

# 5. Price and Wage Developments

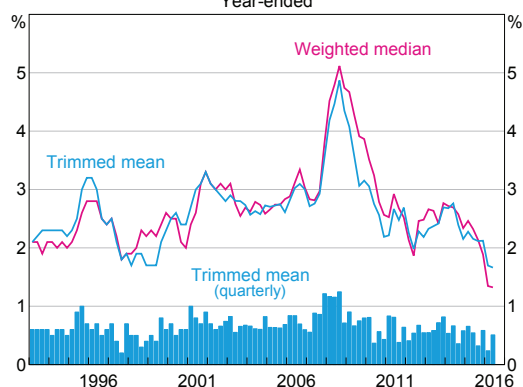
## Inflation

Inflation has been low. A confluence of factors is contributing to weakness in domestic cost pressures. This includes spare capacity in labour and a number of product markets, which has been associated with low wage growth and pressures on costs and margins. Some of the weakness in domestic cost pressures also reflects the adjustment to the decline in the terms of trade and mining investment over recent years, while the depreciation of the Australian dollar over the past few years has put upward pressure on the costs of tradable items.

The June quarter inflation data were broadly in line with the forecast in the *May Statement*. Following the very low March quarter outcomes, measures of underlying inflation picked up to ½ per cent in the June quarter, to be around 1½ per cent over the year (Graph 5.1; Table 5.1). After falling in the March quarter, the headline consumer price index (CPI) increased by 0.6 per cent (in seasonally adjusted terms) to be 1.0 per cent higher over the year (Graph 5.2). Price inflation for volatile items such as fuel and fruit & vegetables boosted headline inflation in the June quarter but remained lower over the year.

The prices of tradable items (excluding volatile items and tobacco) declined slightly in the June quarter and were little changed over the year (Graph 5.3). The final prices of tradable items depend on the world market price and exchange rate movements, although there is still a significant domestic cost component. The substantial

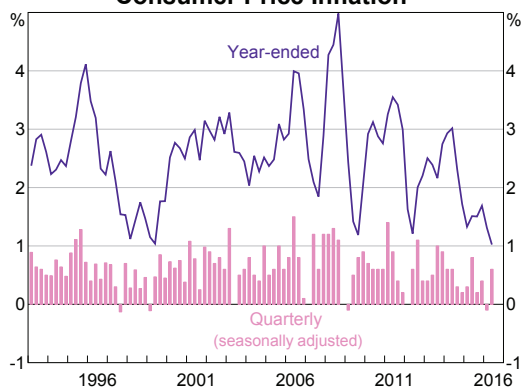
**Graph 5.1**  
Measures of Underlying Inflation\*  
Year-ended



\* 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\*  
Year-ended



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

Sources: ABS; RBA

depreciation of the exchange rate over the past few years has increased import and export prices in Australian dollar terms (Graph 5.4). However,

**Table 5.1: Measures of Consumer Price Inflation**  
Per cent

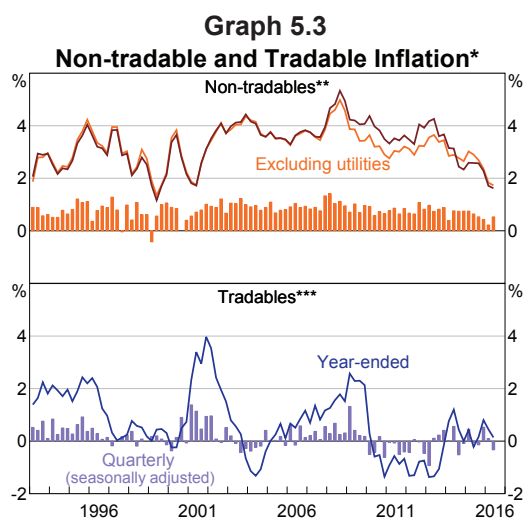
	Quarterly <sup>(a)</sup>		Year-ended <sup>(b)</sup>	
	June quarter 2016	March quarter 2016	June quarter 2016	March quarter 2016
Consumer Price Index	0.4	-0.2	1.0	1.3
Seasonally adjusted CPI	0.6	-0.1	-	-
- Tradables	0.6	-0.6	0.0	0.6
- Tradables (excl. volatile items and tobacco) <sup>(c)</sup>	-0.3	0.1	0.1	0.5
- Non-tradables	0.6	0.2	1.6	1.7
<i>Selected underlying measures</i>				
Trimmed mean	0.5	0.2	1.7	1.7
Weighted median	0.4	0.1	1.3	1.3
CPI excl. volatile items <sup>(c)</sup>	0.4	0.3	1.6	1.7

(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

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

(c) Volatile items are fruit, vegetables and automotive fuel

Sources: ABS; RBA



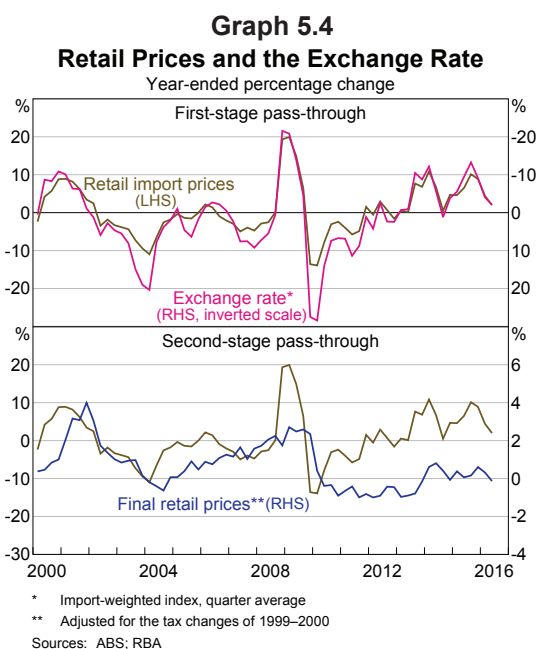
\* Adjusted for the tax changes of 1999–2000

\*\* Excluding interest charges prior to the September quarter 1998 and deposit & loan facilities to June quarter 2011

\*\*\* Excluding volatile items (fruit, vegetables and automotive fuel) and tobacco

Sources: ABS; RBA

heightened retail competition over recent years, including from new foreign entrants, has placed downward pressure on retail prices.<sup>1</sup> The net effect has been further declines in prices of consumer



\* Import-weighted index, quarter average

\*\* Adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

durables, though the extent of the declines is less than a few years ago, and low growth in the prices of food and alcohol.

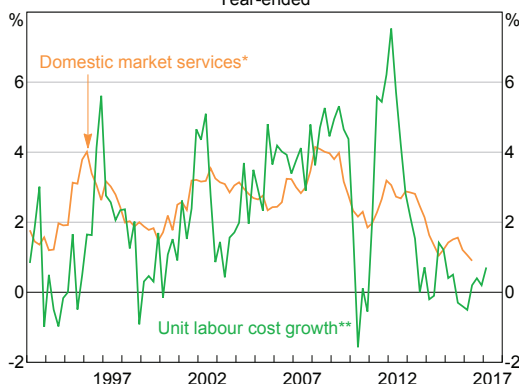
Non-tradables inflation picked up a little in the June quarter but, in year-ended terms, remained

1 For a more detailed discussion, see Ballantyne A and S Langcake (2016), 'Why Has Retail Inflation Been So Low?', RBA Bulletin, June, pp 9–17.

around its lowest level since the late 1990s. A number of factors have contributed to the relatively broad-based decline in non-tradables inflation over recent years, including spare capacity in much of the economy and the associated low growth in labour costs.

Market services inflation has been particularly low (Graph 5.5). As labour costs account for around half of final prices for market services, inflation in this component is consistent with low growth in unit labour costs. This weakness has been particularly pronounced in household services inflation, which includes further large falls in prices of telecommunication equipment and services due to heightened competition. Prices of domestic holiday travel and accommodation were also lower over the year.

**Graph 5.5**  
**Market Services Inflation**  
Year-ended



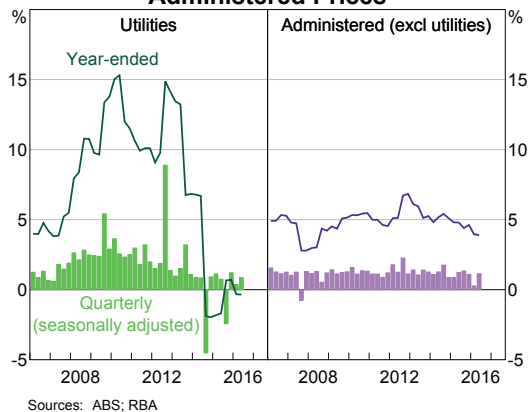
\* Excludes interest charges prior to the September quarter 1998, deposit & loan facilities prior to the June quarter 2011, housing services and domestic travel; adjusted for the tax changes of 1999–2000

\*\* Non-farm, moved forward by four quarters

Sources: ABS; RBA

Administered prices picked up (in seasonally adjusted terms) in the June quarter, following unusually low outcomes in the March quarter in part due to temporary factors (Graph 5.6). Utilities inflation has been low since 2014, following a period of high inflation that was driven by a variety of factors not closely linked to the business cycle, including: a move towards cost-based pricing; an increase in investment to replace ageing infrastructure and

**Graph 5.6**  
**Administered Prices**



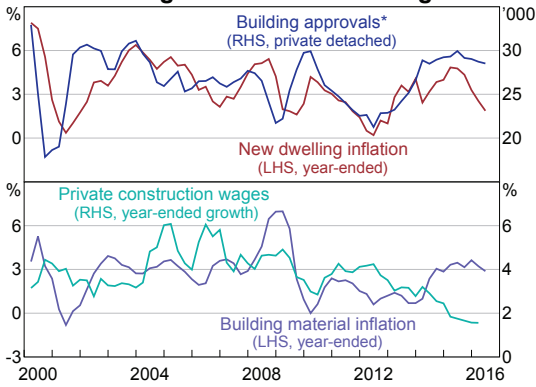
Sources: ABS; RBA

improve capacity; and higher wholesale prices. Many of these pressures have now dissipated and there has been a broad-based decline in inflation in electricity, gas & other household fuels, and water & sewerage. Inflation in other administered items has declined in recent years and was a little below its inflation-targeting average over the past year.

Inflation in the housing-related components of the CPI has been mixed. Inflation in the cost of new dwellings picked up to be around average in the June quarter, following surprisingly weak outcomes in the previous two quarters. New dwelling costs are currently measured by the ABS as the cost of building a new detached house in a capital city, excluding the price of the land; as such, it does not (directly) capture the cost of building an apartment, where a large proportion of building activity has been concentrated of late. The June quarter outcome is broadly consistent with the level of detached housing construction activity in many capital cities and elevated inflation in the cost of building materials (Graph 5.7). While measures of construction wage growth are low, they will also include wage growth in the non-residential and mining construction industries. Furthermore, the residential building industry has a large share of subcontractors, rather than wage earners. According to the Bank's liaison, earnings growth for many residential building subcontractors remains relatively high. New dwelling costs remain weak

**Graph 5.7**

**New Dwelling Inflation and Building Costs**

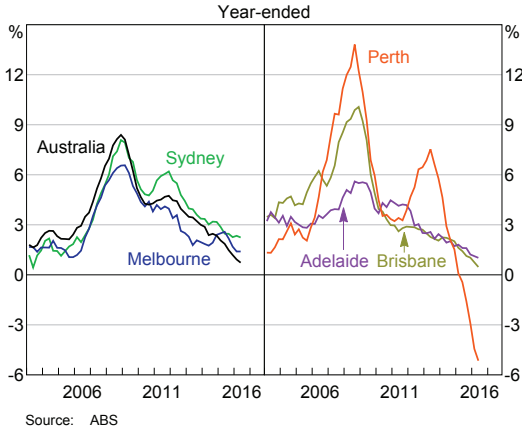


\* Three-month rolling sum  
Sources: ABS; RBA

in Perth, reflecting reduced demand for housing following the end of the mining investment boom and the large decline in commodity prices over recent years.

In Perth, rents have declined sharply, reflecting slower population growth and ongoing additions to the housing supply (Graph 5.8; see 'Box B: The Housing Market'). More generally, residential rent inflation has declined across all capital cities over the year. Developments in rent inflation are fairly persistent over time because the CPI captures all rents, not just the small proportion of agreements that are renegotiated each quarter.

**Graph 5.8**  
**Rent Inflation**

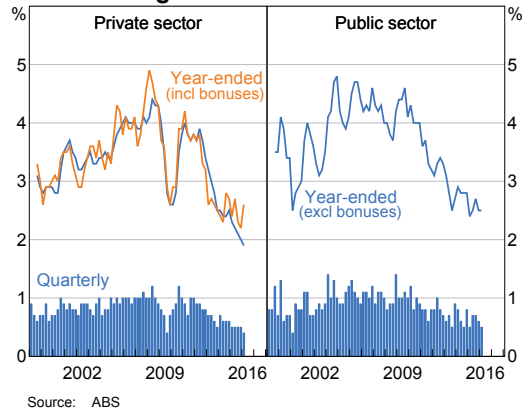


Source: ABS

**Labour Costs**

Labour cost pressures remain weak, reflecting spare capacity in the labour market, a decline in inflation expectations and the moderation in firms' profits due to the decline in the terms of trade. The wage price index (WPI), which is designed to abstract from changes in the type and quality of jobs, rose by 0.4 per cent in the March quarter and by 2.1 per cent over the year. Growth in private sector wages edged down further over the year to March (Graph 5.9). However, when bonuses are included, private sector wage growth has been little changed for the past two years. Public sector wage growth has also been fairly stable over most of the past two years. While wage growth has been low recently, it is around average in real terms (deflated by headline CPI).

**Graph 5.9**  
**Wage Price Index Growth**

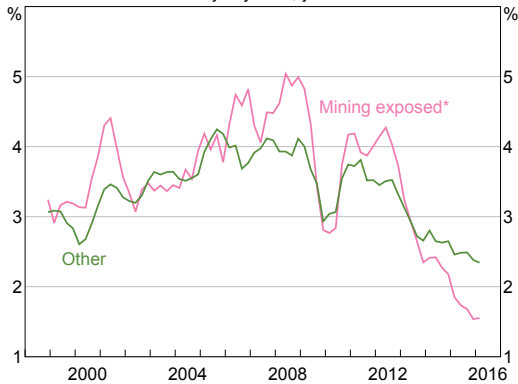


Source: ABS

WPI growth has been low in every industry and across all states. However, private sector wage growth is currently lowest in Western Australia and Queensland, and total wage growth is lowest in industries that are more exposed to the end of the mining investment boom, such as mining, construction and professional, scientific & technical services (Graph 5.10).

Growth in average earnings per hour from the national accounts (AENA) – which captures a broader range of payments to labour as well

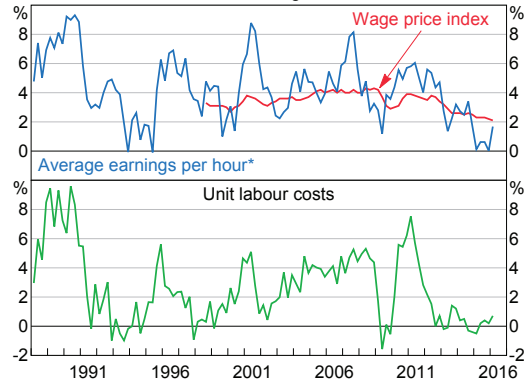
**Graph 5.10**  
**Wage Growth by Industry Group**  
 Seasonally adjusted, year-ended



\* Includes: mining; construction; rental, hiring & real estate; professional, scientific & technical services; and administrative & support services  
 Sources: ABS; RBA

as the effects of changes in the composition of employment – picked up in the March quarter to be 1.7 per cent higher over the year (Graph 5.11). Growth in AENA had been noticeably weaker than growth in the WPI over 2015, which partly reflects the movement of some workers from high-paying jobs in mining-related activities to similar work in lower-paying positions in the non-mining economy. For example, Bank liaison suggests that many workers employed in mining construction during the mining investment boom have returned to jobs in civil and residential construction at lower wage rates. In addition, liaison reports that spare capacity in the labour market more generally is leading some firms to replace workers who are leaving with new employees on lower salaries. Also, promotion rates may be below average and non-wage payments, such as allowances, are likely to be growing slowly or even declining. Nevertheless, AENA growth picked up to be closer to WPI growth in the March quarter 2016. This may just reflect the usual volatility in this series, but the expectation is that AENA growth will eventually pick up in a durable way as the effects of the weakness in resource sector employment wane and there are further cyclical improvements in labour market conditions more broadly.

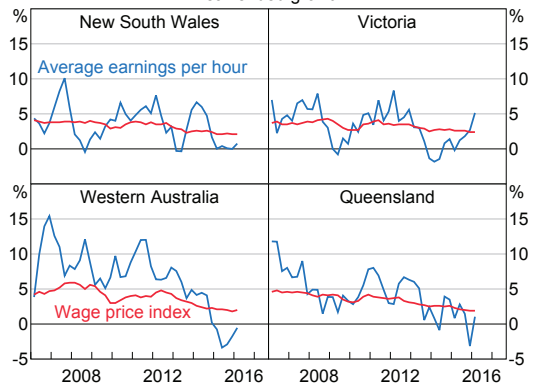
**Graph 5.11**  
**Labour Costs**  
 Year-ended growth



\* Average earnings per hour for the March quarter 2016 are calculated using hours worked from the labour force survey  
 Sources: ABS; RBA

The difference between AENA and WPI growth has been largest in Western Australia, where the shift away from highly paid mining-related positions is most pronounced (Graph 5.12). Indeed, in Victoria AENA growth is outpacing growth in the WPI, which may reflect a shift in employment towards more highly paid positions, a rise in promotion rates or increases in bonuses and other non-wage payments.

**Graph 5.12**  
**Labour Costs by State**  
 Year-ended growth



Sources: ABS; RBA

While low wage growth is consistent with a degree of spare capacity in the labour market, wage growth has been lower than implied by its historical relationship with the unemployment rate.<sup>2</sup> Several

<sup>2</sup> For a more detailed discussion of these factors, see Jacobs D and A Rush (2015), 'Why is Wage Growth So Low?', RBA Bulletin, June, pp 9–18.

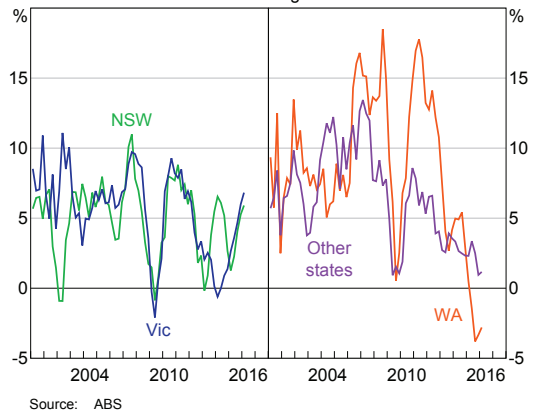
factors are likely to have contributed to this. The decline in inflation expectations and lower CPI outcomes over recent years may have influenced wage negotiations. The Bank's liaison suggests that a large proportion of firms benchmark average wage rates to consumer price inflation and survey evidence suggests union officials commonly consider inflation when negotiating wage increases. It is also possible that other measures of spare capacity in the labour market that have not moved in line with the unemployment rate are more relevant for wage developments. For example, the participation rate remains well below its previous peak, which could signal that some people who would like to work have given up searching for a job, but could re-enter the labour force if employment prospects improve. Also, the underemployment rate remains elevated, as the share of workers who would like to work more hours has not declined (see 'Domestic Economic Conditions' chapter). Finally, increased labour market flexibility may have provided firms with greater scope to adjust wages in response to a given change in demand for their goods and services, and in response to lower income growth, partly due to the significant fall in the terms of trade.

Overall, the cost of a unit of labour from a firm's perspective (unit labour costs) has been little changed for around four and a half years, as low growth in AENA has been matched by low growth in labour productivity (output per hour worked). Productivity growth ticked up a little over the year to March 2016, in part reflecting an increase in LNG exports that made a significant contribution to output but required little additional labour input. Nevertheless, labour productivity growth remains relatively weak in Australia, as it does in many advanced economies (see 'International Economic Developments' chapter). Together with the depreciation of the nominal exchange rate over recent years, low unit labour cost growth is helping to improve international competitiveness, following

a period of relatively strong growth in unit labour costs during the large run-up in commodity prices and mining investment.

Lower growth in labour costs may have encouraged firms to employ more people than otherwise, thereby supporting growth in overall household spending. At the same time, low wage growth has directly contributed to low growth in household disposable income. Overall, growth in total compensation of employees – which reflects growth in both average earnings per hour and the number of hours worked by employees – has picked up to be a little above its long-run average in New South Wales and Victoria over the past year (Graph 5.13). In contrast, compensation of employees has declined in Western Australia over recent years, after growing strongly during the terms of trade and mining investment boom. Growth has also been low in the other states over recent years.

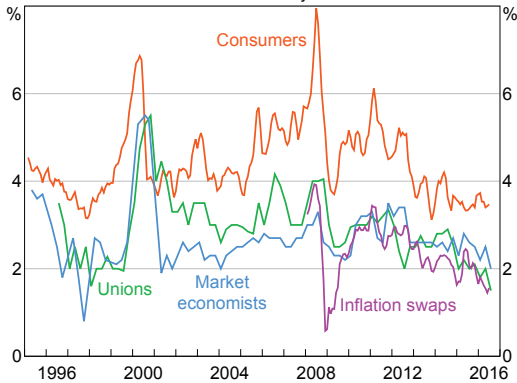
**Graph 5.13**  
**Compensation of Employees**  
 Year-ended growth



## Inflation Expectations

Short-term measures of inflation expectations remain low, consistent with the low inflation outcomes of late (Graph 5.14). Consumers' inflation expectations have been little changed over the past year, while union officials' expectations have

**Graph 5.14**  
**Short-term Inflation Expectations**  
 Over the next year

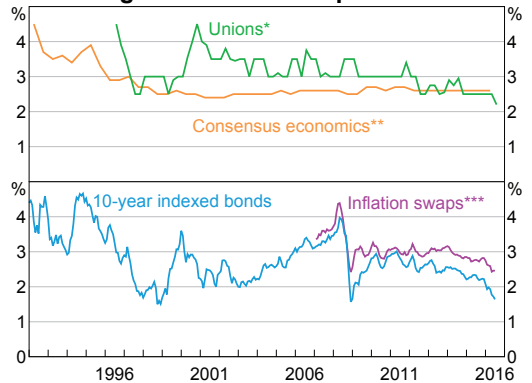


Sources: Australian Council of Trade Unions; Bloomberg; Melbourne Institute of Applied Economic and Social Research; RBA; Workplace Research Centre

drifted down a little. Union officials' and consumers' expectations for inflation over the next year are around the levels seen in the late 1990s. Near-term inflation expectations based on inflation swaps have declined further in recent months; however, some part of this may reflect a change in investors' assessment of, and willingness to bear, inflation risk.

The long-term expectations of union officials have moved a little lower more recently, though both the long-term expectations of market economists and union officials have remained between 2 and 3 per cent (Graph 5.15). Five-to-ten year inflation swaps, which capture expected average inflation between five and ten years ahead, remain within

**Graph 5.15**  
**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

the range of 2–3 per cent, although they have declined since the beginning of the year. Inflation expectations based on 10-year indexed bonds have also fallen noticeably over the first half of the year to be less than 2 per cent, and are now around late 1990s levels. This is partly because the bond-based measure of inflation expectations is the expected average over the next 10 years and is, therefore, affected by expected near-term low rates of inflation. Swaps and bonds may have also been affected by other developments such as changes in the premium that investors demand to bear inflation and liquidity risks. ↘

