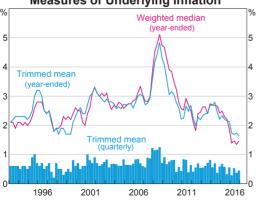
## 5. Inflation

Inflation was low in the December quarter but shows signs of having stabilised. The low inflation outcomes over the past year reflect weak labour cost growth, low inflation expectations, heightened competitive pressures in some product markets and low rent inflation due to the increases in the stock of housing. The earlier large depreciation of the exchange rate is no longer estimated to be putting upward pressure on tradable prices.

Measures of underlying inflation were around ½ per cent in the December quarter and around 1½ per cent over the year, in line with the forecasts in the November *Statement* (Graph 5.1; Table 5.1). Headline inflation was 1.5 per cent over the year (Graph 5.2). Higher tobacco prices contributed 0.4 percentage points to headline inflation over the year; scheduled further increases in the tobacco excise are expected to contribute significantly to headline inflation over the next four years. After subtracting from

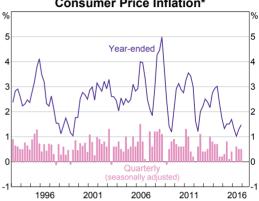
Graph 5.1
Measures of Underlying Inflation\*



Excludes interest charges prior to the September quarter 1998; adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

Graph 5.2
Consumer Price Inflation\*



Excludes interest charges prior to the September quarter 1998;
 adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

headline inflation over much of the previous few years, fuel prices rose in the quarter.

Prices for tradable items (excluding volatiles) declined in the quarter and over the year (Graph 5.3). Prices have declined for consumer durables over most of the past seven years, reflecting discounting in response to competitive pressures as established firms and new entrants (including international retailers) look to gain market share. The effect of heightened competitive pressures on inflation is expected to wane over time, although the point at which this will occur is uncertain.

Non-tradable inflation (excluding tobacco) increased a little in the December quarter, but remains below 2 per cent over the year.<sup>1</sup> It

<sup>1</sup> Following an ABS review of the international trade exposure of CPI components, the December quarter 2016 CPI release contained a reclassification of a number of expenditure classes between tradables and non-tradables. The most notable was the reclassification of tobacco from tradable to non-tradable.

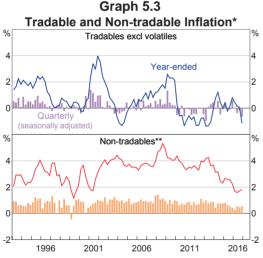
Table 5.1: Measures of Consumer Price Inflation

Per cent

	Quarterly <sup>(a)</sup>		Year-ended <sup>(b)</sup>	
	December quarter 2016	September quarter 2016	December quarter 2016	September quarter 2016
Consumer Price Index	0.5	0.7	1.5	1.3
Seasonally adjusted CPI	0.5	0.5		
– Tradables	0.0	0.5	0.1	0.7
<ul> <li>Tradables (excl volatile items)<sup>(c)</sup></li> </ul>	-0.6	0.2	-0.5	1.4
– Non-tradables	0.8	0.4	2.1	1.7
Selected underlying measures				
Trimmed mean	0.4	0.4	1.6	1.7
Weighted median	0.4	0.4	1.5	1.3
CPI excl volatile items(c)	0.3	0.3	1.3	1.7

<sup>(</sup>a) Except for the headline CPI, quarterly changes are based on seasonally adjusted data; those not published by the ABS are calculated by the RBA using seasonal factors published by the ABS

Sources: ABS; RBA



Excludes tobacco; adjusted for the tax changes of 1999-2000

continues to be weighed down by low domestic cost pressures and downward pressure on rent growth from the increase in housing stock.

Labour costs are an important determinant of non-tradable inflation. Wage growth is low and slowed a little further in the September quarter (see 'Domestic Economic Conditions' chapter). The effect of labour cost growth on inflation depends on the extent to which it is offset by higher labour productivity. For around the past five years, productivity growth has largely offset increases in labour costs, leaving unit labour costs little changed. Because labour costs account for around half of total costs in market services, inflation in this component has also declined. Since 2014, technology-driven price declines for telecommunications equipment & services have also subtracted noticeably from market services inflation. Even excluding telecommunications equipment & services, market services inflation is low compared with its history (Graph 5.4).

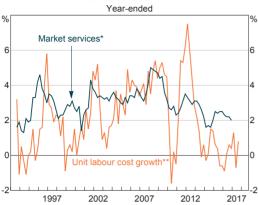
Rent inflation declined a little further in the quarter, and in year-ended terms is around levels last seen in the mid 1990s. The increase in supply of new housing is putting downward pressure on rents. In Perth rents have declined by more than 7 per cent over the year; the significant slowing in population growth in Western Australia is

<sup>(</sup>b) Year-ended changes are based on non-seasonally adjusted data, except for the trimmed mean and weighted median

<sup>(</sup>c) Volatile items are fruit, vegetables and automotive fuel

Excludes interest charges and deposit & loan facilities Sources: ABS: RBA

Graph 5.4 Market Services Inflation

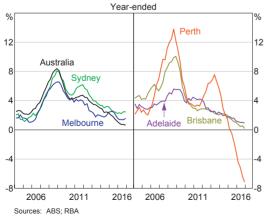


- Excludes telecommunications equipment & services, domestic travel, housing services, interest charges and deposit & loan facilities; adjusted for the tax changes of 1999–2000
- \*\* Non-farm; moved forward by four quarters Sources: ABS: RBA

likely to be adding to this dynamic (Graph 5.5). In contrast, rental growth in Sydney and Melbourne remains subdued but positive and vacancy rates have been steady around their long-run averages for some time. Further increases in housing supply across the country over coming years are expected to result in a protracted period of low rent inflation, though areas where population growth is stronger are likely to be less affected.

New dwelling cost inflation – currently measured by the cost of construction for a new detached

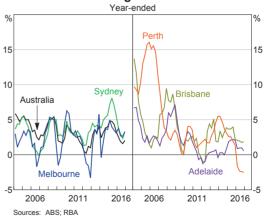
Graph 5.5 Rent Inflation



house – has stabilised although there is considerable variation across cities (Graph 5.6). Over 2016 it was above 3 per cent in Sydney and Melbourne, where construction activity of detached houses has been relatively solid, while new dwelling costs continue to decline in Perth, where economic conditions are weak. The Australian Bureau of Statistics (ABS) announced that it will include costs for apartments and semidetached dwellings in the new dwelling cost series from the March guarter 2017. In recent years, the cost of building these dwellings has grown more slowly than for detached houses. This could reflect a range of factors including larger productivity improvements and spare capacity in the commercial real estate market, which uses similar materials and labour inputs to apartments.<sup>2</sup> The large pipeline of construction of apartments relative to detached houses may result in different price dynamics in the future.

Few regulatory decisions are made in the December quarter, and accordingly non-seasonally adjusted prices for most administered items were unchanged. An exception was urban transport fares, which

Graph 5.6
New Dwelling Cost Inflation



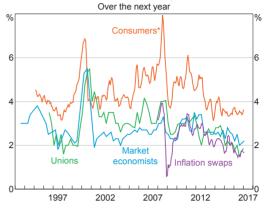
<sup>2</sup> See Shoory, M (2016): 'The Growth of Apartment Construction in Australia', RBA *Bulletin*, June, pp 19–26.

rose noticeably in Sydney. In year-ended terms, inflation in administered items excluding utilities stabilised. Utilities inflation has picked up over the past year but remains well below the high levels seen a few years ago.

Measures of inflation expectations remain low, consistent with recent outcomes for CPI inflation. The recent trend in short-term inflation expectations is mixed across the different measures (Graph 5.7). Consumers' and market economists' short-term inflation expectations have been little changed over the past year. Unions' expectations are lower than one year ago, while one-year inflation swaps have risen to their highest level in a year.

Long-term survey-based measures of inflation expectations remain around the inflation target (Graph 5.8). As is the case in a number of other advanced economies, measures of financial market inflation expectations have recently increased. The 10-year indexed bond measure and the five-to-ten year inflation swap measure are around levels from a year ago. These measures can be affected by factors other than changes in investors' perceptions of expected future inflation, such as changes in the premium that investors demand to bear inflation risk <sup>3</sup> \*\*

**Graph 5.7 Short-term Inflation Expectations** 



\* Three-month moving average; trimmed mean of survey responses Sources: Australian Council of Trade Unions; Bloomberg; Melbourne Institute of Applied Economic and Social Research; RBA; Workplace Research Centre

Graph 5.8

Long-term Inflation Expectations



- \* Average over the next five to ten years
- \*\* Average over six to ten years in the future
- \*\*\* Five-to-ten-year forward

Sources: Australian Council of Trade Unions; Bloomberg; Consensus Economics; RBA; Workplace Research Centre; Yieldbroker

<sup>3</sup> For more detail, see Moore A (2016): 'Measures of Inflation Expectations in Australia', RBA Bulletin, December, pp 23–31.