• Our regular update of the global and national housing outlook

• A focus on IMF assessments of housing markets in Australia and Norway

Globally, house prices continue a slow recovery. The Global House Price Index, an equally weighted average of real house prices in nearly 60 countries, inched up slowly during the past two years but has not yet returned to pre-crisis levels (Figure 1).
Real House Prices over the Past Year
Real house prices increased over the past year in most countries.
(2015:Q2 or latest, annual percent change)

Sources: Bank of International Settlements, Colliers International, European Central Bank, Federal Reserve Bank of Dallas, Savills, Sinyi Real Estate Planning and Research, and national sources.

Figure 2

Real Credit Growth over the Past Year
Real credit growth, often associated with house price changes, was strong in many countries.
(2015:Q2 or latest, annual percent change)

Sources: Haver Analytics and IMF.

Figure 3
As noted in previous quarterly reports, the overall index conceals divergent patterns: over the past year, house prices rose in two-thirds of the countries included in the index and fell in the other one-third (Figure 2). Credit growth has been strong in many countries (Figure 3). As noted in July’s quarterly report, house prices and credit growth have gone hand-in-hand over the past five years. However, credit growth is not the only predictor for the extent of house price growth; several other factors appear to be at play.

For OECD countries, house prices have grown faster than incomes and rents in almost half of the countries (Figures 4 and 5). House price-to-income and house price-to-rent ratios are highly correlated, as documented in the previous quarterly report.

![House Price-to-Income Ratio Around the World](http://www.imf.org/external/research/housing/)

These charts and the underlying data are available from the IMF’s Global Housing Watch page: [http://www.imf.org/external/research/housing/](http://www.imf.org/external/research/housing/)

Over the past quarter, IMF staff has continued to provide detailed assessments of housing market developments in various countries. The remainder of this quarterly update provides extracts of the analysis contained in two of these reports: Australia and Norway.
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Box 1: Are Australia’s House Prices Overvalued?

Adil Mohommad, Dan Nyberg, and Alex Pitt (all at the IMF) argue that house prices are moderately stronger than consistent with current economic fundamentals, but less than a comparison to historical or international averages would suggest.

**Argument:** House prices have risen faster in Australia than in most other countries, suggesting, ceteris paribus, overvaluation

**Counter argument 1:** House prices are in line on an absolute basis

**Bottom line:** Price-to-income ratios have risen in Australia and now near historic highs. However, international comparisons suggest that Australia is broadly in line with comparator countries, although significant data comparability issues make inference difficult.

**Counter argument 2:** The equilibrium level of house prices has also risen sharply

**Bottom line:** Lower nominal and real interest rates and financial liberalization are key contributors to the strong increases in house prices over the past two decades. The various house price modeling approaches indicate that house prices are moderately stronger (in the range of 4-19 percent) than economic fundamentals would suggest.

**Counter argument 3:** High prices reflect low supply

**Bottom line:** Housing supply does indeed seem to have grown significantly slower than demand, reducing (but not eliminating) concerns about overvaluation.

**Counter argument 4:** It is just a Sydney problem, not a national one

**Bottom line:** The two most populous cities, Sydney and Melbourne, have seen strong house price increases, including in the investor segment. A sharp downturn in the housing market in these cities could be expected to have real sector spillovers, pointing to the need for targeted measures—including investor lending—to reduce risks from a housing downturn.

**Counter argument 5:** There are no signs of weakening lending standards or speculation

**Bottom line:** While lending standards overall seem not to have loosened, the growing share of investor and interest-only loans in the highly-buoyant Sydney market, is a pocket of concern.

**Counter argument 6:** Even if they are overvalued, it doesn’t matter as banks can withstand a big fall

**Bottom line:** While bank capital levels are likely sufficient to keep them solvent in the event of a major fall in house prices, they are not enough to prevent banks making an already extremely difficult macroeconomic situation worse.
Box 2: The Housing Boom and Household Debt in Norway

The Norwegian housing market was only moderately affected by the global financial crisis, and the rising trend of house prices resumed shortly after the crisis. In the meantime, household debt reached more than 200 percent of disposable income, and it is expected to grow further. Giang Ho and Kazuko Shirono (both at the IMF) examine the housing boom and household debt in Norway.

House Prices and Household Debt:
Norway has seen a long housing boom. Estimates suggest that house prices may be overvalued by about 25–60 percent, depending on measures of overvaluation. Household indebtedness has also risen significantly for the past decades. Household debt was about 140 percent of disposable income in 2002 and now it stands at about 220 percent of disposable income in 2014, which is among the highest in OECD countries. Household debt is heavily skewed toward housing, with about 85 percent in the form of mortgages from banks and mortgage companies.

Institutional Factors Behind the Housing Boom and Household Indebtedness: Demand and supply factors have contributed to the housing boom and rising household debt. Structural or institutional factors are also important. For example, Norway’s private and public rental combined accounts for about 23 percent of the total dwelling stock, compared to an average of 38 percent for other Nordic countries. Thus, individuals tend to enter the owner-occupied housing market and take mortgages at a relatively younger age. Moreover, Norway ranks among the OECD countries with the highest degrees of tax relief on debt financing cost of homeownership, according to the OECD.

Household Vulnerability: Despite high debt levels in recent years, Norwegian households do not appear to face significant payment capacity problems under current conditions. However, households appear vulnerable to interest rate hikes. A sensitivity analysis shows that household vulnerability could rise under severe stress scenarios, and these effects will be felt unevenly across different income and age groups.

Conclusion: High household debt is an underlying vulnerability for Norway. Risks seem contained so far, but this could change if economic conditions deteriorate significantly. A holistic approach will be needed to address risks associated with high house prices and household debt. Macroprudential policy measures play a key role to contain financial stability risks, but other supporting measures will be needed to address the issue more fundamentally. Possible options include the following: reducing tax preferences for owner-occupied housing and mortgage debt; easing supply constraints; and development of rental market.