A bird’s eye view of OECD housing markets

2012 Financial Markets Conference
Federal Reserve Bank of Atlanta
Atlanta, 9-11 April 2012

Christophe ANDRÉ
OECD Economics Department
Outline of the presentation

• Recent developments in OECD housing markets
• Drivers of supply and demand
• Housing and the wider economy
Recent developments in OECD housing markets
Real house prices
Indices, 1995 = 100
Real house prices (cont.)
Indices, 1995 = 100

- France
- Belgium
- Australia
- New Zealand
- Finland
- Sweden

The graph shows the real house prices indices from 1970 to 2010 for various countries, with 1995 set as the base year (index = 100). The countries included are France, Belgium, Australia, New Zealand, Finland, and Sweden. The graph indicates fluctuations in house prices over time, with some countries experiencing more significant changes than others.
Real house prices in the US and euro area
Indices, 1995 =100

United States
Euro area
Real house prices in selected US states and euro area countries
Indices, 1995 = 100
Cross-country coincidence of real house price increases

Number of countries (out of 18) with over 25% increase in real prices over the previous five years
OECD Real house prices and the business cycle

- Real house prices (left scale)
- Output gap (right scale)

Percentage deviation from trend
Per cent of potential output
Real residential investment
Indices, 1995 =100
Real residential investment (cont.)
Indices, 1995 =100

- France
- Belgium
- Australia
- New Zealand
- Finland
- Sweden
Construction in selected US states and euro area countries
Volume indices, 1997=100
Price-Income and Price-Rent ratios
Long-term average = 100
Price-Income and Price-Rent ratios (cont.)
Long-term average = 100

**Australia**

**Spain**

**Netherlands**

**Denmark**
Asset-pricing model
Poterba (1984)

\[ P = \frac{R}{(i_a + \tau + f - \pi)} \]

- \( P \) = House prices
- \( R \) = Rents
- \( i_a \) = After tax mortgage rate
- \( \tau \) = Property tax rate
- \( f \) = Recurring holding costs
- \( \pi \) = Expected capital gains
Actual and fundamental price-rent ratios
Long-term average = 100

United States

France

Spain

United Kingdom

Different scale
Drivers of supply and demand
Drivers of demand

- Household real disposable income
- Interest rates
- Mortgage market sophistication
- Demographics
- Demand by non-residents
- Price expectations
Drivers of supply

- Profitability: House prices compared to production costs
- Expectations of future house prices
- Physical limitations to increasing supply
- Land-use and building regulations
Real house prices and residential investment
Percentage change over the latest cyclical expansion

\[ y = 0.77x - 6.90 \]
\[ R^2 = 0.75 \]
Housing and the wider economy
Marginal propensity to consume housing wealth and mortgage market indicators

A: Mortgage debt ratios

B: Housing equity withdrawal

Note: MPC is for marginal propensity to consume; HEW is for housing equity withdrawal.

Residential investment and private consumption - United States

Volume indices, 1991=100

- Residential investment
- Private consumption
- GDP

Years: 1991 to 2011
Residential investment and private consumption – Spain
Volume indices, 1991=100
Residential investment and private consumption – United Kingdom
Volume indices, 1991=100
The role of policies

- Loose monetary policy risks fuelling housing booms

- Regulatory and supervisory failures have often led to housing crises

- Taxation of housing often encourages homeownership and leads to higher debt levels
Tenure structure across countries
Per cent of dwelling stock

Globalisation and housing

- Capital inflows associated with trade imbalances have played an important role in fuelling the boom in some countries.

- The “savings glut” has contributed to keeping long-term interest rates low.
Households wealth and saving in the United States

Per cent of household disposable income

Net household wealth (left scale)
Saving ratio (right scale)
Households saving, government deficit and current account balance – United States
Per cent of GDP

-15 -10 -5 0 5 10 15

Households savings
Government net lending
Current balance
Evolution of real house prices and current account balances
2000-2007
Conclusions

- Low interest rates and mortgage market innovations have been the main drivers of the latest housing expansion, at least initially.
- After 2003-04, house prices and construction activity seem to have overshot in many countries.
- Global imbalances have kept long-term interest rates low.
- Inadequate financial regulation and supervision have allowed unsustainable developments in housing finance.
- Tax systems favouring homeownership have tended to increase instability.
Thank you!
Mortgage market sophistication and innovations

- Extension of loan terms
- Interest-only loans / Flexible repayment loans
- Increased reliance on adjustable-rates
- Higher loan-to-value ratios
- Housing equity withdrawal
- Subprime loans
- Securitisation
Risky lending in the UK
Share of all regulated mortgage sales represented by high-risk products in 2007

- 49% Non-income verified
- 32% Interest-only
- 28% Loan-to-income ratios of 3.5 or over
- 14% Loan-to-value ratios of 90% or over
- 4% To individuals with impaired credit history

Source: FSA
Loan to value ratios for housing of first time buyers in Ireland

Source: Department of environment, Heritage and Local Government.
Policy rates and Taylor rule

United States

Euro area

Per cent

Short-term interest rate

Taylor rule

Per cent

Short-term interest rate

Taylor rule
Real GDP and consumption during housing downturns

- Real GDP
- Real household consumption

Quarters after peak
Regulatory and supervisory failures

- “Shadow” banking system
- Excessive leverage
- Pro-cyclicality
- Opaque securities and risk management failures
- Conflict of interest in rating agencies
- Poor underwriting standards for mortgages
- Insufficient attention to liquidity