Global Housing and Mortgage Outlook – 2017

Home Price Rises to Continue but at Slower Pace

Strong Home Price Prospects: The ideal conditions for rapid home price rises exist in several markets, with the combination of extremely low borrowing costs, readily available credit, steady economic growth and limited housing supply. Fitch Ratings expects this situation to remain in 2017 and this is reflected in the Stable or Stable/Positive outlooks on the housing and mortgage markets for 19 of the 22 countries in this report.

Slowdown Overdue in Hottest Markets: The rate of price increases should slow as home purchases become increasingly expensive relative to household income and rents. Unsustainably rapid price rises in some countries (eg New Zealand, Norway, Australia, Canada) are expected to moderate in 2017.

US Recovers; New Risks Emerge: National US home prices and delinquencies are back at 2006 levels, a decade after the subprime crisis began. Loans originated post-crisis maintain their strong performance and prices are supported by fundamentals, although some submarkets are overheated. The appetite to lend to weaker borrowers has also recovered and for the first time, non-bank lenders now account for the majority of loans originated.

China Managing Market Forces: Home prices in China’s Tier 1 cities rose by 25% in 2016 and Fitch predicts the outstanding mortgage balance in 2017 will exceed three-times the 2012 volume. Chinese authorities directly control many aspects of housing and mortgage markets and Fitch expects 2017 price rises of only 2.5% in Tier 1 cities, partly in response to tougher rules on home purchases and minimum loan deposits.

Fundamentals Overpower Regulators: Macro-prudential intervention in the operation of housing and mortgage markets is widespread. Actions to dampen unsustainably rapid price rises, such as mortgage lending restrictions, have proven relatively ineffective against a fundamental excess demand for home purchases. Where intervention has successfully cut demand, it is typically first-time home buyers who have become increasingly excluded.

Fading Legacy of European Crisis: Home prices will stabilise in Italy after years of price declines, leaving Greece as the only European country with falling prices. Double-digit mortgage lending growth is expected in the Netherlands and the southern European periphery, which is recovering from the recessionary trough. Brexit-related uncertainty and stretched home purchase affordability will halt UK home price rises in 2017.

Global Housing and Mortgage Outlook - 2017

Position in Home Price Cycle and Typical Market Characteristics

Source: Fitch

Inside This Report
Market Indicators........................................ 2
Home Prices; Some Growth Rates Unsustainable........................................ 3
Mortgage Arrears; Fading Legacy of Financial Crisis........................................ 4
Mortgage Lending; Mixed, US to See Substantial Drop................................. 5
Home Purchases; Some Markets Clearly Overheated................................. 6
Regional Disparities; Price Gaps Widen But Cannot Widen Indefinitely ........................ 7
Housing Supply; Over-construction Not Visible ........................................... 8
Household Debt; Expanding Quickly in APAC.............................................. 9
Regulatory Environment; Many Initiatives, Effectiveness Uncertain .... 10
Country Outlooks............................................. 11
Macroeconomic Indicators.............................................. 33

See Appendix for related research reports and RMBS criteria

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Full analyst list in Appendix

www.fitchratings.com 16 February 2017
### Market Indicators

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### Legend
- Index of Tier 1 cities: Beijing, Shanghai, Guangzhou and Shenzhen
- Fitch-rated RMBS three-months plus arrears including defaults
- Market-wide or largest lender arrears / impaired loan ratio (definitions vary)
- Measures vary: [Canada, Korea, China, Singapore]: % of previous year’s outstanding mortgage balance; [Norway]: % of previous year’s gross household debt
- Forecast ranges from: ▲ (increase) ▼ (stable), ▼ (decline).
- Outlook on a five-notch scale (Positive, Stable/Positive, Stable, Stable/Negative, Negative)
- Change of outlook evaluation is compared with outlook from a year ago

Source: Fitch

Global Housing and Mortgage Outlook – 2017
February 2017
Home Price Outlook: Some Growth Rates Unsustainable

Prices Rose Faster Than Expected: Home price increases in 2016 generally exceeded our forecasts; in Australia, New Zealand and Canada they have been far higher than anticipated, as low interest rates outweighed home purchase affordability constraints. Even where prices are now out of line with income, continued low rates and economic growth mean we expect more moderate rises rather than price declines.

Hottest Markets to Slow Sharply: We forecast home prices to rise in 19 of the 22 countries covered, but rates of increase will slow almost everywhere. Stable or improving economic growth and employment will support prices in addition to the impetus from low interest rates. Some markets will experience a pronounced and overdue deceleration, with no double-digit price rises expected in 2017. Prices in China’s Tier 1 cities have surged upwards by 50% since 2014, but the future pace of increase is expected to slow to just 2.5%pa.

US Back at Pre-Crunch Prices: US home prices have reached their highest level since 2006 and are up more than 30% from their low in 2012. Some housing markets in the West and major cities appear to have overheated, but overall, home prices are well supported by demographic and economic trends.

Vancouver, Toronto Prices Unsustainable: Canadian home prices are not supported by underlying fundamentals and the risk of a price fall in over-valued markets has risen. Local and federal government efforts to tighten loan eligibility and restrict certain buyers should slow price rises to around 3% nationwide in 2017, from 12% last year.

Norwegian Growth Rate Drop: 2016’s 10.1% rise in Norwegian home prices was mostly driven by Oslo, while prices fell in the oil-intensive region of Rogaland. We expect national price rises to dip to 6% this year, as mortgage rates are likely to increase.

Brexit Puts Brakes on UK: Brexit-related uncertainty and stretched purchase affordability will halt UK home price rises in 2017, although a supply shortage will maintain some support. Prices will rise by 1%-4% in other core European markets. In the eurozone periphery, non-resident demand accounts for more than 10% of transactions and is supporting Spain’s recovery. Improving household disposable income and limited well-located housing supply will sustain Ireland’s price recovery. Prices will stabilise in Italy after years of value declines, leaving Greece as the only European country with falling prices.

Australia, NZ Markets Cool: Prices will rise much more slowly in Australia and New Zealand this year. Price increases have shifted from Auckland to other regional centres. Population growth will support Sydney and Melbourne prices, but rises in other Australian state capitals will be more limited. New supply and slowing immigration will weigh on prices in Singapore, while the 2020 Olympics are boosting Tokyo prices.
Mortgage Arrears Outlook: Fading Legacy of Financial Crisis

Proportion of Mortgage Loans in Late Stage Arrears

Price Rises Boost Performance: The negative equity positions created in the financial crisis in markets such as the US and Ireland have increasingly been reversed by market price rises. This has increased the incentives for borrowers to make their mortgage payments and stave off enforcement proceedings. The volume of Irish loans in arrears fell by 30% in 2Q16 alone.

Record Low Debt Service Costs: Extremely low policy interest rates around the globe have minimised mortgage debt service payments for borrowers with floating-rate loans and triggered waves of refinancing in markets with fixed-rate mortgages. Competition between lenders has intensified in some markets, leading to lower margins and making periodic payments even more affordable.

Southern European Delinquencies Plateau: The arrears rate in Spanish RMBS has been flat for three years; fewer borrowers are entering arrears, but performing borrowers are also refinancing so the delinquency ratio remains relatively constant. The Italian mortgage recovery process is prolonged, so the stock of non-performing loans remains high, although it is not expected to increase much further.

Extremely Strong Recent Vintages: Tight loan origination standards following the financial crisis have resulted in mortgages with extremely strong subsequent performance. There is a stark contrast in performance between US loans originated pre- and post-2008, for example. There are currently no signs of performance deterioration resulting from more relaxed underwriting practices, even where competition amongst lenders has stepped up.

Effectiveness of Enforcement Influences Delinquencies: Arrears rates are higher in locations where the mortgage enforcement process is uncertain and slow. Where borrowers face losing their homes in the near future they are more likely to keep up with mortgage payments and the backlog of defaulted loans will be worked-out more swiftly. The Irish arrears rate soared when it was clear that borrowers were unlikely to be evicted for missing mortgage payments. The stock of delinquent loans in those states of the US that require court approval for foreclosure is three-times higher than for those that do not.

Proactive Servicing Strategies: Earlier detection of borrower distress and more negotiated settlements between lenders and borrowers have cut losses on mortgage lending in Netherlands and Spain.

Minimal Effects of Unemployment: Rising unemployment is often a precursor to deteriorating mortgage performance, but Fitch expects unemployment to be stable or fall by the end of 2018 for 16 of the 22 countries covered. The only country with a forecast increase in unemployment of more than 0.4pp over the next two years is Brazil (at 0.7pp) and even that is a slower pace of increase than in recent years.
Mortgage Lending Outlook: Mixed, US to See Substantial Drop

**Mortgage Lending Still Rising**: Gross new mortgage lending will rise in 2017 in a majority (16) of the markets covered, but rates of increase will generally be lower or unchanged from 2016. Refinancing activity remains a key driver of lending volumes, with existing borrowers adding leverage and seeking more favourable loan conditions. The tighter regulation of loan origination parameters is restricting mortgage access in several markets. This is suppressing buyer demand where home purchase affordability is stretched.

**US Shift Towards Non-banks**: Mortgage rates rose following Donald Trump’s election victory and the Fed’s tightening of policy interest rates. Less refinancing will depress US origination volumes in 2017; we forecast a 15% fall in gross new lending. Non-bank lenders accounted for the majority of loans originated in the US for the first time in 3Q16, reflecting their higher risk appetite compared with banks.

**Chinese Mortgages Growing Fast**: New mortgage lending surged by 35% yoy in 2016. Tighter home purchase qualifications and deposit requirements will moderate origination volumes in 2017, but we anticipate another 20% increase. Fitch expects the outstanding mortgage balance to reach three-times 2012 levels during 2017.

**Core Europe Mixed**: The Netherlands will record the strongest growth in new lending among European core markets (+10%), with new non-bank lenders creating competition for borrowers. UK volumes will be flat, with Brexit uncertainty and changes to the buy-to-let market offsetting a rise in refinancing activity. New lending will fall again in France, Belgium and Denmark following the previous refinancing waves.

**Eurozone Periphery Still Recovering**: Mortgage lending will rise in the eurozone periphery, although volumes will remain below pre-crisis levels. Only Ireland will record below double-digit growth, due to tighter lending rules and a shortage of well-located homes for sale. Strong new lending growth in Portugal remains insufficient to offset borrower repayments on existing mortgages. Greek lenders face scarce and expensive liquidity, but volumes will grow after a sharp contraction last year.

**Canadian Eligibility Rules Weigh on Lending**: Eligibility requirements for CMHC-insured mortgages have tightened and may become applicable to non-CMHC insured loans. This should temper lending to borrowers who qualify for loans, primarily due to the low periodic payments required.

**APAC Lending Growth Mostly Slower**: We forecast unchanged mortgage lending growth rates for Singapore and Korea, but 2.5pp (New Zealand) to 10pp slower growth (Japan) elsewhere in APAC. Australian lending has been affected by reduced transaction volumes, higher bank capital requirements and tougher borrower affordability tests.
Home Purchase: Some Markets Clearly Overheated

**Change in Price-to-Income and Price-to-Rent Ratios**
Change from 2010 to Latest Quarter Available in 2016

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**Home Purchases Relatively More Expensive**

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50% of Markets Getting More Expensive: Since 2010 home purchases have become more expensive in nine of the 18 markets covered, on both price-to-rent and price-to-income metrics. High prices relative to income and rent have been fuelled in many cases by record low interest rates and relatively robust economic performance. Home purchase affordability has decoupled from price, due to the exceptionally low costs of borrowing.

New Zealand Increasingly Expensive: Since 2010, the largest increase in the cost of home purchases (relative to income and the cost of renting) has been in New Zealand, on the back of low housing supply, population growth and demand fuelled by low interest rates. Home price rises have been concentrated in the major population centre of Auckland and more recently in other regional centres.

Canada, UK and Australia Most Expensive: Over the last six years, these markets have seen the greatest rise in the cost of home purchases, relative to income and the cost of renting. Price-to-income ratios in the major population centres of Vancouver, London and Sydney have decoupled from the rest of the country, partly driven by non-resident demand. Price-to-rent ratios reflect low interest rates and expected future capital gains, rather than the historic level of income yield.

Europe Generally Less Expensive: The majority of European countries have seen home prices become relatively less expensive since 2010. The fallout from the financial crisis of 2008 has resulted in incomes falling more slowly than home prices in Italy, Spain, Greece, Ireland, Portugal and The Netherlands.

European Exceptions - Germany, Norway, UK: In these countries, home purchases have actually become relatively more expensive, largely because these markets avoided the worst of the financial crisis and have experienced a sustained period of robust economic growth, with prices fuelled by record low interest rates.

US Relative Cost Varies by Region: West Coast prices are becoming most stretched, while the North East remains well below pre-crisis levels. Home purchases remain inexpensive in most areas of the US, relative to historical averages.

Deposit Size Limits Prices: Exceptionally low mortgage rates allow even large loans to be serviced by average income households, but as prices rise, the size of the equity deposit is increasingly limiting affordability of first-time home purchases. This is being exacerbated in several markets by the curtailment of origination of mortgages with high loan-to-value ratios.
Regional Disparities: Price Gaps Widen But Cannot Widen Indefinitely

Huge Regional Price Disparities: Some national home price figures mask large differences in the rates of change between regions within the countries covered. New Zealand has had the largest disparity in price changes over the last four years, with a difference of over 80 percentage points between the increases in home prices in Auckland and those on the West Coast.

Major Centres Rise Fastest: The regions with the fastest home price growth are those with the most buoyant economic conditions. Housing demand has been strongest in those metropolitan cities that have been the engines of economic growth and so provide the best employment prospects, such as Sydney, Vancouver, London and San Francisco.

Asset Price Speculation Concentrated: Property ownership has been considered an attractive investment in this period of low yields. Investors have focused on cities seen as having the greatest economic prospects and potential for future price appreciation. The weight of money from these investment inflows into locations such as London and Vancouver has proven a powerful driver of price rises.

Severity of Decline Uneven: The southern Italian regions have suffered far larger home price declines than more northerly cities. Prices in Calabria are down by over one-fifth in four years, whereas homes in Veneto have largely maintained their values. The employment prospects in the south suffered greatly in the recession, triggering emigration of the footloose population in search of work. Similarly, home prices in the oil-rich Norwegian region of Rogaland have declined since the oil price collapse, while the authorities are introducing measures intended to curb price rises in Oslo.

Rising Demand Outstrips Construction: Housing supply has failed to keep pace with rising demand, particularly in the best locations in the leading metropolitan centres. Often housing construction is constrained in the inner city core by the physical characteristics of the location and the rigidity of the planning/zoning rules.

Brexit to Hit London Hardest: Concerns over the affordability of London’s housing have been exacerbated by uncertainty surrounding the UK’s EU departure. London was previously seen as a safe haven for international property investors and housing demand was boosted by economic growth outstripping other regions. London’s position as an international hub, particularly for the finance industry, could be weakened by Brexit, thus reducing the demand disparity between London and other UK regions.

First Movers Start to Slow: The regions that have experienced the fastest price rises are likely to reach housing affordability limits earlier. Further price rises will begin to be constrained by income growth.

Source: Scenari immobiliari, CBS, Case Shiller, Ekendomsverdi, ONS, Teranet, RP CoreLogic, QV CoreLogic, NBS China,
*Tier 1 Cities: Beijing, Shanghai, Guangzhou and Shenzhen
Housing Supply: Over-construction Not Visible

**Annual Housing Completions per 1000 Citizens**

- **United States of America**
- **Canada**
- **Germany**
- **Denmark**
- **Spain**
- **Ireland**
- **Portugal**
- **Australia**
- **United Kingdom**

**No Signs of Over-construction:** None of the countries covered appears in danger of repeating the housing supply excesses of Ireland and Spain in the boom years before the financial crisis.

**Australian Supply Responding:** Construction in Australia is at an historic high, a normal response to rapid price growth. Population growth is however keeping the ratio of housing completions per 1,000 people at relatively stable levels. Risk comes from a potential policy change or general fall in immigration, which could result in oversupply. The completions figures are country wide, so it is possible that regional pockets of overbuilding will emerge.

**Canada, New Zealand Home Building Slow:** In contrast, Canada and New Zealand’s construction sectors have been slow to respond to rapid price rises and increased demand for housing. While housing completions in New Zealand are running at close to double the lows of 2011, they are still only 60% of their 2004 peak. With construction not increasing significantly and populations growing in both countries, Fitch expects continued price rises in Canada and New Zealand during 2017.

** Peripheral European Construction Hangover:** Construction is virtually at a standstill in countries that experienced the largest price declines, such as Spain, Ireland and Portugal. Completions in each of these peripheral countries, as well as the Netherlands, are running at less than 15% of their peak levels.

**German Population Growth Outstrips Construction:** Germany escaped the worst of the economic downturn, with housing construction barely slowing. However, the German population is forecast to grow by three-quarters of a million people in the five years to end-2018, whereas it fell in the 15 years to end-2012. The pace of housing construction does not usually respond quickly to price signals or population growth expectations and the volume of new completions is not expected to step up markedly as a result of immigration.

**UK Construction Constrained:** Strict zoning restrictions and extended approval processes continue to constrain new housing supply in the economic hotspots of the UK. The pace of completions stepped up by almost 25% in 2015-16 compared to the average of the previous five years, but total completions in the decade to end-2016 were over 12% below those in the decade to end-2002. In contrast, the UK population grew by 1.89m in the decade to end-2002, but by over 4.73m in the decade to end-2016.

**US Construction Recovering:** Homebuilding in the US is expected to be at its strongest level in almost a decade, driven by sustained home price growth in recent years. Notably, a survey by the National Association of Homebuilders (NAHB) reflects an improving outlook for the North East, which has lagged activity in the West in recent years.
Household Debt: Expanding Quickly in APAC

**Australian, Danish Debt Ratios Highest:** The growth in mortgage lending, in line with home price rises, has pushed Australia’s household debt to 123% of GDP. Only Denmark’s ratio is higher, albeit down from the 140% peak of 2009. The fastest increase in the ratio has also been seen in Australia, up by over 11pp over the past two years.

**Increasing APAC Ratios:** The ratios for Korea and New Zealand have also increased in recent periods, although for New Zealand, this measure of household indebtedness is only back to its 2009 peak, which at today’s low interest rates represents less of a debt-service burden.

**Dutch Debt Over 100% of GDP:** Despite drifting lower since 2010, household debt still represents 111% of GDP in the Netherlands. Fitch expects Dutch mortgage lending to expand in 2017, possibly with enough pace to reverse the downwards trend in the ratio.

**European Debt Ratios Falling:** Those European countries with the largest home price declines have seen commensurately large reductions in the stock of debt. The Irish household debt-to-GDP ratio has halved since its peak, falling by a third in the last two years to 58%. Spanish and Portuguese ratios have also improved significantly. Norway is the exception, with an increasing debt-to-GDP ratio that is heading for 100%, up from 68% a decade ago.

**Canada Exceeds US Peak:** The US household debt-to-GDP ratio has fallen back to 79%, a level last seen in 2003. In contrast, the Canadian ratio reached almost 100% in 2016, which exceeds the 2008 US peak. The rate of increase in Canada has been rapid in recent periods, rising over 7pp in the last two years.

**Chinese Debt Growth From Low Base:** The Chinese household debt-to-GDP ratio was below 20% seven years ago, but has grown rapidly to reach 42%. The expansion of private debt is set to continue with the transformation of the Chinese economy, despite the imposition of restrictions on mortgage lending activities.

**Low Debt Levels in Italy:** The only European country covered where household debt represents less than half of GDP is Italy, with a ratio of 42%. Italian consumers have traditionally been cautious about taking on debt and Italian mortgages typically have lower loan-to-value ratios than those of its neighbours, but the country is also associated with a high arrears rate and a substantial stock of non-performing loans.
Regulatory Environment: Many Initiatives, Effectiveness Uncertain

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<tr>
<th>Country</th>
<th>Home Price Position in Cycle</th>
<th>Mortgage Lending</th>
<th>Home Purchase Incentives</th>
<th>Housing Construction</th>
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* Tier 1 cities - Beijing, Shanghai, Guangzhou and Shenzhen

Cyclical Position Determines Policy Intervention: Most of the countries covered are in a phase of rising home prices; hence, the most prevalent initiatives relate to concerns about deteriorating home purchase affordability and lending sustainability.

Lending Conditions Curbed: New or tighter restrictions on lenders originating loans with high loan-to-value or debt-to-income ratios are being imposed, notably in Canada, Ireland and China. The introduction of such limits in New Zealand and Norway had only a short-lived dampening effect on home price rises and we expect similar results with the latest policy actions. Conversely, Brazilian authorities, faced with declining home prices, are encouraging more borrowing by allowing banks to fund mortgage lending more cheaply.

Policy Fighting Market Forces: The fundamental drivers of home price increases in many countries are exceptionally low borrowing costs and a shortage of attractive housing stock. Macro-prudential actions to dampen unsustainably rapid price rises appear relatively ineffective against these market forces. However, modest price falls have been triggered in Singapore, diminishing affordability concerns.

Authorities Will Manage China's Slowdown: Chinese authorities have the advantage of directly controlling many aspects of the housing and mortgage markets; they are therefore more likely to successfully influence market movements to prevent a disorderly correction. Price rises in China's Tier 1 cities (Beijing, Shanghai, Shenzhen and Guangzhou) will drop in 2017 to 2.5% pa from 25% pa, partly in response to tougher rules on home buying and minimum loan deposits.

Enforcement Process Reforms: There is a substantial overhang of non-performing loans in Italy and Greece and policy initiatives have been introduced to improve the effectiveness of mortgage enforcement processes. Italy’s judicial auction system is expected to become faster, by aligning the interests of official valuers with those of lenders. The Greek authorities aim to facilitate the entrance of new loan servicers with international experience.

Overheated Sectors Targeted: Policymakers are attempting to curb demand for property from certain sources to prevent them pushing prices beyond the reach of more typical purchasers. For example, a 15% purchase surcharge has been placed on non-resident buyers in Vancouver, while in the UK, fiscal incentives for buy-to-let investments have been cut and transaction tax on second homes and investment property is now 3% higher than for principal dwellings.

Limited Construction Stimulus: Mexico and France are the only markets covered where recent policy initiatives aim to promote construction of more or different types of property.
**United States**

### Home Prices and Affordability

#### Home Prices: Steady Growth Continues

US home prices are on track to record a 5% nominal gain for the third consecutive year, returning prices to their highest level since 2006 and up more than 30% from their low in 2012. The rate of growth has been uneven, with areas in the Western regions experiencing much more rapid growth than areas in the Northeast. Prices in California, Arizona, Nevada and Washington, for example, have increased over 50% since 2012, while average prices in New York, New Jersey and Massachusetts are up less than half that figure over the same period.

Some housing markets in the West appear to have over-heated. Fitch now estimates prices in Dallas, Phoenix, and San Francisco to be 10-15% overvalued and are increasingly vulnerable to a slowdown or a price correction. Outside of these regional pockets, home prices in the US appear to be on a solid footing and are well-supported by the underlying demographic and economic trends.

#### Affordability: Still Strong

Despite the increase in home prices, US affordability remains very good by historical standards. The price-to-income ratio is at the lowest level in over 25 years and mortgage rates remain near historical lows.

First-time homebuyers have accounted for over 50% of purchase loans since 2009. Many first-time homebuyers are taking advantage of Federal Housing Administration (FHA) insured loans, which allow for lower credit standards and lower down payments. Loans insured by the FHA and Veterans Administration (VA) account for close to 25% of all loans in the US, up from well below 10% prior to 2008, an increase that could add material risk to the US mortgage market if the trend continues.

### Mortgage Rates and Arrears

#### Mortgage Performance: Back to Pre-Crisis Levels

Performance has continued to recover, with delinquencies returning to pre-crisis levels nationally. The reduction in delinquency rates on loans originated prior to 2008 has varied by region, mostly due to differences in foreclosure law. States that require court approval for foreclosure, such as New York and New Jersey, where delinquent borrowers have not made a payment in four years on average, have delinquency rates approximately three times higher than states that do not require court approval, such as California and Arizona. Court approval greatly extends the time it takes to foreclose on a non-performing loan.

Fitch expects the recovery to continue to be driven by strong home price growth, an improving economy and better underwriting as established after the crisis. Performance remains the best on record for loans originated after 2008 that are guaranteed by Fannie Mae and Freddie Mac, as well as those in Private Label Securities (PLS).

### Mortgage Lending: Evolving Composition

Non-bank lenders comprise an increasingly large share of originations and, in 2016, accounted for the majority of loans originated in the US for the first time. Of loans originated by banks, roughly 33% was kept on balance sheet, rather than securitised, the highest figure since 2002. Banks try to grow their lending portfolios and establish relationships with wealthy borrowers, who have loans too large to qualify for government-sponsored securitisations.

Following the election, mortgage rates increased notably, reflecting higher inflation expectations. Rising interest rates and falling refinance volumes will depress mortgage origination volumes further from the USD1.8tn expected in 2016.
Canada

Home Prices and Affordability

- HPI (real, rebased)
- Real disposable income per capita (rebased)
- HP to income per capita ratio (RHS)

Home Prices: Major Markets Overvalued
Low rates and foreign investment continue to fuel price rises in several key markets in 2016. The average home price in Canada increased year-on-year by 12% through October, primarily driven by growth in the Toronto and Vancouver markets, which have increased approximately 16% and 25%, respectively since 2014.

Despite the continued rise, Fitch views current home prices as unsustainable in the long-term and not supported by fundamentals. As a result, there is a heightened risk of a price correction in over-valued markets. With local and federal governments tightening loan eligibility requirements and imposing restrictions on certain buying segments, the pace of home price growth should decelerate.

Affordability: Record Debt Burden
Household debt reached a new high of almost 168% of disposable income in 2Q16 and breached 100% of GDP. This is the first time that household debt has exceeded the size of the Canadian economy and is higher than the UK and US household debt burden. Mortgage debt is the number one contributor to household debt in Canada.

More conservative down payment requirements, tighter underwriting standards, and potential lender risk sharing arrangements should help stabilise the housing market and improve affordability, despite the possibility of higher mortgage costs. The cumulative effect of these changing dynamics on home prices is likely to be negative, but is yet to be determined as these steps are unprecedented.

Mortgage Rates and Arrears

- Market 90+ day arrears
- 5yr mortgage rate (RHS)
- Unemployment (RHS)

Mortgage Performance: Continued Solid Performance Expected
Performance remains stable, with limited delinquencies and losses noted in issuers' portfolios. Three-months plus arrears remained below 0.3% in 2016. While performance is closely tied to home prices (equity in home), employment, and interest rates, Fitch believes that a rise in unemployment may have the most significant impact on mortgage performance; however, trends in government capital spending, as part of the infrastructure spending program, should help counter spending and investment reductions in the energy sector and keep unemployment from rising sharply above current levels.

Fitch expects solid performance to continue as long as unemployment remains low. Borrowers would also be highly sensitive to rising rates, given the current debt burdens, but Fitch believes the risk of a sharp rise in rates is remote. The lower debt service ratios imposed by CMHC for insured mortgages will temper performance declines among borrowers with mortgage applications taken after 17 October 2016.

Mortgage Lending: Loan Volume to Decline but Remain Elevated
Low interest rates have played a significant role in the nearly double digit year-on-year increase in home prices and record levels of mortgage credit. While a rise in interest rates would help to curtail this growth, rates are likely to remain low in the near term. To counter the impact of low borrowing costs, the Canadian government has taken drastic steps to normalize the home price and mortgage growth.

Fitch expects mortgage rates to remain low for 1H17. Any increase in the policy rate should be modest, even assuming the US Fed continues to raise rates. Inflationary expectations are well-anchored around the inflation target of 2% and there is little upward pressure on prices.

Regulatory Environment: Decline in Volume for Riskier Mortgages
The actions announced in 2015 and 2016 that tightened eligibility requirements for both high- and low-ratio mortgages insured by CMHC are in response to the impact of years of low interest rates on the housing and mortgage markets. More specifically, the growth in prices in Vancouver led the provincial government to assess a 15% property transfer tax on properties purchased by non-residents.

Fitch anticipates that OSFI will incorporate CMHC's mortgage stress testing and other eligibility requirements into its B20 guidelines, including specific limits on debt ratios, which would align eligibility requirements for uninsured mortgages with those of the CMHC. Furthermore, the government has also released a consultation on lender risk sharing, to redistribute the risk in housing finance for government-backed insured mortgages.

It is too soon to determine the impact of the new mortgage rules and the risk sharing program has just entered the consultation phase; however, we expect that it will result in fewer loans being made available to marginal borrowers, which could reduce loan growth. That said, we anticipate loan volumes to remain near historical highs as long as interest rates remain low, employment is stable, borrowers are able to qualify under the stricter mortgage rules, and the desire/demand for home ownership remains high.
Home Prices: No Growth This Year

Home prices grew once again in 2016, due to a strong UK economy, low unemployment, historic low interest rates and demand outpacing supply. The result of the Brexit referendum has so far failed to halt price increases (although growth rates have been slowing since the vote), while the definition of Brexit has yet to be determined. Uncertainty will impact on the UK economy throughout 2017, bringing the strong price growth of recent years to an end.

Taking into account continuing uncertainty caused by Brexit, Fitch expects 0% home price growth in 2017. Prices will be supported somewhat by the continued housing supply shortage. In the past, London and the South East has outpaced other regions, but the uncertainty in the financial services industry caused by the Brexit vote, may negate this differential in the near term.

We expect already stretched affordability to weigh on any further home price increases, as income growth currently remains muted. Increasing inflation will also put pressure on household finances, reducing disposable income further.

Affordability: Household Financial Pressures Increase

New mortgage affordability remains under pressure, as home prices continue to increase (6% 2016 UK average) at a much faster pace than wages (about 2.3%). The tightened regulatory framework introduced by the Mortgage Market Review in 2014, which focussed on stressing interest rates at origination, should continue to prevent borrowers from overstretching their finances.

The Brexit vote will impact economic fundamentals in 2017 and mortgage affordability may worsen during the year.

Mortgage Rates and Arrears

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Mortgage Lending and Prepayments

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Mortgage Lending: Gross Lending Flat in 2017

Readily accessible, cheap wholesale funding allowed lenders to continue to offer competitive mortgage rates in 2016. There was a surge in new origination in 1Q16, ahead of the introduction of higher stamp duty on the purchase of second properties. More than treble the number of BTL mortgages were advanced in March 2016 compared to the same period a year earlier. Since the stamp duty changes lending to landlords has been running at around half the 2015 level.

Reduced housing turnover will lower mortgage demand. However, historically low rates on new mortgages, coupled with expected rate rises from 2018, will increase re-mortgage activity. Changes to stamp duty and tax relief for landlords, along with stricter underwriting guidelines, may dampen BTL lending in 2017 and beyond. With new mortgage lending below peak values, Fitch expects gross lending volumes to remain flat in 2017.

Regulatory Environment: BTL Affordability Testing Introduced

The UK owner-occupied residential mortgage market is tightly regulated. The Mortgage Market Review of 2014 targeted owner-occupied loans, whilst BTL originations will face additional scrutiny from January 2017, with the introduction of rules around underwriting standards and affordability testing.

These changes should result in higher minimum interest coverage ratios (from a typical 125% in 2016 to nearer 145% in 2017) and larger deposits and so lower loan-to-value ratios for new purchases as a consequence. In aggregate these various measures will take the heat out of the BTL market, whilst protecting the performance of new origination. However, all forecasts are subject to the economic fallout of ongoing Brexit negotiations. Fitch provides ongoing coverage of the UK’s resolve to leave the EU in its credit hotspot.
**Home Prices: Continued Growth**

Prices increased by about 6% in the year to September 2016, supported by a stable economy, supply constraints and low rates. Divergence continues between metropolitan areas with rising prices and stable to falling prices in areas with less vibrant job markets. Price levels are now so high in some of the largest cities that price increases have slowed, but are still rising faster than the national average. Price increases in mid-sized cities have been relatively faster, continuing the trend of catching up with the major metropolitan centres.

Housing demand has been driven by low interest rates coupled with low unemployment, continued domestic migration to metropolitan areas and regional centres, and an increase in the number of households caused by households becoming smaller. In addition, non-resident investors entered the German market. Construction has been constrained by regulation and scarcity of building plots in metropolitan areas.

The continuation of low borrowing costs and steady economic growth supports further price increases. Fitch expects prices to rise around 4% per annum in 2017 and 2018.

**Affordability: Expected to Remain Sustainable**

Despite rising prices, affordability remains at a sustainable level. Annual loan payments remained over 7% of the initial loan balance when interest rates fell, resulting in faster loan amortisation. Rises in disposable income were supported by wage settlements in major economic sectors in 2016. Borrowing costs remain exceptionally low.

Price-to-income ratios suggest German housing is still affordable in most locations, particularly against international comparators.

**Mortgage Rates**

German residential mortgage loans continue to show robust performance, given the favourable economic conditions. Over recent years, 3m+ arrears in Fitch-rated German RMBS transactions have been stable, at a remarkably low level of approximately 0.4%. One of the main drivers of this solid performance has been continuously low unemployment and uninterrupted economic growth.

Fitch expects unemployment to remain low, at 4.5% in 2017 and 2018, just slightly higher than 4.3% in 2016 because of the gradual registration of migrants in the labour force. The effect on mortgage performance will be negligible as the newly unemployed individuals do not represent a material share of borrowers in residential mortgage loan portfolios. Long term fixed-rate mortgages mitigate sensitivity to mortgage rate rises, although there is little prospect of policy interest rate increases, at least in the short term.

**Mortgage Lending: Moderate Increase**

New mortgage lending has grown at 3%pa since 2003 driven by the low interest rate environment limiting the attraction of alternative investment opportunities. There are no signs that German lenders take on excessive risks through their loan underwriting.

Fitch expects lending to moderately increase in 2017 and 2018. Banks view mortgage lending as one of few options to bolster net interest income in the low interest rate environment. Constraints on retail lenders’ lending capacity will remain very low in the short term, given their solid and improving capitalisation and extremely low risk costs.

**Regulatory Environment: Moderate Effect of EU Directive**

The European directive on consumer credit agreements relating to residential properties was implemented into German law in March 2016 (Wohnimmobilienkreditrichtlinie). The directive intends to increase the level of consumer protection for borrowers, but critics query whether certain borrowers might become unable to borrow given a stricter affordability assessment. Evidence from mortgage lenders has been mixed, with some reporting significantly decreased lending volumes, while others dismiss the effect of the directive as immaterial.

The implementation of the directive is currently under review by policy makers and some changes are expected to moderate its impact further. Overall, we do not expect material long-term constraints, as underwriting standards have generally incorporated robust affordability assessments prior to the directive’s implementation.

Other changes, such as real estate transfer tax increases, are considered to only have a minor effect on the mortgage markets.

In late October 2016, the Ministry of Finance proposed new legislation that would allow it to set limits for lenders on LTV, debt-to-income, debt service-to-income and minimum amortisation. This legislation aims to calm excessive home price growth, if detected by the Ministry. Such law might, upon enactment, increase the quality of newly originated mortgage loans if the limits are ultimately activated.
Home Prices and Affordability

With a 6.0% yoy growth in 4Q16, home prices have grown more strongly than in previous years, due to a competitive mortgage environment with low rates, increased sales and better labour opportunities. Growth in the largest four cities continues to outpace national levels, and may suggest some over-heating. Prices in Amsterdam and Utrecht have surpassed their peaks from 3Q08 by 10.5% and 1.9%, respectively. Continued growth in the larger cities could deter potential workers from moving in.

Fitch expects home prices to continue to grow steadily into 2017 and 2018 at 3% per annum, which is an increase from last year’s forecast of 2%. A favourable economic environment with positive GDP growth, low mortgage rates, stable employment and higher migration levels will keep driving housing market growth, while the stock of homes for sale keeps decreasing and new builds fall short of demand. Regional differences are expected to persist.

Affordability: Stable, Despite Rising Prices

Affordability has remained mostly unchanged as a strong home price recovery, based on low interest rates, was met by modestly growing income. However, more underwriting decisions have been based on two incomes (50% of originations in 2016 up from 33% in 2015) and are expected to reach 60% in 2017.

For mortgages with a Nationale Hypotheek Garantie (NHG), the maximum property value is now EUR245,000, up from EUR231,132 and therefore credit availability within the lower range of the market is expected to improve. While short-term affordability will remain stretched, an uptick in rates, together with continued home price rises, will put affordability at stake in the longer term.

Mortgage Rates and Arrears

The proportion of loans in late-stage arrears decreased substantially to 0.3% in September 2016 from 0.7% a year earlier and a peak of 0.9% in November 2014. The decrease is supported by improving economic conditions and increased foreclosure activity.

In recent years, lenders have focused on early-warning signals to target problem cases – with ‘budget coaches’ deployed to help borrowers manage their finances. The low rate environment supports borrowers’ capacity to service mortgage payments and will continue to contribute to a stabilising arrears trend. As arrears have declined to historic lows, Fitch expects further improvements to be limited.

Mortgage Lending: Healthy Appetite Remains

Gross new mortgage lending increased by 18% yoy in 4Q16. Low rates, standardised mortgage products at offer, as well as a healthy demand encouraged buyers to enter into the housing market. In addition, competition remains strong due to several new non-bank lenders having entered the market, offering competitive rates. Prepayments have been on a rising trend since mid-2009. We expect these to rise further, caused by increasing home purchase activity, a more competitive market to re-mortgage and low savings rates.

The appetite for mortgages will remain high in the next few years, supported by attractive rates. More borrowers are opting for longer fixed-rated periods, often up to 20 years, as their debt service ability is tested against the current low rates. Fitch expects an uptick in prepayments by about 1% per annum in the next two years, to around 9% in 2017 and 10% in 2018. This will be driven by a competitive market that will foster increased sales and re-mortgaging activity.

Regulatory Environment: Uncertainties Remain

In March 2017, parliamentary elections will take place which could bring about substantial changes to mortgage market regulation. As with previous elections, key issues will be a further relaxation of affordability measures to increase home ownership for first-time buyers and further curtailment of interest rate tax deductibility. Also, we expect political pressure to favour an increase in the stock of social rental properties and to moderate rents, which could have a cooling effect on the growth of the housing market in the longer term.

Other regulatory developments could pose uncertainty to the mortgage market, such as the introduction of ‘Basel IV’ which could weigh on lenders’ capital requirements. Potential knock-on effects from a “hard Brexit” scenario could also impact future performance, as the UK is an important trading partner for the Netherlands.

Political and regulatory developments add uncertainty to an otherwise recovering Dutch mortgage market.
Home Prices and Affordability

Home Prices: Moderate Rises Despite More Activity
The rebound in the turnover of existing properties continued in 2016, with the number of transactions increasing by 16% in the year to 2Q16. The market dynamism is mainly driven by very low borrowing costs, and real estate’s safe haven status at a time of readily-available credit. Government measures encouraging the purchase of new-build properties led to an almost 19% increase in sales in the year to 2Q16, driven by buy-to-let investors. Home prices increased modestly in 2016, with notable disparities between regions. Existing properties in the Paris Region increased annually by 2.1% to 3Q16, compared to an average of only 1.5% for the other regions.

Fitch believes housing turnover will slightly decline in 2017 against the backdrop of increased economic and political uncertainty. National home price growth will slow in 2017, with continued divergence between the regions. Increases of up to 4% are expected in more economically diversified regions contrasting with static prices in less dynamic regions.

Affordability: Improved, Supported by Low Interest Rates
Affordability has improved since 2011 as a result of decreasing interest rates. Housing loan rates continued to decline over the course of 2016, to a record low level of 1.3% in November. This gives first-time buyers and low-income households easier access to the property ladder. The total acquisition costs of an average property have decreased by almost 24% since end-2011 due to lower borrowing costs.

Fitch expects potential deterioration in affordability. New loan borrowing costs will progressively increase as long-term fixed-rate products become more expensive for lenders to provide, due to a steeper interest rate curve.

Housing Loan Rates
The level of impaired housing loans remains low at approximately 1.6%, reflecting the prudent underwriting practices of large French banks, based on the ability of borrowers to make payments. Unemployment is the principal threat to housing loan performance. The unemployment rate reduced marginally in 2016 and is forecast to stand at 10% at year-end, down from 10.4% at end-2015. Structural reform has been undertaken aimed at relaxing some aspects of the fairly rigid labour market which may have a positive impact on employment and should help to restore French competitiveness.

Fitch expects stable performance of housing loans, as unemployment dips below 10% in 2017. Borrower income levels are expected to remain stable over the course of the coming year, against a backdrop of slow but positive economic growth; however residential loan performance will be immune to any rate rises by their fixed-rate nature.

Housing Lending: Slowdown as Refinancing Activity Decreases
Housing loan origination in the first nine months of 2016 increased by over 7% compared to the same period of 2015. This came after origination in 2015 was almost double that of 2014. The spike in origination volumes is explained by an exceptional number of borrowers seizing the opportunity of low interest rates to refinance their debt with another lender. Loan refinancing slowed to about 30% of new originations at the beginning of 2016, but picked up again to represent about 40% during the summer.

Fitch believes that housing loan originations will slightly decrease in 2017, following the trend in property turnover. Prepayments are expected to return to their long-term average, as the majority of borrowers already benefit from low fixed interest rates after refinancing.

Regulatory Environment: Tax Incentives Unchanged
Several measures were implemented in 2016 aimed at supporting first-time buyers and new housing construction. These measures led to a surge in the number of building permits, with an increase by 8.3% in the year to July 2016. The Pinel scheme (previously the Duflot scheme) offers fiscal incentives (tax rebate of up to 21%) to individuals who buy new-build properties to let in specified locations and subject to rent ceilings. As a further incentive for first-time buyers, the eligibility conditions for state-subsidised interest-free loans (prêts à taux zéro or PTZ) were eased, allowing such loans to cover up to 40% of the purchase price for new-build properties or existing properties requiring major renovation works.

The 2017 budget is currently under discussion in Parliament. Fitch expects the Pinel scheme and the PTZ to be maintained as it is a popular policy and 2017 is a presidential election year.

Global Housing and Mortgage Outlook – 2017
February 2017

16
Home Prices: Borrowing Conditions a Driving Factor
On the back of decreasing mortgage rates, nominal home prices in Belgium generally recorded further increases in the year to 1H16, across property types and regions. The planned devolution of fiscal authority to the regions, resulting in less favourable borrowing conditions for some borrowers, has been somewhat offset by the continued favourable low interest rate environment and the limited housing supply.

Given the current lending conditions, Fitch expects any changes to nominal home prices to remain moderate in the coming years, with a slight overall home price increase of around 1% expected in 2017. Notably, in Brussels, longer-term home prices are expected to remain relatively strong, given the economic attractiveness of the region and the overall demand for housing.

Affordability: Remaining Strong
Mortgage affordability for borrowers has remained stable over recent years, mainly driven by the low interest rate environment, which has largely offset property price appreciation and higher mortgage debt levels. Fiscal authority devolution has a limited effect on affordability, as it is limited to new loan contracts and, in some cases, to specific types of loans.

Mortgage Lending: Positive Environment Supports Lending
Overall gross lending in Belgium remained high in the year to September 2016 (EUR68.1bn), despite dropping back from the historical high volumes observed in the year to September 2015 (EUR68.7bn), as borrowers continued to take advantage of the low interest rate environment. The high lending volumes were largely driven by higher average new loan amounts. Loans with LTV ratios greater than 90% continued to represent a sizeable portion of new lending, at approximately 30% of new loan originations in 2015, generally in line with 2014 levels.

Fitch believes that the headline level of mortgage lending will drop gradually in 2017, back towards observed long-term lending volumes, although the low interest rate environment and the continued strong financial position of Belgian households will continue to support relatively high lending volumes in the medium term.

Mortgage Rates: Long-Term Risks Reduced
The favourable interest rate environment for borrowers was a direct contributor to the spate of mortgage loan refinancings observed in the year to 1H15, as households looked to tie-in low mortgage interest rates for the remaining life of their loans. The now predominantly fixed-for-life interest rate contract is viewed as limiting potential stresses from future interest rate increases. As of 3Q16, these contracts represented about 78% of all outstanding mortgages.

Regulatory Environment: Devolution Effect Mitigated
The deviation of fiscal authority to the Belgian regions resulted in less favourable tax benefits for mortgages in Flanders as of January 2015 and was likely one of the drivers of higher loan refinancings in 4Q14. It came into effect in Wallonia in January 2016 (via stricter conditions relating to VAT reductions on renovation loans and amendments to mortgage loan tax treatments) and will be effective in Brussels as of January 2017. The stricter fiscal conditions are not, however, expected to affect mortgage lending in the medium term, given the low interest rate environment.

Longer-term affordability for new borrowers could be affected by rapid or sustained interest rate increases, or changes in underlying institutional features (such as unemployment benefits or the inflation-linked wage system), although this is not Fitch’s expectation.

In order to mitigate risks in the real-estate market, the National Bank of Belgium aims to implement additional capital-based macro-prudential measures as of 2017. These will target higher LTV residential mortgage loans, potentially applying more stressful loss-given-default (LGD) floors for such loans.
Denmark

Home Prices and Affordability

Prices rose by 3.5% in 2016, slightly slower than in 2015. Prices are supported by low rates, increasing disposable income and low unemployment. Favourable housing taxation, notably the freeze in property value tax since 2002, has also supported growth. However, while national prices have grown at sustainable levels in line with income, differences between urban and rural areas have increased.

Fitch expects prices to increase by 3% in 2017, with continued large differences between cities and the rest of the country. In the longer term, prices in Copenhagen are expected to stabilise due to an increase in construction, lower demand due to migration from the city and tighter lending regulation. Revisions to housing taxation proposed by the Central Bank could also play a role in stabilising that market.

Affordability: Strong and Improving

National affordability is at record-best levels, due to income growth and decreasing interest rates in the 2H16. In Copenhagen, affordability of flats has deteriorated due to higher prices, but it remains better than at the price peak in 2008. Although banks have increased their margins in 2016, the effect has been largely offset by lower reference rates.

Fitch expects affordability to remain strong in 2017, as rates are expected to stay low and wages continue to grow. In Copenhagen, affordability will suffer from strong growth in home prices. National affordability is unlikely to improve much further as bank lending margins increase and interest-only lending becomes less readily available.

Mortgage Rates and Arrears

Arrears stayed low in 2016 (0.2% of loans are in arrears by more than three and a half months), supported by increased wages, lower interest rates and low unemployment. The generous social security system also supports mortgage performance.

Fitch expects arrears to remain low at around 0.2% in 2017 as low rates persist. Mortgage lending is gradually shifting to longer periods of fixed interest rates, reducing borrowers' sensitivity to an increase in rates. Most outstanding interest-only loans will enter their amortising phase in 2017 and 2018, but this should not affect performance metrics significantly, particularly because borrowers would be able to refinance at low costs if they are unable to make the principal payments.

Mortgage Lending: More Amortisation, Longer Fixed Rate Periods

The mortgage volume outstanding increased only marginally over the last four years (2% in 2016), notably due to tighter credit standards. The Supervisory Diamond for mortgage banks is being phased-in by 2020 and has already resulted in cuts to interest-only lending and borrowers taking loans with longer fixed-rate periods. Interest-only loans are back to their 2005 levels (50% of new lending) and loans with a fixed-rate period of only one year are now down to just 10% of total lending, from 30% in 2012. The reference rate decrease in 2H16 more than offset the increase in banks' margins.

Fitch expects lending volumes to remain stable in 2017. In order to comply with the Supervisory Diamond regulation, lending will be focused on amortising loans with longer fixed-rate periods. This will decrease refinancing activity to some extent. The minimum interest rate to be used for affordability testing in growth areas may also weigh on lending to those areas.

Global Housing and Mortgage Outlook – 2017
February 2017
Home Prices and Affordability

**Home Prices: Strong Growth Not Sustainable**

Home prices increased by 10.1% in 2016, mainly driven by Oslo (+20%) and the surrounding counties. Conversely, prices in the oil-intensive region of Rogaland continued to decrease (-2%), albeit less severely than in 2015. In Stavanger, the region’s capital, prices are 12% below their peak. Nationally, prices have been supported by low rates, strong credit availability, low unemployment, positive migration and a relative shortage of housing, especially in and around Oslo.

Home price rises at the recent pace are not sustainable in the long run. Fitch expects prices to increase by a further 6% in 2017, supported by low rates and strong demand (with the exception of Rogaland). Marginal mortgage rate rises and stricter underwriting requirements could be implemented will dampen subsequent price rises.

**Affordability: Still Supportive**

Debt service affordability improved in 2016 – with mortgage rates decreasing due to low funding costs and intense competition, notably from foreign banks. The central bank policy rate was cut to 0.50% from 0.75% in March 2016 and is expected to remain below 1.0% over the next few years. Nibor increased in 2H16, putting pressure on banks’ profitability and some banks have started to moderately increase their lending rates.

Fitch expects affordability to remain strong, supported by low mortgage rates. Mortgage rates are likely to increase moderately in 2017 in order to support lenders’ profitability as competition eases and funding costs increase; however, this should have a limited impact on mortgage debt service affordability. We expect mortgages rates to remain below 3% in 2017.

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**Mortgage Rates and Arrears**

**Mortgage Lending: Strong Increase Will Slow**

Household debt grew strongly by 6% in 2016; most of the increase was mortgage lending, but unsecured lending also grew markedly (+13%). The home ownership rate is high (80%) and most mortgages are on a variable interest rate so most new borrowing is refinancing for home refurbishment or to switch banks to benefit from lower rates. The lending increase was partly supported by foreign lender’s keen pricing policies, but this eased towards the end of 2016.

Lending growth should slow as rates increase, albeit moderately. The new lending rules introduced in January 2017, notably requiring increased amortisation and a cap on debt relative to income, should slow growth.

**Mortgage Performance: Arrears To Remain Low**

Three-month plus arrears reached an all-time low of 19bp in 2016. Despite low oil prices affecting the oil industry in Western Norway, leading to increased unemployment in the region, arrears have remained very low and the decrease in home prices has slowed in Rogaland. Performance has been supported by low interest rates, a limited increase in employment and the protective social security system.

Arrears should remain low in 2017 – supported by a strong economic environment including low unemployment levels. Since most loans bear a floating rate, borrowers are exposed to interest rate increases, although Fitch expects mortgage rates to remain below 3% in 2017. Stressed interest rates at origination (+5pp), the tax deductibility of mortgage interest and a greater proportion of amortising loans provide buffers against an increase in rates.

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**Regulatory Environment: Stricter Lending Rules**

Household debt is a key concern for financial stability and regulatory authorities have tightened lending requirements over the last few years. In June 2015, a loan-to-value ratio (LTV) cap of 85% was formally put in place, as well as an amortisation requirement down to 70% LTV and a 5pp interest rate stress at origination. These have had limited effect on origination volumes or the trajectory of home prices partly because borrowers have access to unsecured loans or borrow from family members. New lending requirements were introduced in January 2017 to tighten the amortisation requirement to 60% LTV, introduce a maximum debt level equivalent to five times borrower income and limit the banks’ ability to waive regulatory requirements to 10% of new loans (8% for Oslo). In addition, the Ministry of Children and Equality proposed to establish a public debt register.

Fitch believes that the tightening of mortgage lending restrictions will slow the rate of residential property price growth in 2017. However, low rates and steady demand will outweigh the impact of regulatory intervention so prices will continue to rise at a reduced rate. The limited ability for banks to grant loans outside the regulatory thresholds is most likely to affect first-time buyers. Also, the cap on debt relative to income should restrain household debt growth.

The level of household debt remains an area of focus for the regulatory authorities and further market intervention is possible if the recent measures do not slow the growth rate.
Irish Housing and Mortgage Outlook

Home Prices: Rebound Continues At Slower Pace
Residential property prices rose by 6.6% in the year to June 2016, down from 7.4% to end-2015. The initial bounce in prices in 2014-5 has been followed by continued increases, but at a decelerating pace in recent quarters. Dublin prices increased more slowly than the national average in 2016, after initially leading the recovery. A shortage of housing and an improving economy have maintained the inflationary pressure.

Improve disposable income and employment prospects have boosted demand for housing, while supply remains weak, creating the circumstances for sustained home price increases. The trend of slowing increases will continue, with a 4% rise expected in 2017.

Affordability: Continuing Improvement Expected
The average first-time buyer couple paid 19.1% of their income on a typical 80% LTV mortgage in January 2016, according to the EBS DKM affordability index. This was down from 19.5% recorded a year earlier and well below the 26.4% level seen when home prices were at their peak. The price decline left homes in Dublin more affordable, but they remain less affordable than elsewhere in the country. The continued improvement in affordability is due to increasing average earnings and declining mortgage rates.

Home price rises will again exceed income growth in 2017, but sustained low borrowing costs will maintain reasonable affordability.

Mortgage Rates and Arrears
Mortgage Performance: Lower Arrears to Persist
Residential mortgage arrears continue to fall sharply, with the Bank of Ireland’s total arrears figure at 11.4% in September 2016, down by 1.3pp year to date. This reduction marked the 13th consecutive quarter of decline in arrears. Over 16% of all owner-occupied mortgages had been through a restructuring exercise by June 2016, up from 15% in June 2015. Of the restructured loans, 88% were meeting the conditions of their restructuring agreement – the highest proportion since this process began.

The regulatory environment strongly favours loan restructuring over repossession, but Fitch believes the courts are now more willing to grant possession orders in the appropriate circumstances. The timeline from default to possession remains protracted. As prices recover, borrowers are returning to positive equity positions, encouraging them to work with lenders to resolve their arrears.

Mortgage arrears are expected to decline further in 2017, by about 2%, due to the improving economic background and the ongoing recovery in home prices, which will increase borrower incentives to avoid mortgage enforcement.

Mortgage Lending: Slower Growth
The volume and number of new mortgage loans increased by 17% and 12% respectively in the year to September 2016. Increased housing demand, brought about by the improving economy and higher employment, has resulted in more borrowing but new loan origination remains well below its 2006 peak.

The average interest rate on outstanding mortgages in Ireland was 2.6% as of September 2016, down from 2.7% a year earlier. The average LTV for mortgages originated in 1H16 for all owner-occupied properties was 72.5% (78.6% for first-time buyers). The typical LTV at origination had been rising steadily until 2015 regulation curtailed the origination of loans with an LTV in excess of 90%.

Fitch expects new mortgage lending to increase by over 5% in 2017, a slower pace than recent years. Tighter lending rules, coupled with the recent price rises, are limiting the number of borrowers who can buy and there is a shortage of homes to purchase.

Regulatory Environment: Prudent Regulations in Place
The regulation of residential mortgage lending was tightened by the Central Bank in January 2015. The rules restrict the maximum LTV for new loans according to categorisation of borrower and loan purpose, differentiating between personal dwelling and buy-to-let for example. The volume of higher LTV loans each lender can originate on an annual basis is now also restricted.

Mortgage arrears management rules were set by the Central Bank within its code of conduct in July 2013. The code’s primary objective is to ensure borrowers are given every opportunity to meet their mortgage obligations, but it also provides clear guidelines on when applications for possession orders may be considered appropriate.
Spain

Home Prices and Affordability

Housing demand is on the rise, reflected by the number of quarterly sales that have almost doubled since their trough in 3Q13, having grown at an annualised rate of about 17% since 2014. However, housing transactions are just 40% of the peak numbers seen in 2007.

Home price indices have been showing increases at an average rate of 2.6% in 2015, and 4.0% as of 3Q16. The price appreciation is supported by a strong economy - as yoy real GDP growth is expected to stand at 3.2% for 2016 outpacing the eurozone average of 1.6% during the same period - and a gradual decline in the unemployment rate, falling below 20% for the first time in six years.

Fitch expects the positive trend in the residential housing market to continue, supported by strong economic growth, a mature mortgage industry, and non-resident demand that is currently accounting for about 13% of transactions. A two-tier housing market will remain in place, with the bulk of the recovery concentrated in properties of above-average quality and location. Any recovery on lower quality properties will lag behind this.

Despite clear signs of recovery in the wider housing market, sales price discounts on Spanish repossessed properties peaked at an average of 65% relative to initial appraisal values in 1H16. Fitch views this trend to be the result of natural negative selection within the stock of repossessed properties, as higher quality repossessed properties were the first ones to be sold, lowering the average quality of the remaining stock. For more information, see Spanish Repossession Analysis 2016.

Unemployment, Mortgage Rates and Arrears

Affordability: Slower Income Growth Hampers Improvements

Considerable improvements in the home price-to-disposable income per capita ratio took place following the sharp drop of prices during the 2007-2014 period. This housing affordability ratio has remained stable since 2013 at around 85-90% of its long-term average, though it has seen a 5% increase since 1Q15, driven by a faster recovery in home prices than in disposable income per capita.

Fitch expects housing affordability to worsen gradually because any recovery in incomes will most likely lag that of home prices, considering the challenges in the labour market. The affordability challenge is especially difficult for first-time home buyers.

Mortgage Performance: Decreasing NPLs

Residential non-performing loans (NPL) decreased to 4.8% in 3Q16 from 6.3% in 1Q14, driven by the improved economic landscape, employment creation, low interest rates and the sale of distressed loan portfolios to more proactive servicers. The proportion of loans in arrears by three-months plus in Fitch-rated RMBS remained around 6.2% over 2016.

The agency believes the total volume of NPLs will continue to decrease in 2017/8, as unemployment gradually falls, and some restructured positions deliver improved performance and are reclassified as performing. Fitch expects banks to continue divesting from non-core businesses like NPLs and properties in possession, reducing their exposure to problematic assets. The increasing influence of special servicers, with more proactive loan resolution strategies, will provide additional support to this decreasing trend.

Mortgage Lending

New credit for housing grew 5% in 2016 and has increased at an annualised rate close to 20% since 2014, positively influenced by the economic recovery, increasing home prices and favourable lending conditions under the prevailing negative interest rate environment. However, this growth is still not offsetting ongoing loan amortisation.

Fitch expects new mortgage lending volumes to continue growing, as current levels only represent about 30% of pre-crisis levels. The pace of lending growth will slow from that of 2015-1H16, as Spanish banks adopt a cautious approach in light of legal uncertainties affecting the mortgage market.

Regulatory Environment: Legal Uncertainties

The Spanish mortgage market is facing legal uncertainties that question the validity of some common practices and in turn undermine the risk appetite of established lenders. Examples include the invalidation of existing interest rate floors, if the origination was lacking transparent disclosure, and the potential requirement that lenders reimburse borrowers for transaction costs paid when formalising the mortgage contracts.

The full economic impact of these challenges is still to be determined, but some tightening in underwriting standards is expected in 2017, with a corresponding adjustment towards higher prices. See Spanish Mortgage Floor Decree Will Aid RMBS Assessment for more details.
Italy

Home Prices and Affordability

Nominal home prices continued to fall in 2016 with a 0.5% decline in the year to Q416, leaving prices 17.1% below their 2008 peak. Home prices in the most economically active locations in the north have reached a trough. By contrast, southern and central regions are experiencing slow economic recovery and high youth unemployment, contributing to a 2%-3% home price decline yoy.

Fitch expects marginal national home price growth in 2017, driven by improving housing demand, increased credit availability and low interest rates. Property turnover will remain sluggish in southern areas, with a continuation of the oversupply of property.

Affordability: Sustainable Despite Tensions

Mortgage affordability has improved over the past two years, supported by decreased home prices, lower interest rates and stable household disposable incomes.

Fitch expects borrower affordability to be stable in 2017 as mortgage rates are expected to stay low and real wages are only marginally squeezed by low growth and a modest pick-up in inflation. Italian households have relatively low debt levels, with the average at 61.5% of gross income in June 2016 (EU average of 94%), limiting affordability pressures.

Home Prices: Increases Ahead

Late-stage arrears reached 7.7% in 3Q16, up from 7.1% a year earlier, while the default rate (CDR) slightly decreased. Performance benefited from low and declining borrowing costs, which also boosted prepayments through refinancing activity. The prepayment rate increased to 6.1% in 3Q16, 1pp above the previous year. Recoveries have suffered from home price falls and a lack of market liquidity.

Fitch expects stable performance in 2017, with the volume of late-stage arrears increasing more slowly to within the range of 1.4% to 1.6%, while CDR remains flat. The measures of borrower distress will not improve over the year due to the fragile economic background, the large outstanding stock of defaulted loans and the long recovery process through the congested judicial system. The performance of recently originated loans will benefit from tighter underwriting standards.

Mortgage Lending: Further Growth

New residential mortgage lending increased by about 40% in 1H16 compared to a year earlier. New lending was driven by refinancing activity (60% of new origins in 2Q16) boosted by lower mortgage rates and increased lender competition. New loan borrowing costs of 2.5% in 2Q16 were 50bp below the 2015 average. The origination of loans with a large balance, long tenor, or via a broker became rarer.

Fitch expects increased lending activity in 2017, driven by competition amongst lenders to increase volumes and low borrowing costs boosting housing demand. Refinancing is expected to continue, but at a slower pace than recent periods. Prudent origination policies will remain a market standard.

Mortgage Rates and Arrears

Source: Fitch, Bank of Italy

Mortgage Performance: Stable Despite Weak Economy

Regulatory Environment: Intended to Stimulate Activity

The 2016 budget law cut taxes for home owners and was intended to boost consumer confidence. It allows purchasers moving from one property to another to benefit from the fiscal breaks that were previously only associated with first-time buyers; the tax break remains as long as the old property is sold within a year of the purchase of the new property. Additionally, 50% of the VAT payable on the purchase of new-build homes may be deducted from personal income taxes over 10 years.

A new bankruptcy law empowers judges to authorise asset sales even if bids are up to 25% below the auction reserve price, which should cut the length of time needed to recover on a defaulted loan. Under the prior rules, failure to meet the reserve price triggered a further auction. Also, fees payable to the court-appointed valuers will in future be based on the final asset sale price and be payable upon successful completion of the auction process, rather than being payable upfront and calculated on the valuation amount, as was previously the case. This better aligns valuer incentives with the lender’s need for a valuation that reflects an achievable market value. The number of auctions needed to sell properties backing defaulted loans should reduce as a result.

These regulatory responses are intended to promote market activity, but Fitch does not expect them to be sufficient to stimulate a housing market recovery until the economic and employment situation improves.
Home Prices: Moderate Gains
Residential property values grew by 4.8% in 2016, converging to levels last seen at the end of 2011. Portuguese home prices experienced a sizable correction of 20%-25% during 2007-2012, which was followed by a period of stabilisation until 2015.

Housing demand is returning, supported by banks resuming lending and the low interest rate environment, which implies historically low debt instalments for both existing and newly originated mortgages. The improving sentiment is also reflected by the number of new building permits, which has been growing at an annualised rate of about 25% on average since YE14, albeit from a very low base.

Fitch expects home prices to experience moderate increases in 2017 and 2018, driven by a stabilised macroeconomic environment and the gradual return of affordable credit to the residential property market. However, high unemployment, weak demographics, and a large stock of vacant housing units are expected to constrain home price rises.

Affordability: Stability After Correction
Portugal maintains its position as one of the cheapest housing markets in Europe. In 3Q16, the HP-to-disposable income per capita ratio fell below 8x, a 28% decrease from its peak in 2003, when the ratio was 10.9x. While nominal disposable income per capita is gradually recovering, with annual increases of 3% expected for 2016 and 2017, it will remain constrained by high unemployment that is expected to stay at approximately 10% for the next two years.

Housing affordability is expected to remain stable over the next couple of years, as we see both household income and HP growing gradually in tandem.

Mortgage Performance: Stable NPLs, Low Recoveries
Overdue housing loans, defined by the Bank of Portugal as positions in arrears by over 30 days, have stabilised in the 6%-6.5% range. The three-months plus arrears level in Fitch-rated RMBS transactions rose to 6.1% in 3Q16, up from 5.4% a year earlier. The exceptionally low interest rates have supported mortgage payments at a time of economic stress.

Fitch expects mortgage performance to remain stable and potentially reduce gradually over the next two years, thanks to labour market improvements and low interest rates. The very slow and complex mortgage enforcement process will prevent the backlog of non-performing loans from diminishing quickly and recoveries from defaulted loans will remain weak.

Mortgage Lending: Increasing Appetite
The outstanding balance of housing loans continues to decrease, by about 3% yoy as of 1H16, resulting in a total drop of close to 16% since the peak. New credit for home acquisitions has grown at an average annualised rate of about 40% since 1H13 according to ECB data, albeit from a very low base.

Fitch expects gross new lending volumes to continue the trend, driven by a stabilised economic backdrop and increased lender competition. The volume of new housing mortgages is still less than 30% of that originated during the peak years. Fitch expects new lending to offset loan amortisation no earlier than 2018.

The cost of mortgage credit is falling in Portugal. The average interest rate for new originations was below 2% as of 1H16, almost 35bp 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.

Fitch expects residential mortgage rates in Portugal to remain close to 2% for the next few years, considering the underlying strategies and profitability goals of lenders, and the fact that the ECB is not expected to change its target rate in the near future. In the medium term, funding conditions could be negatively impacted if an adverse scenario on the sovereign or the economy were to materialise.
Greece

Home Prices and Affordability

- HP (real, rebased)
- Real disposable income per capita (rebased)
- HP-to-income per capita ratio (RHS)

Home Prices: Depression Continues

A combination of political uncertainty and a lack of consumer confidence depressed the housing market further in 2016. Home prices continue to fall, albeit at a slower pace than in previous years. The 1.2% drop over 1H16 brought the total decline to 42.4% from the 4Q08 peak. The demand for property remains very weak, due to high unemployment (23.2% Q316), a fall in disposable income, high real estate taxes and banks’ tight credit standards. Furthermore, capital controls and restrictions on financial transactions continue to apply, feeding economic uncertainty.

Despite expectations of GDP growth in 2017, property turnover is likely to remain low as a result of limited disposable income, reduced savings and the limited appetite among lenders for further mortgage lending. Fitch expects prices to fall only marginally in 2017, reaching a total price reduction of about 45% compared to the peak.

Affordability: Fiscal Adjustment to Depress Affordability

In 2016, disposible income and the availability of savings have been limited by fiscal tightening, high real unemployment and GDP contraction. At the same time, mortgage credit remains constrained while home prices continue to fall.

These same factors will continue to stretch borrower affordability in 2017, despite large price reductions.

Mortgage Rates and Arrears

- Bank of Greece 3m+ arrears
- Unemployment
- Mortgage rate new loans (RHS)
- Fitch RMBS arrears (3m+)

Mortgage Performance: Further Improvement in 2017

Residential mortgage performance has shown some signs of improvement in 2016, following successful negotiations with international creditors and some stabilisation of the banking system. Early-stage arrears plummeted by nearly 5pp to 10.6%, as borrowers are no longer withholding payments they are able to make. The stock of non-performing loans reported by Bank of Greece stands at 31.7% compared to 30% 12 months ago, mainly because borrowers who were already in early-stage arrears have since become more than 90 days overdue.

Lenders have been striving to improve the non-performing loan workout process in 2016. Changes to the foreclosure law, implying easier repossessions, improve lenders’ negotiating positions with borrowers. Borrowers are more likely to be willing to restructure their loans and may also be deterred from the strategic withholding of payments.

Fitch expects mortgage performance measures to improve slightly over 2017, supported by the combination of economic growth and a more stable banking system. The renegotiation of mortgage conditions will also allow more loans to be reclassified as performing.

Mortgage Lending and Prepayments

- Quarterly gross new mortgage lending
- Annualised prepayment rate (RHS)

Mortgage Lending: Rebound From Historical Low

Outstanding housing loans amounted to about EUR57bn as of 3Q16, down by 4.5% compared to 3Q15. Also, in the first nine months of 2016 the volume of new lending contracted by 36.5% yoy. This reflects the weak economic environment and the fiscal adjustment measures that adversely impacted private sector spending, credit demand and economic growth. At the same time, liquidity for Greek banks remains scarce and expensive.

Mortgage lending volumes are expected to remain low in the coming years, due to weak borrower appetite and unwillingness to lend. However, the more stable economic environment in 2017 could support some increased lending from the exceptionally low base.

Regulatory Changes: Encouraging Better Loan Servicing

In 2016 the enforcement law was amended to simplify and speed up the judicial process. At the same time, auction costs were reduced and auction reserve price mechanisms were improved, to increase the participation rate. The Government has also intervened to encourage the use of new loan servicers and a secondary market for loans. The new law permits non-bank institutions to purchase loan portfolios and eliminates VAT from loan sales and servicing. Also, the capital and legal requirements for entities to be eligible to service mortgage loans have been relaxed.
Home Prices and Affordability

Home Prices: Slower Growth Prospects
Home price indices, as reported by CoreLogic RP Data, show continuing growth, with combined capital city home prices increasing yoy by 10.9% as of December 2016, driven by the growth in Sydney (+15.5%) and Melbourne (+13.7%). The combined capital city growth rate was up 3.1% from 7.8% in December 2015. Record low interest rates have helped support price growth while rents remained flat. But tighter lending standards, including limitations on the growth of investment loan portfolios for authorised deposit-taking institutions, have dampened price dynamics.

Fitch expects moderate growth in Sydney and Melbourne property prices in 2017, propped up by low interest rates, population growth and lower growth in regional residential property prices of around 0-5%, due to falling rental yield pressure, increasing supply and fewer prospects for capital growth for investors. Fitch expects dwelling completions, to continue to rise nationwide and peak in 2017, acting as a damper on prices. Nationally, Fitch expects price growth at 3%-5% in 2017.

Affordability: Diminishing Prospects for First-Home Buyers
Affordability remains a key issue for first-home buyers, particularly in major cities, as wage growth has failed to keep pace with prices. As a result, the proportion of first-home buyers continued to fall in 2016.

Fitch expects first-home buyers to continue to struggle in 2017, as demand for housing remains strong. Low income growth, tighter underwriting and rising living costs maintain pressure on affordability, even as low rates persist. Household debt remains high and any material rate rise will weigh on mortgage affordability and serviceability.

Mortgage Rates and Arrears

Mortgage Performance: Low Rates to Remain
Australian mortgage arrears have remained broadly stable in 2016, despite improving economic conditions and record low interest rates. The Fitch Dinkum RMBS index, as at 2016, reported 30+ days arrears at 1.14%. The unemployment rate has fallen in 2016; however, the level of under-employment has increased, which may be affecting the disposable income and servicing capacity for some borrowers. The slowdown in the mining sector from falling commodity prices has had a significant effect on mortgage performance in specific mining centres.

Fitch expects mortgage performance to remain stable in 2017, due to low interest rates. Fitch believes the ability of borrowers to service debt for property purchases has become stronger over the last 12-18 months, as lenders have adopted more stringent methods to stress test against higher interest rates. However the rising cost of living and sluggish wage growth are likely to add pressure on those households with little disposable income.

Mortgage Lending and Prepayments

Mortgage Lending: Low Growth
The volume of new mortgages has continued to trend upwards but at a slower rate in 2016, amidst modest economic growth and rising numbers of dwelling completions. According to CoreLogic RP Data, home sales rebounded in November but remain down on the peaks reached in 2015; home sales were 8.3% lower and sales of flats 12.5% lower over the 12 months to November 2016. Lending has been impacted by reduced investor demand, rising transaction costs, additional capital requirements for banks, prudential measures restricting lending to investors and tighter serviceability parameters, restricting access to mortgages for some borrowers.

Fitch expects mortgage lending growth to continue to moderate around 5% in 2017, supported by record low interest rates and the expectation of stable unemployment. This will be partially offset by a rising trend in under-employment, weaker domestic and offshore investor demand and tougher lending practices.

Regulatory Environment: Tighter Lending Standards
An updated consultation paper on mortgage lending, issued in October 2016 by the Australian Prudential Regulation Authority (APRA), provides guidance on best practices for assessing a borrowers’ ability to satisfy repayment obligations - including interest rate buffers and more rigorous techniques to estimate living costs, and measures relating to the treatment of interest-only loans and income from rental properties. These practises were announced in December 2014 and therefore most banks have already introduced revised practices.

As changes have already been implemented by most banks, Fitch does not expect any significant changes to bank practices in the short term.
Home Prices and Affordability

Mortgage Rates and Arrears

Mortgage Lending and Prepayments

Structured Finance

Global Housing and Mortgage Outlook – 2017
February 2017

China

Home Prices: Tier 1 Cities Rise Strongly

Several factors are driving price growth, including low rates, strong income growth, on-going urbanisation, and the government’s frequent intervention. In tier 1 cities (Beijing, Shanghai, Shenzhen and Guangzhou) the housing market hit new highs in September 2016, with average prices increasing sharply by 25% compared to end-2015. This momentum has been replicated across the country, with an average growth of 12% in tier 2 cities and 4% in tier 3 cities over the same period. The difference between the tiers is partly explained by an oversupply of housing in most tier 3 cities and many tier 2 cities in the northern part of China.

Fitch expects the market to cool down in 2017, at varying rates among different tiers. We do not anticipate a major correction in the next 12 months and expect the market will be driven by the current momentum until the policies take effect. Prices are expected to rise slightly, by 2.5% in tier 1, 1.5% in tier 2 and 0.5% in tier 3 cities.

Affordability: Expected to be Flat

Widening price divergence is evident across the country. The average home price-to-income ratio has remained high at 19 in tier 1 cities over the past five years. The tier 2 cities’ price-to-income ratio fell to 8 from 11 and the tier 3 cities’ ratio dropped to 7 from 11 over the same period. Despite the steady growth of urban household disposable income, affordability remains weak as a result of sharp price increases. Fitch expects affordability will remain at current levels for the foreseeable future, as the cumulative increase in tier 1 and tier 2 cities will continue to put a considerable strain on the average household. However, affordability in the cheaper tier 3 cities’ market is less severe, as a result of steady income growth and relaxed credit availability.

Mortgage Performance: Expected to Remain Stable

The People’s Bank of China (PBoC) cut its benchmark borrowing rate to a record low in October 2015 and low mortgage rates charged by the financial institutions have had a positive impact on mortgage performance. The residential mortgage non-performing loan ratio has been stable over the past five years. This performance is also driven by prudent underwriting (eg no interest-only loans, regulatory-driven loan-to-value ratios ranging from 50% to 70%, full documentation) and the importance of home ownership in the credit culture of average Chinese households.

Fitch believes the mortgage rate environment will remain broadly stable in the near future, as the agency expects that the PBoC will adopt monetary tools, such as open-market operations and discount window lending, rather than interest rate changes to help steer the economy. However if soft inflation and further weaker economic growth persist, the PBoC may consider adding monetary stimulus by cutting rates. The low interest rate environment, steady income growth and rising property prices will continue to support mortgage performance.

Mortgage Lending: Growth Set to Slow

Over the past three years, lending has grown at a 20% growth rate on average. The outstanding mortgage balance increased to CNY17.9tn (about USD2.7tn) as at September 2016. The increase in 1H16 was more than double that in 1H15 – driven by strong property sales. However, contract sales have started to decrease and tough policies are starting to crowd out home buyers and investors.

Fitch expects affordability will remain at current levels for the foreseeable future, as the cumulative increase in tier 1 and tier 2 cities will continue to put a considerable strain on the average household. However, affordability in the cheaper tier 3 cities’ market is less severe, as a result of steady income growth and relaxed credit availability.

Regulatory Environment: Highly Regulated and Diversified

The Chinese housing market is highly regulated. The government and regulatory authorities have taken over 100 policy actions directly affecting the housing market since 2003. These measures include the PBoC raising or lowering interest rates more than 25 times and adjusting the reserve-deposit ratio more than 40 times in that period. Policy makers are faced with the challenge of different property cycles in different parts of the country. Therefore, more bespoke and targeted measures were enforced in different cities in 2016. In addition, in 2016, the government released a new round of policies in all tier 1 and some major tier 2 cities, including tough policies relating to home purchase qualifications, increased down payments and restrictions on loan purpose.

Fitch believes that in mild stress environments the Chinese government can be expected to intervene to prevent significant downward price movement and has the will and the administrative and financial resources to manage a gradual and orderly adjustment, even though the risk of a more disorderly outcome remains. Fitch expects the government will continue to stabilise the market in 2017, through swift and flexible policy moves targeted at different tiers.
Mortgage Lending and Prepayments

Mortgage Rates and Arrears

Home Prices and Affordability

Mortgage Performance: Low Arrears and High Prepayments

Mortgage Lending: Slight Increase Expected

Affordability: Slight Weakening Expected

Home Prices: Gradual Increase Expected to Continue

J

Japan

Global Housing and Mortgage Outlook – 2017

Structured Finance

February 2017

27
Home Prices: Losing Momentum
Home prices in Korea reached an all-time high in mid-2016, despite slower growth than in 2015. The rise in prices was primarily fuelled by the low borrowing cost, coupled with strong demand from both end-users and investors. The Bank of Korea (BoK) has been lowering the base rate since 2012 and made a further cut to 1.25% in June 2016.

Fitch expects BoK to cut the base rate by another 25bp in 2017, and mortgage rates are likely to follow in 2017 before picking up slightly in 2018. Concerns about oversupply, high household debt (88.8% of GDP in 1Q16), aging demographics and possible rising US rates, have led the government to intervene recently, triggering rumours of softening. Fitch expects price growth to slow gradually in 2017 and 2018.

Affordability: Remaining Strong
Housing affordability remains strong as the Korean economy continues to grow, thanks to domestic demand holding up relatively well, supported by monetary easing and the government’s stimulus packages. These packages include a low interest rate policy aimed at spurring consumer spending and corporate investments; they should also help lessen the debt servicing burden of mortgage borrowers.

Fitch expects steady GDP growth over the next two years, while disposable income per capita will grow largely in line with GDP. While there is increased uncertainty in relation to mortgage rate movements, following the US election result, Fitch expects mortgage rates to drop 20bp in 2017 (along with BOK’s base rate cut) before rising by 10bp in 2018. These positive drivers, together with a stable outlook on home prices, are expected to provide support to debt servicing and counterbalance the negative impact from rising household debt.

Mortgage Performance: Delinquencies Stable
Mortgage delinquencies of bank-originated loans, as reported by Korea Financial Supervisory Service, have trended down to a new low, with arrears of over 30 days at 0.25% in 3Q16. This was attributable to the record low mortgage rate (currently 2.99%), as well as strong growth in mortgage lending. The labour market has also been robust, as evidenced by the low unemployment rate of 3.6%.

Fitch forecasts broadly stable unemployment in 2017. In the coming two years, the mortgage rate is likely to remain low, on the back of the low policy rate. This will aid borrowers in making repayments and therefore Fitch expects mortgage delinquencies to remain low in 2017-8.

Mortgage Lending: Strong but Slowing Growth
Growth in the volume of outstanding mortgages accelerated, to reach KRW420trn in 2Q16. Leaseholders continues to move towards home ownership upon lease expiry, given low borrowing costs and rising Chonsei price. The national Chonsei price-to-sales ratio in September 2016 reached 75% for apartments. Chonsei refers to a lease structure where a lump-sum deposit, determined as a percentage of the sale price, is paid upfront by leaseholders and returned without interest at maturity. Leaseholders avoid making monthly rental payments, while landlords are free to use the deposit to earn investment income during the contract life. There was also sizable investment demand for residential units.

Fitch expects the shift in market participants’ behaviour to translate into relatively strong mortgage growth in 2017 and 2018, albeit at a slower rate than in 2016.

Regulatory Environment: Tightening for Sustainable Lending
The Korean government attempted to tighten the residential mortgage market at the beginning of 2016 by introducing new lending guidelines. Banks were encouraged to place more emphasis on debt servicing capabilities, instead of relying primarily on collateral for security. The debt servicing ratio is preferred over the debt-to-income ratio, to account for a borrower’s repayment ability on total debt obligations, often under stressed interest rate scenarios. Another guideline introduced by regulators encouraged amortising mortgages, which pay both principal and interest on each instalment, instead of interest-only mortgages. The aim of these measures was to improve the overall quality of debt, instead of curbing the mortgage market.

Fitch views these policy changes as a sign of the healthy governance of Korean banks’ mortgage arrears over the longer term.
New Zealand

Home Prices and Affordability

Home Prices: Regional Price Growth
Demand for housing in New Zealand remains strong, with the fastest home price rises occurring in regional centres outside of Auckland. Auckland increases were pegged back to 12.5% in 2016 by loan-to-value ratio restrictions reducing the number of first-time buyers and investors, Hamilton (20%), Tauranga (24%) and Wellington (20.5%) recorded strong growth in 2016, following a long period of stagnation.

Fitch expects home price discrepancies between regions to continue, with moderate growth expected in areas that border the main metropolitan areas. New regulations which impose higher deposit rates, particularly for investors, may have slowed price growth. Favourable economic conditions will likely continue to stimulate demand outside of Auckland, where there is a greater supply of affordable housing.

Affordability: Diminishing Prospects for First-Home Buyers
The house-price-to-income multiple in New Zealand is among the highest in the developed world. New Zealand’s rampant home price growth has affected the larger regional cities in 2016, following Auckland’s growth in previous years. Affordability pressure has started to become more evident in Auckland, particularly for first-home purchasers, where home prices are over nine times income. In other parts of the country, prices are 6 times income.

Fitch expects price growth to exceed wage growth in 2017 in a period of low rates. We expect real wage growth, which is currently about 1.5%, to increase but at a much slower pace in 2017. The introduction of limits to the loan-to-value ratio (LTV) will place an additional burden on first-home buyers trying to enter the market, particularly in regions that have experienced significant growth in 2016. We expect to see moderate nationwide home price growth of around 5%-8% in 2017.

Mortgage Rates and Arrears

The central bank cash rate has trended downwards in New Zealand, with rate cuts of 0.25% occurring in March 2016, August 2016 and November 2016. This has provided a significant stimulus that supported strong mortgage performance in 2016. The impact of low commodity prices on the dairy sector has not hampered mortgage performance in 2016, as reported 30 plus day arrears figures indicate. Rising tourist numbers and a buoyant construction sector, combined with low unemployment, have been fundamental in driving stable mortgage performance.

Fitch expects the current performance trend to continue into 2017, supported by a rising housing market, low interest rates and a tight labour market. We expect a rate reduction of 25bp by early 2017, with potential for a rate rise to 2.25% in 2018. Fitch does not expect the future tightening cycle to create significant mortgage stress, as the economic outlook is likely to remain stable. We expect unemployement to fall by around 0.2% in 2017, with a further moderate reduction expected into 2018.

Mortgage Lending and Prepayments

The buoyant market has prompted the Reserve Bank of New Zealand (RBNZ) to tighten the restrictions placed on banks’ residential lending, by extending the LTV limits for properties in Auckland to the rest of the country. The introduction of these limits has slowed the housing market to some extent. This will likely push sentiment lower in the regions, and have a similar effect to that which occurred in Auckland when the restrictions were initially introduced. Auckland suffered a reduction in yoy growth of 10.6%, as at October 2016. However, if low interest rates persist over an extended period, the move is more likely to fuel further home price growth and lead to higher levels of household debt.

Fitch expects lending volumes to grow, but at a slower pace with banks likely to compete via attractive offers in 2017. However, tighter underwriting and decreasing levels of affordability will moderate volumes into 2017-2018 to around 5% yoy. Stretched affordability is likely to suppress demand from new mortgage applicants, particularly in Auckland. Growth will likely come from the larger regional centres.

Regulatory Environment: Regulatory Intervention to Continue
The limits on high LTV mortages were revised in October 2016 and a new limit was imposed. The new framework restricts low deposit lending to investors and owner occupiers by imposing minimum deposits of 40% and 20%, respectively. Further restrictions limit banks’ exposure to low deposit lending to investors and owner occupiers to 5% and 10% respectively, as a proportion of the bank’s overall mortgage portfolio.

Fitch expects that the roll out of the LTV restrictions may not have a lasting impact, as previous efforts to moderate price growth by the RBNZ by implementing LTV restrictions only had a temporary impact.
Home Prices and Affordability

- Singapore’s government has been steadfast in maintaining measures intended to cool the property market, first initiated in 2009. The private home price index has fallen for 12 consecutive quarters and prices have fallen 11% since peaking in September 2013.

- Fitch expects home prices to remain soft, due to a continued influx of new supply and slowing immigration amid a weak economy. Home vacancies climbed to 8.9% as at 2Q16, the highest in over 11 years, and fell marginally to 8.7% in 3Q16. The total supply of private homes in the pipeline numbered 43,693 at end-September 2016, of which 20,577 units remained unsold (12.7% of the total stock of private homes). That said, owner-occupier demand continues to support transaction volumes, and household balance sheets remain sound in aggregate. These factors help mitigate the risk of a severe correction in home prices.

- Fitch expects private home prices to drop by 3%-5% per annum in the next two years. A global financial or economic shock could trigger a more severe slump in home prices, but this is not our base-case scenario.

Affordability: Helped by Lower Home Prices

- Affordability has been improving in recent years, on the back of falling home prices and positive income growth.

- Fitch expects affordability to improve slightly in the next two years, barring any drastic price correction. A further decline of home prices will compensate for potentially higher mortgage rates, as short-term rates in Singapore are expected to rise over the next two years. With household debt as a proportion of GDP at the lower band among developed economies, this suggests a relatively healthy debt-servicing capability. The overall unemployment rate in Singapore remained very low, at 2.1% as at end-September 2016.

Mortgage Performance: Rise in Arrears Possible

- Many of the floating rate mortgages in Singapore are benchmarked against SIBOR and SOR (swap offer rate). SIBOR has historically tracked the US Federal funds rate, and Singapore’s mortgage rates are expected to increase in tandem with US rates.

- Higher mortgage rates, coming off a very low base, may be negative for loan quality but the impact on delinquencies is expected to be marginal. Fitch believes housing loan quality will continue to be supported by a tight labour market and strong household balance sheets. We expect the housing non-performing loan ratio to rise by 10-15bp per annum in 2017-2018, reaching a still-low level of 0.7% by end-2018.

Regulatory Environment: Expected to Remain Tight

- The authorities are likely to maintain current policy in the near-term, barring any major price correction. In our view, this gives regulators room to stem a destabilising fall in home prices, by selectively unwinding the cooling measures.
Home Prices and Affordability

- HPI (real, rebased)
- Real working income (rebased)
- Real HP to real working income (rebased)
- Gross rental yield p.a. (rebased)

Sources: Fitch, BCB (Banco Central do Brasil), ABECIP (Association of Brazilian Real Estate Loans and Savings Companies)

Home Prices: Further Real Declines Probable

While asking prices have remained mostly flat in 2015, high inflation has seen prices decline by 9% in real terms, and by over 5% in the year to September 2016. All major metropolitan regions have been affected, with Rio de Janeiro being the hardest hit, due to inflated price levels. The economic recession over the last two years, coupled with high inflation and interest rates, has reduced both demand for home purchases and the supply of cheap mortgages. On the other hand, availability of good quality housing is scarce and homebuilders have reduced new constructions, while the population is growing and average households are larger than in developed countries. This limits downward potential for home prices.

High unemployment, reduced incomes and relatively tight monetary policies will continue to weigh on the housing market. We expect real home prices to continue to decline at least in 2017, although the pace of decline will soften, due to the forecast modest recovery of Brazil’s economy. In the mid-term, home prices are expected to stabilise, helped by an improving macroeconomic environment and the meagre housing supply in large cities.

Affordability: Only Slight Improvement Expected

Affordability remains low, as shown by high price-to-income ratios and low rental yields, although income-adjusted prices have decreased by around 5% since January 2015. An average property in Sao Paulo still costs around 15x per capita GDP. Rental yields are considerably lower than real government bond yields and mortgage rates.

Tight underwriting standards and increased mortgage rates since 2015 have further worsened affordability. Also, many households are indebted and face steep interest rates on consumer loans.

Mortgage Rates and Arrears

- Mortgage rates
- Selic rate
- Unemployment

Source: Fitch, BCB (Banco Central do Brasil)

Mortgage Performance: Arrears to Remain Low

Mortgages originated by large banks and included in Fitch-rated RMBS have shown stable performance with low arrears. Prepayments have reduced because of declining household incomes and the increase in mortgage rates. Typical Brazilian mortgages are fixed rate with constant principal amortisation. Home prices would have to decline sharply for borrowers to lose their equity, as initial loan-to-value ratios average 76%. Also, real wages would have to fall significantly to critically raise debt-to-income ratios (DTI).

Arrears ratios are expected to remain low, with market three-months plus arrears at around 1.8%. Favourable loan characteristics, especially decreasing DTI for most mortgages, will keep arrears at bay, despite the projected slowdown in mortgage balance growth.

Mortgage Lending: Turning Point in 2017

New mortgage lending has nosedived recently, with a decline of nearly 35% in real terms in the year to September 2016. Lending has sunk to less than half the volume seen in 2014, while at the same time the proportion of subsidised mortgages has increased considerably. The adverse macroeconomic scenario has led to a continued depletion of savings - the cheapest mortgage funding source - accompanied by mortgage rate increases and tighter underwriting criteria.

We expect mortgage lending to recover slightly next year, but it will remain subdued well into 2018. Despite the projected declines, the Selic benchmark rate will remain significantly above rates on savings accounts (capped at 6-8% per annum), stimulating further outflows. The potential for mortgage rate declines will be limited, although rates have slightly reduced in recent months. Buyer demand will remain muted, due to growing unemployment and strained household income levels.

Regulatory Environment: Little Change Expected

In the last two years, regulatory changes have focused on freeing up cheap funding for mortgage lending. After reducing reserve requirements in May 2015 (which increased the amount of deposits available for mortgage lending by 4.5%), BCB has, since end-September 2016, allowed banks to use 6.5% of savings deposits to finance properties valued up to BRL1.5m, at a capped rate of 12% per annum. Also, according to new Brazilian law, a total of 52% of savings deposits have to be directed towards housing finance at the capped rate: previously, the maximum property value was BRL650,000/BRL750,000 (depending on the region). The two measures were introduced mainly to help homebuilders that have been suffering from a scarcity of cheap mortgages caused by the large net withdrawal of savings.

The most recent regulatory measure could revive lending for more upmarket properties in large cities at the expense of cheaper units. The impact on the market as a whole is expected to be weak. In the next year or two, Fitch expects the covered bond law, introduced in 2014, to be regulated by Bacen. This could potentially reduce funding costs, especially for smaller institutions.
**Home Prices: Fundamentals Support Price Stability**

Home price appreciation continued its steady growth in 2016. Mexican peso depreciation against the US dollar (-43% between 2014-2016) and a tighter monetary policy are key drivers of the increase in construction costs, which are in turn driving increased home prices. Still, Fitch believes that persistent demand for home ownership underpins long-term home price growth.

Fitch expects a growing workforce (+3.6% during 2016) and stable unemployment rates (4.0% average) to be key drivers of housing dynamics in the foreseeable future. A domestic macro-environment facing low growth prospects may moderate the household income recovery among domestic borrowers, ongoing since 2012. Hence, housing demand in more expensive locations may fall.

**Affordability: Expected to Remain Sustainable**

As per-capita income continues its recovery, Fitch expects mortgage leverage to be stable in terms of the price-to-income ratio with consistent DTI ratios at around 25%-30% of gross borrower income. Additionally, fixed-interest rate loan products continue to support mortgage affordability – with INFONAVIT and FOVISSSTE (the two largest government agencies) showing sustained origination of fixed-rate mortgages denominated in Mexican pesos (a loan product which should be more attractive than inflation-linked mortgages).

**Mortgage Rates and Arrears**

The underlying asset performance of agency-sponsored and bank-sponsored RMBS remains strong, given a payroll collection mechanism in the former and large loan seasoning in the latter. Default ratios are stable around 3-4% for both sectors.

Fitch does not expect this to change, given strong servicing abilities. However, Fitch expects the asset performance of RMBS sponsored by non-bank financial institutions (NBFIas) to remain stressed, due to lingering default resolutions and a drawn-out recovery process. The effectiveness of mortgage insurance and the management of repossessed properties will be critical to reducing losses from NBFI portfolios. Moreover, the best performers in the NBFI category are currently facing another servicer substitution process, which will likely impact the collection process in the short term.

**Mortgage Lending: Increased Competition**

Given their relatively cheap funding, in the form of customer deposits, Fitch expects the supply of mortgage loans to be sustained, albeit with a slightly lower growth rate than previous years, given interest rate pressure and indirect competition from government agencies. While the borrower base between banks and agencies differ (banks focus on the middle- and high-income segment and agencies focus on low-income borrowers), they do partially overlap, allowing for some migration of potential borrowers from banks to agencies.

Fitch believes the availability of mortgage credit will remain strong.

**Regulatory Environment: 2012 Initiatives On-track**

President Pena Nieto’s strategy on housing affordability has focused on three areas: better coordination of housing policy; sustainable urban development; and increasing housing supply to cope with demand while improving citizens’ quality of life.

Importantly, these initiatives have resulted in the promotion of new builds closer to city centres. While this is credit negative for existing private-sector RMBS sponsored by NBFIas (as borrowers have abandoned houses in poorer locations), it has resulted in home price growth for new constructions. This has increased pressure on the sales of existing repossessed properties, as prospective new home buyers are being encouraged to move closer to urban centers.

Another notable change stemming from the above initiatives has been increased competition among the dominant banks. This stems from new mortgage products being granted to the federal agencies and the elimination of transfer costs when refinancing. Federal agencies have been able to sustain strong origination volumes via more competitive products and refinancings are growing in popularity, despite rising interest rates.
Macros Indicators

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Legend

* IDR: Sovereign Issuer Default Rating
* The Bank System Indicator (BSI) is a system weighted average of bank standalone strength as measured by bank Viability Ratings
* With the Macro-Prudential Indicator (MPI) Fitch systematically monitors macro-prudential risks on a scale from ‘1’ (low) to ‘3’ (high)
* Change of Outlook evaluation compared with evaluation a year ago
* Source: Fitch
### Appendix 1: Related Research, Criteria and Analyst Contact Information

<table>
<thead>
<tr>
<th>Country</th>
<th>Analysts</th>
<th>Contacts</th>
<th>Related Research and Criteria for Country</th>
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</thead>
</table>
| USA         | Grant Bailey                      | +1 212 908 0544 grant.bailey@fitchratings.com | U.S. RMBS Loan Loss Model Criteria, (November 2016)  
U.S. RMBS Sustainable Home Price Report (November 2016)  
|             | Suzanne Mistretta                 | +1 212 908 0639 suzanne.mistretta@fitchratings.com | Canadian Residential Mortgage Rating Criteria, (October 2016) |
| Canada      | Grant Bailey                      | +1 212 908 0544 grant.bailey@fitchratings.com |                                        |
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RMBS Compare (September 2016) |
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|             | Thomas Kayani                     | +44 20 3530 1006 thomas.kayani@fitchratings.com |                                        |
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|             | Adrian Pfaff                      | +49 69 768 076 259 adrian.pfaff@fitchratings.com |                                        |
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Mortgage Market Index – Netherlands (3Q 2016) |
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Mortgage Market Index – Spain (September 2015)  
Spanish Repossession Analysis 2016 (October 2016)  
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Italian NPL Scheme (10 March 2016) |
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RMBS Compare (September 2016) |
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February 2017
### Related Research, Criteria and Analyst Contact Information (Continued)

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