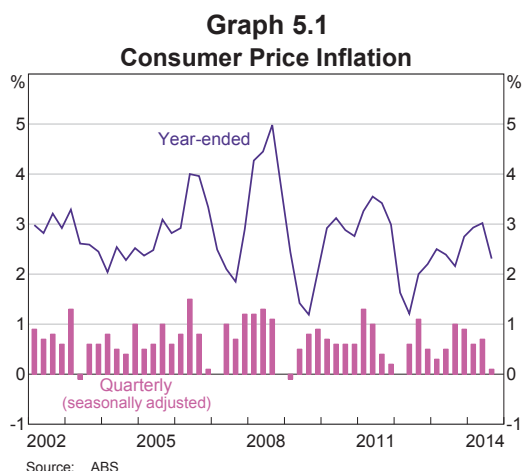


## 5. Price and Wage Developments

### Recent Developments in Inflation

Inflation declined in the September quarter and was a little lower than expected. This followed several quarters where inflation had been rising in year-ended terms and had been a little higher than expected.

Consumer price inflation was 0.1 per cent in the quarter (in seasonally adjusted terms) and 2.3 per cent over the year (Graph 5.1; Table 5.1). The decline in headline inflation (from 0.7 per cent in the June quarter) in large part reflected the repeal of the carbon price, which took effect retroactively from 1 July. Excluding utility prices, which capture the direct effect of the repeal on final prices, consumer



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

	Quarterly <sup>(a)</sup>		Year-ended <sup>(b)</sup>	
	September quarter 2014	June quarter 2014	September quarter 2014	June quarter 2014
Consumer Price Index	0.5	0.5	2.3	3.0
Seasonally adjusted CPI	0.1	0.7	–	–
– Tradables	0.0	0.4	2.0	2.9
– Tradables (excl volatile items and tobacco) <sup>(c)</sup>	–0.6	0.5	0.4	1.2
– Non-tradables	0.2	0.8	2.4	3.1
– Non-tradables (excl utilities)	0.7	0.8	2.8	2.9
<i>Selected underlying measures</i>				
Trimmed mean	0.4	0.7	2.5	2.8
Weighted median	0.6	0.6	2.6	2.6
CPI excl volatile items <sup>(c)</sup>	0.1	0.8	2.1	2.8

(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

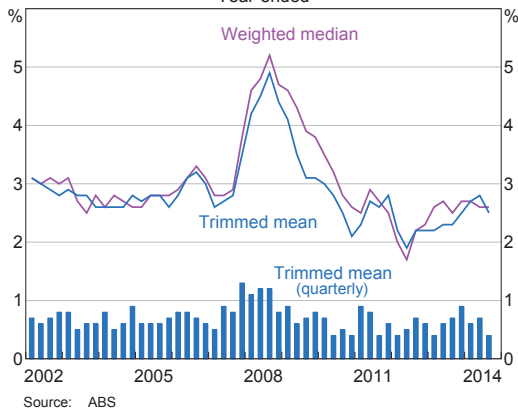
(c) Volatile items are fruit, vegetables and automotive fuel

Sources: ABS; RBA

price inflation was 0.4 per cent in the quarter and 2.5 per cent over the year. The effect on headline inflation of a sharp increase in fruit prices was offset by a fall in the price of fuel, reflecting lower prices of crude oil.

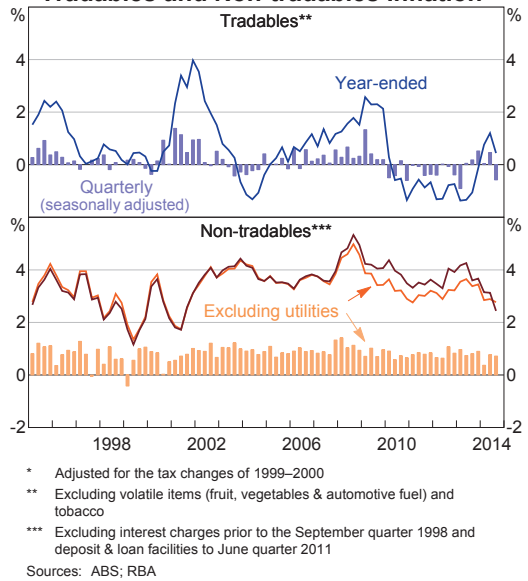
Underlying inflation also declined in the September quarter. Statistical measures suggest that quarterly underlying inflation slowed to around ½ per cent, from around ¾ per cent in the June quarter (Graph 5.2). Over the year, underlying inflation was around 2½ per cent. The pace of underlying inflation is also likely to have been affected to an extent by the removal of the carbon price, owing to its ‘indirect’ effect on the prices of a broad range of consumer goods and services. However, these indirect effects are likely to pass through over a number of quarters and are difficult to observe amid the usual variation in different costs.

**Graph 5.2**  
**Measures of Underlying Inflation**  
Year-ended

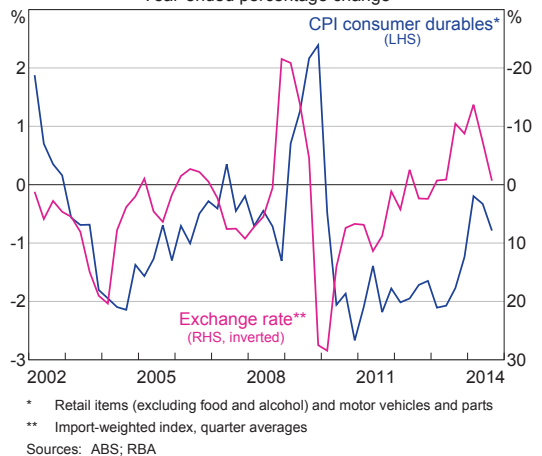


The prices of tradable items (excluding volatile items and tobacco) declined by 0.6 per cent in the September quarter, although these prices are still higher than they were a year ago (Graph 5.3). Over time, the prices of tradable items tend to be heavily influenced by movements in the exchange rate, as they are either imported or relatively exposed to international competition (particularly for consumer durables) (Graph 5.4). Accordingly, the exchange rate depreciation since early 2013 has led to an increase in

**Graph 5.3**  
**Tradables and Non-tradables Inflation\***



**Graph 5.4**  
**Consumer Prices and the Exchange Rate**  
Year-ended percentage change



the prices of imported items when measured ‘across the docks’. This will exert gradual upward pressure on prices faced by consumers for several years. The more recent depreciation of the exchange rate can be expected to push the prices of tradable items up further still (see ‘Economic Outlook’ chapter).

Tradables inflation frequently displays a high degree of volatility from quarter to quarter. The decline in

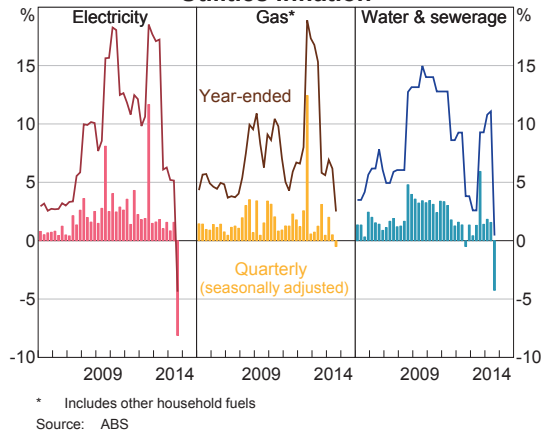
tradables prices in the September quarter could reflect several factors. It may be due to statistical noise. It may reflect a temporary pause in the pass-through of the exchange rate depreciation following the strong outcome in the previous quarter. In addition, liaison suggests that retailers have been constrained in passing on price increases due to the strength of competitive pressures and there may have been greater-than-usual discounting to clear winter stocks of clothing and footwear following unseasonably warm weather in the June quarter.

Non-tradables prices increased by only 0.2 per cent in the September quarter, to be 2.4 per cent higher in year-ended terms. The weak outcome largely reflects the effect of the repeal of the carbon price on utility prices (Graph 5.5). Electricity prices declined by 8.1 per cent, with large decreases across most states. The effect of the repeal of the carbon price on gas prices was offset by price rises for other reasons (including the expected increase in wholesale prices as gas markets on the eastern seaboard are integrated into international markets). Water and sewerage prices also fell sharply in the quarter, although this was driven by policy changes in Victoria unrelated to the repeal of the carbon price. It is likely that the bulk of the direct effects of the carbon price repeal on utility prices have been passed through in the September quarter.

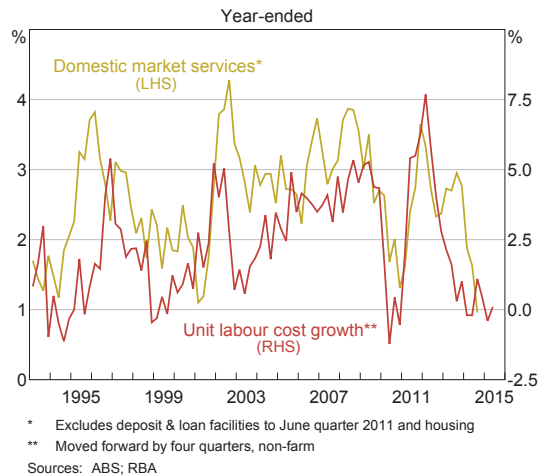
Abstracting from utility prices, non-tradables inflation was little changed in the September quarter and remains below its average over recent years. Weak growth in labour costs over the past couple of years has exerted downward pressure on non-tradables inflation. This is most apparent for market services inflation, which over the past year was around 1 per cent, its slowest pace in the past couple of decades (Graph 5.6). This is not surprising because market services have a relatively high labour content, are comparatively sheltered from international competition and include few administered price components. Accordingly, their prices are particularly sensitive to growth of labour costs.<sup>1</sup>

<sup>1</sup> For further details, see Jacobs D and T Williams (2014), 'The Determinants of Non-tradables Inflation', RBA *Bulletin*, September, pp 27–38.

**Graph 5.5**  
**Utilities Inflation**

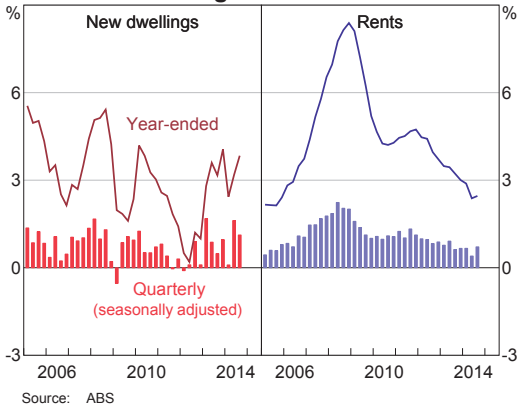


**Graph 5.6**  
**Market Services Inflation**

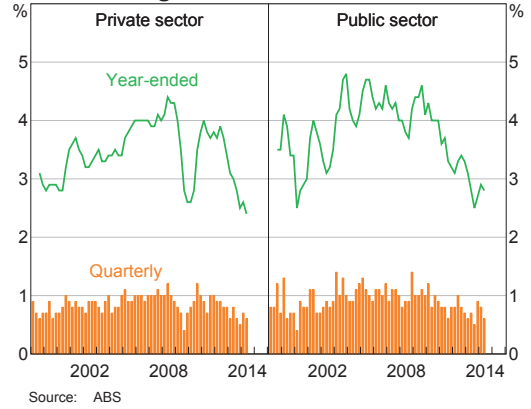


Non-tradables inflation has also been affected by the housing cycle (see 'Box B: Inflation and the Housing Cycle'). Overall, inflation in the housing-related components of the CPI (excluding utilities) continued at an around-average pace in the September quarter. But inflation in new dwellings costs remained elevated, consistent with strong activity in the new housing sector (Graph 5.7). In contrast, rents inflation picked up a little in the quarter, but remains low in year-ended terms, consistent with a gradual trend higher in rental vacancy rates.

**Graph 5.7**  
**Housing Cost Inflation**



**Graph 5.8**  
**Wage Price Index Growth**



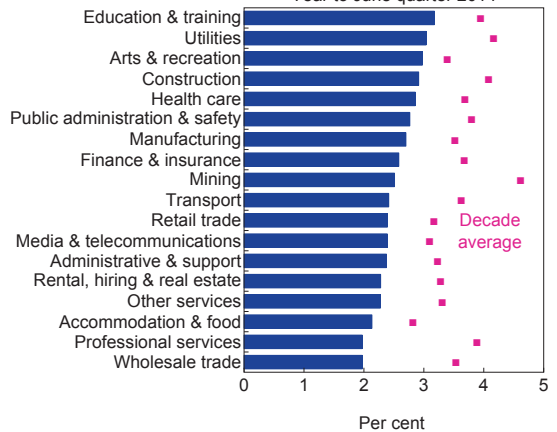
## Labour Costs

Labour cost pressures generally remain weak, consistent with a degree of spare capacity in the labour market. Wage growth, as measured by the wage price index, remained low in the June quarter at 0.6 per cent. Year-ended wage growth was 2.6 per cent. While this is the lowest it has been since the late 1990s, when the wage price index was first published, the pace of wage growth looks to have stabilised in recent quarters.

The weakness in wage growth continues to be broad-based. Private sector wage growth has been weak, slowing to 2.4 per cent over the year (Graph 5.8). This is consistent with business surveys and liaison, which suggest that wage growth has stabilised at low levels, with firms remaining focused on reducing costs. Mining, professional & technical services and wholesale trade have seen pronounced declines in the pace of wage growth in recent years (Graph 5.9).

The broad-based decline in wage growth is consistent with other evidence of spare capacity in the labour market. In particular, measures of unemployment and underemployment are at elevated levels (see 'Domestic Economic Conditions' chapter). The extent of the slowing in wage growth appears to have been a little more pronounced than would have been expected given historical

**Graph 5.9**  
**Wage Growth by Industry\***  
Year to June quarter 2014



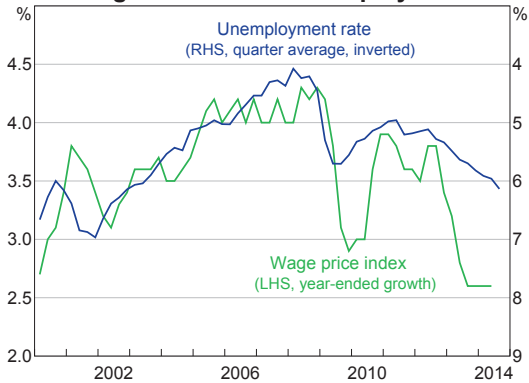
\* Wage price index  
Sources: ABS; RBA

relationships between private sector wage growth and measures of the degree of spare capacity in the labour market (Graph 5.10).<sup>2</sup>

There are various possible explanations for a change in the sensitivity of wage growth to the level of spare capacity in the economy. Greater labour market flexibility may have allowed wages to respond more to a given change in the unemployment rate than in earlier episodes. Alternatively, the rise

<sup>2</sup> The same conclusion is drawn from a more sophisticated econometric modelling approach that controls for variables such as the unemployment rate, output prices and inflation expectations.

**Graph 5.10**  
**Wage Growth and Unemployment**

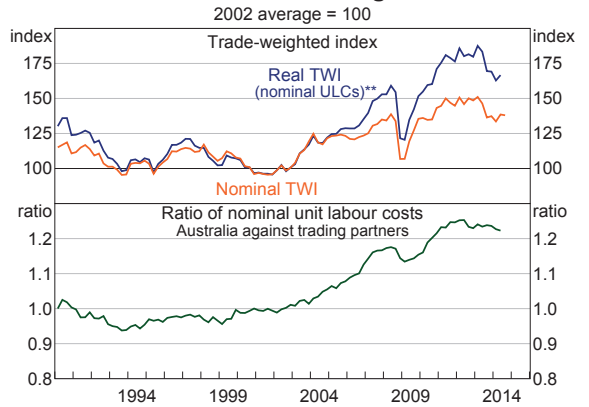


Sources: ABS; RBA

in the unemployment rate may be understating the extent of the increase in spare capacity in the labour market. It is also possible that concerns about job security – which remain elevated as measured by unemployment expectations in the Melbourne Institute survey of consumers – have led workers to limit their wage demands. Liaison with firms supports this, with reports that employees appear to be willing to trade lower wage growth for greater job security. It is also consistent with the low level of industrial disputes.

In addition, businesses have been under pressure to contain costs due to a loss of international competitiveness. Over a number of years, this was brought about by the run-up in the terms of trade, which contributed to a sizeable appreciation of the exchange rate and some growth in wages. A measure of Australia's international competitiveness that adjusts Australia's nominal trade-weighted index by the relative growth of labour costs in Australia and its OECD trading partners illustrates that both factors contributed to a decline in Australia's competitiveness up to 2013 (Graph 5.11). The depreciation of the nominal exchange rate since early 2013, if sustained, can be expected to assist in improving international cost competitiveness. The relatively low growth of Australia's unit labour costs – unchanged now for a few years – will also make a contribution to competitiveness (Graph 5.12).

**Graph 5.11**  
**Real Effective Exchange Rate\***

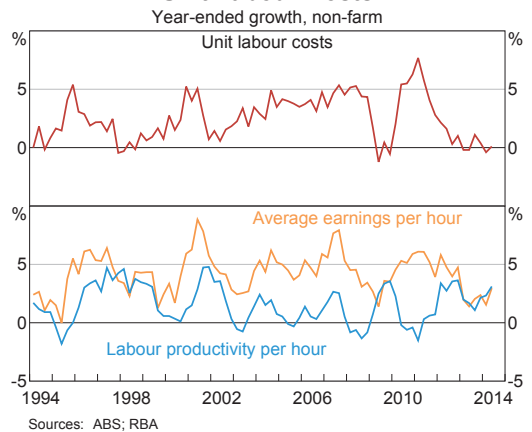


\* Series constructed using unit labour cost data exclude China and several other trading partners as data are unavailable

\*\* Nominal trade-weighted index adjusted for ratio of nominal unit labour costs

Sources: OECD; RBA

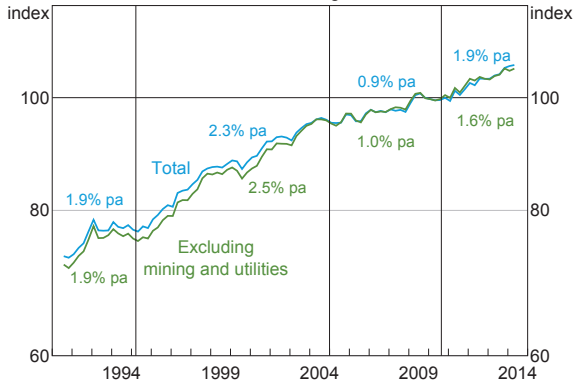
**Graph 5.12**  
**Unit Labour Costs**



Sources: ABS; RBA

Labour productivity growth has increased over the past few years. Recent improvements partly reflect the transition of the resource sector to a period of strong growth in output, which is much less labour intensive than the earlier period of significant accumulation of capital. However, there are also signs that labour productivity growth has picked up across a wide range of industries over recent years (Graph 5.13).

**Graph 5.13**  
**Labour Productivity\***  
2009/10 = 100, log scale



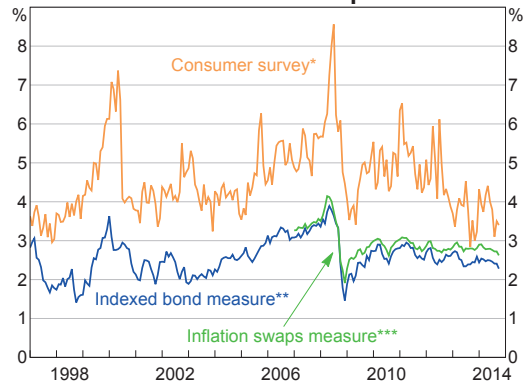
\* Figures represent trend growth during each period  
Sources: ABS; RBA

Producer price data suggest that domestic inflationary pressures have been relatively subdued across all stages of production over the past year. The repeal of the carbon price affected domestic producer prices in the quarter, though it is difficult to quantify this effect. The low level of inflation across the domestic components of producer prices is broadly consistent with the below-average level of non-tradables inflation (excluding utilities) reported in the CPI; however, such comparisons should be drawn with caution owing to the variety of conceptual and measurement differences between the indices. The pass-through of imported producer prices, which have increased over the past year or so, to consumer prices typically occurs with long lags. The more recent depreciation of the exchange rate, along with the continued effects of the earlier depreciation, are likely to exert continued upward pressure on final prices for tradables items for some time yet.

## Inflation expectations

Measures of inflation expectations have generally declined and remain below their long-run average levels (Table 5.2; Graph 5.14). The CPI data for the September quarter were a bit lower than generally expected, and market economists and union officials revised down their forecasts for 2014 in response. Forecasts for inflation over 2015 are little changed for market economists, but union officials have revised their forecasts lower by nearly ½ percentage point. Financial market measures and the Melbourne Institute survey of consumer inflation expectations have also declined in recent months and are below their historical averages. ▽

**Graph 5.14**  
**Indicators of Inflation Expectations**



\* Trimmed mean expectation of inflation over the next year  
\*\* Break-even 10-year inflation rate on indexed bonds; interpolation used to match exact maturity  
\*\*\* Expectations of average annual inflation over the next 10 years  
Sources: Bloomberg; Melbourne Institute of Applied Economic and Social Research; RBA

**Table 5.2: Median Inflation Expectations**  
Per cent

	Year to December 2014			Year to December 2015		
	May 2014	August 2014	November 2014	May 2014	August 2014	November 2014
Market economists	2.4	2.2	2.1	2.7	2.6	2.7
Union officials	3.0	3.0	2.5	2.9	3.0	2.6

Sources: RBA; Workplace Research Centre