

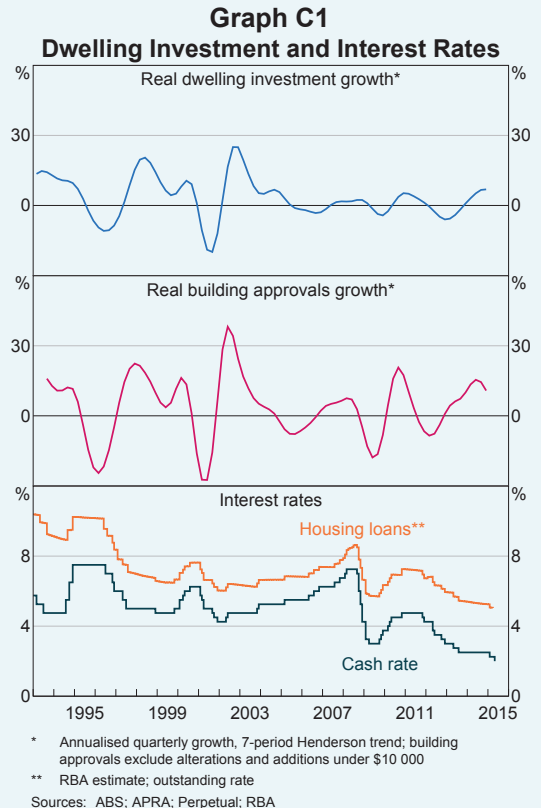
## Box C

# The Cycle in Dwelling Investment

Dwelling investment is the expenditure component of GDP that tends to be most sensitive to interest rates.<sup>1</sup> So given the reductions in the cash rate over recent years, it is unsurprising that the pace of dwelling investment growth has increased to 8 per cent over the past year (Graph C1). Ongoing strength in residential building approvals, relatively strong population growth and the very low level of interest rates suggest that further increases in dwelling investment are in prospect.

Interest rates affect dwelling investment partly because purchasing or renovating a dwelling is a large expense for a household and typically requires financing with a loan. A reduction in the cash rate lowers household borrowing rates, making it easier for households to finance the purchase of a dwelling, thereby increasing demand for dwellings. A reduction in the cash rate also lowers yields on 'safe' investments, such as cash deposits, which increases the demand for higher-yielding assets, such as dwellings or shares. Given the time it takes to start a building project, higher demand for dwellings would be expected to lead to higher prices for existing dwellings in the near term and, a little later, to stimulate the building of new dwellings as well as renovations to existing dwellings.

Statistical models that jointly consider the various drivers of investment in new dwellings (which makes up the bulk of dwelling investment) suggest that the response to declines in the cash rate in the current phase of the monetary policy cycle has been in line



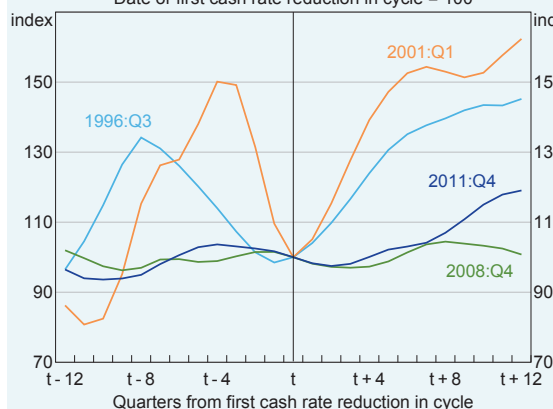
with previous episodes of declining rates.<sup>2</sup> Despite this, the pick-up of new dwelling investment so far looks more muted than in some previous cycles, particularly that in 2001 (Graph C2). One explanation for the difference is that the current cycle has had an unusually high concentration of construction of higher-density dwellings, particularly high-rise apartments, which take longer to reach the construction phase after the building approvals have been granted. Indeed, the increase in the volume of

1 See, for instance, Lawson J and D Rees (2008), 'A Sectoral Model of the Australian Economy', RBA Research Discussion Paper No 2008-01. This also tends to be true for other countries: for the United States, see Mishkin FS (2007), 'Housing and the Monetary Transmission Mechanism', NBER Working Paper No 13518; for the United Kingdom, see Corder M and N Roberts (2008), 'Understanding Dwellings Investment', Bank of England *Quarterly Bulletin*, 48(4), pp 393–403.

2 New dwelling investment excludes alterations and additions activity, which has been weaker than suggested by historical experience.

**Graph C2**  
Investment in New Dwellings\*

Date of first cash rate reduction in cycle = 100



\* Volumes; 7-period Henderson trends

Sources: ABS; RBA

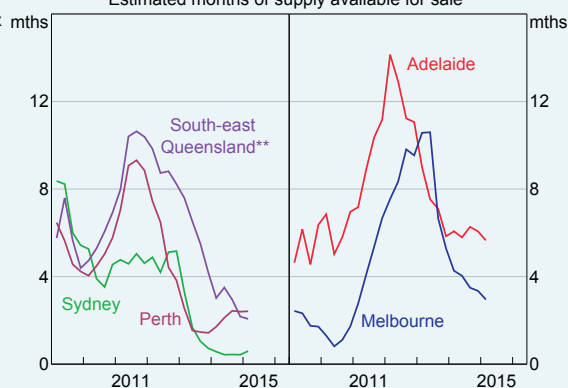
approvals has been more in line with that of other cycles. Also, the relatively sharp pick-up of new dwelling investment in 2001 was unusual. This may, in part, have reflected a rebound following the sharp decline in approvals after the introduction of the goods and services tax in July 2000. The introduction of the federal First Home Owner Grant scheme at that time might also have played some role.

To accommodate an increase in demand for renovations and new dwelling construction, the construction industry needs to draw more heavily on a range of inputs, including land, construction workers, materials and equipment. The size of the increase in dwelling investment will therefore depend on how easily the industry can source these additional inputs.

The increase in dwelling investment to date has already seen a pick-up in growth of greenfield land sales, particularly along the eastern seaboard. However, developers are now holding unusually low levels of unsold lots and, in some cities, supply is equivalent to less than three months of sales (Graph C3). Unsold lots are recorded as being most scarce in Sydney and south-east Queensland, where

**Graph C3**  
Greenfield Land Supply

Estimated months of supply available for sale\*



\* Number of lots for sale at quarter-end divided by average number of lots sold per month over the preceding year

\*\* Brisbane, Gold Coast, Sunshine Coast

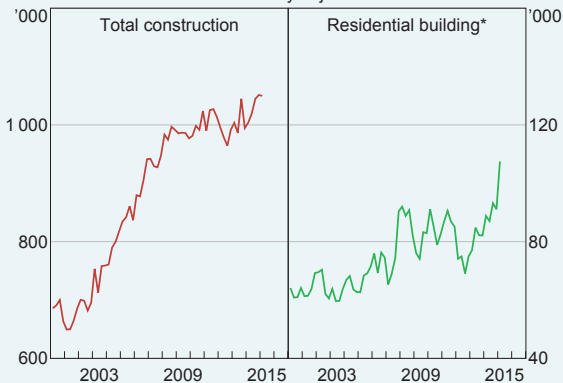
Sources: National Land Survey Program, Charter Keck Cramer, Research 4; RBA

the Bank's liaison contacts have suggested that developers are having difficulty obtaining further suitable land approved for development. Some liaison contacts have also raised concerns about the availability of land for apartment developments in Sydney, as the stock of suitable sites has been gradually depleted over recent years.

The employment of construction workers has also grown, particularly in residential construction (Graph C4). Even so, only some types of personnel are reported to be in short supply, such as project managers in the high-density construction sector and bricklayers on the eastern seaboard.

In general, the supply of labour in the residential construction industry appears to be well placed to increase further, partly because large numbers of construction workers are becoming available as work on mining construction projects winds down. According to the Bank's liaison, construction employment in the mining sector is expected to fall by about 60 000 people from 2014 to 2018 (around 6 per cent of construction employment), and contacts have suggested that many will be able to move into

**Graph C4**  
**Construction Employment**  
 Seasonally adjusted



\* Seasonally adjusted using ABS seasonal factors for aggregate construction employment; does not include residential-related construction services employment or workers employed in building construction that are difficult to classify further

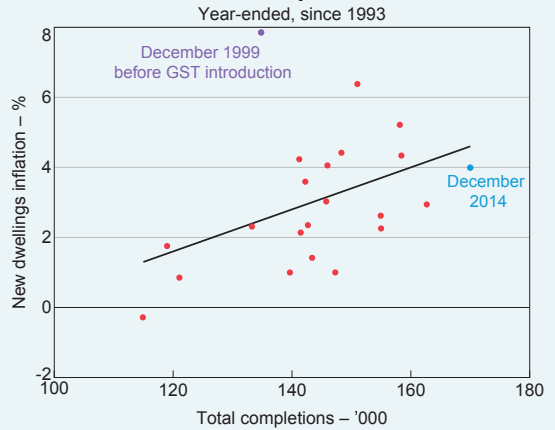
Sources: ABS; RBA

the residential building industry.<sup>3</sup> There is also scope to employ construction workers from overseas if significant skill shortages arise.

It is more difficult to quantify any potential shortages of building equipment and materials. The Bank's liaison suggests that some builders have been able to increase margins over the past year or so, and building material price inflation has risen somewhat. Significant shortages of any key building inputs, if they do arise, are also likely to show up in faster growth of new dwelling prices. Indeed, in the past, periods of strong growth of new dwelling completions have been associated with higher rates of inflation in the cost of newly built houses (Graph C5; the measure of inflation excludes the cost of land). Growth of new dwelling costs was around 4 per cent over the year to the December quarter 2014 and remained strong in the March quarter. This is around 1 percentage point above its average over the inflation-targeting period, but below that seen in earlier periods of strong dwelling construction activity. However, outside of certain trades, labour cost pressures have been

3 For more detail, see Doyle M-A (2014), 'Labour Movements during the Resources Boom', RBA *Bulletin*, December, pp 7–16.

**Graph C5**  
**New Dwellings Price Inflation and Completions**  
 Year-ended, since 1993



Sources: ABS; RBA

subdued to date. Growth in construction wages was around its slowest pace in the past decade or so over 2014.<sup>4</sup>

On balance, strength in dwelling investment is likely to be sustained, supported by low interest rates and relatively strong population growth. However, difficulties in obtaining the necessary production inputs, especially suitable land with development approval in some parts of the country, are likely to limit the extent of any further pick-up in dwelling investment growth above what is currently expected. ↗

4 For more detail, see RBA (2014), 'Box B: Inflation and the Housing Cycle', *Statement on Monetary Policy*, November, pp 55–57.

