly if a rate rise materialises.

**South Africa May See a Turning Point:** Rising rates mean 2016 may see a reversal in the long-term trend of improving mortgage performance in South Africa. Job losses in key sectors like mining may also weigh on performance.

**Mexican Non-Bank Asset Performance to Remain Stressed:** Market-wide arrears in Mexico will be steady, but while government agency and bank performance is strong, non-bank lender portfolios are stressed due to delinquencies and long workout processes.

**Gross New Mortgage Lending**

Rebased 2007 = 100



Source: RBA (Royal Bank of Australia), DNB (De Nederlandsche Bank), RBNZ (Royal Bank of New Zealand), NBB (National Bank of Belgium), South Africa Reserve Bank, CML (Council of Mortgage Lenders), Banca D'Italia, MBA (Mortgage Bankers Association), ECLG (Environment, Community and Local Government), ECB (European Central Bank), Banque de France

*Gross Lending Outlook: Refinancing Boost Fades*

**US Lending to Fall:** We expect US lending to fall 10% in 2016 following an increase of around 15% last year, as mortgage rates finally rise and high prices weigh on volumes. Refinancing will contract as most borrowers who can refinance have already taken advantage of historically low rates. Lenders may loosen eligibility requirements to compensate for declining refinancing volume.

**Temporarily High Refinancing in Some European Markets:** Gross mortgage lending jumped in 2015 in France, Belgium and Italy as borrowers took advantage of low interest rates to refinance. We think volumes will reduce or stabilise in these countries in 2016 as refinancing activity drops and new loan origination reflects macroeconomic and housing market fundamentals. Attractive rates on new mortgages and strong mortgage affordability will support both new lending as well as re-mortgage activity in Ireland and the Netherlands.

**Iberia Turning a Corner:** We expect gross new lending in Spain and Portugal to continue to grow thanks to improving consumer confidence and lender competition, to the point where new lending will roughly offset loan amortisation by 2017.

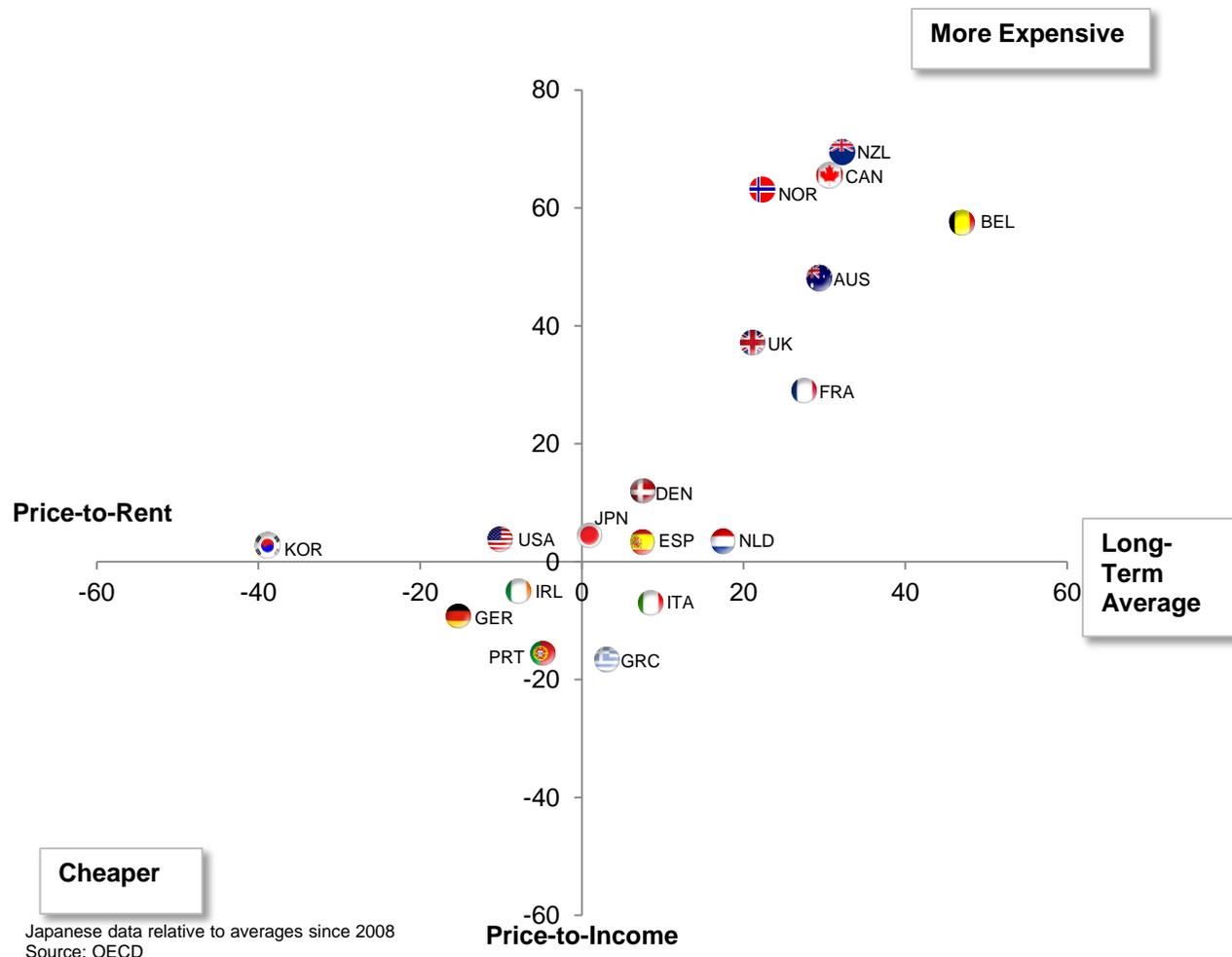
**APAC Lending Growth to be Stable:** Efforts to curb speculative or risky lending mean a moderate increase in gross lending in Australia which, like Singapore, will rest on owner occupiers. Borrower caution on rising rates in South Korea may be offset by rising rents making home ownership relatively attractive.

**South African Lending to Slow, then Fall:** We expect gross residential mortgage lending in South Africa to stabilise in 2016 and then go into reverse in 2017 as house price growth slows and new affordability regulations potentially restrict mortgage credit to weaker borrowers. However, volumes will depend largely on interest rates.

**Authorities Seek to Redirect Lending:** Financial sector regulation and housing policy continue to affect the amount and composition of mortgage lending. Canada has tightened guidelines on riskier products qualifying for guarantees, Ireland has tightened lending rules, and the UK, Australia and New Zealand have moved to contain investment lending. At the same time, policymakers may try to support the flow of mortgage credit to owner-occupiers where affordability is stretched or housing markets sluggish. In the UK, for example, Right-to-Buy changes should increase lending to first time buyers, contributing to a 10% increase in gross lending next year.

**Affordability: Price-to-Rent and Price-to-Income**

As at 2Q15, relative to long-term averages



*House Price Affordability: Most Markets Expensive*

**Global Housing Is Expensive:** Global housing was expensive in 2015, as it was in 2014. 10 of the 18 markets charted show housing as expensive compared to the long-term average on both price-to-rent and price-to-income metrics. This is a result of high prices which are supported by low interest rates and as a result cheap funding.

**And Getting More Expensive:** Fitch estimates that the 10 countries that are in the expensive quadrant of the chart averaged over 5% price appreciation in 2015. Fitch expects this to slow somewhat in 2016 although still projects these countries' prices to continue to grow at 2%-3% on average. Only three of the 18 countries shown (plus Singapore for which comparable data was not available) saw house prices fall in 2015. Among those, only France belongs to the 10 expensive countries on both measures.

**Canada, Australia and New Zealand Stretched:** All three saw continued price rises but ended the year with signs they may have reached the limits of borrower affordability. While growth in price-to-rent and price-to-income ratios waned in late 2015, affordability will continue to remain constrained going into 2016 as these ratios remain well above long-term averages. Low interest rates and stable employment indicate that macro-prudential measures are not likely to cause any significant reduction in prices in the near term.

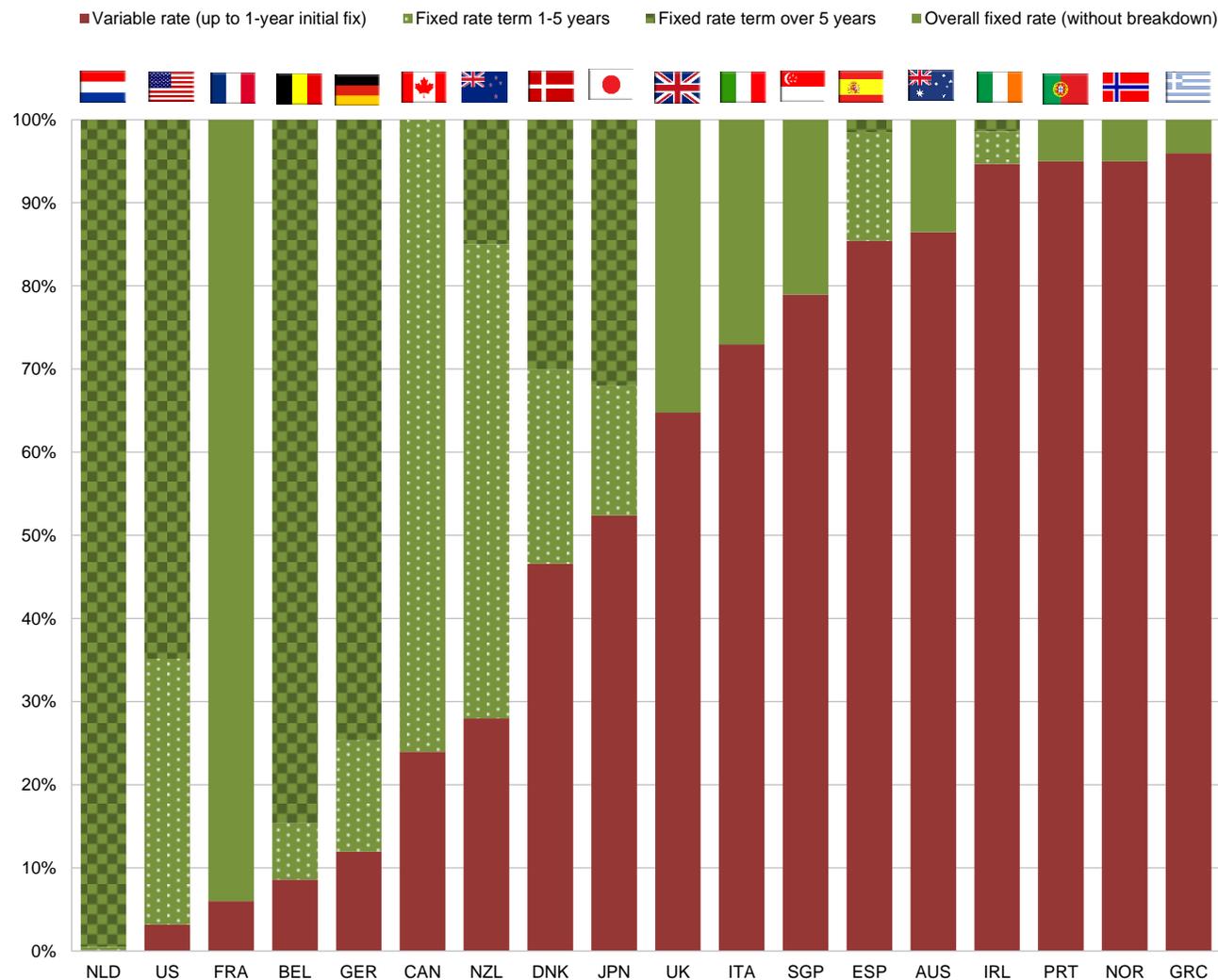
**US Affordability Worsening:** Strong home price growth and upward pressure on interest rates is expected to erode affordability in the US in 2016, particularly in areas of California where affordability has decreased approximately 25% since 2011. However, relative to historical averages, houses remain affordable in most areas of the US, although many potential buyers are deterred by tight credit conditions.

**Nordic Countries Expensive:** Danish house prices will continue their resurgence since their correction in 2007-2009, particularly in Copenhagen. Norway, however, will be split between weakening prices and incomes in the west and a supported rest of the country.

**Irish, UK Affordability Slowly Worsening:** After Ireland's massive correction until 2012, prices in Dublin surged first with the rest of the country following more recently. However, mortgage payments as a percent of incomes will remain well below the 2007 peak. In the UK, we expect already stretched affordability to weigh on any further home price increases, as income growth remains muted.

**Mortgage Product Interest Variability**

On Outstanding Mortgages as of 2014



Source: Fitch, Data and Estimates by EMF, MFAA, JHF, DBS, BoG

*Interest Rate Risk: Monetary Tightening Begins,*

**Affordability Stress Testing Should Offer Protection for New Loans in Certain Markets:**

In the UK the requirements under the recently implemented Mortgage Market Review (MMR) to ensure affordability is sufficiently tested at loan origination will protect lenders and mortgage investors against rate rises. MMR requires lenders to stress test interest rates, get more comfort around both income levels (ie, self-certification of income not allowed) and outgoing borrower expenses. Similarly, regulators in Australia have renewed focus on underwriting criteria to ensure borrowers can withstand rates substantially higher than the current historic lows.

**Rates to Rise in North America, but Little Impact Expected:**

The high percentage of fixed-rate products in the US will limit the impact of interest rate hikes on existing borrowers. The same applies to Canadian mortgages, with the difference that tenors tend to be shorter.

**Core EU Markets Better Protected Than Periphery:**

The ECB is likely to keep rates low over the next couple of years, which should result in steady mortgage rates. While macro fundamentals are expected to improve in Spain and Ireland, a slightly negative outlook in Portugal and Italy and distinctly weaker one in Greece could expose these markets when rates do rise. The predominance of fixed-rate loans in core countries – particularly for Germany, France and Belgium – should offer relatively better protection against such rate rises.

**Singapore Most Exposed in APAC:**

Singapore is more exposed to rate rises due to relatively low proportions of fixed-rate mortgages and expectations of rate rises in line with US interest rate moves. Rates are expected to stay broadly stable in other APAC markets, including Japan and Australia.

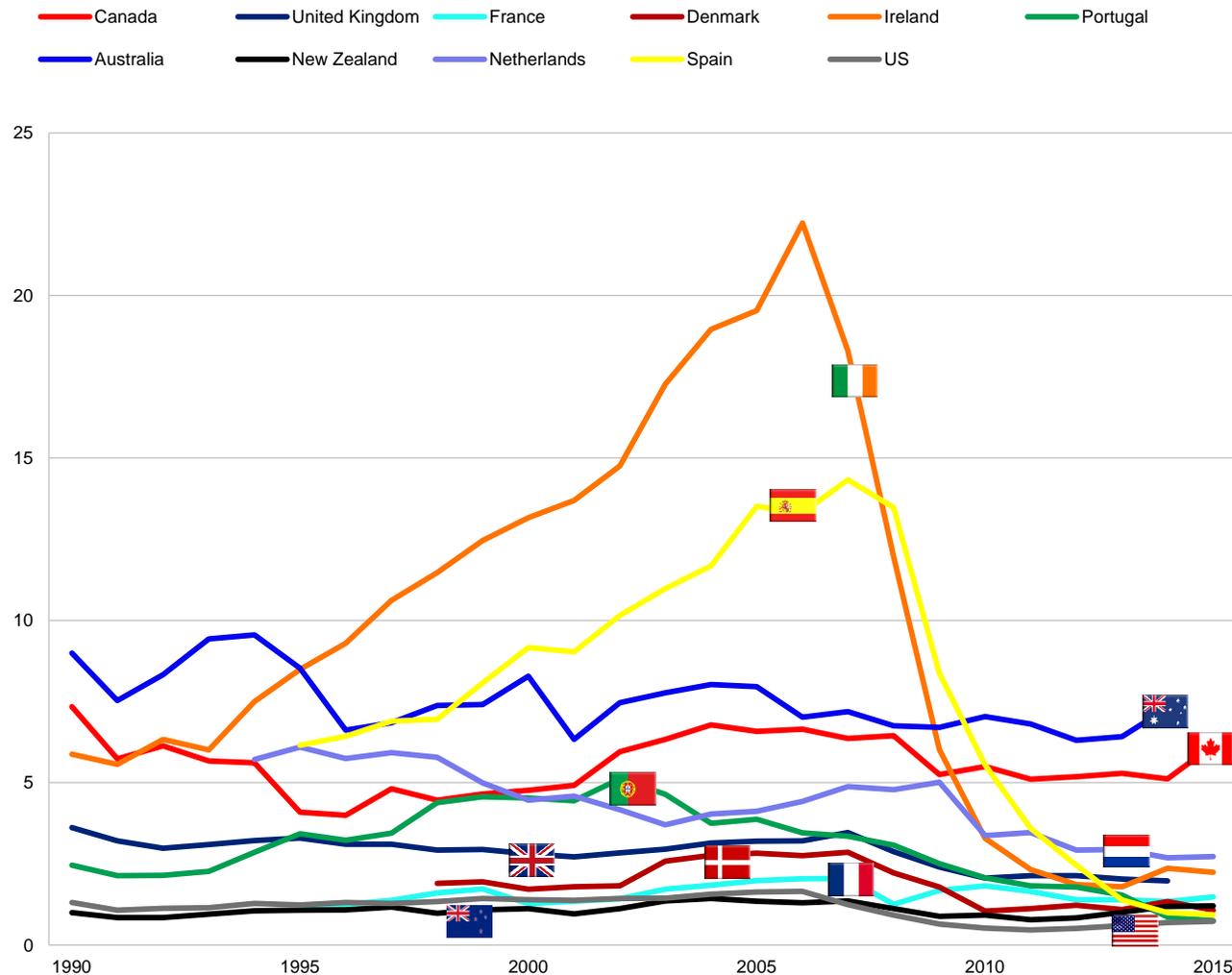
**Interest Only Versus Repayment Loans:**

Sectors with a relatively high proportion of interest-only mortgages (eg, UK and Australian buy-to-let/investment market, UK non-conforming and the Netherlands) will be more exposed to rate rises. The nature of the Dutch market (with, fixed-rate products and the presence of repayment vehicles) should act as a mitigant.

**Nordics Relatively Sensitive:**

Danish financial institutions have been increasing efforts to move borrowers to longer-term fixed rates to reduce refinancing risk and interest rate sensitivity. In Norway, 95% of mortgages are on short-term reset periods. However, rates are expected to remain low over the next two years.

Housing Completions per 1000 Citizens



Source: Fitch, Ameco, INE (Instituto Nacional de Estadística), Statline, U.S. Census Bureau

*Housing Supply, Demand Imbalances Drive Regional Prices*

**No Signs of Over-Construction:** Ireland and Spain have returned to more sustainable levels of construction after their building booms in the lead-up to the financial crisis. No country in our data set is showing excessive construction on this scale.

**Australia, Canada Construction Respond to High Prices:** Building supply increased in Australia and Canada on the back of rising economic growth in those countries. Increased construction has generally matched increased population in both markets although a fall in immigration means there is potential for oversupply and some scope for overbuilding in parts of both nations.

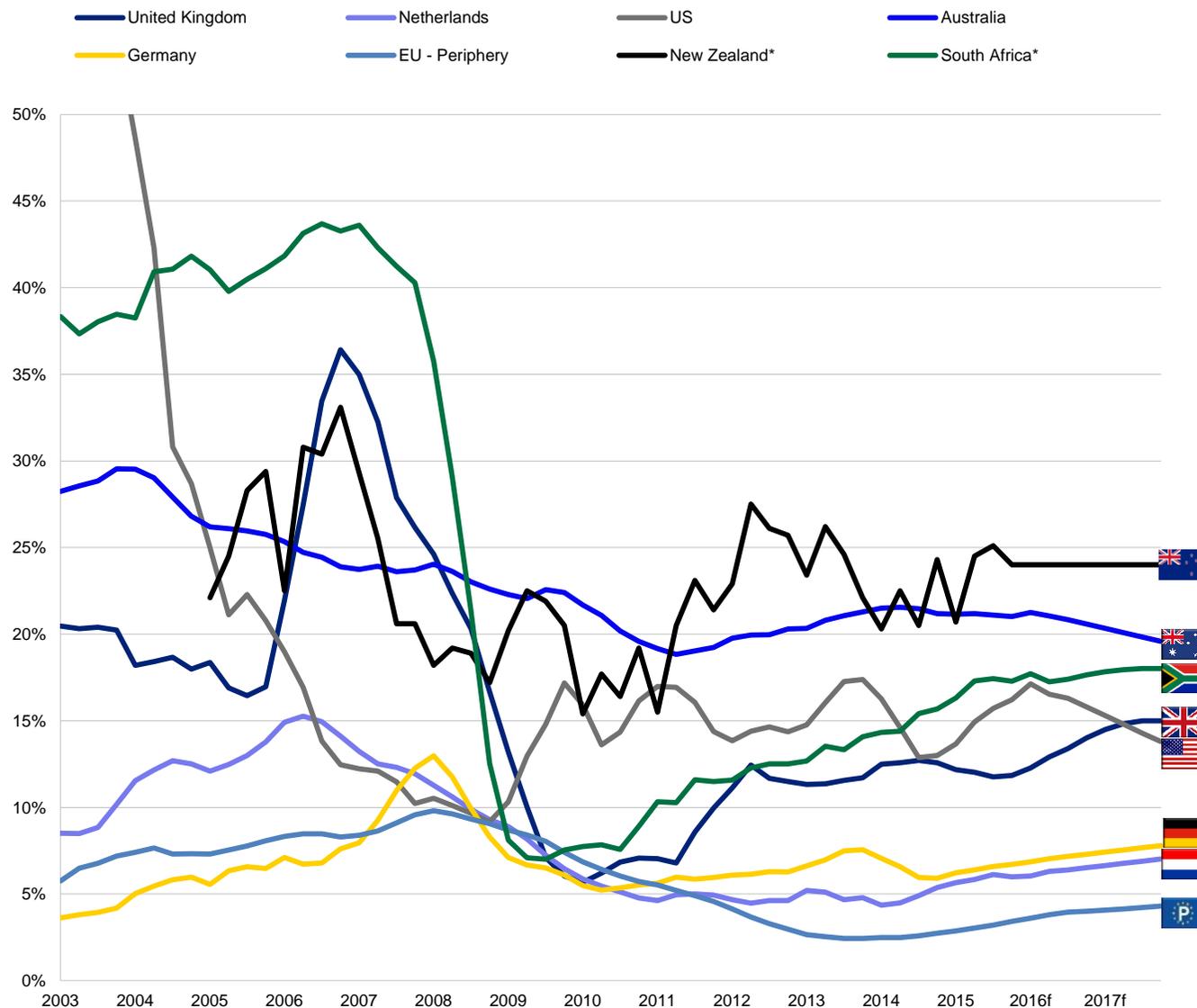
**New Zealand Construction not Responding:** In contrast, New Zealand's construction sector has been lagging the population growth and particularly the change in behaviour that has seen far less emigration to Australia than in the past. Apart from the rebuild of Christchurch, the lag of construction activity will result in continued price pressure into 2016.

**European Construction Constrained:** Countries that have experienced significant price corrections such as Spain, Ireland, Greece and, to a lesser extent, Portugal have seen construction virtually coming to a standstill. Countries with a milder price correction, such as the Netherlands and Denmark, have seen a slowdown. Strict zoning and extended approval processes continue to constrain new supply in the UK and Norway despite rising prices and strong demand from migrants. Only Germany is seeing a pick-up in activity on the back of healthy economic and wage growth.

**US Construction Still Weak:** New home construction in the US is rebounding from its post-crisis lows, but remains below long-term historical averages.

**Brazil and South Africa To Be Hit:** Construction activity in both markets has already slowed. The ongoing economic deterioration is likely to have a further negative effect in both countries.

Prepayments



Fitch-rated transactions excluding defaults or \* denotes the market rate for prepayments  
 Source: Fitch, SARB (South African Reserve Bank), RBNZ (Royal Bank of New Zealand)

RMBS Prepayment Outlook Generally Stable

**Prepayments to Be Low as Borrowers Have Already Refinanced:**

Prepayment rates are expected to remain low for the foreseeable future as rates in the US are expected to rise in 2016 and most eligible borrowers have already refinanced over the past few years to take advantage of historically low rates. Despite monetary policy expected to be generally neutral in the eurozone over the next couple of years, borrowers already on fixed rates in countries such as Germany should constrain prepayment rates as well.

**New Lenders in UK, Netherlands Affect Markets:**

Price competition among new lenders in the buy-to-let and near-prime space (UK) and across the market (Netherlands) could translate into benefits for borrowers looking to refinance off their existing mortgages – which should increase prepayments over the next couple of years.

**Certain Borrowers in the Eurozone Periphery Could Be Trapped:**

While a generally improving macro environment and better funding conditions in the eurozone periphery (outside of Greece) should promote higher prepayment levels, those borrowers with mortgages in negative equity (particularly in coastal regions in Spain or outside of Dublin, Ireland) or on products that are not presently offered by lenders, should have limited refinancing opportunities.

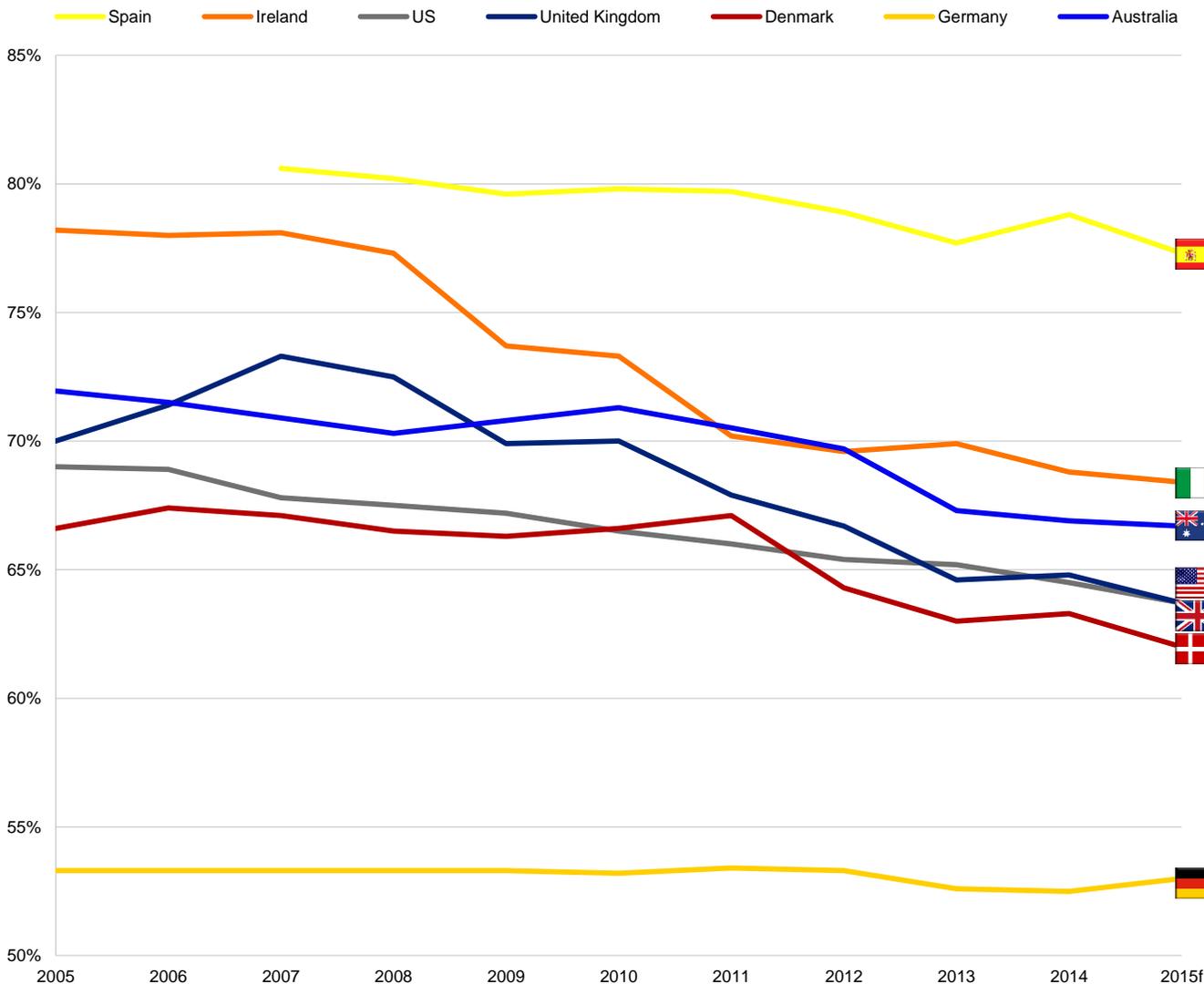
**Slowing Economies to Affect APAC:**

A slower housing market combined with lending restrictions, such as on high LTV lending and capital gains tax on investment property in New Zealand, will reduce refinancing activity. Lower forecasted lending growth translates into lower prepayment rates also in Australia and Japan. Any expected reduction may be partially offset by greater competition between lenders, particularly for owner occupied mortgages as regulators favour them and are actively constraining lending to the investment sector.

**South African Prepayments Could Increase as Rates Rise:**

Fitch expects borrowers with spare capacity to pay down their mortgages as rates increase. 12-month average payment rates are expected to increase by 1pp to 18% in 2016, continuing a trend of rising prepayments since 2009, and then stabilise in 2017.

Home Ownership



Source: Fitch, Eurostat, US Department of Commerce

*Affordability Constraints Outweigh Improving Funding Conditions for Home Ownership*

**Limit to Ownership Rate Decline in Spain and Ireland:** Both countries have seen substantial declines in home ownership ratios since 2007. While house price affordability is relatively stronger in Ireland, which can promote more first-time buyer activity, improving credit conditions and the macroeconomic outlook in Spain should result in fewer foreclosures which support home ownership levels there.

**Germany Stable at Low Level:** Affordability still remains strong, particularly in smaller cities driven by rising incomes and low interest rates. This is despite a rise in house prices, driven by the view that housing is a relatively safe investment. Lending volumes will continue to increase without causing the market to overheat given the limited property supply and the wide availability of renting alternatives.

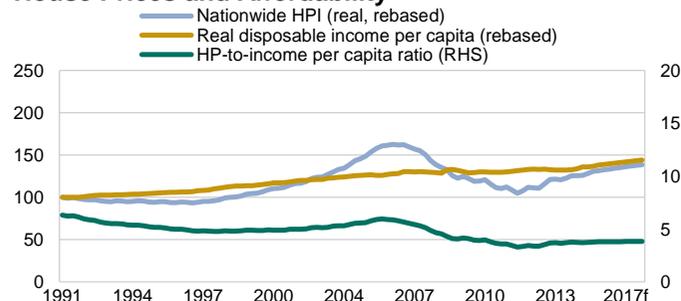
**US at 25-Year Low:** The US level has fallen from 69% in 2006 to below 64% today, the lowest level in over 25 years. The steady decline is driven by foreclosures, tight credit conditions, and unemployment. Despite solid affordability in many parts of the US, Fitch expects owner occupation to weaken further in part due to tight lending conditions and a shift in consumer preference toward renting as a more flexible housing alternative.

**UK Government, Regulators Try to Strike a Balance:** Continued house price increases in the UK market, driven by foreign and domestic investors, have caused local regulators to impose macro-prudential measures to take the steam out of the buy-to-let market. This could lead to a re-direction of demand to the owner-occupied market, particularly as the government continues to support first-time buyers through various measures. However, stretched house price affordability well above its long-term average constrains home ownership.

**Australian Rates Stagnate:** Recent strong house price growth – particularly in capital cities – has encouraged growth of investment mortgages. However, macro-prudential measures are expected to increase transaction costs and diminish capital growth opportunities. This could result in lender competition to focus on owner-occupied mortgages, but house price affordability remains a constraining factor on home ownership levels.

 **United States**

**House Prices and Affordability**



Source: Fitch, Case-Shiller, IHS Global Insight, Ameco

**House Prices: Slow But Steady Growth**

Nominal home prices have rebounded by over 25% nationally and over 40% in California from their lowest level in 2011. Although the rate of growth has slowed, home prices are on track to gain a healthy 5% in 2015.

By the end of 2016, US home prices may approach nominal levels reached during the peak of the housing bubble in 2006. However, the supporting economic fundamentals have changed significantly over the past 10 years. Since the prior peak, the country's population has increased by over 20 million people and total gross income is up by roughly 25% in nominal terms. When adjusted for inflation, US home prices remain more than 20% below their peak levels.

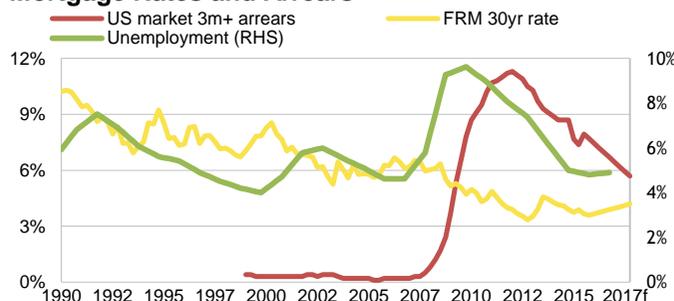
According to Fitch's Sustainable Home Price (SHP) model, used in assessing RMBS pools, current national prices appear to be sustainable when compared to long-term equilibrium values, based on underlying economic fundamentals. However, several regional markets, including California and Texas, are viewed as overvalued and may experience a softening in their housing markets, though large downturns are considered unlikely.

**Affordability: Declines Expected**

Continued strong home price growth and upward pressure on mortgage rates are likely to reduce affordability in 2016, particularly in large metropolitan areas such as California, where affordability has fallen by more than 20% since 2011.

Affordability in many other parts of the US remains high, relative to historical averages, although tight credit conditions limit the number of potential buyers.

**Mortgage Rates and Arrears**



Source: Fitch, PMMS

**Mortgage Rates: Finally Set to Rise**

Mortgage rates remain near historically low levels. The low rate environment has contributed to significant volumes of refinance loans, among borrowers looking to lock in these favourable rates.

By the end of 2016 Fitch expects mortgage rates to rise 25bp-50bp, with the possibility of upside risk emerging as the Fed raises rates to 1.25%. The increase in mortgage rates will incentivise lenders to broaden loan eligibility requirements, as refinance volume is likely to dry up.

**Mortgage Performance: Recovery Continues**

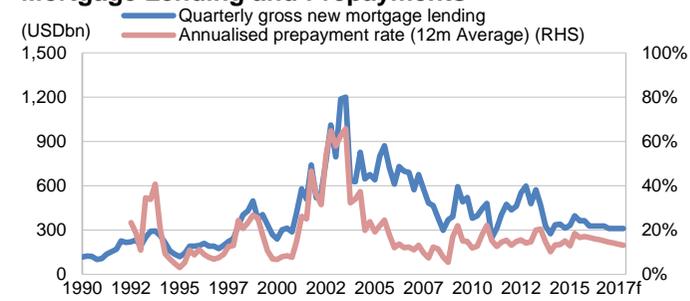
The improvement in the equity position of legacy borrowers is reflected in a positive performance trend. Serious delinquency rates for all private-label non-agency legacy loans have fallen to 2009 levels.

However, while the total number of distressed loans has fallen and home prices have improved notably, recoveries on liquidations have remained surprisingly low; indeed, 2015 saw record lows. Low recoveries are driven primarily by unusually long resolution timelines and adverse-selection among the remaining distressed properties. Properties liquidated at the end of 2015 averaged over 40 months since the last payment, the longest period on record.

The performance of non-agency securitised loans originated post crisis remains excellent. Of the more than 40,000 loans securitised in Prime RMBS since 2010, only four loans have entered the foreclosure process.

Fitch expects the trends observed in recent years within legacy and post-crisis pools to continue through 2016, supported by a stable housing market.

**Mortgage Lending and Prepayments**



Source: Fitch, MBA (Mortgage Bankers Association)

**Mortgage Volume: Decline Likely With Rising Rates and Prices**

New lending volume is expected to decline 10% in 2016, as high prices and upward interest rate pressure weigh on a recovering market. With rates still near historic lows, most able borrowers have already refinanced, and this volume now represents a smaller slice of the market.

Borrowers who have struggled to access credit in the recent tight underwriting environment may see more opportunities in 2016, as lenders potentially loosen eligibility requirements to compensate for declining refinance volumes.

Fitch expects that overall lending volumes will decline in 2016, although it is possible that US RMBS securitisation volume could increase, as credit expansion and a flatter yield curve reduce the incentive for lenders to retain loans on their balance sheets.

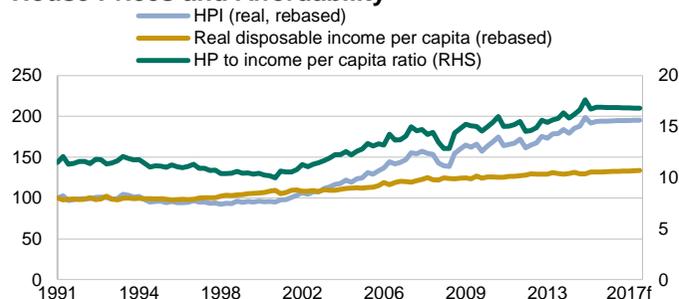
**Prepayments: New Prepayment Environment Likely**

Although difficult to predict the timing with much certainty, interest rates will inevitably increase, resulting in a significant slowdown in prepayments. With roughly 70% of RMBS borrowers locked into a low, long-term fixed rate, or an adjustable rate mortgage that has been modified into a fixed rate, the market will likely enter a sustained period where prepayment rates fall below historical averages.



Canada

House Prices and Affordability



Source: Fitch, AMECO, BIS (Bank of International Settlements)

House Prices: Growing Economy, but Overvaluation an Issue

Low mortgage rates and steady employment continue to drive home prices, which increased by almost 6% in 2015. However, the sharp drop in oil prices, beginning in 2H14, has hit economic growth. GDP contracted 0.6% qoq 1Q15, with annual growth reducing to 1% in 2015. Risks to the broader economy may be mitigated by strong growth in the US, as 80%-90% of all exports go to the US. Fitch expects GDP growth of 2.2% in 2016.

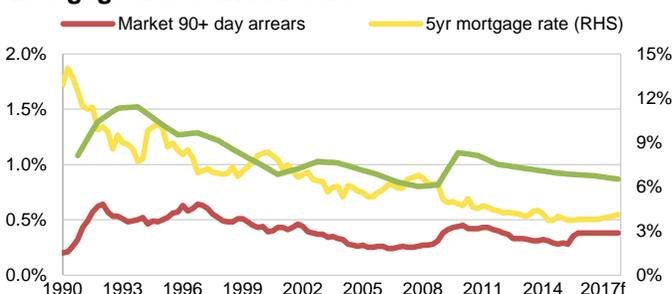
*Fitch projects a 2.5% increase in home prices in 2016. However, Fitch sees national prices as over 20% overvalued compared to growth in long-term economic fundamentals, leaving markets exposed to downside risk. No significant downward price movements are expected, and Fitch expects to see a moderation of price growth rates in 2016.*

Affordability: Decreasing on High Prices and Rising Rates

Affordability remains a primary concern, as high prices have caused borrowers to take on increasingly large debt burdens to afford homes. Household indebtedness is at 165.5% of disposable income and is among the highest of Fitch-rated sovereigns, with credit growth accelerating since the Bank of Canada's interest rate cut in January.

*Fitch expects affordability to continue to be pressured, with prices likely to continue to rise modestly. High levels of indebtedness will continue if a low policy rate is maintained to alleviate sluggish growth. Should rates rise in concert with US policy tightening, wage growth will be insufficient to prevent the market from cooling. Yet, the lack of risky mortgage products and high average borrower equity means that the exposure to risk is limited in the market.*

Mortgage Rates and Arrears



Source: Fitch, StatCan, CBA (Canadian Bankers Association)

Mortgage Rates: Mixed Signals for the Near Term

Low interest rates have been a significant part of the stimulus, which has allowed consistent price growth and low delinquencies over an extended period of time. With lending costs low, borrowers have been able to take on record levels of household debt, which has financed the expansion of prices nationally.

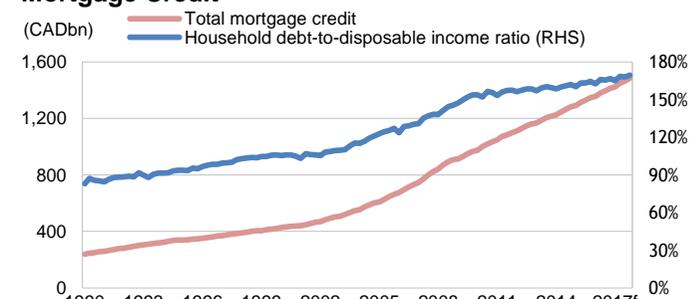
*It is possible that rates will remain flat in the short term, even if rates in the US rise, which would modestly benefit the economy, though more substantial rate movements may be likely further down the road. With borrowers holding record debt amounts, there is a potential for rate changes to restrict the continued price growth that has been fuelled by affordability and have a negative, but limited, impact on mortgage performance.*

Mortgage Performance: Tied to Home Prices and Unemployment

After a spike in delinquencies in early 2010 following a brief downturn in home prices, mortgage delinquencies have continued to trend downwards over recent years. In general, the delinquency rate has been highly correlated to home price movements and unemployment, which Fitch expects to remain steady at about 6.7% going into 2016.

*Fitch expects strong mortgage performance to continue, though support from rapidly rising prices may wane, with a moderation of growth rates expected in 2016. While, higher mortgage rates may cause delinquencies to rise, particularly for highly leveraged borrowers, prudent mortgage underwriting guidelines introduced in recent years should mute the impact of an increased debt burden, as Canadian mortgage performance is more closely linked to employment.*

Mortgage Credit



Source: StatCan

Lending Volumes: Limited Growth of Riskier Mortgages

Policies from the government-sponsored Canadian Mortgage and Housing Corporation (CMHC) have reduced the availability of mortgage credit. Such policies have narrowed guidelines for loans qualifying for CMHC insurance and placed restrictions on the bulk portfolio insurance available to lenders originating loans with at least 20% down payments. Both CMHC and the Office of Superintendent of Financial Institutions (OSFI) have exerted significant influence on banks' lending policies, and in general, have succeeded in restricting risky loan products.

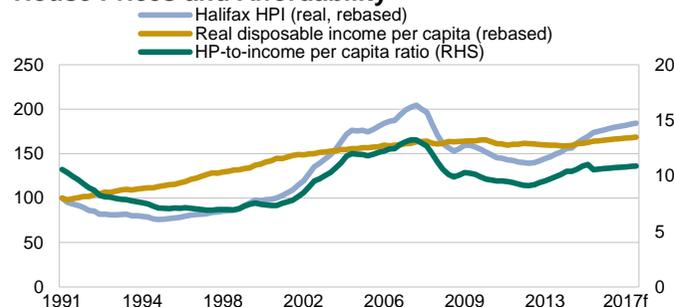
These restrictions have stunted the rate of growth of total outstanding lending, though enthusiasm over rising prices and low mortgage rates has maintained a steady stream of new lending, and lending volumes remain above long-term averages.

Due to the nature of typical mortgage products (five-year term with automatic renewal), prepayment statistics are not a focus of the market, since loans are prepaid by definition at renewal. In addition, mortgagors tend to borrow from banks with which they have strong financial ties, including other credit and deposit accounts; hence there is less of a tendency to shop around for a refinancing product.

*Fitch expects that mortgage lending volumes will slow slightly from the rates observed in 2015. As affordability declines and risky lending practices continue to be discouraged by government policy, some marginal homebuyers will find it harder to acquire mortgage funds, potentially lowering total market demand.*

 **United Kingdom**

**House Prices and Affordability**



Source: Fitch, Halifax, Ameco

**House Prices: Continued Growth Ahead**

House prices grew once again in 2015, due to a strong UK economy, falling unemployment, low interest rates and demand outpacing supply.

Interest rates remain the key risk to the housing market, the confidence of which will likely be tested when rates start to rise.

*Driven by a housing supply shortage, Fitch expects house price growth in 2016 of around 4%-5%, with London and the South East modestly outpacing the other regions.*

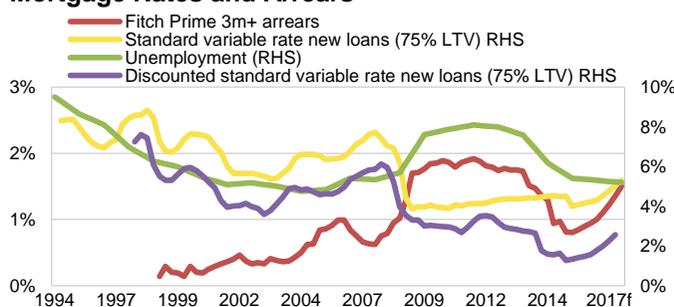
*We expect already stretched affordability to weigh on any further home price increases, as income growth currently remains muted. Recently announced government initiatives around housing construction are not expected to feed through to housing supply until 2017 at the earliest, and in the shorter term, demand will continue to outstrip supply.*

**Affordability: House Price Growth Outstrips Income Growth**

New mortgage affordability remains pressurised, as house prices continue to increase (9.5% 2015 UK average) at a much faster pace than wages (about 2.5%). The tightened regulatory framework introduced by the Mortgage Market Review in 2014, which focussed on stressing interest rates at origination, should prevent borrowers from overstretching their finances.

*A similar economic backdrop to 2015 is expected in 2016, but affordability may worsen during the year if mortgage interest rates rise.*

**Mortgage Rates and Arrears**



Source: Fitch, BoE (Bank of England)

**Mortgage Rates: Remaining Stable in 2016**

Mortgage spreads have continued to tighten, extending a trend seen over the last three years. The mortgage market continues to be more competitive on price, with lenders seeking to increase market share without compromising on credit quality. However, we believe there is a floor on rates that will likely be reached in 2016, whereby lenders cannot dip below 1.3% for a typical two-year fixed rate 75% LTV loan.

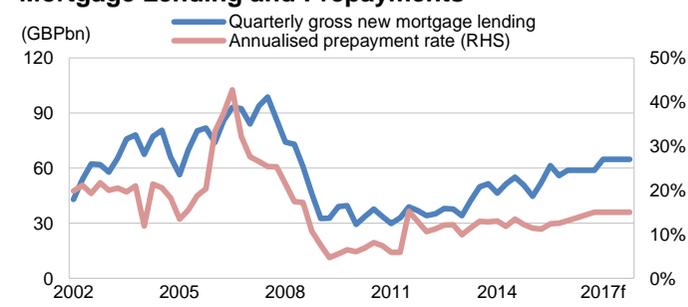
*In the first half of 2016, we expect mortgage rates to further extend into historically low levels. Towards the second half of the year onwards, rates could start to rise in anticipation of policy rate increases.*

**Mortgage Performance: Positive Outlook on Asset Performance**

A combination of low interest rates, rising house prices, a relatively strong UK economy and an improved mix of borrower and mortgage types is expected to keep arrears levels low. Arrears and repossessions continued to reduce in 2015 and we expect the trend to continue in 2016. A modest and gradual rise in interest rates is not expected to cause major asset performance issues; however, UK non-conforming pool performance is more vulnerable to rate increases compared to prime portfolios. More recent non-conforming originations are expected to outperform peak-of-the-market vintages, due to a tighter regulatory framework for lenders to work within.

*Fitch expects three-month-plus (3m+) arrears to reach 0.8% for prime portfolios by year end 2015 and mortgage performance to stay strong in 2016. A sharp rise in interest rates could lead to performance deterioration; however, the agency expects rate rises to occur over an extended period of time and to be modest in their extent.*

**Mortgage Lending and Prepayments**



Source: Fitch, CML (Council of Mortgage Lenders)

**Mortgage Lending: Recovery Expected to Continue**

Steady access to cheap wholesale funding allowed lenders to continue to offer competitive mortgage rates in 2015, which supported a small increase of 3.6% yoy in lending volumes.

*Fitch expects lending volumes to grow moderately in 2016. A combination of attractive rates on new mortgages, coupled with expected rate rises is likely to drive increased re-mortgage activity next year. Recently announced Right-to-Buy (RtB) changes should also help the first-time buyer market to grow. However, changes to stamp duty and tax relief for landlords may hamper Buy-to-Let (BtL) growth into 2016 and beyond. Although mortgage lending remains below peak values, Fitch expects gross lending volumes to grow by 10% during 2016.*

**RMBS Prepayments: to Increase**

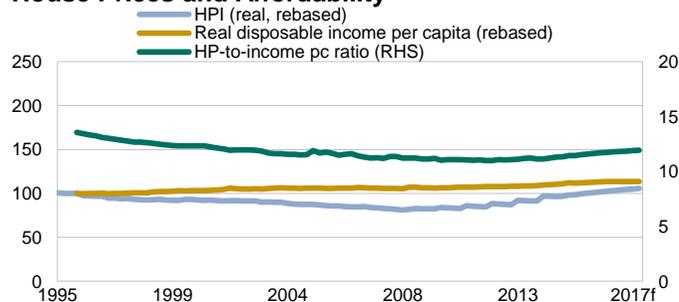
Price competition between lenders is likely to encourage borrowers to prepay and take advantage of new mortgage products. As of 2Q15, 56% of borrowers were on a variable rate (3Q12: 73%).

*In an environment of rising interest rates, we expect to see borrowers shifting towards fixed-rate products, leading to a slight increase in prepayments. Borrowers with poor credit histories, affordability issues and those with low rate historical products (eg pre-crisis BTL loans) are least likely to prepay.*

*Prepayment rates among Fitch-rated RMBS are expected to reach 15% by end-2016 (2015: 12.5%), supported by price competition and the increased probability of interest rate rises. Some historical products for which borrowers are unlikely to get a comparable alternative will continue to see low prepayment rates.*

 **Germany**

**House Prices and Affordability**



Source: Fitch, BulweinsGesa, AMECO

**House Prices: Moderate Growth; Demand Shift to Smaller Cities**

Average house prices increased by about 4% in 2015, slightly higher than Fitch's expectation but still broadly in line with previous years. Price growth in metropolitan centres has started slowing, explained by a shift in demand to smaller cities and rural areas. Price growth in smaller cities is now catching up with metropolitan areas, following a long period of stagnation. Combined, this supports our view that the German property market is not overheating.

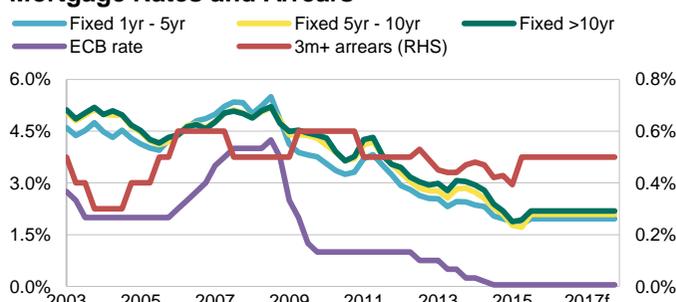
*Increasing house prices in recent years have been driven by robust demand stimulated by historically low mortgage interest rates, the attractive yield-risk profile of buying a property over alternative investments and the overall stable to positive economic environment in Germany. In line with this price growth, the property market has become more liquid, reflected in lower price discounts after forced sales of foreclosed properties. These favourable economic factors are expected to continue and, coupled with a somewhat higher than expected price growth last year, have led Fitch to increase its price growth forecast, from 3% to around 4% per annum in 2016 and 2017.*

**Affordability: Expected to Remain Sustainable**

Despite rising prices, affordability has remained sustainable, driven by rising disposable income, low unemployment and low interest rates.

*Price-to-income ratios in most German cities remain affordable. A demand shift to smaller cities will help keep overall affordability stable. In 2016, Fitch expects interest rates to remain low and property price increases to be balanced out by increases in disposable income. Hence, the agency expects affordability to remain sustainable.*

**Mortgage Rates and Arrears**



Source: Fitch, Deutsche Bundesbank

**Mortgage Rates: Low Rates on Deflation Fears**

The loose monetary policy of the ECB has led to record low interest rates, while high competition between lenders has increased downward pressure on mortgage rates.

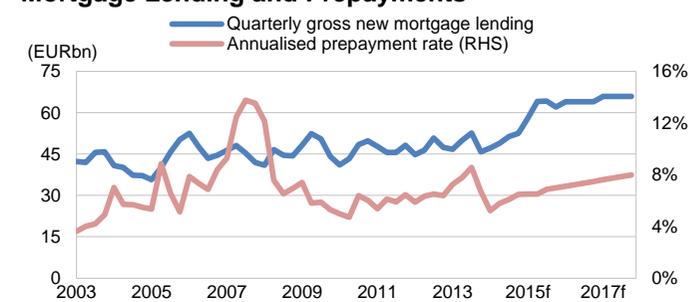
*Fitch expects these two factors to persist in the foreseeable future and, as a result, German mortgage rates are expected to remain low in the next two years, supporting affordability. German mortgages are predominantly fixed rate, and hence are immune to rate increases during the fixed period of typically 10-15 years. However, refinancing risk could become an issue for fixed rate loans originated in a low rate environment, if the rate is reset in a period of rising interest rates. Recently originated loans could be more exposed to such risk. In general, lenders take this risk into account by testing the borrowers' affordability in rising rate scenarios.*

**Mortgage Performance: Expected to Remain Robust in 2016**

Over recent years, 3m+ arrears in Fitch-rated German RMBS transactions have been stable, at a remarkably low level of approximately 0.5%. One of the main drivers of this solid performance has been continuously low unemployment.

*Fitch expects German unemployment to remain low, at 4.6% in 2016, and 2017. As a result, the agency expects German residential mortgages to continue their robust performance, given the favourable economic conditions. However, an unexpected deterioration of the labour market could lead to an increase in defaults.*

**Mortgage Lending and Prepayments**



Source: Fitch, Bundesbank

**Mortgage Lending: Steady Growth Driven by Increased Demand**

Improving affordability, together with increased demand for properties regarded as a safe and profitable investment haven, have led to steadily growing new mortgage lending. Lending volumes have grown at an average of 3% a year since 2003, with an above average growth in 2015; .This is despite lenders not relaxing underwriting standards.

*In 2016 and 2017 we expect lending volumes to continue increasing at a similar pace. However, lending is not likely to overheat, given the limited property supply and the Germans' cultural preference for renting over home ownership.*

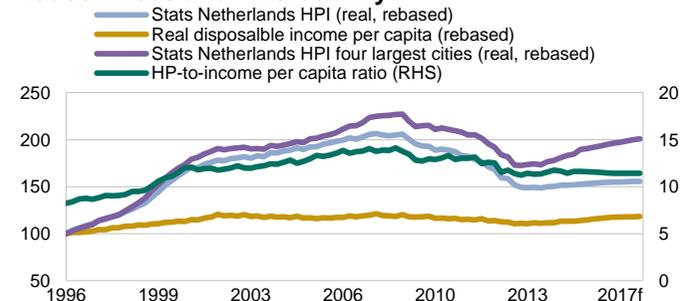
**RMBS Prepayments: Expected to Remain at a Stable Low Level**

Prepayments on German fixed rate mortgages are generally low; the current annualised prepayment rate in Fitch-rated transactions is approximately 6.5%.

*Fitch expects prepayments to remain at a similar level as to recent years, due to the specific features of the German mortgage market. Full loan prepayments before the interest reset date are usually accompanied by significant penalties. A borrower sometimes has the contractual option to prepay a fixed percentage of the loan at a certain point, for example once a year; however, these percentages are usually quite small.*

 Netherlands

**House Prices and Affordability**



Source: Fitch, Statistics Netherlands, Ameco

**House Prices: 2% Growth Per Annum in 2016-17**

Since the trough in 2Q13, house prices have gained 5%, supported by strong momentum in the Dutch economy, improving consumer confidence, low rates and growing demand, driven by strong affordability.

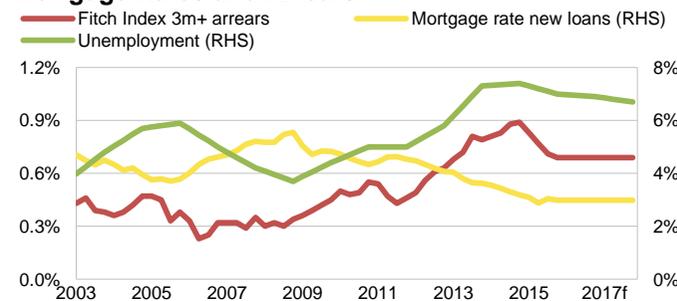
*Fitch expects the housing market recovery to persist in 2016 and 2017, backed by an improving economic climate and strong affordability. Regional differences exist: the four largest municipalities have recovered faster than the rest of the country, due to a higher level of migration, supported by better job opportunities; we expect this trend to continue. The same trend persists in the rest of the country albeit at a slower pace. Furthermore, we believe the housing market will continue to be supported by low mortgage rates, stable employment and positive GDP growth of 1.7% in 2016 and 2017.*

**Affordability: Strong and Stable**

Affordability remains close to levels observed in the early 2000s, as measured by the disposable income per capita to house price ratio, despite a recent modest house price increase. Increasing lending volumes, modest income growth and a low interest rate environment are expected to support a gradual house price recovery.

*Fitch expects affordability to remain at similar levels for the foreseeable future, as house prices are expected to grow in-line with GDP. After years of tighter lending criteria, the mortgage code of conduct has now been loosened for joint borrowers, giving more credit to the second borrower's income. The effect of this is limited, for second incomes above EUR35,000 the borrowing limit base for joint borrowers has increased by 5%. This change may support short-term demand and contribute to Fitch's anticipated house price increase of 2% for 2016.*

**Mortgage Rates and Arrears**



Source: Fitch, DNB (De Nederlandsche Bank)

**Mortgage Rates: Competitive Market**

Mortgage interest rates are currently at a historical low, with 10-year fixed NHG loans available at under 2.2%. Despite this, banks' margins remain healthy in a European context, attracting new lenders and investors to the mortgage market.

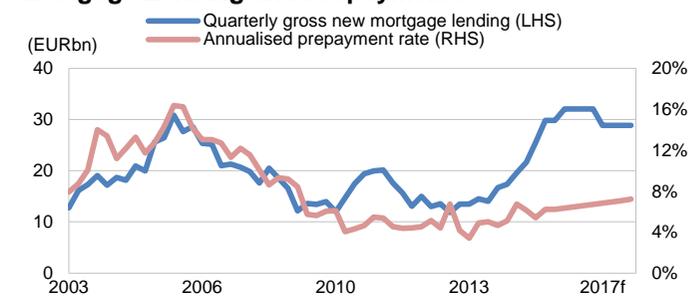
*The Dutch market is predominantly characterised by long-term fixed rate mortgages. However, we have seen more borrowers, conscious of low interest rates, refinancing to short-term floating products. Fitch expects margins to remain at current levels however. Prices will stabilise throughout the course of 2016 and remain at similar levels throughout 2017.*

**Mortgage Performance: Arrears Have Peaked**

Loans 3m+ in arrears increased from 0.3% in 2008 to 0.9% in November 2014; they have since decreased to 0.7%. The levels are fairly low compared to other countries and the recent decline stems from higher levels of foreclosures, triggered by improving market liquidity. In addition, early-stage arrears have decreased, explained by an improved economic climate and stable employment helping borrowers return to performing, while reducing the inflow of new arrears.

*In recent years, lenders have been moving away from foreclosing properties by means of auction, preferring instead a private sale which often returns a higher sale price. On the back of a relatively positive macroeconomic backdrop, we expect arrears to stabilise throughout 2016 and 2017 at around current levels.*

**Mortgage Lending and Prepayments**



Source: Fitch, DNB (De Nederlandsche Bank)

**Mortgage Lending: New Entrants Gain Market Share**

Clarity on mortgage market regulation, improved affordability and low mortgage rates have encouraged new buyers to enter the residential market. This has resulted in a 22% increase in lending volumes yoy to October 2015. New entrants in the lending market have captured a greater share of the increased lending volumes, while competing on price, whereas existing lenders have focused on reducing their mortgage exposure.

*Fitch expects lending volumes to grow moderately in 2016, in line with increased housing market activity. A combination of attractive rates on new mortgages and strong mortgage affordability will support both new lending, as well as re-mortgage activity in the market.*

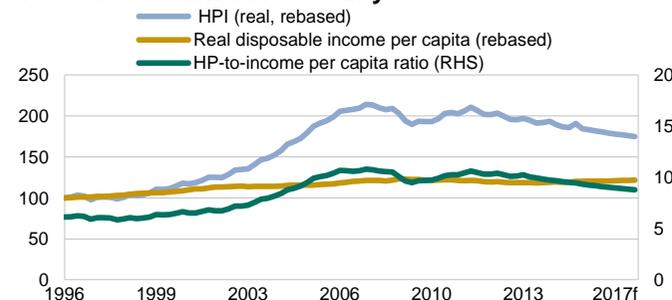
**Prepayments: Slight Increase Ahead**

At the start of 2015 there was a temporary up-tick in prepayments, due to tax exemption on parental gifts, ie up to EUR100,000 of donations towards a mortgage payment could be made exempt from income tax. Since this allowance ended on 1 January 2015, prepayment rates have fallen to about 6.2%.

*Fitch expects prepayments in 2016 to stabilise at a higher level compared to 2014. This is mainly due to refinancing activity, to take advantage of lower mortgage rates. However, prepayments may also be driven by low interest rates on saving accounts. Fitch believes prepayments could be concentrated among high street lenders, which are looking to either maintain or decrease market share. Fitch expects prepayment rates to remain around 7% in 2016 and 2017.*

 France

**House Prices and Affordability**



Source: Fitch, INSEE, Ameco

**House Prices: Correction Continues Despite Increased Activity**

The real estate market gained momentum in 2015; BtL investors returned, benefiting from new fiscal incentives, and the number of transactions for new dwellings increased by 20% yoy. Favourable financing conditions drove an increase in the number of transactions for existing dwellings by 10% yoy. Despite higher turnover, the price correction, which started at end-2011, continues at a moderate pace, with declines of an average 2.5% yoy. Over the three-year period to 2Q15, house prices declined by approximately 6.5% in nominal terms, with clear disparities between regions based on their economic and employment profiles. Although the current trend is positive, the housing market continues to be negatively affected by the low growth rates of the French economy, high unemployment and inflated real estate prices. These factors are partly compensated for by the low interest rate environment, the availability of credit and improved consumer confidence.

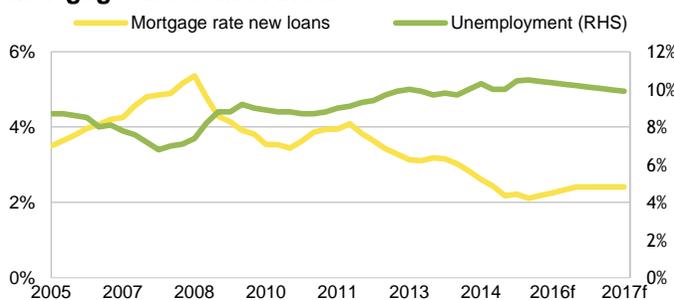
*Fitch believes that the rebound in activity seen in 2015 will continue in 2016, following the implementation of recently announced measures to support first-time buyers. House price discrepancies among regions will intensify, with price stability expected in regions with high employment opportunities, and a price decrease of 2.5% anticipated in less attractive regions.*

**Affordability: Improved by Lower Interest Rates**

Borrower affordability has continued to improve, driven by a decrease in mortgage rates and, to a lesser extent, a decline in house prices.

*Fitch expects affordability to improve further in 2016, as disposable income per capita is expected to moderately increase.*

**Mortgage Rates and Arrears**



Source: Fitch, Banque de France

**Mortgage Rates: Floor Reached With Upside Risk**

Mortgage rates continued to decrease during the first two quarters of 2015, from 2.6% at end-2014 to 2.2% at end-Q215, remaining stable since then. The portion of fixed rate loans in new origination continued to increase as borrowers try to lock in cheap rates. Around 92% of new residential loans bear a fixed rate for life and amortise in constant instalments.

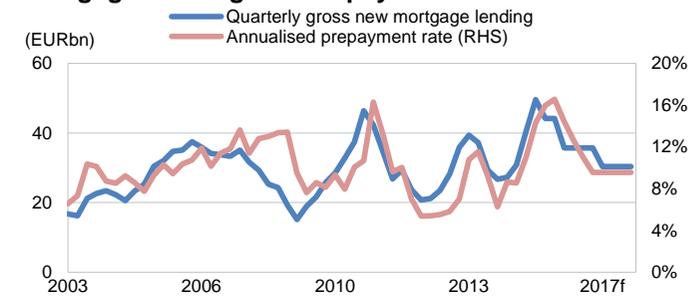
*Fitch deems a stabilisation of mortgage rates as the most likely scenario given the ECB's near-zero interest rates and Quantitative Easing measures to continue until September 2016. However, further pressure on banks' residential loans' book profitability could lead to an increase in mortgage rates in the mid-term.*

**Mortgage Performance: Unemployment Remains a Threat**

Uncertainty remains about France's long-term growth which will partly depend on its capacity to implement structural changes. Unemployment remains one of the main drivers of mortgage performance in France. Unemployment has remained high since 2013, standing at 10.0% in 2015 and continuing to weigh on credit performances. However, default risk has remained low since the start of the crisis in 2007 showing the resilience of the French lending model, characterised by: underwriting based on borrower's ability to repay and standardised fixed rate products.

*Fitch expects unemployment to decrease slightly by 0.3% in 2016. As such, defaults are expected to decline consequently, although they should remain above pre-crisis levels. French mortgages are mostly fixed rate; therefore, an increase in interest rates is not expected to have a material effect on French mortgage loan performance.*

**Mortgage Lending and Prepayments**



Source: Fitch, Banque de France

**Mortgage Lending: Growth to Slow in 2016**

Gross mortgage lending increased sharply in 2015, by 48.9% ytd as of September 2015. This rebound was mainly driven by loan refinancing, as borrowers took advantage of the low interest rate environment and banks competed to attract new clients. Refinancing represented more than 30% of new loans originated since the start of 2015. New lending other than refinancing was up by 15% during the same period.

*Fitch expects mortgage lending to fall in 2016, the result of a drop in refinancing activity. As observed in 2013, refinancing tends to be a cyclical phenomenon. New loan production other than refinancing should follow the dynamics of the real estate market and remain stable at around EUR120bn. Fitch does not expect a durable recovery in lending before 2018, given the overall French economic outlook, the over-valued property market — particularly for first-time buyers — and the stabilisation or potential increase in mortgage rates.*

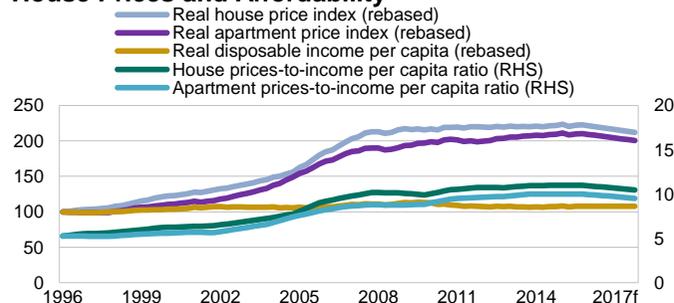
**Prepayments: Further Decrease**

Prepayment rates among French residential loans had increased to 16% at end-2Q15, driven by the refinancing activity seen on existing residential loans (the result of the low interest rate environment). Refinancing is accounted for via an early repayment and a new mortgage and is therefore reflected in both indicators in the chart above.

*Prepayment rates will decrease in 2016, a consequence of the slowdown in loan refinancing. Prepayment rates are expected to return to 9% (closer to the historical average) driven mainly by housing turnover in France (which provides a floor to prepayment rates).*

 **Belgium**

**House Prices and Affordability**



Source: Fitch, Stadim, Statbel, Ameco

**House Prices: Localised Property Price Corrections**

The relatively stable property prices in Belgium in 2014-2015 resulted from localised price adjustments for specific locations and property types. Despite localised variations throughout 2016, no large-scale price adjustment is expected for the overall market.

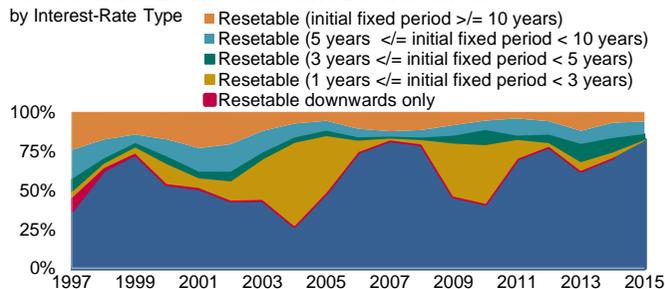
*The recent trend of decreasing mortgage rates and longer loan maturities has limited scope to further support property price rises. Furthermore, devolution of fiscal authority to the regions has resulted in less favourable tax benefits in Flanders; this measure is due to come into effect in Wallonia in January 2016 and Brussels in January 2017. Fitch expects to see a slight fall in nominal property prices in Wallonia during 2016 and a larger correction in Brussels during 2017, after a slight anticipatory rise in demand. Overall, price corrections should remain moderate at 1% in 2016, with a similar decrease in 2017, due to limited housing stock and sustained demand for housing.*

**Affordability: No Deterioration Expected Despite Strains**

Mortgage affordability for borrowers has remained stable over recent years, mainly driven by the low interest rate environment and longer loan maturities, which have largely offset property price increases.

*The large-scale residential loan refinancing of the last 12 months – especially the prevailing shift to low fixed-for-life mortgage rates – is expected to neutralise the effect of any potential interest rate increases in 2016 and 2017 and maintain overall borrower payment capacity. Similarly to property prices, longer-term affordability for new borrowers could be affected by rapid or sustained interest rate increases, or changes in underlying institutional features, although this could be mitigated by any property price adjustments.*

**Residential Loans Amount Distribution**



Source: UPV-BVK (Union Professionnelle du Credit)

**Mortgage Rates: Fixed-Rate Market Trend**

The sustained near record low mortgage rates during 2014 and 2015 continued to push the market further towards fixed-for-life-rate loans (82.1% in 1H15), as borrowers take advantage of favourable market conditions.

While the Belgian mortgage market remains a fixed-rate market, with relatively long-term loans, the distribution between fixed-for-life rate and resettable fixed rate loans is largely influenced by the evolution of underlying rates. The cost of switching banks can be relatively high for a borrower (due to mortgage registration costs) and banks largely offer competitive pricing for borrowers, in light of their deposit-based operating model.

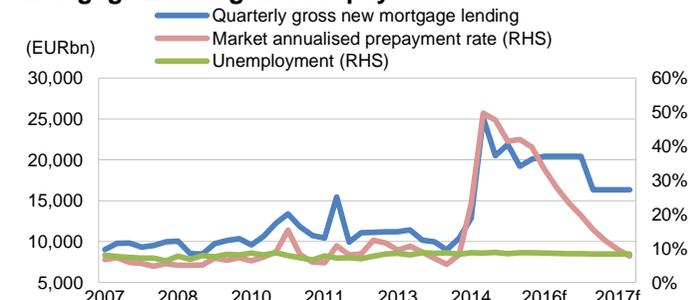
*Any marked change in the distribution of mortgage rates is unlikely to materialise in 2016, in light of both the high levels of refinancing recorded in the last 12 months and the expectation that mortgage rates will remain low. Beyond such time, any fundamental change in the market will be largely driven by changing interest rates.*

**Mortgage Performance: Continued Strong Performance Expected**

Arrears and default rates in Belgium have been among the lowest in Europe in recent years, the result of generous unemployment benefits, coupled with inflation-linked wages and sound underwriting practices.

*The recent levels of loan refinancing – resulting from the continued low interest rate environment – is viewed as positive for the market, as it typically reduces the stress on a borrower's ability to pay. Furthermore, unemployment levels in Belgium are expected to drop slightly in 2016 and 2017, by a cumulative 0.4%; this should help support mortgage performance during this period.*

**Mortgage Lending and Prepayments**



Source: Fitch, National Bank of Belgium, Belfius, ING Belgium, Axis, Fortis, KBC

**Mortgage Lending: Spikes in Lending Driven by Refinancings**

Despite record new mortgage lending in 2015 (EUR61.6bn in the year to September, compared to EUR57.4bn in the whole of 2014), Fitch does not foresee an overall change in long-term lending activity in Belgium. Mortgage lending continues to be largely driven by loan refinancing – a consequence of the low interest rate environment – with the large volumes of 'new' loan production being offset by the historically high levels of prepayments observed throughout the market.

*Fitch believes that the high headline level of mortgage lending may persist into 2016, notably in Brussels; however, the second half of 2016 will see the underlying level of new mortgage lending return towards the longer-term average observed in years unaffected by specific incentives (eg green loans, drops in mortgage rates, tax breaks).*

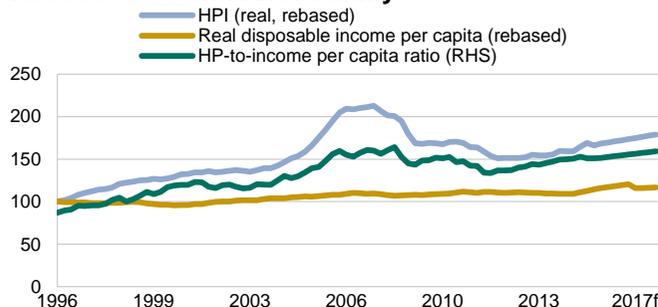
**Prepayments: High Prepayments Not a Long-Term Trend**

Prepayment levels across Belgian lenders rose sharply in 2014, to 50% in 4Q14 from 8% in 2Q14, remaining above 40% during 1H15. The increase was driven primarily by very low mortgage rates (and the consequent increase in loan refinancing). Fitch expects the high prepayment levels to continue into 2016, thereafter returning towards the longer-term prepayment average for Belgium, which has historically ranged between 4% and 8%.

*The high prepayment rates seen in Belgium over the last 12 months are not considered as a fundamental market change. Prepayments on Belgian residential mortgage loans are expected to return to relatively low levels over the next few years, ranging between 4% and 8%, in line with long-term average prepayment levels.*

 Denmark

**House Prices and Affordability**



Source: Fitch, Statistics Denmark, Ameco, BiS (Bank of International Settlements)

**House Prices: Increasing but Regional Differences Widen**

After the 20%-25% house price correction in 2007-2009, due primarily to oversupply, property prices increased by 6% nationally in 2015 after five years of near stagnation. Regional and property type differences remained prevalent in 2015, as the recovery outside of main cities started later. Prices of apartments increased by 10% since 4Q14 with the main demand in Copenhagen due to population growth of approximately 10,000 people annually since 2008 and low supply. Real-estate construction has increased over recent years but has not compensated for population growth. In addition, some of these projects will not be completed in the short term and therefore will not provide relief from the immediate upward pressure on house prices.

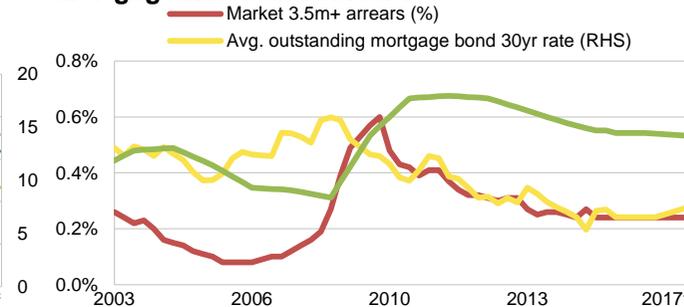
*Fitch expects the flat/house price gap to widen further in 2016 as demand around Copenhagen increases. The agency also expects nominal house prices to increase by 5% nationally.*

**Affordability: Strong, Supported by Low Interest rates**

Mortgage affordability for new loans has improved significantly since 2007, due to a decrease in house prices and low interest rates. Affordability for existing borrowers has also remained strong, supported by increasing disposable income of 2.5% between 3Q14 and 3Q15.

*Fitch expects borrower affordability in Denmark to remain strong in 2016 as mortgage rates are expected to stay low and wages continue to grow. The risk of a bubble in Copenhagen is higher than 12 months ago, due to low interest rates, rising property prices — driven by borrower expectations — and population growth, coupled with limited home supply (rather than speculative property investment)*

**Mortgage Rates and Arrears**



Source: Fitch, Realkreditradet

**Mortgage Rates: Longer Reset Periods Expected**

The current historically low mortgage interest rates are due to the low costs of funding from covered bonds. Approximately 75% of mortgages have an adjustable or variable rate, with a 30% concentration in mortgages with a one-year or shorter interest reset period; these are mainly funded by one-year covered bonds.

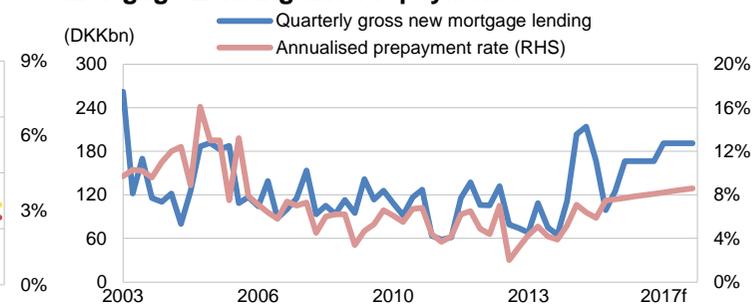
*Fitch expects the average interest rate on mortgages to remain similar to those seen in the second half of 2015 and the average interest reset period to continue to increase in 2016. This will be due to financial institutions looking to reduce refinancing risk, by incentivising borrowers on short-term reset mortgages to switch to mortgages with a three- to five-year interest reset period (funded by three- to five-year covered bonds).*

**Mortgage Performance: Low Arrears to Remain Stable**

Mortgage performance has remained strong, with 3m+ arrears at 0.2% in 2015. In fact, 3m+ arrears have remained below 0.6% for the last five years, despite the economic crisis and the house price declines in 2007-2009; arrears have been supported by strong borrower affordability, a robust labour market, a generous social security system and low interest rates.

*Fitch expects arrears to remain stable at around 0.2% over the next year, as low rates persist. Loans with adjustable or variable interest rates, originated in the current period of low interest rates, would be particularly exposed to rising rates — although Fitch expects rates to remain relatively stable.*

**Mortgage Lending and Prepayments**



Source: Fitch, Realkreditradet

**Mortgage Lending: Prudent Lending Remains the Key Focus**

In 1H15, gross mortgage lending returned to levels last observed before the price correction in 2007-2009, due to higher demand in the low interest rate environment. Lending over the past few years has been focused on refinancing, with the amount of outstanding mortgages only marginally increasing by 2.0% yoy, from 3Q14.

Effective property value and land tax rates vary across Denmark, due to a freeze on property value taxes since 2002. This can lead to large deviations in an increasing housing market, as taxes no longer reflect current values and may distort real borrower affordability. The freeze on the land tax announced for 2016 will also have a destabilising effect.

*Fitch expects gross lending to grow by 10% in 2016, mostly on the back of strong regional housing demand and rising prices. The agency believes banks should remain cautious when granting loans in such a low interest rate environment, because the affordability test at origination uses a 30-year fixed rate, currently at 3%, and assumes an amortising loan and required down payment amount of 5%, which provides minimal protection.*

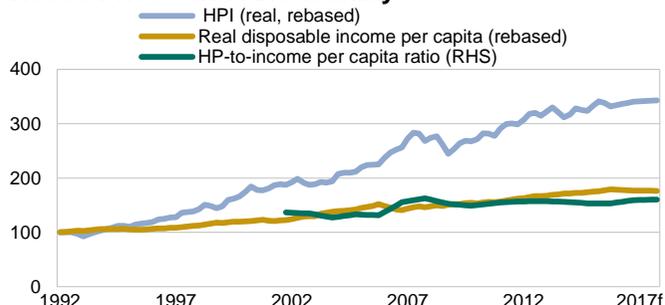
**Prepayments: Significant Refinancing Expected**

Prepayments, excluding refinancing, have been around 5% over the past two years. The market is still primarily focused on refinancing, as borrowers avail to the low long-term fixed rates.

*Fitch expects prepayments in 2016 to increase by 0.5%, while interest rates remain low.*

 **Norway**

**House Prices and Affordability**



Source: Fitch, SSB (Statistics Norway), Norges Bank, Ameco

**House Prices: Strong Increase, Apart from Western Norway**

House prices rose by about 7% in 2015 in Norway. However, this excludes oil-dependent western regions, where the fall in oil prices fed through into lower economic growth; prices fell by 2.6% in Rogaland for instance. For non-oil dependent regions, price increases have been supported by low interest rates, wage growth, low unemployment and population growth. Housing completions and the increase in households were more balanced in 2014.

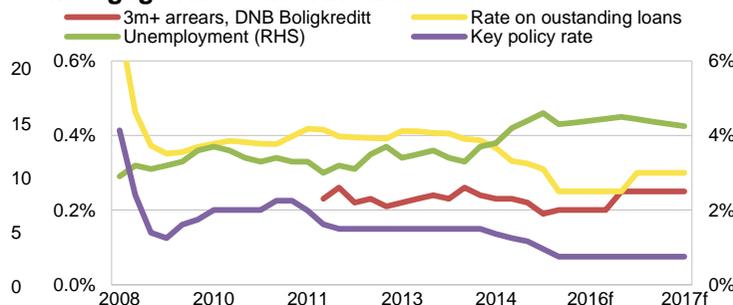
*Fitch expects property prices to decrease in the West, which is suffering from a slower economy, lower oil investments and overbuilding. The rest of the country is expected to keep growing, driven by low interest rates, despite less generous taxation; this includes an increase in property taxes for some areas, less generous tax deductibility of mortgage interest, and the revised valuation of second homes for wealth tax. The current level of house price growth is not sustainable in the long term and prices suffer when rates increase and immigration slows. However, a significant price drop is unlikely in a country where most households own their homes (78%) and where the tax treatment of the homeowner is still very generous.*

**Affordability: Strong, Supported by Low Interest Rates**

Mortgage affordability has improved over the past two years, supported by decreasing interest rates that have compensated for the increase in house prices for new borrowers.

*Fitch expects affordability to remain strong, supported by low mortgage rates and increasing wages. The increase in household indebtedness is an area of concern and attempts to curb credit growth (see Mortgage Lending) have been offset by the lure of lower interest rates.*

**Mortgage Rates and Arrears**



Source: SSB (Statistics Norway), DNB Boligkredit, Norges Bank

**Mortgage Rates: All Time Low**

Interest rates on new mortgages reached a new low of 2.8% in 3Q15. Rates have been declining since end-2013 due to competition, notably from foreign bank subsidiaries. Also, bank funding costs, via covered bonds and deposits, have reduced markedly due to low yields and a cut in the base rate by the Central Bank of Norway to 0.75% in September 2015 (to help support the economy recover from the oil price drop). 95% of mortgages have a variable rate that can be reset by the bank with a six-week notice period. As such, rates on existing mortgages have also fallen (to 2.93% as of August 2015).

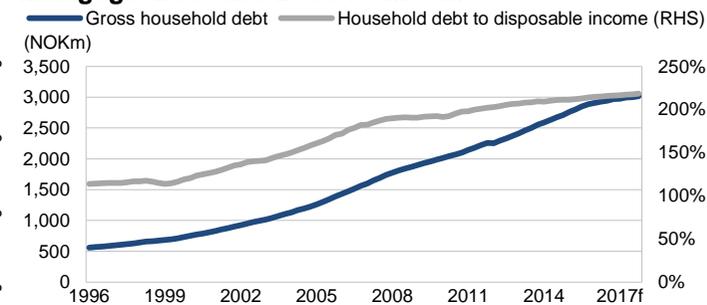
*Fitch expects rates on mortgages to remain low in 2016, reflecting the low yield environment and reduced cost of funding for banks.*

**Mortgage Performance: Low Arrears to Remain Stable**

Mortgage performance has remained very strong, with 3m+ arrears at 0.2% in 2015. The drop in oil prices has created significant challenges for Western Norway, especially Rogaland, and unemployment has increased (to a still low 4.3%). Mortgage performance has been supported by strong borrower affordability, ever lower interest rates, a robust labour market, a generous social security system and the generous tax treatment for mortgages.

*Fitch expects arrears to increase in Rogaland, but to remain relatively stable across the rest of the country. Most mortgages have floating rates so borrowers are exposed to interest rate risk, although Fitch expects rates to remain low in 2016. Buffers to mortgage performance volatility include stressed interest rates at origination, tax deductibility of mortgage interest and a greater proportion of amortising loans.*

**Mortgage Debt and Debt-To-Income**



Source: SSB (Statistics Norway), Norges Bank

**Mortgage Lending: New Regulations May Restrict Growth**

Mortgage lending growth has been strong (6-7% in 2015), driven by house price increases, equity release through refinancing and affordability increases (led by wage growth and lower rates). The regulator has increasingly taken steps to reduce higher risk lending, to avoid a further build-up of household indebtedness; measures include limiting LTV ratios to 85% from 2012 (although only as best practice), and increasing risk weights on mortgages to 20-30% in 2014 (from 10-15% in 2013). In June 2015, the regulator formally instated the LTV cap at 85% (with 10% exceptions permissible), introduced mandatory amortisation down to 70% LTV and made a 5pp interest rate stress at origination mandatory. These measures may restrict riskier lending, but have had little impact on house prices, as lower interest rates have more than offset their effects.

*Fitch expects mortgage lending to grow by 3-5% in 2016, mostly driven by increasing prices and higher lender competition through lower mortgage rates. The stricter new regulations, notably the limitation on interest only mortgages, are viewed as positive developments to limit riskier lending.*

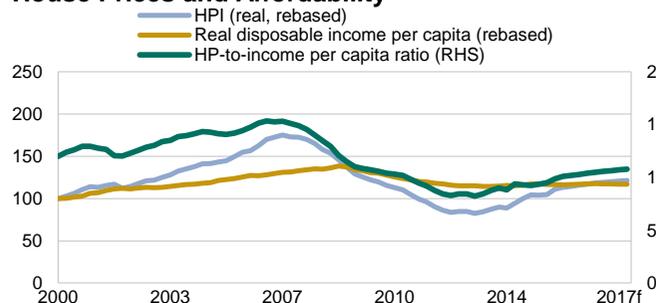
**Prepayments: Driven by Refinancing and Lender Competition**

Prepayments are usually driven by refinancing, as 95% of mortgages pay a floating rate and prepayment penalties are minimal. The increasing value of houses has allowed people to release part of their equity, while high competition among lenders in a low interest rate environment had kept prepayments high. Risk-reducing regulatory measures may ultimately reduce refinancing.

*Fitch expects prepayments in 2016 to be driven mostly by refinancing.*

 Ireland

**House Prices and Affordability**



Source: Fitch, CSO (Central Statistics Office), Ameco

**House Prices: Modest Growth Ahead**

At 16% yoy, Irish house price growth was among the highest in the world as of 4Q14 (22% in Dublin) (source: Central Statistics Office). This upward trend continued in 2015, albeit at a significantly reduced pace (as of 3Q15, 8.9% yoy, Dublin at 6.5%) on the back of continued housing shortages - particularly in Dublin - an improving economy and increased credit availability.

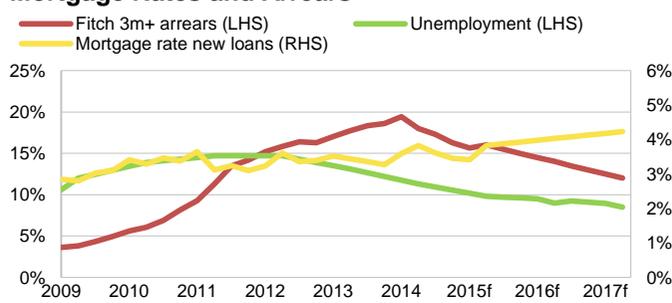
*These factors should support continued house price growth; indeed, with improving income and employment prospects boosting demand for housing, a sustained house price recovery seems likely. We expect the full impact of mortgage rate cuts to be felt in 2016. Overall price growth is expected to be 6% for 2016, down somewhat on 2015, reflecting the strong link between house prices and income and driven partially by Central Bank lending rules announced in January 2015, pronouncing tighter LTV limits and loan-to-income rules.*

**Affordability: Rising House Prices Will Reduce Affordability**

According to the EBS DKM affordability index, an average first-time buyer couple paid 19.5% of their income on a 90% LTV mortgage in April 2015. This is slightly lower than the 20.6% of October 2014, but it remains well below the peak of the market (26.4%).

*In 2016, house price growth is once again expected to exceed income growth: thus, Fitch expects affordability to weaken during the year, but to remain much better than at the peak of the market. The new Central Bank lending rules reduce concerns of a return to the lending excesses of pre-crisis years.*

**Mortgage Rates and Arrears**



Source: Fitch, CBOI (Central Bank of Ireland)

**Mortgage Rates: Expected to Remain Stable**

Interest rates charged by lenders on new lending have remained fairly stable over the last year, driven by a stable interest rate and mortgage lending environment.

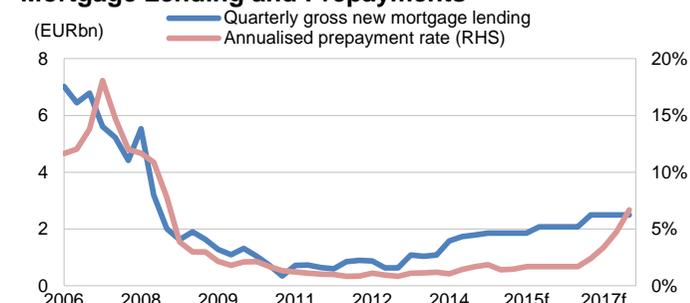
*Many lenders are looking to increase lending volumes yoy. However, given pressure on bank balance sheets, the agency does not expect lenders to reduce rates materially to gain market share. Rates on new lending have remained stable at just below 4% (source: Central Bank of Ireland). In Fitch's view, rates are likely to remain around this level in 2016.*

**Mortgage Performance: High but Declining Arrears**

There is now increased clarity over the mortgage arrears resolution framework and a supportive economic environment, enabling lenders to implement long-term restructuring plans for borrowers in arrears. According to the Central Bank, 15% of all owner-occupied mortgages in Ireland had been through a restructuring exercise by June 2015; 86% of these were meeting the terms of their restructure agreement.

*The regulatory environment strongly favours restructuring over repossession. Fitch believes repossessions occur gradually and are spread over a long period. As prices recover, some borrowers are likely to return to positive equity, encouraging them to work with lenders to resolve their arrears and hence reducing the eventual number of repossessions. Fitch expects arrears to continue to decline in 2016 by about 2%, due to the stabilising economy and the ongoing recovery in home prices.*

**Mortgage Lending and Prepayments**



Source: Fitch, ECLG (Environment, Community and Local Government)

**Mortgage Lending: Continuing to Increase**

Mortgage lending increased in 2015 as the economy grew and employment rose; nevertheless, volumes were only around 10% of the peak seen pre-crisis. In 3Q15, volumes represented an increase of 15.6% yoy; the revised lending rules possibly contributed to reduced mortgage drawdowns in 1Q15 compared to 4Q14, but each quarter since has registered a rise.

*Fitch expects new mortgage lending to increase by around 12% in 2016, supported by the expectation of a stronger labour market and an improving economy. However, lending rules are limiting affordability and so growth will not be as high as 2015.*

**Prepayments: Expected to Remain Very Low**

The majority of mortgages are still variable rate, albeit the proportion of variable rate mortgages declined significantly for new business during 2015 (from 61% in 1Q to 51% in 3Q). This is, in part, due to cheaper fixed rate alternatives.

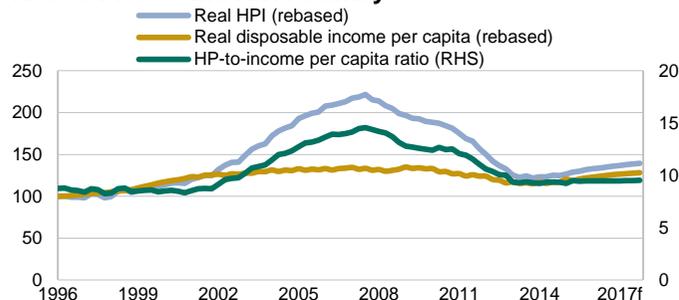
The first nine months of 2015 saw just 712 re-mortgages take place in Ireland. Borrowers with tracker-rate mortgages typically have very low interest rates, which are no longer available on newly originated loans. This removes any incentive for these borrowers to prepay. In addition, borrowers in negative equity still have limited options to re-mortgage.

*Fitch expects prepayments to remain in the low single digits for the foreseeable future, with a possible increase in 2017. Mortgage availability is expected to increase, but the repriced products do not encourage tracker-rate borrowers to prepay, whilst tightened lending criteria offers limited options for borrowers in negative equity.*



**Spain**

**House Prices and Affordability**



Source: Fitch, Bank of Spain, Ameco, INE

**House Prices: Recovery in a Two-Speed Market**

After seven years of consecutive declines, the Spanish residential property market began to show signs of stabilisation in 2014. 2015 has added to this positive trend, with prices rising 3.6% ytd, according to INE. Other sources paint a less rosy picture, with an overall average price increase of 1.1% ytd. This upward trend has been driven by the improved economic landscape and the return of credit. Despite improvements in the Spanish economy, high unemployment continues to hamper rapid price increases.

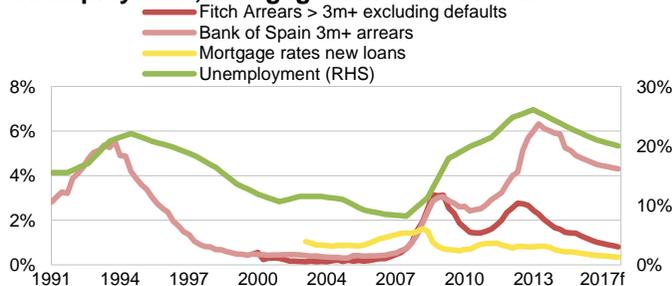
*Fitch expects sub-segments of the Spanish property market to show different performance trends. While prime properties located in urban centres will enjoy a gradual recovery, distressed properties linked to foreclosures, or those located in peripheral areas with low economic activity, will continue to see high price corrections and high loss severities.*

**Affordability: High Unemployment Hampers Further Improvement**

The 35%-40% peak-to-trough house price correction observed over recent years has led to a significant improvement in the house price to disposable income per capita ratio, which is now back to 2002-2003 levels and close to the long-term historical average.

*Fitch expects further housing affordability improvements to be constrained by persistently high unemployment levels, which currently stand at 21% according to INE. Additionally, we expect the house price recovery to outpace that of disposable income, as broad-base salary gains are constrained by a high proportion of temporary jobs. According to INE, 66% of jobs created over the last 12 months were on a temporary basis.*

**Unemployment, Mortgage Rates and Arrears**



Source: Fitch, Bank of Spain

**Mortgage Rates: Expect Margin Compression**

Competition among lenders for good credit continues to push margins down, though they remain well above pre-crisis levels. These lower margins, combined with historically low Euribor rates, had pushed overall mortgage rates to 2.2% as of 3Q15.

*Most Spanish mortgages are floating rate loans referenced to Euribor, making them vulnerable to interest rate rises. Borrowers could face a payment shock if medium- to long-term interest rate increases take place, as they have become used to the very low interest rate environment of the past five years. This could be partly mitigated on new originations, as margin levels are still above historical averages, leaving some room for margin compression if interest rates were to increase.*

**NPLs: Lower Trend to Persist**

Residential mortgage NPL has decreased to 5.25% in 2Q15 driven by the overall improved economic landscape, employment creation and low interest rates. This NPL ratio measured by the Bank of Spain includes loan in arrears by more than 90 days, and doubtful positions which can in turn capture loan restructurings. The average NPL ratio of Fitch rated RMBS transactions stands at 1.3% as of Nov/15, which refers to loans by more than 90 days in arrears excluding defaults.

*The agency believes NPLs will continue its recent trend and decrease in 2016 and 2017, as unemployment gradually decreases, and some restructured positions deliver improved performance and become reclassified as a normal credit.*

**Mortgage Lending**



Source: Fitch, Bank of Spain, ECB

**Mortgage Lending: Revival**

The recession all but halted residential mortgage lending, resulting in a deleveraging process in the banking sector that has reduced the outstanding balance of residential mortgage debt by more than 15%.

After seven years of contraction, credit for home acquisitions has been growing since 1Q14 at an average annualised rate of approximately 20% (in volume terms), albeit from a very low base. However, this growth is still not enough to offset loan amortisation. Property sales registered for 1H15 are at the highest level since 2010 and almost 10% greater than 1H14.

*Fitch expects gross new mortgage lending to continue its increasing trend and offset loan amortisation by 2017. These positive developments reflect improved consumer confidence, competition among lenders (and the resulting lower financing costs), and attractive property prices after the correction.*

**Prepayments: Remain at Low Levels**

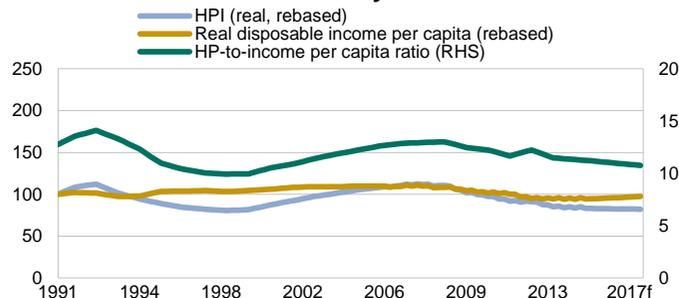
Prepayment rates in Fitch-rated RMBS transactions are still lingering at historically low levels — 3.75% on average during 2015.

*Fitch expects prepayments to remain at these levels, as margins on refinancing options are far higher (around 200bp) than spreads on legacy mortgages originated in the run-up to the peak years (less than 100bp); hence, refinancing is not an attractive choice for many borrowers. Moreover, first-time buyers who formalised mortgage credit prior to 2012 receive a fiscal incentive, and therefore are not incentivised to prepay on their credit.*



Italy

House Prices and Affordability



Source: Fitch, Scenari Immobiliari, Ameco

House Prices: Trough Reached

Italian nominal house prices declined less than 1% in 2015, resulting in a 17% decline from the 2008 peak. Over recent quarters, house prices have begun to bottom out in some regions, especially in the north and centre, hitting a 0% growth rate as the mild economic recovery gains traction.

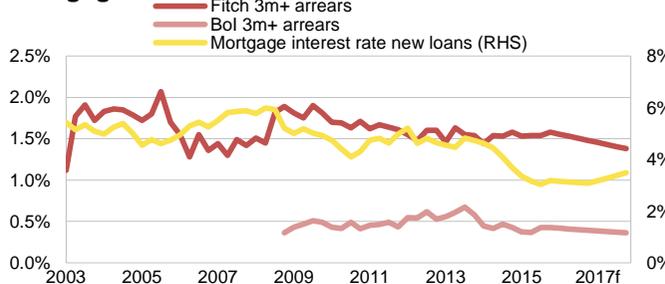
Fitch expects house prices at the national level to bottom out in 2016, supported by improving economic conditions that should translate into stronger housing demand and higher volumes of real estate transactions. We anticipate an increased availability of credit, stemming from the banking system for house purchase mortgages. This, coupled with the removal of the property tax on first homes, will help reduce the housing supply overhang and prevent further price declines. Fitch expects further upside in 2017, although below the overall inflation rate.

Affordability: Reviving Economy Eases Tensions

The Italian economy shows moderate signs of progress (0.7% GDP in 2015), leading Fitch to revise its 2016 GDP and unemployment forecasts, to 1.3% from 1.0% and to 11.6% from 12.2%, respectively. A gradual improvement in affordability is already noticeable in the decreasing number of payment holidays in Fitch-rated transactions.

Fitch expects mortgage affordability to keep strengthening, supported by continued low interest rates, a steady labour environment in the mid-term and slightly increasing disposable income, thanks to a cut in the VAT rate. This, together with the relatively contained indebtedness of Italian borrowers, should ease some of the pressure that recessive cycles had placed on affordability in recent years. Low spreads on new and renegotiated loans are also expected to keep debt-to-income (DTI) ratios low and mortgages affordable.

Mortgage Rates and Arrears



Source: Fitch, Bank of Italy

Mortgage Rates: At a Record Low due to Competition

Record low rates in the eurozone and renewed competition among Italian banks has further reduced coupons. Consequently, the interest rate on new mortgages has fallen by 22% yoy, to 3.0% as at October 2015 from 3.8% (and from a peak of 6% in 2008).

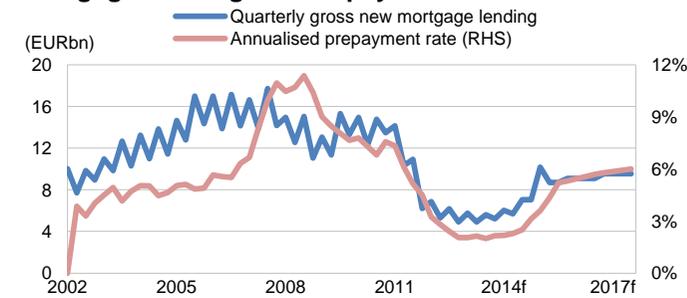
Fitch expects mortgage rates over the next 12 months to stabilise at the current level of about 3%. A slight reversion of the downward trend may come from the increased popularity of fixed rate loans among new originations. Given the strong competition among banks, a significant increase in mortgage rates over the next two years could only occur in the unlikely case that the ECB increases its policy rate.

Mortgage Performance: Stronger but with Minor Volatility

Despite the prolonged recession, the combination of low interest rates and conservative underwriting standards has resulted in stable performance in recent years. Constant default rates (CDR) slightly decreased to 1.2% in November 2015 from 1.3% in November 2014; late-stage arrears have remained stable at around 1.6% for the past 20 months up to November 2015. The improvement is also attributable to the slight economic recovery, most evident in the north.

Fitch expects this gradually improving trend to continue in the short term. Nevertheless, as the recovery is in its embryonic phase, performance volatility cannot be ruled out. Fitch therefore expects arrears levels to fluctuate between 1.4% and 1.7% over the medium term. An improving labour market could lead to a more marked decrease in the CDR. As about 70% of mortgage stock is floating rate and DTI ratios are rarely stressed at origination, performance remains sensitive to interest rate shocks. However, Fitch views such a scenario as unlikely over the next two years.

Mortgage Lending and Prepayments



Source: Fitch, Bank of Italy

Mortgage Lending: Increased Volumes to be Repeated

During the first nine months of 2015, new residential mortgage lending increased dramatically, by about 60% yoy to EUR27bn, albeit from a very low base. This spike in new originations was driven by refinancing (60% of new originations in 3Q15). Borrowers attracted by record low rates have either renegotiated loans with their bank, or opened a new mortgage with another bank at more favourable terms, thus boosting gross new lending.

While Fitch expects refinancing activity to reduce over time, the agency also expects Italian banks to re-start lending for residential mortgages, in an attempt to improve their profitability in 2016. The increased credit supply will be matched by an expected pick-up in housing transactions that will support demand for new financing. Fitch believes these two factors will offset each other; thus new lending in 2016 is expected to be at par with, or slightly higher than, new originations in 2015.

Prepayments: Pick-up to Continue in the Short Term

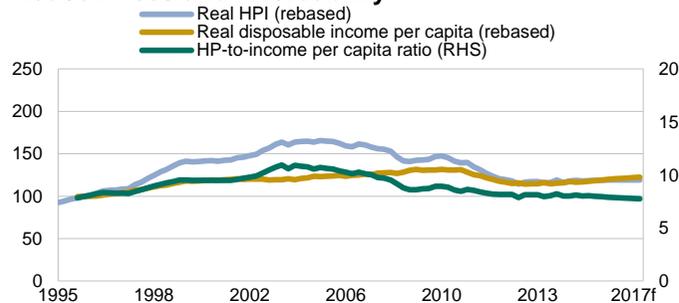
Over the past 12 months prepayments have been rising steadily, reaching 5.2% in 3Q15 and boosted by extraordinary refinancing activity, mainly affecting older vintages of Italian RMBS transactions. Borrowers are renegotiating margins on floating rate loans, or moving to fixed rate loans to lock-in low long-term rates.

Fitch expects prepayment rates to keep climbing in the short term, supported by ongoing refinancing activity. However, we do not expect prepayments to exceed 6%-7% and believe that in the medium term, prepayments will converge towards the long-term average of 5.5%-6.0%, once borrowers have renegotiated at the current lower rates.



Portugal

House Prices and Affordability



Source: Fitch, INE, Ameco

House Prices: Not Yet Ready for Take Off

After a nominal peak-to-trough correction of 20%-25%, which bottomed out in 2013, house price valuations have stabilised at around EUR1,000 per square meter, as measured by the National Institute of Statistics (INE). In 2015, the housing market showed signs of a small recovery, with an increase of 2.0% ytd as of 3Q15.

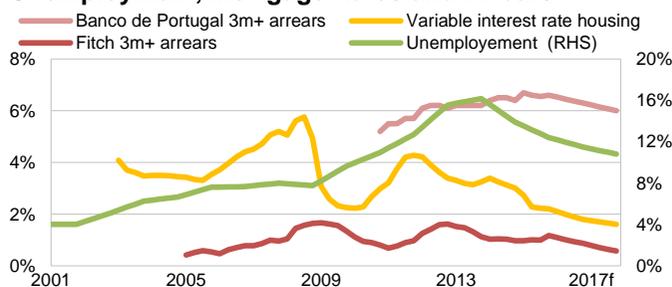
*Fitch expects house prices to experience low to moderate increases in 2016 and 2017, driven by an improved macroeconomic environment, and the return of credit to the residential property market. However, high unemployment, weak demographics and a large stock of vacant housing units are expected to constrain excessive growth in prices.*

Affordability: Stability After Correction

Portugal maintains its position as one of the cheapest housing markets in Europe. In 2Q15, the house price to disposable income per capita ratio reached a 8x, a 26% decrease from its peak in 2003, when the ratio was 10.9x. Household disposable income is showing signs of a gradual recovery, increasing by 0.8% in 2014; however, it will remain constrained by high unemployment, which is expected to stay in double digit levels for the next two years.

*Affordability is expected to remain mostly stable over the next couple of years, as we see both household income and house prices delivering gradual gains, in tandem. Marginal increases in real disposable income and house prices are expected to cancel each other out, leaving affordability on a stable trend. We expect house price increases of around 2% on average, in response to the new wave of lending in the residential property market.*

Unemployment, Mortgage Rates and Arrears



Source: Fitch, Bank of Portugal, Eurostat

Mortgage Rates: Affordable Credit Returns

The cost of mortgage credit is falling in Portugal. The average interest rate for new originations was 2.3% as of 2Q15, which is almost 100bp lower than a year ago. This reduction reflects the increased competition among banks for good credit, as well as the improved liquidity and lower funding costs of Portuguese banks.

*We predict residential mortgage rates in Portugal will remain close to 2% for the next few years, considering the underwriting strategies of lenders and the fact that the ECB is not expected to change its target rate in the near future.*

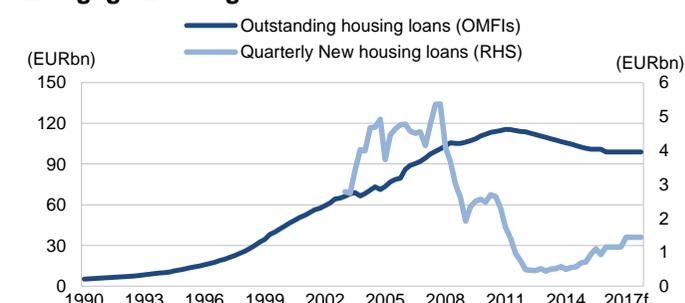
Mortgage Performance: NPLs Broadly Stable

Overdue housing loans, defined by the Bank of Portugal as positions in arrears over 30 days in number terms, have stabilized at around 6%. We anticipate this level to remain stable and potentially reduce gradually over the next 2 years as labour market improvements translate into salary gains for borrowers. The average NPL ratio of Fitch rated RMBS transactions stands at 1.0% as of Nov/15, which refers to loans by more than 90 days in arrears excluding defaults.

The average property market value decline (MVD) continues to be around 40% relative to their initial valuation estimates, with a foreclosure time since default that remains long at around 5-7 years.

*Most mortgages in Portugal are variable interest rate contracts linked to Euribor, and therefore have been supported by the historically low interest rates. A rising interest rate scenario in the medium to long term represents a material risk to Portuguese mortgage performance*

Mortgage Lending



Source: Fitch, ECB (European Central Bank)

Mortgage Lending: Increasing Appetite

The outstanding balance of housing loans has decreased by 13% since 1Q11 and was still diverging at an annualised rate of 3% at 3Q15. New credit for home acquisitions has grown at an average annualised rate of 29% since 2Q13 according to ECB data, albeit from a very low base, on a rising trend that has intensified during 2015.

*Fitch expects gross new lending volumes to continue this positive trend, driven by the improved economic landscape and increased lender competition. The volume of new housing mortgages is still less than 20% of that originated during the peak years, but given current growth rates, Fitch expects new lending to offset loan amortisation by 2017.*

Prepayments: Sticky at the Bottom

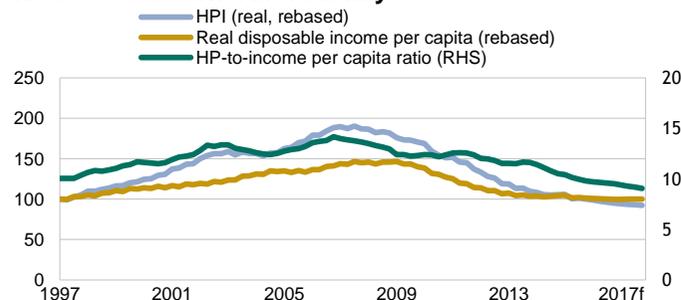
Prepayment rates have decreased markedly since the onset of the financial crisis and are now at 1.5%, driven by the decreased willingness and ability of financial institutions to write new loans. In 2014, prepayments finally stabilised at a very low level and as of 3Q15, they had picked up slightly to 2.2%, according to our database of Portuguese RMBS transactions.

*We expect prepayments to remain close to 2%-3% in the foreseeable future, given that borrowers have little incentive to prepay their existing debt in the current economic environment, taking into account that margins on legacy loans remain much tighter than current alternatives. The margin on typical mortgage credit had dropped to approximately 210bp in 3Q15, from 280bp in 3Q14, as abundant liquidity in the Portuguese economy drives bank competition.*



Greece

House Prices and Affordability



Source: Fitch, Bank of Greece, Ameco, National Statistical Service,

House Prices: Depression Continues

A combination of political uncertainty, capital controls and incoming austerity measures depressed the housing market further in 2015. Home prices had dropped by 4.4% from 4Q14 as of 2Q15, bringing to 42.4% the total contraction from the 4Q08 peak.

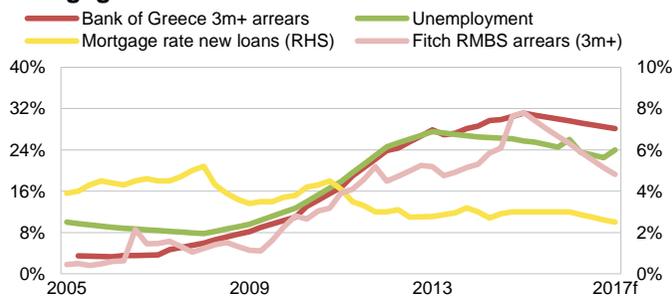
Fitch believes that in 2015 house prices will drop by 6%, as housing demand remains strongly depressed. This can mainly be ascribed to political uncertainty, expected austerity measures and tight credit conditions, in addition to GDP contraction. In Fitch's opinion, prices will continue to reduce, in 2016 by 4% and 2017 by 2% yoy. The agency believes that fiscal adjustments will suppress investor appetite for home purchases, while uncertainty over future austerity measures will also depress housing demand. At the same time, scarce bank funding is likely to reduce the mortgage supply. In turn, the residential market is expected to remain oversupplied, while property turnover will remain low.

Affordability: Fiscal Adjustment to Depress Affordability

Political events strongly hampered mortgage affordability in 2015. Despite the low interest rates and plummeting property prices, high unemployment, GDP contraction and scarce availability of credit have worsened affordability.

While prices on the few property transactions that take place are expected to drop faster than wages, in Fitch's view, affordability will further worsen in 2016 as a result of expected economic contraction, tight credit availability and fiscal adjustments agreed within the bailout program. The agency expects buyer confidence not to improve before 2017 once the economy stabilises.

Mortgage Rates and Arrears



Source: Fitch, Bank of Greece

Mortgage Rates: Loan Margins to Stay High

In 2015 mortgage rates remained broadly stable, at around 3%. This is a result of high funding costs among Greek lenders and large housing market risks.

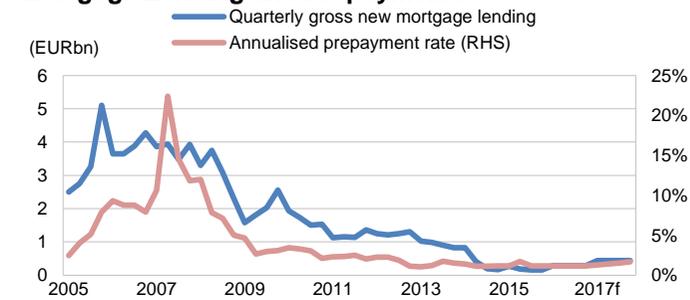
Margins on new loans are likely to remain high relative to European peers throughout 2015, in response to high funding costs, credit risk and the foreclosure ban. Nonetheless, the low interest rate environment should cause only a marginal increase in mortgage rates. Mortgage spreads are expected to start decreasing in 2017, in combination with a better economic environment.

Mortgage Performance: Weak Performance Improves Gradually

Mortgage performance has been strongly affected by prolonged political negotiations and a three-week bank closure. Fitch's 3m+ arrears index climbed to 7.6% in September 2015, from the 5.3% reported ahead of the elections; this rise was likely due to borrowers withholding their payments during the extended period of uncertainty.

Fitch expects asset performance to remain weak in 2016. This is a consequence of uncertainty over the banking system while capital controls remain in place, and lower disposable income. However, arrears should gradually decrease as the banking system stabilises, gradually reaching pre-election levels by 2017. The extension of the foreclosure ban throughout 2016 implies lengthy repossession. Discussions with lenders suggest little appetite to increase repossessions despite proposed changes to the foreclosure framework, as they prefer renegotiation strategies. In Fitch's view, easier repossessions are likely to give the banks greater negotiating power to encourage borrowers to restructure their loans and may also deter strategic defaulters from withholding payments.

Mortgage Lending and Prepayments



Source: Fitch, Bank of Greece

Mortgage Lending: Rebound From Historical Low

In the first nine months of 2015 the volume of new lending contracted by 60% yoy, reaching another historical low. The contraction was due to political uncertainty and tensions stemming from inconclusive negotiations with Greece's creditors. Additionally, throughout 2015, mortgage lending has been restricted by scarce and expensive liquidity, sourced mostly from the Emergency Liquidity Assistance facility. Meanwhile, the loan workout process has remained problematic, due to the illiquid housing market and the foreclosure ban. As a result, Greek lenders have increased the level of provisioning on mortgage NPLs.

New lending is likely to rebound in 2016. After banks complete the capital injection and the waiver on ECB collateral eligibility is restored, Greek lenders are likely to benefit from more stable and cheaper liquidity, suggesting greater credit availability. Nevertheless, annual lending is not expected to revert to 2014 levels. In the coming years, Greek banks are likely to focus on improving the recovery process and gradually reducing exposure to mortgage lending, as the illiquid property market and foreclosure ban still constitute a high risk.

Prepayments: Low Incentives

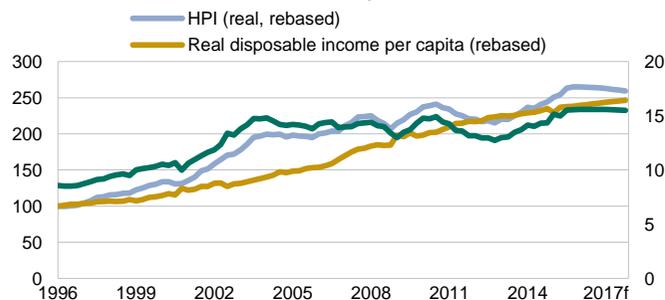
In the first nine months of 2015 the constant prepayment rate ranged between 1.1% and 1.7% per annum.

Voluntary prepayments are expected to remain unchanged at low levels in 2016. This is a consequence of economic uncertainty, as well as a lack of refinancing opportunities. In addition, low reference interest rates and higher margins on new lending disincentivise refinancing.



**Australia**

**House Prices and Affordability**



Source: Fitch, RP Data, ABS (Australian Bureau of Statistics)

**House Prices: Growth Expected to Moderate**

The rate of house price growth across the eight capital cities rose by 7.8% in 2015, as reported by CoreLogic RP data. This follows nationwide growth of 7.9% in 2014 and 8.2% in 2013. This growth has largely been driven by record low interest rates in 2015 and demand from investors, particularly in Sydney and Melbourne.

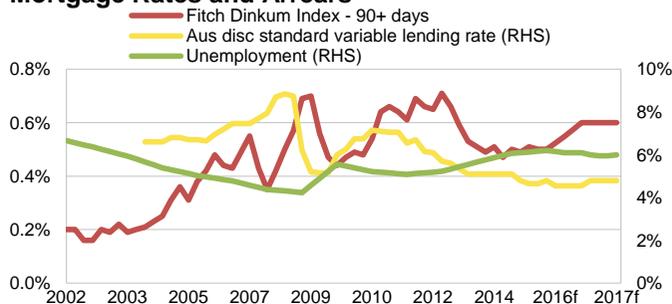
*We expect the impact of decreasing affordability for owner occupiers to become evident over coming months, while a further compression of rental yields for investors will likely soften demand in the housing market, particularly in Sydney where the median house price is significantly higher than other Australian cities. Fitch expects house price growth to moderate over the course of 2016 to around 2%, likely driven by growth moderating in Sydney and Melbourne.*

**Affordability: Short-Term Outlook Tightening**

In the past year, continued house price appreciation in Melbourne and Sydney has led to decreasing levels of affordability; this continues to outpace wage growth.

*Fitch's expectation of only modest house price growth may add further pressure on the ability of borrowers to service debt. This will be especially true for borrowers who have made recent purchases and those that have contributed minimum levels of equity; investment property borrowers may prove particularly sensitive to rising lending rates. Issuers test the capacity of borrowers to service their mortgage obligations by applying interest rate buffers of 1.5%-2.0%, and a minimum interest rate of 7.25%. This ensures borrowers are able to cover their repayment obligations if interest rates rise.*

**Mortgage Rates and Arrears**



Source: Fitch, RBA (Royal Bank of Australia)

**Mortgage Rates: To Slightly Rise in Next Couple of Years**

The RBA cash rate has been at historical lows of 2.0% since the rate review in May 2015, which came in response to declining commodity prices and falling terms of trade. The low interest rate environment has had a positive impact on housing demand, propping up borrowing and spending, although recent policy changes have restricted access to credit for some borrowers. Additional capital requirements for bank residential portfolios have led to an increase in mortgage rates, including higher interest rates for investment loan borrowers.

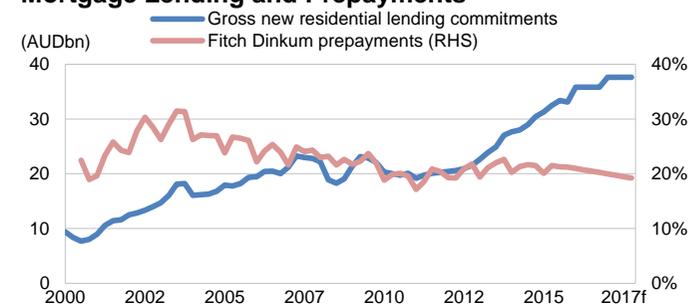
*Fitch does not anticipate an increase in the RBA policy rate in the near future, as the effect of increased capital charges on the overall funding costs for banks has already led to an increase in lending rates. The RBA is reluctant to cut rates, due to the already heated housing market; however, if weak external demand persists, combined with soft inflation and weaker wage growth, it may bow to pressure for a rate reduction in 2016.*

**Mortgage Performance: Broadly Steady**

Fitch's Dinkum Prime Index has seen minor improvements since June 2014, averaging 0.49%. The steady performance during this time reflects increasing levels of servicing buffer (from lower interest rates) and a stable unemployment rate, while house price appreciation has opened up additional equity for home owners and investors.

*As wage growth remains low and the cost of living steadily increasing, Fitch expects borrowers will find it increasingly difficult to service their debt, especially if rates rise in 2016.*

**Mortgage Lending and Prepayments**



Source: Fitch, RBA (Royal Bank of Australia)

**Mortgage Lending: Slowdown in Investor Lending**

Over the 12 months to September 2015, total mortgage lending in Australia increased by 7.9%, to AUD1.329bn from AUD1.225bn. There has been a slowdown in mortgage approvals in 2H 2015, particularly those issued to investors. Growth has been driven by investors in the past year, which make up approximately 50% of new lending; new building approvals have continued to fall over the past six months, particularly for new unit dwellings.

*Fitch expects weaker demand from investors as a result of a further compression in rental yields, increased costs — a result of prudential measures restricting the growth of investment loan portfolios — dwindling prospects for capital growth in the capital cities, and increasing transactional costs.*

*Fitch expects moderate growth in lending for owner-occupiers, which will likely be supported by a forecasted GDP growth of 2.7% and a stable outlook for unemployment (which is expected to remain between 5.8-6.5% throughout 2016).*

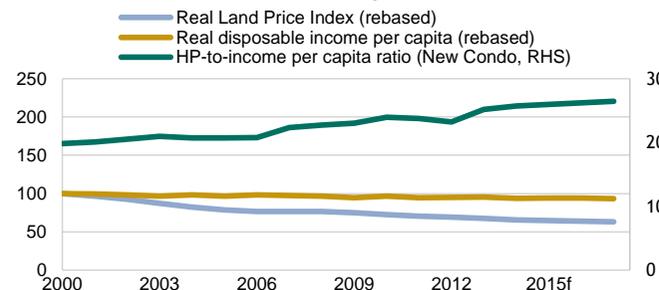
**Prepayments: Subdued Market Activity Moderates Prepayments**

Mortgage prepayment rates have gradually increased, primarily as a result of lower serviceability for borrowers and increased market activity and turnover.

*Fitch expects lower growth will stifle the prepayment rate, due to less market activity and a decline in the frequency of early pay-outs. However, any expected reduction may be partially offset by a contraction in the investor segment. We may yet see greater competition between lenders for owner-occupied business, which may result in borrowers prepaying.*

● Japan

**House Prices and Affordability**



Source: Fitch, STAT.GO (Statistics of Japan), Ameco

**House Prices: Expected to Gradually Increase**

The 2020 Tokyo Olympic Games are expected to continue boosting property investments in the Tokyo metropolitan area. This has led to an increase in property prices, especially in Tokyo, where prices for some newly-built condominiums (condos) are already inflated. However, in contrast, regional housing demand remains weak. This reflects stagnant land prices in Japan as a whole.

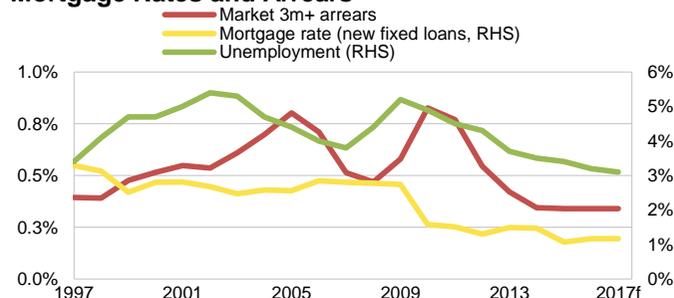
*Fitch expects house prices for new condos to continue gradually increasing in 2016 by around 2%, supported by the relatively strong preference for purchasing new, rather than existing homes, and a modest increase in new housing. The 2020 Tokyo Olympic games remain a positive factor for house prices in the near future; however, from a long-term perspective, the falling population will limit total demand for residential properties and constrain any price increase.*

**Affordability: Expected to be Flat**

In 2015 nominal disposable income slightly increased, as wages grew following the rising profits of many Japanese companies; however, house prices for new condos also increased. As a result, the affordability rate expressed in the house-price-to-income ratio remains unchanged.

*Fitch expects affordability to be almost flat, as income growth on a real basis is likely to offset the increase in house prices. The consumption tax increase scheduled for April 2017 would negatively affect affordability, as disposable income growth on a real basis may be constrained by consumer price increases; however, Fitch expects such negative impact to be temporary.*

**Mortgage Rates and Arrears**



Source: Fitch, STAT.GO (Statistics Japan)

**Mortgage Rates: Remain Low**

In 2015, mortgage rates slightly declined, due to the highly competitive mortgage lending market in Japan and the implementation of Japan Housing Finance Agency's (JHF) mortgage rate discount, which was supported by a government policy to stimulate the Japanese economy.

*Fitch believes the low mortgage rate environment will remain broadly unchanged, based on the monetary policy by Bank of Japan and intense competition in residential mortgage lending.*

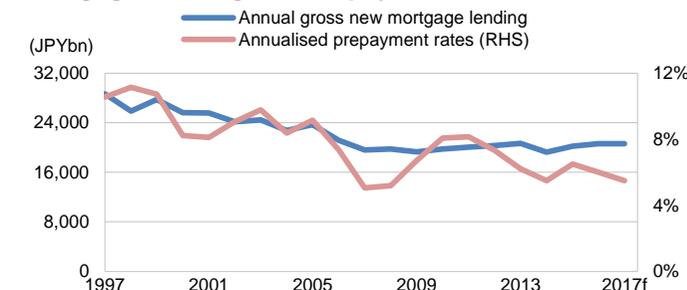
**Mortgage Performance: Stable Performance Expected**

Mortgage loan performance in Japan has continued to improve in recent years, with declining arrears rates hitting a historical low in 2014.

*The low interest rate environment, stable income and a low unemployment rate will continue to support good mortgage performance.*

*Despite these supportive factors, Fitch believes that the potential for a further improvement in arrears rates is limited, as they have already declined to a very low level.*

**Mortgage Lending and Prepayments**



Source: Fitch, STAT.GO (Statistics Japan)

**Mortgage Lending: Slight Recovery Expected**

New mortgage lending has recovered YTD 2015, from the decline in 2014, when demand for residential properties was subdued by the consumption tax increase in April 2014.

*Due to the limited availability of investment opportunities in the domestic market, evidenced by banks' low loan-to-deposit ratios, lender appetite to provide mortgage loans is likely to remain strong. This is especially true among regional banks and should lead to a favourable environment for borrowers, who will be able to refinance their loans with low interest rates.*

*The consumption tax rise scheduled for April 2017 is likely to contribute to a last-minute surge in demand for residential properties before the tax increases. However, from a long-term perspective, we do not anticipate a significant increase in new mortgage lending.*

**Prepayments: Expected to Decline Marginally**

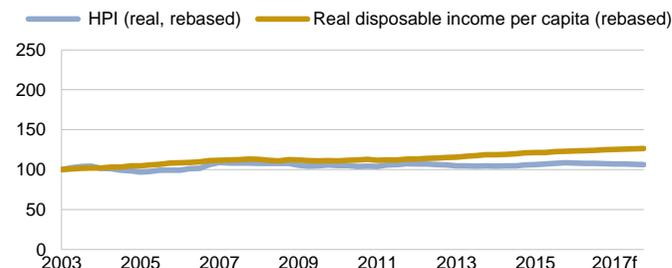
Prepayment rates have continued to decline since 2011; however, a slight increase has been observed YTD 2015. This is due to intense competition among lenders, partially stimulated by the JHF's mortgage rate discount.

*Fitch expects a marginal decline in the prepayment rate in 2016, as many seasoned loans with higher interest rates are likely to have prepaid; the agency believes the increase in the prepayment rate in 2015 to be temporary.*



**South Korea**

**House Prices and Disposable Income Trend**



Source: Fitch, BIS (Bank of International Settlements), KOSIS (Korean Statistical Information Service), Ameco

**House Prices: Holding Up**

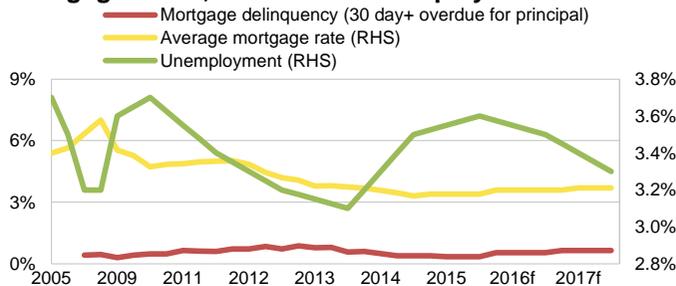
House prices are expected to remain largely stable in 2016, amid a challenging market environment; there are mixed expectations on rate movements and nationwide concern on high household indebtedness. Housing demand, created by the Bank of Korea's (BOK) record low base rate of 1.5%, will likely lose its momentum in 2016, as the nation cautions against its high debt levels.

That said, the currently record high rental costs will continue to translate lease expiries into house purchases. Downward pressure on house values will be limited, as recent demand has mostly been for owner-occupied housing, rather than investments (the former remains less exposed to potential hits by economic stress).

**Affordability: Decline to Flat**

Affordability is likely to worsen in 2016 and remain flat in 2017. The mortgage debt servicing burden would increase for borrowers if rate do indeed rise. This would put a strain on the average household, for which debts other than mortgages have increased in recent years. However, this situation should be checked by steady real GDP growth and household income growth in 2016, backed by benign labour market conditions. Fitch expects rising debt servicing costs will weigh slightly more than income growth on affordability in 2016.

**Mortgage Rates, Arrears and Unemployment**



Source: BoK (Bank of Korea), FSS (Financial Supervisory Service), KFHC (Korea Housing Finance Corporation)

**Mortgage Rates: Slightly Increasing**

Most floating rate mortgages in South Korea — which comprise 70%-80% of the banking system's mortgage portfolio and are inclusive of hybrid of fixed and floating rate — reference either the Cost of Funds Index (COFIX) or the 90-day certificates of deposit rates (CD rates). These reference rates are the country's dominant benchmarks for floating household debt.

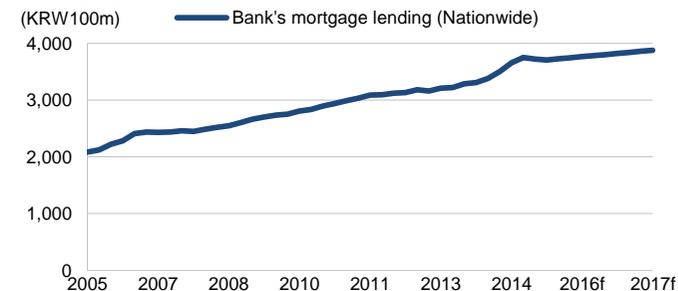
The benign interest rate environment will likely continue into 2016, due to the nation's desire for stimulus. Korea's short-term rate is forecast at 1.5% in both 2016 and 2017 (down from 1.6% in 2015). However, uncertainty on global rates may put pressure on the private sector's cost of funding, causing it to increase. Fitch expects mortgage rates to range between 3.6% and 3.8% in 2016 and 2017, an increase from 3.4% in 2015.

**Mortgage Performance: Arrears to Increase Slightly**

A strong labour market and a tight LTV restriction of 70% has kept mortgage delinquencies low and this stable trend is expected to prevail in 2016.

However, a marginal increase in arrears is expected if mortgage rates rise. Fitch expects 30 days+ mortgage delinquencies to increase to around 0.6% in 2016 and 0.7% in 2017, from 0.35% in June 2015.

**Mortgage Lending**



Source: BoK (Bank of Korea)

**Mortgage Lending: Stable**

New mortgage lending is sensitive to the market's perception of interest rate movements and the current expectation of a rise will no doubt drive away some cautious borrowers.

However, increasing rental costs will likely push a large share of leaseholders into making house purchases. The lease deposit-to-property value ratio is close to its all-time high at 72.9%, according to Kookmin Bank data of September 2015 (the South Korean lease deposit is an upfront deposit by the leaseholder. At contract maturity, the landlord returns the nominal value of the lease deposit to the leaseholder. Leaseholders may choose to pay very high deposits to avoid monthly rental payments.). Fitch generally expects borrowing demand to remain steady in 2016.

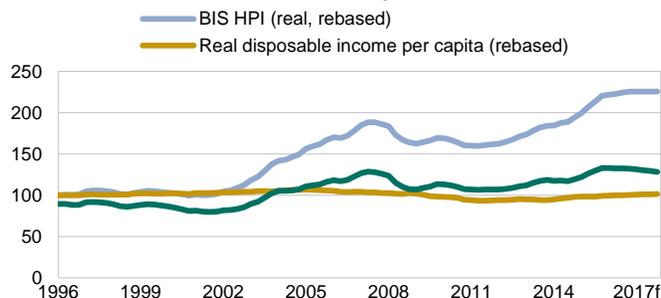
**Prepayments: Largely Stable**

Fitch expects prepayment rates in South Korea to remain stable in 2016, at between 25%-30% per annum. This expectation is based on our view that some floating rate borrowers may prepay mortgage debt when interest rates increase, while others may prepay other, more expensive unsecured borrowings, instead. Refinancing activity resulting in prepayment spikes is expected to remain limited.



**New Zealand**

**House Prices and Affordability**



Source: Fitch, Statistics New Zealand, BIS (Bank of International Settlements)

**House Prices: Growth Rates Expected to Continue to Fall**

Demand in New Zealand's main housing market of Auckland is driven by both owner occupiers and investors, propped up by low interest rates and a worsening housing shortage. The number of new dwelling consents over the past two quarters fell sharply, from 1,116 in July 2015 to 643 in September 2015. Supply is falling short of demand in Auckland, while increasing net migration has increased demand for housing.

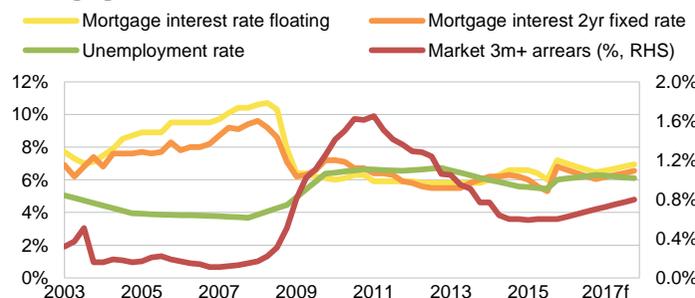
*Fitch expects housing growth to be maintained at modest levels in Auckland, where a supply shortage will continue to drive growth; this will likely be offset partially by recent restrictions imposed on low deposit lending by the RBNZ, and increasing levels of unaffordability for owner occupiers. In regional NZ, we expect very modest to static growth in 2016, due to subdued business activity (a result of weaker demand from falling dairy prices and in some cases, lower agricultural production).*

**Affordability: Short-Term Outlook Tightening in Key Metro Regions**

More recently, regional NZ has seen improving affordability in many regional areas, due to stagnant house price growth and falling interest rates. The main metro regions have seen affordability worsened to near unsustainable levels (Auckland is the least affordable region in NZ). Wage growth has been stable and has continued to outpace the consumer price index, but has failed to keep up with the average growth of the housing market in 2015.

*Fitch expects rising net levels of migration and a supply shortage to impact affordability in Auckland, while regional NZ is likely to remain relatively affordable, due to modest growth and low interest rates.*

**Mortgage Rates and Arrears**



Source: Fitch, RBNZ (Royal Bank of New Zealand)

**Mortgage Rates: Expected to Rise in 2015**

Lending rates remain low in NZ; a 0.75% rate reduction in the RBNZ's official cash rate (OCR) in 2015 saw it fall to 2.75%. Variable mortgage rates have declined from an average of 6.6% as at December 2014 to 6.0% in September 2015; over the same period, two-year fixed rates fell to 5.3% from 6.2%.

*Fitch expects current mortgage rates to fall in 2016, followed by an increase in 2017, likely driven by rate hikes in the OCR. This assumption is based on an expectation of dairy prices stabilising towards the end of 2016, followed by a gradual improvement in 2017. Any pick-up in global economic growth or inflation would likely increase the OCR closer to the long-term average.*

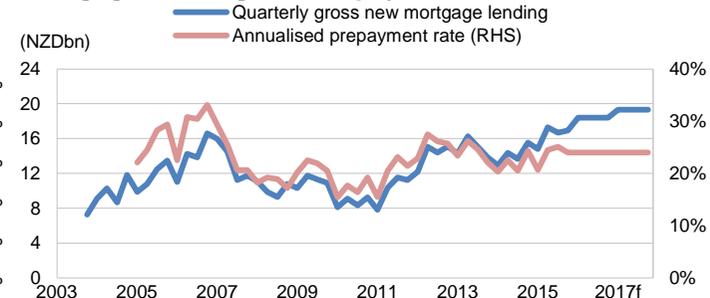
*However, as NZ is greatly dependent upon international trade, concerns remain around slower growth prospects among NZs major trading partners, particularly China. Slower than expected growth in these markets would likely negatively impact NZs balance of trade and maintain downward pressure on interest rates.*

**Mortgage Performance: Marginal Increase Expected**

The level of 90+ day arrears including impairments was 0.6% as at 2Q15; it has trended downwards since 2011 and is expected to increase marginally in 2016. In the past year, mortgage servicing costs have increased marginally, supported by low interest rates; household debt has remained at 155%, up from 154% in 4Q15.

*Fitch expects arrears to continue performing broadly in line with recent performance. Potential for a marginal increase stems from the vulnerability of highly leveraged borrowers to increasing interest rates and rising unemployment.*

**Mortgage Lending and Prepayments**



Source: RBNZ (Royal Bank of New Zealand)

**Mortgage Lending: Steadily Declining**

Total new loan approvals have been rising since 4Q14 and were up approximately 20% yoy as at September 2015. Much of the increase is due to demand outweighing supply in Auckland; however, earlier declines in mortgage lending resulted from macro-prudential controls on LTV ratios. As of November 2015, LTV limits had eased across NZ, except for Auckland, which specifically targets investors to offset the perceived growing market risk in this region.

*Fitch expects relatively small increases in lending to continue in 2016, a result of the cooling housing market. We expect demand for housing in Auckland to be driven by a supply shortage that will be partially offset by decreasing affordability and LTV restrictions; a more stable trend for mortgage lending growth is expected in the other regional areas, as housing growth weakens.*

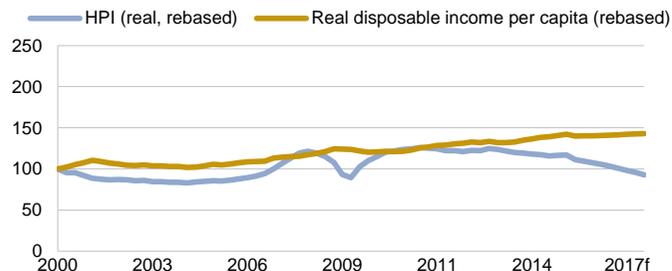
**Prepayments: To Decrease Slightly**

Mortgage prepayments have been decreasing at a steady rate in 2015. This is largely due to reduced refinancing activity, after consecutive rate rises in 2014 saw consumers lock into fixed-rate loans. The low interest rate environment does allow additional serviceability for variable rate borrowers and encourages prepayments; however prepayments are more likely driven by mortgage competition between lenders and turnover activity in the housing market.

*The level of financing and early pay-outs are likely to continue driving down prepayment rates, a consequence of slower growth in the housing sector, together with restrictions placed on low deposit lending and a newly implemented capital gains tax on investment properties.*

 Singapore

**House Prices and Affordability**



Source: Fitch, BiS (Bank of International Settlements), Singapore Dept of Statistics

**House Prices: Continuous Declining**

The Singapore property market has cooled following a slew of measures introduced since 2009, including additional buyer's stamp duty (ABSD) and lower LTVs. Home prices have declined over the last eight quarters by a total of 8.0% and this trend is expected to continue into 2016.

*We expect sentiment to continue to be dampened by a large influx of new supply, higher interest rates, a soft economy and still-tight immigration policies. With supply expected to exceed demand over the next two years, amid slow household formation, we expect home vacancies to rise.*

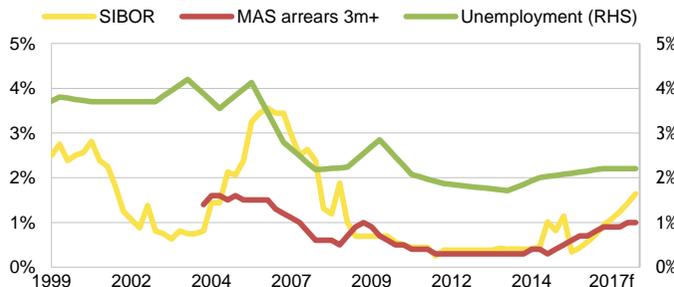
*The total supply of uncompleted private residential homes (excluding executive condominiums) stood at 58,348, of which 22,456 were unsold, at end-September 2015; this represented 18.1% of total stock at end-September. Barring any global financial crisis, a drastic price correction looks unlikely. We expect a 5%-8% annual price drop in 2016-2017.*

**Affordability: To Improve Slightly**

*We expect affordability to improve slightly in 2016, aided by a further decline in home prices, which will compensate for slower wage growth and higher mortgage rates.*

*The employment market has been strong and is likely to remain so in 2016. The resident unemployment rate has edged up slightly, but was still low at 3.0% at end-September 2015. This should provide a strong safety net to the Singapore property market.*

**SIBOR & Unemployment**



Source: Fitch, MAS (Monetary Authority of Singapore)

**Mortgage Rates: Expected to Rise**

SIBOR and SOR (swap offer rate), the benchmark floating rates for many mortgages offered in the last five to 10 years, have been rising since end-2014. They are likely to trend higher in the next two years, influenced by the pace of US rate hikes. However, mortgage rates may not rise to the same extent, as banks can switch to other reference rates or fixed rates, in order to maintain attractive pricing in a competitive market.

*We expect mortgage rates to rise to 2.5% by end-2016 and 3.2% by end-2017.*

**Mortgage Performance: Arrears Likely to Increase**

The three largest Singapore banks account for roughly 60% of banking system assets.

*We expect mortgage delinquencies for these banks to remain low in 2016 and 2017. This is premised on a healthy labour market and strong household balance sheets.*

*As interest rates rise, we expect the housing NPL ratio to inch up by 0.3pp, to about 0.9% by end-2016, and 0.1pp to 1% by end-2017.*

**Mortgage Lending**



Source: Fitch, Department of Statistics Singapore

**Mortgage Lending: Anaemic Growth Expected**

Macro-prudential policies have taken the heat off the property market by curbing speculative activity.

*We expect future mortgage lending to be driven by owner-occupied home purchases. Growth momentum will be constrained by a soft economy and slower immigrant inflow. As such, Fitch expects housing loan growth of 2%-3% in 2016-2017.*

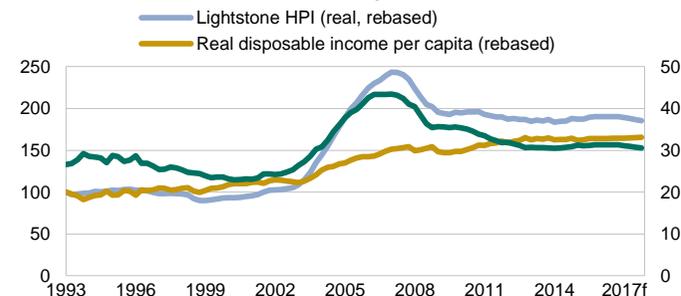
**Prepayments: Remain Low**

Market data on prepayments is not readily available as there has been no Singapore RMBS issuance to date and Singapore's inaugural covered bond was only issued in August 2015.

*Recent prepayments in Singapore have been low. We do not expect the heavier interest burden, brought by higher mortgage rates, to affect this overall trend. Fitch estimates the prepayment ratio to remain in the region of 10%-15% in 2016 and 2017, consistent with recent trends.*

 **South Africa**

**House Prices and Affordability**



Source: Fitch, SARB (South African Reserve Bank), Lightstone

**House Prices: Appreciation to Slow Further**

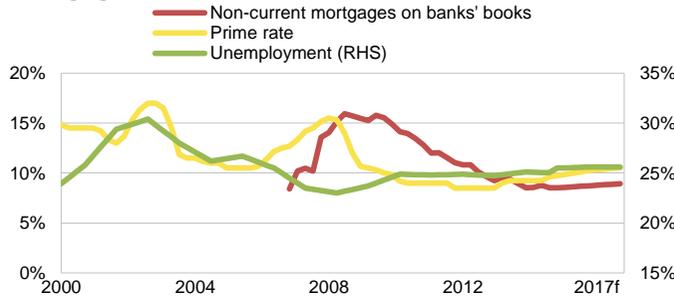
South African observers are divided as to whether housing appreciation accelerated or decelerated in 2015. The Lightstone index shows appreciation gaining pace, while the growth of the ABSA index slowed significantly. The consensus nonetheless seems to be for housing appreciation about equivalent to consumer price inflation (which we forecast at 4.8% for 2015). The decline in real disposable income per capita since 2013, which is constraining housing affordability, will limit any further appreciation in real terms. The weak economic outlook, energy supply constraints and unfavourable commodity markets (which contribute 47% of the country's current external receipts) create further headwinds. Finally, signals of rising interest rates may influence home buyers' expectations and thus the pricing of residential properties.

*Fitch expects real house prices to remain stable in 2016, and to decline by about 3% in 2017. This is driven by weak growth prospects in the economy and household incomes, and our expectation of further monetary tightening by the SARB. We nonetheless still expect housing to appreciate in nominal terms in both 2016 and 2017, by 6% and 4% respectively.*

**Affordability: Pressure from Rising Interest Rates**

*Given recent trends and poor economic prospects, we expect real household disposable income to decline slightly in 2016 and 2017, but by less than real house prices. Housing affordability will reduce in our view, under the effect of rising interest rates. We expect interest rates to rise, such that instalments on a typical mortgage loan increase by 5% to 10% by the end of 2016.*

**Mortgage Rates and Arrears**



Source: Fitch, National Credit Regulator, SARB (South African Reserve Bank)

**Mortgage Rates: Increases Expected**

South African mortgages carry a floating rate linked to either Jibar or the Prime rate (a lending rate defined by banks at a historically stable spread over policy rates). The SARB has already raised the base policy rate by 125bp since January 2014, to 6.25%, in an attempt to meet its inflation target. In spite of this policy action, the rand has depreciated significantly since the start of 2015; this is likely to have been triggered, in part, by anticipation of rate rises by the US Federal Reserve. Meanwhile, inflation remains elevated, despite low oil prices.

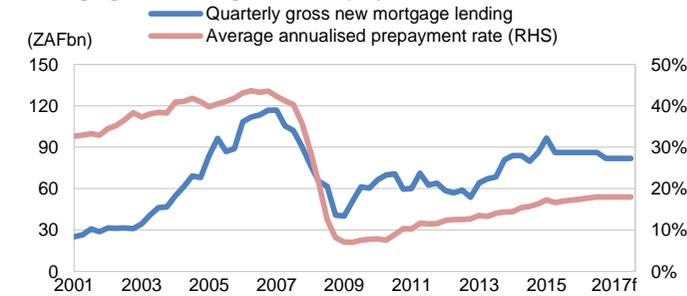
*Fitch expects a further gradual tightening in monetary policy by the SARB to control inflation within target and head off the pressure of anticipated rate rises in the US. We expect policy rates to average 6.8% during 2016.*

**Mortgage Performance: A Turning Point**

Mortgage performance remained broadly stable in 2015; however, 2016 may well see a turning point in the long-term trend of improving performance since the crisis, as interest rates are set to rise. Rising rates, from a fairly high starting level, should have a relatively limited effect on affordability and performance. Lenders' affordability assessments currently assume rises in interest rates by 1%-2%. Nonetheless, the impact on the solvency of lower income households is a concern.

*Fitch expects national mortgage delinquencies - as reported by the National Credit Regulator - to start rising, as rate rises hamper the ability to pay for low income borrowers. Job losses in key sectors such as mining might also affect performance.*

**Mortgage Lending and Prepayments**



Source: Fitch, SARB (South African Reserve Bank)

**Mortgage Lending: Set to Slow Down**

According to the SARB, residential gross new mortgage lending has continued to accelerate, against our expectations in last year's outlook. New lending in the year to September 2015 was up 7.6% over the previous year. This is broadly in line with nominal housing appreciation and the modest yoy rise we have observed in the number of transactions. We still believe, however, that new lending is set to slow, as housing appreciation weakens. We would also expect a rise in interest rates to reduce both the liquidity of the housing market and lending volumes. The enactment in September 2015 of the Affordability Assessment Regulations — which set forth requirements for the documentation of applicants' income and assumptions on certain minimum living expenses — might also contribute to a reduction in lending through higher lending standards.

*Fitch expects mortgage lending to stabilise in 2016 and go into reverse in 2017; although this would, to a large extent, depend on the evolution of interest rates.*

**Prepayments: Increase Expected to Continue**

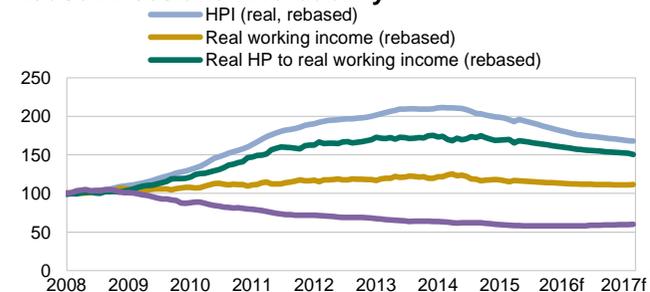
Prepayments have been rising since 2009. The above chart reflects both un-scheduled and scheduled repayments, gross of any re-advance or further advance. The impact of rising interest rates on prepayments is, in our view, two-fold: while incentivising borrowers with spare capacity to prepay, it will ultimately reduce the liquidity of the housing market.

*Fitch expects the 12m average overall market payment rate to increase from 17% currently to 18% by end-2016, and to stabilise in 2017.*



**Brazil**

**House Prices and Affordability**



Sources: Fitch, Fipe (Fundacao Instituto de Pesquisas Economicas), Ameco, BCB (Banco Central Do Brasil)

**House Prices: Nominal Decline Expected in 2016**

Home prices were weighed down in 2015 by a worse than anticipated economic recession; real household income decreased, unemployment rose, monetary policy tightened and mortgage lending reduced. Correspondingly, the average nominal house price increased by just 0.9% in the year until November, while inflation was 9.6%, implying a real house price decline of 8.7%. However, low rental yields indicate that houses are still too expensive.

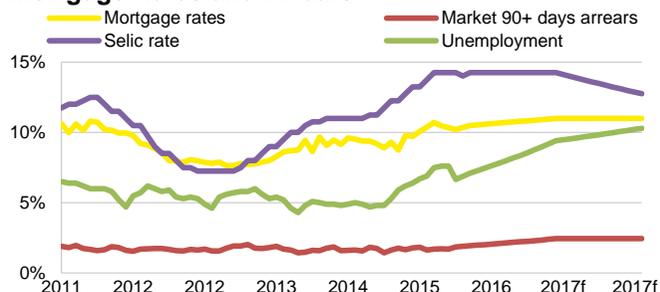
We expect average house prices to continue to decline in 2016, by around 10% in real terms. Further real declines are probable in 2017, albeit at a lower rate. This follows Fitch's forecasts of tight monetary policy in 2016, with some relaxation in 2017, a real GDP contraction by 2.5% in 2016, with a modest recovery in 2017, and further increases in unemployment. These factors will likely lead to continued net withdrawals of savings and hence restricted availability of credit. Considerable price declines are expected to occur in most regions, including Rio de Janeiro, which saw one of the largest real price decreases until November 2015 (9.8%). Notably, the city still has the highest house prices in Brazil and is exposed to the ailing oil industry.

**Affordability: Improvement by 2017**

Average income-adjusted home prices reduced only slightly in 2015, due to slow income growth, while loans have become more expensive and banks more selective. Consequently, affordability has tightened further. One of the few exceptions is Brasilia, which has experienced a fall in average real prices of more than 20% since 2011.

The projected house price declines in 2016 and 2017, together with an expected macroeconomic stabilisation and some pick up in lending in 2017, should lead to improved overall affordability in the medium term.

**Mortgage Rates and Arrears**



Source: Fitch, BCB (Banco Central Do Brasil)

**Mortgage Rates: Further Increase Expected**

The continued increase of the Selic benchmark rate to 14.25%, a level last seen in 2006, together with reduced availability of cheap savings deposits (capped at 6%-8% and the main funding source for unsubsidised mortgages), has led to higher mortgage rates, although increases have been relatively moderate so far. Mortgage rates (about 10%-12%) are now significantly below the benchmark rate.

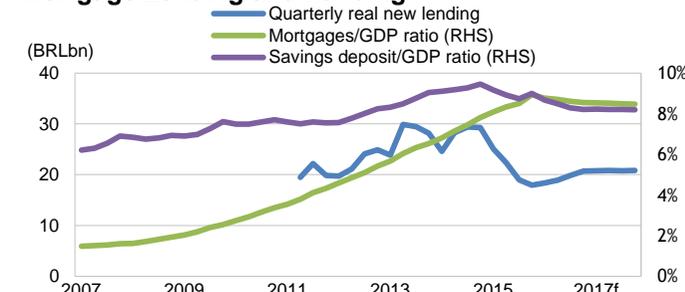
Fitch expects mortgage rates to increase only slightly in 2016 and to stabilise in 2017, helped by a flat benchmark rate in 2016 (which is expected to decline early 2017). The gap between mortgage rates and the Selic rate should not fully close because of competition between banks for good customers, and the availability of savings deposits at some of the larger banks. Rather than significantly increase rates, leading banks will continue to restrict lending to the best customers. However, rates could increase faster in the medium term, if savings do not start to recover in 2017 and market interest rates remain at high levels.

**Mortgage Performance: Expected to Remain Stable**

Most mortgages are largely fixed rate, with constant principal amortisation. Inflation rates of 6-10% in recent years and real-income increases until 2014 have led to declines in DTI ratios for existing loans. In addition, mortgages do not have particularly risky features. Static delinquency data for CEF's (the leading lender) vintages since 2007 show cumulative 180+ days arrears below 2%. Market 3m+ arrears have varied around 1.5 and 2% in recent years, partly attributable to lending growth.

Overall, favourable loan characteristics are expected to contribute to resilient mortgage performance. Dynamic delinquencies for the whole market should increase somewhat because of reduced new lending.

**Mortgage Lending and Funding**



Source: Fitch, BCB (Banco Central Do Brasil)

**Mortgage Lending: Further Declines Probable**

New mortgage lending began to decline notably in May. In the year to September, the nominal decline was nearly 18%, in real terms over 24%. Record net outflows of savings in 2015 have been the main driving force. The reduced availability of cheap deposit funding has particularly hurt the leading lender CEF (it traditionally holds a 67%-69% market share); it was forced to sharply reduce LTV limits for standard used properties to 50%, from 80%. Other banks have followed this trend and become more selective in their choice of borrowers, although their LTV limits remain largely unchanged.

New lending is expected to remain depressed in 2016 and to stabilise in real terms only from 2017. This is predicated on the assumption that net outflows of savings stop by 2017.

Mortgage lending volumes may continue to fall, if lenders need to rely on market-based funding sources in a high interest rate environment.

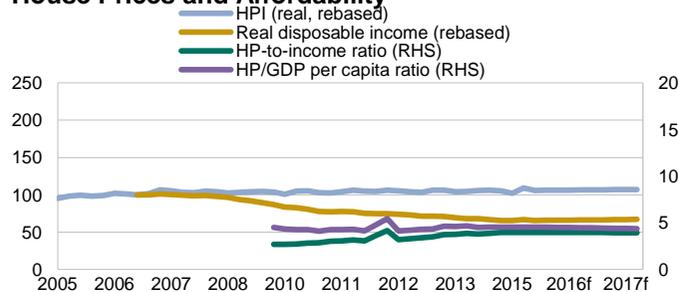
**Prepayments: Some Decline Expected for CEF RMBS**

In the context of Brazil's economic recession and increased mortgage rates, prepayments have fallen somewhat in 2015, despite being supported by nominal income growth of 2.8% in the year to October and the lack of prepayment penalties. Fitch has observed average prepayment rates of around 10% for securitised CEF portfolios. Highly seasoned loans show higher rates.

Fitch expects that for its rated RMBS, prepayments will decrease by about 2% in 2016. The weak economy, coupled with increasing mortgage rates, will negatively impact prepayments. On the other hand, inflation is expected to remain relatively high and thus reduce the real value of future loan installments.

 Mexico

**House Prices and Affordability**



Source: Fitch, BIS (Bank of International Settlements), INEGI (Instituto Nacional de Estadistic y Geografia)

**House Prices: Largely Stable**

Housing appreciation remained in line with general inflation in 2015, keeping real prices fairly stable. In 2Q15, prices accelerated 3.7% above annual real appreciation, due to the higher production costs faced by homebuilders on the back of foreign exchange volatility. However, Fitch considers this a temporary concern.

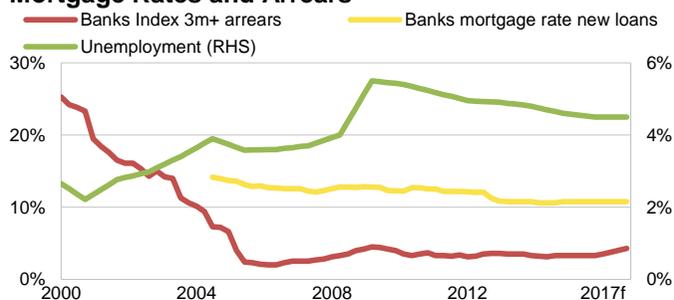
A stable macro environment prevails in Mexico and supply/demand fundamentals should drive housing appreciation of around 4% over the coming years. The workforce grew 9.4% over the last year according to the Mexican Social Security Institute. Nominal household income has been growing since 2012, after faltering in the post-crisis years. Notwithstanding, higher income taxes have prevented real incomes to reach pre-crisis levels. Government agencies and banks continue to represent the main origination channels to sustain credit volumes. According to CONAVI (National Housing Commission) annual loan growth for house acquisition purposes reached 13.1% in 2Q15 (7.9% for construction during 2Q15).

**Affordability: Assisted by Recent Loan Product Changes**

The automatic annual adjustment of the minimum wage is a fundamental element used to support stability in the price-to-income ratio. Also, low interest rates and DTI ratios (at 25%-30% of gross borrower income) continue to support mortgage affordability.

*Fitch considers the new mandates of INFONAVIT and FOVISSSTE (the two largest government agencies, focused on federal house acquisition policies) to originate mortgages denominated in Mexican pesos will contribute to higher affordability; this loan product should be more attractive than inflation-linked mortgages. Fitch views the cap of 25% of the DTI ratio by these agencies as prudent.*

**Mortgage Rates and Arrears**



Source: Fitch, Banxico, INEGI (Instituto Nacional de Estadistic y Geografia)

**Mortgage Rates: Resilient to Expected Market Rate Increases**

Interest rates for mortgages originated by banks decreased 15bp to 10.6% at end-3Q15. This trend is consistent with recent performance, that saw interest rates fall to their lowest historical level. Traditionally, mortgage loans carry a fixed interest rate for the life of the loan.

*Fitch expects gross margins in this loan product to remain positive, as banks usually finance mortgages via customer deposits. Therefore, expected increases on market interest rates should have a moderate impact on this lending product and its performance.*

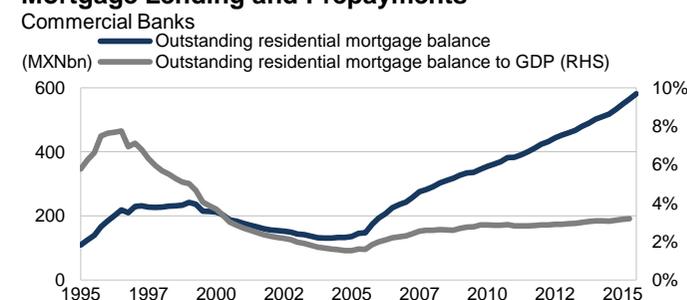
**Mortgage Performance: Stable at Banks/Agencies; Weak at NBFIs**

Mortgage performance varies by segment. Government agencies and banks have maintained strong performance, with banks showing controlled delinquencies below 5%; government agencies' RMBS show consistent overcollateralisation growth. Non-bank lenders remain stressed, due to lingering default resolutions and drawn out recovery processes.

*For 2016, Fitch does not expect market-wide arrears to substantially change from current levels, as portfolios are reasonably seasoned and the payroll deduction mechanism for collections continues to support consistent borrower payments (for INFONAVIT and FOVISSSTE). Unemployment is expected to remain stable at around 4.5%. The mortgage asset quality of banks is good, as borrowers belong to the middle- to high-income sector and loans de-lever steadily.*

*Fitch expects non-bank asset performance to remain stressed. Late delinquencies face a lengthy recovery process, forcing servicers to be cost efficient in the workout process. The effectiveness of mortgage insurance and the management of real-estate-owned portfolios will be key to the mitigation of losses.*

**Mortgage Lending and Prepayments**



Source: Fitch, Banxico, INEGI (Instituto Nacional de Estadistic y Geografia)

**Mortgage Lending: Consistent Growth Expected**

Mortgage loans are an important component of commercial banks' balance sheets and profitability structures. According to data from CNBV (National Banking and Securities Commission), these loans accounted for approximately 19.8% of the total lending portfolio as of 3Q15. Since the financial crisis, the market has entered a phase of stability, with consistent loan terms and pricing and steady but moderate loan growth.

*Fitch believes the availability of mortgage credit will remain stable over the foreseeable future. Low, albeit gradually increasing, interest rates, coupled with the importance of mortgage lending to commercial banks and ongoing government agency housing programmes point to a sustained flow of mortgage financing. Employment and disposable income will support a stable demand for house purchases.*

**Prepayment Rates: Stable**

Interest rates for mortgages have been declining over recent years and are likely to have now bottomed out. Market rates are expected to increase moderately; therefore, Fitch estimates constant prepayment rates (CPR) will remain stable. Recently, the CPR has stabilised and Fitch estimates the weighted average annual CPR of securitised mortgage loans among rated RMBS transactions was 10.0% for 2015.

*Fitch believes that mortgage interest rates may have limited room to continue decreasing; as such, reduced mortgage transfer costs and the high seasoning of existing securitised loans should sustain prepayments rates.*

Macro Indicators

|                  | Country   | Sovereign Environment |                  |                              | Unemployment (%) |       |       | GDP Growth (%) |       |       | Short Term Rates (%) |       |       | Overall Macro Evaluation |                              |
|------------------|---|-----------------------|------------------|------------------------------|------------------|-------|-------|----------------|-------|-------|----------------------|-------|-------|--------------------------|------------------------------|
|                  |   | IDR <sup>a</sup>      | BSI <sup>b</sup> | MPI <sup>c</sup> (last year) | 2015e            | 2016f | 2017f | 2015e          | 2016f | 2017f | 2015e                | 2016f | 2017f | Outlook <sup>d</sup>     | Change vs. 2015 <sup>e</sup> |
| North America    | USA    | AAA                   | a                | 1 (1)                        | 5.0              | 4.8   | 4.9   | 2.5            | 2.5   | 2.3   | 0.3                  | 0.9   | 1.6   | Positive                 | ▶                            |
|                  | CAN    | AAA                   | aa               | 1 (1)                        | 6.8              | 6.7   | 6.5   | 1.0            | 2.0   | 2.2   | 0.8                  | 1.0   | 1.8   | Stable/Positive          | ▼                            |
| Europe           | UK     | AA+                   | a                | 1 (1)                        | 5.4              | 5.3   | 5.2   | 2.5            | 2.3   | 2.1   | 0.5                  | 1.0   | 1.7   | Positive                 | ▶                            |
|                  | GER    | AAA                   | a                | 1 (1)                        | 4.7              | 4.6   | 4.6   | 1.5            | 1.9   | 1.9   | 0.1                  | 0.1   | 0.1   | Positive                 | ▶                            |
|                  | NLD    | AAA                   | a                | 1 (1)                        | 7.0              | 6.9   | 6.7   | 1.9            | 1.7   | 1.7   | 0.1                  | 0.1   | 0.1   | Stable/Positive          | ▶                            |
|                  | FRA    | AA                    | a                | 1 (1)                        | 10.5             | 10.2  | 9.9   | 1.1            | 1.5   | 1.5   | 0.1                  | 0.1   | 0.1   | Stable/Negative          | ▼                            |
|                  | BEL    | AA                    | a                | 1 (1)                        | 8.7              | 8.4   | 8.3   | 1.2            | 1.5   | 1.6   | 0.1                  | 0.1   | 0.1   | Stable/Negative          | ▼                            |
|                  | DEN    | AAA                   | a                | 1 (1)                        | 6.2              | 6.1   | 6.0   | 1.7            | 2.1   | 2.2   | 0.0                  | 0.0   | 0.1   | Stable/Positive          | ▶                            |
|                  | NOR    | AAA                   | a                | 1 (2)                        | 4.3              | 4.5   | 4.3   | 1.3            | 1.6   | 2.3   | 1.0                  | 0.8   | 0.8   | Stable                   | ▶                            |
|                  | IRL    | A-                    | bb               | 1 (1)                        | 9.8              | 9.0   | 8.5   | 5.9            | 4.1   | 3.2   | 0.1                  | 0.1   | 0.1   | Positive                 | ▲                            |
|                  | ESP   | BBB+                  | bbb              | 1 (1)                        | 22.5             | 21.0  | 20.0  | 3.1            | 2.5   | 2.2   | 0.1                  | 0.1   | 0.1   | Stable/Positive          | ▲                            |
|                  | ITA  | BBB+                  | bbb              | 1 (1)                        | 12.2             | 11.6  | 11.2  | 0.7            | 1.3   | 1.5   | 0.1                  | 0.1   | 0.1   | Stable/Negative          | ▶                            |
|                  | PRT  | BB+                   | bb               | 1 (1)                        | 12.4             | 11.5  | 10.8  | 1.5            | 1.6   | 1.5   | 0.1                  | 0.1   | 0.1   | Stable/Negative          | ▶                            |
|                  | GRC  | CCC                   | f                | 3 (2)                        | 25.7             | 26.0  | 24.0  | -0.3           | -1.5  | 0.5   | 0.1                  | 0.1   | 0.1   | Negative                 | ▶                            |
| Asia Pacific     | AUS  | AAA                   | aa               | 1 (1)                        | 6.1              | 6.1   | 6.0   | 2.3            | 2.7   | 3.0   | 2.1                  | 1.8   | 2.1   | Stable/Positive          | ▼                            |
|                  | JPN  | A                     | a                | 1 (1)                        | 3.4              | 3.2   | 3.1   | 0.6            | 1.1   | 0.4   | 0.1                  | 0.1   | 0.1   | Stable/Positive          | ▼                            |
|                  | KOR  | AA-                   | bbb              | 1 (1)                        | 3.6              | 3.5   | 3.3   | 2.5            | 2.9   | 3.2   | 1.6                  | 1.5   | 1.5   | Stable                   | ▼                            |
|                  | NZL  | AA                    | a                | 1 (1)                        | 6.0              | 6.3   | 6.1   | 2.3            | 2.5   | 2.6   | 3.1                  | 2.6   | 2.8   | Stable/Positive          | ▼                            |
|                  | SG   | AAA                   | aa               | 2 (2)                        | 2.1              | 2.2   | 2.2   | 2.0            | 2.1   | 2.1   | 0.2                  | 0.7   | 1.4   | Positive                 | ▶                            |
| Emerging Markets | ZAF  | BBB-                  | bbb              | 1 (1)                        | 25.5             | 25.6  | 25.6  | 1.4            | 1.7   | 2.4   | 6.3                  | 6.8   | 7.0   | Stable/Negative          | ▶                            |
|                  | BRA  | BBB-                  | bb               | 3 (3)                        | 7.1              | 9.4   | 10.3  | -3.7           | -2.5  | 1.2   | 14.3                 | 14.3  | 12.8  | Negative                 | ▼                            |
|                  | MEX  | BBB+                  | bbb              | 1 (1)                        | 4.6              | 4.5   | 4.5   | 2.4            | 2.8   | 3.5   | 3.0                  | 3.8   | 4.3   | Stable/Negative          | ▲                            |

Legend

<sup>a</sup> IDR: Sovereign Issuer Default Rating

<sup>b</sup> The Bank System Indicator (BSI) is a system weighted average of bank standalone strength as measured by bank Viability Ratings

<sup>c</sup> With the Macro-Prudential Indicator (MPI) Fitch systematically monitors macro-prudential risks on a scale from '1' (low) to '3' (high)

<sup>d</sup> Outlook on a 5-notch scale (Positive, Stable/Positive, Stable, Stable/Negative, Negative)

<sup>e</sup> Change of Outlook evaluation compared with evaluation a year ago

Source: Fitch

Appendix 1: Related Research, Criteria and Analyst Contact Information

| Country            | Analysts  | Contacts  | Related Research and Criteria for Country  |
|--------------------|---|---|--|
| <b>USA</b>         | Grant Bailey  | +1 212 908 0544<br><a href="mailto:grant.bailey@fitchratings.com">grant.bailey@fitchratings.com</a>   | <i>U.S. RMBS Loan Loss Model Criteria, (August 2015)</i><br><i>U.S. RMBS Sustainable Home Price Report (August 2015)</i><br><i>Residential Mortgage Market Index – U.S.A. (April 2015)</i> |
| <b>Canada</b>      | Grant Bailey<br>Suzanne Mistretta   | +1 212 908 0544<br><a href="mailto:grant.bailey@fitchratings.com">grant.bailey@fitchratings.com</a><br>+1 212 908 0639<br><a href="mailto:suzanne.mistretta@fitchratings.com">suzanne.mistretta@fitchratings.com</a>  | <i>Canadian Residential Mortgage Loan Loss Model Criteria, (April 2015)</i>  |
| <b>UK</b>          | Robbie Sargent<br>Shomas Kayani<br>Grace Yeo                                | +44 20 3530 1404<br><a href="mailto:robbie.sargent@fitchratings.com">robbie.sargent@fitchratings.com</a><br>+44 20 3530 1006<br><a href="mailto:shomas.kayani@fitchratings.com">shomas.kayani@fitchratings.com</a><br>+44 20 3530 1486<br><a href="mailto:grace.yeo@fitchratings.com">grace.yeo@fitchratings.com</a>  | <i>Criteria Addendum: UK (December 2015)</i><br><i>Mortgage Market Index – United Kingdom (2Q 2015)</i>  |
| <b>Germany</b>     | Dr.Georgy Kharlamov<br>Eberhard Hackel<br>Mathias Pleissner<br>Adrian Pfaff | +49 69 768076 263<br><a href="mailto:georgy.kharlamov@fitchratings.com">georgy.kharlamov@fitchratings.com</a><br>+49 69 768076 117<br><a href="mailto:eberhard.hackel@fitchratings.com">eberhard.hackel@fitchratings.com</a><br>+49 69 768076 133<br><a href="mailto:mathias.pleissner@fitchratings.com">mathias.pleissner@fitchratings.com</a><br>+49 69 768 076 259<br><a href="mailto:adrian.pfaff@fitchratings.com">adrian.pfaff@fitchratings.com</a> | <i>Criteria Addendum – Germany (August 2015)</i>   |
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