Statement on Monetary Policy

NOVEMBER 2023

RESERVE BANK OF AUSTRALIA

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Overview

Inflation in Australia has passed its peak but is still too high and is proving more persistent than expected a few months ago. CPI inflation remains above 5 per cent in year-ended terms – well above the Bank's inflation target of 2–3 per cent. Underlying inflation is higher than was expected at the time of the August *Statement on Monetary Policy*. While goods price inflation has continued to moderate largely as expected, the prices of many services are rising briskly. Services price inflation reflects primarily domestically sourced costs for labour and non-labour inputs and demand pressures; services price inflation in many other advanced economies has been slow to decline. Consistent with the signal from inflation, recent indicators of activity also point to growth in the economy having been a bit stronger this year than had been expected.

The economy has been growing below trend this year, as it has slowed in response to high inflation and the cumulative increase in interest rates. In particular, cost-of-living pressures have weighed on people's real incomes and, consequently, growth in household consumption has been weak. Even so, output growth this year has had a bit more momentum than was expected three months ago, which is partly the result of stronger-than-expected growth in population, as well as more strength in the growth of private and public investment. Business investment and public demand are expected to continue to contribute to output growth in coming quarters, supported by strong population growth, an easing in supply constraints and a large pipeline of projects, including for public infrastructure.

A period of below-trend growth in the economy is helping to achieve a better balance between the level of demand and supply, which will help to reduce inflation further over time. Output growth is expected to remain below trend over 2023 and 2024, but the outlook over the next year has been revised higher compared with three months ago, consistent with lingering demand pressures in the economy. Inflation is expected to decline more gradually than previously forecast. Inflation is forecast to decline to around 3½ per cent by the end of 2024 and to reach a little below 3 per cent at the end of 2025.

Conditions in the labour market have gradually eased across a range of measures, but they remain tight. Employment growth has slowed from its strong pace late last year and it is now roughly keeping pace with growth in working-age population. Firms have been adjusting hours worked by staff in response to easing demand growth in the economy. This has seen the underemployment rate pick up a little more than the unemployment rate recently, but both remain low by historical standards. Recent strong population growth has added to the supply of labour while also adding to aggregate demand.

The number of employed persons is expected to continue increasing over the period ahead but to grow more slowly than the working-age population for a period, reflecting the expectation that the economy will continue to grow

below trend. The unemployment rate is expected to rise gradually over the next year, to 4¼ per cent from late 2024, which is a more moderate increase than previously forecast.

Wages growth picked up a little further in the September quarter, according to a range of timely indicators. Some further increase was expected because of the previously announced increase in award wages, as well as the ongoing tightness in the labour market and recent changes to public sector wage policies. However, the labour market is not as tight as it was and liaison with firms suggests there has been a moderation in wages growth in some jobs and industries. Even so, the cost of labour for firms also depends on growth in labour productivity, which has been very weak. As a result, growth in the cost of labour is very high and is adding to firms' overall cost pressures; the forecasts assume that productivity growth will pick up, which will be needed for labour cost growth to be consistent with the inflation target.

Some of the earlier tightening in monetary policy is still working its way through the economy. Scheduled mortgage payments have increased in recent months and will rise somewhat further as borrowers with very low fixed-rate loans roll off onto higher mortgage rates. Housing credit growth has remained steady at much lower levels than a year ago, although there has been a modest increase in new housing loans since earlier in the year alongside rising housing prices. The Australian dollar has been little changed over recent months, remaining close to the lower end of its range of the past year.

Consumption growth has been particularly weak this year, as high inflation as well as higher interest rates and tax payable have resulted in declines in real household disposable income. These factors are expected to continue to weigh on growth of real incomes and consumption for a time. As inflation continues to moderate over the coming year or so, real household incomes are expected to grow again and support consumption growth. Higher housing wealth is also expected to provide some support, as housing prices have risen noticeably to be back around their 2022 peaks. However, the support they provide to consumption growth may be less than usual given low housing turnover and modest credit growth. Overall spending in the economy has been supported this year by a rebound in international students and tourists, which in turn has supported consumer-facing firms in the economy.

Growth in household consumption remains a key source of uncertainty for the economic outlook. Many households are experiencing a painful squeeze on their finances, through higher inflation and interest rates. At the same time, many are benefiting from rising housing prices, substantial savings buffers and higher interest income. Consumer spending could be stronger than anticipated if employment growth does not slow as much as expected, if spending responds more strongly to higher housing prices than assumed or households draw more heavily on their savings buffers. On the other hand, the current weakness in household consumption growth could persist for longer than expected. This could arise if weak real household disposable income has a larger-than-anticipated effect on spending, particularly for households on lower incomes, which typically have lower savings buffers.

There are both upside and downside risks to the outlook for inflation. Domestic demand pressures on inflation could be more persistent than anticipated – for example, if growth in consumer spending or investment were stronger than forecast – and cost pressures on inflation could be accentuated by supply-side shocks from the conflicts abroad or the El Niño weather pattern. With inflation remaining high and forecast to decline more gradually than anticipated three months ago, inflation expectations might drift higher, which could further

delay the return of inflation to the target range. Conversely, domestic demand pressures on inflation could ease faster than expected, particularly if some of the downside risks to consumption growth were to be realised, and global disinflationary pressures could be greater than assumed, particularly if downside risks to the outlook for global economic activity were to materialise.

Persistently high inflation remains the major concern for central banks in advanced economies. Headline inflation has edged higher over recent months because of increases in fuel prices. Core inflation has continued to decline in year-ended terms, but progress has been gradual because core services inflation has been declining only slowly as demand for services has been relatively strong and labour markets have remained tight. The risk that inflation takes even longer to return to target has increased.

Government bond yields at longer maturities have increased over recent months. Policymakers at several advanced economy central banks have suggested that the tightening in financial conditions associated with higher longer term yields could reduce the need for further increases in policy rates in their economies. Market participants expect policy rates in most advanced economies will be held at or near current levels until at least mid-2024.

The near-term outlook is for relatively weak output growth in Australia's major trading partners, with risks tilted to the downside. Growth is expected to slow from 3½ per cent in 2023 to 3 per cent in 2024, well below average growth in the decade prior to the pandemic. In China, the potential for larger negative spillover effects from the weak property sector to the broader economy and financial system remains a significant downside risk to the outlook there. In advanced economies, a key downside risk to near-term output growth is whether financial conditions tighten further, which could be because central banks decide they need to raise rates further to bring about a faster decline in inflation. The Hamas–Israel conflict is adding uncertainty to the global economic outlook and poses an upside risk to inflation if it disrupts regional energy markets or trade.

At the November meeting, the Reserve Bank Board decided to raise policy rates by a further 25 basis points, bringing the cumulative increase over this tightening cycle to 425 basis points. The Board had held rates steady at the previous four meetings. It had judged that higher interest rates were working to establish a more sustainable balance between supply and demand in the economy. This had allowed the Board to wait for additional evidence about the evolving state of the economy and to consider an updated set of forecasts. It also allowed the Board to further assess how the increase in interest rates to date was affecting the economy and the outlook, recognising that monetary policy works with a lag. At these previous meetings, the Board had noted the upside risks to growth and inflation, but it was also mindful that there were scenarios where growth in the economy could slow more sharply than anticipated, which could result in an earlier return of inflation to target. The Board had therefore signalled that further rate rises may be required to bring inflation back to target within a reasonable timeframe.

Taken together, the data received over recent months indicate that the domestic economy has been a bit stronger than previously thought and capacity utilisation remains high. The labour market remains tight and, while wages growth looks to have stabilised overall, unit labour costs are still growing very strongly. New loan approvals have been increasing and housing prices have been rising across the country. Consumer prices are rising briskly, particularly in market services and rents, and the inflationary pressures in these components are expected to take some time to dissipate. The latest readings for underlying inflation mean that there is now

likely to be less progress in bringing inflation down over the next few quarters than had been thought a few months ago. In many respects, conditions in Australia continue to echo developments in other advanced economies, where progress in bringing inflation down has slowed, services price inflation remains high and labour markets remain relatively tight.

The weight of recent information suggests that the risk of inflation remaining higher for longer has increased. The updated forecasts have inflation in Australia higher in the near term and taking a bit longer to return to the top of the Bank's target range. The forecasts assume a path for the cash rate that is in line with financial market pricing and market economist expectations, and therefore incorporate some increase in the cash rate. In addition, there is potential for further upside surprises to inflation, both because domestic inflationary pressures are persisting and because of external factors, such as potential global energy market disruptions and the prospect of higher food price inflation related to El Niño.

While it has been reassuring that medium-term inflation expectations have remained anchored to date, some measures have recently been edging up. These could rise further if upside risks to the forecasts were to materialise. Rising inflation expectations would add to inflationary pressures, especially if productivity growth remains subdued. This would require a prolonged period of below-trend growth, and lower employment, to reverse. It is important to avoid this given the significant costs involved, namely even higher interest rates and a larger rise in unemployment.

At its November meeting, the Board also considered the option to continue to hold policy rates steady. The arguments in support of this are that inflation expectations remain consistent with the inflation target despite the recent up-tick in some measures and wages growth looks to have stabilised. The economy is growing below trend and labour market conditions are gradually easing. It is possible that productivity growth picks up as pandemic disruptions fade, which would help to reduce the growth of unit labour costs. As such, it is still possible that inflation will return to target in a reasonable timeframe. A further pause could also allow further time to consider how the evolving situation in the Middle East will affect the outlook for global activity and energy prices.

The Board judged, however, that an increase in interest rates in November was warranted to be more assured that inflation would return to target in a reasonable timeframe. High inflation makes life difficult for everyone and damages the functioning of the economy. It erodes the value of savings, hurts household budgets, makes it harder for businesses to plan and invest, and worsens income inequality. The Board is also mindful that many households are facing a painful squeeze on their budgets, both from high inflation and the increase in mortgage rates to date. There are also economic and social benefits in preserving as much of the gains in the labour market as possible. Weighing all these considerations, the Board judged that, after holding policy rates steady for the past few months, it was appropriate to raise rates at the November meeting.

The Board's priority is to return inflation to target. Whether further tightening of monetary policy is required to ensure that inflation returns to target in a reasonable timeframe will depend upon the data and the evolving assessment of risks. In making its decisions, the Board will continue to pay close attention to developments in the global economy, trends in domestic demand, and the outlook for inflation and the labour market. The Board remains resolute in its determination to return inflation to target and will do what is necessary to achieve that outcome.

1. The International Environment

High inflation remains the key challenge facing most central banks. After earlier declines, headline inflation rates have edged up again in many economies in recent months, driven mainly by higher fuel prices. Core inflation has eased further in year-ended terms, but progress has been gradual, largely because strength in core services inflation has been persistent. In addition to the tragic human toll, conflict in the Middle East is also a significant source of uncertainty for the global outlook. It presents a potential upside risk to inflation if the conflict were to disrupt energy supply in the region. Separately, the El Niño weather pattern may also push up food price inflation.

Economic activity has held up better than generally expected in a number of advanced economies, particularly in the United States. This is despite the cumulative effects of tighter monetary policy. This resilience reflects the combined effects of fiscal policy, tight labour markets and healthy household balance sheets. Growth in Europe has slowed more clearly, and growth in G7 economies is forecast to slow further in the year ahead and remain below average through to at least 2025. The post-pandemic recovery in the services sector is now well advanced and so less likely to continue to drive economic growth in the period ahead. Business investment has been a key driver of economic growth in recent quarters, but investment intentions point to weaker business investment growth going forward.

Chinese economic growth has continued to recover over recent quarters from the pandemic disruptions to activity, but the recovery has been uneven and the level of activity remains below the trend expected prior to the pandemic. While household consumption has been recovering, demand for property remains very weak. Combined with financial stress among real estate developers, this has led to a persistent decline in residential real estate investment and prompted Chinese authorities to take further steps to stabilise the property market, as well as address local government debt risks. Policy support for infrastructure investment this year has helped to bolster overall investment, so steel production in China has been steady. This has supported the price of iron ore (which is a key Australian export). The renminbi has also stabilised around multi-decade lows. Growth in China is expected to moderate in the next two years as the consumer recovery slows and the effect of stimulus measures fades.

Central banks in advanced economies have maintained or increased policy rates over recent months, in line with the prior expectations of market participants. Meanwhile, government bond yields at longer maturities have increased noticeably, led by US Treasuries, but they have also been quite volatile. In most advanced economies, government bond yields reached their highest levels in more than a decade in October, before declining of late. This has been accompanied by an appreciation of the US dollar and declines in the prices of riskier assets. Though global financial conditions have tightened moderately over this period, equity prices in the United States and Europe are still higher than a year ago, while corporate bond

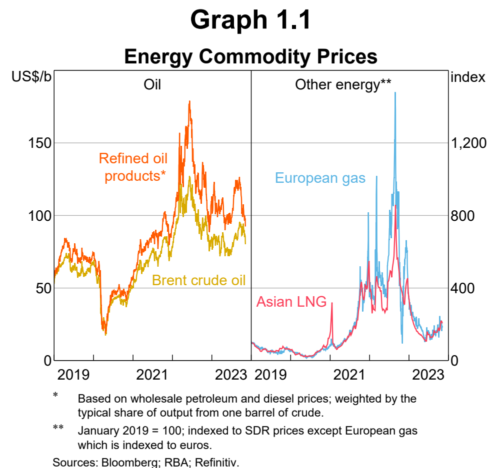
spreads remain close to their long-term averages.

Most of the increase in longer term yields over recent months has been driven by higher real yields, with inflation expectations increasing only modestly. The rise in real yields is likely to reflect a number of factors, including: increased uncertainty around the economic and policy outlook; expectations of a larger supply of government bonds associated with sizeable fiscal deficits, most notably in the United States; the simultaneous reduction in central bank asset holdings; and market participants upgrading their estimates of the level of neutral interest rates. Policymakers at several central banks have suggested that the increase in longer term yields could reduce the need for policy rate increases if they result in a sustained tightening of financial conditions beyond that implied by expected policy rates. Most advanced economy central banks judge policy rates to be restrictive and that they will need to be kept at least around these levels for an extended period to bring inflation back to target. With the exception of Japan, market participants generally expect there will be some modest policy easing towards the middle of 2024.

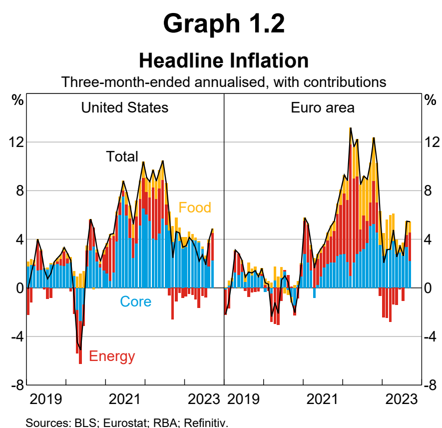
Higher oil prices have put upward pressure on headline inflation, but core inflation has continued to ease, albeit gradually

Headline inflation has ticked up in many economies in recent months, largely because of higher fuel prices in the September quarter (Graph 1.1; Graph 1.2). While oil prices remain well below 2022 peaks, they have risen since June, following the extension of supply cuts by Saudi Arabia and Russia. LNG prices have increased significantly more recently due to the Israel–Tamar gas field shutdown and an increase in other supply risks heading into the European winter. By contrast, thermal coal prices have declined, partly due to relatively high inventories in Europe and China. The Hamas–Israel conflict and the related prospect of rising geopolitical tensions in the Middle East more broadly pose additional upside risk to energy prices. Global food price inflation has moderated in many economies over recent months but remains high; the El Niño weather pattern is an upside risk to the prices of some agricultural commodities over the year ahead.

Core inflation has continued to moderate gradually in advanced economies in year-ended terms. However, progress has been uneven, and monthly core inflation has edged higher in a few economies recently. Lower core goods price inflation has been the main driver of lower inflation in advanced economies (Graph 1.3). By



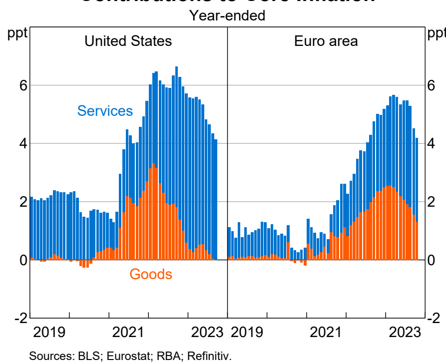
* Based on wholesale petroleum and diesel prices; weighted by the typical share of output from one barrel of crude.
** January 2019 = 100; indexed to SDR prices except European gas which is indexed to euros.
Sources: Bloomberg; RBA; Refinitiv.

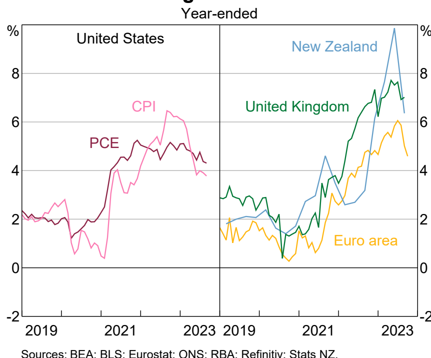


Sources: BLS; Eurostat; RBA; Refinitiv.

contrast, inflation in core services prices has eased by less in advanced economies, with a high degree of persistence in both shelter and other services prices.

Non-housing services inflation looks to have peaked but remains high in most advanced economies. This is consistent with strong demand for services relative to supply and is also reflected in still-tight labour markets (see below) (Graph 1.4). By contrast, rent price inflation is yet to ease and remains well above pre-pandemic norms in most advanced economies. The United States is a notable exception, with rental price inflation having eased materially over the past year, in line with an increase in the supply of housing and softer demand.

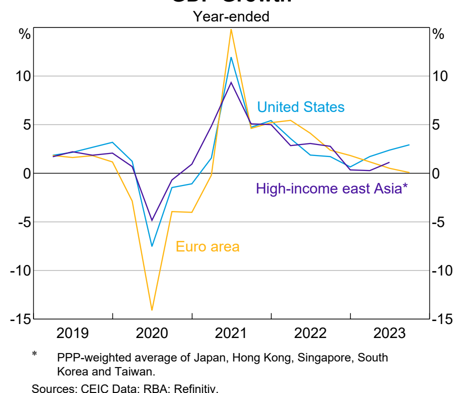




Economic activity has held up better than expected in some advanced economies, but timely data suggest that growth is waning

Growth in advanced economies has slowed, but by less than had been previously anticipated. GDP growth has been surprisingly resilient in the United States and in some high-income east Asian economies (including Japan and South Korea) in recent quarters, even though tighter monetary policy and cost-of-living pressures have continued to weigh on real incomes and demand (Graph 1.5). By contrast, economic growth has continued to slow in the euro area, with partial indicators suggesting this is also true in Canada and the United Kingdom.

The post-pandemic recovery in the services sector in advanced economies is well progressed and will not provide as much support to growth in the year ahead. Indeed, survey measures of services sector conditions have moved into contractionary territory in many advanced economies (Graph 1.6). Conditions in the manufacturing sector have also continued to deteriorate in Europe. Conversely, manufacturing sector conditions have recovered somewhat in the United States according to some measures and have held up more in east Asia, in part reflecting the resilience



in demand from the United States. In turn, this has seen export volumes from high-income east Asia stabilise over 2023. Exports from China have also stabilised, following sharp declines earlier in the year.

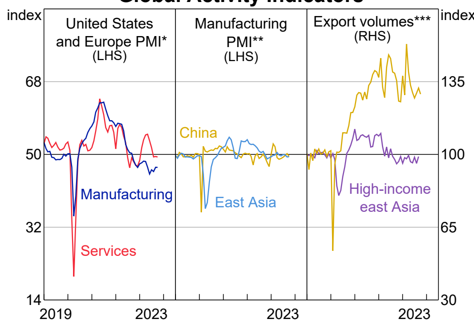
Resilient labour markets have continued to support household consumption, while business investment has been supported by government policy

Labour market conditions in advanced economies remain tight but have eased a little over the course of this year. Job vacancy-to-unemployment ratios are still high relative to historical norms but have declined from their peaks, suggesting some improvement in the balance between labour demand and supply (Graph 1.7). Consistent with this, wages growth remains high but has eased a little in a number of advanced economies; the United Kingdom remains a notable exception as high inflation continues to feature prominently in wage negotiations and put upward pressure on wages (Graph 1.8).

The resilience in labour markets has been a key factor supporting household consumption in advanced economies, notwithstanding the headwinds from tighter monetary policy. Strong nominal income growth and a diminishing drag from headline inflation saw growth of real household disposable income in year-ended terms turn positive in many advanced economies in the June quarter (and earlier in the United States) (Graph 1.9). In addition, household balance sheets remain healthy, with large accumulated savings balances in many economies and housing prices recovering. Household consumption growth has been especially strong in the United States. Although US households have been drawing down the extra savings that were accumulated during the pandemic in order to support consumption, recent data revisions show a larger stock of

Graph 1.6

Global Activity Indicators



* Purchasing Managers' Index; PPP-weighted average of the United States, euro area and the United Kingdom.

** Purchasing Managers' Index; east Asia is a PPP-weighted average of Japan, South Korea, Taiwan, Indonesia, Malaysia, Philippines, Thailand and Vietnam.

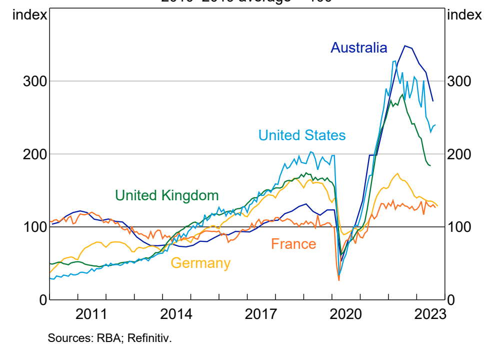
*** Merchandise exports; deflated using the United States import price indices for east Asia and China; high-income east Asia is a PPP-weighted average of Japan, South Korea, Taiwan, Singapore and Hong Kong.

Sources: CEIC Data; RBA; Refinitiv; S&P Global.

Graph 1.7

Vacancies-to-unemployment

2010–2019 average = 100

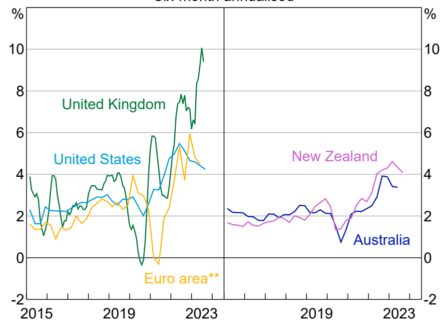


Sources: RBA; Refinitiv.

Graph 1.8

Wages Growth*

Six-month annualised



* Labour cost indices used where available; average earnings for the United Kingdom (compositionally controlled prior to April 2022).

** Year-ended.

Sources: BoE; RBA; Refinitiv.

savings is still available for consumption than previously thought. Overall, US households are saving a much smaller share of their incomes than was the case before the pandemic, but this is generally not the case in other advanced economies. Consistent with this, consumption growth has generally continued to slow, with below-trend growth in most other advanced economies in recent quarters.

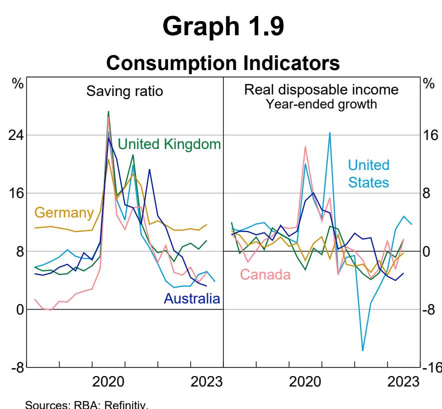
Business investment has been a key driver of economic growth across several advanced economies in recent quarters (Graph 1.10). Business investment grew particularly strongly in the United States and the United Kingdom in the first half of the year, supported by substantial government support (e.g. tax incentives) as well as a post-pandemic catch-up in investment in transport and structures (e.g. warehouses). However, business investment intentions have been easing across several advanced economies, as tighter financial conditions and uncertainty about global growth weigh on the outlook; US business investment growth also stalled in the September quarter. Recent US policy initiatives such as the Inflation Reduction Act and the CHIPS and Science Act are designed to influence investment over longer time horizons and it is difficult to identify when they will have their greatest impacts on business investment growth.

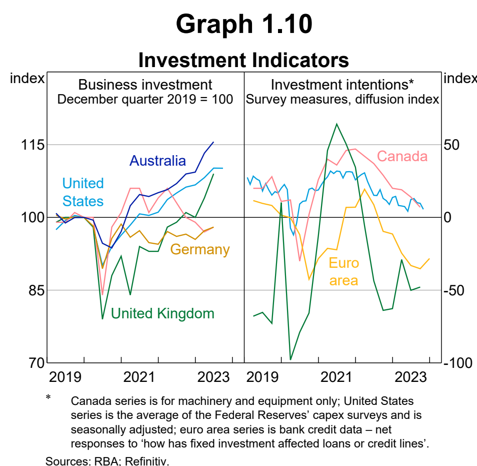
Chinese economic growth has picked up after a softer period in the middle of the year, but the property sector continues to weigh on activity

The Chinese economy continued to recover in the September quarter, but the level of GDP remains below the trend expected prior to the pandemic (Graph 1.11). The services (tertiary) sector has been the primary driver of growth in 2023, due to the removal of pandemic-related restrictions at the end of 2022. Consistent with this, urban household consumption continued to recover in the September quarter and the urban household saving rate declined (Graph 1.12). Much of the recovery in consumption has been driven by services, consistent with where inflation has picked up. Core goods inflation has been weak and fuel and food prices have declined (Graph 1.13).

Total fixed asset investment in China has been growing despite a persistent and marked decline in residential fixed asset investment. Private sector investment has been driven by a sustained expansion in manufacturing investment, while fiscal policy measures have driven growth in infrastructure investment (Graph 1.14).

Conditions in the Chinese property sector remained weak in the September quarter, with



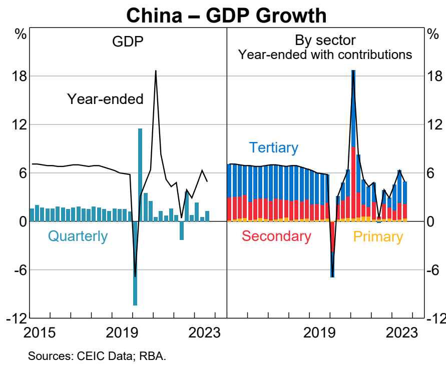


new housing sales, starts and investment all remaining at very low levels (Graph 1.15). Sales in large cities have recently recovered a little in line with further policy easing, but it is not clear whether this will persist or lift buyer sentiment in smaller cities where the vast majority of new homes are sold. Aside from the direct impact of weak activity in the property sector, the continued stress on developers and flow-on effects to the financial system could weigh on economic growth in the medium term.

Chinese property developers remain under extreme stress

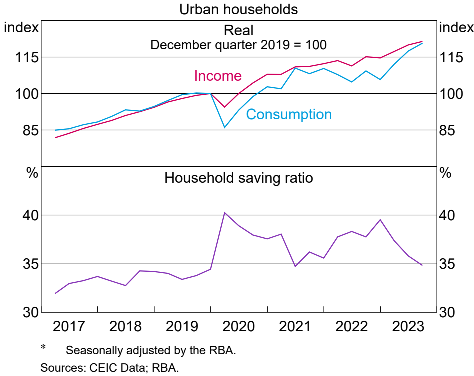
Chinese property developers' bond and equity prices have declined further over recent months, as weak demand for new housing continued to weigh on developers' earnings (Graph 1.16).

Graph 1.11



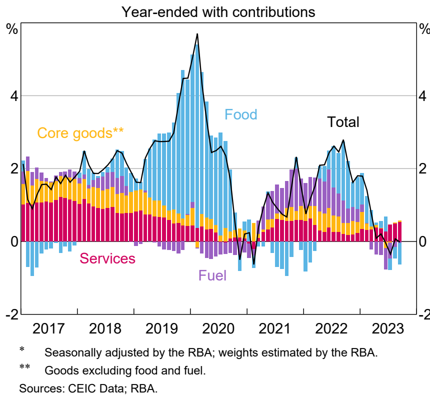
Sources: CEIC Data; RBA.

Graph 1.12



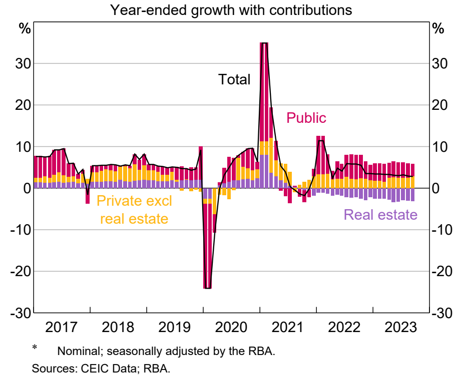
* Seasonally adjusted by the RBA.
Sources: CEIC Data; RBA.

Graph 1.13



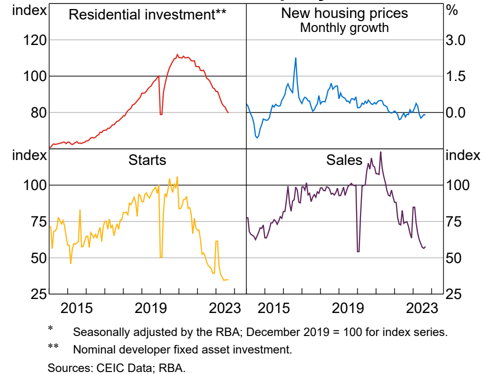
* Seasonally adjusted by the RBA; weights estimated by the RBA.
** Goods excluding food and fuel.
Sources: CEIC Data; RBA.

Graph 1.14



* Nominal; seasonally adjusted by the RBA.
Sources: CEIC Data; RBA.

Graph 1.15



* Seasonally adjusted by the RBA; December 2019 = 100 for index series.
** Nominal developer fixed asset investment.
Sources: CEIC Data; RBA.

Private developers' financing conditions are especially challenging. They have little to no access to funding from capital markets and banks have been hesitant to extend loans as defaults have risen. Overall, more than half of large private developers (weighted by assets) have defaulted, and many others are likely to find it difficult to meet upcoming debt repayments. A prominent example is Country Garden – one of the largest private developers in China – which defaulted in October after missing an interest payment on a US dollar bond. Country Garden had previously warned it would be unable to meet upcoming payments and will now seek to restructure its debt.

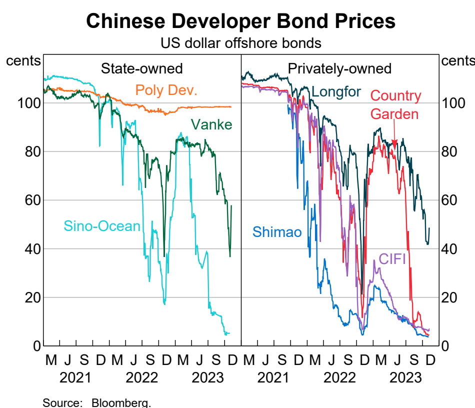
Stress in the property sector has been contained thus far, but there are concerns about possible spillovers to other parts of China's financial sector. Defaults on shadow banking products, including trust loans and wealth management products, have increased further, and smaller regional banks with weaker capital adequacy positions remain particularly exposed to weak conditions in the property sector.[1]

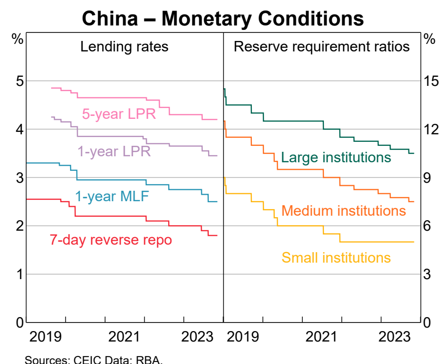
Chinese authorities have eased policy further

Chinese authorities have eased policy further to stabilise the property market and support the recovery more broadly. Key measures to support the property sector have included a further easing of household credit policies and purchase restrictions in large cities. In late October, central authorities also announced CNY1 trillion in additional borrowing to be transferred to local governments and spent in 2023 and 2024, at the same time raising the headline fiscal deficit in 2023 from 3.0 to 3.8 per cent of GDP. These transfers will support local government finances and should continue to support infrastructure investment in the near term.

The People's Bank of China (PBC) eased monetary policy modestly in September by lowering the reserve requirement ratio by 25 basis points for most banks (Graph 1.17). The additional liquidity allows banks to support a large volume of government bond issuance, including the accelerated issuance of local government special bonds, which typically fund infrastructure projects. In addition, following the PBC's guidance, banks have reduced interest rates on outstanding first-home mortgages (which make up around half of all housing loans). This is estimated to reduce the average mortgage rate paid on first-home mortgages by around 70 basis points, which is likely to support household consumption.

The renminbi has stabilised around multi-decade lows after depreciating by 6 per cent against the US dollar since March alongside





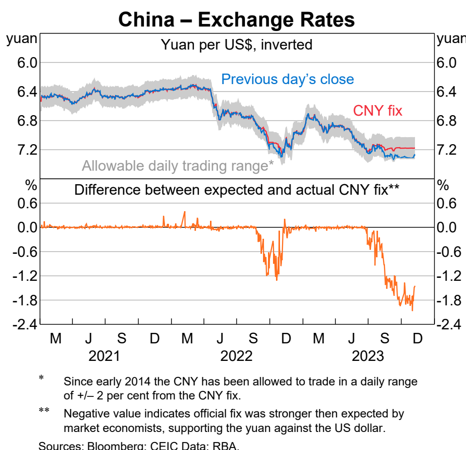
economic data that was better than the market expected and efforts by authorities to lean against the pace of depreciation (Graph 1.18). This has included the PBC setting the strongest 'CNY fix' – the midpoint of the permitted daily trading range of +/–2 per cent – for the renminbi since a survey of expectations began in 2018.

Chinese authorities have also announced measures to address local government debt risks. Several heavily indebted local governments have had limits imposed on additional financing and others have reportedly been allocated refinancing bond quotas, which can be used to repay the debt of local government financing vehicles (LGFVs). Though these quotas are modest relative to total outstanding LGFV debt, the refinancing program has raised expectations of further support, and the spread on LGFV bonds to Chinese government bonds has narrowed since its announcement.

World steel production has remained steady despite the weakness in the Chinese property sector, supporting iron ore and coking coal prices

Global steel production has remained steady, in turn supporting iron ore and coking coal prices over recent months (Graph 1.19; Graph 1.20; Table 1.1). Steel production in China has been broadly stable, with weak demand from the property sector offset by solid growth in infrastructure and manufacturing investment. Recent policy announcements by Chinese authorities, which are expected to support steel production in China in the near term, have supported iron ore prices further. Steady growth in steel production in India has also supported demand for coking coal, although India's share of world steel production remains small. Coking coal prices have increased significantly since the August *Statement*, partly because of supply disruptions in Australia (globally the largest exporter); these disruptions though have eased more recently.

Graph 1.18

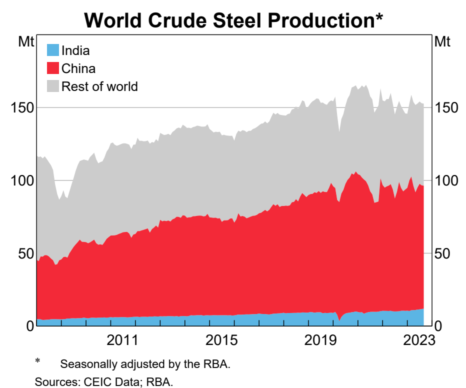


* Since early 2014 the CNY has been allowed to trade in a daily range of +/– 2 per cent from the CNY fix.

** Negative value indicates official fix was stronger then expected by market economists, supporting the yuan against the US dollar.

Sources: Bloomberg; CEIC Data; RBA.

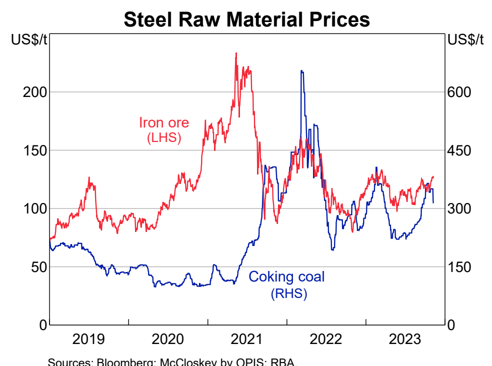
Graph 1.19



* Seasonally adjusted by the RBA.

Sources: CEIC Data; RBA.

Graph 1.20



Sources: Bloomberg; McCloskey by OPIS; RBA.

Table 1.1: Commodity Price Growth[a]

SDR terms; percentage change

	Since previous *Statement*	Over the past year
Bulk commodities	22	–1
– Iron ore	27	44
– Coking coal	30	–4
– Thermal coal	–11	–62
– Asian LNG spot	57	–41
– Lithium (Australian Spodumene)	–24	–49
Rural	–4	–20
Base metals	1	–5
Gold	2	11
Brent crude oil[b]	–6	–17
RBA ICP	7	–14
– Using spot prices for bulk commodities	11	–10

(a) Prices from the RBA Index of Commodity Prices (ICP); bulk commodity prices are spot prices.

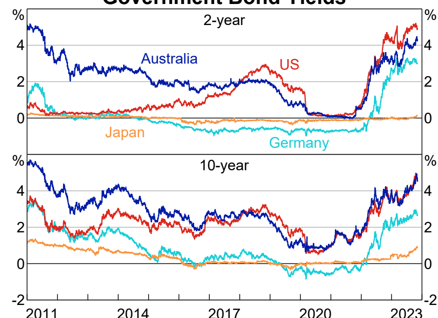
(b) In US dollars.

Sources: Bloomberg; McCloskey by OPIS; RBA; Refinitiv.

Government bond yields have increased substantially at longer maturities, amid elevated volatility

Government bond yields at longer maturities have increased noticeably over recent months, and in most advanced economies they reached their highest levels in more than a decade, before declining of late (Graph 1.21). Most of the increase in longer term yields has come from higher real yields. While there has been a small increase in longer term market-implied inflation expectations in recent months, these remain broadly consistent with central banks' inflation targets (Graph 1.22). Short-term bond yields have been more stable, reflecting market expectations that most central banks are at or close to the end of their policy tightening phases.

The increase in longer term real yields over recent months appears to partly reflect an increase in the term premium, which is the yield on bonds over and above what is explained by expectations of inflation and future shorter term real interest rates. Estimates of term premia declined in the period following the global financial crisis and have been negative for most of the past decade. The recent increase may reflect a number of factors, such as increased uncertainty around the economic and policy outlook and expectations of a larger supply of government bonds from debt issuance at the same time that central banks are reducing their asset holdings. Real yields may also have risen in part because of investors upgrading their estimates of the level of neutral interest rates, in



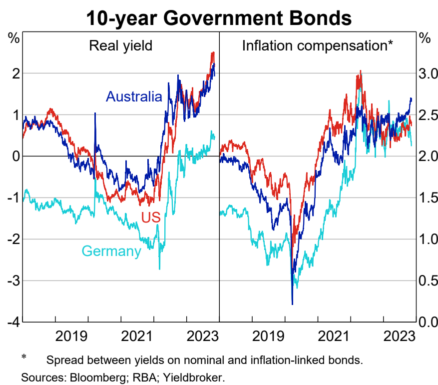
the wake of resilient economic activity in the face of high policy rates. At the same time, volatility of longer term government bond yields has increased, consistent with elevated uncertainty over the future path of inflation and interest rates (Graph 1.23).

Private sector financial conditions have tightened moderately in advanced economies but compensation for credit risk remains low

Equity prices in the United States and Europe have declined over recent months, in part due to higher interest rates, which decrease the present value of future company earnings (Graph 1.24). Corporate bonds yields have increased alongside the rise in government bond yields and a modest widening of credit spreads (Graph 1.25). Nevertheless, equity prices in most major markets are still noticeably higher than a year ago, while corporate bond spreads are around their long-term average in Europe and the United States. This is despite the significant increases in policy rates to levels judged to be restrictive and increases in longer term risk-free rates. Levels of these asset prices suggest that market participants do not anticipate significant declines in corporate profits or a large rise in corporate defaults.

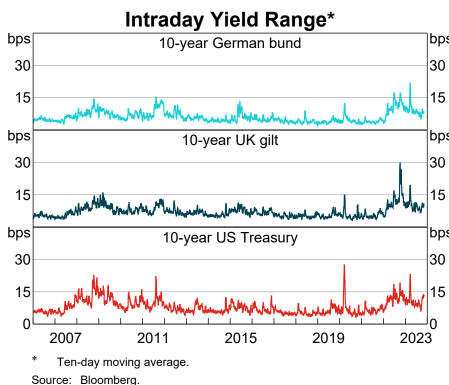
Corporate bond issuance in the United States and Europe has picked up in recent months. This may in part reflect some firms bringing forward their issuance to guard against the risk that

Graph 1.22



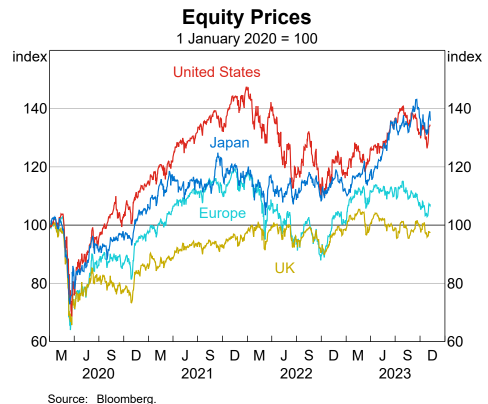
* Spread between yields on nominal and inflation-linked bonds.
Sources: Bloomberg; RBA; Yieldbroker.

Graph 1.23



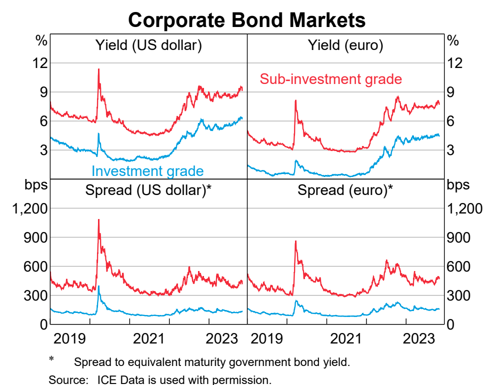
* Ten-day moving average.
Source: Bloomberg.

Graph 1.24



Source: Bloomberg.

Graph 1.25



* Spread to equivalent maturity government bond yield.
Source: ICE Data is used with permission.

yields rise even further. Initial public offerings have also picked up in US equity markets following a long period of inactivity.

Central bank surveys have shown a broad-based tightening in lending standards and weakening in demand for credit this year. Credit growth has slowed sharply this year in the United States and Europe, although the rate of deceleration has moderated in the United States in recent months.

The US dollar has appreciated over recent months alongside a widening in US yield differentials

The US dollar has appreciated moderately on a trade-weighted (TWI) basis to be around 2 per cent higher over recent months. The appreciation has been broadly based and consistent with the widening in the yield differential between US Treasury bonds and other advanced economy government bonds.

The Japanese yen has continued to depreciate over recent months and is around 10 per cent lower on a TWI basis since the beginning of the year. Weakness in the yen has reflected the Bank of Japan (BoJ) maintaining very accommodative policy settings in an environment of rising global yields.

Most advanced economy central banks have increased policy rates to levels they consider restrictive, and expect to maintain these settings for some time

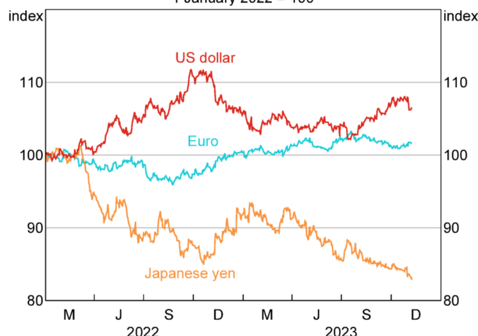
Most advanced economy central banks judge policy rates to be restrictive. Central bank commentary has increasingly focused on balancing upside risks to inflation and downside risks to economic growth, while many have noted that the conflict in the Middle East is an additional significant source of uncertainty. Nevertheless, policymakers at most central banks have emphasised the need to keep policy rates around at least their current restrictive levels for as long as necessary to bring inflation back to target. Officials from several central banks have indicated that recent increases in sovereign bond yields could reduce the need for policy rate increases if they result in a sustained tightening of financial conditions beyond that implied by expected policy rates. Market participants expect most central banks' policy rates have peaked and anticipate that there will be some modest easing towards the middle of 2024 (Graph 1.27; Table 1.2).

In October, the BoJ adjusted its yield curve control policies by replacing its strict 1 per cent cap on 10-year Japanese Government bond (JGB) yields with a softer 1 per cent 'reference rate'. Under the new policy, the BoJ will no

Graph 1.26

Trade-weighted Exchange Rates

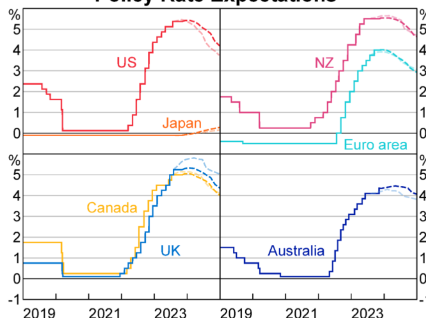
1 January 2022 = 100



Sources: Bloomberg; Board of Governors of the Federal Reserve System.

Graph 1.27

Policy Rate Expectations*



* Darker dashed lines show expectations implied by current overnight indexed swap rates; lighter dashed lines show the same expectations as the August SMP.

Sources: Bloomberg; RBA.

Table 1.2: Policy Rates at Advanced Economy Central Banks

	Change since August *Statement* (basis points)	Current level (per cent)	Expected peak (per cent)*
Australia	+25	4.35	4.35
United States	0	5.25–5.5	5.25–5.5
Euro area	+25	4	4
Canada	0	5	5
Japan	0	–0.1	N/A
New Zealand	0	5.5	5.5
Norway	+50	4.25	4.25
Sweden	+25	4	4
Switzerland	0	1.75	1.75
United Kingdom	0	5.25	5.25

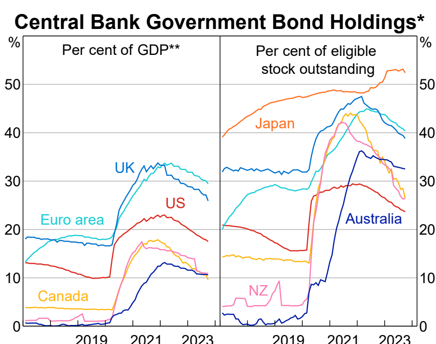
* Values represent the peak policy rate that is fully priced in by markets.
Sources: Bloomberg; central banks.

longer commit to strictly defend 10-year yields at 1 per cent. The BoJ has stated that it will continue large-scale JGB purchases to encourage yields to remain around this level, but with the flexibility to accommodate additional increases in yields. Other central banks are reducing their holdings of assets purchased under quantitative easing programs (Graph 1.28). Meanwhile, central banks have continued to wind down term funding schemes established or expanded during the pandemic (Graph 1.29).

Emerging markets are facing tighter external funding conditions

Emerging markets' external funding conditions have tightened moderately over recent months. Nevertheless, yields on US-dollar-denominated sovereign debt remain a little below 2022 highs, and spreads to US Treasuries have widened by only a small margin (Graph 1.30). Net portfolio outflows have been most pronounced in Asia, and several Asian central banks are thought to have intervened to support their exchange rates. Meanwhile, Bank Indonesia increased its policy rate by 25 basis points in October to stabilise the currency and mitigate the impact of imported inflation risks. Some central banks in Latin America – which started raising policy rates earlier and by more than advanced economies – have continued to reduce policy rates as core inflation has eased, though the market-implied expected rate of easing has moderated over the past month.

Graph 1.28



* Central government debt only, except the euro area. Holdings for euro area only include asset purchase programs; holdings for UK do not include financial stability purchases; other central banks include bonds held for operational or liquidity purposes.

** Four quarter rolling sum. Japan (not shown) is currently 99 per cent of GDP.

Sources: Central banks; debt management offices; RBA; Refinitiv.

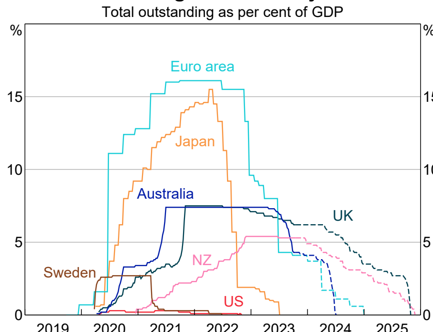
Growth in Australia's major trading partners is expected to remain below average over the next few years

Year-average GDP growth in Australia's major trading partners is expected to be around 3½ per cent in 2023, before slowing to 3 per cent in 2024 (Graph 1.31). This overall outlook is little changed from three months ago, with stronger forecast growth in the United States and Japan offset by weaker forecast growth in east Asian economies (outside of China and Japan).

Graph 1.29

Term Funding Scheme Projections*

Total outstanding as per cent of GDP

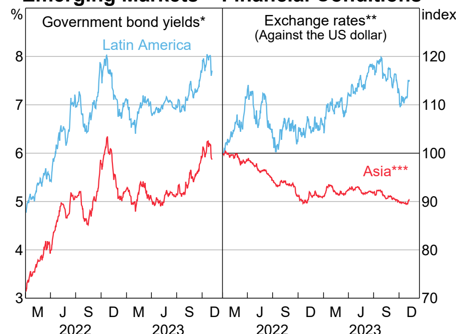


* COVID-19 pandemic response schemes only. Dashed lines represent projected repayments and/or maturities. Euro area projections from ECB Survey of Monetary Analysts. UK, Australia and New Zealand projections assume outstanding funding held to maturity.

Sources: Central banks; Refinitiv.

Graph 1.30

Emerging Markets – Financial Conditions



* US-dollar-denominated bond yields, weighted by market value.

** 3 Jan 2022 = 100.

*** Excluding China.

Sources: Bloomberg; JP Morgan; RBA.

Consensus forecasts are for moderate GDP growth in major advanced economies in 2023. A modest upward revision in forecast growth has been driven by stronger-than-expected economic activity data in the United States and Japan over recent months; US GDP growth forecasts for 2024 have also been revised higher. Consensus forecasts for GDP growth in the United Kingdom and euro area remain subdued. Overall growth in G7 economies is still forecast to slow substantially over 2024, before picking up in 2025. Growth in China is expected to slow in the next two years as the consumer recovery slows and the effects of stimulus measures fade. While the most recent GDP data in China were largely in line with forecasts in the previous *Statement*, the profile for expected growth has been revised downwards, reflecting the further deterioration in Chinese property market conditions and a judgement that potential spillovers to the household sector could be larger than previously thought.

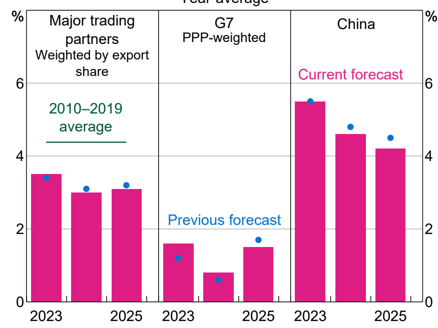
The outlook for global economic activity is uncertain, with risks tilted to the downside:

- *Financial conditions could tighten further or remain tighter for longer than expected.* If this tightening is not accompanied by stronger economic activity, this would present a downside risk to growth. Central banks and market participants are generally

Graph 1.31

GDP Growth

Year-average



Sources: ABS; CEIC Data; Consensus Economics; RBA; Refinitiv.

anticipating a less disruptive economic and employment cycle than in previous disinflation episodes, but these forecasts could prove too optimistic, with additional monetary and financial tightening leading to more pronounced downturns. Current monetary policy settings may be insufficiently restrictive if inflation proves to be more persistent than expected or picks up again. Some potential sources of greater inflation persistence include ongoing high rent inflation (if housing supply adjusts more slowly than expected) or an increase in inflation expectations. Potential future upside shocks to inflation could include an escalation of geopolitical tensions related to the conflict in the Middle East (which could increase oil prices) and/or a more disruptive than anticipated El Niño weather pattern (which could increase agricultural prices). There is also a risk that financial conditions could tighten further (independently of monetary policy settings) – for example, if increasing government debt or uncertainty about the response of monetary policy to a changing economic outlook were to drive sustained increases in long-term government bond yields. If a significant further tightening in financial conditions were to occur in a synchronised way across major advanced economies, a mutually reinforcing negative global economic and financial cycle could emerge.

- *There continues to be uncertainty (in both directions) about the effects of the cumulative tightening in monetary policy and broader financial conditions on economic activity.* It is likely that the overall tightening in financial conditions that has already occurred is still flowing through the economy, given the lags involved and more recent increases in long-term bond yields, but economic activity in advanced economies has so far been more resilient than expected. This resilience could be sustained if labour market tightness unwinds more slowly than anticipated or if recoveries in housing prices gather momentum and provide further support to household consumption growth through wealth effects. However, if growth in services sectors (which are relatively labour intensive) moderates further, unemployment and/or underemployment could rise more quickly than currently expected. This could, in turn, also support an easing in core services inflation, which to date has shown significant persistence.
- *Economic growth in China could slow more than forecast due to spillovers from continued stress in the property sector.* Despite the recent policy measures to stimulate the property market, demand for housing remains weak and this could persist for longer than expected. This could exacerbate financial pressures on property developers and increase stress in China's financial system. Ongoing weakness in the property sector could also weaken the recovery in household consumption through sustained low levels of consumer sentiment, by limiting potential household wealth accumulation and/or encouraging households to save more in other forms of wealth. While it is possible that the policy measures announced over recent months could prove to be more effective at stimulating the property market or infrastructure investment than expected, or that authorities adopt additional policy measures to further support the economy, the scale and impact of any additional support measures remains uncertain. ✠

Endnotes

[1] See RBA (2023), '5.1 Focus Topic: Vulnerabilities in China's Financial System', *Financial Stability Review*, October.

2. Domestic Economic Conditions

Labour market conditions remain tight but have eased over the course of this year as growth in labour demand has eased and labour supply has increased. The economy is experiencing a period of below-trend growth and GDP per capita has declined further. High inflation and the significant rise in interest rates are weighing on people's real incomes and household consumption growth is subdued, as is dwelling investment. At the same time, the ongoing rebound in international student and tourist numbers is supporting demand conditions for Australian businesses. Strong growth in public and private investment has also supported domestic activity, reflecting a large pipeline of work and an easing in supply constraints.

Labour market conditions have eased since late 2022, but measures of spare capacity remain close to multi-decade lows

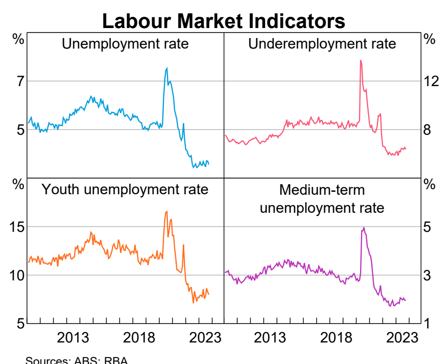
A range of measures suggest that the labour market remains tight, but conditions have eased over the course of this year as growth in labour demand has moderated while growth in the supply of labour has remained strong.

The unemployment rate was 3.6 per cent in September, a touch above its 50-year low of 3.4 per cent reached in late 2022 (Graph 2.1). Underemployment has also risen over that period, driven both by part-time workers preferring to work more hours and fewer part-time workers finding the hours of work that they would like. Increases in underemployment have been more pronounced among young people and those seeking to work an additional half to one day. Broad measures of labour underutilisation have also risen.

The youth unemployment rate now sits roughly 1 percentage point above its July 2022 trough. Youth labour market outcomes tend to be more cyclical than aggregate measures and move contemporaneously with broader labour force indicators around turning points. The medium-term unemployment rate – a measure most representative of cyclical unemployment – has risen slightly in recent months.

The ratio of vacancies to unemployed persons has declined from its peak reached last year but remains well above its pre-pandemic level (Graph 2.2). Labour mobility indicators are mostly below their 2022 peaks, although the share of people voluntarily quitting their jobs remains above pre-pandemic levels. Business surveys, along with firms in the Bank's liaison program, have also reported an improvement in labour availability and a decline in turnover rates, though finding suitable workers continues to be difficult.

Graph 2.1



Employment growth has slowed to be roughly consistent with strong population growth

Employment growth has slowed since last year but has kept up with strong growth in the working-age population (Graph 2.3). This has supported the employment-to-population ratio, which remained around historical highs in recent months. The number of employed persons has increased by over one million since February 2020. There has also been an increase in the proportion of employed persons holding multiple jobs, to a record high of 6.7 per cent.

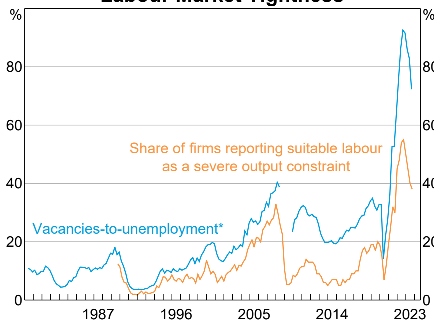
Slower employment growth is consistent with the moderation in other indicators of labour demand since mid-2022. New job advertisements and hiring intentions from firms in the Bank's liaison program have declined from their highs reached last year.

Employment growth has increasingly been driven by part-time employment in recent months (Graph 2.4). This contrasts to patterns observed during the recovery from the pandemic, when full-time employment accounted for almost all employment growth. Relatedly, average hours worked have declined a little recently and are expected to remain a key margin of adjustment as labour demand eases further.

Labour supply has increased since the start of 2020 and helped to meet high levels of labour demand. The participation rate remains near historical highs. The increase in participation since the start of 2020 has been particularly prevalent among females and young people. Strong population growth, driven by strong net overseas migration, particularly the arrival of students and other temporary migrants, has also added to labour supply and helped relieve labour shortages in some industries, although migrants add to overall demand for goods and services and hence also increase the demand for labour. Australia's working age population rose by 2.8 per cent over the year to September; this was the strongest rate of working age

Graph 2.2

Labour Market Tightness



* The ABS vacancies survey was suspended between May 2008 and November 2009.

Sources: ABS; NAB; RBA.

Graph 2.3

Employment and Population Growth

Year-ended

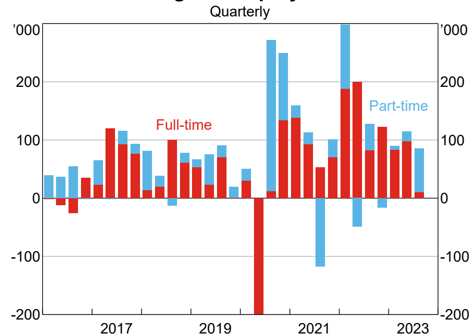
* Trend measure; outliers during the COVID-19 pandemic were truncated.

Sources: ABS; RBA.

Graph 2.4

Change in Employment*

Quarterly



* June quarter 2020 observation cut off.

Sources: ABS; RBA.

population growth since this series began in February 1979.

The economy is experiencing a period of below-trend growth

Growth in the Australian economy has slowed over the first half of 2023 and GDP per capita has declined (Graph 2.5). The slowing in the economy was a little less pronounced than was expected a few months ago.

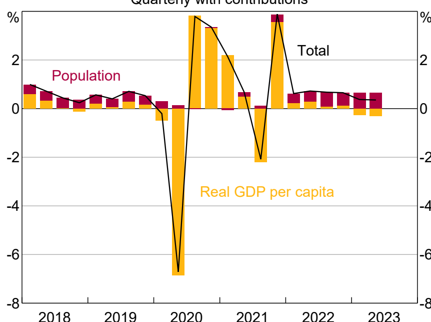
Growth in domestic final demand has remained around its pre-pandemic average over the first half of 2023 despite weak growth in household consumption (Graph 2.6). Business investment growth has been strong, reflecting a large pipeline of work and an unwinding of supply disruptions. Construction of government infrastructure projects has also contributed to the resilience in overall economic activity, with demand continuing to exceed available capacity in the sector (see Box A: Insights from Liaison). Timely indicators suggest that domestic activity will continue to grow moderately in the September quarter.

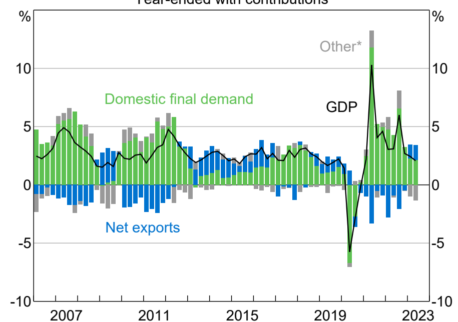
Growth in household consumption remains subdued amid cost-of-living pressures and rising interest rates

Household consumption growth has been subdued in recent quarters and per capita consumption has declined slightly. The slowdown in growth has been driven by discretionary categories, while growth in the consumption of essential goods and services has remained steady. Sales of new cars have continued to grow strongly, supported by the delivery of orders that were placed several months earlier as supply constraints have eased. Retail sales and other timely indicators suggest that household consumption growth remained subdued in the September quarter, although growth is expected to have picked up compared with the June quarter (Graph 2.7). Spending by Australian tourists abroad has also risen strongly in recent months, returning to around pre-pandemic levels in August in nominal terms (Graph 2.8).

Falling real household incomes have been a key driver of the weakness in consumption growth over the past year. Real household disposable income has been declining since mid-2022 and was 3 per cent lower than a year ago in the June quarter. High inflation, strong growth in tax payments and higher net interest payments have more than offset robust growth in labour incomes (Graph 2.9).

The pressure on household budgets has seen the household saving ratio decline further below pre-pandemic levels. For households with a mortgage, extra mortgage payments (beyond





scheduled payments) in recent quarters have been slightly lower than the pre-pandemic average (see Chapter 3: Domestic Financial Conditions). More broadly, there has been a small drawing down of the additional savings accumulated during the pandemic in recent quarters, as measured by the deviation of the savings rate from its pre-pandemic average (Graph 2.10). The extent to which households draw down on their savings to smooth consumption remains a key uncertainty for the consumption outlook (see Chapter 5: Economic Outlook).

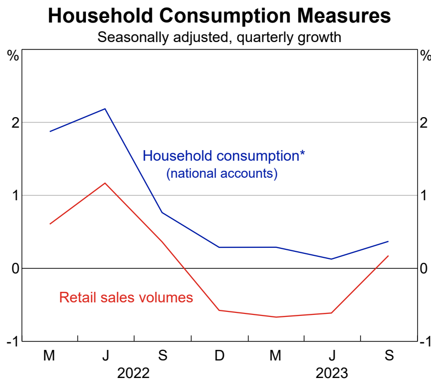
Despite the uneven effects of higher interest rates and high inflation on different households, data on spending by income and mortgagor status suggests that outcomes have been broadly comparable across most groups so far (Graph 2.11). Savings buffers are helping many mortgagor households manage the impact of higher interest rates, while stronger growth in incomes for lower income households and renters is likely to be supporting their ability to spend. That said, many households are facing a squeeze on their budgets and have had to make adjustments by reducing spending, dipping into savings (or at least saving less) and taking on extra hours of work in response to budgetary pressures.[1]

While the growth of consumption by permanent residents has been weak, growth of

Graph 2.7

Household Consumption Measures

Seasonally adjusted, quarterly growth



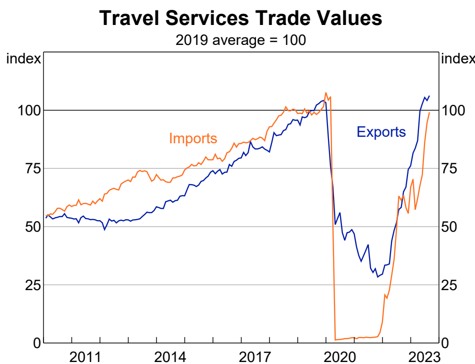
* Includes September quarter 2023 estimate based on the 'Consumption Tracker' model; see Bishop, Boulter and Rosewall (2022).

Sources: ABS; RBA.

Graph 2.8

Travel Services Trade Values

2019 average = 100

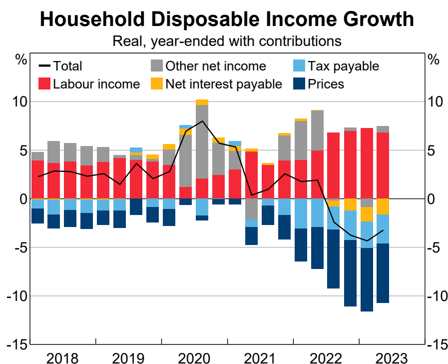


Sources: ABS; RBA.

Graph 2.9

Household Disposable Income Growth

Real, year-ended with contributions

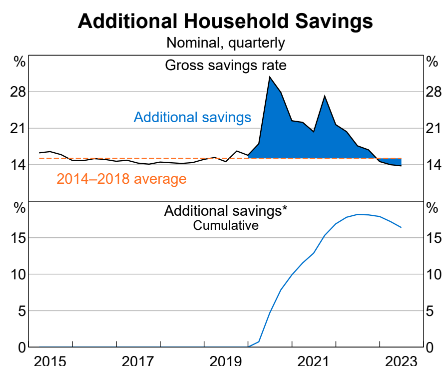


Sources: ABS; RBA.

Graph 2.10

Additional Household Savings

Nominal, quarterly



* Additional savings are relative to a pre-pandemic trend and as a proportion of household disposable income.

Sources: ABS; RBA.

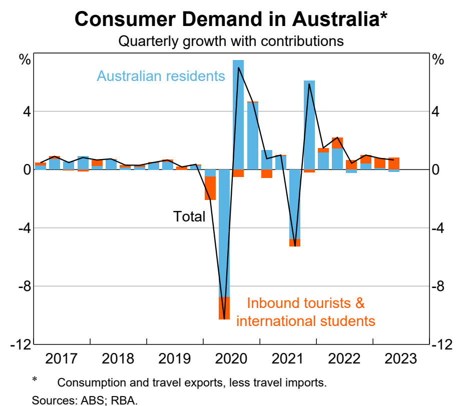
total consumer spending in Australia – which includes spending by temporary residents – remains around its pre-pandemic average (Graph 2.12). This has supported demand conditions for Australian businesses. In particular, total spending has been supported by strong growth in international students and tourists over the past year. This includes a large contribution from Chinese tourists and students since the start of 2023, despite a slowing economic recovery in China (see Chapter 1: The International Environment). Total spending, rather than consumption, determines the demand conditions that feed into the price-setting behaviour of consumer-facing firms. However, an increase in international students also supports the supply side of the economy as many students participate in the labour force.

Non-mining business investment has grown strongly, reflecting resilient business conditions and an unwinding of supply chain disruptions

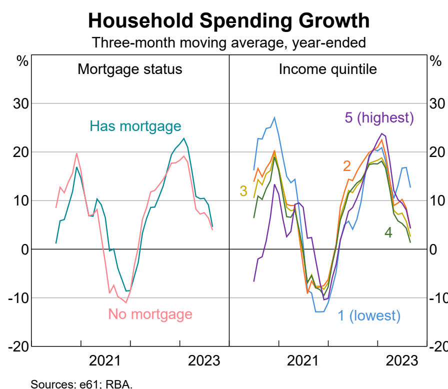
Business investment has increased strongly over the past year, with broad-based growth across non-mining industries (Graph 2.13). Growth in non-mining business investment over the first half of 2023 was the strongest outcome since 2007, aside from the pandemic rebound. Investment in machinery and equipment as a share of GDP has risen to its highest level in a decade, partly reflecting the boost to vehicle sales from an unwinding of supply chain disruptions. Non-residential construction has also increased strongly; very low vacancy rates and a large increase in rents for industrial property have led to a strong pick-up in industrial building activity.

Survey measures suggest that business investment will continue to grow, underpinned by strong population growth, a high level of capacity utilisation and measures of business conditions that remain around average levels. Increased investment should, over time, help to lift labour productivity. A large pipeline of building and engineering work should support

Graph 2.12



Graph 2.11



Graph 2.13

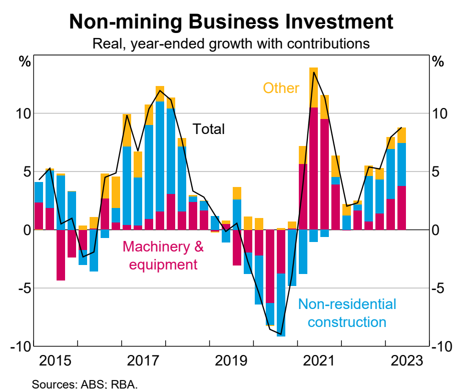


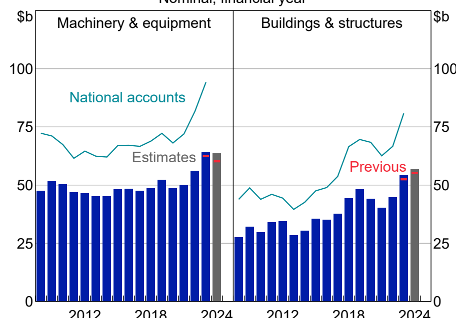
Table 2.1: Growth in Housing Prices

Per cent, seasonally adjusted

	October	September	August	Since April 2022	Year-ended	Since Feb 2020
Sydney	0.7	0.9	1.1	0	9.0	25
Melbourne	0.3	0.1	0.8	–3	2.4	11
Brisbane	1.4	1.4	1.6	2	7.9	48
Adelaide	1.3	1.9	1.3	9	6.5	50
Perth	1.6	1.5	1.5	12	10.8	42
Darwin	0.1	0.4	0.4	0	–1.7	26
Canberra	0.2	0.6	0.3	–6	–1.5	32
Hobart	0.7	0.0	0.5	–11	–4.9	31
Capital cities	0.8	0.9	1.1	1	6.8	27
Regional	0.7	0.7	0.8	–1	2.1	47
National	0.8	0.9	1.1	0	5.6	31

Sources: CoreLogic; RBA.

non-residential construction over the coming years, although the timing of work is uncertain given ongoing labour constraints. The ABS Capital Expenditure Survey showed that, in aggregate, non-mining firms have revised up their expectations for investment for the 2023/24 financial year and nominal investment intentions are a little above 2022/23 levels (Graph 2.14). Investment intentions reported by firms in the Bank's liaison program remain above their long-run average.



The rebound in housing prices has continued and is supporting household wealth

National housing prices have increased strongly over the past six months to be around their April 2022 peak (Graph 2.15; Table 2.1). Recent increases have been broadly based across capital cities and regional areas and have underpinned a rebound in household wealth. The rebound in housing prices reflects a combination of stronger demand for established housing, partly due to strong population growth, and ongoing limited supply of dwellings. Housing turnover and overall residential listings remain below long-run average levels.

A number of indicators suggest that national housing price growth may slow over coming months. Price growth has eased in markets that led the rebound in prices, particularly in the higher value segments of Sydney and Melbourne. This is consistent with the rise in new listings in these areas and a decline in auction clearance rates (Graph 2.16). Outside of Sydney and Melbourne, new listings generally

remain low and auction clearance rates are above historical averages.

The rental market remains tight and the ongoing weakness in dwelling investment suggests this is unlikely to ease in the near term

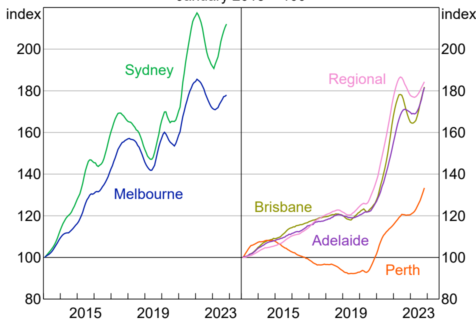
Rental vacancy rates remain very low, particularly in smaller capital cities (Graph 2.17). Advertised rents (for new leases) are 30 per cent higher than pre-pandemic levels, but the pace of growth in advertised rents has slowed, particularly in regional areas (Graph 2.18). Despite the easing in advertised rents growth, inflation for the stock of rentals captured in the CPI (which covers capital cities but not regional areas) increased by almost 8 per cent over the year to September and is expected to increase further (see Chapter 4: Inflation). Rents on new leases flow through to rent inflation in the CPI with a lag because only a small share of the stock of rental properties update leases in a given month.

Strong population growth has added to demand for rental properties, particularly in major cities, while supply takes some time to adjust. The shift in preferences during the pandemic towards more residential space per occupant led to lower average household size, which contributed to additional demand for housing. Average household size in capital cities has increased since the start of the year, which is likely a reflection of tight rental market

Graph 2.15

Housing Prices

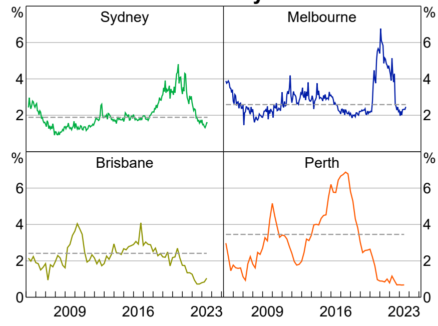
January 2013 = 100



Sources: CoreLogic; RBA.

Graph 2.17

Rental Vacancy Rates*



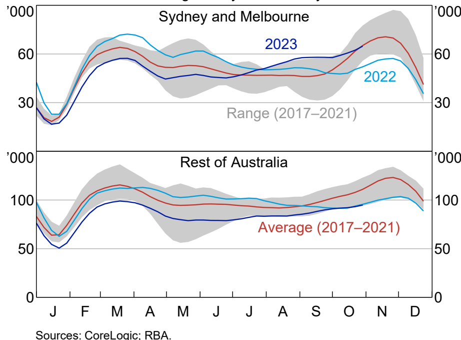
* Data is monthly for Sydney and Melbourne, and quarterly for Brisbane and Perth; dashed lines represent historical (2005–2019) averages.

Sources: RBA; REIA; REINSW; REIV.

Graph 2.16

New Residential Property Listings

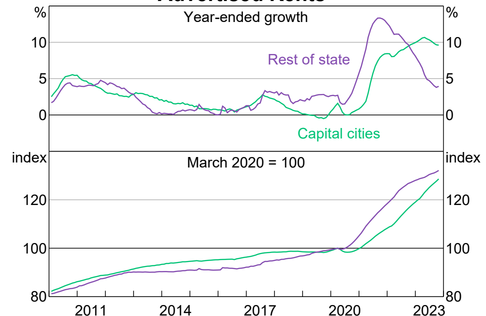
Rolling 28-day sum, weekly



Sources: CoreLogic; RBA.

Graph 2.18

Advertised Rents*



* Hedonic; seasonally adjusted.

Sources: CoreLogic; RBA.

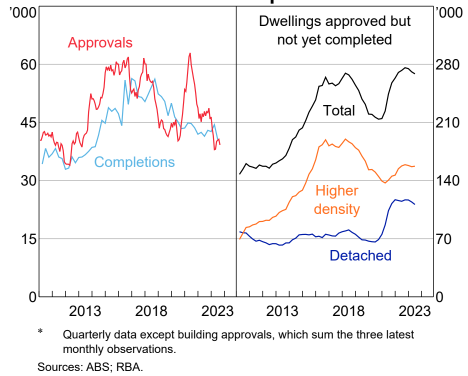
conditions, but it remains well below pre-pandemic levels (Graph 2.19).

The supply of new dwellings has also been constrained. Dwelling investment has declined over the past year and is below levels that were typical prior to the pandemic. Capacity constraints have continued to limit the pace at which builders can work through the large pipeline of residential construction to be done, as labour shortages have remained acute at the latter stages of construction (Graph 2.20). Around 42,000 dwellings were completed in the June quarter, the lowest quarterly outcome in close to a decade.

Demand to purchase new dwellings has remained subdued as higher interest rates, elevated construction costs and longer building times have weighed on buyer sentiment. However, there are signs that the recent strength in the established market will translate to stronger demand for new dwellings in the period ahead. Sales of new detached housing and greenfield land have increased a little in recent months after stabilising at a low level earlier in the year (Graph 2.21). Some firms in the Bank's liaison program expect demand for new dwellings to increase over the next year, supported by inward migration and low rental vacancy rates. ✠

Graph 2.20

Residential Pipeline*

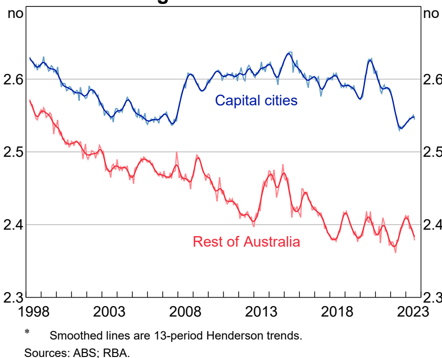


* Quarterly data except building approvals, which sum the three latest monthly observations.

Sources: ABS; RBA.

Graph 2.19

Average Household Size*



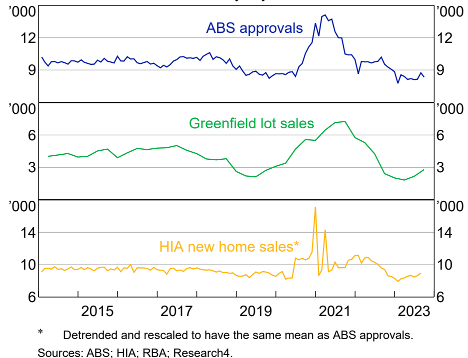
* Smoothed lines are 13-period Henderson trends.

Sources: ABS; RBA.

Graph 2.21

Detached Housing Activity Indicators

Seasonally adjusted



* Detrended and rescaled to have the same mean as ABS approvals.

Sources: ABS; HIA; RBA; Research4.

Endnotes

[1] See RBA (2023), '5.3 Focus Topic: Indicators of Household Financial Stress', *Financial Stability Review*, October.

Box A

Insights from Liaison

This Box highlights key messages collected by teams based in Adelaide, Brisbane, Melbourne, Perth and Sydney during discussions with around 290 businesses, industry bodies, government agencies and community organisations over the period from the beginning of August to early November 2023.

Liaison information provides a timely signal that economic activity in a number of sectors has continued to moderate over recent months. While demand conditions in retail and new housing construction have slowed, generally solid levels of business activity (including in infrastructure construction) are supporting investment intentions. Employment intentions have eased over recent months and are around longer run averages. Wages growth is still tracking around 4 per cent, but forward expectations have drifted lower of late. Firms note that growth in non-labour costs has been easing since earlier in the year, though recent movements in the exchange rate and oil prices are slowing the decline in imported costs, and domestic cost pressures persist. Softer demand is weighing on firms' capacity to increase prices and maintain margins.

Consumer demand has eased and cost-of-living pressures remain acute for many households

Retail trading conditions have been broadly unchanged in recent months and remain weaker than a year ago, with sales volumes declining for most retailers since last year. Retailers continue to report that consumers – particularly those most affected by cost-of-living pressures – are more budget-conscious in their spending. Consistent with this, domestic leisure travel has declined over the past six months, though it is still at a high level.

Community organisations have flagged that cost-of-living pressures remain acute, with more people than usual seeking support, including wage earners and households with mortgages. These organisations continue to report that a lack of affordable rental accommodation is a key issue. Increasingly, demand for support is exceeding the capacity of these organisations to provide assistance.

The outlook for residential construction is subdued, but there is a large pipeline of infrastructure work that is stretching capacity in some areas

Firms working in detached residential construction report still being relatively busy as they work through the sizeable backlog of activity built up over recent years. Supply chains, upstream costs and labour availability are improving which is helping to support profitability, though there are lingering concerns around financial conditions in parts of the industry. Builders and developers generally expect slower residential

construction activity in 2024 in the wake of declining home sales over the past year or so.

Sharply higher construction and financing costs over 2022 and 2023 have adversely affected feasibility for many higher density residential projects, and activity is subdued as a result. Some firms report the need to compete with infrastructure projects for materials and labour inputs. Buyer sentiment for off-the-plan purchases remains weak. Conditions are more favourable for build-to-rent and student accommodation projects, underpinned by strong population growth (including the recovery in international student numbers) and growth in housing rents.

Firms involved in infrastructure and other larger construction projects are reporting strong demand and a substantial pipeline of work. While some large road and rail projects are due to finish towards the end of 2024, there is a growing number of projects related to the renewable energy transition. Firms have noted that demand is exceeding available capacity across the non-residential construction sector; this is keeping materials and contractor costs elevated, which is flowing through to firms' pricing.

More broadly across industries, solid cashflows have been underpinning investment plans for many firms, with a continued focus on digitisation, automation and cybersecurity to improve delivery of services or increase firm productivity. This includes investment in industrial property and technology, consistent with the shift to e-commerce and the need to improve 'last mile' logistics.

Demand for labour has eased and labour availability has improved

Over recent months, firms' hiring intentions have eased back to longer run averages, led by a smaller share of firms looking to expand headcount (Graph A.1). Softer labour demand has been particularly evident for wholesale and retail firms, and remains relatively subdued for firms in manufacturing, construction and mining. Firms generally cite a mixture of rising costs – including wage costs – and weaker sales growth as reasons for moderating hiring intentions.

Firms have reported improved labour availability in recent months, though finding suitable labour generally remains more difficult than prior to the pandemic. Voluntary turnover rates have declined but are still higher than longer run averages.

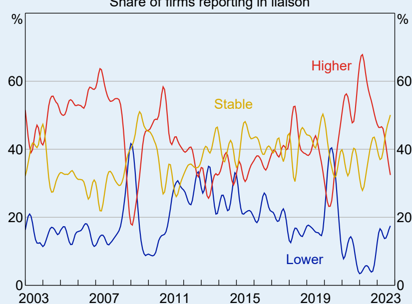
Private sector wages growth is currently around 4 per cent, while forward expectations have drifted lower

Liaison suggests that private sector wages growth is around 4 per cent in year-ended terms, as has been the case for much of the past year. The effect of higher award wages

Graph A.1

Employment Intentions*

Share of firms reporting in liaison



* Over the next 12 months; smoothed with a 13-month Henderson trend.

Source: RBA.

growth has been partly offset by moderating wages growth in certain occupations and industries, including IT, professional services and construction. In part to manage higher labour costs, firms continue to look for operational efficiencies, which is supporting investment in automation and business processes.

Expectations for wages growth over the year ahead have drifted below 4 per cent over recent months. Firms that anticipate wages growth to ease over the coming year cite expectations for lower inflation outcomes and an easing in business conditions. An improvement in labour availability, lower voluntary turnover and a continued emphasis on cost control have also been noted.

An easing in the growth of upstream costs and softer demand are filtering through to firms' pricing

Non-labour costs are growing less rapidly than earlier in the year, driven by lower imported goods cost increases (Graph A.2). Countering this, firms have emphasised that they are facing a range of persistent upward pressures on domestic costs such as energy, logistics (including fuel) and insurance, in addition to higher labour costs over the past year. Some firms have recently flagged that a weaker exchange rate and higher fuel prices could offset some of the underlying decline in imported goods costs.

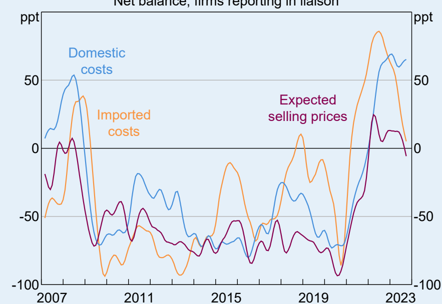
Firms across a broad range of industries have noted intensifying price competition over recent months. In the case of retailers, promotional and discounting activity has picked up and, compared with recent years, firms report that they are more constrained in the price increases that customers will accept.

Many firms expect to increase their prices by less over the next 12 months compared with the past 12 months, but the share expecting above-average increases is still much higher than prior to the pandemic. A few firms have recently indicated that their prices growth may moderate more slowly than they previously expected given persistent input cost pressures. ✠

Graph A.2

Change in Firms' Non-labour Costs and Prices*

Net balance, firms reporting in liaison



* Share of firms reporting above-average increases less share reporting below-average increases or decreases; average increase indexed to 0; smoothed with a 13-month Henderson trend.

Source: RBA.

3. Domestic Financial Conditions

Australian financial conditions are assessed as being restrictive. Following the increase in the cash rate target by 25 basis points to 4.35 per cent in November, market pricing implies an expectation that the cash rate may be increased once more in the first part of 2024. Meanwhile, bank bill swap (BBSW) rates are around the peak reached in July and over recent months there have been substantial increases in long-term bond yields and a pick-up in bond market volatility.

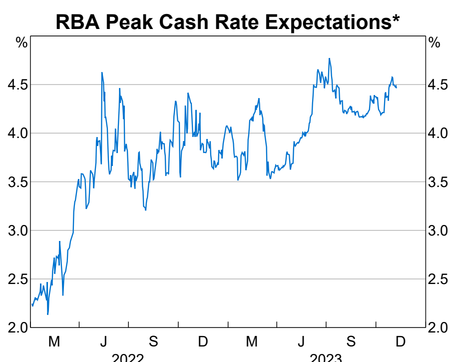
Banks' overall funding costs increased a little in the September quarter to be around levels last seen in 2012. Banks have increased both lending and deposit rates by less than the cash rate over this tightening phase. Scheduled mortgage payments have increased in recent months and will continue to rise as borrowers with expiring fixed-rate loans roll off onto higher mortgage rates. Housing credit growth has remained steady at much lower levels than a year ago, with a modest increase in new housing loans alongside a further rise in housing prices. Business credit growth has also remained steady and the Australian dollar is little changed on a trade-weighted basis over recent months.

Cash rate expectations have increased a little

Market participants' expectations for the path of the cash rate, as implied by overnight index swaps (OIS), have increased over recent months (Graph 3.1).

OIS rates rose in response to the release of the minutes of the October Board meeting that were seen as being somewhat 'hawkish' and following the higher-than-expected inflation data. Since then, the Reserve Bank Board has increased the cash rate target by 25 basis points to 4.35 per cent, and market pricing implies some expectation by participants that the cash rate may be increased once more in the first part of 2024 (Graph 3.2). This is consistent with views of market economists. Moreover, compared with a few months ago, market participants expect the cash rate to remain around its peak for longer.

Transaction volumes in the cash market have been little changed in recent months, with the cash rate determined by market transactions almost every day since early August. The cash rate has remained 3 basis points below the cash rate target.



Money market rates have increased a little

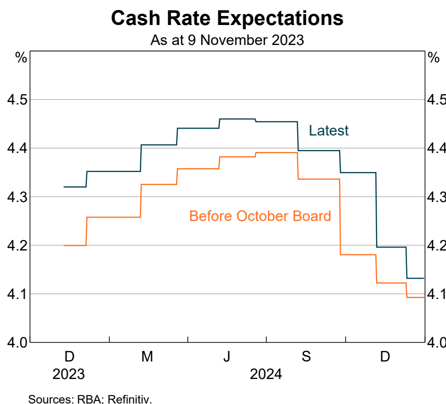
Money market rates have increased in recent months to be near their peaks seen around the middle of the year. The spreads between BBSW rates and OIS have also increased, which is not unusual when cash rate expectations are rising. Spreads are a little below the levels reached in mid-2023, when bank issuance of longer term bills was elevated as banks sought to smooth the effect of Term Funding Facility (TFF) repayments. The cost of sourcing Australian dollar funding offshore by issuing short-term US dollar securities and swapping the proceeds in the foreign exchange market has also increased in recent weeks.

Longer term AGS yields have risen considerably

Over recent months, yields on Australian Government Securities (AGS) have risen considerably alongside similar moves in international markets. The rise in yields was most pronounced for longer term securities, resulting in a steepening of the AGS yield curve. In early November, AGS yields were at their highest levels since 2011 (Graph 3.3).

After declining for most of the past few months, differentials between yields on AGS and US

Graph 3.2

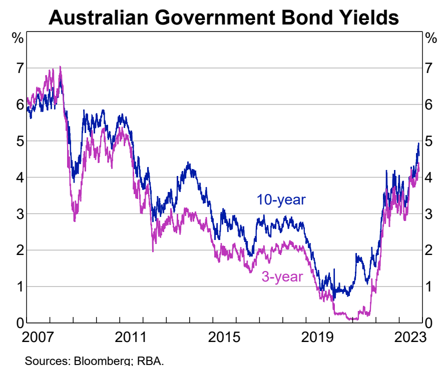


Treasuries increased in recent weeks, partly in response to the stronger Australian CPI data (Graph 3.4).

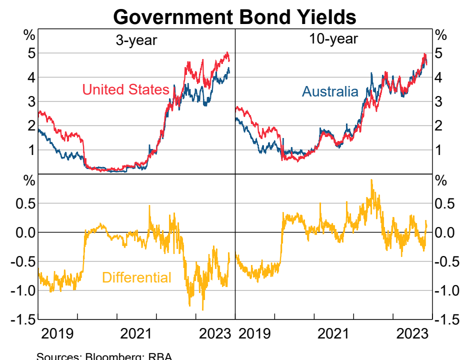
Consistent with overseas bond markets, the rise in longer term AGS yields continues to be largely driven by increases in real yields. Breakeven inflation rates have edged higher, but remain well anchored (Graph 3.5). This is consistent with market participants expecting that the monetary policy tightening will be sufficient to keep inflation around the target range over the medium term.

The spreads between yields on semi-government securities (semis) and AGS have generally declined in recent months (Graph 3.6). Ongoing strong demand from domestic banks to hold semis as part of their high-quality liquid

Graph 3.3



Graph 3.4

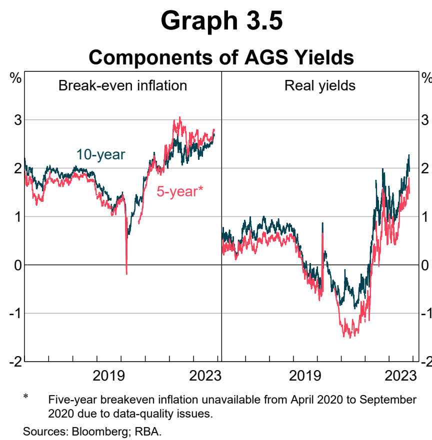


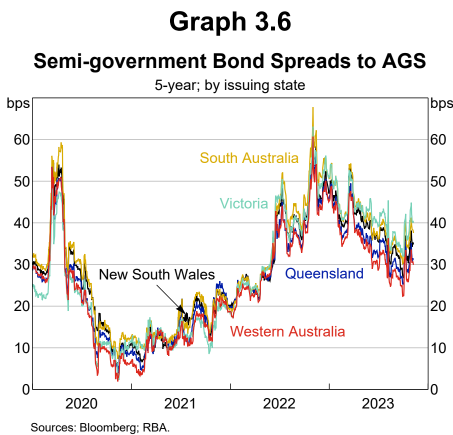
assets portfolios has supported the decline in semis spreads.

Government bond markets are functioning well

Bond markets continue to function well. Increased volatility has not adversely affected secondary market bid-offer spreads on AGS and semis, which remain around their lowest levels in recent years. However, there has been a moderate increase in the volatility of semi spreads to AGS. Demand for new government issuance from both domestic and international investors remains strong. A new 30-year AGS was issued in October raising $8 billion; it was oversubscribed, with $28.6 billion of bids received.

The Reserve Bank supports the functioning of government bond markets by lending bonds to the market. Demand from market participants to borrow AGS from the Bank has declined from its 2022 peak (Graph 3.7). This reflects easing scarcity due to ongoing issuance of AGS and the maturity of some of the AGS that were purchased by the Bank.





The size of the Bank's balance sheet continues to decline

Since the end of the financial year, the size of the Bank's balance sheet has fallen from around $600 billion to $530 billion (Table 3.1). Declines of late have been driven by TFF maturities, with the initial allowance provided to banks now fully repaid (about $80 billion).

On the liabilities side, Exchange Settlement (ES) balances have fallen to their lowest level since July 2021 as maturing TFF loans have been repaid. Government deposits have also decreased from recent highs due to relatively low net issuance of AGS. Over the coming months, the Bank's balance sheet is expected to decline more gradually; this will then be followed by a sizeable decline in 2024 as a

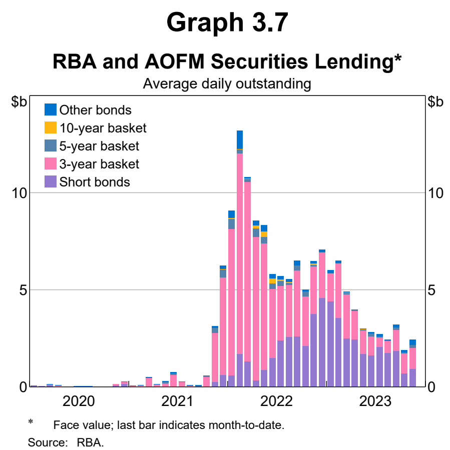


Table 3.1: RBA Balance Sheet

$ billion

	End-December 2022	End-June 2023	1 November 2023
Assets	**626**	**598**	**529**
Gold and foreign exchange	86	91	95
Domestic	540	507	433
– Outright bond holdings	327	313	307
– Term Funding Facility	188	176	108
– OMO repo	16	11	13
– Open repo and other	8	7	6
Liabilities	**626**	**598**	**529**
Deposits	519	498	438
– ES balances	453	409	363
– Government and other	66	88	75
Banknotes	104	101	101
Accumulated losses[(a)]	–21	–21	–27
Other (including capital)	24	20	17

(a) Accumulated losses reflect previous mark-to-market losses on the Bank's assets not absorbed by unrealised profit reserves, underlying earnings and the Reserve Bank Reserve Fund at the end of the previous financial year.

Note: Totals may not sum due to rounding

Source: RBA.

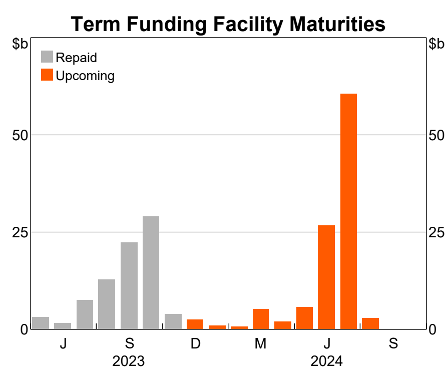
further $104 billion in TFF loans and $38 billion in the Bank's domestic bond holdings mature.

The initial allowance of the Term Funding Facility has matured smoothly

Around $80 billion of the $188 billion provided to banks under the TFF has matured, with banks repaying $64 billion of TFF funding in the September quarter. This was the first of two concentrated maturity periods, with $96 billion scheduled to mature in the June quarter of 2024 (Graph 3.8). Banks have managed their TFF repayments smoothly to date.

TFF maturities contributed to a period of higher BBSW rates – and so bank funding costs – as banks issued longer dated bank bills to span the maturity period. However, BBSW spreads to OIS remained well within historical ranges and declined immediately after the peak period of TFF maturities in the September quarter (Graph 3.9). The direct effect of the remaining TFF repayments is not expected to increase bank funding costs materially because much of the

Graph 3.8

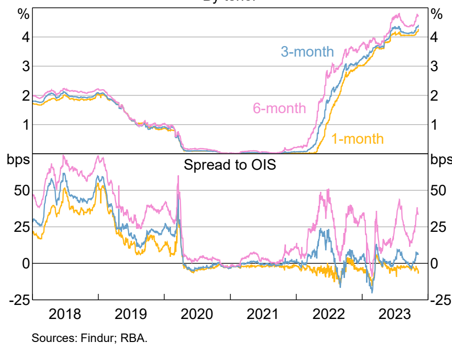


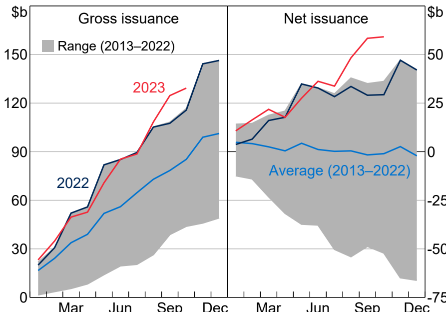
funding is hedged back to floating rates, which have already increased with the cash rate.

Bank bond issuance remains high

Bank bond issuance was above average in the September quarter, at about $40 billion. Around two-thirds of this was in the domestic market. Cumulative issuance in the year to date has been strong in both gross and net terms (Graph 3.10).

Yields on three-year banks bonds have remained high over recent months, at around 5 per cent for the major banks, alongside increased swap rates and AGS yields (Graph 3.11). The spread to the swap rate for bonds issued by banks remains in the range seen in the past year and a half.



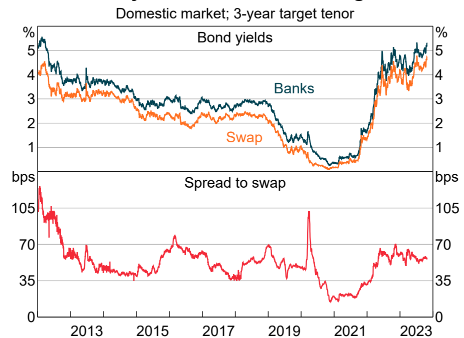


Banks generally swap fixed-rate payments on newly issued bonds into floating-rate payments to match their floating-rate loans, and so the spread to swap is an important component of bank funding costs.

Issuance of asset-backed securities has been high over recent months

Conditions in the securitisation market remain positive, with the level of issuance in asset-backed securities (ABS) seen in the past few quarters continuing in October (Graph 3.12). Residential mortgage-backed securities (RMBS) accounted for over two-thirds of this. While non-banks have accounted for most of the RMBS issuance in 2023, the smaller banks have increased their issuance in recent months. In addition, and reflecting the favourable conditions for issuers, the first major bank public RMBS deal since mid-2022 recently priced.

Issuance of 'other ABS' has also remained at a high level in recent months relative to its long-run average. Strong issuance of other ABS partly reflects non-bank lenders adjusting their business models. In particular, non-bank lenders have reduced lending for prime housing mortgages, where they have become less competitive compared with banks, and increased other types of loans, such as those for cars and equipment. Spreads on both RMBS and



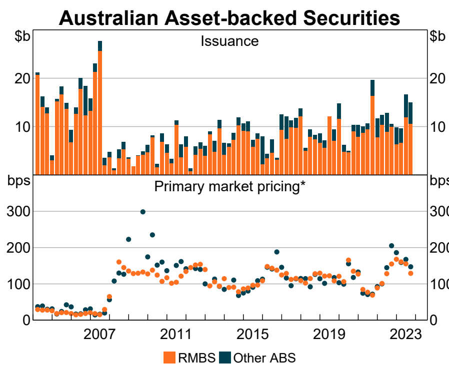
other ABS have continued to narrow in recent months, driven by strong demand from domestic and foreign investors.

Deposit growth has continued to slow

The total stock of deposits has grown more slowly over the past six months than during the pandemic, in part because slowing credit growth creates fewer new deposits (Graph 3.13); higher issuance of bank bonds has also played a role. Deposits have continued to shift from at-call deposits to term deposits, which typically offer significantly higher returns (see below).

Graph 3.12

Australian Asset-backed Securities

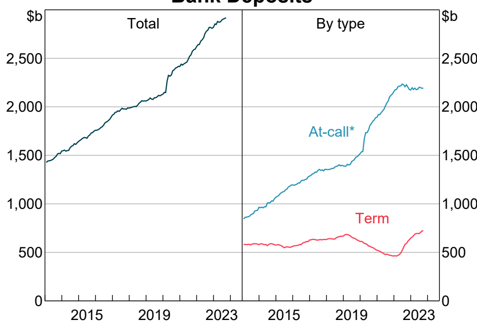


* Face-value weighted quarterly average of the primary market spread to bank bill swap rate for AAA-rated notes.

Sources: Bloomberg; KangaNews; RBA.

Graph 3.13

Bank Deposits



* Includes deposits in housing loan offset accounts and non-interest bearing deposits.

Sources: APRA; RBA.

Bank funding costs have increased further

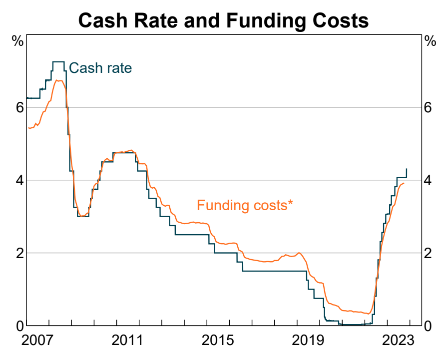
Banks' overall funding costs increased a little in the September quarter as banks replaced maturing bonds issued at much lower rates and average deposit rates increased (Graph 3.14). These factors were partly offset by a decline in BBSW rates. Much of banks' wholesale debt and deposit costs are linked to BBSW rates, either directly or through banks' hedging activities. This includes banks swapping foreign-currency denominated and fixed-rate liabilities for floating-rate exposures that reference BBSW.

Deposit rates have risen more on some products than others

The average rate on outstanding at-call deposits – comprising around three-quarters of total deposits – has risen by around 250 basis points since May 2022, which is 150 basis points less than the increase in the cash rate to September 2023 (Graph 3.15). This is partly because around 10 per cent of at-call balances pay no interest. As banks often hedge deposits that pay no interest, their effective cost to banks increases with BBSW rates. Banks have increased advertised rates on 'bonus savers' (where depositors must meet certain conditions to receive a higher interest

Graph 3.14

Cash Rate and Funding Costs



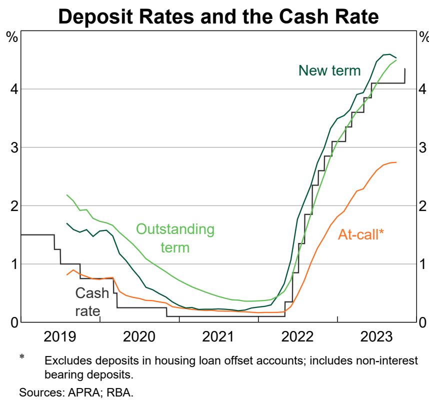
* RBA estimates of overall outstanding hedged debt and deposit costs for the major banks; to September 2023.

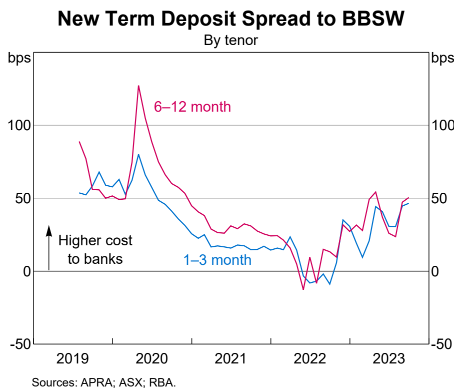
Sources: ABS; AFMA; APRA; ASX; Bloomberg; major bank liaison; major banks' websites; RBA; Refinitiv; Securitisation System; Tullett Prebon; US Federal Reserve; Yieldbroker.

rate) more than on standard at-call savings accounts.

Average rates on new term deposits have increased by more than the cash rate since the start of 2022, in line with larger movements in BBSW and swap rates (Graph 3.16). Higher term deposit rates also reflect banks' interest in increasing the term deposits share of their funding to address TFF maturities, given the favourable treatment of term deposits in liquidity ratios compared with at-call deposits.

In aggregate, banks have passed on around 75 per cent of the total increase in the cash rate to September 2023 to deposit rates.[1] This partly reflects the effect of deposits shifting from non-interest bearing and other at-call accounts into term deposits to earn higher interest rates.





Lending rates have increased by less than the cash rate over the tightening phase

The average rate charged on all outstanding housing and business loans increased by around 315 basis points from May 2022 to September 2023 – 85 basis points less than the cash rate over the same period (Graph 3.17). Housing loans (around two-thirds of total credit) account for most of this difference. Lending rates have increased a little more than deposit rates on average.

The average outstanding mortgage rate increased by around 290 basis points from May 2022 to September 2023 – 110 basis points less than the cash rate over the same period. This divergence reflects the high share of fixed-rate housing loans outstanding that were taken out at low interest rates and, to a lesser extent, the effect of competition between lenders on variable-rate housing loans.

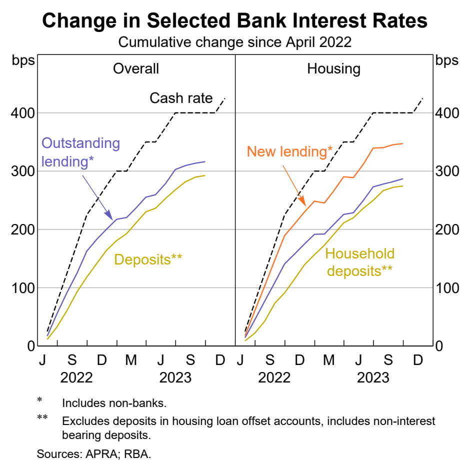


Table 3.2: Average Outstanding Housing Rates
September 2023

	Interest rate Sep 2023 Per cent	Change since Apr 2022 Basis points	Change since Feb 2020 Basis points
Cash rate	**4.10**	**400**	**335**
Variable-rate loans			
– Owner-occupier	6.18	332	261
– Investor	6.49	328	253
– All variable-rate loans	6.28	331	257
Fixed-rate loans			
– Owner-occupier	3.15	92	–57
– Investor	3.45	86	–56
– All fixed-rate loans	3.25	89	–61
Loans by repayment type[a]			
– Principal-and-interest	5.55	287	193
– Interest-only	6.11	288	189

(a) Weighted average across variable- and fixed-rate loans.

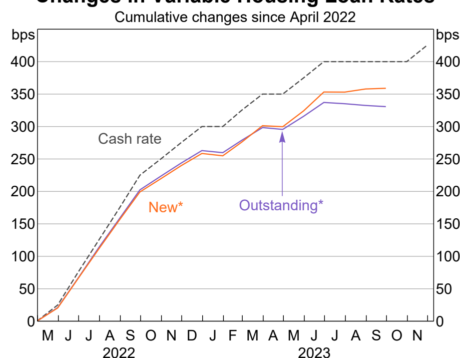
Sources: APRA; RBA.

Variable interest rates on new housing loans have increased over recent months

The average variable rate on new housing loans increased a little faster than the cash rate between June and September as competition for housing loans has eased (Graph 3.18). Even so, the average new variable rate has increased by 40 basis points less than the increase in the cash rate between May 2022 and September 2023 (Graph 3.19). The average outstanding variable rate increased by around 70 basis points less than the cash rate between May 2022 and September 2023, and has declined a little of late (Table 3.2). This reflects the willingness of banks to negotiate discounts to retain existing customers. At the time this *Statement* was finalised, most of the largest housing lenders had announced that they would pass through the November increase in the cash rate in full to their housing reference rates.

The fixed-rate share of outstanding housing credit has continued to decline

The fixed-rate share of total outstanding housing credit declined to 22 per cent in September, well below its peak of just under 40 per cent at the start of 2022 (Graph 3.20). This decline largely reflects the rolling off of fixed-rate loans taken out at very low rates during the pandemic that



have transitioned to variable-rate loans. These fixed-rate expiries have outweighed the smaller inflow of new fixed-rate lending; over recent months, the share of fixed-rate loan expiries each month has exceeded 5 per cent of the outstanding stock of fixed-rate housing loans as at December 2022, while new fixed-rate lending has accounted for less than 1 per cent of this stock.

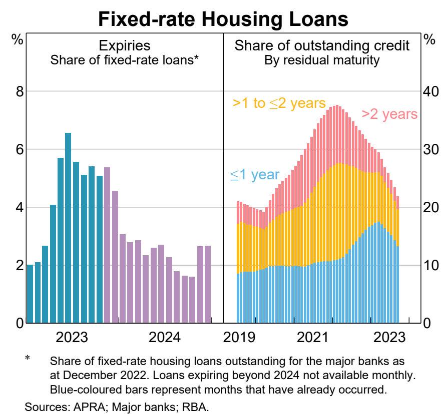
Most of the remaining fixed-rate loans are expected to expire by the end of 2024. These fixed-rate expiries will see the average outstanding mortgage rate continue to increase as the effect of the rise in the cash rate since May 2022 flows through to a greater share of borrowers.

Scheduled housing loan payments have increased

Scheduled mortgage payments – interest plus scheduled principal – increased to around 10 per cent of household disposable income in the September quarter; this is above the estimate of about 9½ per cent at the previous historical high (Graph 3.21). However, because households have substantially reduced their stock of personal debt in the past 15 years, the overall debt servicing burden for households appears to be lower than in 2008.

Scheduled mortgage payments as a share of household disposable income have risen by around 2½ percentage points since the March quarter of 2022 and will increase further as borrowers with expiring fixed-rate loans roll off onto higher rates. Based on cash rate increases to date, scheduled mortgage payments are projected to increase to around 10½ per cent of household disposable income by the end of 2024.

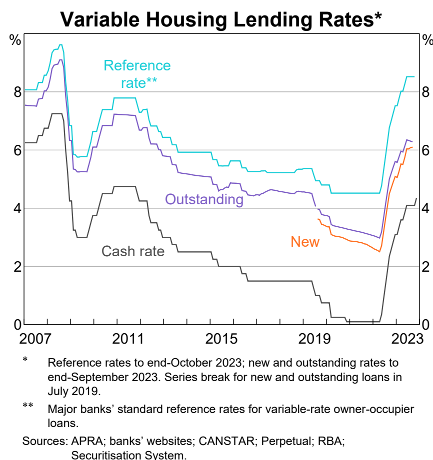
Graph 3.20



* Share of fixed-rate housing loans outstanding for the major banks as at December 2022. Loans expiring beyond 2024 not available monthly. Blue-coloured bars represent months that have already occurred.

Sources: APRA; Major banks; RBA.

Graph 3.19

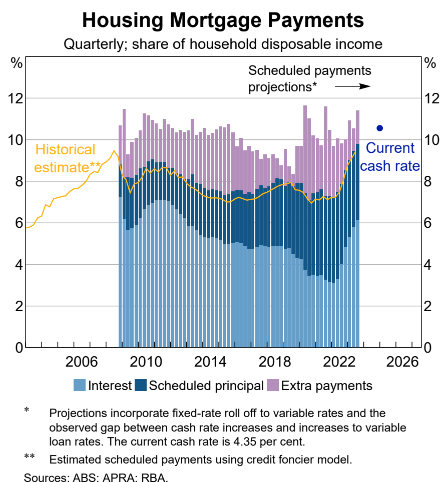


* Reference rates to end-October 2023; new and outstanding rates to end-September 2023. Series break for new and outstanding loans in July 2019.

** Major banks' standard reference rates for variable-rate owner-occupier loans.

Sources: APRA; banks' websites; CANSTAR; Perpetual; RBA; Securitisation System.

Graph 3.21



* Projections incorporate fixed-rate roll off to variable rates and the observed gap between cash rate increases and increases to variable loan rates. The current cash rate is 4.35 per cent.

** Estimated scheduled payments using credit foncier model.

Sources: ABS; APRA; RBA.

Extra payments into offset and redraw accounts remain below the pre-pandemic average

Extra payments into borrowers' mortgage offset and redraw accounts have declined as interest rates have increased to be below the pre-pandemic average (of around 2 per cent of household disposable income) (Graph 3.22). While borrowers in aggregate are still adding to this stock of savings, some borrowers have been drawing down funds in these accounts. This is consistent with pressures on disposable incomes due to interest rate rises and increases in the cost of living.

Total credit growth has remained stable

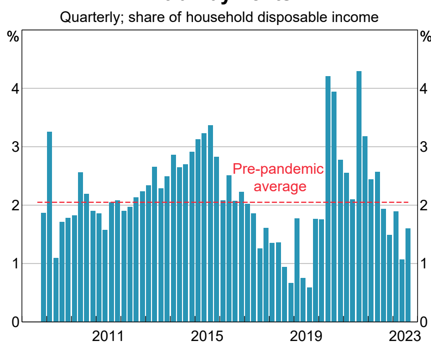
Growth in total credit has remained stable in recent months at around 5 per cent on a six-month-ended annualised basis, 4 percentage points below its peak in late 2022 (Graph 3.23). Housing credit growth has been steady, supported by a modest increase in housing loan commitments alongside the continued rise in housing prices. Business credit growth has also stabilised in recent months.

Personal credit rose strongly over recent months after being little changed since mid-2021. Even so, it remains well below levels prior to the pandemic. The pick-up in personal credit growth has been driven by an increase in lending by automotive finance companies; this is consistent with recent strength in new car sales, partly reflecting improvements in supply chains (see Chapter 2: Domestic Economic Conditions). There is currently little evidence to suggest that households are, in aggregate, using personal credit to sustain other spending. Meanwhile, spending on credit cards and charge cards that do not accrue interest has increased, but only by a little (Graph 3.24). Outstanding balances for these accounts remain 20 per cent below pre-pandemic levels.

Graph 3.22

Extra Payments*

Quarterly; share of household disposable income



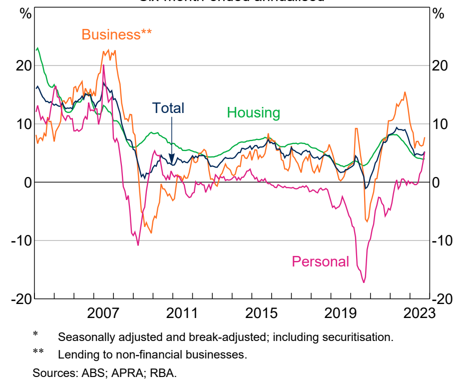
* Payments into offset and redraw accounts; data are break-adjusted and seasonally adjusted.

Sources: ABS; APRA; RBA.

Graph 3.23

Credit Growth by Sector*

Six-month-ended annualised



* Seasonally adjusted and break-adjusted; including securitisation.

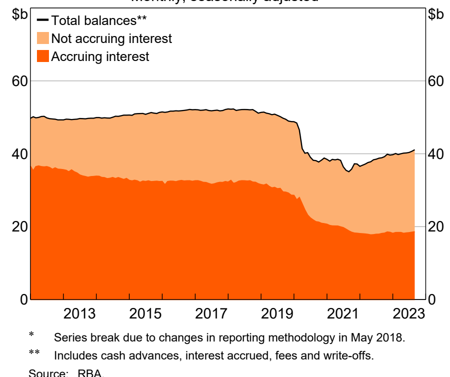
** Lending to non-financial businesses.

Sources: ABS; APRA; RBA.

Graph 3.24

Credit and Charge Card Balances

Monthly, seasonally adjusted*



* Series break due to changes in reporting methodology in May 2018.

** Includes cash advances, interest accrued, fees and write-offs.

Source: RBA.

Demand for new housing loans increased a little further in recent months

New housing loan commitments have increased modestly since February alongside the rebound in national housing prices, with investors contributing more than half of this increase (Graph 3.25). Nonetheless, new housing loan commitments remain around 25 per cent below their peak in January 2022 and are at relatively low levels as a share of housing credit.

Commitments for external refinancing (switching to a new lender) remain high but have declined in recent months as competition in the mortgage market has eased. External refinancing continues to be supported by the large number of borrowers rolling off fixed rates, some of whom are switching lenders to obtain a more favourable rate.

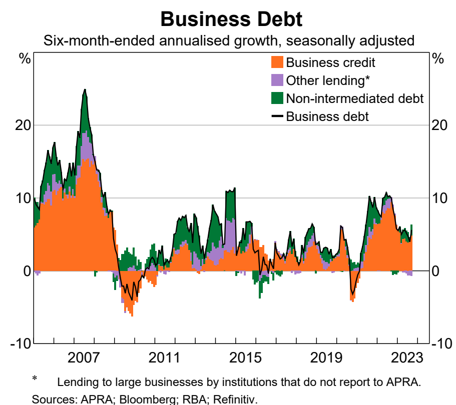
Growth in business debt has stabilised, while corporate bond issuance has been strong

Growth in business debt has stabilised in recent months, as business credit growth has been little changed (Graph 3.26). By contrast, bond issuance by non-financial corporations remained high in the September quarter at $18 billion. Most issuance was in offshore markets, with energy and resources companies accounting for more than half of the funds raised.

Higher long-term interest rates have weighed on equity prices

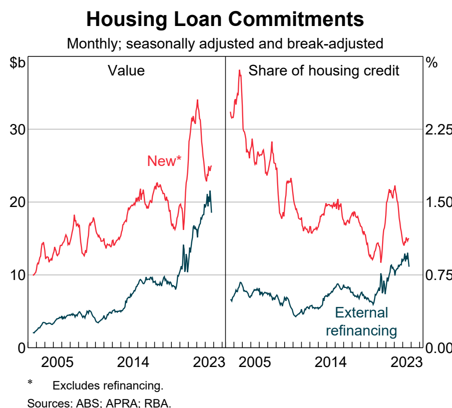
The ASX 200 index has declined a little in recent months but remains broadly unchanged over the year (Graph 3.27). The Australian equity market has underperformed the US market but outperformed other international equity markets since the end of June on a total return basis. Equity prices have been sensitive to recent increases in longer term risk-free rates, the expected path of central banks' policy rates and geopolitical risks in the Middle East.

Graph 3.26



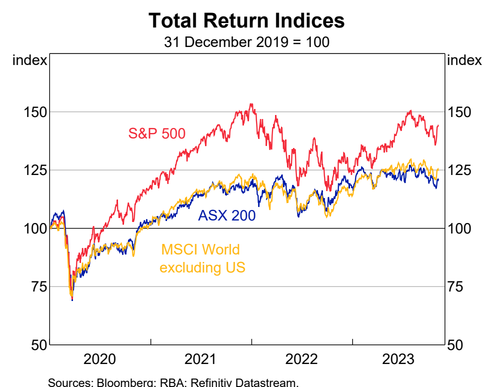
* Lending to large businesses by institutions that do not report to APRA.
Sources: APRA; Bloomberg; RBA; Refinitiv.

Graph 3.25



* Excludes refinancing.
Sources: ABS; APRA; RBA.

Graph 3.27

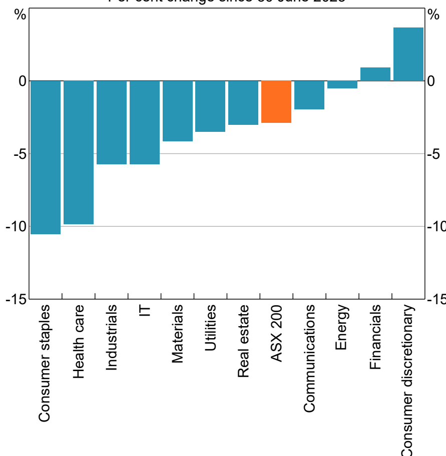


Sources: Bloomberg; RBA; Refinitiv Datastream.

Consumer staples share prices have declined persistently over recent months, partly reflecting concerns around cost pressures (Graph 3.28). By contrast, consumer discretionary share prices have been more volatile and have recently outperformed other sectors. Health care stock prices have fallen, with some concern around increasingly popular weight-loss drugs lessening the demand for other medical products and treatments. After strong increases earlier in the year, IT stocks have also recently declined. Technology companies are often expected to experience strong growth in profits over the longer term, making their valuations more sensitive to changes in interest rates.

Equity raisings remain around their lowest levels in a decade

After relatively strong activity in 2021, equity raisings have been very subdued since the start of 2022. Over the year to date, only around $900 million was raised through initial public offerings (IPOs), largely in the industrials sector (Graph 3.29). Total equity raisings, net of share buybacks, remain around the lowest levels in over a decade.

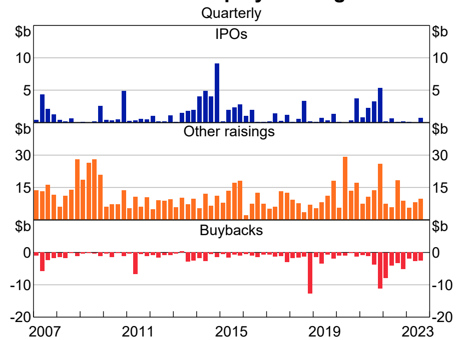


Australian listed company profits declined in the first half of 2023

Underlying profits of ASX 200 companies declined in the first half of this year relative to the same period a year earlier (Graph 3.30). Less than half of ASX 200 companies reported growth in underlying profits when adjusted for inflation, with ongoing cost pressures commonly cited as a challenge. Profits in resources sectors fell relative to record levels in the first half of 2022, largely reflecting lower commodity prices. By contrast, banks' profits increased slightly, supported by growth in net interest income. Earnings in the real estate sector continue to be adversely affected by declines in the valuations of commercial real estate, but there are limited signs of financial stress among these firms.[2]

The Australian dollar TWI is little changed in recent months

The Australian dollar is little changed on a trade-weighted (TWI) basis and around 2 per cent lower against the US dollar since the August *Statement* (Graph 3.31). The depreciation against the US dollar has mostly reflected broad-based US dollar strength over this period, although this has been partly offset by Australian government bond yields rising by more than those on US Treasuries ahead of the November Reserve Bank



Board meeting (see Chapter 1: The International Environment).

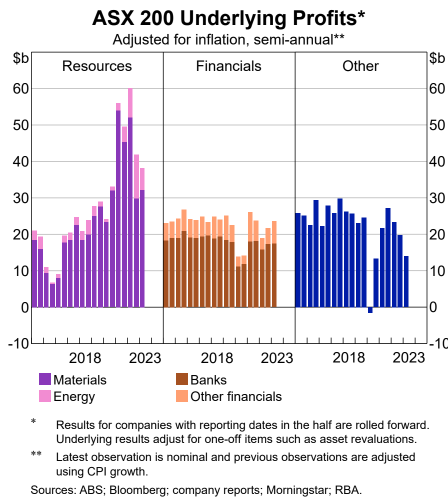
On a longer term basis, the Australian dollar TWI is trading around early-2022 levels, when global central banks began raising their policy rates. Yield differentials between AGS and the weighted average of those of major advanced economies have widened since that time, while the Bank's Index of Commodity Prices has traversed a wide range over this period to be a little lower as a whole. The level of the Australian dollar (in real TWI terms) has remained broadly consistent with model estimates implied by historical relationships with forecasts of the terms of trade and real yield differentials (Graph 3.32).[3]

Australia's financial account deficit widened in the June quarter and the net foreign liability position declined further

Australia's financial account deficit widened in the June quarter of 2023 as net capital outflows increased (Graph 3.33). The net outflow of capital was driven by a net disposal of Australian Government debt by foreign investors.

Australia's net foreign liability position declined to 32 per cent of GDP over the June quarter – its lowest level since the mid-1980s (Graph 3.34). The decline was driven by a widening in Australia's net foreign equity asset position, which mostly reflected foreign equity prices rising by more than Australian equity prices. Australia's net foreign liability position as a share of GDP has declined by around 30 percentage points since its peak in 2016 due to persistent current account surpluses. In more recent years, rising interest rates have reduced the value of existing external debt, while higher US equity prices and a weaker Australian dollar have

Graph 3.30

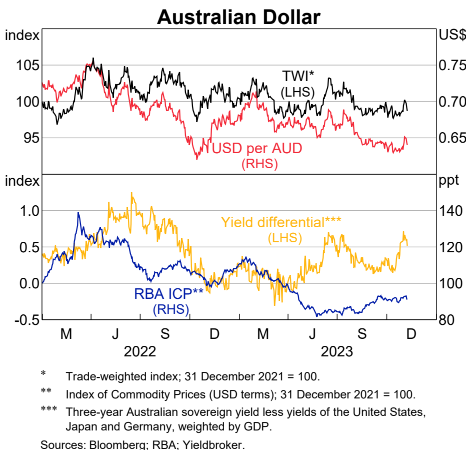


* Results for companies with reporting dates in the half are rolled forward. Underlying results adjust for one-off items such as asset revaluations.

** Latest observation is nominal and previous observations are adjusted using CPI growth.

Sources: ABS; Bloomberg; company reports; Morningstar; RBA.

Graph 3.31



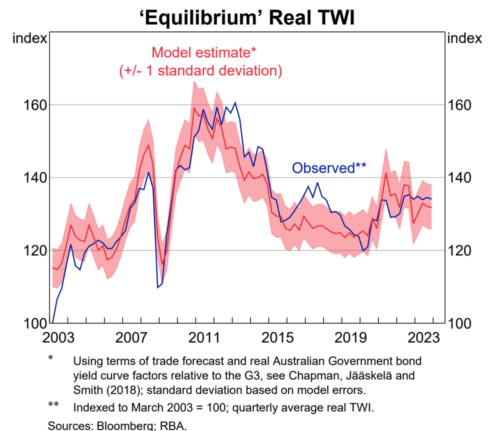
* Trade-weighted index; 31 December 2021 = 100.

** Index of Commodity Prices (USD terms); 31 December 2021 = 100.

*** Three-year Australian sovereign yield less yields of the United States, Japan and Germany, weighted by GDP.

Sources: Bloomberg; RBA; Yieldbroker.

Graph 3.32



* Using terms of trade forecast and real Australian Government bond yield curve factors relative to the G3, see Chapman, Jääskelä and Smith (2018); standard deviation based on model errors.

** Indexed to March 2003 = 100; quarterly average real TWI.

Sources: Bloomberg; RBA.

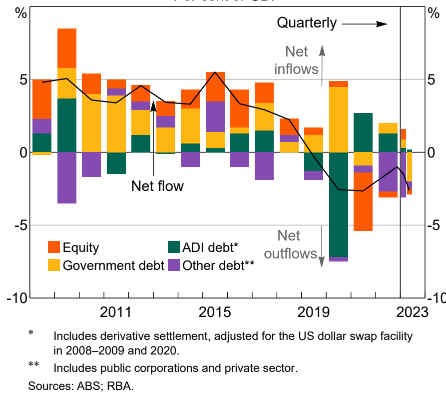
increased the value of external assets in Australian dollar terms.

The net income deficit – which comprises net payments made on Australia's net foreign liability position – narrowed to 3.7 per cent of GDP in the June quarter, but remains elevated. The narrowing reflected a decline in primary income debits, as weaker commodity prices led to a reduction in profits across the mining and resources sector. The net income deficit remained lower than the trade surplus during the quarter, leaving the current account balance in surplus. ✠

Graph 3.33

Net Capital Flows

Per cent of GDP



* Includes derivative settlement, adjusted for the US dollar swap facility in 2008–2009 and 2020.

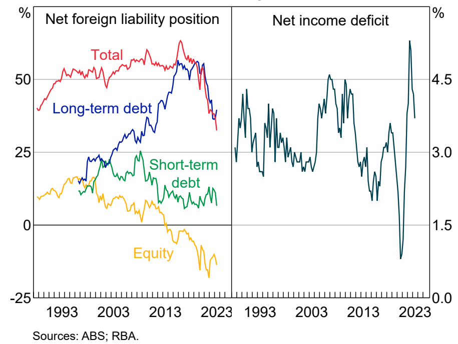
** Includes public corporations and private sector.

Sources: ABS; RBA.

Graph 3.34

Net Foreign Position and Payments

Per cent of GDP



Sources: ABS; RBA.

Endnotes

[1] See Kent C (2023), 'Channels of Transmission', Address to Bloomberg, Sydney, 11 October.

[2] See RBA (2023), 'Chapter 2: Resilience of Australian Households and Businesses', *Financial Stability Review*, October.

[3] See Chapman B, J Jääskelä and E Smith (2018), 'A Forward-looking Model of the Australian Dollar', RBA *Bulletin*, December.

4. Inflation

Inflation has declined further in year-ended terms but it remains high and underlying measures were stronger than expected in the September quarter. Services inflation remains very high, reflecting an environment of elevated domestic cost pressures and still-robust levels of demand. Goods inflation has declined substantially since last year as global supply chains improved and inflation in raw materials prices declined, though it is still above average levels. Price changes for a number of volatile components and administered items affected headline inflation in the September quarter; overall, however, their effects were roughly offsetting. Measures of inflation expectations have increased recently but remain consistent with achieving the inflation target over time.

Wages growth remains robust, underpinned by the ongoing tightness of the labour market and high inflation outcomes. Timely indicators suggest that wages growth increased a little in the September quarter, with the effect of the Fair Work Commission (FWC) decision partially offset by some moderation in growth in other wages. Annual growth in unit labour costs – which is the measure of labour costs that matters most for inflation – reached over 7 per cent recently, which is around its strongest pace in several decades (excluding the volatile pandemic period). This reflects the combination of robust wages growth and poor productivity outcomes; while it is difficult to assess underlying trends in measured productivity, it has declined recently to suggest little growth over the past several years.

Underlying inflation was stronger than expected

The Consumer Price Index (CPI) increased by 1 per cent in the September quarter (in seasonally adjusted terms) and by 5.4 per cent over the year. This headline result was broadly as expected three months ago, and is below its peak of 7.8 per cent over the year to the December quarter of 2022 (Graph 4.1; Table 4.1).

Measures of underlying inflation (which remove the effect of irregular or temporary price changes) also eased further over the year, but by less than had been forecast three months ago, as services inflation remained high amid strong domestic cost pressures and still-robust aggregate demand. Trimmed mean inflation was 1.2 per cent in the September quarter and 5.2 per cent over the year – an increase in the quarterly rate of inflation from 1 per cent in the June quarter, but well below the peak of 6.9 per cent over the year to the December quarter of 2022 (Graph 4.2; Table 4.1).

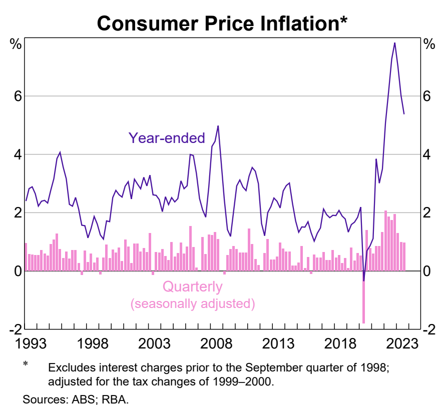


Table 4.1: Measures of Consumer Price Inflation

Per cent

	Quarterly[a]		Year-ended[b]	
	September quarter 2023	June quarter 2023	September quarter 2023	June quarter 2023
Consumer Price Index	1.2	0.8	5.4	6.0
Seasonally adjusted CPI	1.0	1.0	–	–
– Tradables	0.4	0.8	3.7	4.4
– Tradables (excl. volatile items)[c]	–0.2	1.0	4.1	5.8
– Non-tradables	1.3	1.1	6.2	6.9
Selected underlying measures				
Trimmed mean	1.2	1.0	5.2	5.9
Weighted median	1.3	1.0	5.2	5.4
CPI excl. volatile items[c]	0.8	1.0	5.5	6.5

(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.

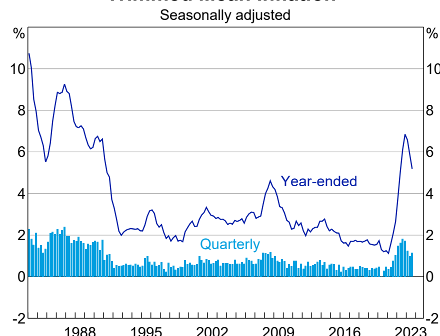
Sources: ABS; RBA.

High inflation remains broadly based

A wide range of items have contributed to inflationary pressures over the past year (Graph 4.3). Services inflation, including rents, has increased in recent quarters and is now contributing to a large proportion of inflation overall. The contributions from goods categories such as consumer durables, groceries and new dwellings have declined but remain above pre-pandemic levels.

The share of CPI categories with prices growing faster than 3 per cent remained around

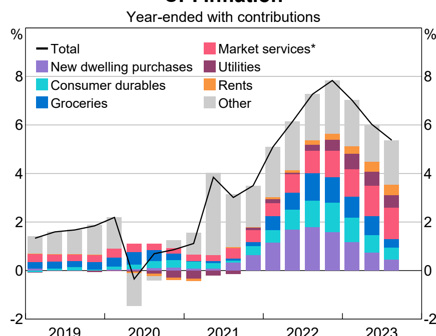
Graph 4.2



* 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 4.3

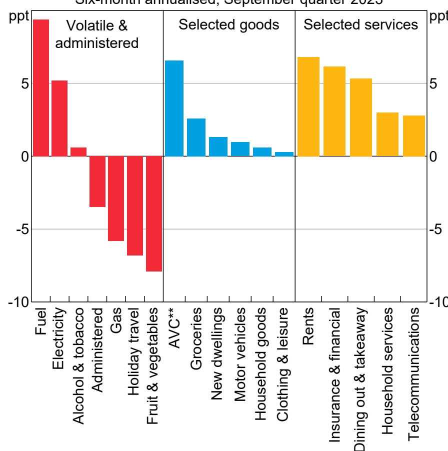


* Excludes domestic holiday travel & accommodation and telecommunications.

Sources: ABS; RBA.

60 per cent in the September quarter. Although this share has declined from a peak of around 80 per cent last year, it is still around the top end of the range seen in the three decades prior to the pandemic. Recently, inflation rates for most categories of goods and services have been above their average over that period (Graph 4.4).

Among items that tend to have prices that are volatile or influenced by changes in government policies, recent inflation outcomes have been mixed. Government electricity rebates, increased child care subsidies and some other changes in government policies subtracted around ½ percentage point from headline inflation in the September quarter. Together with sharp falls in fruit and vegetables prices, this largely offset higher fuel and retail electricity price increases (excluding the effect of energy rebates). Fuel prices have declined over the past month to be slightly above their September quarter average (Graph 4.5).



* Average from 1993 to December quarter of 2019; volatile & administered items are 37 per cent of the CPI basket, selected goods are 32 per cent and selected services are 26 per cent; administered excludes utilities; groceries excludes fruit & vegetables.

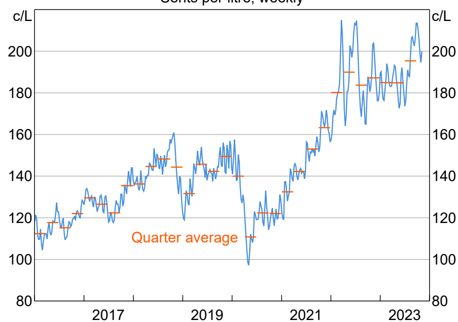
** Audio, visual & computing equipment.

Sources: ABS; RBA.

Services inflation was very high, reflecting an environment of elevated domestic cost pressures and still-robust demand

Market services price inflation (excluding domestic travel and accommodation, and telecommunications) was stronger than expected; it was 1.7 per cent in the September quarter and 7 per cent over the year (Graph 4.6). The prices of these services, which cover around one-fifth of the CPI basket, are among the most sensitive to domestically generated inflationary pressures. High inflation in this category reflects the still-robust level of demand and continued pressure from input costs (both labour and domestic non-labour). Unit labour costs – that is, the cost of labour required for the production of a given amount of output – represent a large share of input costs for market services firms and have grown strongly of late, as discussed below. Firms in the Bank's liaison program continue to report large increases in their energy costs where contracts have been renewed. Many firms report that retail rents have risen and are adding to cost pressures. Firms are also facing high inflation in the cost of inputs such as insurance, legal, accounting and administrative services.

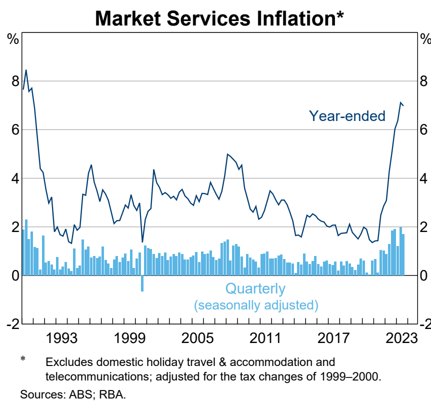
Within market services, prices for meals out and takeaway rose by 2.1 per cent in the September quarter (Graph 4.7). Prices of household services

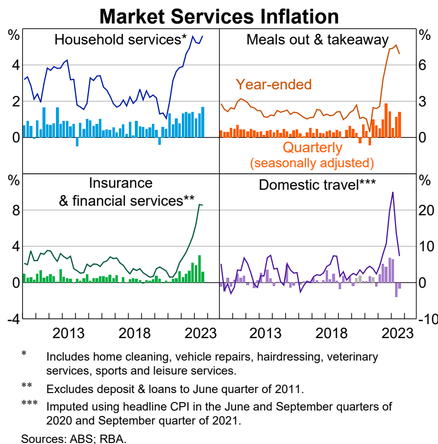


* Weighted average of unleaded and diesel fuel.

Sources: Australian Institute of Petroleum; RBA.

also increased strongly, driven by increases in prices for sports and leisure services. Insurance premiums have continued to increase significantly, reflecting higher expected claims (due to the effects of high inflation and weather events) and a reassessment of risk more broadly. Inflation in other financial services declined in the quarter due to increases in stamp duty concessions by some state governments, which lower measured prices. Prices for both domestic and overseas travel and accommodation declined in the quarter, unwinding some of the large increases recorded following the reopening of the economy.

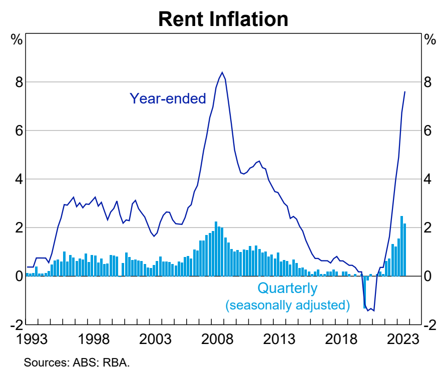




Rents increased by 2.2 per cent in the September quarter (Graph 4.8). Excluding the effects of an increase in Commonwealth Rent Assistance in the quarter, rent inflation remained at an annualised rate of around 10 per cent, as was the case in the June quarter. High rent inflation has been broadly based, consistent with tight rental market conditions across the country (Graph 4.9). Housing supply has not kept pace with the increased demand for housing – the result of a decrease in average household size since the beginning of the pandemic, robust nominal income growth and the increase in population growth. Advertised rents have increased 30 per cent since prior to the pandemic, much more than the increase in CPI rents so far. Together with historically low vacancy rates, and little sign that tight rental market conditions will ease in the near term, this is expected to keep rent inflation elevated for some time. (For further discussion of housing, see Chapter 2: Domestic Economic Conditions.)

Goods price inflation declined further because global supply chains have improved and raw materials inflation has declined

Goods price inflation eased further in the September quarter for both consumer durables and groceries (Graph 4.10). This is because of a moderation in demand for some goods and an



easing in inflation in the prices of imported consumption goods – despite some depreciation of the exchange rate – as global supply chain issues have improved and raw materials price inflation has declined over 2023. Shipping costs have fallen sharply this year, following a period of extremely rapid growth. Domestic labour and non-labour costs continue to place some offsetting upward pressure on final goods prices. As with firms in the services sector, firms selling goods have faced increased costs of electricity, services inputs and retail rents. Rents for industrial properties have risen particularly sharply, especially for warehouses and logistics centres.

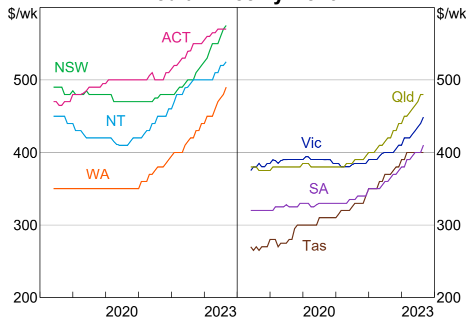
Consumer durables inflation moderated further in the September quarter to be around 3 per cent over the year – well below the peak of 7 per cent over the year to the December quarter of 2022. This reflects the easing in prices of some imported goods and some moderation in demand as consumers limit their discretionary spending due to cost-of-living pressures and more restrictive monetary policy. Prices declined in the September quarter for household appliances, furnishings, and audio, visual and computing equipment but this was offset by small price increases for clothing and motor vehicles (Graph 4.11).

Grocery prices (excluding fruit and vegetables) increased by 0.6 per cent in the September quarter – the slowest quarterly increase since mid-2021. In year-ended terms, grocery prices were 6½ per cent higher (down from 11 per cent over the year to December 2022). The easing in inflation was broadly based across grocery items, including for items with a higher degree of processing for which inflation had remained high in the prior quarter (such as bread and cereal products and other packaged food) (Graph 4.12). An exception was dairy prices, which increased by a further 2 per cent in the quarter, reflecting concerns about a structural shortage of milk produced domestically.

New dwelling cost inflation was 1.3 per cent in the September quarter, having eased dramatically since mid-2022. This is due to

Graph 4.9

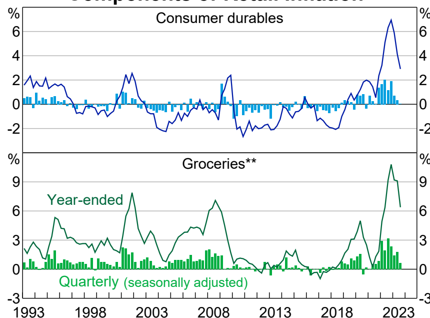
Median Weekly Rent



Source: ABS.

Graph 4.10

Components of Retail Inflation*



* Adjusted for the tax changes of 1999–2000.

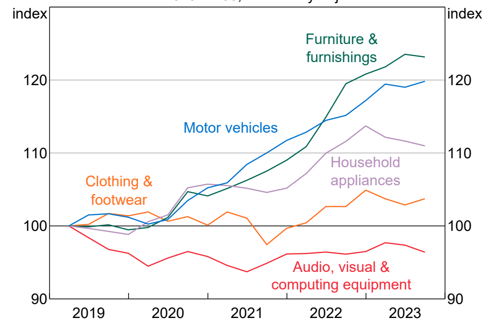
** Excludes fruit & vegetables.

Sources: ABS; RBA.

Graph 4.11

Consumer Durables Prices

March 2019 = 100, seasonally adjusted



Sources: ABS; RBA.

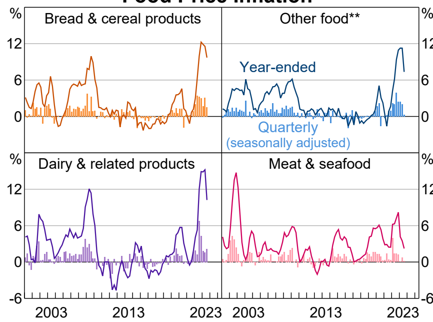
subdued demand for new dwellings and the easing in cost pressures for building materials (Graph 4.13). Despite this, the recent pace of new dwelling price increases remains above its inflation-targeting average. Labour shortages have remained acute at the latter stages of construction.

Electricity prices increased in the September quarter

Prices for most utilities increased in the September quarter, to be substantially higher over the past year (Graph 4.14). Electricity prices increased by 3.7 per cent in the quarter, as the pass-through of higher average wholesale costs to retail prices was in large part offset by energy

Graph 4.12

Food Price Inflation*



* Adjusted for the tax changes of 1999–2000.

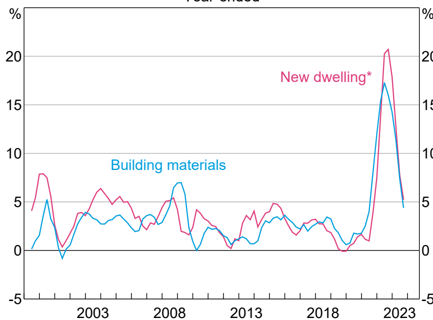
** Includes products such as eggs, jams, oils, snacks etc.

Sources: ABS; RBA.

Graph 4.13

New Dwelling and Building Materials Inflation

Year-ended



* Adjusted for the tax changes of 1999–2000.

Sources: ABS; RBA.

rebates offered to households under the Australian Government's Energy Price Relief Plan and various state government measures. Gas prices were little changed in the quarter, following large increases over the year prior.

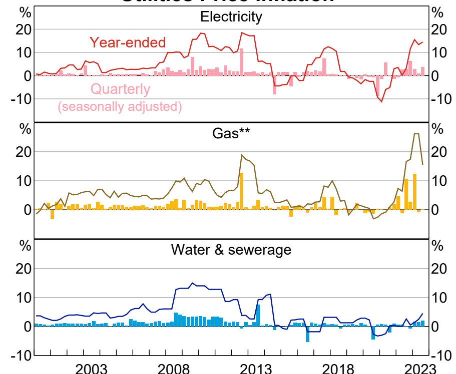
In the CPI basket, 'administered prices' are (at least partly) regulated or relate to goods and services for which the public sector is a significant provider. They include categories such as health, education and child care, as well as utilities. Administered prices (excluding utilities) were little changed overall in the September quarter, as increases in a range of inflation-indexed prices were offset by a large decline in child care prices. The decline in child care prices reflected increases in Australian Government subsidies; excluding the effect of increased subsidies, child care prices increased by 6.7 per cent in the quarter (Graph 4.15).

Inflation expectations remain consistent with the inflation target

Measures of short-term expectations have declined notably from their mid-2022 peaks (Graph 4.16). Most measures of medium- and long-term expectations remain consistent with the Bank's inflation target. Long-term measures from financial markets have increased a little

Graph 4.14

Utilities Price Inflation*



* Adjusted for the tax changes of 1999–2000.

** Includes other household fuels.

Sources: ABS; RBA.

over the past year, but remain in line with longer term averages (Graph 4.17).

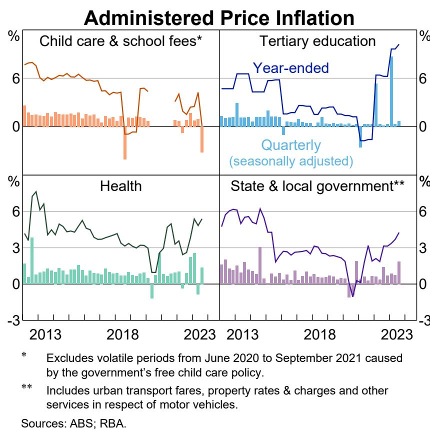
Wages growth remained robust over the year to the June quarter …

The Wage Price Index (WPI) grew by 0.8 per cent in the June quarter and 3.6 per cent in year-ended terms (Graph 4.18). Year-ended wages growth remains robust, reflecting a tight labour market, high inflation outcomes and the implementation of new public sector wage policies. Public sector wages rose by 0.7 per cent in the quarter to be 3.1 per cent higher over the year; this is the highest year-ended growth rate in a decade. Private sector wages increased by 0.8 per cent in the quarter and 3.8 per cent over the year.

The average size of wage changes (for those jobs that received a wage change in the year to the June quarter) were around decade-high levels at roughly 4 per cent in the private sector and 3 per cent in the public sector. Around one-third of wage changes were larger than 4 per cent over that period, reflecting ongoing labour market tightness and high inflation, as well as the implementation of award and minimum wage increases in the September and December quarters of 2022 (Graph 4.19). The frequency of wage changes remains above its historical average, but was a little lower in the June quarter than a year earlier, as firms reported

Graph 4.15

Administered Price Inflation



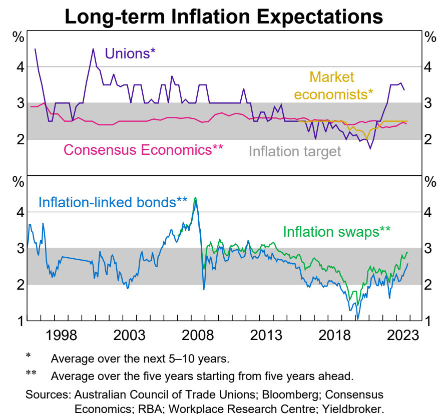
* Excludes volatile periods from June 2020 to September 2021 caused by the government's free child care policy.

** Includes urban transport fares, property rates & charges and other services in respect of motor vehicles.

Sources: ABS; RBA.

Graph 4.17

Long-term Inflation Expectations



* Average over the next 5–10 years.

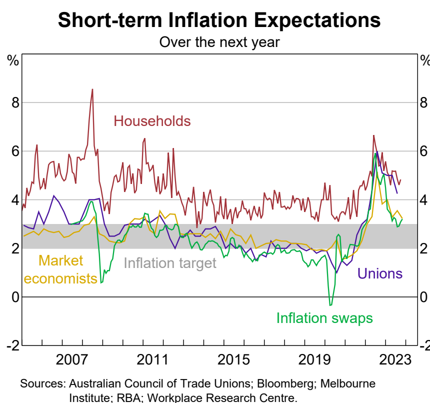
** Average over the five years starting from five years ahead.

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

Graph 4.16

Short-term Inflation Expectations

Over the next year



Sources: Australian Council of Trade Unions; Bloomberg; Melbourne Institute; RBA; Workplace Research Centre.

Graph 4.18

Wage Price Index Growth by Sector

* Non-seasonally adjusted.

Source: ABS.

making fewer ad hoc wage increases to attract or retain staff.

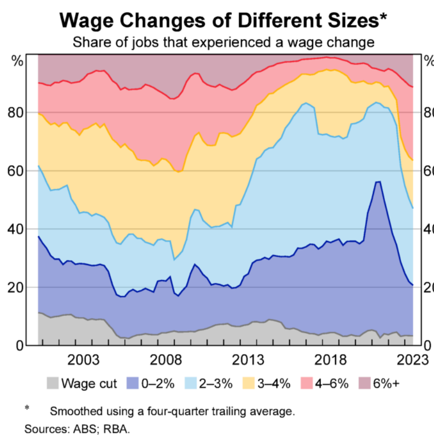
Wages growth for those on enterprise bargaining agreements (EBAs) has increased notably over the past year, but continues to lag behind growth in award and individual arrangement wages in year-ended terms (Graph 4.20). Much of that difference reflects the multi-year structure of EBAs, which causes a lag in the flow-through of wage pressures to agreements.

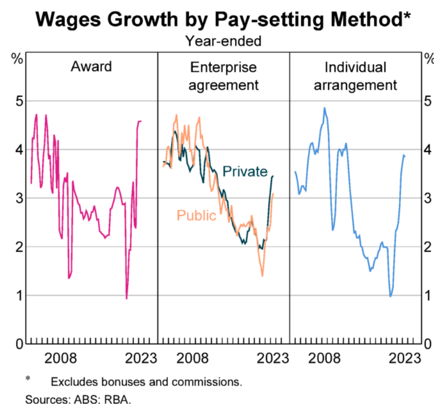
Compensation of employees – which includes the effects of wages growth as well as increases in employment hours – rose by 10 per cent over the year to the June quarter, close to the strongest rate of growth since 1990 (Graph 4.21).

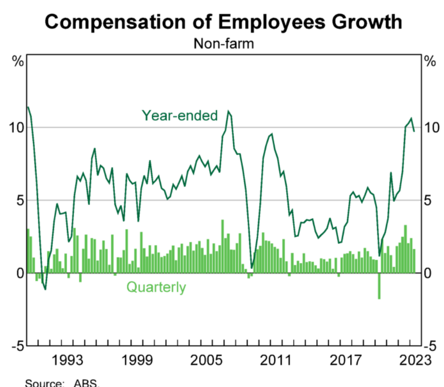
While it is difficult to assess underlying trends in productivity growth over short time periods, weak productivity outcomes have contributed to rapidly rising unit labour costs. Indeed, non-farm labour productivity has declined to be around the levels recorded several years ago, as total hours worked have increased by considerably more than output. Labour productivity fell sharply in the 2022/23 financial year as a whole, reflecting a decline in the capital-to-labour ratio and multifactor productivity, which measures changes in the productivity of both labour and capital combined (Graph 4.22). The decline in labour productivity contributed to strong growth in unit labour costs of around 7 per cent in 2022/23 relative to the year prior (Graph 4.23).

… and is expected to increase a little further in the September quarter as award wage increases have been partially offset by easing wages growth in other jobs

A range of timely indicators suggest that year-ended wages growth increased a little further in the September quarter (Graph 4.24). Increases in award and minimum wages took effect from 1 July, following the FWC's annual wage review,

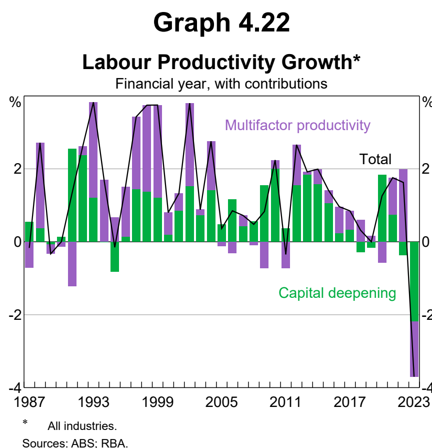


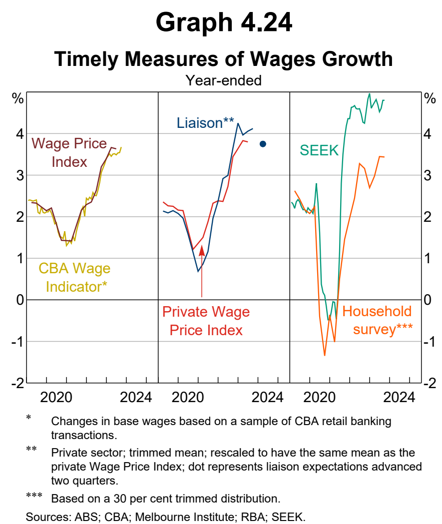


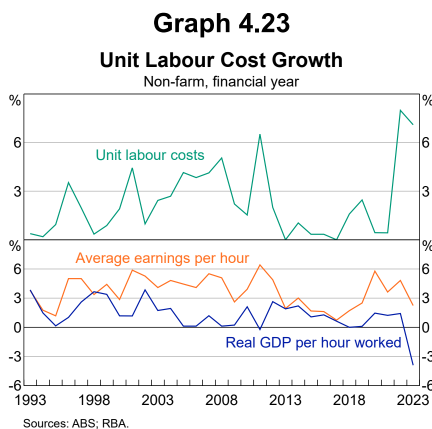


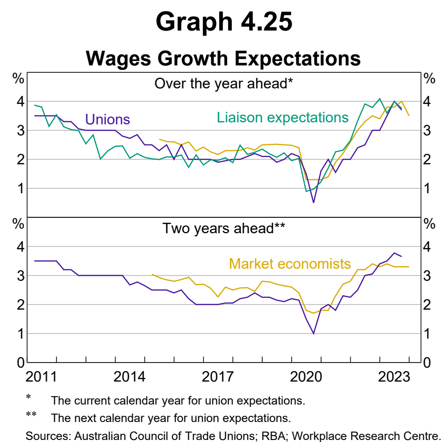
and so far there do not appear to be larger-than-normal spillovers to the wages of those on enterprise bargaining or individual wage agreements. According to liaison with firms, there has been some offset from a moderation in wages growth for other jobs, particularly in some occupations and industries (like business services and construction) where wages growth was especially strong last year. In addition, some firms have reported offsetting award wage increases by providing lower wage increases for non-award workers. Market economists and firms in the Bank's liaison program expect wages growth to be around 3½ to 4 per cent over the year ahead (Graph 4.25). Beyond that, market economists expect wages growth to ease a little to around 3¼ per cent.

Wages growth in newly lodged enterprise agreements – which provides an indication about the direction of average enterprise agreement wages growth – increased to 4 per cent in the September quarter (Graph 4.26). The range of underlying outcomes is wide and some of the larger increases reflect specific circumstances, such as wage catch-up after extended negotiation periods and agreements in the aged care sector that follow the FWC decision to raise industry award wages by 15 per cent.









Increases to public sector wage policies and administrative decisions will support wages growth in the period ahead

Changes to wage policies in a number of jurisdictions will continue to flow through to wages growth over coming quarters. The NSW Government recently announced a four-year agreement with public school teachers, including base wage increases of between 8 per cent and 12 per cent from October this year. The Australian Government revised up its proposal for wage increases to 4 per cent in the first year of the agreement, 3.8 per cent in the second year and 3.4 per cent in the third year, although negotiations with employees are ongoing. The FWC approved an application for childcare workers to bargain for pay rises under the new multi-employer bargaining laws and the major union for the childcare industry has proposed a pay rise of 25 per cent.

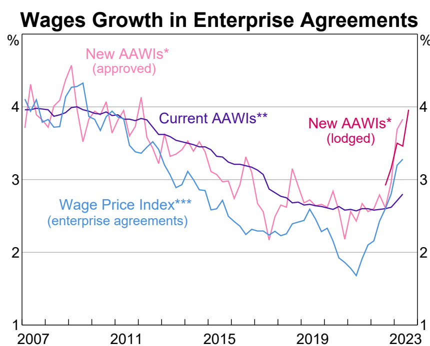
Real base wages were broadly stable in the June quarter, following declines over the past two years

Real wages (as measured by the difference between the seasonally adjusted WPI and CPI) declined by 0.1 per cent in the June quarter; this was the smallest quarterly decline since 2020, as wages growth has increased and inflation has moderated since last year. Real wages have declined by around 5 per cent over the past two years based on base wages alone. By contrast, real employment income has increased, as the fall in real base wages was more than offset by an increase in hours worked, people switching to higher paid jobs or receiving promotions, and firms offering additional payments such as overtime or cost-of-living bonuses. The rise in inflation has been broadly based across the income distribution and household types (Graph 4.27). Real wage declines have been smaller for lower wage earners because nominal wages growth has been strongest for this group, due in part to the FWC award wage decision. Administrative employment data suggests that lower income workers also experienced stronger earnings growth than higher income workers in the year to the June quarter. Across all quintiles, real employment income increased.

Growth in cost-of-living indices eased in the September quarter across most household types but remains high (Graph 4.28). The experience of individual households varies widely. Rising living costs tend to impact lower income households

Graph 4.26

Wages Growth in Enterprise Agreements



* Quantifiable average annualised wage increases (AAWIs) in new FWC-approved and federally registered enterprise agreements; dark pink line represents quarterly average of AAWIs in newly lodged agreements; data for the dark pink line is up to September quarter 2023.

** AAWIs in the total stock of nominally current, FWC-approved and federally registered enterprise agreements.

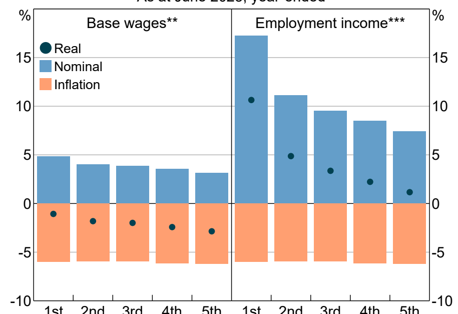
*** Year-ended growth; excludes bonuses and commissions.

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

Graph 4.27

Growth in Real Earnings by Quintile*

As at June 2023, year-ended



* Inflation quintiles constructed by income levels.

** Total hourly rates of pay, excluding bonuses and commissions; quintiles constructed using hourly wage rates in the previous period.

*** Single Touch Payroll employment income per worker for those with a 2019/20 tax return; percentiles constructed using employment income in the current period; estimates are based on the percentile at the midpoint of each group; administrative data on incomes are not necessarily directly comparable to published aggregate estimates.

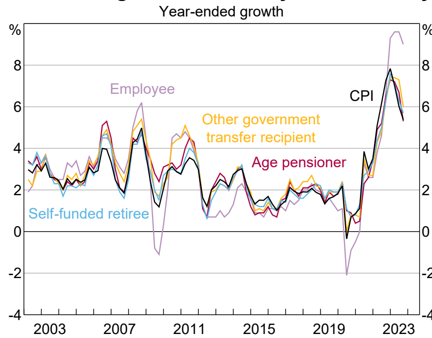
Sources: ABS; ATO; RBA.

more than other groups as they typically have the most constrained budgets, spend a greater proportion of their income on essential items and have lower financial buffers. Relative to a year ago, a greater share of people across the income distribution are identifying cost-of-living concerns as their most important issue (Graph 4.29).

Graph 4.28

Selected Living Cost Indexes by Household Type*

Year-ended growth



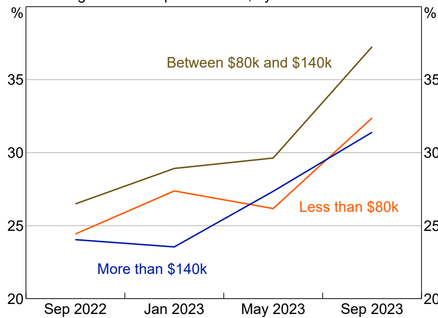
* The living cost indexes include mortgage interest payments (which are not included in the CPI) but exclude the construction costs of new dwellings (which are included in the CPI); other financial and insurance items also differ between the indexes.

Source: ABS.

Graph 4.29

Cost-of-living Concerns*

Share of individuals nominating 'cost of living' as most important issue, by household income



* Response to McKinnon Poll question on 'what are the most important issues facing Australia today and into the future that we should be doing something about?'; 'cost of living' is one of 20 possible response categories.

Source: McKinnon Poll, Susan McKinnon Foundation.

5. Economic Outlook

Global growth is forecast to slow and remain well below its historical average in the year ahead. This reflects the ongoing effects of tighter monetary policy on demand in advanced economies, as well as a soft outlook for the Chinese economy (see Chapter 1: The International Environment).

Growth in the Australian economy is expected to remain below trend over 2023 and 2024 as cost-of-living pressures and higher interest rates continue to weigh on demand. But the economy has proved to be more resilient in recent quarters than previously expected – which is supporting demand conditions for Australian businesses. Hence, the outlook for growth has been revised up in the near term compared with the August *Statement*. The very tight labour market conditions of last year have begun to ease and labour underutilisation rates are expected to rise gradually over the forecast period given below-trend economic growth. The easing in labour market conditions is forecast to be more gradual than previously expected because of the stronger outlook for aggregate demand. Much of the labour market adjustment to below-trend growth in economic activity is expected to occur through a decline in average hours worked; employment is expected to increase over the forecast period. Over coming years, a more sustainable balance between supply and demand across the economy, including in labour and product markets, is expected to support the return to low and stable inflation as growth in domestic activity returns to trend.

Inflation is forecast to decline to 3½ per cent by the end of 2024 and to reach a little below 3 per cent at the end of 2025 (Table 5.1). The forecast decline in inflation is more gradual than anticipated three months ago because domestic inflationary pressures are dissipating more slowly than previously thought (Graph 5.1). Goods prices have accounted for almost all of the decline in inflation so far; goods inflation is expected to continue falling in the near term as the resolution of supply disruptions flows through to prices paid by consumers. By contrast, services inflation remains high. Services inflation is expected to ease but to remain above its inflation-targeting average throughout the forecast period in an environment of elevated domestic cost pressures and still-robust levels of demand. The key domestic uncertainties that shape the risks around these forecasts are: (i) inflation could be higher for longer; and (ii) growth could be weaker than expected, resulting in lower inflation than anticipated. These risks are discussed at the end of this chapter.

The forecasts incorporate several technical assumptions:

- The cash rate is assumed to peak at around 4½ per cent before declining to around 3½ per cent by the end of 2025. This assumes a higher cash rate path than used for the August *Statement*. The path for the cash rate reflects expectations derived from surveys of professional economists and financial market pricing.

Table 5.1: Output Growth and Inflation Forecasts[a]

Per cent

	Year-ended					
	Jun 2023	Dec 2023	Jun 2024	Dec 2024	Jun 2025	Dec 2025
GDP growth	2.1	1½	1¾	2	2¼	2¼
(previous)	(1½)	(1)	(1¼)	(1¾)	(2)	(2¼)
Unemployment rate(b)	3.6	3¾	4	4¼	4¼	4¼
(previous)		(4)	(4¼)	(4½)	(4½)	(4½)
CPI inflation	6.0	4½	4	3½	3¼	3
(previous)		(4¼)	(3½)	(3¼)	(3)	(2¾)
Trimmed mean inflation	5.9	4½	4	3¼	3	3
(previous)		(4)	(3¼)	(3)	(3)	(2¾)
	Year-average					
	2022/23	2023	2023/24	2024	2024/25	2025
GDP growth	3.3	2	1¾	1¾	2	2¼
(previous)	3	1½	1	1¼	1¾	2

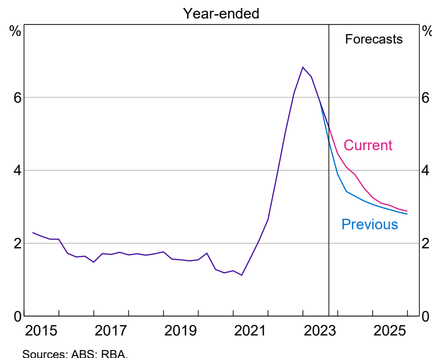
(a) Forecasts finalised 7 November. The forecasts are conditioned on a path for the cash rate broadly in line with expectations derived from surveys of professional economists and financial market pricing; the cash rate is assumed to peak at around 4½ per cent before gradually declining to 3½ per cent by end-2025. Other forecast assumptions (assumptions as of August *Statement* in parenthesis): TWI at 61 (61); A$ at US$0.64 (US$0.66); Brent crude oil price at US$84bbl (US$80bbl). The rate of population growth has been revised higher in the near term but is expected to gradually decline to around its pre-pandemic average. Forecasts are rounded to the nearest quarter point. Shading indicates historical data, shown to the first decimal point.

(b) Average rate in the quarter.

Sources: ABS; RBA.

- The exchange rate is assumed to be unchanged at its current level, which is 1 per cent lower than the August forecasts on a trade-weighted basis.

Graph 5.1



- Crude oil and fuel prices are assumed to be broadly unchanged around their current levels for the rest of the forecast period, which is around 5–8 per cent higher than at the August *Statement*. (Oil prices are assumed to remain constant at the current price over the current quarter. For the rest of the forecast period oil prices are expected to remain around the price implied by the six-month-forward rate.)
- The level of the population has been revised higher again, reflecting stronger-than-expected net overseas migration; year-ended population growth is assumed to have peaked in the September quarter at around 2½ per cent, after which it is expected to decline back to its pre-pandemic average of around 1½ per cent.

(The population assumption is underpinned by a range of sources, including projections from the Australian Government's Centre for Population, partial indicators from the Australian Bureau of Statistics and liaison with the education sector.)

Inflation in Australia is easing, but more gradually than previously expected

Consumer price inflation is forecast to continue to decline across the forecast period (Graph 5.2). However, the expected decline will be more gradual than anticipated at the time of the August forecasts because domestic inflationary pressures are dissipating more slowly than previously thought. Underlying inflation was stronger than expected in the September quarter, pointing to demand being stronger than anticipated as cost pressures have remained elevated; this builds on underlying inflation being higher than expected over the past year (see Box B: Has the Economic Outlook Evolved as Forecast a Year Ago?). The forecasts for both headline and underlying inflation over the year ahead have been revised higher to account for the typical persistence of the components of inflation that were stronger than expected (Graph 5.3).

The inflation forecasts out to 2025 have also been revised higher. The domestic economy has proved more resilient than previously expected, and the labour market is expected to ease more gradually as a result. In addition, the prospect of higher inflation over the year ahead increases the risk of embedding higher inflation expectations in price-setting decisions.

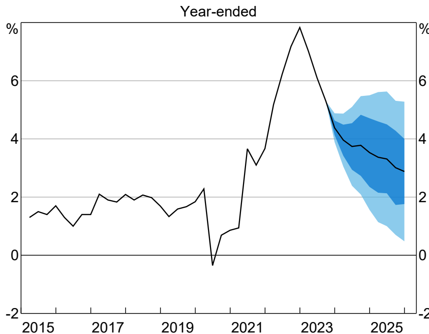
Services inflation remains high and was the primary driver of stronger-than-expected underlying inflation in the September quarter. This reflects the still-strong level of demand for services as well as recent strong growth in domestic costs, including for labour (partly because of poor productivity outcomes) and non-labour business inputs such as energy, rent and insurance. A moderation in services inflation is still expected over the forecast period as growth eases in labour and non-labour costs, and as the demand for services moderates. But services inflation is expected to moderate more gradually than earlier anticipated.

Goods price inflation is forecast to moderate further in the period ahead as the easing in global upstream costs continues to be passed through to final prices. A further moderation in goods price inflation would be consistent with the experience in other advanced economies. Firms in the Bank's liaison program have

Graph 5.2

Headline Inflation Forecast*

Year-ended



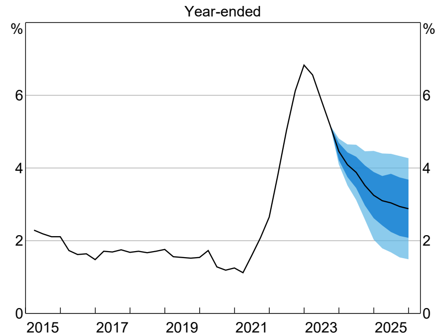
* Confidence intervals reflect RBA forecast errors since 1993, with the 70 per cent interval shown in dark blue and the 90 per cent interval shown in light blue.

Sources: ABS; RBA.

Graph 5.3

Trimmed Mean Inflation Forecast*

Year-ended



* Confidence intervals reflect RBA forecast errors since 1993, with the 70 per cent interval shown in dark blue and the 90 per cent interval shown in light blue.

Sources: ABS; RBA.

reported supply chain improvements and an easing in imported goods inflation. Domestic cost pressures remain a source of upward pressure in firms' pricing decisions, though these cost pressures are expected to ease over time.

Rents have increased at an annualised rate of around 10 per cent over the past six months and rent inflation is expected to remain broadly around this rate for the year ahead, before easing gradually. Housing supply has not kept pace with the increased demand for housing from the decrease in average household size since the beginning of the pandemic, robust nominal income growth and strong population growth, contributing to very low vacancy rates and high rent inflation.

There remains a high degree of uncertainty around the speed and extent of the disinflation in the period ahead (see the section on 'Key domestic uncertainties' below).

Economic activity is forecast to be more resilient than was expected a few months ago, although growth will remain below trend and this will help to achieve a better balance between supply and demand in the economy

Growth in the Australian economy is expected to remain below trend over the year ahead as cost-of-living pressures and higher interest rates continue to weigh on demand; GDP per capita is expected to decline over 2023 (Graph 5.4). The outlook for growth in the near-term has been revised up compared with three months ago; stronger-than-expected growth in private and public investment and further upgrades to services exports have more than offset a weaker outlook for household consumption. These developments are supporting demand conditions for Australian businesses and has implications for firms' price-setting.

The relatively soft outlook for GDP growth in the near term reflects subdued growth in consumption by Australian residents as higher interest rates, cost-of-living pressures and higher tax payable weigh on real disposable income growth. Weak demand for new housing, high construction costs and ongoing capacity constraints – reflecting shortages for some skilled trades – are also expected to continue to weigh on new building approvals and dwelling investment in the period ahead. While new dwelling cost inflation has slowed significantly since mid-2022, it remains above its pre-pandemic pace.

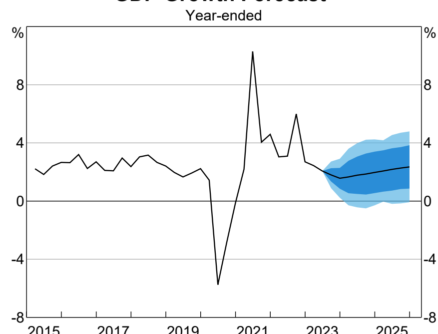
Conversely, the near-term outlook for non-mining business investment and public investment remains strong following recent broad-based growth and because of a large pipeline of construction and public infrastructure work. The ongoing rebound in international student and tourist numbers is also expected to support growth in the near term and provide some offset to weak spending by Australian residents. Robust total spending in Australia is expected to continue supporting demand conditions for businesses and impact firms' ability to pass on cost pressures to customers (Graph 5.5).

GDP growth is forecast to increase gradually from early next year, largely reflecting stronger growth in household consumption and public

Graph 5.4

GDP Growth Forecast*

Year-ended

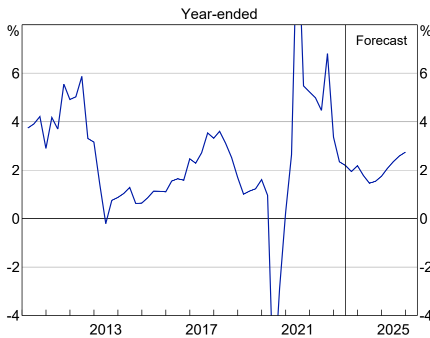


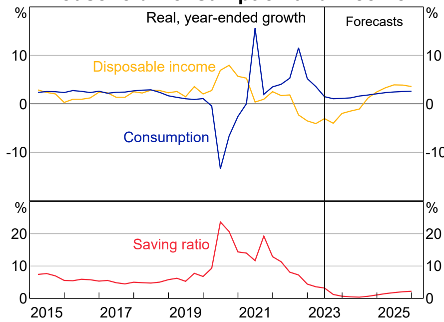
* Confidence intervals reflect RBA forecast errors since 1993, with the 70 per cent interval shown in dark blue and the 90 per cent interval shown in light blue.

Sources: ABS; RBA.

demand. Household consumption growth is forecast to pick up to around its pre-pandemic average by late 2024, supported by a recovery in real income growth as current headwinds fade and higher household wealth (Graph 5.6). The household saving ratio is expected to decline further over the coming year before increasing gradually as real income growth turns positive from around the middle of next year. The extent to which households draw down on their savings to smooth consumption remains a key uncertainty for the consumption outlook, particularly given the additional incentive for all households to save more as interest rates increase.

Dwelling investment is also expected to increase over coming years from current subdued levels. This increase reflects ongoing progress through the pipeline of work to be done as capacity constraints continue to ease, as well as stronger demand for new housing supported by strong population growth, higher prices for established housing and an improvement in build times. While stronger demand will support an increase in dwelling investment, higher density housing supply typically responds with a significant lag due to long planning and construction lead times.





Employment is expected to increase further, though labour underutilisation is forecast to gradually rise as growth in economic activity remains below trend

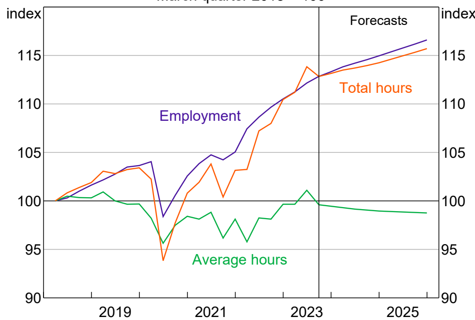
The near-term outlook for employment growth has been revised higher because of the stronger outlook for domestic activity and an assumption of stronger growth in the working-age population over the year ahead; growth in the working-age population supports growth in labour supply while also adding to aggregate demand in the economy. Employment is expected to increase further over the next couple of years and much of the labour market adjustment to below-trend growth in economic activity is expected to occur through a decline in average hours worked (Graph 5.7). The labour market is less tight than in late 2022, though labour market spare capacity is still around multi-decade lows, and measures of labour underutilisation (i.e. people working fewer hours than they want) are expected to continue to increase gradually over the next two years.

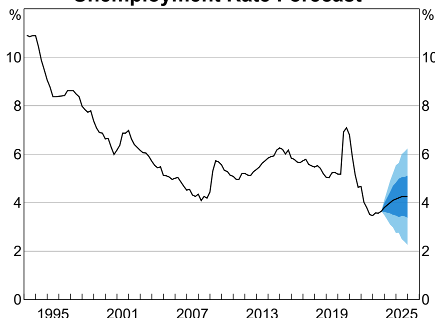
Employment growth is expected to remain positive throughout the forecast period, but it is expected to be below growth in the working-age population for a time, resulting in a gradual increase in the unemployment rate. Because of the more resilient outlook for economic activity, the unemployment rate is now forecast to rise more gradually than at the August *Statement*, to be around 4¼ per cent from late 2024 to 2025

(Graph 5.8). An unemployment rate around 4¼ per cent is well below the typical rate experienced over the past five decades.

In coming years, a more sustainable balance between supply and demand in the labour market and the economy more broadly is expected to support the return to low and stable inflation as growth in domestic activity returns to trend.

Participation in the labour force is expected to be sustained close to historically high levels over the forecast period. The effect of the cyclical slowing in the labour market is expected to be partly offset by trends that have been driving the participation rate higher over a longer period, including higher participation by female and older workers.

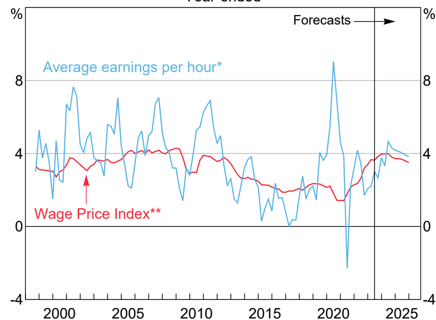




Wages growth is forecast to be close to its peak and to decline gradually as the labour market eases

Nominal wages growth is expected to remain robust in the near term, underpinned by the ongoing tightness of the labour market and high inflation outcomes. Growth in the Wage Price Index (WPI) – which seeks to measure changes in base wage rates for a given quantity and quality of labour – is forecast to rise a little further over the second half of 2023 to stabilise at around 4 per cent before declining gradually as the labour market eases (Graph 5.9). Inertia in the wage-setting process and some lagged catch-up in real wages mean that the decline in wages growth is forecast to be slower than the decline in inflation.

Timely indicators suggest that wages growth increased in the September quarter, but tightness appears to have eased in some segments of the labour market by more than expected, even as aggregate labour underutilisation rates have increased only gradually. The Fair Work Commission decision to increase minimum and award wages has flowed through as expected in the September quarter,



providing a boost to aggregate wages growth, but there is little sign that it has had larger spillovers than usual on the wages of other workers. In response to these developments, the wages growth forecast has been revised down a little in the near term and is little changed further out as the stronger forecast for the labour market provides an offset. The forecast is consistent with the message from firms in the Bank's liaison program, with a larger share of firms reporting they expect that wages growth in a years' time will be below its current rate.

Broad measures of labour income are expected to grow at a faster rate than the WPI. This reflects additional earnings growth associated with improvements in skills over time, and the use of bonuses, allowances and other non-base wage payments to retain or attract staff. These broader measures imply less of a decline in real wages than suggested by the WPI measure (Graph 5.10)

Overlaying all of this, growth of labour costs remains very high. Recent labour productivity outcomes have been weak. Together with solid growth in average earnings over the past year, this has seen recent growth in unit labour costs – which is the measure of labour costs that matters most for inflation – reach 7 per cent, its highest rate since 1990 (excluding pandemic-

impacted outcomes in 2020). The forecasts for nominal wages growth remain consistent with the inflation target, provided productivity growth returns to its pre-pandemic trend (this risk is discussed further below).

Key domestic uncertainties

The risks to the domestic outlook are assessed to be broadly balanced – assuming that inflation expectations remain well anchored.

Inflation could take longer to return to target than anticipated

Inflation could be higher for longer, which could lead to an upward drift in inflation expectations. This would be very costly (in terms of both employment and inflation) to unwind and could take a number of years. There are a number of channels through which inflation could be higher for longer than forecast:

- *Demand could be stronger than expected.* Household consumption could turn out to be stronger than forecast, which would result in an easing by less than expected of firms' ability to pass cost pressures on to prices, labour market conditions and domestic inflationary pressures. The stronger outlook for wealth could lead to a faster or larger turnaround in household consumption growth, including via increased housing turnover and increased ability to obtain credit (although credit growth and turnover remain low so far). Households may also be more willing to spend from their sizeable savings buffers than currently expected. The tight labour market conditions could, if sustained, contribute to stronger-than-expected outcomes for household incomes and consumption.
- *Services inflation could be higher for longer than expected.* Services inflation is expected to remain elevated over the forecast period, taking signal from recent inflation outcomes

and the typical gradual moderation that has been experienced historically in Australia and some other countries. But there is a risk that it remains stubbornly higher than forecast. In a high inflation environment, it is easier for firms to increase prices; people also tend to pay closer attention to changes in costs and prices than when inflation is low, and so may come to expect further large price increases. There are also uncertainties regarding the lags in the effect of monetary policy and how firms' pricing decisions and wages respond to slower growth in the economy at a time when the labour market remains tight. While profit margins outside of the mining sector have been broadly stable in recent years, firms may expand their margins as cost pressures ease if demand remains sufficiently strong.

Inflation could also moderate more slowly than anticipated if productivity growth does not pick up. This would increase labour costs by more than expected given the current outlook for nominal wages and so add to inflationary pressures. The forecasts include an expectation that labour productivity growth increases to the rate recorded in the decades preceding the pandemic. Recent productivity growth outcomes have been weaker than this, although the effects of the pandemic on the economy has made it difficult to discern underlying trends.

- *Inflation could be pushed up by supply shocks or a further rise in rent inflation*. The Hamas–Israel conflict could lead to further increases in oil prices, which would both directly increase fuel prices and indirectly affect consumer prices by raising firms' costs. However, in this scenario some of the initial upward pressure on inflation could be unwound if the oil price shock were also to weigh on economic growth and so demand for goods and services. The El Niño weather pattern and/or ongoing climate change effects could cause disruptions to agricultural production that increase food prices by more than expected. Rent inflation could be higher for longer than expected. Strong population growth is occurring at a time when the rental market is already very tight and it will take time for supply to respond. Households pay relatively close attention to fuel, food and housing costs and so further price increases in these consumption categories in an environment of already-high inflation could raise households' expectations of future inflation.

Inflation could fall faster than expected if domestic or international demand is softer than anticipated

- *The recent weakness in household consumption could persist for longer than expected*. This could occur if weak real disposable income growth has a larger-than-expected effect, particularly on low-income households that typically have lower savings buffers. While many households are well placed to absorb higher interest rates, there is a risk that households, especially those with low savings buffers and high debt relative to incomes, will adjust spending by more than expected. Higher interest rates could also encourage all households to save more than expected, resulting in lower consumption growth. If household consumption is weaker than expected, there may be an easing by more than expected of firms' ability to pass cost pressures on to prices, labour market conditions and domestic inflationary pressures.
- *If international demand for Australian goods and services is weaker than expected, domestic inflationary pressures may ease by more than anticipated*. The outlook for the global economy remains uncertain, with risks tilted to the downside. China's weaker growth outlook continues to create uncertainty

around the outlook for demand for bulk commodities and, in turn, the prices of Australia's key exports and terms of trade. Despite overall fixed-asset investment and steel production remaining robust through most of 2023, real estate investment has been a drag on investment since 2021, and policy support in the property sector has been restrained.

Notwithstanding the continued recovery in household consumption in China, consumer confidence in that trading partner remains subdued, and if consumption growth settles at a lower trend path after the post-pandemic recovery, this could pose additional downside risks to Australia's education and tourism exports. A prolonged cyclical downturn in China could further weigh on Australia's exports through its effect on the rate of economic growth in Australia's major trading partners in the east Asian region.

Outside of China, broader risks to global economic growth pose additional risks to Australia's exports outlook. In particular, if downside risks to growth in advanced economies are realised in a material way – for example, due to a sizeable further tightening in financial conditions that is not accompanied by stronger growth – this would likely weigh further on growth in China and east Asia more broadly. Tighter global financial conditions could also weigh on domestic demand if this were to lead to tighter domestic financial conditions and/or were associated with a broader loss of confidence.

- *Goods prices could decline significantly if domestic demand or international demand eases by more than anticipated.* The inflation forecasts assume that goods prices stabilise at a high level rather than decline over coming years. Supply chain conditions are back around pre-pandemic norms and goods inflation has eased in most advanced economies. Large or widespread declines in goods prices would moderate inflation outcomes by more than currently expected. One way this could occur is if the simultaneous tightening of monetary policy across many economies, as well as independent tightening in financial conditions in some economies, affects demand by more than the sum of individual-economy effects would imply, leading to lower import prices for Australia. Depreciation of the Australian dollar exchange rate may provide some offset in a scenario where the global economy is weaker than expected. The pass-through to domestic goods prices also depends on domestic demand conditions and non-import business costs; so far, the downward pressure on goods prices from easing import costs has been partly offset by elevated domestic cost pressures.

  To give a sense of the magnitude of this risk, if prices for consumer durables reversed one-third of the price increases recorded since the onset of the pandemic, year-ended headline inflation would be around ½ percentage point lower than the current forecast. This would mean that headline inflation would be around the upper end of the inflation target range in late 2024.

Box B

Has the Economic Outlook Evolved as Forecast a Year Ago?

Each year, a review of the RBA staff economic forecasts is undertaken to assess what we have learned about the economy and the forecasting approach, with a view to continuous improvement. For last year's review, see RBA (2022), 'Box C: What Explains Recent Inflation Forecast Errors?', *Statement on Monetary Policy*, November.[1]

Headline inflation and the unemployment rate have evolved broadly as expected a year ago. But underlying inflation has been higher than anticipated, as high services inflation has persisted in an environment of strong domestic cost pressures and still-robust levels of aggregate demand. Population growth has been substantially stronger than expected following the reopening of the border; however, the net effects on the aggregate inflation outlook and the unemployment rate have been relatively small because the increase in population has added to both aggregate supply and aggregate demand in the economy.

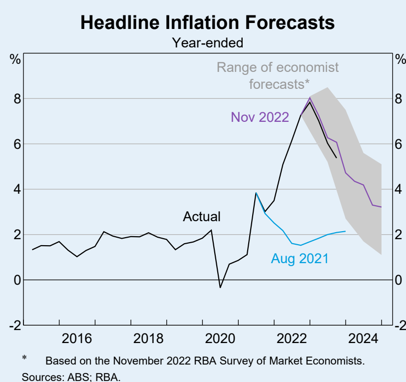
Headline inflation has evolved broadly as expected a year ago

Headline inflation over the past year has been broadly in line with the Reserve Bank's expectations a year ago; inflation peaked at 7.8 per cent in late 2022 and has eased by 2½ percentage points since then (Graph B.1). This is in contrast to 2022, when inflation was significantly higher than Bank staff and most other forecasters had anticipated, reflecting in large part the unexpected imbalance between supply and demand during the pandemic.

Underlying inflation has been stronger than expected, reflecting an environment of elevated domestic cost pressures and still-robust levels of demand

Trimmed mean inflation peaked in late 2022 as forecast, but it has subsequently eased by less than expected (Graph B.2). The forecast miss on underlying inflation reflected higher-than-expected services inflation.

Domestic cost pressures (both labour and non-labour) have remained robust, contributing to stronger-than-expected underlying price pressures. Liaison with firms indicates that a range of domestic business



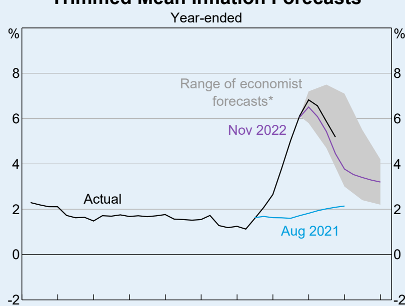
* Based on the November 2022 RBA Survey of Market Economists.
Sources: ABS; RBA.

costs such as energy, rent, insurance and labour costs remain elevated (see Box A: Insights from Liaison). For goods price inflation, the downward pressure on import prices following the resolution of global supply chain issues has more than offset these domestic cost pressures. By contrast, services price inflation has been more persistent, as has been the case in many overseas economies. Ongoing robust levels of demand have allowed firms to pass on cost increases to final prices.

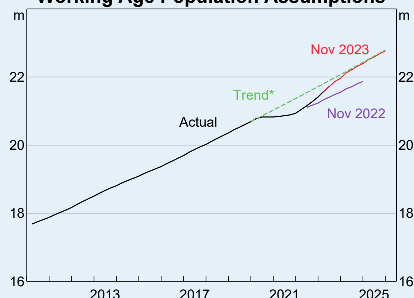
While it is difficult to assess underlying trends in productivity growth over short time periods, weak productivity outcomes have contributed to high labour costs. This has a larger impact on services inflation because services production has a higher labour component than goods production. Unit labour costs – which are labour costs (average earnings per hour in the national accounts) adjusted by labour productivity – are the measure of labour costs most relevant to inflation over the medium run. Although wages growth evolved broadly in line with the forecasts, growth in unit labour costs was materially higher, driven by weaker productivity outcomes than had been assumed a year ago. Non-farm labour productivity has declined to be around the levels recorded several years ago, as total hours worked increased by considerably more than output.

Population growth has been stronger than anticipated, driven by a large increase in net overseas migration following the reopening of the border …

The faster-than-expected return of international students and working holidaymakers coupled with low rates of departures has driven a large increase in net overseas migration over the past year. As a result, the working age population is set to return to its pre-pandemic trend much earlier than previously thought (Graph B.3). As new information came to light, the population assumption used by the Reserve Bank in its forecasts was upgraded materially with implications for some other economic variables.[2]



* Based on the November 2022 RBA Survey of Market Economists.
Sources: ABS; RBA.



* Calculated using average quarterly growth from 2010–2019.
Sources: ABS; RBA.

… but the net effect on the unemployment rate and on aggregate inflation has been relatively small because the increase in population has added to both supply and demand in the economy

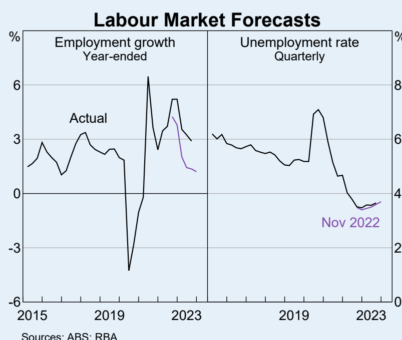
The upside surprise on population growth over the past year has added to both supply and demand in the economy and so the effects on aggregate inflation have been largely offsetting.

In the labour market, the increase in migration has contributed to faster-than-expected employment growth, while the employment-to-population ratio has remained around a record high, buoyed by the very high level of job vacancies. Consistent with this, the evolution of the unemployment rate has been broadly in line with expectations over the past year (Graph B.4). Both the unemployment rate and broader measures of spare capacity suggest that the labour market has become less tight since late 2022. Relatedly, wages growth has evolved broadly in line with the forecasts a year ago (Graph B.5). The supply and demand effects of stronger-than-expected population growth appear to have roughly offset in aggregate, while helping to alleviate labour shortages in specific sectors, such as hospitality. This has helped to contain wage pressures in some affected industries and geographic areas, though increased migration has not materially affected aggregate wages growth.

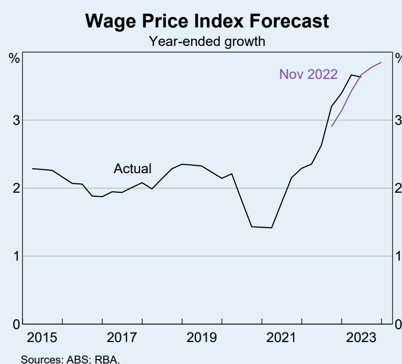
As discussed in Chapter 5: Economic Outlook, recent outcomes for GDP growth have surprised to the upside, suggesting that the economy is more resilient than was thought a few months ago. However, relative to a year ago, aggregate GDP growth and the level of GDP have evolved broadly as expected (the outlook for growth was downgraded in the first half of 2023 due to weak incoming data) (Graph B.6). The increase in population has offset softer-than-expected GDP per capita compared with expectations a year ago. The weaker-than-expected outcomes for GDP per capita are consistent with the poor outcomes for productivity growth over recent years. It also takes time for the capital stock to adjust to an unexpected pick-up in population.

While aggregate GDP has evolved broadly as expected, there have been some offsetting misses at the component level (Graph B.6). Weaker-than-expected consumption has been partly offset by the stronger-than-expected rebound in education and tourism exports, which has supported overall

Graph B.4

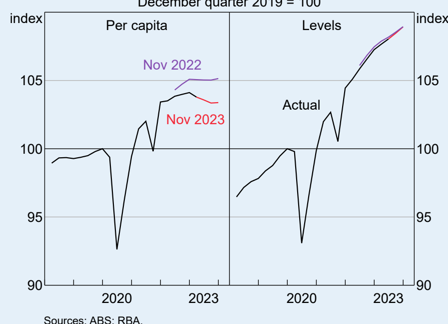


Graph B.5



demand conditions for domestic consumer-facing businesses. Capacity constraints in the construction sector, particularly related to labour availability for certain trades, have remained binding for longer than was expected and have weighed on residential construction. By contrast, outcomes for public and private business investment have been stronger than forecast, in part due to the faster-than-expected improvement in materials and equipment availability as supply chain issues have eased.

While the impact on aggregate inflation has been relatively small, the net effects of a surge in population growth can be somewhat inflationary for a period in sectors where capacity utilisation is already tight because the capital stock generally takes time to adjust to higher demand. Stronger-than-expected population growth has added to demand for housing in an already-tight environment of low rental vacancy rates. Rental market tightness has been underpinned by a decline in average household size during the pandemic and robust nominal income growth, with dwellings already in short supply due to planning restrictions. The combination of stronger-than-expected demand factors have contributed to rent inflation being stronger than anticipated as housing supply usually adjusts in response to changes in demand with a significant lag. Tightness in the rental market is in turn supporting demand to purchase established properties and is one factor supporting the earlier-than-expected rebound in housing prices seen over the past year.



The evolution of inflation and economic activity in Australia has been similar to international experience

Australia's experience over the past year has been broadly similar to that in other advanced economies, though Australia has lagged many peer economies throughout the current inflation cycle. This was the case during the phase of increasing inflation and has contined as inflation has declined, and so the earlier experience of peer economies has helped inform the forecasts. Headline inflation outcomes and growth in economic activity for Australia's major trading partners in aggregate have been broadly in line with Consensus expectations a year ago, although core inflation has typically surprised advanced economy central banks to the upside. ✠

Endnotes

[1] See also RBA, 'Historical Forecasts'.

[2] The population assumption is underpinned by a range of sources, including projections from the Australian Government's Centre for Population (CPOP), partial indicators from the ABS and liaison with the education sector. A year ago, the weight of evidence available suggested that a rebound in international student numbers was underway but a complete recovery was not imminent and there was substantial uncertainty about when China would remove its pandemic restrictions.