4. Inflation

Inflation is high and broadly based. Strong demand and ongoing supply issues boosted goods price inflation in the September quarter, as non-labour cost pressures continued to be passed through to consumers. Some of these upstream cost pressures have eased in recent months, but it will take some time before this affects the prices paid by consumers. Higher input costs and strong demand have also contributed to a pick-up in services inflation in recent quarters, while rent inflation has picked up in response to tight rental market conditions. Short-term measures of inflation expectations remain high, consistent with the high inflation environment. Most medium- and long-term measures remain anchored to the inflation target, suggesting the current high inflation is expected to be relatively short lived.

Labour cost growth has continued to strengthen according to a range of timely indicators, with broader measures of earnings growing faster than base wages. The recent strengthening in wages outcomes reflects the tight labour market, as well as high inflation and the flowthrough of the Fair Work Commission decision in June on minimum and award wage rates. However, aggregate wages growth remains moderate so far and wage growth expectations generally remain consistent with the inflation target. The Wage Price Index (WPI) for the June quarter of 2022 confirmed that wage pressures were continuing to build gradually.

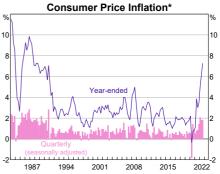
Inflation in the September quarter was high and broadly based

The Consumer Price Index (CPI) increased by 1.8 per cent in the September quarter and by 7.3 per cent over the year – the highest year-ended CPI inflation since 1988 (excluding interest charges) (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 grew faster than 3 per cent in annualised terms in the September quarter (Graph 4.3).

Measures of inflation that remove the effect of irregular or temporary price changes also indicate that underlying inflation was high in the September quarter. Trimmed mean inflation was 1.8 per cent in the September quarter (after being revised up from 1.5 per cent to 1.6 per cent in the June quarter) and 6.1 per cent

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 ^(a)		Year-ended ^(b)	
	September quarter 2022	June quarter 2022	September quarter 2022	June quarter 2022
Consumer Price Index	1.8	1.8	7.3	6.1
Seasonally adjusted CPI	1.8	1.8	_	_
– Tradables	1.3	2.3	8.7	8.0
– Tradables (excl. volatile items) ^(c)	1.7	1.7	6.9	5.1
– Non-tradables	2.0	1.5	6.5	5.3
Selected underlying measures				
Trimmed mean	1.8	1.6	6.1	4.9
Weighted median	1.4	1.4	5.0	4.3
CPI excl. volatile items ^(c)	1.9	1.6	6.7	5.3

⁽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

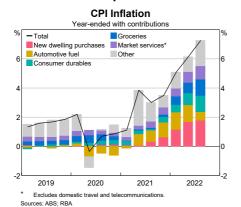
over the year; these are the strongest outcomes since 1990 (Graph 4.4; Table 4.1).

Fuel prices declined in the quarter

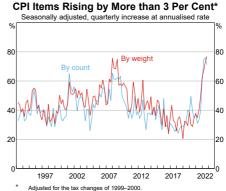
Fuel prices decreased by 4 per cent in the September quarter, subtracting about 0.2 percentage points from headline inflation (Graph 4.5). This was primarily due to lower

global oil prices, reflecting concerns about the outlook for the global economy. Fuel prices have picked up again in recent weeks, largely reflecting the unwinding of the temporary reduction in the fuel excise.

Graph 4.2



Graph 4.3



⁽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.

The pass-through of upstream cost pressures continued to drive strong goods price inflation

The pass-through of upstream cost pressures, including higher materials and transport costs, continued to boost prices across a number of goods-related sectors in the September quarter. Some of these cost pressures, such as shipping rates and many commodity prices, have fallen in recent months; however, for most goods it will take some time before these declines materially affect prices paid by Australian consumers.

New dwelling inflation eased in the quarter but remained high, with prices increasing by nearly 4 per cent in the September quarter to be 21 per cent higher over the year. Sustained

Graph 4.4

strong demand for housing construction has enabled builders to pass through increased costs for labour and building materials; prices for building materials increased by about 3 per cent in the September quarter and 16 per cent over the year (Graph 4.6).

Consumer durables inflation eased in the quarter but was 6.3 per cent over the year – the highest annual rate since 1988 (Graph 4.7). The easing in the quarter was driven by broadly flat outcomes for the prices of clothing & footwear, audio, visual & computing equipment and motor vehicles; however, prices continued to increase strongly for many other household goods such as furniture and furnishings (Graph 4.8).

Trimmed Mean Inflation*
Seasonally adjusted

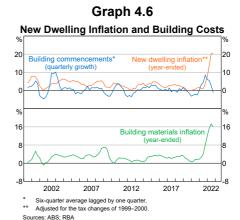
%
6
4
Quarterly
1992 1998 2004 2010 2016 2022

Excludes interest charges prior to the September quarter of 1998 and

deposit & loan facilities; adjusted for the tax changes of 1999-2000

Sources: ABS; RBA

Graph 4.5 **Unleaded Petrol Prices** Cents per litre, weekly c/L c/L 200 200 180 180 160 160 140 140 120 120 100 100 R۸ 2020 2022 2014 2016 2018 Sources: Australian Institute of Petroleum: RBA



Graph 4.7

Components of Retail Inflation*

Consumer durables

8

Vear-ended

Quarterly (seasonally adjusted)

Groceries

**Adjusted for the tax changes of 1999–2000; groceries excludes fruit & vegetables; consumer durables includes other manufactured household goods such as cleaning and personal care products.

Grocery prices (excluding fruit & vegetables) increased very strongly in the September quarter as supermarkets continued to pass through supplier cost increases. Prices were around 9 per cent higher than a year ago – the highest rate of annual grocery price inflation since 1983. The prices of most food items increased strongly; for instance, prices for dairy and related products increased by 7 per cent, reflecting higher wholesale costs (Graph 4.9). Food retailers in the Bank's liaison program reported that suppliers have been requesting price increases more often than usual this year and that supermarkets have become more willing to accept these due to their understanding of supplier conditions.

Graph 4.8 **Consumer Durables Inflation*** Selected items, year-ended Furniture & household items Clothing & footwea Vehicles -10 10 -20 -20 Audio visual & comp ⁻³⁰fr------1996 2009 2022 1996 2009 2022 Adjusted for the tax changes of 1999-2000

Graph 4.9 Food Price Inflation* Year-ended Bread & cereal products Other food** 9 6 6 Dairy & related products Meat & seafood 10 10 2002 2012 2022 2002 2012 2022 Adjusted for the tax changes of 1999-2000

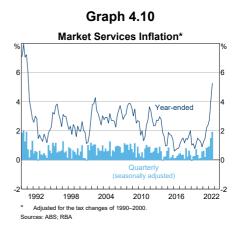
Includes products such as eggs, jams, oils, snacks, etc

The prices of fruit & vegetables increased by 5 per cent in the quarter in seasonally adjusted terms and by 16 per cent over the year. This primarily reflected the effects of heavy rainfall and flooding in key growing areas in early 2022, which affected the availability of many items. Higher input costs, such as for transport and fertiliser, also contributed to price rises. The recent flooding in parts of Victoria and New South Wales is expected to affect food prices in the months ahead.

Inflationary pressures increased for many services

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, picked up strongly in the September quarter to be 5.3 per cent higher over the year – the fastest annual increase since 1991 (Graph 4.10). The prices of these services are generally among the most sensitive to domestic labour costs; however, increases in non-labour costs such as food and transport have also been an important factor in recent quarters, particularly for cafes and restaurants.

Prices of meals out & takeaway increased very strongly in the quarter, reflecting both underlying price increases due to higher labour

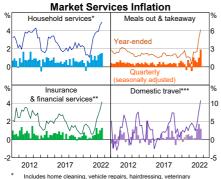


rces: ABS; RBA

and non-labour input costs and the unwinding of some state government initiatives that had been weighing on prices in recent quarters, such as the NSW 'Dine & Discover' voucher scheme (Graph 4.11). Prices for domestic holiday travel & accommodation also increased strongly, reflecting robust demand and higher airfare prices owing to temporary capacity restrictions and increases in jet fuel prices. State government voucher schemes – such as the 'Victorian Dining Program' and the NSW 'Stay' and 'Parents' vouchers – weighed on prices for a number of market services components; in the absence of these vouchers, price increases would have been a little stronger in the quarter.

Rents – accounting for around 6 per cent of the CPI basket – increased by 1.3 per cent in the September quarter, reflecting historically low vacancy rates across the country. Rents in Sydney and Melbourne recorded their largest quarterly increase in 10 years, while rents in other capital cities continued to record relatively strong rises. The gap between CPI rents (covering the entire rental stock) and advertised rents for new tenants remains large by historical standards (Graph 4.12); this gap is expected to narrow as CPI rent growth increases further over the year ahead, supported by low vacancy rates and tight rental market conditions, although the

Graph 4.11



services, sports and leisure services.

timing and extent of this pick-up remains uncertain.

State government rebates delayed the effect of sharp utility price increases

The increase in wholesale gas and electricity prices from earlier in the year began to affect retail prices in the September guarter – though electricity rebates from some state governments have delayed much of this effect on the CPI until the December quarter. Measured electricity prices in the CPI increased by 3 per cent in the quarter; by contrast, underlying electricity prices (excluding the effect of rebates) increased by 15½ per cent (Graph 4.13). Gas prices, where no significant rebates were provided, increased by 10 per cent in the quarter to be nearly 17 per cent higher over the year. Although wholesale electricity and gas prices have reversed much of the sharp spikes seen around the middle of this year, futures markets indicate that in the year ahead they are likely to remain around double the levels observed in 2021. This is expected to result in further strong increases in retail electricity and gas prices in 2023 (see chapter on 'Economic Outlook').

Administered inflation (excluding utilities) remains around pre-pandemic trends, having increased by around 3 per cent over the year to the September quarter. State and local govern-

Graph 4.12

Rent Inflation Year-ended, with city weights indicated Sydney (38% weight) Melbourne (28% weight) 10 10 CPI rents n Advertised rents Perth (7% weight) Brisbane (14% weight) 10 10 -10 2010 2016 2022 2010 2016 2022 Hedonic three-month average

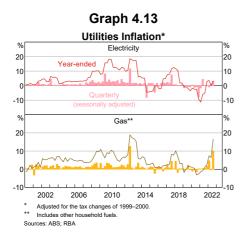
Sources: ABS: CoreLogic: RB/

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.

ment charges were about 3 per cent higher over the year. Child care prices rose a little in the quarter but were lower over the year due to the effects of the increase in the subsidy rate for families with more than one child and the NSW 'Before and After School Care' voucher (Graph 4.14). Prices for health-related products and services increased by 2½ per cent over the year, broadly in line with pre-pandemic trends.

The monthly CPI indicator points to elevated inflationary pressures

The ABS released its new monthly CPI indicator for the month of September alongside the regular quarterly CPI release, which included the first publication of the monthly trimmed mean

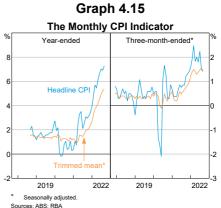


Graph 4.14 Administered Price Inflation* Child care & school fee: Tertiary education 40 Vear-ended 20 Quarterly -20 Health State & local government* 2002 2022 2002 2022 2012 2012 Adjusted for the tax changes of 1999-2000 Includes urban transport fares, property rates & charges and other services in respect of motor vehicles.

measure (see 'Box B: The Introduction of a Monthly CPI Indicator for Australia'). The monthly CPI indicator points to inflationary pressures remaining elevated and broadly based through the September guarter (Graph 4.15). Movements in the monthly CPI indicator over July to September were driven by price increases across many CPI components, including groceries, consumer durables and new dwelling construction – as was the case for the quarterly CPI.

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

Measures of short-term inflation expectations remain at relatively high levels (Graph 4.16). This is consistent with the higher cost of living that households are experiencing, the Reserve Bank's public commentary that inflation will increase further in the near term 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 (Graph 4.17). Most mediumand long-term measures, including those from financial markets, remain within the inflation target range, suggesting that the current high inflation is expected to be relatively short lived. Long-term expectations of union officials remain



Sources: ARS: RRA

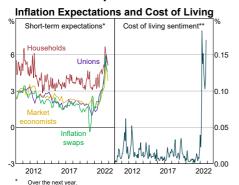
around 3½ per cent – the highest level since 2009.

Inflation expectations can influence firms' and households' wage negotiations and pricesetting behaviour. There has been an increase in the number of liaison contacts suggesting that higher headline inflation outcomes are contributing to higher wage expectations over recent months, though most firms citing inflation as a factor generally expect wages growth over coming quarters to be less than current headline inflation rates. This is in part because some of the recent strength in inflation is seen as temporary. Reports of higher labour costs contributing to price increases have so far been largely contained to a few specific sectors, such as professional and household services, residential construction and for some retail firms; for some of these firms, labour is the most significant component of their costs.

Timely information suggests that wages growth has increased

Wages growth continued to strengthen in the September quarter according to a broad range of indicators (Graph 4.18). Many firms in liaison have reported that the increase in wages growth has been driven by strong labour demand and the tight labour market, high inflation outcomes

Graph 4.16

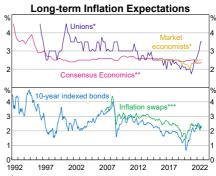


*** Proportion of financial news articles mentioning 'cost of living'

Sources: Australian Council of Trade Unions; Bloomberg; Dow Jones Factiva; Melbourne Institute of Applied Economic and Socia Research; RBA; Workplace Research Centre and the flowthrough of the award wage increases of 4.6–5.2 per cent announced by the FWC in June. New and timely data on wage outcomes for enterprise agreements from the FWC suggests that there has been an average wage increase of 2.9 per cent in newly lodged enterprise agreements in the September quarter so far, which is slightly higher than the 2.8 per cent increase in approved agreements in the June quarter (Graph 4.19).

The pick-up in wages growth over recent quarters has been broadly based. In liaison, firms in most industries have reported higher-thanaverage wages growth. In the September

Graph 4.17



- * Average over the next 5–10 years.
- ** 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

Graph 4.18



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

the private Wage Price Index.
Sources: ABS; CBA; RBA; SEEK; Xero Small Business Insights

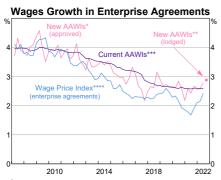
quarter, over 45 per cent of firms reported realised wage increases of 3–5 per cent; a further 25 per cent reported increases above 5 per cent – well above the pre-pandemic average of around 5 per cent of firms.

Wages growth is expected to rise further over the coming year

Liaison reports and surveys of wages growth expectations point to a further lift in wages growth over coming quarters, though these expectations generally remain consistent with the inflation target. The majority of firms in the Bank's liaison program expect stable or higher wages growth over the coming year, although the share of firms expecting slower wages growth over the next year lifted to around 25 per cent in the September quarter (see 'Box A: Insights from Liaison'). Market economists and unions expect wages growth to rise to around 3.5 per cent over the next couple of years (Graph 4.20).

Recent public sector wage announcements by the federal government and several state governments are likely to support a further pickup in wages growth over the next year. The Australian Government recently announced a

Graph 4.19



- * Quantifiable average annualised wage increases (AAWIs) in new FWC-approved and federally-registered enterprise agreements.
- AAWIs in enterprise agreements submitted but not yet approved; quarterly average to date.
- *** AAWIs in the total stock of nominally current, FWC-approved and federally-registered enterprise agreements.
- **** Year-ended growth; excludes bonuses and commissions.

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

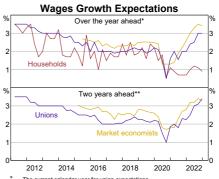
wage increase of 3 per cent for public sector wages. The Western Australian Government revised its wage policy upwards, offering a wage increase of 3–6 per cent per annum for the next two years, with larger increases for lower paid workers; this is alongside a lump-sum payment to assist with cost-of-living pressures.

Wages pressures continued to build in the June quarter

The WPI grew by 0.7 per cent in the June quarter and 2.6 per cent in year-ended terms. Private sector wages growth picked up to 2.7 per cent over the year, while public sector wages growth was more muted and continued to weigh on overall outcomes (Graph 4.21). Wages growth was strongest over the past year in the construction industry (3.4 per cent), in line with liaison messages about labour cost pressures in the sector.

Wages growth was strongest for jobs where wages are set by individual arrangement, reaching 2.8 per cent in the June quarter (Graph 4.22). Average wages growth in enterprise agreements has been broadly steady around 2.4 per cent. Growth in wages set by awards shows a similar trend, but is expected to pick up in the September quarter as the most

Graph 4.20



- The current calendar year for union expectations.

 The next calendar year for union expectations.
- Sources: Australian Council of Trade Unions; Melbourne Institute of Applied Economic and Social Research; RBA; Workplace Research Centre

recent FWC decision begins to flow through to workers' wages.

The pick-up in wages growth is broadening. The share of jobs that have received a wage increase over the past year has increased to around 80 per cent – the highest level since 2012. For jobs that received a wage change, the share of changes above 4 per cent has risen in recent quarters and is around its 2014 level (Graph 4.23). The share of changes between 0–2 per cent has continued to decline. Wage increases have been particularly strong at the bottom end of the skill distribution (Graph 4.24).

Broader measures of labour costs have grown at stronger rates than base wages, as firms use bonuses and other payments to attract and

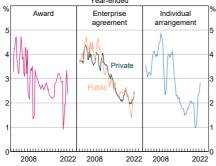
Graph 4.21



Graph 4.22

Wages Growth by Pay-setting Method*

Year-ended



Excludes bonuses and commissions

Sources: ABS; RBA

retain staff in a tight labour market and to ease cost-of-living pressures for workers. The WPI including bonuses and commissions was 3.3 per cent in the June quarter. Around one-third of jobs by expenditure weight received a bonus payment over the past 12 months – the highest share since 2009 – though this may also reflect bonuses and commissions related to firm-wide performance and sales (Graph 4.25). Growth in the national accounts measure of average earnings per hour has also risen, although it remains affected by volatility in average hours worked due to workers taking paid leave.

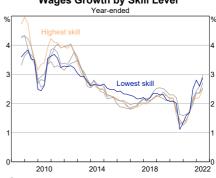
Graph 4.23

Wage Changes of Different Sizes*



Graph 4.24

Wages Growth by Skill Level*



* The 'highest' and 'lowest' skill categories are ABS occupational skill levels 1 and 5, respectively; grey lines denote wages growth for skill levels 2–4.

Real incomes continued to decline

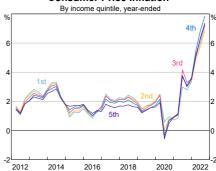
Real (inflation-adjusted) incomes continued to decline in the June quarter, as consumer prices rose more quickly than labour income. The rise in inflation has been broadly based across the income distribution and household types (Graph 4.26; Graph 4.27). Nonetheless, cost-ofliving pressures will fall unevenly across households, as those with lower incomes spend a greater proportion on essential items. However, some of these households will have their real income supported by the FWC award wage decision and the indexation of social security payments to inflation. Broader measures of labour income imply less of a decline in household purchasing power than implied by growth in base wages. 🛪

Graph 4.25



Graph 4.26

Consumer Price Inflation*

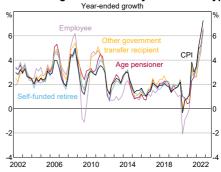


* Measures of inflation based on upper-level differences in consumption patterns by income quintile; estimated with the 2015/16 Household Expenditure Survey.

Sources: ABS; RBA

Graph 4.27

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