## 4. Inflation

Inflation remains high and broadly based but is likely to have peaked at the end of 2022. Goods price inflation remained high in the December quarter as non-labour cost pressures continued to be passed through to consumers. The easing in global goods price pressures is not yet evident in retail prices in Australia. Domestic services inflation picked up further in the quarter, reflecting higher input costs and strong demand conditions, while rent inflation increased further in response to tight rental market conditions. Measures of short-term inflation expectations have declined a little but remain high, consistent with the high inflation environment. Most measures of medium- and long-term inflation expectations remain anchored to the inflation target.

Labour cost growth was strong in the September quarter and has continued to pick up in recent months according to a range of timely indicators. The recent strengthening in wages outcomes reflects the tight labour market, as well as high inflation and the pass-through of the Fair Work Commission (FWC) decision in June on minimum and award wage rates. Broader measures of income picked up strongly as employers used bonuses and other non-wage payments to attract and retain staff. Aggregate wages growth is expected to pick up further in the period ahead.

# Inflation remains high and broadly based

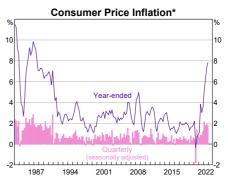
The Consumer Price Index (CPI) increased by 1.9 per cent in the December quarter and by 7.8 per cent over the year. This is the highest

year-ended CPI inflation since 1990 (and since 1987 excluding interest charges) and is expected to be the peak in the current cycle (Graph 4.1; Table 4.1).

Inflation continues to be broadly based. A wide range of items have contributed to the strong inflation outcomes over the past year (Graph 4.2). Around three-quarters of prices in the CPI basket continued to grow faster than 3 per cent in annualised terms in the December quarter (Graph 4.3).

Measures of underlying inflation (which remove the effect of irregular or temporary price changes) were also high in the December quarter. Trimmed mean inflation was 1.7 per cent in the quarter and 6.9 per cent over the year – the highest annual rate since 1988 (Graph 4.4; Table 4.1).

Graph 4.1



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

**Table 4.1: Measures of Consumer Price Inflation** 

Per cent

	Quarterly <sup>(a)</sup>		Year-ended <sup>(b)</sup>	
	December quarter 2022	September quarter 2022	December quarter 2022	September quarter 2022
Consumer Price Index	1.9	1.8	7.8	7.3
Seasonally adjusted CPI	1.8	1.9	_	_
– Tradables	1.7	1.4	8.7	8.7
– Tradables (excl. volatile items) <sup>(c)</sup>	2.3	1.8	8.1	6.9
– Non-tradables	1.8	2.0	7.4	6.5
Selected underlying measures				
Trimmed mean	1.7	1.9	6.9	6.1
Weighted median	1.6	1.4	5.8	4.9
CPI excl. volatile items <sup>(c)</sup>	2.0	2.0	7.6	6.7

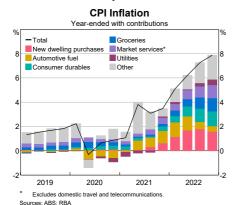
<sup>(</sup>a) Except for the headline CPI, quarterly changes are based on seasonally adjusted data; those not published by the ABS are calculated by the RBA using seasonal factors published by the ABS.

Sources: ABS; RBA

## Fuel prices increased in the December quarter

Fuel prices increased by 2 per cent in the December guarter and by 13 per cent over the year (Graph 4.5). The end of the temporary reduction in the fuel excise was largely offset by lower global oil prices. Since the start of the year, fuel prices have been broadly similar to the average level observed in the December quarter.

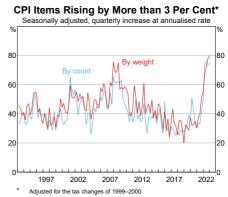
Graph 4.2



## Pass-through of upstream cost pressures amid strong demand continued to drive strong goods price inflation

Upstream cost pressures amid strong demand continued to boost prices across a number of goods-related sectors in the December quarter. Some of these cost pressures, such as shipping rates and many commodity prices, eased

Graph 4.3



Sources: ABS: RBA

<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.

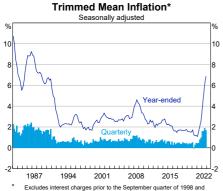
materially in the second half of 2022, but for most goods it will take time before this affects prices paid by Australian consumers; this is in contrast with a number of other advanced economies where core goods inflation is declining.

New dwelling cost inflation eased to 1.7 per cent in the quarter, well below the quarterly outcomes of above 5 per cent seen in the first half of 2022; prices were about 18 per cent higher over the year to end 2022. The easing in new dwelling inflation reflects improvements in the supply of building materials and weaker demand following the rise in interest rates. Prices for building materials increased by 2 per cent in the December quarter and

14 per cent over the year, which is slower than the pace of increases seen in previous quarters (Graph 4.6).

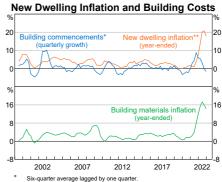
Consumer durables inflation picked up strongly in the quarter to be 7 per cent higher over the year, reflecting the continued pass-through of upstream cost pressures (Graph 4.7). Price increases were broadly based across consumer durables categories but were particularly strong for clothing and footwear (despite being partially offset by promotional activity during the Black Friday and Cyber Monday sales period in November) and motor vehicles (driven by price rises for luxury vehicles). Prices increased only marginally for audio, visual and computing equipment in the quarter (Graph 4.8).

Graph 4.4



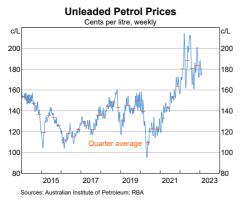
deposit & loan facilities; adjusted for the tax changes of 1999-2000 Sources: ABS; RBA

Graph 4.6

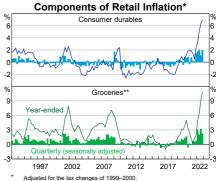


Adjusted for the tax changes of 1999-2000 Sources: ABS; RBA

Graph 4.5



Graph 4.7

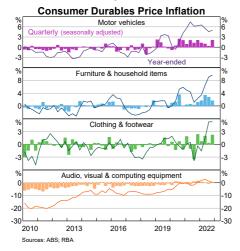


Excludes fruit & vegetables

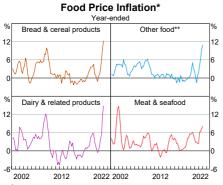
Sources: ABS; RBA

Grocery prices (excluding fruit and vegetables) increased by 2.2 per cent in the December quarter as supermarkets continued passing through supplier cost increases; prices were around 11 per cent higher than the same time a year ago – the highest annual rate of growth since 1983. The prices of most food items increased strongly in the quarter, with the largest increases seen in dairy and related products due to higher wholesale costs (Graph 4.9). Liaison suggests that grocery prices are likely to increase further in the near term, though at a more moderate pace than in recent quarters.

Graph 4.8



Graph 4.9



Adjusted for the tax changes of 1999–2000.

Includes products such as eggs, jams, oils, snacks, etc

Sources: ABS; RBA

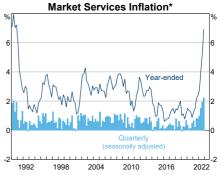
The prices of fruit and vegetables declined by 6 per cent in the December quarter in seasonally adjusted terms but remained 8½ per cent higher over the year. The decline in the quarter primarily reflects an easing of the effects of unfavourable weather conditions experienced earlier in 2022. The flooding in parts of Victoria and New South Wales in late 2022 had a smaller impact on fresh produce supply conditions than was expected a few months ago.

#### Services inflation picked up further

Cost pressures and strong demand have contributed to large price increases for many services in recent quarters. Market services inflation, which covers a little over one-fifth of the CPI basket, was above 2 per cent in the quarter and 7 per cent over the year – the strongest outcomes since 1990 (Graph 4.10). The prices of these services are generally among the most sensitive to domestic labour costs, although increases in non-labour costs such as materials and transport have been an important factor driving higher prices in recent quarters, in particular for cafes and restaurants.

Prices for domestic and international holiday travel and accommodation increased by 27 per cent in the month of December – a sharp increase that reflected very strong demand for travel over the summer holidays. Airfares drove a

**Graph 4.10** 



\* Adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

large portion of the increase, reflecting high fuel prices and reduced capacity, with accommodation prices also increasing substantially. Prices of meals out and takeaway increased by 2 per cent in the quarter as firms passed through increases in input costs, including the effect of minimum and award wage increases (Graph 4.11). Prices for insurance and financial services also increased strongly in the December quarter and over the year.

Rents increased by 1.2 per cent in the December quarter and by 4 per cent over the year, reflecting tight rental market conditions across the country. The regular indexation of rent subsidy payments provided some offset to a higher increase in underlying prices. In the absence of this offset, rents would have increased by 1.5 per cent – a little stronger than the previous quarterly outcome. In monthly terms, rent inflation was fairly stable in the second half of 2022. Rents were strong across all cities, with increases in Sydney and Brisbane particularly large in the December quarter (Graph 4.12). Strong current rental market conditions across the country, as reflected in high advertised rents and historically low vacancy rates, are likely to contribute to a further pick-up in CPI rent growth in the year ahead.

#### **Graph 4.11**



- Includes home cleaning, vehicle repairs, hairdressing, veterinary services, sports and leisure services.
- \*\* Excludes deposit & loans to June quarter of 2011.
- \*\*\* Imputed using headline CPI in the June and September quarters of 2020 and September quarter of 2021.
  Sources: ABS: RBA

# Electricity prices rose strongly as state government rebates were unwound

Electricity prices increased by 7 per cent in the December quarter in seasonally adjusted terms due to the unwinding of rebates in Western Australia and the ACT, though rebates in Oueensland and Tasmania continued to subtract from measured prices (Graph 4.13). Gas prices, which were not affected by government rebates, increased by about 2 per cent in the guarter to be more than 17 per cent higher over the year. Electricity and gas prices are expected to increase further in 2023, largely due to higher wholesale costs recorded over the past year; however, over this year and next, increases in wholesale costs are expected to be dampened by the Australian Government's Energy Price Relief Plan (see chapter on 'Economic Outlook').

In the CPI basket, 'administered prices' are (at least partly) regulated or relate to goods and services for which the public sector is a significant provider – such as health, education and child care, as well as utilities. Inflation for administered prices (excluding utilities) remains around pre-pandemic trends, having increased by 4 per cent over the year to the December quarter. Child care prices increased by 4 per cent in the quarter in seasonally adjusted terms due to the pass-through of higher labour costs and reduced take up of the 'Before and After School

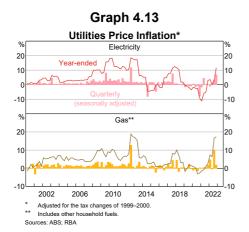
**Graph 4.12** 

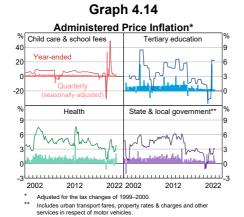
#### **Rent Inflation** Year-ended, with city weights indicated Sydney (37% weight) Melbourne (28% weight) 10 10 CPI rents Brisbane (15% weight) Perth (8% weight) 10 10 -10L 2010 2016 2022 2010 2016 2022 Hedonic three-month average

Care' vouchers in Sydney; however, prices remained lower over the year due to the effects of the increase in the subsidy rate introduced in early 2022 for families with more than one child (Graph 4.14). Prices for medical and hospital services increased by 2.4 per cent in the quarter in seasonally adjusted terms, reflecting increased gap payments for GP consultations and a rise in private health insurance premiums; some funds delayed their usual premium increase from April to November in 2022.

# The monthly CPI indicator points to elevated inflationary pressures

The ABS released data for the month of December alongside the regular quarterly CPI

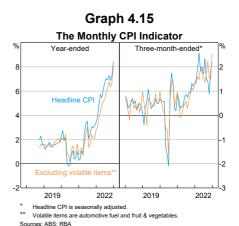




release. The monthly CPI indicator also points to inflationary pressures remaining high and broadly based, with the year-ended rate of the monthly indicator for headline inflation (including or excluding volatile items) increasing to over 8 per cent in December (Graph 4.15). The monthly data were mixed over the quarter – inflation had moderated noticeably in October and November but was very strong in December. Movements in the monthly CPI indicator over October to December were driven by price increases across many CPI components, including market services, retail items, rents and utilities – as was the case for the quarterly CPI.

# Short-term inflation expectations are high, but measures of longer term inflation expectations mostly remain consistent with the inflation target

Measures of short-term inflation expectations have declined a little in recent months but remain at relatively high levels (Graph 4.16). This is consistent with the higher cost of living that households are experiencing and general reports in the media of high inflation. The available evidence suggests that longer term inflation expectations remain anchored to the inflation target at this stage, although financial market measures have increased a little in recent



Sources: ABS: RBA

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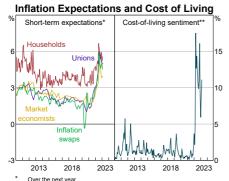
months (Graph 4.17). Long-term expectations of union officials remain around 3½ per cent – the highest level since 2009.

Inflation expectations can influence firms' and households' wage negotiations and pricesetting behaviour. Firms across a broad range of industries report that higher headline inflation outcomes are contributing to higher wage expectations, though most firms citing inflation as a factor generally expect wages growth in the year ahead to be less than current headline inflation rates. This is in part because some of the recent strength in inflation is seen as temporary. Over recent months, firms in a number of industries, particularly market services, have reported that higher labour costs are contributing to price increases; for some of these firms, labour is the most significant component of their costs.

## Wages growth was strong in the September quarter ...

The Wage Price Index (WPI) grew by 1 per cent in the September guarter and 3.1 per cent in year-ended terms (Graph 4.18). This was the highest rate of year-ended wages growth since 2013, reflecting tightness in the labour market, high inflation outcomes and the implementation of the FWC's award and

**Graph 4.16** 

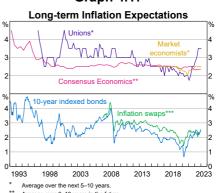


Percentage of financial news articles mentioning 'cost of living'

Sources: Australian Council of Trade Unions; Bloomberg; Dow Jo Factiva; Melbourne Institute of Applied Economic and Social Research; RBA; Workplace Research Centre minimum wage increases. Wages growth was strongest in the private sector, which picked up to 1.2 per cent in the quarter and 3.4 per cent over the year; the quarterly outcome was one of the strongest in the history of the series. By contrast, public sector wage growth continued to weigh on aggregate outcomes, increasing by 2.4 per cent over the year.

Broader measures of labour income were also strong in the September quarter. Growth in measures of wages that include bonuses increased at a faster pace than base wages, consistent with reports that employers have been using bonuses to attract or retain staff amid the tight labour market and to compensate for cost-of-living pressures. Compensation of employees (COE) - the broadest measure of economy-wide labour costs, which also includes headcount and hours worked – rose by 10 per cent over the year, its fastest pace in over a decade (Graph 4.19). Average earnings per hour grew strongly but continued to be affected by volatility in average hours worked; sick leave was higher and more variable than usual in 2022, reflecting the waves of COVID-19 cases that occurred during the year. Consistent with the signal from the WPI, growth in private sector COE was much stronger than public sector COE.

**Graph 4.17** 



Average over 6–10 years in the future

5-years to 10-years forward.

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

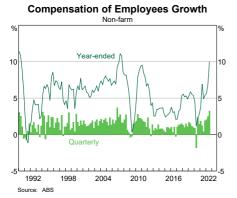
In the private sector, wage increases were more common than usual and the average size of increases was also larger than it has been in over a decade (Graph 4.20). Nearly 40 per cent of jobs (by expenditure weight) recorded a wage change in the quarter; this was above previous September quarters, which typically have a larger share of jobs receiving wage increases than other quarters due to the timing of end-of-financial year salary reviews. The average size of wage increases for those jobs that experienced a wage change picked up to 4.2 per cent.

Increases to award and minimum wages announced by the FWC in June mostly took effect in the September quarter, with the majority of award jobs receiving a 4.6 per cent increase. This supported growth in wages across

**Graph 4.18** 



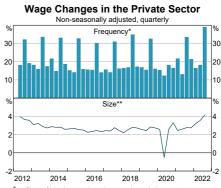
Graph 4.19



all pay-setting methods to varying degrees (Graph 4.21); this is consistent with estimates that around one-third of jobs are directly or indirectly linked to awards. As a result, the share of jobs receiving wage increases above 4 per cent picked up significantly across all methods of setting pay (Graph 4.22). The tight labour market also supported wages growth for individual arrangements. Wages growth in private enterprise bargaining agreements (EBAs) picked up in the quarter, while growth in public EBAs was broadly in line with previous September quarters.

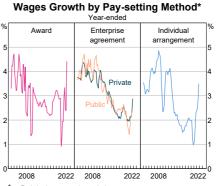
Wages growth increased in most industries over the year, supported by the tight labour market

Graph 4.20



Share of jobs that experienced a wage change in the quarter.
 Average percentage wage change, conditional on a wage change having occurred in the quarter.
 Sources: ABS; RBA

**Graph 4.21** 



\* Excludes bonuses and commissions

Sources: ABS; RBA

(Graph 4.23). Wages growth was strongest in the retail trade industry, which had two award wage increases in the year; this outcome reflects the high share of jobs in that industry that are either on awards or that are covered by enterprise agreements or individual arrangements linked to the award wage increase. Lower skill jobs experienced stronger wages growth in the September quarter than higher skill jobs, consistent with the prevalence of award wage reliance in these jobs (Graph 4.24).

### **Graph 4.22**



#### Graph 4.23

Wage Price Index Growth by Industry\*

#### Year-ended, September 2022 Education Public admir Transpor Mining Accom & food Utilities Health care Professiona Construction Info media Other services Manufacturing Admir Financial Wholesale Renta

\* Non-seasonally adjusted; excluding bonuses and commissions. Source: ABS

Aggregate

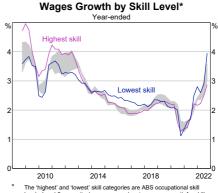
# ... and is expected to pick up further over coming quarters

Timely indicators of wages growth suggest that wages increased further in the December quarter (Graph 4.25). Firms in the liaison program continue to report that the increase in wages growth was driven by strong demand, the need to attract and retain staff, and higher inflation outcomes (see 'Box B: Insights from Liaison'). Wages growth in enterprise agreements remains moderate; average annual wage increases in newly lodged agreements were 3.1 per cent in the December quarter, slightly higher than the September quarter at 2.9 per cent (Graph 4.26).

Wages growth is expected to pick up further in the period ahead. Market economists and unions expect wages growth to be 3½ to 4 per cent over the next year (Graph 4.27). Firms surveyed in the liaison program expect wages growth to stabilise around 4 per cent in coming quarters.

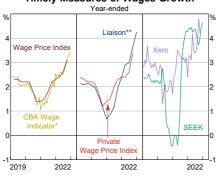
Changes to the wages policies of several state governments should also flow through to wages growth over the coming period. New enterprise agreements were recently approved for nurses, teachers and police officers in Queensland, with pay rises of 4 per cent in both 2022 and 2023 and 3 per cent in 2024. The Western

Graph 4.24



\* The 'highest' and 'lowest' skill categories are ABS occupational skill levels 1 and 5 respectively; grey range denotes wages growth for skill levels 2–4.
Sources: ABS; RBA Australian Government reached agreement with several employee groups on its proposed wage increases of between 3 and 6 per cent each year for the next two years. The Tasmanian Government increased its public sector wages offer to 3.5 per cent in the first year and 3 per cent in the next two years, which has been accepted by a number of groups.

# Graph 4.25 Timely Measures of Wages Growth



- Changes in base wages based on a sample of CBA retail banking transactions.
- \*\* Private sector; trimmed mean; rescaled to have the same mean as the private Wage Price Index.

Sources: ABS; CBA; RBA; SEEK; Xero Small Business Insights

## **Graph 4.26**



- Quantifiable average annualised wage increases (AAWIs) in new FWC-approved and federally-registered enterprise agreements.
- \*\* AAWIs in the total stock of nominally current. FWC-approved and
- \*\*\*\* Year-ended growth; excludes bonuses and commissions.

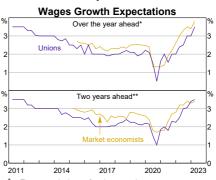
  Sources: ABS; Department of Employment and Workplace Relations,
  FWC; RBA

federally-registered enterprise agreements.

# Real incomes continued to decline in the September quarter

Real (inflation-adjusted) labour incomes continued to decline in the September quarter, as consumer prices rose more quickly than labour income over the year. The rise in inflation has been broadly based across the income distribution and household types (Graph 4.28). While a rising cost of living puts pressures on household budgets across the economy, lower income households typically have the most constrained budgets as they spend a greater proportion on essential items and have lower financial buffers. Some of these households will have had their real income supported by the tight labour market, the FWC award wage decision and the indexation of social security payments to inflation (Graph 4.29). 🛪

**Graph 4.27** 

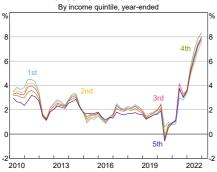


- \* The current calendar year for union expectations
- \*\* The next calendar year for union expectations.

  Sources: Australian Council of Trade Unions; RBA; Workplace Research Centre

## **Graph 4.28**

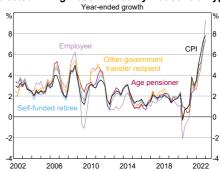
#### Consumer Price Inflation\*



Measures of inflation based on upper-level differences in consumption patterns by income quintile; estimated with the 2015/16 Household Expenditure Survey.
 Sources: ABS: RBA

## **Graph 4.29**

#### Selected Living Cost Indexes by Household Type\*



The living cost indexes include mortgage interest payments (which are not included in the CPI) but exclude the construction costs of new dwellings (which are included in the CPI); other financial and insurance items also differ between the indexes.

Source: ABS