Statement on Monetary Policy

MAY 2023

RESERVE BANK OF AUSTRALIA

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Overview

Inflation has passed its peak in Australia but remains very high. Headline inflation declined to 7 per cent in year-ended terms in the March quarter; trimmed mean inflation was 6.6 per cent over the same period. The decline was driven by goods prices, consistent with, but a little later than, the pattern in other economies. Somewhat offsetting this, cost pressures (both labour and non-labour) and strong demand continued to contribute to strong price increases for many services. CPI rent inflation has been picking up, consistent with tight rental markets.

Inflation is expected to return to the 2–3 per cent target range, but it will take some time. The central forecast is for headline inflation to decline to 4½ per cent by the end of 2023 and to reach 3 per cent by mid-2025. Goods price inflation is expected to decline further as the easing seen in global price pressures continues to be passed through in Australia. Services inflation is expected to be more persistent, although it is expected to ease in the latter part of the forecast period as interest rates weigh on demand and, in time, growth in unit labour costs eases. Energy costs are expected to increase in coming quarters, although government policy measures are expected to limit the increases. Rent inflation is expected to continue to pick up over the next year or so, and to add materially to inflation over the forecast period.

The labour market remains tight. The unemployment rate continues to be at its lowest level in almost 50 years, at 3½ per cent; measures of underemployment are also low relative to history. Employment growth remained solid through the March quarter, driven entirely by full-time employment. While job vacancies have declined a little, they remain at high levels. Even so, reports of difficulty finding suitable labour have become less pervasive. Wages growth continues to pick up in line with the tight labour market. A range of timely indicators suggest private wages growth was running at around 3½ to 4 per cent in the March quarter. Broader measures of labour costs increased at a faster pace than this, as employers continued to use non-base-wage payments to attract and retain workers. Moreover, unit labour costs are rising at a fast pace, with productivity growth remaining subdued.

Growth in the Australian economy moderated in the second half of 2022 as the recovery from pandemic-related restrictions had mostly run its course. Consumer spending has continued to slow more recently as the higher cost of living and higher interest rates have weighed on real household disposable incomes, and declines in housing prices over the past year have reduced household wealth. Over the period ahead, GDP growth is expected to be below trend. It is expected to trough at around 1¼ per cent and then to pick up gradually to 2 per cent by mid-2025 as the drag from higher inflation and interest rates wanes and household wealth recovers.

Consistent with the outlook for slower economic growth, the unemployment rate is expected to start rising later this year and reach 4½ per cent by late 2024. The Wage Price Index is expected to peak at around 4 per cent later this year and

ease a little after that. Growth in public sector wages is picking up, with several governments having increased their wage caps. The forecast for labour costs is consistent with inflation returning to the Bank's target, provided productivity growth picks up back to pre-pandemic trends.

The outlook is subject to a range of uncertainties. Growth in consumption is being influenced by competing forces, with higher interest rates and declines in real wages being offset by strong growth in employment and, for many households, still-high accumulated savings, which could be drawn down to support spending. Consumer spending, especially on services, has remained surprisingly resilient in some other advanced economies and it is possible that the Australian experience will be similar. In addition, housing prices have stopped falling at a national level, implying that the drag on consumption from declining wealth could be smaller than previously assumed.

Developments in the housing market more broadly also represent a source of uncertainty for the outlook. Demand for new housing has been weak recently and borrowing for housing has slowed. Over the medium term, however, it is expected to be supported by strong fundamentals, including a higher population than was previously expected. Despite higher rental yields, incentives to build have been impeded by high construction costs and construction delays. These factors have also placed pressure on builders, with liaison contacts reporting increased financial stress and elevated insolvency risks in parts of the construction sector. A shortfall in housing supply, relative to strong demand from a rising population, is expected to result in continued upward pressure on rents, adding to the inflation forecast. Average household size is an important margin of adjustment in the face of rising rents; in recent months, it has already reversed a little of the sharp decline seen during the pandemic.

While inflation is expected to decline further from here, there are a range of uncertainties about the pace of the decline. Goods inflation is expected to decline further in response to an easing in global price pressures. If global goods prices fall back closer to pre-pandemic trends, overall inflation could decline more quickly. In Australia so far, however, this process has lagged the experience in some other advanced economies. Wages growth remains consistent with inflation returning to target, provided productivity growth recovers. If this does not occur or higher prices and wages reinforce one another, domestic inflation would be more persistent than the central forecast.

Globally, inflation has declined from earlier peaks but remains high. Progress in lowering inflation has slowed in recent months, particularly for core measures of inflation. Goods price inflation is clearly slowing, and for some categories, prices have started to decline. This reflects a better balance of supply and demand following the resolution of the pandemic disruptions in supply chains, and some reversal in earlier increases in energy prices. But services price inflation remains strong and could prove to be quite persistent. Domestic drivers are underpinning this persistence in most economies, including strong demand from the ongoing recovery in services consumption and high wages growth. Wages growth is above rates consistent with inflation targets in a number of economies. Most central banks in advanced economies expect inflation to return to target, but not in the coming year.

Despite economic growth slowing in advanced economies, labour markets are still very tight. Historically low unemployment rates and relatively strong household balance sheets, including increased savings buffers, have helped counter the pressures that households have faced from high inflation and increases in

interest rates. Real disposable incomes are no longer declining in most major advanced economies. These factors could mean the slowdown in consumption in advanced economies could be milder than was the case in previous tightening cycles.

Volatility in bond markets, including in Australia, increased sharply for a short period in response to the emergence of stress in parts of the banking system in the United States and Switzerland, but has since declined. Corporate bond spreads have widened a little, including for Australian banks, though these spreads remain within usual ranges. Conditions in foreign exchange markets have been relatively stable. The Australian dollar has depreciated over recent months, partly in response to declines in the prices of Australia's key commodity exports, while the differential between Australian Government bond yields and those of the major advanced economies is little changed from the levels of three months ago, having increased of late.

Growth in Australia's major trading partners is expected to remain below historical averages over the next few years. The near-term outlook has been upgraded somewhat, however, and the trough in growth in advanced economies is expected to occur slightly later. Central banks in many advanced economies have increased policy rates further, although some have emphasised greater uncertainty about the outlook following the recent banking stresses. If stresses intensify, financial conditions could tighten by more than currently expected, which could have implications for policy rates in these economies.

The Chinese economy has been recovering slightly faster than had been expected, largely due to the economy being less affected by the COVID-19 restrictions late last year than had initially been reported. The authorities are targeting growth of 'around 5 per cent' over 2023, which is expected to be achieved comfortably. Real estate investment in China is still quite weak, however, despite some nascent signs of a pick-up in housing market activity. The resulting outlook for Chinese steel production has weighed on iron ore and coal prices over the past three months. More broadly, the softer outlook for global growth implies that Australia's terms of trade are expected to decline over the period ahead. However, this could be partly offset by lower import prices as global goods price pressures ease.

Over recent meetings, the Reserve Bank Board has continued to take action to ensure inflation returns to the target range in a reasonable timeframe. Throughout this period, it has been mindful that inflation is a long way from the target range and domestic demand pressures on inflation are at a high level. The Board raised interest rates by 25 basis points at its March meeting – its 10th consecutive increase. It then held interest rates steady at the April meeting. The decision to pause provided the Board with some time to assess the pulse of the economy (both in Australia and globally) and the outlook, as well as to assess the impact of the cumulative 3½ percentage points increase in interest rates that had occurred to that point. It is also consistent with the practice of earlier interest rate cycles, where it was common to pause in order to assess the flow of information and then move again if circumstances warranted doing so. The Board is conscious that monetary policy operates with a lag and that the full effects of the cumulative increase in interest rates are yet to be felt. It therefore considered that, given the significant uncertainties around the outlook, it would be helpful to have additional data and an updated set of forecasts before again considering when and how much more monetary policy would need to be tightened to bring inflation back to target within a reasonable timeframe.

Since then, the Board has received further evidence that the Australian labour market is still

very tight. Moreover, there are signs that asset prices – including the exchange rate and housing prices – have been responding to the expectation that interest rates may not increase. While goods price inflation is slowing, the pass-through from lower global price pressures to prices in Australia has been limited so far. In addition, services price inflation is turning out to be more persistent than expected in some other advanced economies, and it is possible that this experience could be repeated in Australia. Domestically sourced price pressures are high, especially for rents and for market services. These pressures are expected to increase further over the course of this year before easing. And unlike in some other advanced economies, energy price inflation is anticipated to remain high in Australia over the next year or so. The revised forecasts continued to have inflation above target for an extended period. With the benefit of this information, at the May meeting the Board judged that it was appropriate to increase interest rates again, by a further 25 basis points.

The Board is still seeking to keep the economy on an even keel as inflation returns to the 2–3 per cent target range, but the path to achieving a soft landing remains a narrow one. The Board is mindful that a considerable adjustment to interest rates has already been made and that monetary policy affects activity and inflation with a lag and through different channels. Many households are experiencing a painful squeeze on their budgets, in part because of the fast pace of the rate increases so far. The Board has also been taking into account the benefits of preserving as much of the gains in the labour market as possible, which is in the collective interests of all Australians.

So far, medium-term inflation expectations remain consistent with inflation returning to target. It is important, but not assured, that this remains the case. On current forecasts, inflation is not expected to return to target until mid-2025. The longer inflation remains above target, the greater the risk that inflation expectations rise and price- and wage-setting behaviour might adjust accordingly. If this were to eventuate, the end result would be even higher interest rates and a larger rise in unemployment would be required to bring inflation back to target.

The Board's priority is to return inflation to target. High inflation makes life difficult for people and damages the functioning of the economy. And if high inflation were to become entrenched in people's expectations, it would be very costly to reduce later. Some further tightening of monetary policy may be required to ensure that inflation returns to target in a reasonable timeframe, but that will depend upon how the economy and inflation evolve. The Board will continue to pay close attention to developments in the global economy, trends in household spending 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. ✠

1. The International Environment

Inflation remains high globally. Although headline inflation is past its peak in most advanced economies and in much of east Asia, progress in reducing core inflation has slowed in recent months. Falling energy prices and a normalisation in global supply chain conditions have contributed to the easing in headline inflation. However, inflation in the prices of services remains strong; services price inflation tends to be relatively persistent and is more closely related to wages growth, which remains high in most advanced economies. Unemployment rates remain very low and labour markets are tight, but less so than a few months ago.

Economic growth in advanced economies has slowed in response to higher interest rates but by less than had been expected. Household consumption continued to expand in the United States in the March quarter but has contracted in some euro area economies; business investment has slowed only modestly. Chinese economic activity has begun to recover quickly this year, following the removal of COVID-19 containment measures, with services consumption especially strong. Elsewhere in Asia, growth has been more muted. Global growth is expected to remain below average in the next two years. Financial stability concerns related to banking sector stresses have subsided but would pose downside risks to the economic outlook if the situation were to deteriorate once more.

Central banks in many advanced economies have increased policy rates further, although some have emphasised greater uncertainty over the outlook for policy rates following the emergence of stress in parts of the banking system in the United States and Switzerland. Market participants' expectations for the path of policy rates have fallen in most advanced economies recently. This reflects the possibility that recent banking stress may tighten financial conditions so that central banks need to increase policy rates by less than previously expected. Government bond yields declined in line with policy rate expectations, while bond market volatility increased. Corporate bond spreads have widened and equity prices have recovered from earlier declines. Conditions in foreign exchange markets have remained relatively stable over recent months; the US dollar is little changed since the February *Statement*. While the cost of borrowing US dollars in foreign exchange swap markets increased following the emergence of concerns about banks offshore, strains in these markets eased following the actions of central banks in response to these concerns.

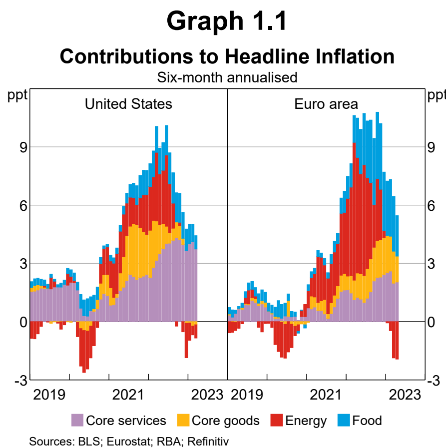
Global inflation remains high, and progress towards inflation targets has slowed

Year-ended inflation remains high but has declined in headline terms. While energy prices have fallen further, food price inflation remains high, especially in the euro area and the United Kingdom, where production has been constrained by poor growing conditions and earlier high energy prices (Graph 1.1). Core inflation has also moderated from its peak, but the pace of decline has slowed and recent monthly inflation data have remained strong in

a number of advanced economies (Graph 1.2). This slower progress in reducing core inflation is being monitored closely by central banks as some components of core inflation can be quite persistent. Central banks in advanced economies are forecasting that inflation will fall further this year, although in most cases it is expected to take a couple of years to return to target.

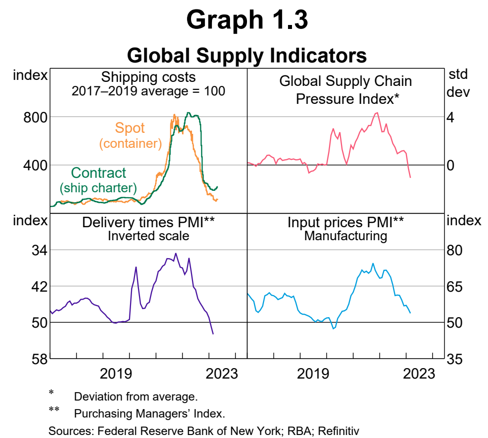
In the goods sector, core inflation slowed sharply in several advanced economies in the second half of 2022 as energy prices fell and supply chain pressures eased (Graph 1.3). Progress has slowed in recent months as supply chain conditions have broadly eased to around pre-pandemic levels, though some indicators including input cost inflation and shipping costs have continued to fall. Core goods inflation has declined by more in the United States and Canada than it has in the euro area and the United Kingdom, where second-round effects of earlier high energy prices have kept inflation higher (Graph 1.4).

Core services inflation remains high and has been the main driver of inflation in advanced economies over the past six months or so. Housing services inflation has been a key component of this and is yet to peak. That said, in the United States, declines in advertised rents suggest that housing services inflation is likely to slow before the end of 2023. Inflation in the prices of other core services remains strong and may prove to be relatively persistent; these



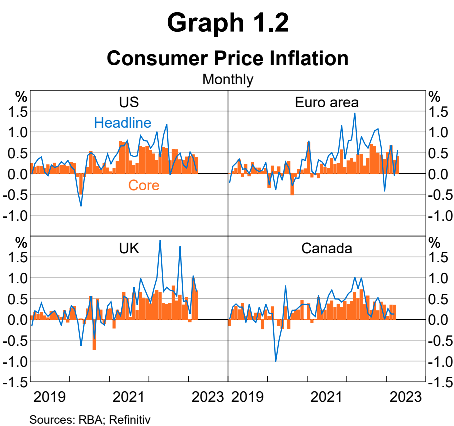
Graph 1.1
Contributions to Headline Inflation
Six-month annualised

Sources: BLS; Eurostat; RBA; Refinitiv



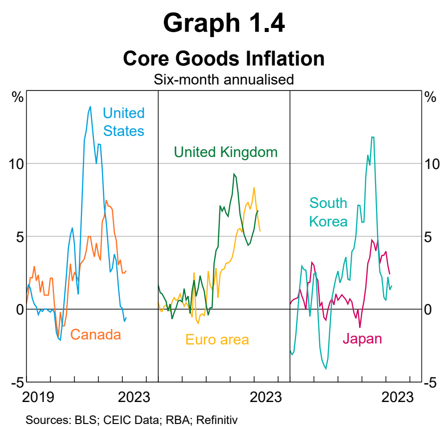
Graph 1.3
Global Supply Indicators

* Deviation from average.
** Purchasing Managers' Index.
Sources: Federal Reserve Bank of New York; RBA; Refinitiv



Graph 1.2
Consumer Price Inflation
Monthly

Sources: RBA; Refinitiv



Graph 1.4
Core Goods Inflation
Six-month annualised

Sources: BLS; CEIC Data; RBA; Refinitiv

services are closely related to domestic demand conditions and wages growth, both of which have been slightly stronger in recent months than expected by many forecasters (Graph 1.5).

Labour markets are tight but less so than a few months ago

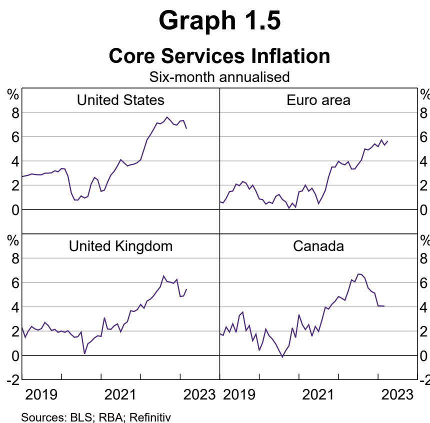
Unemployment rates remain near historical lows in advanced economies, but some timelier indicators of labour market conditions suggest labour demand has eased a little. Employment growth has generally remained robust but has slowed in a few economies; vacancy rates have declined but are still high in most economies (Graph 1.6). Information from business surveys and central banks' liaison with firms suggest that it is becoming easier to find workers as labour supply is increasing; employment intentions are expected to remain relatively flat over the coming year.

Wages growth appears to have peaked, or at least plateaued, in most advanced economies, though it is still above rates consistent with inflation targets in many countries (Graph 1.7).

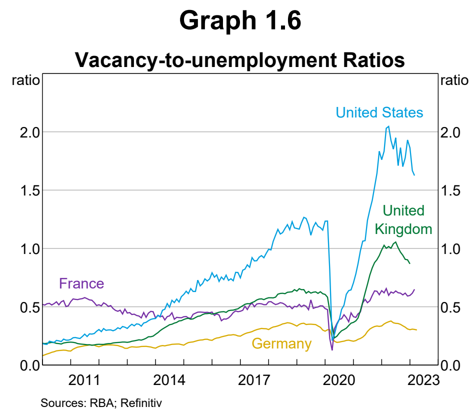
Economic activity in advanced economies was subdued in early 2023

GDP growth in advanced economies was subdued in the March quarter; however, growth was not as weak as expected in February when forecasts were for activity in most economies to stall or contract (Graph 1.8). Household consumption continued to grow solidly in the United States in the March quarter, but it contracted in some euro area economies. In east Asia, the weaker goods demand from advanced economies led to falls in exports, which in turn weighed on GDP in the March quarter. Industrial production in east Asia also fell, and inventories remained high.

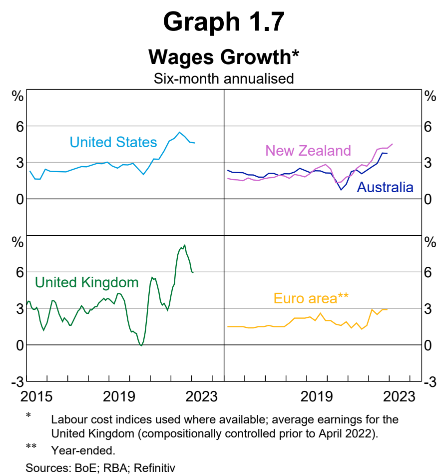
Tight labour market conditions and a decline in household savings ratios over the past year have supported household consumption, albeit to varying degrees across countries. Real household incomes stopped declining in recent quarters, reflecting strong growth in nominal



Sources: BLS; RBA; Refinitiv



Sources: RBA; Refinitiv



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

** Year-ended.

Sources: BoE; RBA; Refinitiv

incomes and falling energy prices. However, in Europe, real household incomes remain below pre-pandemic levels (Graph 1.9). Central banks' liaison with firms suggests that consumers continue to trade down to less expensive goods in response to these pressures. Consumer confidence was little affected by recent banking sector stress, though it remains below average.

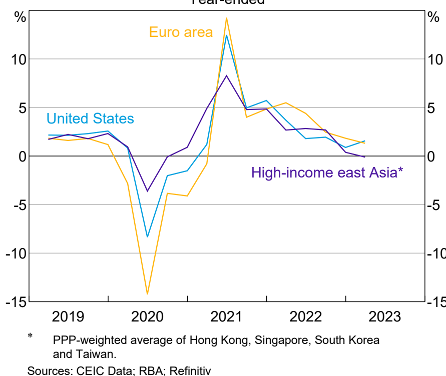
Consumer spending continues to be driven by a recovery in services consumption, as expenditures on goods and services continue to rebalance after the pandemic. Spending on dining out is above pre-pandemic levels across a range of advanced economies and surveyed business conditions in the services sector remain expansionary (Graph 1.10). By contrast, goods consumption continued to decline in the March quarter in most economies; the United States is a notable exception, with goods consumption remaining around pandemic peaks. New orders in the manufacturing sector have weakened in a number of advanced economies, consistent with softer goods demand.

The housing sector continues to weaken in almost all advanced economies in response to higher interest rates, but housing prices appear to have stabilised in some economies recently (Graph 1.11). Forward-looking indicators such as building approvals and housing starts have generally continued to fall sharply, suggesting residential investment will weigh on growth in the coming quarters. In the United States, however, indicators such as housing approvals, starts and sales have ticked up since the start of 2023 following sharp declines over 2022.

Graph 1.8

GDP Growth

Year-ended



* PPP-weighted average of Hong Kong, Singapore, South Korea and Taiwan.

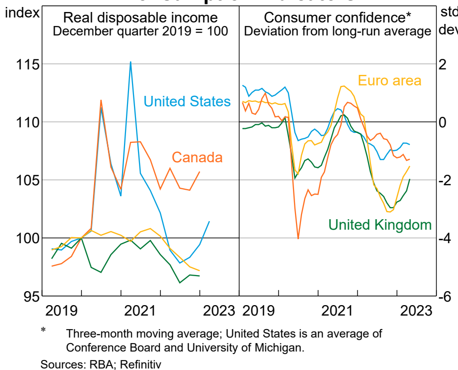
Sources: CEIC Data; RBA; Refinitiv

Activity in China is recovering …

The removal of COVID-19 restrictions towards the end of 2022 contributed to strong economic growth in China in the March quarter of 2023. The Chinese economy grew by 2.2 per cent in the quarter, and by 4.5 per cent in year-ended terms (Graph 1.12). This was driven by a rebound in household services consumption as consumers took advantage of the reopening, but household goods consumption declined

Graph 1.9

Consumption Indicators

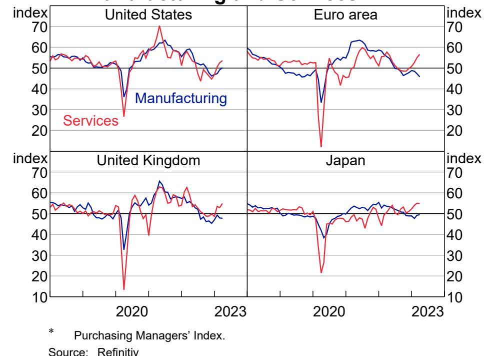


* Three-month moving average; United States is an average of Conference Board and University of Michigan.

Sources: RBA; Refinitiv

Graph 1.10

Manufacturing and Services PMI*



* Purchasing Managers' Index.

Source: Refinitiv

further (Graph 1.13). Fixed asset investment increased in the March quarter, driven by strong growth in infrastructure investment, which has in turn been supported by government policies. Merchandise exports rebounded, though this may be temporary if it is related to the filling of order backlogs. Strong growth in the March quarter followed an upward revision in the December quarter of 2022, indicating more resilience to COVID-19 lockdowns than previously recognised.

Property fixed asset investment continues to weigh on growth in China, but there are early signs that demand for new housing is recovering in response to policy support and the improved economic outlook (Graph 1.14).

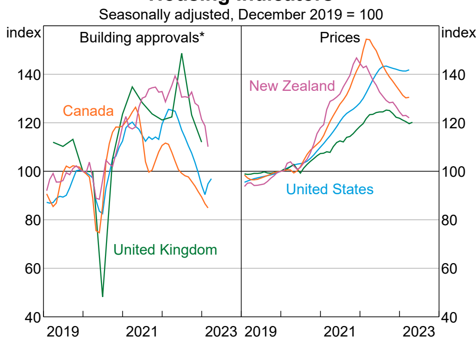
The level of new housing sales rebounded by more than expected in the March quarter. New housing prices also rose through the beginning of 2023, and across a growing share of cities. The lift in sales could support future real estate investment, but the flow through to investment typically takes time. New housing starts – a leading indicator of construction – had picked up following the removal of COVID-19 restrictions but declined back to low levels in March.

Property developers have faced significant financial pressure over recent years. While equity and bond prices of less-leveraged developers (and those that have received direct policy

Graph 1.11

Housing Indicators

Seasonally adjusted, December 2019 = 100



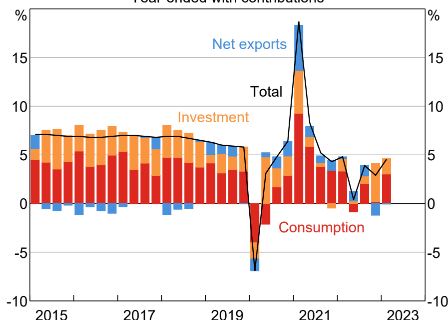
* Three-month moving average used for Canada, New Zealand and the United States; quarterly housing starts are used for the United Kingdom.

Sources: national sources; RBA; Refinitiv

Graph 1.12

China – GDP Growth

Year-ended with contributions

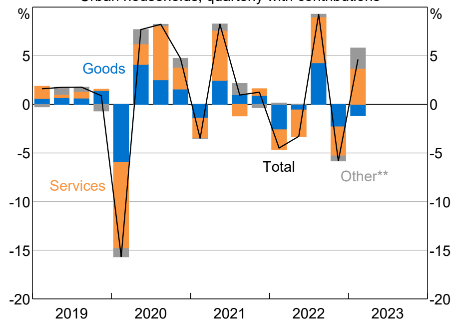


Sources: CEIC Data; RBA

Graph 1.13

China – Real Household Consumption Growth*

Urban households, quarterly with contributions



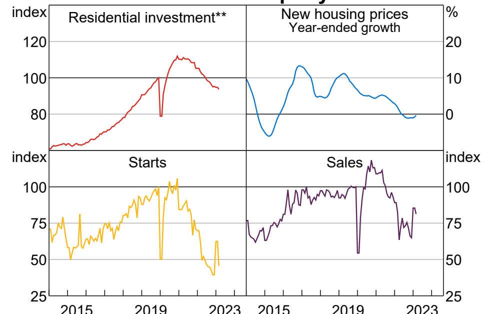
* Each component seasonally adjusted by the RBA and deflated using headline CPI.

** Rents and miscellaneous goods and services.

Sources: CEIC Data; RBA

Graph 1.14

China – Residential Property Indicators*



* December 2019 = 100 for index series.

** Nominal developer fixed asset investment.

Sources: CEIC Data; RBA

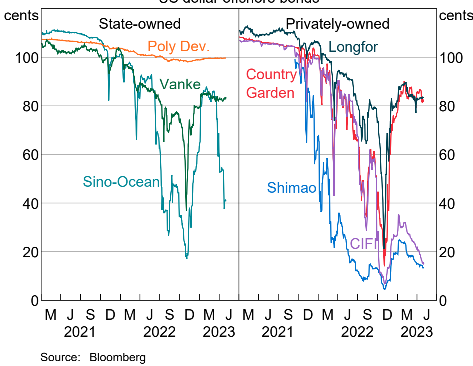
support) have increased sharply, many developers are still under significant financial stress (Graph 1.15). This may dampen the pace of recovery in real estate investment.

Despite activity recovering in China, inflation has declined further and is still well below authorities' target of 3 per cent. Lower inflation has been driven in large part by declines in domestic food prices over the past few months, following the increases seen in 2022 due to cold weather and COVID-19 disruptions. Non-food price inflation has also been low in recent months, partly driven by lower energy prices (Graph 1.16).

Graph 1.15

Chinese Developer Bond Prices

US dollar offshore bonds

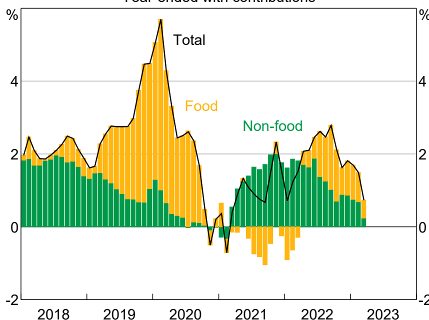


Source: Bloomberg

Graph 1.16

China – Consumer Price Inflation*

Year-ended with contributions



* Seasonally adjusted by the RBA; CPI basket weightings as per Bloomberg estimate 2019.

Sources: Bloomberg; CEIC Data; RBA

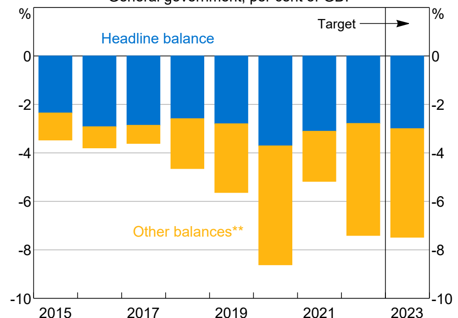
… as Chinese authorities announced a growth target of 'around 5 per cent' alongside broadly neutral fiscal policy …

At the National People's Congress in March, Chinese authorities emphasised their focus on ensuring economic stability, stimulating domestic demand, and preventing and reducing major financial risks. Authorities announced a GDP growth target of 'around 5 per cent' for 2023, which was a little lower than most forecasts for growth at the time. The announced fiscal stance is neutral, with authorities budgeting for a broadly unchanged deficit-to-GDP outcome, suggesting an intention to provide ongoing fiscal support instead of reducing the deficit (Graph 1.17). The local government special bond quota for 2023 remains high but is a little lower than last year's final quota. Local government special bonds are typically tied to infrastructure projects, so this, along with an already large pipeline of infrastructure projects, should continue to support infrastructure investment in 2023.

Graph 1.17

China – Consolidated Budget*

General government, per cent of GDP



* Values for 2023 assume nominal GDP level implicit in budget documents (growth of 7.5 per cent).

** Includes balance of government-managed funds; adjusts for transfers to and from Central Budget Stabilisation Fund; removes transfers from government-managed funds to general government.

Sources: CEIC Data; MoF; RBA

… and eased monetary policy further

The People's Bank of China eased monetary policy modestly in March by lowering its reserve requirement ratio by 25 basis points for most banks (Graph 1.18). Business credit growth increased in the March quarter, supported by existing policy measures focused on infrastructure investment and the property sector. Household credit growth remains weak but has increased a little from its recent lows alongside a rise in property sales.

Chinese Government bond yields have declined to be around their lowest levels since late 2022, while equity prices have been little changed over recent months. The Chinese renminbi has remained relatively stable against the US dollar, despite a narrowing in the interest rate differential between Chinese and US Government bonds.

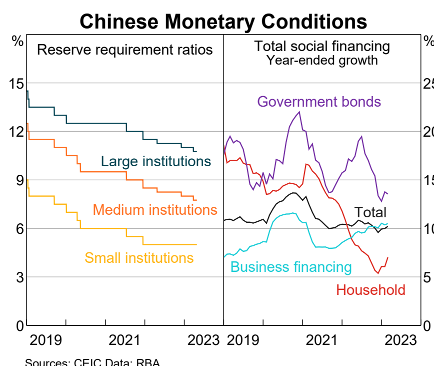
Most commodity prices have declined since February

Thermal coal and gas prices have declined over the past three months, but they remain around double their pre-pandemic averages due to ongoing reduced gas supply from Russia (Graph 1.19; Table 1.1). Recent declines in prices were driven by ongoing weaker demand for gas and coal as relatively warm weather conditions persisted throughout the peak gas-use season in the northern hemisphere. This supported (already elevated) gas storage levels and coal inventories and contributed to an easing in concerns about medium-term energy supply. Oil prices have declined since the beginning of February; tighter financial conditions associated with concerns about some smaller US banks and concerns that the US Treasury may soon not be able to meet all of its payment obligations if the US debt ceiling is not increased have been viewed as increasing the risk of weaker oil demand. Iron ore and Australian coking coal prices decreased, driven partly by weaker steel demand in China. Australian coking coal prices were also driven lower by the resolution of supply disruptions in Queensland. Base metals prices declined moderately.

Global growth forecasts have been revised a little higher, but remain below average with risks skewed to the downside

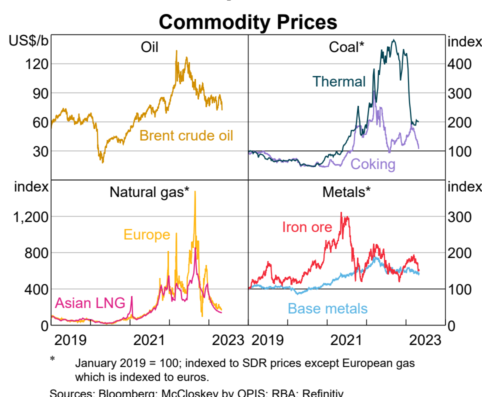
Overall, year-average GDP growth in Australia's trading partners is forecast to be around 3¾ per cent in 2023 and 3½ per cent in 2024 – well below its pre-pandemic decade average of 4½ per cent (Graph 1.20). This is a little stronger than three months ago, driven by upgrades to growth forecasts in China and high-income economies in east Asia. Although Consensus forecasts for GDP growth in major advanced

Graph 1.18



Sources: CEIC Data; RBA

Graph 1.19



* January 2019 = 100; indexed to SDR prices except European gas which is indexed to euros.

Sources: Bloomberg; McCloskey by OPIS; RBA; Refinitiv

Table 1.1: Commodity Price Growth[(a)]

SDR terms; percentage change

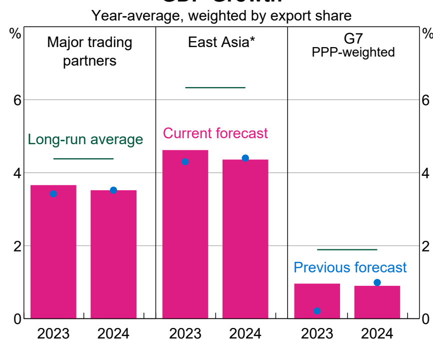
	Since previous *Statement*	Over the past year
Bulk commodities	−23	−40
– Iron ore	−20	−29
– Coking coal	−35	−51
– Thermal coal	−17	−49
LNG – Asia spot price	−5	−24
Rural	−6	−16
Base metals	−4	−19
Gold	9	9
Brent crude oil(b)	−14	−32
RBA ICP	−8	−17
– Using spot prices for bulk commodities	−17	−29

(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

economies in 2023 have also been revised higher, GDP is still forecast to contract slightly in the United States and the United Kingdom in the coming quarters. Recent stresses among some banks in the United States and Europe have increased downside risks to the forecasts and have led to modest downward revisions to Consensus forecasts in some advanced economies from the December quarter of this year.



The upward revision to the forecast for China's economic growth in 2023 has occurred in response to evidence that the Chinese economy was less affected by the COVID-19 restrictions of late last year than had been expected. The authorities' intentions to maintain supportive fiscal policy also contributed to the upgrade. Year-average GDP growth is forecast to comfortably exceed the authorities' growth target of 'around 5 per cent' announced in March. Elsewhere in Asia, forecasts have been revised up slightly in reaction to the improved outlook for major advanced economies and China; however, to the extent the recovery is services-led, the flow-on effects to other economies could be relatively muted.

The outlook for global economic activity is subject to a range of risks, with the balance skewed to the downside. The key uncertainties are:

- *The pace of disinflation is uncertain, resulting in greater-than-usual uncertainty about the outlook for monetary policy.* Monetary policy transmission is uncertain, both in terms of

lags and the overall effect on output and inflation. In addition, some parts of inflation (e.g. rents) could prove to be highly persistent. If progress in reducing inflation stalls, monetary policy may need to be tighter and require a sharper slowing in economic activity than currently expected, especially if inflation expectations were to rise. The required slowing in activity could, at least initially, be difficult to achieve, given that substantial additional savings in some advanced economies and still very tight labour markets could support household consumption for some time. Alternatively, it is possible that inflation could slow more quickly than expected, particularly as there may be further disinflationary pressures on final goods prices. The risk of spillovers to global goods inflation from the Chinese economy's reopening is judged to be low at this stage, given supply chain issues have dissipated, and goods demand in China remains weak.

- *Financial stability concerns and resulting tighter financial conditions could slow economic activity.* Although the global banking system has remained resilient in the face of recent bank failures, there is uncertainty about the overall effect on global financial conditions, most notably in the United States. If stresses were to widen and financial conditions were to tighten more significantly, this would pose downside risks to real economic activity through a combination of reduced credit availability, lower asset prices and weaker confidence, in turn weighing on spending and investment decisions. Uncertainty about the magnitude of these effects, coupled with broader uncertainty about the potency and timing of monetary policy effects, creates an environment where there is substantial risk of tightening either too much or too little to bring inflation back in line with central banks' targets.
- *The risks to the Chinese economic outlook are balanced.* The Chinese authorities' supportive policy settings, along with the boost to consumption from the lifting of COVID-19 restrictions, may generate a stronger recovery this year than currently expected. This could be further supported if recent improvements in property markets were sustained over the year. However, soft external demand, particularly from advanced economies, could weigh on exports more than currently anticipated. The recovery could also be hampered if household consumption growth stalled following its initial rebound from the removal of COVID-19 restrictions, if residential investment was constrained by property developers' ongoing efforts to repair their balance sheets, or if fiscal stimulus supported demand by less than expected.

Central banks have raised policy rates further, with some nearing their expected peak

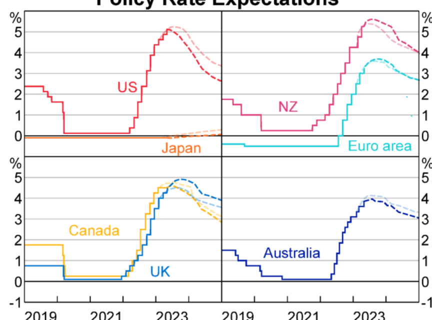
Central banks in most advanced economies have increased policy rates further to slow the pace of inflation and mitigate the risk that above-target inflation becomes embedded in price- and wage-setting behaviours. Market-implied policy rate expectations declined sharply in March as concerns emerged about some banks in the United States and Switzerland. Concerns about widespread banking stress subsided somewhat following the response of regulators in these countries. Market-implied policy rate expectations have increased in many advanced economies, though they remain below the levels seen earlier in the year.

Market pricing suggests policy rates are at or near their peak in most advanced economies, with rates expected to decline in some

economies in the second half of the year (Graph 1.21). However, most advanced economy central banks have signalled that policy rates may need to remain at restrictive levels for some time to ensure inflation returns to target.

Key news from central banks includes:

- The US Federal Reserve (Fed) increased the target range for its policy rate by a cumulative 50 basis points to 5–5.25 per cent at its March and May meetings. Chair Powell noted that the Fed will assess incoming data and take into account the lagged effect of tightening to date in determining the extent to which additional policy firming may be appropriate.
- The European Central Bank (ECB) raised its key policy rate by 50 basis points to 3 per cent at its March meeting, in line with the guidance it had provided in February. The ECB stated that the future path of the policy rate would be data dependent considering the elevated level of uncertainty.
- The Bank of England (BoE) increased its policy rate by 25 basis points to 4.25 per cent at its March meeting. The BoE indicated that a further tightening in monetary policy would be required if there was evidence of more persistent inflationary pressures.



- The Bank of Canada (BoC) kept its policy rate unchanged at 4.5 per cent at both its March and April meetings. It noted that it remains prepared to raise the policy rate further if needed.
- The Reserve Bank of New Zealand (RBNZ) increased its policy rate by a cumulative 100 basis points to 5.25 per cent at its February and April meetings. The RBNZ said future policy rate decisions will depend on the extent to which core inflation and inflation expectations continue to moderate.
- The Bank of Japan (BoJ) left its key policy rate unchanged at –0.1 per cent at its March and April meetings and communicated that it will continue monetary easing (via asset purchases) until inflation remains sustainably above its 2 per cent target.
- Among other advanced economy central banks: Sveriges Riksbank increased its policy rate by a cumulative 100 basis points to 3.5 per cent at its February and April meetings; the Swiss National Bank (SNB) increased its policy rate by 50 basis points to 1.5 per cent at its March meeting; Norges Bank increased its policy rate by 25 basis points to 3 per cent at its March meeting; and the Bank of Korea left its policy rate unchanged at 3.5 per cent at both its February and April meetings.

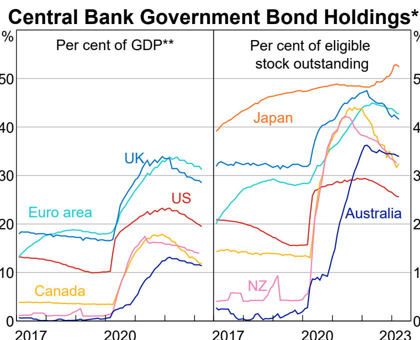
Most central banks have continued to reduce their holdings of assets purchased under quantitative easing programs (Graph 1.22). The BoC is allowing bonds to mature without reinvestment, while the Fed has continued reinvesting part of the proceeds of maturing bonds. In March, the ECB began to reduce its bond holdings by only partially reinvesting maturities. The BoE and RBNZ have continued to sell their bond holdings. The Riksbank recently commenced sales of its holdings of longer dated government bonds in addition to allowing other assets to mature without

reinvestment. The BoJ is now the only major central bank that is still adding to its bond holdings.

Central banks have continued to wind down term funding schemes established or expanded during the pandemic (Graph 1.23). A significant proportion of remaining lending under the ECB's term funding scheme is expected to mature or be repaid over the first half of 2023, while most lending under the BoE and RBNZ's term funding schemes is not due to mature until 2024 or later.

Graph 1.22

Central Bank Government Bond Holdings*



* Central government debt only for all countries except the euro area. Holdings data for euro area only include bonds held as part of asset purchase programs; holdings data for the United Kingdom does not include purchases for financial stability purposes; holdings for other central banks also include bonds held for operational or liquidity purposes.

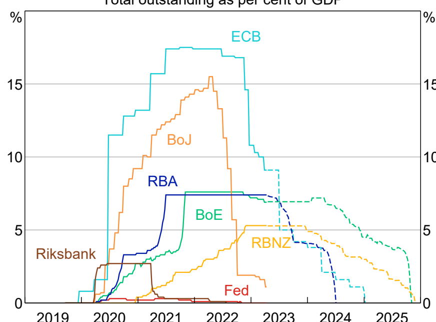
** Four-quarter rolling sum. Japan (not shown) is currently at 101 per cent of GDP.

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

Graph 1.23

Term Funding Scheme Projections*

Total outstanding as per cent of GDP



* Only includes schemes created in response to COVID-19 pandemic. Projected repayments and/or maturities are represented by dashed lines. Projections for the ECB are from the most recent ECB Survey of Monetary Analysts. Projections for the BoE, RBA and RBNZ are based on the assumption all outstanding funding is held until maturity.

Source: Central banks

In emerging market economies, central bank policy rates are widely expected to have reached or be close to peak levels (Graph 1.24).

Central banks expanded liquidity support for banks

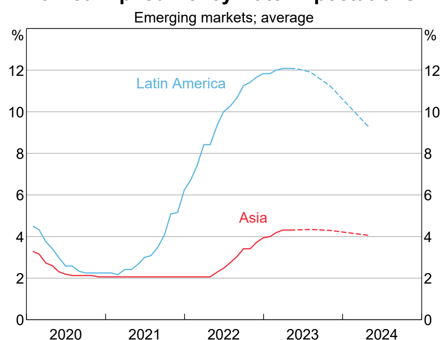
Following some bank failures in the United States and the takeover of Credit Suisse by UBS, a number of advanced economy central banks acted to safeguard financial stability by providing extraordinary liquidity support to banks. The Fed introduced a Bank Term Funding Program (BTFP) to complement its existing discount window facility in providing liquidity support to otherwise solvent banks. Compared with the discount window, the BTFP offers funding at a longer term and at a fixed rate, and values (a narrower range of eligible) collateral at par rather than at market value. The Fed provided US$165 billion of liquidity to banks via the BTFP and discount window in the week following the collapse of Silicon Valley Bank (SVB). Since then, use of these facilities has declined slightly to US$155 billion (Graph 1.25). The SNB announced new liquidity facilities to support the merger of Credit Suisse and UBS.[1]

The BoC, BoE, BoJ, ECB, Fed and SNB also enhanced the provision of US dollar liquidity by increasing the frequency of their seven-day

Graph 1.24

Market Implied Policy Rate Expectations*

Emerging markets; average



* Solid lines show actual policy rates; coloured dashed lines show market-implied policy rates; Latin America comprises Brazil, Chile and Mexico; Asia comprises India, Malaysia, Philippines and Thailand.

Sources: Bloomberg; RBA; Refinitiv

operations through existing swap arrangements from weekly to daily. More recently, the central banks reverted to a weekly frequency for these operations, highlighting the improvement in US dollar funding conditions and low demand at recent operations.

Government bond yields declined amid heightened volatility

Government bond yields declined from their recent peaks in most advanced economies following the emergence of concerns about some banks in the United States and Switzerland (Graph 1.26). Volatility in government bond yields increased to be around its highest levels since 2008 (though volatility has since eased a bit), and measures of liquidity have deteriorated (Graph 1.28). Market makers are typically less willing to provide liquidity during periods of heightened uncertainty, resulting in more volatile trading conditions. Both real yields and market-implied inflation expectations have declined from levels reached earlier in the year, although longer term market-implied inflation expectations remain in the 2–3 per cent range in most advanced economies (Graph 1.27).

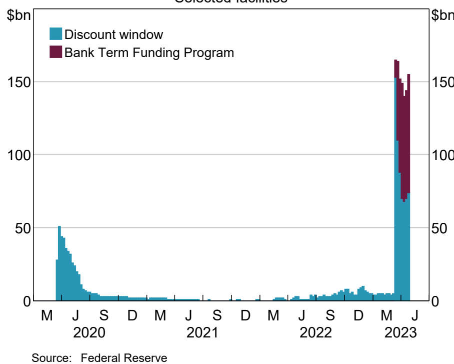
The United States has been using extraordinary measures to remain under its statutory debt limit since mid-January. US Treasury Secretary Yellen has indicated the Treasury may no longer be able to meet all of its payment obligations on time from as early as 1 June. Spreads on US Government credit default swaps have risen over recent months and yields on Treasury bills maturing within the window when the Treasury is expected to have exhausted its extraordinary measures to remain within the debt limit are noticeably higher than those falling outside this range.

Volatility in emerging market government bond yields also rose, but by less than in advanced economies (Graph 1.28). Local-currency sovereign bond yields have declined alongside those in advanced economies, while spreads between US-dollar-denominated emerging market sovereign bonds and US Treasuries have widened amid the heightened uncertainty in global financial markets (Graph 1.29). This has

Graph 1.25

Federal Reserve Liquidity

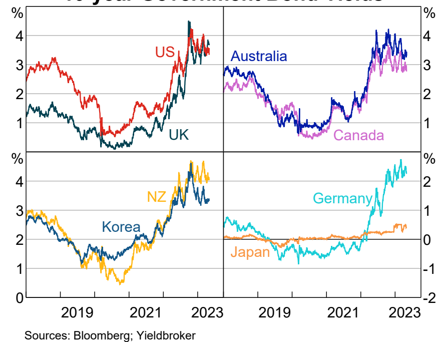
Selected facilities



Source: Federal Reserve

Graph 1.26

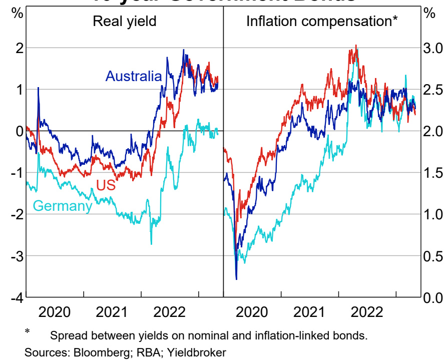
10-year Government Bond Yields



Sources: Bloomberg; Yieldbroker

Graph 1.27

10-year Government Bonds



* Spread between yields on nominal and inflation-linked bonds.

Sources: Bloomberg; RBA; Yieldbroker

been most evident in Latin America, which has stronger financial and trade links to the United States.

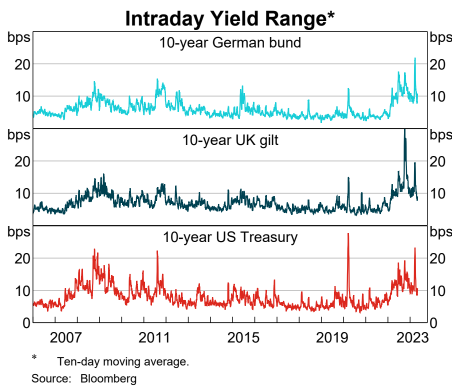
Private sector financial conditions have tightened somewhat

Corporate bond spreads have widened in recent months, reflecting increased uncertainty about the economic outlook following the collapse of SVB. Taking into account the decline in government bond yields, corporate bond yields in the United States are little changed, while corporate bond yields in Europe have increased (Graph 1.30). There has been limited issuance of corporate bonds below investment grade in the United States and Europe in recent months. Bond issuance by banks in the United States for this year so far has been much lower than previous years.

Equity prices in major markets declined following the collapse of SVB; however, they have since recovered to their levels prior to the collapse of SVB in Europe, while in the United States they are 4 per cent higher (Graph 1.31). By contrast, bank equity prices remain more than 10 per cent below their levels prior to the collapse of SVB due to concerns about future earnings. Equity issuance has remained subdued since early 2022 in both the United States and Europe.

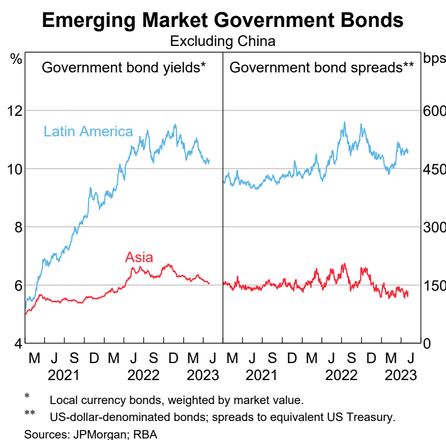
Since the emergence of stress at a number of US regional banks, there has been an outflow of

Graph 1.28



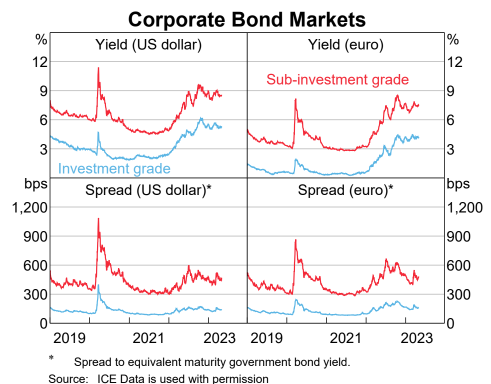
* Ten-day moving average.
Source: Bloomberg

Graph 1.29



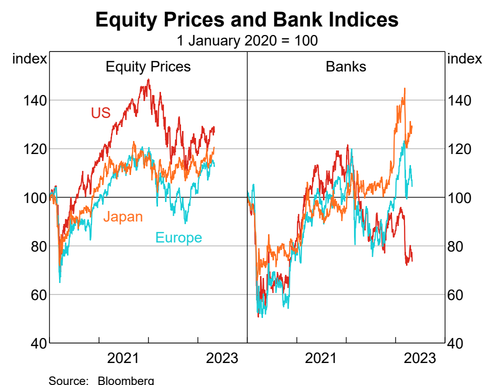
* Local currency bonds, weighted by market value.
** US-dollar-denominated bonds; spreads to equivalent US Treasury.
Sources: JPMorgan; RBA

Graph 1.30



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

Graph 1.31



Source: Bloomberg

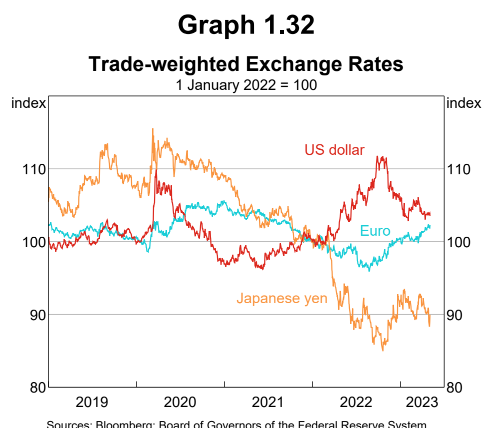
more than US$400 billion in commercial bank deposits in the United States, with a few vulnerable institutions experiencing very large outflows. Withdrawn deposits appear to have largely been invested in US money market funds, which offer higher returns than bank deposits. These banks have replaced lost deposit funding by borrowing from the Fed's liquidity facilities and from Federal Home Loan Banks. Stress at some banks does not appear to have led to a significant contraction in aggregate bank lending in the United States, although that may still occur in the period ahead. In particular, the Fed has indicated that small- and medium-sized banks in the US have continued to tighten credit standards in recent months. Smaller banks (those outside the top 25), which have been most affected by the stress, make up around one-third of all household lending and one-half of all commercial lending in the United States. The ECB has also reported a substantial tightening of credit standards by euro area banks in the first quarter of 2023, along with a decline in demand for credit.

The US dollar remains below its 2022 highs

The US dollar is little changed on a trade-weighted (TWI) basis since the February *Statement* but is around 7 per cent lower than its peak in October 2022 (Graph 1.32). It did, however, depreciate against the currencies of some other advanced economies, such as the euro and the UK pound, following the collapse of SVB in early March. This largely reflected a decline in the yield differential between US Treasury bonds and the government bonds of other advanced economies, as stress in parts of the US banking system weighed on yields there more than elsewhere.

The euro has appreciated a little over recent months, while the Japanese yen depreciated following the BoJ's decision to leave monetary policy unchanged at its April meeting. Meanwhile, the currencies of commodity-exporting economies, including the Australian dollar, have generally depreciated (see Chapter 3: Domestic Financial Conditions).

Foreign exchange markets have been far less volatile than bond markets. This partly reflected the broad decline in yields across most advanced economies, which resulted in more moderate changes in yield differentials. While the cost of borrowing US dollars in foreign exchange swap markets increased following the emergence of concerns about banks overseas, strains in these markets eased following central banks' actions in response to these concerns – including through increasing the frequency of existing US dollar foreign exchange swap line operations (see above). More generally, foreign exchange markets have continued to function well over the recent period.



Endnotes

[1] For more detail, see RBA (2023), 'Box A: Recent International Bank Failures – Causes, Regulatory Responses and Implications', *Financial Stability Review*, April. Available at <https://www.rba.gov.au/publications/fsr/2023/apr/box-a-recent-international-bank-failures-causes-regulatory-responses-and-implications.html>

2. Domestic Economic Conditions

Growth in the Australian economy has slowed over recent quarters. Domestic demand was unchanged in the December quarter as investment declined and household consumption growth weakened, despite higher population growth over this period. Timely indicators suggest domestic activity remained subdued in the March quarter as higher interest rates and cost-of-living pressures continued to weigh on demand. The balance between labour demand and supply has improved somewhat as labour demand has moderated and labour supply has been boosted by a sharp recovery in net arrivals from overseas. Nevertheless, the labour market remains tight, with many firms continuing to find it challenging to hire workers. Sentiment in the housing market has improved and housing prices have stabilised following a large decline over the past year.

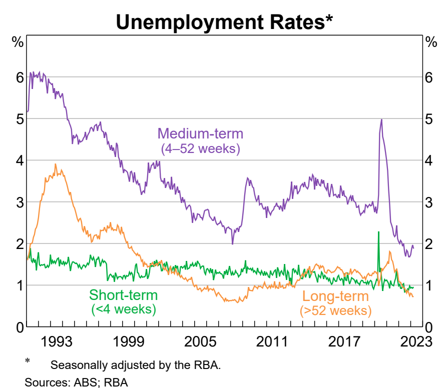
The labour market remains tight …

The unemployment rate remains around its 50-year low of 3½ per cent and is around multi-decade lows in most states. It has been steady around these levels since mid-2022, abstracting from the recent monthly variability that largely reflected changes to seasonal patterns. The medium-term unemployment rate – a measure of cyclical unemployment that has historically had the closest relationship with wages growth – has ticked up slightly in recent months but remains very low. The long-term unemployment rate is close to its lowest level in recent decades (Graph 2.1). Job vacancies have declined since mid-2022, but there are still nearly as many vacancies as there are unemployed people.

Broader measures of underutilisation have also remained around multi-decade lows (Graph 2.2). The decline in underemployment over recent years has been driven by firms responding to strong demand by increasing the hours of their workforce; many previously part-time employees have shifted into full-time work. Full-time employment has accounted for all the growth in employment since the onset of the pandemic (Graph 2.3).

… but the balance between labour demand and supply has improved

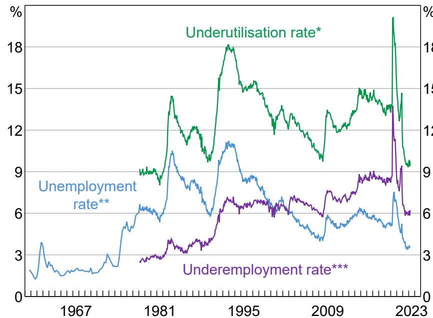
Demand for labour has eased but remains high. Employment growth has moderated following the rapid growth observed as the economy reopened. Timely indicators of labour demand, such as job advertisements, have moderated since mid-2022; however, they remain much higher than prior to the pandemic (Graph 2.4). Hiring intentions by firms in the Bank's liaison program have eased over recent quarters.



Graph 2.2

Labour Underutilisation

Per cent of labour force



* Sum of the unemployment and underemployment rates.

** Quarterly data from 1959 to 1964 are spliced from historical national accounts data.

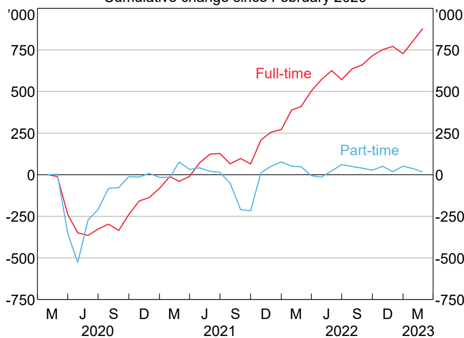
*** Employed people who want, and are available, to work more hours.

Sources: ABS; RBA

Graph 2.3

Employment

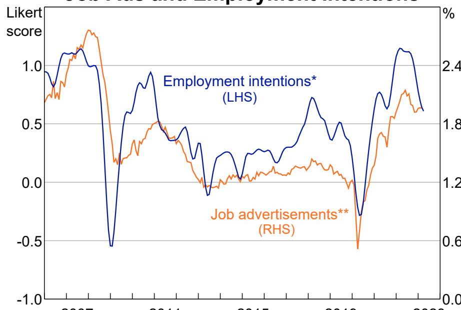
Cumulative change since February 2020



Source: ABS

Graph 2.4

Job Ads and Employment Intentions



* Over the year ahead; smoothed using a 13-month Henderson trend.

** As a share of the labour force.

Sources: ABS; Jobs and Skills Australia; RBA

Labour supply has continued to pick up recently. The working-age population has grown strongly over the past year as arrivals from overseas have increased to around pre-pandemic rates and fewer people than usual have departed the country (Graph 2.5). International student and working holiday maker arrivals have returned to around pre-pandemic levels; though some of these people are excluded from the working-age population measure, they have nonetheless contributed to an easing in labour shortages and turnover rates in some sectors. Despite growing supply, a lack of suitable labour remains a constraint for many firms. The strong labour market and ongoing demand for labour has supported the participation rate remaining near its record high in recent months.

Actual and expected job mobility remains higher than prior to the pandemic but has declined in recent months. In most industries, job mobility has returned to around long-run averages; the main exception is health care, where job mobility remains elevated. Overall, job turnover continues to be driven by people looking for a better job or a change (Graph 2.6).

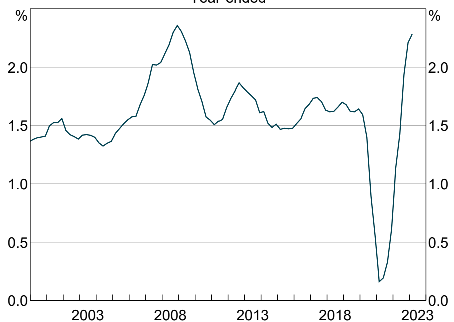
Domestic activity growth continued to moderate in late 2022 …

Growth in the Australian economy slowed to a below-trend rate of 0.5 per cent in the

Graph 2.5

Working-age Population Growth*

Year-ended



* Population aged 15 years and over.

Source: ABS

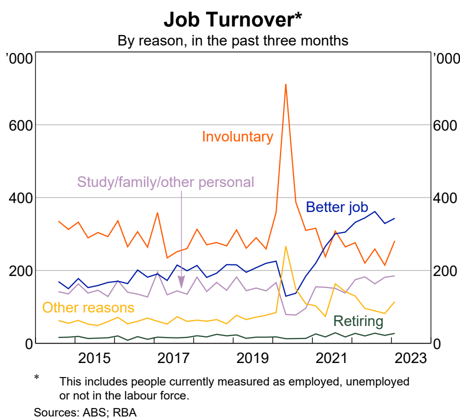
December quarter after solid growth through the middle of 2022 (Graph 2.7). While an increase in tourists and international students boosted exports a little in the quarter, growth in domestic final demand stalled – recording its weakest outcome outside of lockdowns since 2014. Investment declined and household consumption growth was much slower than in previous quarters. The bounce-back from pandemic-related restrictions had mostly run its course by late last year and higher interest rates, high inflation and declining wealth were dampening demand in the private sector. Partial indicators suggest domestic activity remained subdued in early 2023, as rising interest rates and cost-of-living pressures continued to weigh on demand.

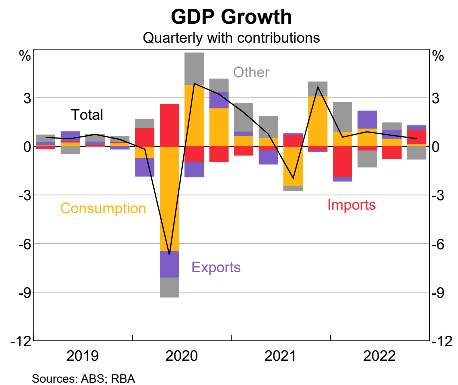
Real output growth in the second half of 2022 was broadly in line with population growth, implying little growth in GDP per capita (Graph 2.8). In nominal terms, the economy continued to grow strongly in the December quarter, reflecting strong growth in domestic prices and a small rise in the terms of trade.

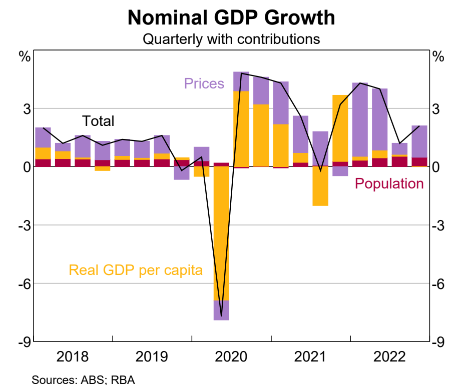
… as growth in household consumption slowed

Household consumption growth slowed over the second half of 2022, with growth of 0.3 per cent in the December quarter (Graph 2.9). Slower growth reflected both underlying headwinds to consumption and the fading of the bounce-back from pandemic-related restrictions. In levels terms, household consumption per capita is close to its pre-pandemic trend and, other than international travel, both goods and services consumption are back to around trend (Graph 2.10). The consumption of discretionary goods – including clothing and footwear, and household goods – has declined, but there was continued steady growth in discretionary services categories such as transport and, hotels, cafes and restaurants.

A range of timely indicators suggest that household consumption growth remained subdued in the March quarter. Growth in







nominal retail sales values has continued to slow; this slowing was broadly based but was particularly pronounced in discretionary goods categories such as household goods and clothing and footwear (Graph 2.11). Retail prices increased in the March quarter, and the volume of retail sales is estimated to have continued to decline. These data are consistent with information from the Bank's liaison program that spending has continued to moderate and retail volumes have declined since the start of the year (see Box A: Insights from Liaison). Preliminary estimates suggest that spending on international travel increased a little in the March quarter following a weak December quarter outcome, to remain well below its pre-pandemic trend.

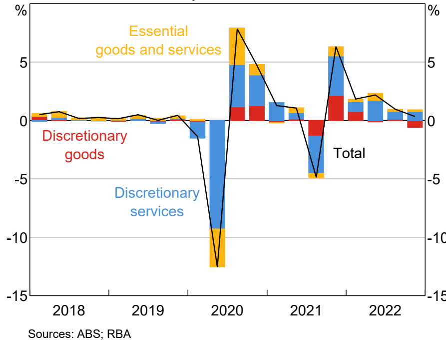
There are continued headwinds to household spending

Slower household income growth, higher cost of living and lower household wealth have all weighed on household spending. Household income growth slowed over the second half of 2022 as strong growth in labour income was offset by higher net interest payments and tax payable. Small business income declined over the year, as did social assistance payments – although the latter was at least partly due to more people gaining employment. The household saving ratio declined further in the quarter, to be a little below the average level that prevailed prior to the pandemic (Graph 2.12).

Graph 2.9

Household Consumption Growth

Quarterly with contributions

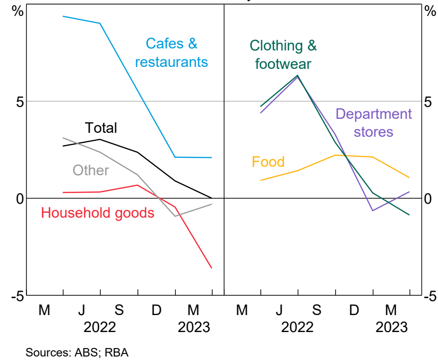


Sources: ABS; RBA

Graph 2.11

Growth in Retail Sales Values

Quarterly

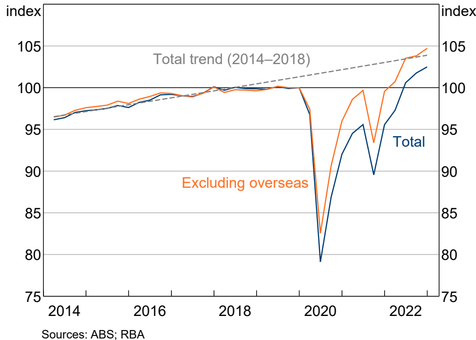


Sources: ABS; RBA

Graph 2.10

Services Consumption per Capita

December 2019 = 100

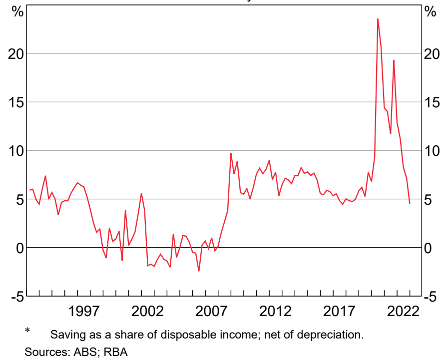


Sources: ABS; RBA

Graph 2.12

Household Saving Ratio*

Quarterly



* Saving as a share of disposable income; net of depreciation.

Sources: ABS; RBA

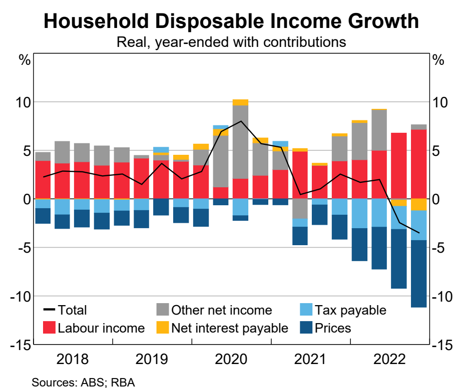
While slow growth in incomes represents a headwind to spending growth, this is partly mitigated by the distribution of employment income growth. The tight labour market has especially benefited lower income people, who tend to spend more of each extra dollar than those on higher incomes. Analysis of administrative employment data suggest that earnings growth in the year to the December quarter of 2022 was faster for lower income workers than higher income workers. Several factors are likely to have contributed to this. Previously unemployed people who gain employment typically benefit the most from strong labour market conditions. The significant reduction in underemployment has benefited lower income workers proportionately more than higher income workers. And wages growth has been relatively strong in lower skilled occupations (see Chapter 4: Inflation).

However, there are a number of other headwinds for household consumption growth. Adjusted for inflation, household disposable income declined by 3 per cent over 2022 (Graph 2.13). While that decline largely reflects rising consumer prices, higher taxes as a share of income have also contributed as gross nominal incomes have risen relative to income tax thresholds. Higher net interest payments are expected to put increasing pressure on household budgets as fixed-rate loans expire and cash rate increases are passed through to borrowers' payments with a lag (see Chapter 3: Domestic Financial Conditions). Real household net wealth also decreased by 10 per cent over 2022, driven by lower housing prices.

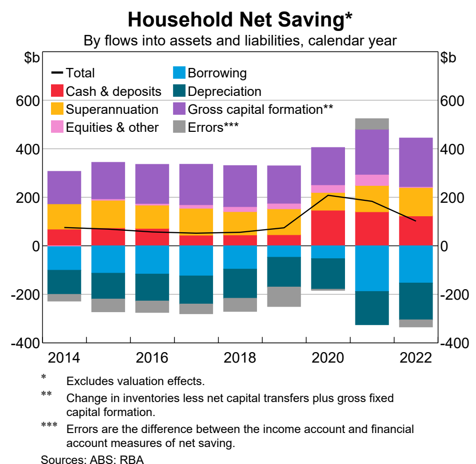
The extent to which these headwinds translate into continued subdued growth in consumption depends on how much households draw on their accumulated savings to smooth through current financial pressures. Many households have built up extra savings in recent years. In aggregate, households saved around an additional $300 billion during the pandemic, relative to pre-pandemic trends – equivalent to around 20 per cent of annual disposable income. A large share of this additional savings is relatively liquid and reflected in higher bank deposits (including offset accounts) (Graph 2.14). However, some of the additional savings have flowed into assets that are less readily available to support household consumption in the near term, such as superannuation accounts and spending on home renovations.

The pressure on household budgets from higher interest rates and inflation have contributed to a sharp decline in consumer sentiment, which is around the lows observed at the onset of the

Graph 2.13



Graph 2.14

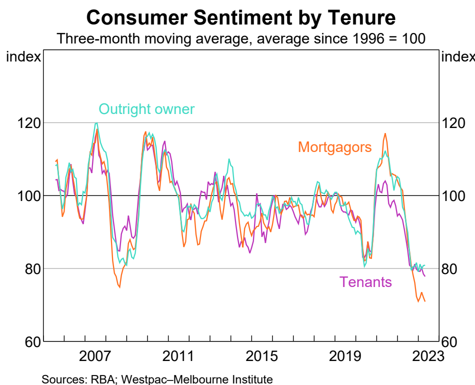


pandemic. Sentiment has been particularly weak for households with a mortgage on their home (Graph 2.15).

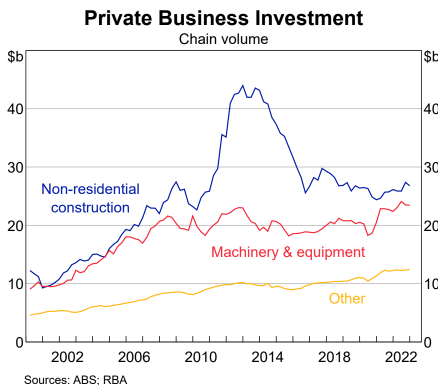
The outlook for business investment remains positive but has softened

Business investment decreased in the December quarter but remained around 3 per cent higher over 2022 (Graph 2.16). Non-residential construction investment has been supported by a significant pipeline of projects and an easing of materials supply constraints. Investment in machinery and equipment declined in the quarter, but remained at an elevated level, as firms in some industries sought to expand capacity following an extended period of above-average capacity utilisation.

Graph 2.15



Graph 2.16

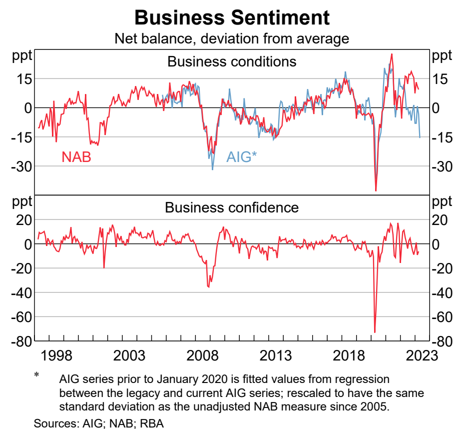


Survey measures of investment intentions, business conditions and information from liaison generally point to a positive outlook for business investment, although the outlook has softened. Business conditions generally remained around or above their long-run averages in the first part of 2023, although some indicators of business sentiment have since declined (Graph 2.17). The December quarter ABS Capital Expenditure Survey showed that, in aggregate, firms increased their expectations for investment in the 2022/23 financial year (Graph 2.18). The first estimate for the 2023/24 financial year also showed that firms intend to increase their nominal investment compared with the current financial year, though this may partly reflect higher input costs. Information from the Bank's liaison program suggests that some firms anticipate delays to investment projects resulting from labour shortages, and some smaller firms are focusing on conserving liquidity rather than investing.

Demand for new dwellings has fallen considerably

Dwelling investment decreased in the December quarter of 2022, to be around 4 per cent lower than a year earlier (Graph 2.19). While constraints on the supply of materials

Graph 2.17



have eased, poor availability of skilled tradespeople has continued to limit the pace at which firms have been able to work through the large pipeline of residential construction.

Looking beyond the pipeline of approved dwellings to be built, demand to purchase new detached housing remained exceptionally weak in early 2023. This reflects a range of factors, including higher costs of land and construction, falling established home prices (making them a more attractive alternative to building a new home) and poor buyer sentiment stemming from construction delays and builder insolvencies. Indicators such as building approvals, greenfield land sales and new home sales have declined to be around their lowest levels in at least a decade and some liaison contacts have reported that pre-construction cancellations have increased (Graph 2.20). Recent weakness in demand for new detached dwellings is expected to weigh on dwelling investment once the backlog of dwelling construction is worked through. Information from liaison suggests that investor demand for new higher density housing has also been low, despite an increase in rental yields on units.

Contacts in the Bank's liaison program have noted that some firms are experiencing cash flow issues and insolvencies have risen in the construction industry over the past year. This is because of the lengthening in detached dwelling completion times, along with substantial increases in construction costs and firms still working through fixed-price contracts signed prior to these increases.

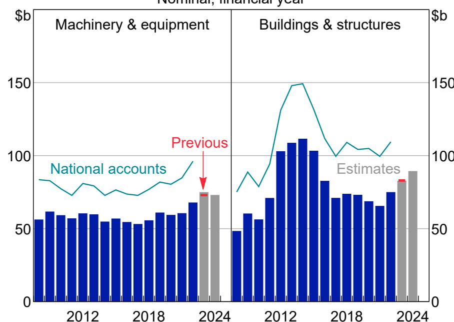
Housing prices have stabilised …

National housing prices have stabilised in recent months, as indicated by a range of data sources, following a decline of around 8 per cent since their peak in April 2022 (Graph 2.21). Prices remain 16 per cent above their pre-pandemic level. Strong underlying fundamentals for housing, such as population and income growth, have offset the effects of the higher cost of credit on housing prices nationally. The

Graph 2.18

Capital Expenditure Intentions*

Nominal, financial year



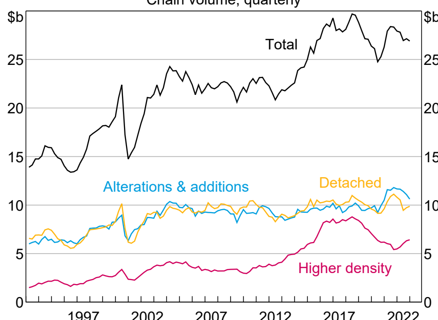
* Estimates are firms' expected capital expenditure; adjusted for past average differences between expected and realised spending.

Sources: ABS; RBA

Graph 2.19

Private Dwelling Investment

Chain volume, quarterly

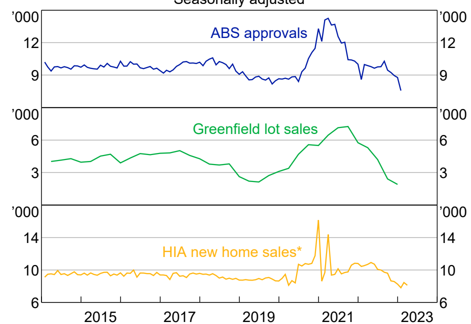


Sources: ABS; RBA

Graph 2.20

Detached Housing Activity Indicators

Seasonally adjusted



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

Sources: ABS; HIA; RBA; Research4

Table 2.1: Growth in Housing Prices
Per cent, seasonally adjusted

	April	March	February	Since recent peak	Year-ended	Since Feb 2020
Sydney	0.7	0.7	0.1	–12	–11	11
Melbourne	–0.1	0.1	–0.6	–10	–9	1
Brisbane	–0.3	–0.6	–0.4	–11	–10	26
Adelaide	–0.1	–0.2	0.1	–2	1	42
Perth	0.1	0.4	–0.4	–0	1	25
Darwin	–1.3	–0.7	–0.2	–3	–0	29
Canberra	–0.5	–0.8	–0.5	–10	–9	25
Hobart	–0.1	–1.0	–1.7	–13	–13	20
Capital cities	0.3	0.2	–0.3	–9	–8	12
Regional	–0.4	–0.4	–0.6	–8	–7	31
National	0.1	0.0	–0.4	–8	–8	16

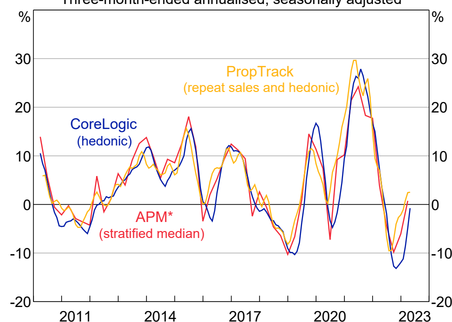
Sources: CoreLogic; RBA

combination of stronger demand, limited supply of properties and changes in the interest rate outlook has led to an earlier stabilisation in housing prices than expected by many market commentators; if maintained, this stabilisation will support the outlook for household wealth and consumption (see Chapter 5: Economic Outlook).

Housing price growth has been led by Sydney recently, driven by increases in the more expensive segments of the market. Housing prices continued to decline in most other areas, although the pace of decline has slowed further in most capital cities (Graph 2.22; Table 2.1). Housing market activity has picked up in recent months, as measured by auction clearance rates and housing turnover, but remains well below levels seen at the start of 2022. Survey measures of housing price expectations have also increased.

Graph 2.21

National Housing Price Growth
Three-month-ended annualised, seasonally adjusted



* Quarterly; capital cities only.
Sources: APM; CoreLogic; PropTrack; RBA

… and the rental market remains very tight

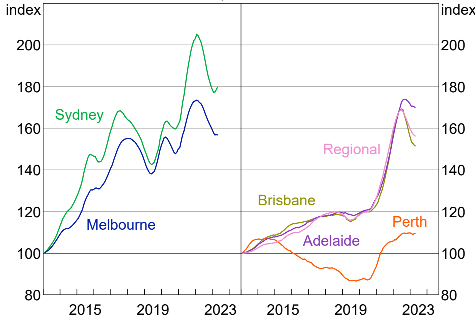
Rental vacancy rates have declined in most capital cities and regional areas over the past year. Declines have been largest in Melbourne and Sydney, where vacancy rates are now below long-run average levels (Graph 2.23). In other capital cities, vacancy rates are at historical lows. Stronger population growth has added to the demand for rental properties. The average household size has increased slightly in capital cities in recent months and has been increasing for some time in regional areas, where rental markets have been tighter for a longer period; this reverses a small part of the declines in average household size seen since the onset of the COVID-19 pandemic (Graph 2.24).

Growth in advertised rents (for new leases) has been strong, although the pace of growth has eased in recent months in some areas (Graph 2.25). In most states, rents growth in capital cities has been outpacing growth in regional areas. Rents have grown more strongly for units than houses, and rental yields for units have increased to be above pre-pandemic levels for most states.

Graph 2.22

Housing Prices

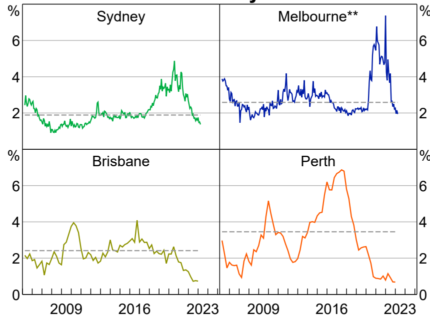
January 2013 = 100



Sources: CoreLogic; RBA

Graph 2.23

Rental Vacancy Rates*



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

** Linear interpolation made for March 2021 observation to smooth one-off spike.

Sources: RBA; REIA; REINSW; REIV

Public demand remains elevated

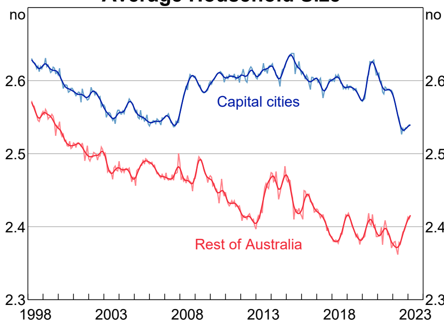
Public consumption as a share of nominal GDP remains high compared with the pre-pandemic period, supported by public spending programs such as the National Disability Insurance Scheme and aged care (Graph 2.26). A strong pipeline of infrastructure projects is expected to support public investment going forward, though ongoing labour and materials shortages may limit the pace at which work can be completed.

Services exports continue to grow as services imports stabilise

Export and import volumes have increased substantially since early 2022, driven by services trade, as students and tourists took advantage of the removal of travel restrictions (Graph 2.27). The trade surplus increased in early 2023, as export values rose and import values declined.

Graph 2.24

Average Household Size*



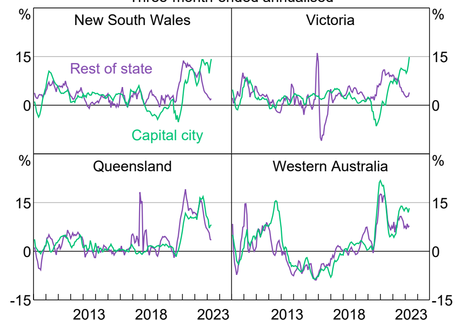
* Smoothed lines are 13-period Henderson trends.

Sources: ABS; RBA

Graph 2.25

Advertised Rents Growth*

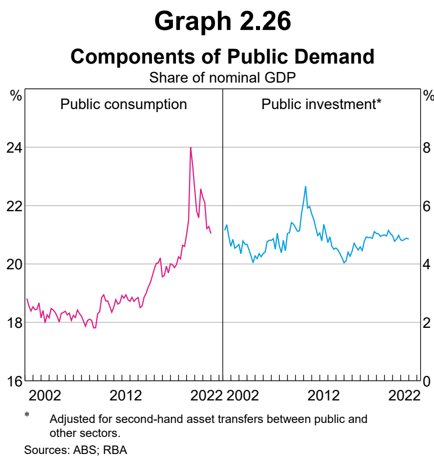
Three-month-ended annualised



* Hedonic; seasonally adjusted.

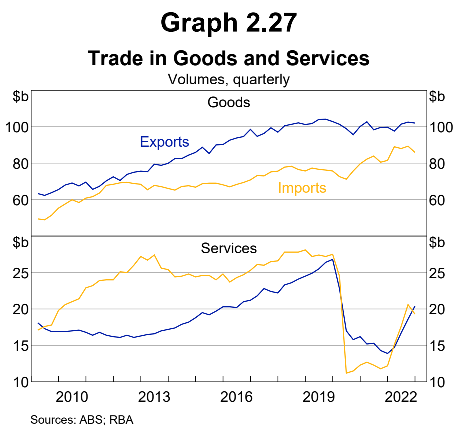
Sources: CoreLogic; RBA

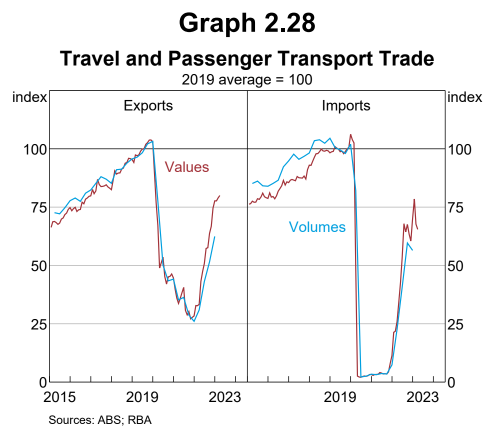
Services export volumes grew in the December quarter, driven by the ongoing recovery in tourism and education exports. The number of overseas arrivals and the value of travel exports suggest that services export volumes continued to increase in the March quarter (Graph 2.28). Student visa grants have risen to their highest level in at least a decade, which should support a further increase in education exports over the first half of this year. Preliminary travel data suggests the level of Australians' overseas travel spending has remained broadly steady since mid-2022.



Goods export volumes were flat in the December quarter as increases in bulk commodities and manufacturing exports were offset by declines in rural exports and non-monetary gold. Partial data indicate a mixed start to 2023 for resource exports, with higher LNG exports offset by lower coal exports. Coal exports have been trending down since 2019 as producers have faced ongoing production issues. Coal exports to China resumed in the March quarter in small quantities. Rural exports declined in the December quarter, though levels remain elevated following favourable weather conditions and tight global supply. Rural export values declined further in the March quarter.

There were broad-based declines in goods imports volumes in the December quarter. Pandemic-related manufacturing disruptions in China drove a decline in capital goods. There was also a broad-based decline in the imports of consumption goods, though this was partly offset by a large increase in the imports of vehicles as supply chain disruptions eased in the quarter. Partial data for the March quarter have been volatile but indicate some recovery in the value of capital goods imports, which is consistent with reports from firms in the liaison program that supply chain disruptions have eased over the past year.





Box A

Insights from Liaison

This Box summarises information collected by five Reserve Bank teams based in Adelaide, Brisbane, Melbourne, Perth and Sydney during discussions with around 250 businesses, industry bodies, government agencies and community organisations over the period from the beginning of February to early-May 2023. Further information on the Reserve Bank's liaison program is provided in the September 2022 *Bulletin* article 'The Reserve Bank's Liaison Program Turns 21'.

Information from the Bank's liaison program suggests that growth in private sector economic activity continued to slow over recent months as higher interest rates and the increased cost of living weighed on consumer demand. Retail spending looks to have declined slightly in real terms since the start of the year. Sales of new detached housing are very weak and firms continue to report financial stress in parts of the construction industry, consistent with the recent increase in business failures in the industry. Community services contacts have reported a sharp increase in demand for their services, in large part reflecting increased living costs for essentials such as rent, energy and food.

There is still a large pipeline of business investment to be delivered, although the sharp rise in costs means that, in real terms, investment at many firms may not increase over the period ahead. Hiring intentions remain positive but have moderated in response to softening demand and are slowing as some firms seek to contain costs. Firms generally report that inflationary pressures have eased and that this is expected to continue over the next 12 months. Reported wages growth has stabilised and expectations for wages growth in the next 12 months have moderated. Conditions for rural, commodity and services exporters and the domestic tourism sector remain relatively strong and these businesses are more optimistic.

Household sector

Growth in household spending has slowed

Retail contacts report that customers have gradually reduced their purchases of goods over recent months in response to cost-of-living pressures and in the context of a pivot to services consumption. Reported declines in sales volumes have so far been modest and some firms have continued to report strong year-ended sales growth over recent months. For stores that have seen a decline in sales recently, the shift in consumer demand is said to have been more noticeable in geographic areas that have below-average income. In these areas, firms have observed more consumers trading down to cheaper products within categories or reducing the number of items they purchase each trip.

Demand for leisure-related services has only recently seen some signs of softening. Domestic tourism demand has remained

strong, largely driven by leisure travel, with business travel demand expected to recover further over the next 12 months. Spending on entertainment and hospitality was reported to have been strong overall in recent months but with signs of slowing demand.

Looking to the period ahead, retailers expect the decline in retail sales volumes to continue over coming months, primarily driven by reduced spending in areas that tend to have below-average income. By contrast, tourism contacts are largely positive about the near-term outlook for domestic tourism demand, even though they expect cost-of-living pressures and the increases in interest rates to weigh on leisure demand in the latter part of the year.

Universities generally expect domestic student numbers to remain subdued, following flat or lower domestic university student commencement numbers in early 2023 relative to 2022. Contacts attribute this subdued demand to potential students choosing to work rather than pursue full-time study amid strong labour demand. By contrast, demand from overseas students has picked up strongly (see below).

More people are turning to community services for assistance

Community services organisations have raised concerns regarding the sharp increase in demand for their services over recent quarters, including for financial aid, domestic violence and acute mental health support, food bank services and housing assistance. They note that there has been a rise in the number of people seeking assistance for the first time, including renters and people with mortgages. There are also reports of an increasing number of people presenting with multiple personal debts. These organisations note that those seeking assistance have often already significantly rationalised how they are spending and that in many cases this includes reducing their spending on essential goods and services.

The increase in demand for their services has mainly been attributed to increased living costs from high inflation – for example, on rent, energy and food. Moreover, community services organisations have stated that they are finding it very difficult to meet this increased demand as they face staffing and volunteer shortages and higher costs. These organisations are also concerned about their ability to meet future demand given their funding levels.

Business sector

The outlook for business investment is steady

Most contacts plan to maintain nominal investment at or above average levels over the next 12 months. A large pipeline of renewable energy, transport, storage and infrastructure construction is planned. However, many contacts report that the high level of investment spending intentions is largely due to the costs of materials, labour and equipment having risen. In real terms, it is possible that non-mining investment over the period ahead will be relatively flat for these firms. Some firms, particularly smaller businesses, said they have already reduced their investment plans because of the increases in interest rates and their uncertainty regarding the macroeconomic outlook.

Liaison suggests that resources investment will increase over coming years, driven by bulk commodity projects and supported by

investment in minerals used in the production of batteries, particularly for electric vehicles. The expected timing of some bulk commodity projects has been delayed over recent months, which in a few cases is said to be partly due to delays in receiving approvals.

Firms have continued to note that difficulties in securing appropriately skilled labour are delaying the progress of their investment. Such challenges also pose a downside risk to the investment outlook. Most firms have said that finance remains readily available, although the cost of debt has increased in line with the increases in the cash rate. Financial conditions are tighter in the construction industry (see below) and for businesses exposed to fossil fuels.

Residential construction activity is expected to decline

The current level of residential construction activity is being supported by the backlog of work. Completion times have improved over recent months, but shortages of trade labour are contributing to ongoing project delays. The level of residential construction activity is expected to decline around the latter part of this year following the sharp decline of sales since mid-2022.

Sales of new detached housing and off-the-plan apartments are at very low levels, which firms attribute to the increases in interest rates, higher prices for land and construction, as well as poor consumer sentiment. Households are concerned about lengthy build times, builder insolvencies and declines in established house prices. Some contacts noted that cancellations have increased, partly because purchasers are struggling to obtain the requisite finance. A few contacts also noted that some projects have been scaled back to manage cost increases.

Firms continue to report that financial stress and insolvency risks in parts of the construction industry are elevated; this has been a feature of discussions with firms in this industry since early 2022. A key issue highlighted by firms as having contributed to these stresses was much higher-than-expected increases in costs that, in many cases, were not passed on to customers because of the use of fixed-price contracts. Construction firms have also experienced several difficult years that included COVID-19-related disruptions and poor weather, which contributed to a significant increase in build times of around six to nine months in many cases. Many firms are still absorbing cost increases through lower margins for delayed projects. Cost pressures for new projects have eased, although costs relating to trade labour and energy-intensive materials such as bricks and concrete are continuing to increase.

Despite these challenges, some industry contacts are optimistic about the medium-term outlook, citing strong underlying demand for housing due to low rental vacancy rates and strong population growth.

Services exports are expected to continue to grow over the period ahead

A bounce-back in international student commencements is supporting growth in services exports. Commencements at most universities have recovered further over recent months and are expected to continue doing so over coming months. Students have largely returned to studying onshore, which brings their spending on living expenses into the scope of services exports. The rebound in demand has been strongest from South Asia.

International student enrolments in the vocational education and training sector (where courses are typically of shorter duration) have already exceeded pre-pandemic levels.

The number of international tourists has also grown over recent months. Contacts expect the recovery in international tourism to continue but to take some time to reach pre-pandemic levels; views on when this is expected range from the end of this year to sometime in 2026. Flight capacity to and from Australia is gradually improving but is still regarded as a constraint on a full recovery. There is also uncertainty over the speed of return of Chinese tourists.

Liaison discussions indicate that bulk commodity export volumes are expected to remain broadly steady in the near term, before increasing moderately over coming years. Exports of non-bulk commodities will be boosted over the period ahead by investment to expand the production of battery-related minerals that is currently underway in response to elevated prices. Despite a difficult year for many farmers affected by flooding and labour shortages, Australia's aggregate rural exports have been supported by recent favourable weather conditions and bumper harvests. Contacts suggest the outlook for rural exports remains favourable but drier domestic conditions and improved global supply of agricultural commodities is expected to lead to a decline in rural exports over the next 12 months from the very high levels seen in the past couple of years.

Hiring intentions have moderated and labour availability has improved

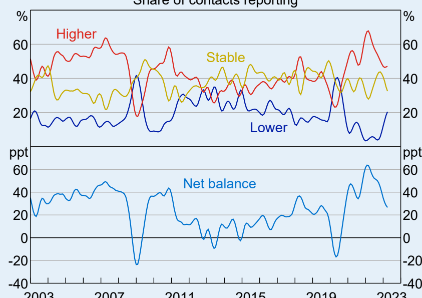
The hiring intentions of liaison contacts have moderated over the past few months, although they remain positive overall (Graph A.1). This is in response to the softening in the demand environment as well as an effort to focus more on cost containment. The easing in firms' employment intentions has been broadly based across industries and intentions are now back to around levels seen in the lead up to the pandemic. Firms connected to the residential property sector have pulled back their hiring intentions more sharply, as the existing pipeline of work starts to approach completion and new orders have declined.

Sourcing labour has become a little easier for most firms in recent months. Staff turnover rates have also generally declined. However, both labour availability and turnover remain more difficult for firms than prior to the pandemic and some firms report little improvement in conditions. For firms that have found that hiring conditions have improved, some contacts have linked this to an increasing availability of both skilled and unskilled foreign workers in recent months.

Graph A.1

Employment Intentions*

Share of contacts reporting



* Over the year ahead; smoothed with a 13-month Henderson trend.

Source: RBA

Costs and prices

Contacts report their wages growth has stabilised at around 4 per cent, but expect growth to moderate in the near term

Firms reported that year-ended growth in private sector wages has remained around 4 per cent in recent months. A smaller share of firms reported wage increases above 5 per cent than was the case in the latter part of 2022 (Graph A.2). Overall, reported wages growth over recent months remains above pre-pandemic growth rates in all industries, and the distribution of current wages growth is broadly similar to that seen during the previous period of tightness in the labour market in the mid-2000s. Firms continue to report the use of non-base wage payments to attract and retain workers.

Wages growth expectations for the next 12 months have moderated over recent months and in aggregate are now around 3¾ per cent. Factors noted by those firms expecting wages growth to slow include softening business conditions, increased internal focus on cost control, lower voluntary turnover and improved labour availability. Expectations of lower wages growth are more common among firms in business services and goods production industries, and are most evident for roles that experienced larger wage increases over the past 12–18 months.

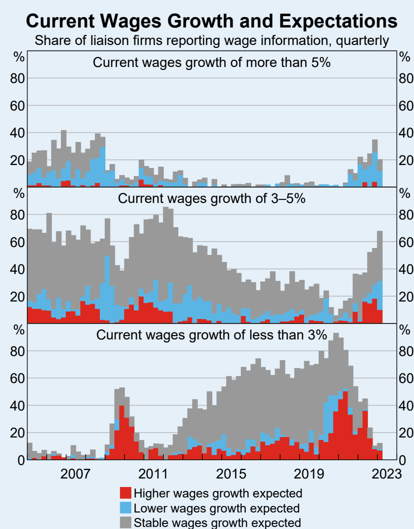
Some firms negotiating new enterprise agreements expect wages outcomes to be higher than current or expired agreements, with expected outcomes generally ranging between 3 per cent and 5 per cent on average. This year's Fair Work Commission decision has been noted as a key uncertainty for firms whose wages are directly or indirectly linked to award rates.

The pace of growth in firms' total costs is easing

Many contacts have reported a slowing in the pace of input cost increases over recent months. The cost of imported goods has declined as international supply chains have normalised. International freight rates paid by firms have declined further over recent months as contracts have been renegotiated, supported by slowing global demand and increased shipping capacity.

By contrast, firms report that some of their domestic costs have increased further over recent months, particularly for energy, wage bills and logistics. Firms on the east coast report large increases in their energy costs where prices are variable or contracts have been renewed. Some contacts report that they have been less exposed to rising energy prices because of pre-existing long-term contracts or access to cheaper renewable energy. Firms report that parts of domestic supply chains are still strained, primarily due to shortages of pallets and truck drivers, and

Graph A.2



Source: RBA

some continue to hold elevated levels of inventory as a precaution, adding to logistics costs.

Firms expect their aggregate cost inflation to ease further over coming months. They expect their imported costs to continue to decline but for growth in their domestic costs to remain relatively strong.

Price inflation is expected to moderate gradually

Firms expect to increase their prices at a more moderate pace over the next 12 months than they did over the past year. That said, many firms expect that their prices will continue to grow at above pre-pandemic rates. Some firms have said they will try to maintain or recover their margins as they deal with higher costs, while some services firms said they intend to increase their prices to incorporate the higher labour costs they now face. A small number of non-food retailers have said they might cut prices as the costs of imported goods and freight declines.

Many firms have, however, highlighted that the pricing environment is quite uncertain and economic conditions could evolve differently from what they expect. Firms also indicate that their competitors' behaviour and demand conditions are important factors in their pricing decisions.

Box B

Have Business Profits Contributed to Inflation?

In a number of countries, high inflation after the COVID-19 pandemic has been accompanied by high corporate profits and falling real wages. This has prompted a debate in Australia and overseas about the role that changes in firms' profit margins have played in driving inflation.[1] Researchers at some international central banks have noted that changes in profit margins have contributed to higher inflation in those economies.[2] This debate has particular resonance at a time when household budgets are being stretched by rising prices and interest rates, because it bears on perceptions of how fairly the nation's income is being split between workers' income and corporate profits.

A rise in profit margins may be a causal factor in the increase in inflation if firms facing limited competition have taken advantage of higher inflation to raise their markup over input costs. Alternatively, rather than a driver of inflation, increased profit margins could simply be a by-product of strong demand in markets where firms are price-takers and prices have risen to match demand to limited supply, or margins could have increased temporarily in anticipation of future cost increases.

This Box sets out some of the available data for Australia at the aggregate, sectoral and firm level. There is little evidence that there has been a broad-based increase in domestic non-mining profit margins, suggesting that changes in domestic profit margins have not been a significant independent cause of the increase in aggregate CPI inflation. For example, outside of the mining sector – where output prices reflect the balance of demand and supply in global markets – aggregate profits have grown at a similar pace to labour income, with some variation between non-mining sectors.[3] At the firm level, there has been little change in the distribution of margins. These observations are consistent with firms having generally passed on higher costs to maintain their profit margins, and aggregate inflation having been driven by the balance of demand and supply factors – rather than changes in firms' pricing power.[4]

The profit share of income in Australia is little changed outside of the mining sector

The Australian National Accounts data on private non-financial profits indicate that the aggregate profit share of income has grown strongly since the start of 2021.[5] This suggests that aggregate profits increased faster than labour income. However, this largely owed to strong growth in mining sector profits, which were driven by commodities prices set in global markets, based on the balance of global supply and demand (Graph B.1).

A large portion of the increase in mining sector profits has reflected higher iron ore and base metals prices over this period. This has little direct effect on the prices that domestic consumers face as these commodities are exported in much larger

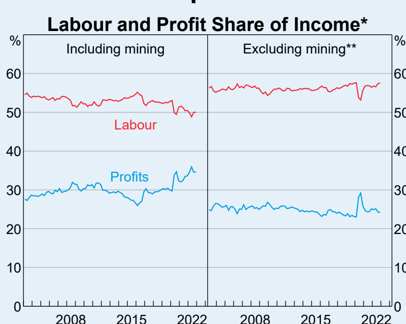
volumes than are used as inputs to domestic production.[6] That partly explains why the GDP deflator increased by 3¼ percentage points more than consumer prices over the two years to December 2022. In addition, mining profits earned on iron ore and base metals are not likely to have contributed significantly to inflationary pressures via domestic demand, as a large share have either been remitted to foreign shareholders or retained as windfall tax revenues by Australian governments.

Higher energy prices over the past year, driven by global factors, have also contributed to the elevated level of the mining sector profit share. This has benefited Australian energy producers while raising costs for other firms and households – for example, via increases in wholesale and retail gas prices in Australia (see Chapter 4: Inflation).[7] While higher energy prices have simultaneously boosted energy producers' profit margins and consumer price inflation, the primary underlying cause is global energy market conditions rather than higher markups in the energy sector independently driving prices.

Excluding the mining industry, the aggregate profit share (i.e. non-mining profits divided by non-mining output) has been little changed over most of the past decade, looking through the volatility in the early stages of the COVID-19 pandemic. The profit share at the end of last year was slightly higher than in 2019, but it had fallen over 2022 and was below its average level over the previous 10 years. Excluding small business owners' income, the profit share was little changed compared with 2019.[8] If rising domestic profit margins were a significant independent driver of inflation, profits would instead have increased significantly relative to labour income over the past year. The profit share has, however, been broadly stable across most industries over the past year and the proportion of industries that saw a rise – or fall – in their profit share has been broadly in line with long-run averages. Similarly, profit shares in the household services and goods-related sectors, which tend to comprise of more consumer-facing firms, have been little changed recently (Graph B.2).

Graph B.1

Labour and Profit Share of Income*



* Shares do not sum to 100 per cent due to the exclusion of the gross operating surplus of public corporations, financial corporations, general government and dwellings.

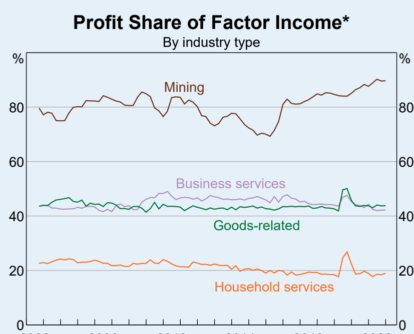
** Profits excluding the mining sector and labour income excluding the mining sector, both expressed as a share of total non-mining income.

Sources: ABS; RBA

Graph B.2

Profit Share of Factor Income*

By industry type

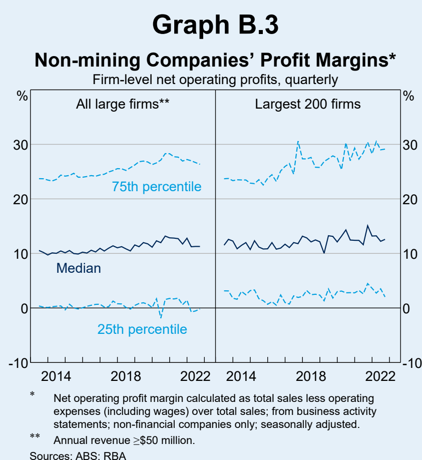


* Profits include gross mixed income.

Sources: ABS; RBA

Firm-level net profit margins have not substantially widened outside of the mining sector

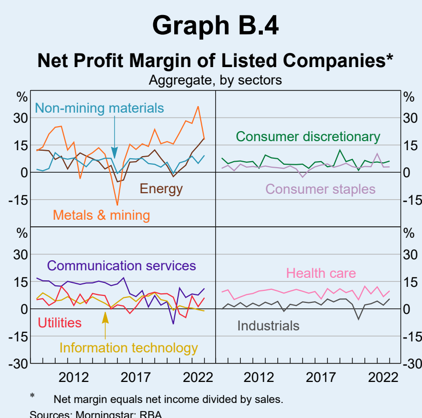
Consistent with the trends in profit shares, detailed firm-level data suggest that large non-mining firms' pricing behaviour has not changed materially as of the September quarter of 2022 (the latest available data). The distribution of net operating margins, which measure the extent to which firms' revenues exceed their wages and other operating costs, has remained largely unchanged relative to 2019 (Graph B.3).[9] This implies that these firms have increased their prices broadly in line with growth in their average costs. Among the 200 largest firms, some highly profitable firms have been able to gradually increase their margins over this period.[10] However, this is unlikely to have played a major role in driving the recent rise in aggregate inflation as the widening in margins has been ongoing since 2016 and the increase has been much less pronounced over the past year or so. The firm-level trends presented here are broadly consistent with information from ASX-listed companies' financial reports for the second half of 2022, which showed that aggregate profit margins remained within historical ranges in most sectors (Graph B.4). ✠



* Net operating profit margin calculated as total sales less operating expenses (including wages) over total sales; from business activity statements; non-financial companies only; seasonally adjusted.

** Annual revenue ≥$50 million.

Sources: ABS; RBA



* Net margin equals net income divided by sales.

Sources: Morningstar; RBA

Endnotes

[1] See, for example, Stanford J (2023), 'Profit-Price Spiral: The Truth Behind Australia's Inflation', The Australia Institute; Weber I and E Wasner (2023), 'Sellers' Inflation, Profits and Conflict: Why Can Large Firms Hike Prices in an Emergency?', Economics Department Working Paper Series No 2023–2; Glover A, J Mustre-del-Rio and A von Ende-Becker (2023), 'How Much Have Record Corporate Profits Contributed to Recent inflation?', Federal Reserve Bank of Kansas City Economic Review, January; Brainard L (2023), 'Stating the Course to Bring Inflation Down', Speech at the University of Chicago Booth School of Business, Chicago, 19 January.

[2] Researchers have noted that pass-through from costs to prices has been higher in the past couple of years than prior to the pandemic, that retail markups have increased or that profits have increased by more than labour income in recent years, resulting in a decline in the labour share of income. See Arce O, E Hahn and G Koester (2023),

‘How Tit-for-tat Inflation Can Make Everyone Poorer’, The ECB Blog, 30 March; Beaudry P (2023), ‘No Two Ways About It: Why the Bank is Committed to Getting Back to 2%’, Speech at the Alberta School of Business, Edmonton, 16 February; Glover *et al*, n 1.

[3] For an analysis of longer run trends in the profit share, see La Cava G (2019), ‘The Labour and Capital Shares of Income in Australia’, RBA *Bulletin*, March. Available at <https://www.rba.gov.au/publications/bulletin/2019/mar/the-labour-and-capital-shares-of-income-in-australia.html>

[4] See RBA (2023), ‘Box C: Supply and Demand Drivers of Inflation in Australia’, *Statement of Monetary Policy*, February. Available at <https://www.rba.gov.au/publications/smp/2023/feb/box-c-supply-and-demand-drivers-of-inflation-in-australia.html>

[5] The profit share of total factor income comprises of income accruing to capital owners as gross operating surplus (GOS) and to unincorporated business owners as gross mixed income (GMI). GMI, which accounts for a small share of private non-financial profits, includes both labour and capital income and it is not simple to separate out their respective contributions. For simplicity, GMI has been included in its entirety in profits in the below analysis. Private non-financial GOS, GMI and compensation of employees together comprised around 85 per cent of total factor income in the December quarter of 2022. The remaining 15 per cent is accounted for by public corporations GOS, financial corporations GOS, general government GOS and dwellings GOS.

[6] For further discussion and estimates of mining sector input to domestic final demand, see Rayner V and J Bishop (2013), ‘Industry Dimensions of the Resource Boom: An Input-Output Analysis’, RBA Research Discussion Paper No 2013-02. Available at <https://www.rba.gov.au/publications/rdp/2013/2013-02.html>

[7] See also RBA (2022), ‘Box A: Recent Developments in Energy Prices’, *Statement of Monetary Policy*, August. Available at <https://www.rba.gov.au/publications/smp/2022/aug/box-a-recent-developments-in-energy-prices.html>

[8] That is, the income share of gross operating surplus of private non-financial corporations, excluding the mining sector, is little changed compared with 2019. This measure excludes GMI.

[9] This analysis is limited to large firms (annual revenue above $50 million) as they account for the majority of economic activity. For a discussion including smaller firms’ net operating margins, see RBA (2023), ‘Household and Business Finances in Australia’, *Financial Stability Review*, April. Available at <https://www.rba.gov.au/publications/fsr/2023/apr/household-business-finances.html>

[10] This result also holds when the 200 largest firms are weighted by size.

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3. Domestic Financial Conditions

Australian financial conditions have tightened a little further in recent months. The Reserve Bank has increased the cash rate target and the rate on Exchange Settlement (ES) balances by a further 50 basis points since the previous *Statement* to 3.85 per cent and 3.75 per cent, respectively. Market pricing currently suggests that financial market participants assign some chance to a further increase in the cash rate.

Money market rates have risen alongside increases in the cash rate target this year. Australian Government Securities (AGS) yields are lower and have continued to trade in a relatively wide range, in line with moves in US Treasury yields. AGS yields rose in February as market expectations for the cash rate were revised higher following the February Reserve Bank Board meeting and because stronger-than-expected US data led to higher yields globally. Yields subsequently declined and trading conditions in bond markets deteriorated following the collapse of Silicon Valley Bank (SVB) in the United States in March and the resulting concerns around other banks offshore. Yields subsequently moved higher again, including for a time after the cash rate target was increased at the May Board meeting.

Banks' funding costs continued to increase in the March quarter of 2023, as the cash rate and bank bill swap rates (BBSW) rose. Banks increased both lending and deposit rates, although both have risen by less than the cash rate. Scheduled mortgage repayments have increased further and will continue to rise largely because more fixed-rate loans will roll off onto higher mortgage rates over the next year. Extra payments into offset and redraw accounts had been declining as scheduled payments picked up, but extra payments picked up somewhat in the March quarter. Commitments for new housing loans have declined sharply over the past year and housing credit growth has continued to ease; there are signs, however, that housing market activity has stabilised in recent months. Business credit growth has continued to slow from earlier rapid rates.

The Australian dollar has depreciated over recent months alongside a decline in the prices of Australia's key commodity exports, while the yield differential between AGS and those of the major advanced economies is little changed from its levels in early February, having increased of late. Despite the recent depreciation, the Australian dollar is around its levels in early 2022 on a trade-weighted (TWI) basis.

AGS yields have declined

Yields on AGS have traded in a wide 70 basis point range and are around 30 basis points lower since the previous *Statement* (Graph 3.1).

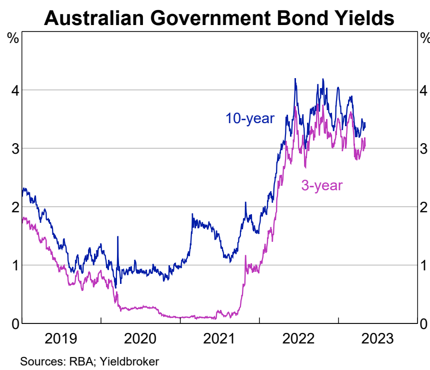
Yields had moved higher following the Bank's communication about the February Board decision – as market participants revised up their expectations for the future path of monetary policy – and US economic data was stronger than expected. However, in March there was a sharp move lower in AGS yields in line with the decline in global bond yields that occurred following the collapse of SVB. Yields have subsequently stabilised but remain near the bottom of their recent range, with concerns

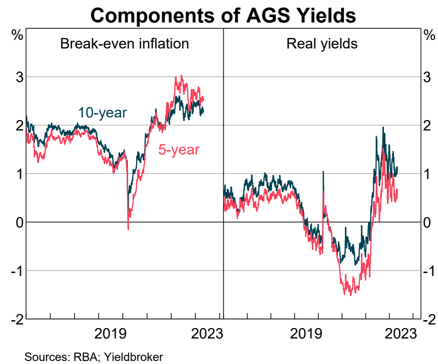
about some banks in the United States continuing to linger. There was little lasting impact on yields following the May Board decision to increase the cash rate target by 25 basis points.

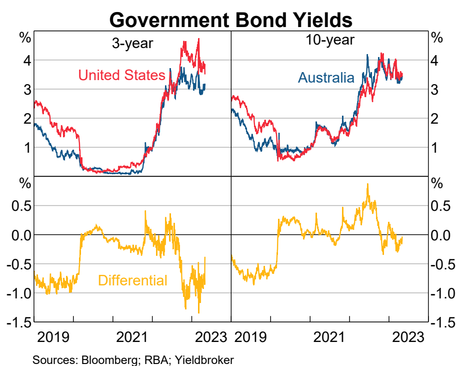
The differential between yields on 10-year AGS and US Treasuries has declined a little since the last *Statement* and currently sits around zero (Graph 3.2). Short-term yield differentials have become less negative, although yields on Australian securities remain notably lower than yields on equivalent US securities. This is consistent with the higher expected level of the US Federal Funds rate compared with the Reserve Bank cash rate.

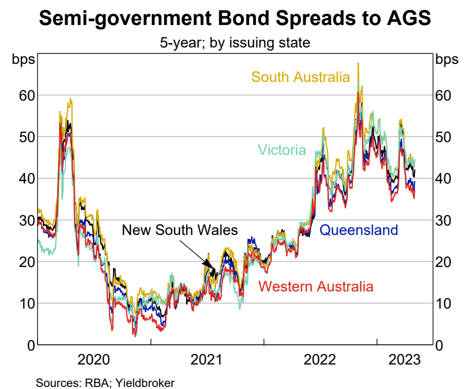
Movements in longer term AGS yields continue to be largely driven by movements in real yields, reflecting changes in expectations for policy rates over the near term (Graph 3.3). By contrast, break-even inflation rates have remained relatively stable and well anchored. This implies that market participants expect monetary policy tightening to be sufficient to keep inflation around the target range over the medium term.

Yields on semi-government securities (semis) have moved in line with AGS yields, and so their spreads to AGS are little changed since the last *Statement* (Graph 3.4). The spread between yields on semis and AGS rose in March, largely reflecting a rise in risk premia and a widening of swap spreads that occurred due to the increase in concerns about banks offshore. However, these spreads subsequently narrowed as the volatility in bond yields abated.









Bond market conditions deteriorated for a time as concerns rose about offshore banks

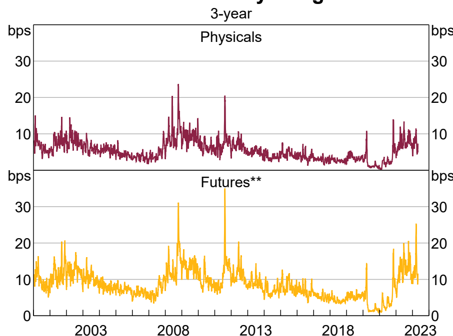
Conditions in bond markets temporarily deteriorated alongside the collapse of SVB. Bond volatility rose around this time and bid-offer spreads on AGS and semis widened, although these moves were not as severe as those observed around the onset of the pandemic in March 2020. Trading conditions normalised relatively quickly with volatility and bid-offer spreads returning to the relatively low levels observed earlier in the year (Graph 3.5).

Demand to borrow AGS from the Bank has declined in recent months, with an average of around $4 billion of bonds per day borrowed from the Bank's stock by market participants since the previous *Statement*. Demand remains focused on bonds with residual maturities of one to three years, particularly those where the stock available in private markets is more limited because of the Bank's earlier purchases (Graph 3.6). Bond dealers borrow these bonds to help settle their own transactions and the transactions of their clients. By lending these bonds back into the market for short periods, the Bank supports the functioning of government bond markets.

Graph 3.5

Bonds Intraday Range*

3-year



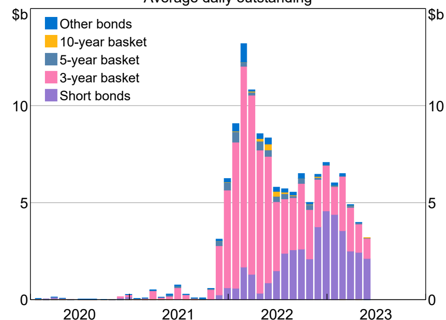
* Ten-day moving average.
** Includes overnight session.
Sources: Bloomberg; RBA

The size and pace of government bond issuance by the Australian Office of Financial Management (AOFM) in 2023 has so far been well below issuance in recent years (Graph 3.7). In January the AOFM lowered its 2022/23 fiscal year issuance guidance to around $85 billion (from around $95 billion previously). Of this, around $74 billion has already been completed. Semis issuance has remained strong in 2023, with issuance to date higher than observed in recent years. This continued to be the case in March and April despite volatility in financial markets following the collapse of SVB.

Graph 3.6

RBA and AOFM Securities Lending*

Average daily outstanding

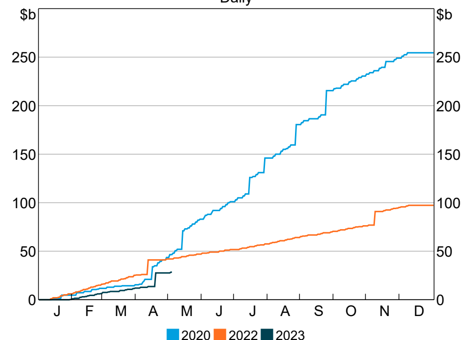


* Face value; last bar indicates month-to-date.
Source: RBA

Graph 3.7

Cumulative AGS Issuance*

Daily



* Cumulative value for each year.
Sources: AOFM; RBA

The cash rate has increased and market pricing implies participants see some chance of a further increase

The Reserve Bank has increased the cash rate target and the rate on ES balances by a further 50 basis points since the previous *Statement* to 3.85 per cent and 3.75 per cent, respectively. Market pricing implies that expectations for the peak in the cash rate have declined since the time of the last *Statement*; prices for overnight indexed swap (OIS) contracts currently imply that the cash rate is close to its expected peak of around 3.85 per cent compared with over 4 per cent last quarter, with some chance for one additional rise in coming months. Since March, uncertainty over the stability of some US banks has reduced market expectations of policy rate increases in a number of countries, including in Australia. Some market economists now expect an additional increase in the cash rate target later this year, but the median expectation is for no further increase (Graph 3.8).

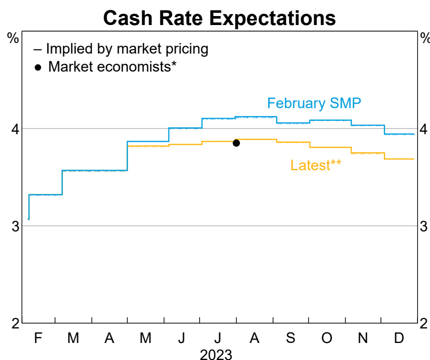
Transaction volumes in the cash market have picked up a little in recent months, with the cash rate determined by market transactions on most days. The cash rate has remained at a modest margin below the cash rate target, currently 3 basis points.

Money market rates have continued to rise

Short-term money market rates have continued to increase, including BBSW, consistent with the rise in the cash rate (Graph 3.9). While the spread between BBSW and OIS widened for a time following the collapse of SVB, this largely reflected a decline in OIS rates rather than credit concerns surrounding Australian banks (which would have seen BBSW rates move materially higher). The cost of Australian dollar funding from offshore short-term issuance (via the foreign exchange swap market) has also increased since the previous *Statement*, about in line with moves higher in domestic money market rates.

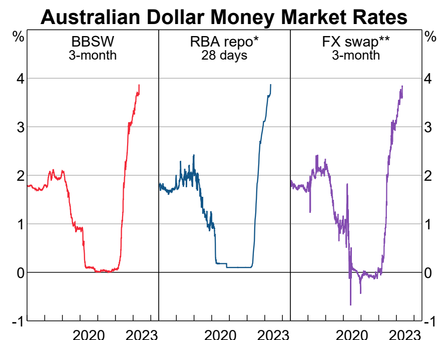
Repurchase agreement (repo) rates at the Bank's regular open market liquidity operations (OMO) have also increased further, with the OMO hurdle rate continuing to be set at term-matched OIS plus a modest spread. This rate was 3.88 per cent at the OMO immediately following the May Reserve Bank Board meeting. Demand for short-term Australian dollar liquidity obtained at OMO remains modest. Although volumes increased a little around the time of the SVB collapse, demand was not unusually high over this period.

Graph 3.8



* Median peak rate called by market economists at both February SMP and April 2023; peak rate timing ranges mostly from March quarter 2023 to September quarter 2023.
** Latest projections as at May 2023.
Sources: Bloomberg; RBA

Graph 3.9



* Weighted average rate for morning open market operation repos.
** Implied AUD rate based on covered interest parity.
Sources: ASX; Bloomberg; RBA; Tullet Prebon; US Federal Reserve

The Term Funding Facility has started to unwind

Funding obtained by banks under the Term Funding Facility (TFF) has started to mature, with $3 billion having matured in April. The Bank established the TFF in March 2020 to support the economy by offering low-cost fixed-rate funding for three years to banks operating in Australia. To repay the TFF, banks will use some of the balances held in their ES accounts. ES balances will therefore decline by $84 billion in 2023 and a further $104 billion in 2024, with TFF maturities concentrated in the September 2023 and June 2024 quarters (Graph 3.10). Nonetheless, even after all loans from the TFF are repaid, aggregate ES balances will remain abundant by pre-pandemic standards.

ES balances qualify as high-quality liquid assets (HQLA) for the purpose of banks' regulatory liquidity ratios. On the other hand, around 90 per cent of the collateral that secured banks' TFF loans was self-securitised assets, which do not qualify as HQLA. Consequently, as the banking sector runs down its ES balances to repay the TFF, it will need to obtain other HQLA in order to maintain liquid asset ratios, which are currently well above regulatory requirements. Bank bond issuance has been very strong over recent months, with some of this funding likely to be used to purchase HQLA securities.

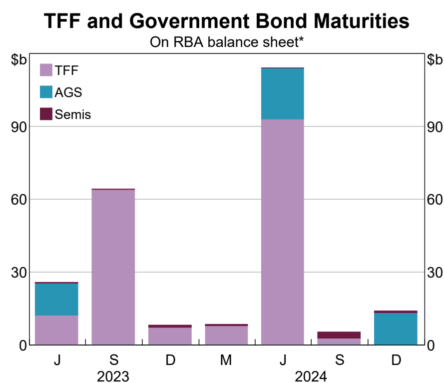
TFF loan maturities will add to bank funding costs, although the effect is expected to be small relative to the cumulative change in the cash rate. This reflects the fact that TFF loans account for around 5 per cent of banks' funding and that banks have hedged some of this borrowing (and hence funding costs) back to floating rates, which have already increased.

The Bank's balance sheet remains large but will decline noticeably over the course of this year

The Bank's balance sheet remains large by historical standards reflecting the monetary policy measures introduced in response to the COVID-19 pandemic (Graph 3.11). Since the previous *Statement*, the size of the balance sheet has decreased slightly to around $620 billion. The decline was primarily driven by the maturity of $13 billion of the April 2023 AGS held by the Bank. Separately, the outstanding size of the TFF has declined by around $3 billion following the first scheduled TFF maturities in April. On the liabilities side, government deposits rose alongside the syndication of a new December 2034 AGS, although this was partly offset by the April 2023 AGS maturity (Graph 3.12). The increase in government deposits and TFF maturities led to a decline in ES balances. The Bank's balance sheet will decline noticeably over the next few years as funding provided to banks under the TFF is repaid and the Bank's government bond holdings mature.

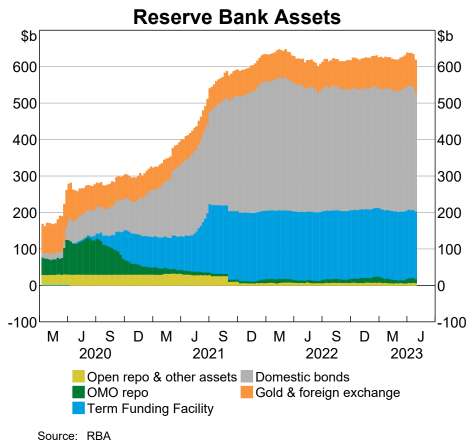
Bank bond spreads are little changed

Bank bond yields remain at about their levels of three months ago, with yields on three-year bonds now at around 4 per cent (Graph 3.13).

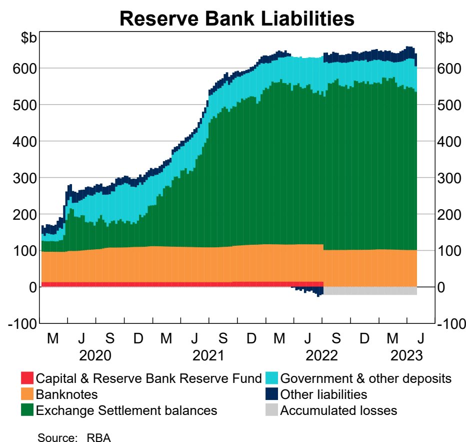


While the spread to the swap rate (a reference rate for the pricing of fixed-income securities) widened a little following the failure of SVB in the United States, it has recently narrowed. The spread remains around the average of the past year for major banks, and a little wider for smaller banks. Banks generally swap fixed-rate payments on newly issued bonds into floating-rate payments to match their floating-rate loan assets, and so it is the spread to swap that matters most for funding costs.

Graph 3.11



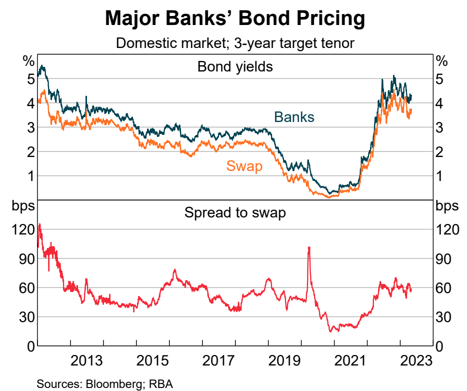
Graph 3.12



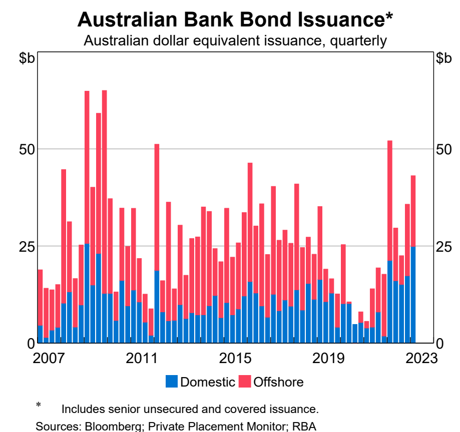
Bank bond issuance was high in the March quarter

Bank bond issuance was high in early 2023 (Graph 3.14). Banks raised $43 billion in bond markets over the March quarter, of which $25 billion was raised in the domestic market – the highest amount in over a decade. Covered bond issuance was around $9 billion. Much of this was issued in late March, which may have reflected a preference among some investors for secured rather than unsecured debt during a time of somewhat heightened financial market volatility. More recently, issuance has been slower, partly reflecting the fact that banks are ahead of their funding plans.

Graph 3.13



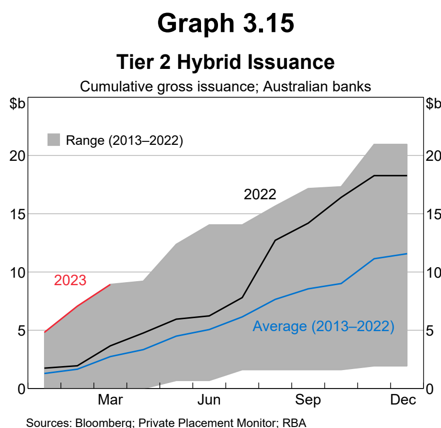
Graph 3.14

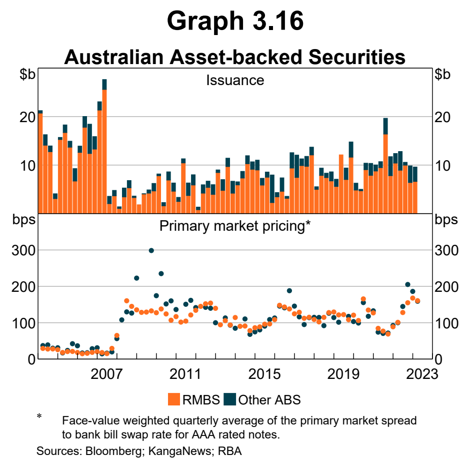


Banks issued $9 billion of Tier 2 hybrid securities in the March quarter – the highest level in over a decade (Graph 3.15). Most Tier 2 hybrids were issued by the major banks. Hybrid securities have both equity and debt features and can be used to fulfil a part of regulatory capital requirements. The Australian Prudential Regulation Authority has introduced new capital rules, coming into effect from 1 January 2026, which will substantially increase the major banks' loss-absorbing capital requirements; banks had been issuing hybrids in anticipation of this.

Issuance of asset-backed securities remained robust in the March quarter

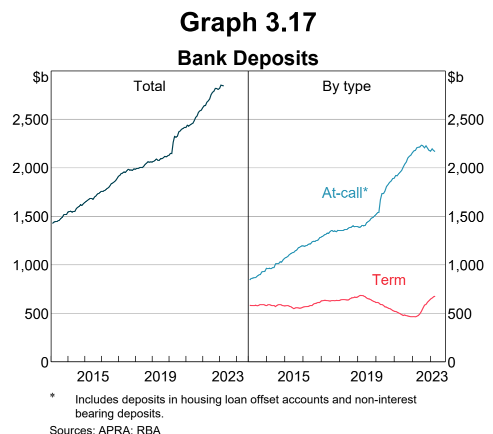
Issuance of asset backed securities (ABS) remained strong in the March quarter and continued to be driven primarily by non-banks (Graph 3.16). Non-bank lenders, which are more dependent on wholesale funding than banks, accounted for $9 billion of the $10 billion issued. While issuance slowed during mid-March, following the failure of SVB, it has since resumed with several deals being completed recently. Spreads on both residential mortgage-backed securities (RMBS) and other ABS remain at the wider end of the pre-pandemic range. Market liaison suggests that wider spreads in RMBS markets make RMBS issuance less appealing for banks compared with senior unsecured and covered bond issuance.





Growth in deposit funding has slowed and shifted towards term deposits

The total stock of deposits has grown more slowly in the last six months than during the pandemic – in part because credit growth has slowed, which means fewer deposits are created (Graph 3.17). Depositors have continued to shift from at-call deposits into term deposits, which offer significantly higher returns (see below).



Banks' funding costs continued to increase

Banks' overall funding costs rose in the March quarter of 2023, underpinned by higher BBSW rates (Graph 3.18). BBSW rates have increased due to both actual and expected changes in the cash rate. Much of banks' wholesale debt and deposit costs are linked to BBSW rates either directly or through banks' hedging. This includes banks swapping foreign-currency denominated and fixed-rate liabilities into floating-rate exposures that reference BBSW.

There has been little impact on Australian banks' overall funding costs following the failure of SVB in March. As discussed above, bank bond issuance has also remained elevated recently as banks prepare for TFF maturities.

Deposit and lending rates have increased by less than the cash rate

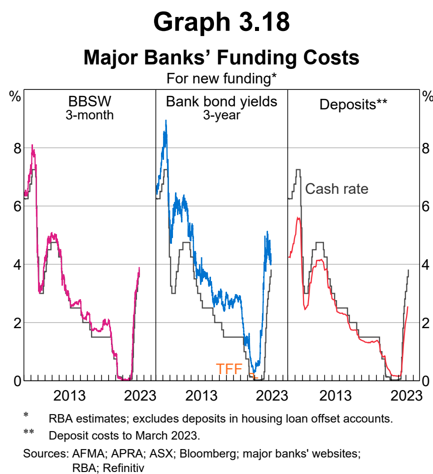
As the cash rate has risen, banks have increased both lending and deposit rates, although both have increased by less than the cash rate (Graph 3.19). The average rate charged on all outstanding loans to households and businesses has increased by around 100 basis points less than the cash rate increases to March (the latest available data). Housing loans (which make up around two-thirds of total credit) account for much of this difference, due to the material share of fixed-rate loans outstanding and strong competition among banks for new and existing customers. The average rate on outstanding business loans has moved more closely in line with the cash rate. The average rate on outstanding deposits has increased by around 120 basis points less than the cash rate, due to lower pass-through to some at-call deposit accounts. Given that lending rates have risen by more than deposit rates, banks' net interest margins have ticked up a little, although they remain lower than before the pandemic.[1]

In February, the Treasurer directed the Australian Competition and Consumer Commission to conduct an inquiry into the market for retail deposits, including on the interest rates paid on deposits and the nature and extent of competition in the supply of retail deposits.[2] The inquiry report is due in December this year.

Deposit rates have risen more on some products than others

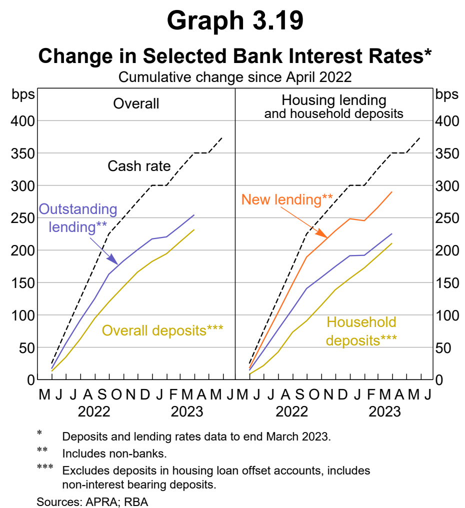
The average rate on outstanding at-call deposits, which comprise around three-quarters of total deposits, increased 210 basis points in the 12 months to March (Graph 3.20). This includes around 15 per cent of at-call balances on which

Graph 3.18
Major Banks' Funding Costs
For new funding*



* RBA estimates; excludes deposits in housing loan offset accounts.
** Deposit costs to March 2023.
Sources: AFMA; APRA; ASX; Bloomberg; major banks' websites; RBA; Refinitiv

Graph 3.19
Change in Selected Bank Interest Rates*
Cumulative change since April 2022



* Deposits and lending rates data to end March 2023.
** Includes non-banks.
*** Excludes deposits in housing loan offset accounts, includes non-interest bearing deposits.
Sources: APRA; RBA

banks pay no interest to depositors, although banks often hedge such deposits so their effective cost to banks increases with BBSW rates. By contrast, banks have increased advertised rates on 'bonus savers' (where depositors must meet certain conditions to receive a higher interest rate) more than they have on standard at-call savings accounts.

Average rates on new term deposits increased by more than the cash rate, in line with larger movements in BBSW and swap rates, which are the key benchmarks used to price these products. Rising term deposit rates also partly reflect banks' interest in growing term deposits given their favourable treatment in liquidity ratios, compared with at-call deposits, as they prepare for TFF maturities.

Banks have continued to pass on larger rate increases to wholesale depositors than households, in part because wholesale depositors have a wider range of market-based alternatives in which to place cash.

Housing loan interest rates have risen further

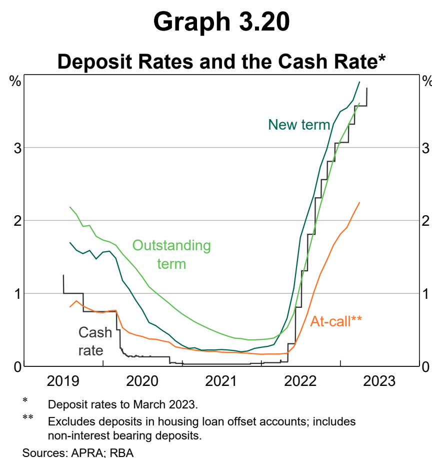
Housing lenders have passed on cash rate increases up to March in full to their reference rates for variable-rate loans (Graph 3.21). At the time this *Statement* was finalised, some housing lenders had announced they would also pass through the May increase in the cash rate in full to their housing reference rates.

Very few borrowers pay the reference rate, however, and instead are charged a rate discounted relative to these reference rates.[3] These discounts have increased over the past year, as competition for mortgage holders has been elevated amongst banks. As a result, the average rate on outstanding variable-rate loans has increased by around 50 basis points less than the cumulative increase in standard variable reference rates (and the cash rate) up to March (the latest available data) (Table 3.1). Reserve Bank estimates suggest that just under half of this difference reflects borrowers renegotiating a lower rate on their home loan with their current lender. Borrowers are also refinancing their loans with another lender to secure lower new variable rates; the average new variable rate is around 45 basis points lower than the average outstanding variable rate. Recent changes in advertised rates suggest that competition for housing loans may be easing – since the end of February, major banks and some of their subsidiary brands have started to reduce discounts on new variable-rate loans.

The average interest rate on outstanding fixed-rate loans has increased marginally in recent months (Table 3.1). This reflects the gradual roll-off of existing fixed-rate loans originated at low rates during the pandemic and relatively few borrowers taking out new fixed-rate loans at higher rates. Currently, around 30 per cent of total housing credit is on a fixed interest rate. Over the coming year, around half of all fixed-rate loans outstanding will reach the end of their terms and many of these loans will reprice at significantly higher interest rates.[4] Importantly, the repricing of these loans will occur gradually in aggregate because borrowers will reach the end of their terms at different times (Graph 3.22).

Graph 3.20

Deposit Rates and the Cash Rate*



* Deposit rates to March 2023.

** Excludes deposits in housing loan offset accounts; includes non-interest bearing deposits.

Sources: APRA; RBA

Table 3.1: Average Outstanding Housing Rates

March 2023

	Interest rate March 2023 Per cent	Change since Apr 2022 Basis points	Change since Feb 2020 Basis points
Cash rate	3.60	350	285
Variable-rate loans			
– Owner-occupier	5.85	298	227
– Investor	6.19	298	222
– All variable-rate loans	5.96	298	225
Fixed-rate loans			
– Owner-occupier	2.63	40	–110
– Investor	2.92	33	–109
– All fixed-rate loans	2.72	37	–113
Loans by repayment type[(a)]			
– Principal-and-interest	4.92	224	130
– Interest-only	5.59	235	137

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

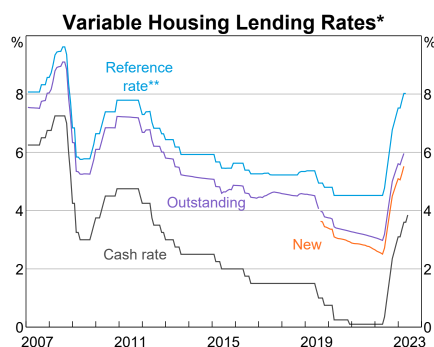
Sources: APRA; RBA

Scheduled housing loan payments have increased further

Scheduled mortgage payments – interest plus scheduled principal – increased further over the March quarter to around 8.9 per cent of household disposable income (Graph 3.23). Scheduled payments are now around 1¾ percentage points of household disposable income higher than in the March quarter of 2022 as increases in the cash rate have passed through to banks' lending rates and borrowers' mortgage payments.

Scheduled payments will increase further over coming months, as borrowers with fixed-rate loans continue to roll off onto higher rates. Additionally, recent cash rate increases will continue to flow through to payments as lenders typically take a few months to adjust

Graph 3.21

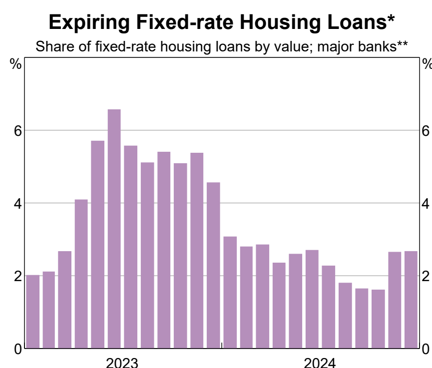


* Reference rates to end April 2023; new and outstanding rates to end March 2023. Series break for new and outstanding loans in July 2019.

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

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

Graph 3.22



* Loans expiring beyond 2024 not available monthly.

** Value of fixed-rate housing loans outstanding as at end December 2022.

Sources: Major banks; RBA

Table 3.2: Growth in Financial Aggregates

Percentage change[(a)]

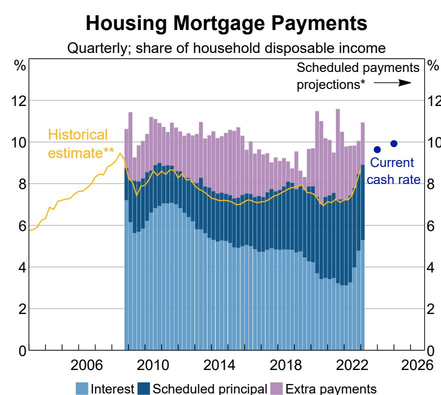
	Three-month annualised		Six-month annualised	
	Dec 22	Mar 23	Sep 22	Mar 23
Total credit	5.0	4.3	9.0	4.6
– Household	4.3	3.7	6.3	4.0
– Housing	4.7	4.0	6.6	4.4
– Owner-occupier	5.4	4.6	7.0	5.0
– Investor	3.4	2.8	5.9	3.1
– Personal	–1.0	–0.7	0.9	–0.9
– Business[(b)]	6.7	6.4	14.9	6.5
Broad money	8.7	6.0	6.2	7.3

(a) Figures are break-adjusted and seasonally adjusted.

(b) Lending to non-financial businesses.

Sources: ABS; APRA; RBA

borrowers' mortgage payments. Scheduled mortgage payments are projected to reach around 9.6 per cent of household disposable income by the end of the year, and around 9.9 per cent by the end of 2024, based on cash rate increases to date.



* 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 3.85 per cent.

** Estimated scheduled payments using credit foncier model.

Sources: ABS; APRA; RBA

Extra payments into offset and redraw accounts increased over the March quarter

Extra payments into offset and redraw accounts increased over the March quarter but remain well below the highs seen during the pandemic following a period of declines (Graph 3.24). Borrowers have accumulated significant mortgage payment buffers over the past three years; this is true for borrowers across the income distribution.[5] Although the total value of these funds continues to increase, the share of borrowers who are drawing down on their mortgage payment buffers has increased compared with the 2019–2021 period.[6]

Growth in total credit has continued to slow

Total credit growth has continued to slow in recent months (Graph 3.25; Table 3.2).[7] Business credit growth fell further from its September 2022 peak and housing credit growth continued to ease up to March. Growth in personal credit contracted a little, and personal credit outstanding remains well below pre-pandemic levels.

Demand for new housing loans declined sharply over the past year but refinancing activity remains very high

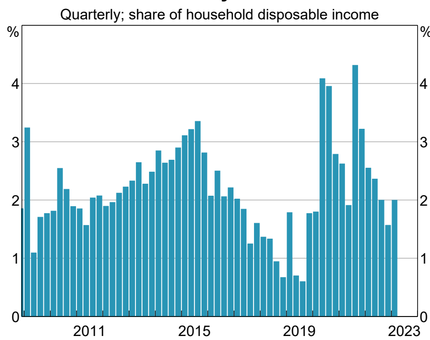
Housing credit growth declined in March to 4.4 per cent on a six-month-ended annualised basis. New housing loan commitments have declined by around one-third since the January 2022 peak (Graph 3.26). The large fall in commitments over the year to March is consistent with higher interest rates, lower housing turnover and the decline in housing prices. However, housing prices have stabilised of late, which could provide some support for housing lending over the coming months.

Commitments for external refinancing (switching to a new lender) remain at very high levels. A large share of borrowers with variable-rate loans have sought a better deal on their mortgage as interest rates and the cost of living have increased. At the same time, fixed-rate loans taken out during the pandemic have continued to expire and roll onto variable rates, which has prompted some borrowers to shop around.

Graph 3.24

Extra Payments*

Quarterly; share of household disposable income

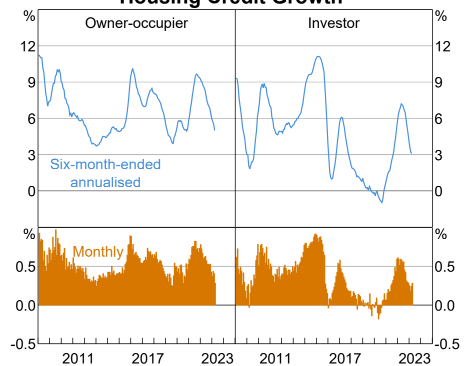


* Payments into offset and redraw accounts. Data are break-adjusted and seasonally adjusted.

Sources: ABS; APRA; RBA

Graph 3.26

Housing Credit Growth*



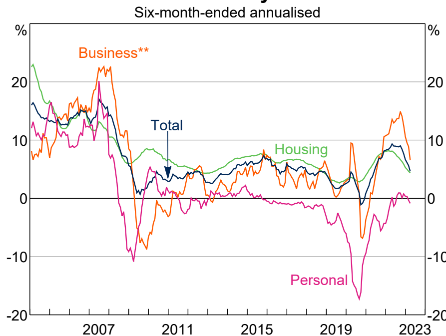
* Seasonally adjusted and break-adjusted.

Sources: APRA; RBA

Graph 3.25

Credit Growth by Sector*

Six-month-ended annualised



* Seasonally adjusted and break-adjusted; including securitisation.

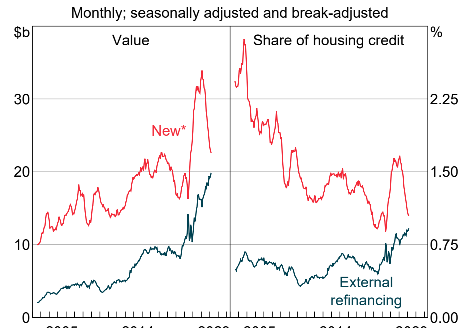
** Lending to non-financial businesses.

Sources: ABS; APRA; RBA

Graph 3.27

Housing Loan Commitments

Monthly; seasonally adjusted and break-adjusted



* Excludes refinancing.

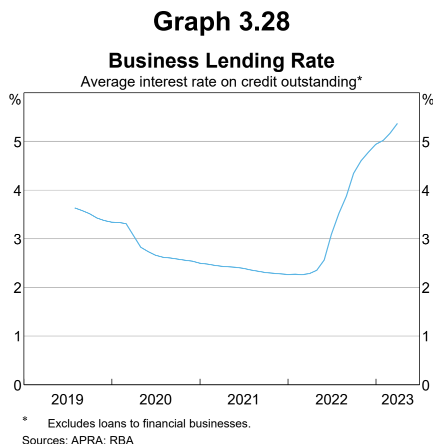
Sources: ABS; APRA; RBA.

Interest rates on business loans have risen, and business credit growth has slowed

Interest rates on business loans have risen in recent months, reflecting increases in the cash rate and BBSW rates (BBSW rates are the standard benchmark rates used to price loans to medium and large businesses) (Graph 3.28).

Growth in non-financial business credit has continued to decline over recent months (Graph 3.29). The slowdown in business credit growth has been broadly based across industries. Growth in lending to the property services industry has slowed, consistent with the decline in commercial property transactions. To manage disrupted supply chains, some businesses in goods-related industries had earlier increased their use of revolving credit facilities; now that those disruptions are easing, businesses are winding this back. Commitments for new business loans have decreased in recent months, which suggests the growth of business credit is likely to decline further.

Another factor weighing on business demand for credit is that the attractiveness of its pricing, relative to bond issuance, has diminished recently. Accordingly, bond issuance by non-financial corporations picked up in the March quarter to $10 billion. Most issuance was in offshore markets and around half was issuance from resource-related corporations.



Graph 3.28

Business Lending Rate

Average interest rate on credit outstanding*

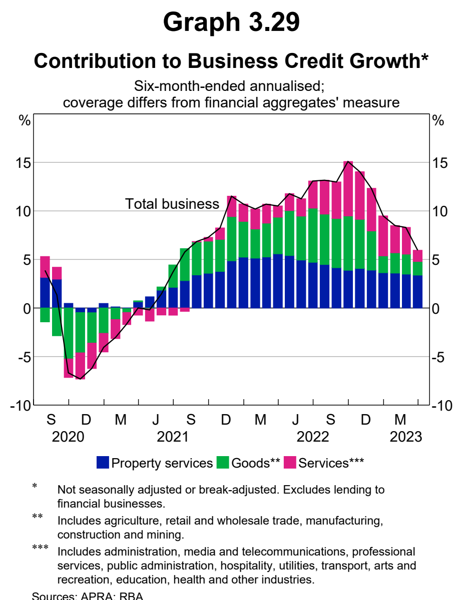
* Excludes loans to financial businesses.

Sources: APRA; RBA

Australian equity prices have fallen a little

The ASX 200 index is about 3 per cent below its recent peak in early February on a total return basis (Graph 3.30). Equity prices fell sharply following the failure of SVB, and again after concerns about Credit Suisse emerged; however, they mostly recovered as broader concerns over financial stability eased from late March. During this period of market stress, banks' share prices declined by less than those in some other markets. More recently, banks' share prices have again experienced some volatility following pressures on some US banks.

Since the start of 2023, the ASX 200 has underperformed overseas equity markets. This partly reflects the composition of the Australian market, which has a larger resources sector and a smaller IT sector compared with many other markets. Energy stocks have decreased, reflecting lower commodity prices due to concerns about the outlook for the global



Graph 3.29

Contribution to Business Credit Growth*

Six-month-ended annualised; coverage differs from financial aggregates' measure

* Not seasonally adjusted or break-adjusted. Excludes lending to financial businesses.

** Includes agriculture, retail and wholesale trade, manufacturing, construction and mining.

*** Includes administration, media and telecommunications, professional services, public administration, hospitality, utilities, transport, arts and recreation, education, health and other industries.

Sources: APRA; RBA

economy (Graph 3.31). By contrast, prices of stocks in the interest-rate-sensitive IT and consumer discretionary sectors have risen as bond yields have fallen over this period.

Profits and dividends of listed companies fell in the second half of 2022

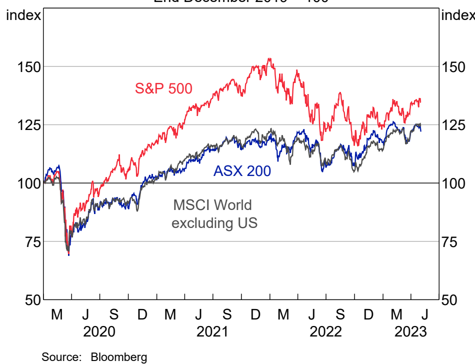
Aggregate underlying profits of ASX 200 companies were 12 per cent lower in the second half of 2022 compared with the same period a year earlier (Graph 3.32). Due to moderating iron ore prices, lower earnings by mining companies were the main contributor, though earnings in other sectors also decreased. Around one-half of ASX 200 companies reported lower earnings relative to the second half of 2021. Cost pressures still remain an issue for most companies and many have raised prices to preserve margins (see Box B: Have Business Profits Contributed to Inflation?). Some companies reported an easing in consumer demand in early 2023.

Dividends announced in the first half of 2023 fell in comparison to those paid in the first and second halves of 2022 (Graph 3.33). The decline was driven by a large decrease in dividends from the major miners. That said, most sectors reported higher dividends compared with a year ago, with the largest increase in the energy sector due to elevated oil and gas prices. As aggregate dividends fell by less than underlying earnings, the dividend payout ratio increased compared with the same period a year earlier.

Graph 3.30

Total Return Indices

End December 2019 = 100

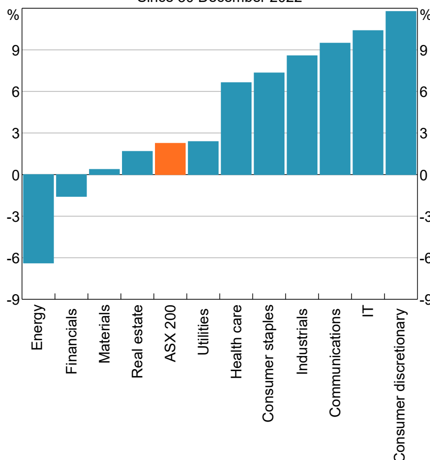


Source: Bloomberg

Graph 3.31

Change in Equity Prices

Since 30 December 2022



Source: Bloomberg

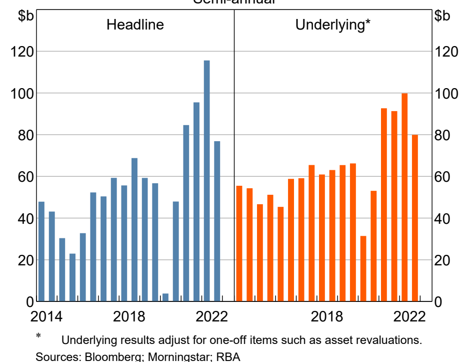
The Australian dollar has depreciated over recent months

The Australian dollar has depreciated by around 4 per cent against the US dollar and 3 per cent on a TWI basis since early February to be slightly lower over the year to date (Graph 3.34). It is currently a touch below US$0.67. The depreci-

Graph 3.32

ASX 200 Profits

Semi-annual



* Underlying results adjust for one-off items such as asset revaluations.

Sources: Bloomberg; Morningstar; RBA

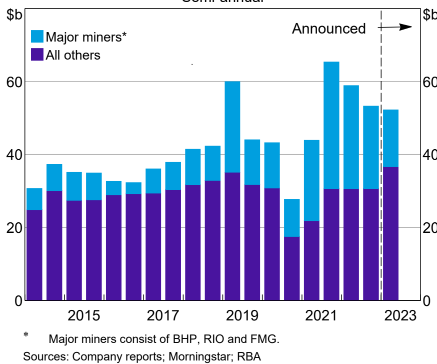
ation is consistent with lower prices for Australia's key commodity exports, including for iron ore and coal, as well as increased uncertainty among market participants following the emergence of concerns about banks offshore (see Chapter 1: The International Environment). Meanwhile, the yield differential between Australian Government bonds and those of the major advanced economies is little changed from its levels in early February, having increased of late.

In trade-weighted terms, the Australian dollar is around its levels in early 2022, when many central banks began raising their policy rates. This is consistent with yield differentials being overall little changed over this period. 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 3.35).[8]

Graph 3.33

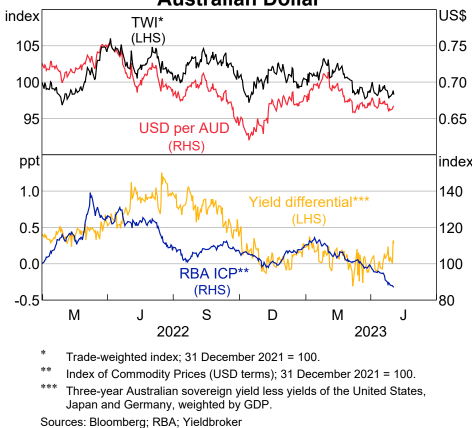
ASX 200 Dividends

Semi-annual



Graph 3.34

Australian Dollar



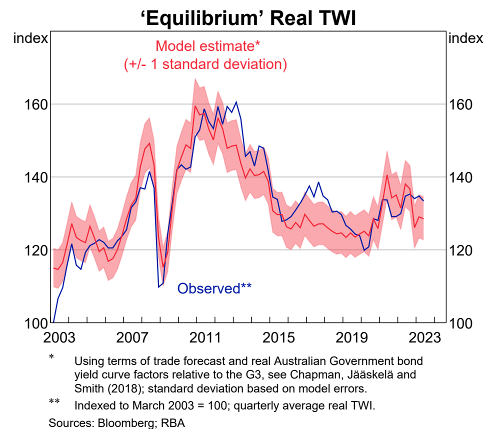
Australia's financial account deficit narrowed in 2022

Australia continued to be a net exporter of capital in 2022, although the financial account deficit has narrowed. This is the corresponding balance to Australia's current account surplus and reflects the difference between national savings and investment over this period.[9] Net outflows of capital in 2022 reflected private non-bank corporations – including superannuation funds – investing in foreign debt and equity assets (Graph 3.36). Partly offsetting these outflows were inflows associated with Australian banks issuing offshore debt securities as they prepared for TFF maturities. In addition, there were inflows related to foreign investment in AGS.

Australia's net foreign liability position was little changed over 2022 at around 35 per cent of GDP (Graph 3.37). This reflected a narrowing in the net foreign equity asset position; foreign equity prices declined relative to those in

Graph 3.35

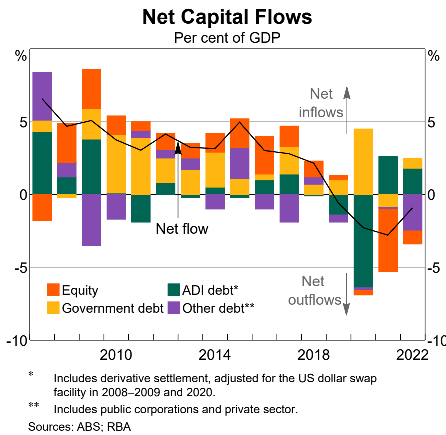
'Equilibrium' Real TWI



Australia, which was offset by a decline in the net debt liability position that reflected valuation effects associated with rising interest rates. The net foreign liability position remains around its lowest level since the 1980s.

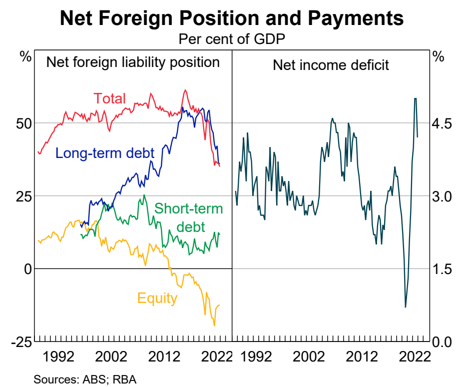
The net income deficit (NID) – which reflects net payments made to service the net foreign liability position – widened over the year and remains at a high level compared with the past decade. The widening of the NID reflected an increase in dividend payments to non-residents associated with high operating profits amid elevated commodity prices, and increased payments on portfolio debt liabilities related to higher interest rates. ✢

Graph 3.36



* 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 3.37



Sources: ABS; RBA

Endnotes

[1] See RBA (2023), 'The Australian Financial System', Financial Stability Review, April. Available at <https://www.rba.gov.au/publications/fsr/2023/apr/australian-financial-system.html>

[2] For more information, see ACCC (2023), 'Retail Deposits Inquiry 2023'.

[3] See RBA (2019), 'Box D: The Distribution of Variable Housing Interest Rates', *Statement on Monetary Policy*, November. Available at <https://www.rba.gov.au/publications/smp/2019/nov/box-d-the-distribution-of-variable-housing-interest-rates.html>

[4] See Lovicu G, J Lim, A Faferko, A Gao, A Suthakar and D Twohig (2023), 'Fixed-rate Housing Loans: Monetary Policy Transmission and Financial Stability Risks', RBA *Bulletin*, March. Available at <https://www.rba.gov.au/publications/bulletin/2023/mar/fixed-rate-housing-loans-monetary-policy-transmission-and-financial-stability-risks.html>

[5] See Kent C (2023), 'Long and Variable Monetary Policy Lags', Speech at the KangaNews DCM Summit, 20 March. Available at <https://www.rba.gov.au/speeches/2023/sp-ag-2023-03-20.html>

[6] See RBA (2023), 'Household and Business Finances in Australia', *Financial Stability Review*, April. Available at <https://www.rba.gov.au/publications/fsr/2023/apr/household-business-finances.html>

[7] From the April 2023 release, the financial aggregates were updated to remove the effect of lending to warehouse trusts in business credit. Business credit now reflects credit to non-financial businesses. See RBA (2023), 'Changes to Statistical Tables', 21 April. Available at <https://www.rba.gov.au/statistics/tables/changes-to-tables.html#d20230421>

[8] See Chapman B, J Jääskelä and E Smith (2018), 'A Forward-looking Model of the Australian Dollar', RBA *Bulletin*, December. Available at <https://www.rba.gov.au/publications/bulletin/2018/dec/a-forward-looking-model-of-the-australian-dollar.html>

[9] For more information, see Adams N and T Atkin (2022), 'The Significant Shift in Australia's Balance of Payments', RBA *Bulletin*, March. Available at <https://www.rba.gov.au/publications/bulletin/2022/mar/the-significant-shift-in-australias-balance-of-payments.html>

4. Inflation

Inflation declined in the March quarter, although it remains high and broadly based. The easing in global upstream cost pressures has started to flow through to domestic goods prices and this is expected to continue in the year ahead. Market services inflation remains high and rent inflation has picked up further in response to the tight conditions in the rental market. Measures of short-term inflation expectations have continued to decline in recent months but remain high, consistent with the high inflation environment. Most measures of medium- and long-term inflation expectations remain consistent with the inflation target.

The December quarter outcomes for wages and broader measures of labour costs suggest that the strong September quarter outcomes had to some extent overstated the underlying momentum in labour cost growth. Nonetheless, labour cost growth over 2022 was the highest it had been in over a decade, driven by the tight labour market, high inflation and the Fair Work Commission's (FWC) decision on minimum and award wages. With productivity growth very weak over 2022, growth in unit labour costs was around multi-decade highs. Timely indicators suggest that wages growth was solid in the March quarter of 2023. Firms in the Bank's liaison program report that their wages growth has stabilised at around 4 per cent, but that they expect growth to moderate in the year ahead. Market economists and union officials expect wages growth to peak around 3¾ to 4 per cent over the year ahead and to then moderate over the following year.

Inflation eased in the March quarter

The Consumer Price Index (CPI) increased by 1.3 per cent in the March quarter (in seasonally adjusted terms) and by 7 per cent over the year, down from a peak of 7.8 per cent in the December quarter. Nonetheless, inflation remains around its highest level since 1990 (Graph 4.1; Table 4.1).

High inflation continues to be broadly based. A wide range of items have contributed to the strong inflation outcomes over the past year (Graph 4.2). The share of the CPI basket growing faster than 3 per cent in annualised terms declined in the March quarter but remains high (Graph 4.3).

Measures of underlying inflation (which remove the effect of irregular or temporary price changes) also eased in the March quarter but remain high. Trimmed mean inflation was 1.2 per cent in the quarter (in seasonally adjusted terms) and 6.6 per cent over the year,

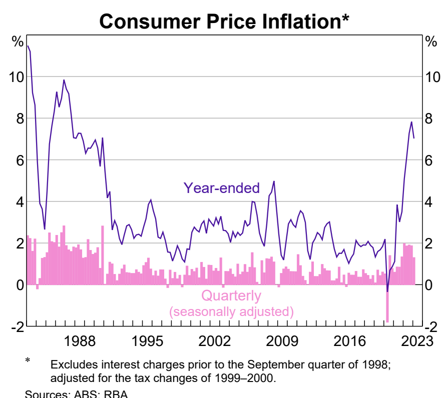


Table 4.1: Measures of Consumer Price Inflation

Per cent

	Quarterly[a]		Year-ended[b]	
	March quarter 2023	December quarter 2022	March quarter 2023	December quarter 2022
Consumer Price Index	1.4	1.9	7.0	7.8
Seasonally adjusted CPI	1.3	1.9	–	–
– Tradables	0.6	1.9	6.1	8.7
– Tradables (excl. volatile items)[c]	0.8	2.4	6.7	8.1
– Non-tradables	1.7	1.9	7.5	7.4
Selected underlying measures				
Trimmed mean	1.2	1.7	6.6	6.9
Weighted median	1.2	1.6	5.8	5.6
CPI excl. volatile items[c]	1.4	2.1	7.3	7.6

(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

down from a peak of 6.9 per cent in the December quarter of 2022 (Graph 4.4; Table 4.1).

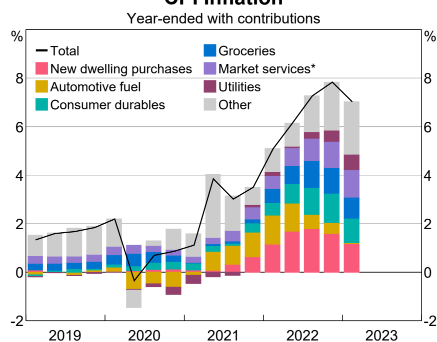
Fuel prices declined in the March quarter

Fuel prices declined a little in the March quarter, largely reflecting price declines for diesel fuel. Fuel prices are little changed compared with a year ago and are well below the peaks reached following Russia's invasion of Ukraine in March 2022 (Graph 4.5). So far, fuel prices are higher in the June quarter than the average levels observed in the March quarter.

Goods price inflation has slowed in response to the easing in upstream cost pressures

The easing in global upstream cost pressures has contributed to slower inflation for new dwellings, groceries and many consumer

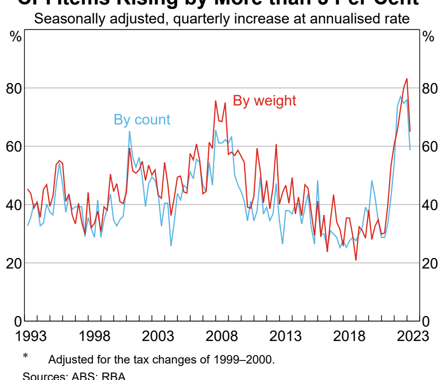
Graph 4.2



* Excludes domestic travel and telecommunications.

Sources: ABS; RBA

Graph 4.3

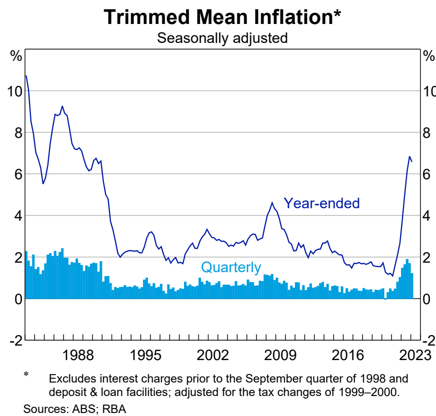


* Adjusted for the tax changes of 1999–2000.

Sources: ABS; RBA

durable items. Global supply chain conditions have returned to around pre-pandemic norms and cost pressures for international freight, materials and some imported goods have eased significantly. This easing in international costs has been partially offset by increased domestic costs, particularly from energy, wages and logistics. Nonetheless, lower input cost growth has started to affect prices paid by consumers and is expected to lead to a further slowing in goods inflation in the period ahead, consistent with the experience overseas.

New dwelling cost inflation eased further to around 1 per cent in the March quarter, well below the quarterly outcomes of around 5 per cent observed in the first half of 2022.



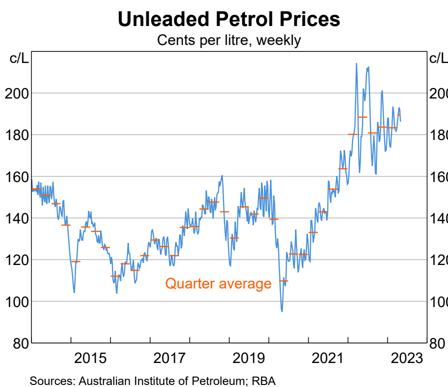
* Excludes interest charges prior to the September quarter of 1998 and deposit & loan facilities; adjusted for the tax changes of 1999–2000.

Sources: ABS; RBA

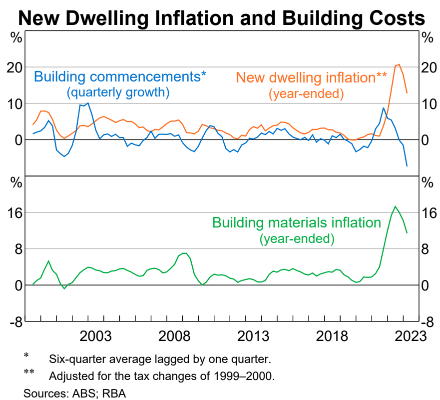
Prices were around 13 per cent higher over the year, down from a peak of 21 per cent in September 2022. The easing in new dwelling inflation reflects improvements in the supply of building materials and weaker demand following the rise in interest rates. However, trade costs due to labour shortages remain a source of upward pressure for some builders. Prices for building materials increased by 1.6 per cent in the March quarter and 11 per cent over the year, which is slower than the pace of increases seen over 2022 (Graph 4.6).

Consumer durables inflation eased in the March quarter to be 6 per cent over the year (down from 7 per cent in the December quarter) (Graph 4.7). Prices declined or remained little changed for a number of components – such as clothing and footwear, household appliances, textiles and furniture – due to increased post-Christmas discounting activity (Graph 4.8). However, price increases remained strong for audio, visual and computing equipment, as well as for some other items such as motor vehicles. Notably, the decline in wholesale LCD panel prices that has flowed through to retail prices of TVs and other audio-visual equipment in other advanced economies has yet to occur in Australia.

Grocery prices (excluding fruit and vegetables) increased by around 1 per cent in the quarter –



Sources: Australian Institute of Petroleum; RBA



* Six-quarter average lagged by one quarter.

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

Sources: ABS; RBA

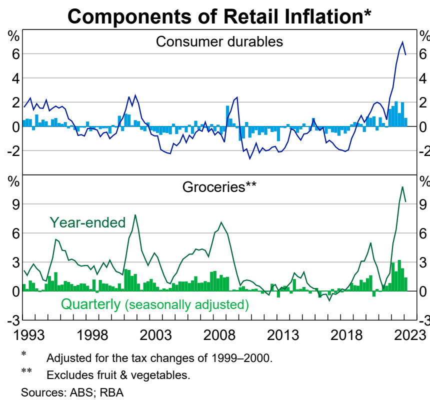
the slowest rate since 2021 – and were 9 per cent higher over the year (Graph 4.7). Supermarkets continue to pass through supplier cost increases, although the pace of these increases has moderated lately. Grocery inflation eased for most food categories in the quarter, particularly for meat and seafood (Graph 4.9). Liaison suggests that grocery prices are likely to increase further in the near term, but at a slower pace than seen over the past year. Prices of fruit and vegetables were broadly unchanged in the quarter.

Services inflation remains strong

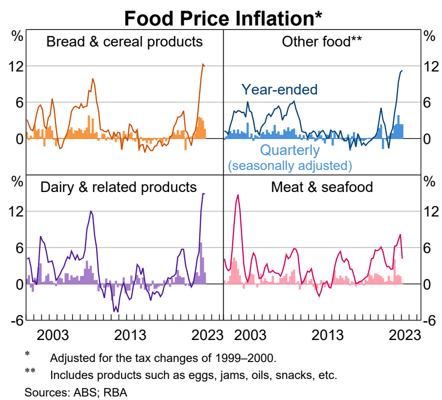
Input cost pressures and strong demand continued to contribute to large price increases for many services. Market services inflation – which covers a little more than one-fifth of the CPI basket – was 1.6 per cent in the March quarter and around 8 per cent over the year (Graph 4.10). This was the strongest outcome since 1990 and annual inflation remained strong across most items. The prices of these services are generally among the most sensitive to domestic labour costs, although increases in non-labour costs such as materials and transport have been an important factor driving higher prices for some of these services in recent quarters (in particular, for cafes and restaurants).

Outcomes differed in the quarter across different types of market services. Prices for insurance and financial services increased strongly in the March

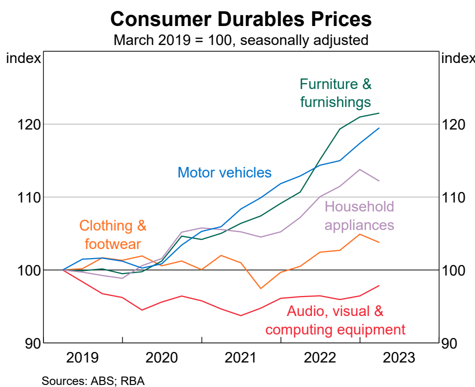
Graph 4.7



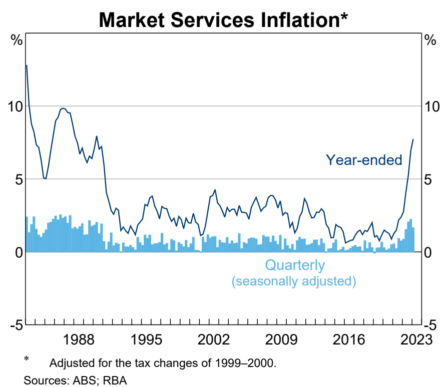
Graph 4.9



Graph 4.8



Graph 4.10



quarter and over the year, reflecting higher insurance premiums due to increased claims arising from natural disasters (Graph 4.11). Meals out and takeaway inflation eased in quarterly terms, following strong increases in recent quarters. Domestic holiday travel and accommodation inflation remained strong in the quarter, reflecting robust demand; however, prices for international holiday travel and accommodation declined due to lower airfare prices.

Rents increased by 1.6 per cent in the March quarter and by 5 per cent over the year, reflecting tight rental market conditions across the country (Graph 4.12). The indexation of private rent assistance partly offset a larger increase in underlying prices. In the absence of this offset, rents would have increased by 1.8 per cent – stronger than the previous quarterly outcome. In monthly terms, rent inflation was fairly stable throughout the quarter at 0.7 per cent (excluding the effect of rent assistance in March), though this was stronger than the outcomes seen over the second half of 2022. Rents were strong across all cities, with particularly large increases in Brisbane and Perth. Strong current rental market conditions across the country, as reflected in high advertised rents and historically low vacancy rates, are expected to contribute to a further pick-up in CPI rent growth in the year ahead.

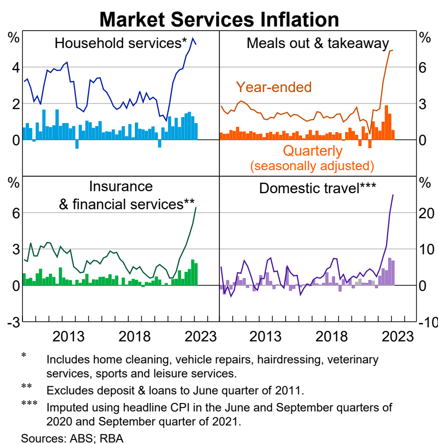
Gas prices rose strongly due to higher wholesale costs

Gas prices increased by 12 per cent in the March quarter, due to the pass-through of higher wholesale costs; prices were 26 per cent higher over the year – the largest annual increase on record (Graph 4.13). Prices increased in all capital cities but were largest in Melbourne over the quarter (23 per cent). Electricity prices increased by 2½ per cent in the quarter due to the continued unwinding of rebates in Queensland, Western Australia and Tasmania. Electricity prices were 15½ per cent higher over the year – the highest rate of increase since 2013. Electricity and gas prices are expected to increase further over the second half of this year as retail prices catch up to wholesale costs; however, the size of these increases are expected to be smaller than was anticipated prior to the announcement of the Australian Government's Energy Price Relief Plan (see Chapter 5: Economic Outlook).

In the CPI basket, 'administered prices' are (at least partly) regulated or relate to goods and services for which the public sector is a significant provider. They include categories such as health, education and child care, as well as utilities. Inflation for administered prices (excluding utilities) picked up to around

Graph 4.11

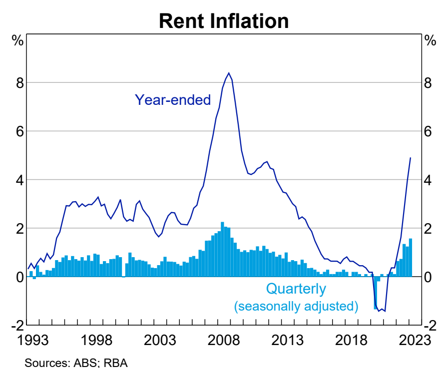
Market Services Inflation



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

Graph 4.12

Rent Inflation



Sources: ABS; RBA

4½ per cent over the year to the March quarter. Prices for medical and hospital services increased by 3½ per cent in the quarter due to higher private health insurance premiums and increases in non-hospital medical services (Graph 4.14). Prices for education increased strongly in the quarter, due to the indexation of tertiary course fees to inflation, the final cohort of students transitioning to higher fees as a result of the job-ready graduate scheme introduced in 2021, and higher wages growth contributing to increases in school fees. State government fee relief programs in New South Wales, Victoria and Queensland more than offset underlying increases in prices for pre-school and primary education. Childcare prices increased by 2.4 per cent in the quarter, reflecting the pass-through of higher labour costs; however, prices remained flat compared with a year ago due to the effects of the increase in the subsidy rate in 2022 for families with more than one child.

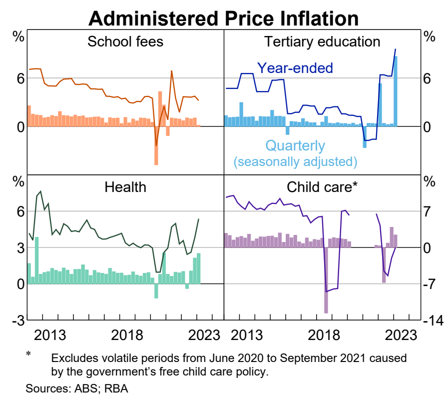
The monthly CPI indicator points to easing inflationary pressures

The ABS released the monthly CPI indicator for the month of March alongside the regular quarterly CPI release. The monthly CPI indicator points to inflationary pressures easing, with the year-ended rate slowing through the quarter (to 6.3 per cent in March, down from a peak of 8.4 per cent in December 2022) (Graph 4.15). The measure excluding volatile items also eased through the quarter (to 6.9 per cent in March, down from a peak of 8.3 per cent in December). The easing in the monthly CPI indicator over January to March was largely driven by disinflation in prices for many goods and holiday travel and accommodation – as was the case for the quarterly CPI.

Short-term inflation expectations have eased further, and longer term inflation expectations are mostly consistent with the inflation target

Measures of short-term inflation expectations have continued to decline from their

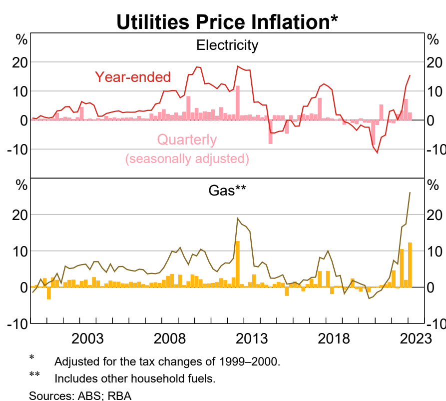
Graph 4.14



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

Sources: ABS; RBA

Graph 4.13

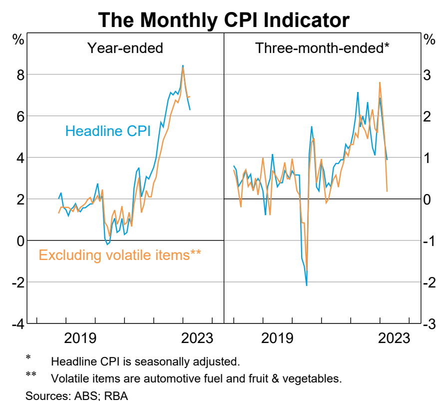


* Adjusted for the tax changes of 1999–2000.

** Includes other household fuels.

Sources: ABS; RBA

Graph 4.15



* Headline CPI is seasonally adjusted.

** Volatile items are automotive fuel and fruit & vegetables.

Sources: ABS; RBA

mid-2022 peaks but remain above the Bank's inflation target, consistent with the high inflation environment (Graph 4.16). The share of households expecting inflation to be greater than 10 per cent over the year ahead has declined over recent quarters; however, the share of households that expect inflation to be above 6 per cent over the coming year remains considerably higher than prior to the pick-up in inflation in mid-2021 (Graph 4.17). Most medium- and long-term measures remain consistent with the inflation target (Graph 4.18).

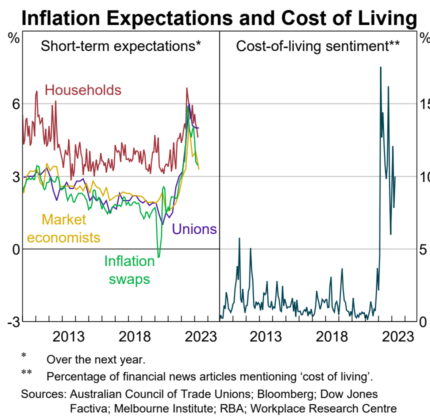
Wages growth was solid in the December quarter …

The Wage Price Index (WPI) grew by 0.8 per cent in the December quarter and 3.3 per cent in year-ended terms (Graph 4.19). This was the highest rate of year-ended wages growth since 2013, reflecting tightness in the labour market and high inflation outcomes. Wages in the private sector grew by 0.8 per cent in the quarter; although this was a solid increase, it was lower than the large increase in the September quarter that was boosted by the implementation of the FWC's award and minimum wage increases. Over the year to December, wages in the private sector grew by 3.6 per cent. By contrast, public sector wage growth continued to weigh on aggregate outcomes, increasing by 2.5 per cent over the year.

In the private sector, the average size of increases (for those jobs that received an increase in the quarter) remained around the highest rate in over a decade at around 4 per cent (Graph 4.20). This was partly driven by the delayed implementation of wage increases for awards in hospitality, tourism and aviation jobs announced by the FWC in 2022, with most of these jobs receiving a 4.6 per cent wage increase. Wages in accommodation and food

Graph 4.16

Inflation Expectations and Cost of Living

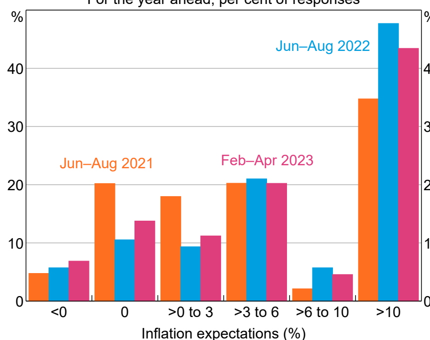


* Over the next year.
** Percentage of financial news articles mentioning 'cost of living'.
Sources: Australian Council of Trade Unions; Bloomberg; Dow Jones Factiva; Melbourne Institute; RBA; Workplace Research Centre

Graph 4.17

Distribution of Households' Inflation Expectations

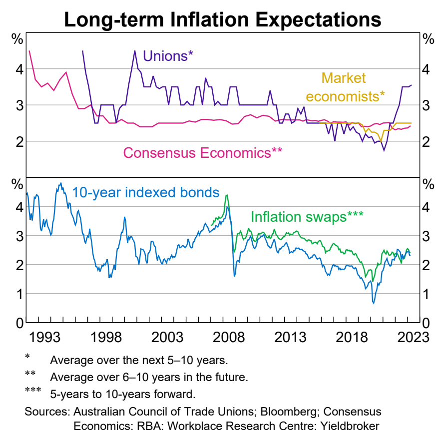
For the year ahead, per cent of responses



Sources: Melbourne Institute; RBA

Graph 4.18

Long-term Inflation Expectations



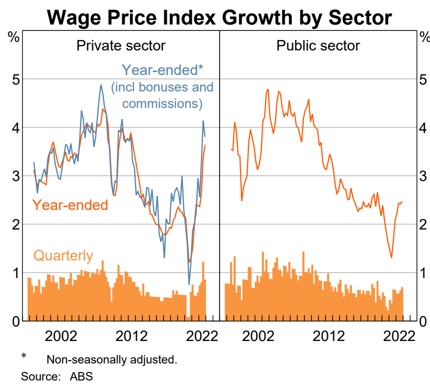
* Average over the next 5–10 years.
** Average over 6–10 years in the future.
*** 5-years to 10-years forward.
Sources: Australian Council of Trade Unions; Bloomberg; Consensus Economics; RBA; Workplace Research Centre; Yieldbroker

services recorded the largest increase in wages across industries in the quarter, reflecting the high proportion of jobs in this industry either on awards or that are covered by enterprise agreements or individual arrangements linked to the award wage increase. Lower skill jobs experienced stronger wages growth in the December quarter than higher skill jobs, consistent with the prevalence of award wage reliance in these jobs (Graph 4.21).

Broader measures of labour costs remained strong in the December quarter. Despite a slight slowing in the quarter, measures of wages that include bonuses continued to grow faster than base wages over the year, consistent with reports that employers have been using bonuses to attract or retain staff amid the tight labour market and to compensate for cost-of-living pressures. Compensation of employees – the broadest measure of economy-wide labour costs, which also includes headcount and hours worked – rose by 10 per cent over the year, its fastest pace in over a decade (Graph 4.22), largely driven by the private sector. Average earnings per hour declined in the quarter, although this measure continues to be affected by volatility in average hours worked. With productivity growth very weak over 2022, growth in unit labour costs was around multi-decade highs.

Graph 4.19

Wage Price Index Growth by Sector

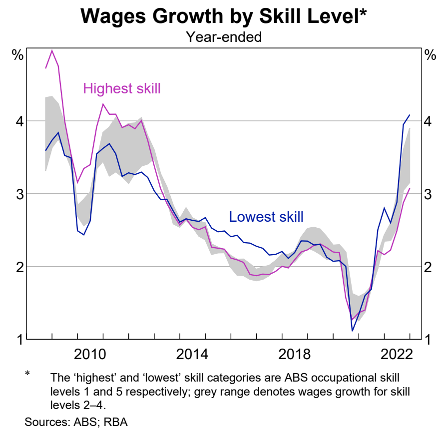


* Non-seasonally adjusted.
Source: ABS

Graph 4.21

Wages Growth by Skill Level*

Year-ended

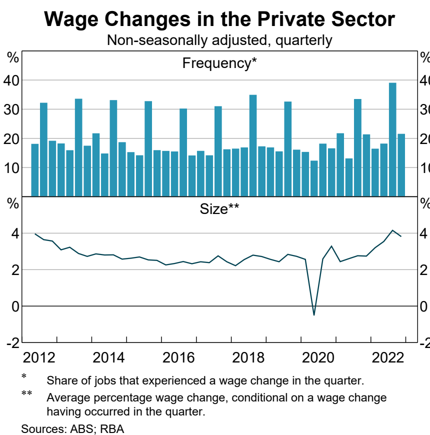


* The 'highest' and 'lowest' skill categories are ABS occupational skill levels 1 and 5 respectively; grey range denotes wages growth for skill levels 2–4.
Sources: ABS; RBA

Graph 4.20

Wage Changes in the Private Sector

Non-seasonally adjusted, quarterly

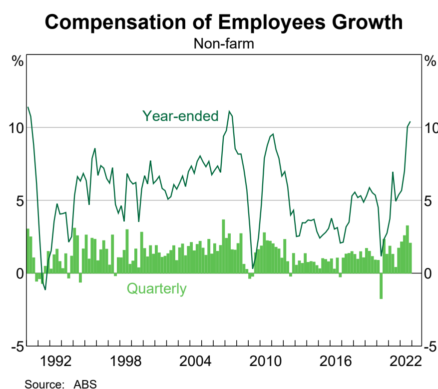


* Share of jobs that experienced a wage change in the quarter.
** Average percentage wage change, conditional on a wage change having occurred in the quarter.
Sources: ABS; RBA

Graph 4.22

Compensation of Employees Growth

Non-farm

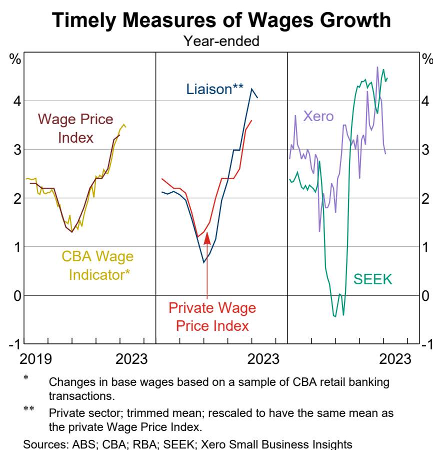


Source: ABS

… and this is expected to continue over coming quarters

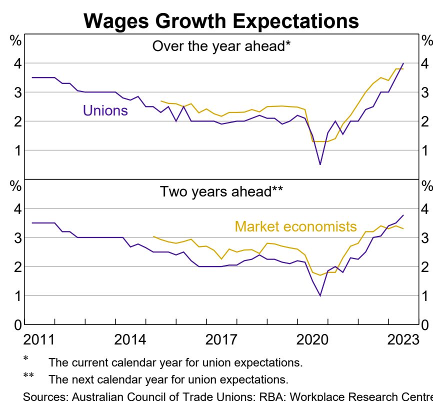
Timely indicators suggest that wages growth was solid in the March quarter, though there appears to be less upward momentum than a few months ago. Firms in the Bank's liaison program report their wages growth has stabilised at around 4 per cent, but they expect growth to moderate in the year ahead (Graph 4.23). Market economists and union officials expect wages growth to be around 3¾ to 4 per cent over the year ahead and to then moderate over the following year (Graph 4.24).

Graph 4.23



* Changes in base wages based on a sample of CBA retail banking transactions.
** Private sector; trimmed mean; rescaled to have the same mean as the private Wage Price Index.
Sources: ABS; CBA; RBA; SEEK; Xero Small Business Insights

Graph 4.24

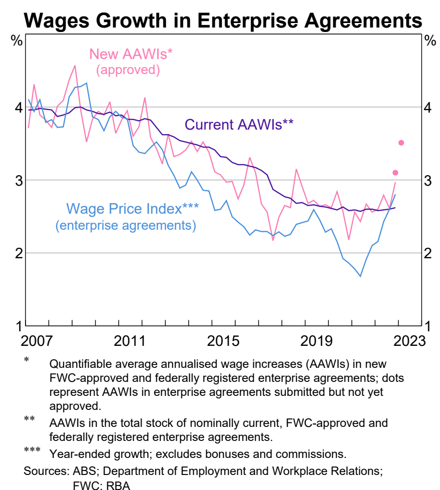


* The current calendar year for union expectations.
** The next calendar year for union expectations.
Sources: Australian Council of Trade Unions; RBA; Workplace Research Centre

Wages growth in enterprise agreements is expected to pick up further over coming quarters. Wages growth in newly lodged enterprise agreements increased to 3.5 per cent in the March quarter, though the number of employees covered by new agreements was lower than average (Graph 4.25). This series has tended to report slightly stronger wages growth than the data on *approved* new enterprise agreements, which likely reflects timing mismatches for some agreements. Firms in the Bank's liaison program generally expect wage growth outcomes in new enterprise agreements to be higher than current or expired agreements. Recent changes to the wage policies of a number of state governments and the Australian Government are also expected to support wages growth as they flow through to enterprise agreements in the public sector. For example, Victoria recently increased the public sector wage cap to 3 per cent for new enterprise agreements, and the NSW Government has indicated that it intends to offer larger public sector wage increases than is provided for under the existing wage cap.

Increases to award and minimum wages in coming quarters should further support wages growth. In February 2023, the FWC approved an

Graph 4.25

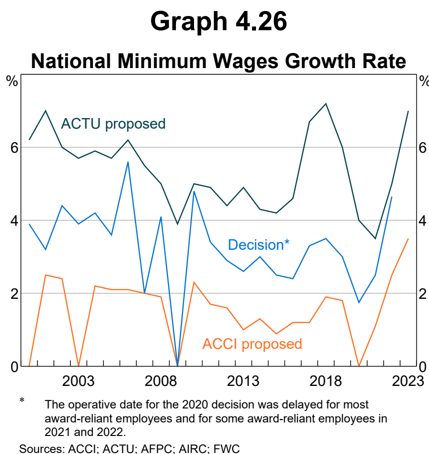


* Quantifiable average annualised wage increases (AAWIs) in new FWC-approved and federally registered enterprise agreements; dots represent AAWIs in enterprise agreements submitted but not yet approved.
** AAWIs in the total stock of nominally current, FWC-approved and federally registered enterprise agreements.
*** Year-ended growth; excludes bonuses and commissions.
Sources: ABS; Department of Employment and Workplace Relations; FWC; RBA

interim 15 per cent increase to modern award minimum wages for direct care workers and some other staff in the aged care sector; this will take effect from 30 June 2023. The FWC is considering whether further increases are warranted and whether to extend this interim increase to other workers in the sector. More broadly, the FWC will decide on the increases to award and minimum wages in coming months as part of its Annual Wage Review. In making its decision, the FWC is required to consider a range of factors, including the performance and competitiveness of the national economy, gender equality and the relative living standards and needs of low-paid workers. It also considers submissions from interested parties. The Australian Council of Trade Unions (ACTU) proposed a 7 per cent increase, while the Australian Chamber of Commerce and Industry (ACCI) proposed a 3.5 per cent increase (Graph 4.26).

Real incomes declined further in the December quarter

Real (inflation-adjusted) labour income declined further in the December quarter as labour income increased by less than consumer prices. Real wages declined by around 4 per cent over the year. The declines have been smaller for lower wage earners; nominal wages growth has been strongest for this group, due in part to the FWC award wage decision, while the rise in inflation has been broadly based across the income distribution and household types. Administrative employment data also suggests that lower income workers experienced relatively stronger earnings growth than higher income workers in the year to the December quarter of 2022. Across all quintiles, nominal employment income growth has been stronger than base wages growth, which likely reflects increases in hours worked, especially for those on lower incomes, switching to higher paid jobs and promotions, as well as additional payments such as overtime or cost-of-living bonuses (Graph 4.27). The increase in the cost of living has been broadly based across different household types, however, those on lower incomes typically have the most constrained budgets as they spend a greater proportion on essential items and have lower financial buffers (Graph 4.28). Furthermore, the experience of individual households varies widely and some workers who have remained in the same job and maintained the same hours will have seen their real incomes decline significantly.

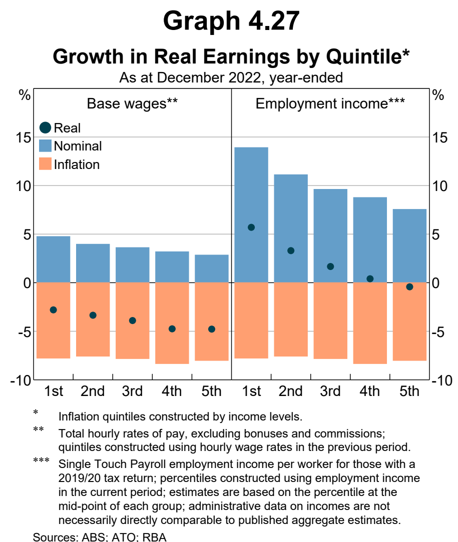


Graph 4.26

National Minimum Wages Growth Rate

* The operative date for the 2020 decision was delayed for most award-reliant employees and for some award-reliant employees in 2021 and 2022.

Sources: ACCI; ACTU; AFPC; AIRC; FWC



Graph 4.27

Growth in Real Earnings by Quintile*

As at December 2022, year-ended

* Inflation quintiles constructed by income levels.

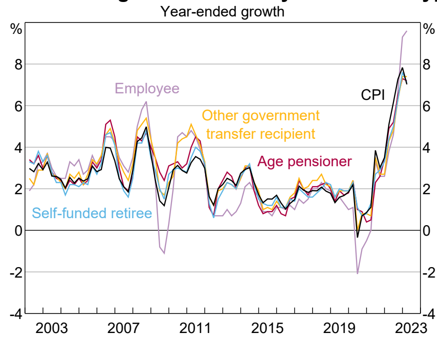
** Total hourly rates of pay, excluding bonuses and commissions; quintiles constructed using hourly wage rates in the previous period.

*** 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 mid-point of each group; administrative data on incomes are not necessarily directly comparable to published aggregate estimates.

Sources: ABS; ATO; RBA

Graph 4.28

Selected Living Cost Indexes by Household Type*



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

Source: ABS

5. Economic Outlook

Global growth is forecast to remain well below its historical average over the next two years, as high inflation and tighter monetary policy settings are expected to continue to weigh on demand. The forecast for growth in Australia's major trading partners has been revised up a little, largely because of an upward revision to the outlook for Chinese GDP growth. The previously very weak outlook for economic growth in major advanced economies has also been upgraded in response to stronger-than-expected economic activity data in early 2023; however, the outlook in these economies remains subdued (see Chapter 1: The International Environment).

Growth in Australian economic activity is expected to have slowed in the March quarter and is forecast to remain subdued through this year as higher interest rates, the higher cost of living and earlier declines in household wealth continue to weigh on growth. The pace of growth is expected to increase gradually over the remainder of the forecast period as these headwinds fade. There has been a further upgrade to the population estimate, which mainly affects population growth in recent quarters rather than over the forecast period.

The labour market remains tight and employment growth remained solid through the March quarter. That said, the balance between labour demand and supply has improved; the recent pick-up in overseas migration may be helping to alleviate shortages in some areas. The unemployment rate is forecast to rise over coming years because of subdued economic growth.

Consumer price inflation in Australia eased in the March quarter, confirming that inflation has passed its peak. Goods prices have accounted for most of the disinflation so far and this is forecast to continue over 2023 as the resolution of supply disruptions flows through to prices paid by consumers. By contrast, services and energy inflation remains strong and this is expected to continue in the near term. The outlook for inflation over coming years is similar to three months ago, although its composition has shifted. Non-housing inflation is expected to be slower because of downgrades to the outlook for activity, the labour market and labour costs. This is offset, however, by a stronger outlook for rent inflation, reflecting the strength in recent data and the upward revisions to the population growth estimate.

Inflation is expected to decline to around the top of the 2–3 per cent target range over coming years. Inflation could turn out to be more persistent if productivity growth remains weak, the high inflation environment leads to firms expanding margins as their costs ease, there is greater feedback between higher prices and wages than expected, or if rents increase by more than expected. On the other hand, inflation could turn out to be lower than expected if the easing in goods inflation is faster or more widespread than anticipated, including because consumer spending is weaker.

A key source of uncertainty for the domestic activity outlook is the competing forces affecting household spending. Household incomes have been supported by strong labour demand and higher population growth. But

Table 5.1: Output Growth and Inflation Forecasts[a]

Per cent

	Year-ended					
	Dec 2022	June 2023	Dec 2023	June 2024	Dec 2024	June 2025
GDP growth	2.7	1¾	1¼	1½	1¾	2
(previous)	(2¾)	(2¼)	(1½)	(1½)	(1½)	(1¾)
Unemployment rate[b]	3.5	3½	4	4¼	4½	4½
(previous)		(3½)	(3¾)	(4)	(4¼)	(4½)
CPI inflation	7.8	6¼	4½	3½	3¼	3
(previous)		(6¾)	(4¾)	(3½)	(3¼)	(3)
Trimmed mean inflation	6.9	6	4	3¼	3	3
(previous)		(6¼)	(4¼)	(3¼)	(3)	(3)
	Year-average					
	2022	**2022/23**	**2023**	**2023/24**	**2024**	**2024/25**
GDP growth	3.7	3¼	1¾	1¼	1½	1¾
(previous)	(3¾)	(3½)	(2¼)	(1½)	(1½)	(1¾)

(a) Forecasts finalised 1 May. 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 3¾ per cent before declining to around 3 per cent by mid-2025. Other forecast assumptions (assumptions as of February *Statement* in parenthesis): TWI at 60 (62); A$ at US$0.66 (US$0.69); Brent crude oil price at US$78bbl (US$82bbl). The rate of population growth is assumed to be in line with forecasts from the Australian Government's Centre for Population. 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

consumption growth has slowed recently as high inflation and rising interest rates have weighed on households' disposable incomes in real terms and household wealth has fallen alongside housing prices over the past year. Another important source of uncertainty for the Australian economy is the outlook for global growth. Most notably, there is uncertainty around the pace of disinflation and so the future path of monetary policy and economic growth abroad. While financial stability concerns related to banking sector stresses have subsided, they would pose downside risks to the global economic outlook if the situation were to deteriorate again and financial conditions were to tighten substantially.

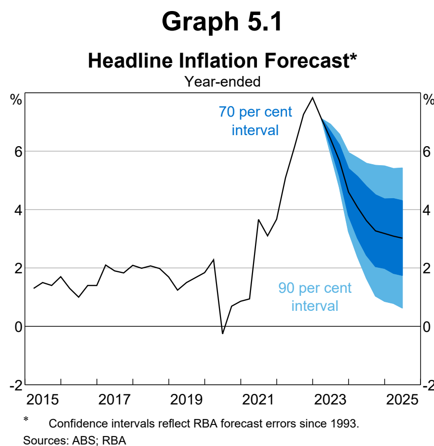
The forecasts are based on some technical assumptions. The path for the cash rate reflects expectations derived from surveys of professional economists and financial market pricing prior to the May Board meeting. The cash rate is assumed to peak at around 3¾ per cent before declining to around 3 per cent by mid-2025, broadly in line with the assumed path in February. The exchange rate is assumed to be unchanged at its level prior to the May Board meeting, which is 4 per cent below its level three months ago on a trade-weighted basis. Petrol prices are assumed to be broadly unchanged around their recent level, which is around 10c/L higher than in early February. The level of the population has been revised higher and population growth

projections are broadly in line with the latest Australian Government's Centre for Population forecasts. Higher migration reflects the recent faster-than-expected recovery of temporary migrants, especially students and working holiday makers, with a strong recovery in arrivals alongside low levels of departures.

Inflation in Australia has peaked

Consumer price inflation in Australia eased in the March quarter, confirming that inflation has passed its peak (Graph 5.1). Goods price disinflation has driven most of the moderation in inflation outcomes in early 2023, consistent with but a little later than the experience overseas. Nonetheless, inflation remains high and broadly based and services inflation continues to pick up. The outlook for headline and underlying inflation has been revised lower in the near term due to the slightly weaker-than-expected March quarter outcome. Further out, the outlook is similar to a few months ago, with the effect of the downgrades to the labour market and labour costs offset by a stronger outlook for rent inflation and a small depreciation in the exchange rate.

Energy prices are expected to add significantly to inflationary pressures over the coming year. Regulators released draft determinations of the default offers for electricity prices in the 2023/24 financial year and these were largely in line with prior expectations. Energy prices in the CPI (which includes both electricity and gas) are expected to add ¼ percentage point to headline inflation over the 2023/24 financial year. Energy price changes are expected to be relatively small in the 2024/25 financial year, based on current wholesale prices in futures markets.



Goods price inflation is forecast to moderate further in the period ahead, consistent with the experience overseas. Information from liaison and other timely indicators signal that pricing pressures have eased since mid-2022. This is largely driven by an easing in non-labour input cost pressures, which has been most notable for international freight and some imported goods. However, domestic cost pressures such as energy, wages and logistics remain a source of upward pressure in firms' pricing decisions. Compared with a few months earlier, retailers have increasingly cited weaker demand as a constraint on their ability to increase prices.

Services inflation is forecast to remain high in 2023, before moderating slowly over the forecast period; as a result, inflation is expected to be above the target band over most of the forecast period. Growth in unit labour costs is expected to be solid over the forecast period, adding to cost pressures for labour-intensive market services. Rental vacancy rates are low and stronger population growth will contribute to further tightness in the rental market in the period ahead. As a result, rental price inflation is expected to increase further over coming quarters as higher rents work their way through the stock of outstanding rental agreements.

Underlying inflation is expected to decline over coming years to be around the top of the inflation target range by mid-2025 (Graph 5.2). The disinflation in 2023 is expected to be driven by the resolution of supply disruptions (Graph 5.3). Ongoing tightness in the labour market and further energy price increases are expected to keep domestic price pressures

elevated in the near term before they start to ease later in the forecast period. There is a high degree of uncertainty around the speed and extent of the disinflation expected in the period ahead. On the one hand, lower goods prices from the resolution of supply chain issues could come through sooner and swifter than anticipated. On the other hand, domestic price pressures may be stronger and more persistent than expected. These risks are discussed further in the section on 'Key domestic uncertainties', below.

Economic growth is expected to slow this year

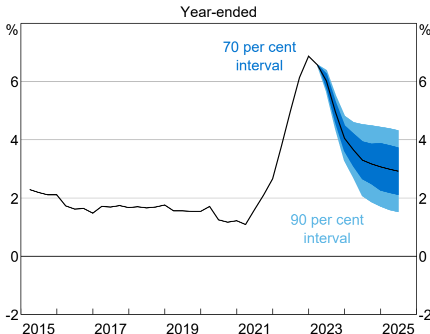
GDP growth is expected to slow to around 1¼ per cent over 2023, with GDP per capita declining over the year (Graph 5.4). The weaker near-term outlook relative to three months ago reflects the softness in recent activity data. Domestic demand growth stalled in the December quarter, and timely indicators suggest subdued growth in early 2023. Household consumption growth is expected to remain sluggish through this year as inflation and higher interest rates weigh on real disposable income. Consumption growth is expected to increase to around its pre-pandemic trend over 2024 as the effect of the earlier monetary policy tightening wanes and the cash rate decreases, inflation moderates, household wealth recovers and tax cuts support disposable income.

The recovery in consumption, alongside faster growth in public demand, supports a forecast pick-up in GDP growth in 2024. The outlook for non-mining business investment over the forecast period remains positive but has softened in response to weaker demand conditions. Export volumes are expected to grow strongly, driven by the ongoing rebound in tourism and education-related travel. Broadly corresponding growth in imports, including travel services, means trade is expected to have little net effect overall on GDP growth over most of the forecast period.

Graph 5.2

Trimmed Mean Inflation Forecast*

Year-ended



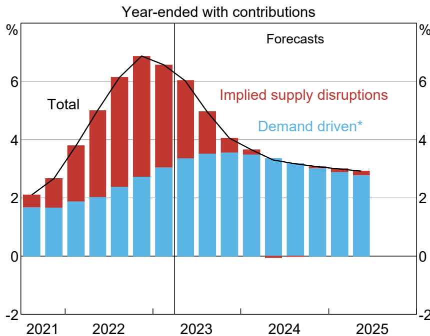
* Confidence intervals reflect RBA forecast errors since 1993.

Sources: ABS; RBA

Graph 5.3

Trimmed Mean Inflation

Year-ended with contributions



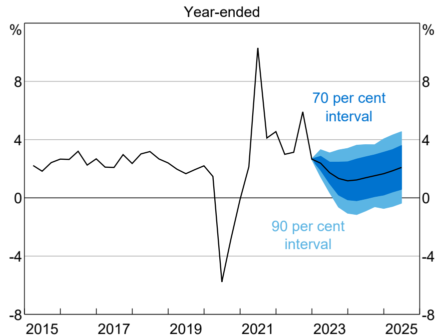
* Predicted by Phillips curve model.

Sources: ABS; RBA

Graph 5.4

GDP Growth Forecast*

Year-ended



* Confidence intervals reflect RBA forecast errors since 1993.

Sources: ABS; RBA

Consumption growth is expected to slow because of rising prices and higher interest rates

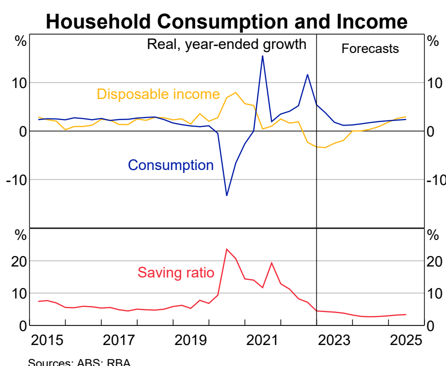
Household consumption growth is expected to remain subdued in 2023, and slowly increase over the rest of the forecast period (Graph 5.5). While strong labour market outcomes continue to support household income growth this year, consumption growth is expected to be dampened by higher consumer prices, net interest expenses, tax payable and the decline in housing prices seen over 2022. From the second half of 2023, consumption growth is expected to gradually increase towards its average rate prior to the pandemic, as a range of factors support both wealth and household disposable income growth. The recent stabilisation in housing prices supports household wealth relative to expectations in February. Additionally, a pick-up in real household disposable income growth is supported by lower inflation, as well as the legislated 'Stage 3' tax cuts from mid-2024.

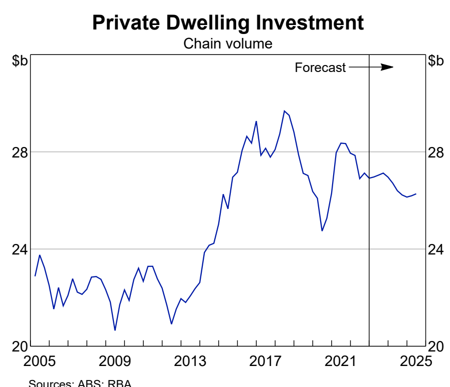
The household saving ratio is expected to continue to decline over the next year or so, before increasing gradually from mid-2024.

The outlook for private investment has softened

A large pipeline of residential and non-residential construction projects is expected to support activity over 2023. While the recent flow of data and information from the Bank's liaison program indicates that materials shortages and related supply chain issues have largely been resolved, shortages of skilled tradespeople remain a significant constraint on activity and are limiting the pace at which the pipeline of projects can be worked through. Most construction firms continue to report that they are operating at around full capacity.

Dwelling investment is expected to decline once the backlog of construction is worked through, consistent with the very weak demand for new detached dwellings (Graph 5.6). High construction costs, construction delays and housing price declines over 2022 have reduced the incentive to build new dwellings. This is consistent with the recent decline in building approvals, greenfield land sales and new home sales. Information from liaison with developers suggests that investor demand for higher density dwellings has been very weak in recent months. Although an increase in rental yields since the start of 2022 and strong inward migration may support investor demand in future, higher density housing supply is expected to respond with a significant lag due to long planning and construction lead times. After gaining planning approvals and pre-sales, the average apartment building takes more than two years to build.





Non-mining machinery and equipment investment is expected to remain at a high level over the forecast period. Information from the ABS Capital Expenditure survey suggests that firms' nominal investment intentions for the current financial year remain robust, though this partly reflects the higher cost of undertaking a given volume of investment. Intentions for the 2023/24 financial year are significantly weaker, and forward-looking measures of business conditions and confidence have softened. The resolution of supply chain pressures is expected to support investment in machinery and equipment in the near term.

Mining investment is expected to be broadly unchanged over coming years. While expansionary iron ore and LNG projects are expected to drive some growth over 2023, the vast majority of mining investment remains sustaining in nature and is intended to replace ageing infrastructure.

Public demand is forecast to remain at a high level

Public demand as a share of nominal GDP is expected to remain at a high level over the forecast period. A decline in pandemic-related spending is expected to weigh on public consumption throughout most of 2023. Further out, public consumption is expected to resume expanding, partly due to public spending programs such as the National Disability Insurance Scheme.

Public investment is expected to grow over the forecast period. The pipeline of public engineering work is anticipated to support a high level of public capital expenditures for several years. The speed of the rollout will continue to be affected by capacity constraints in the construction sector, particularly in the near term.

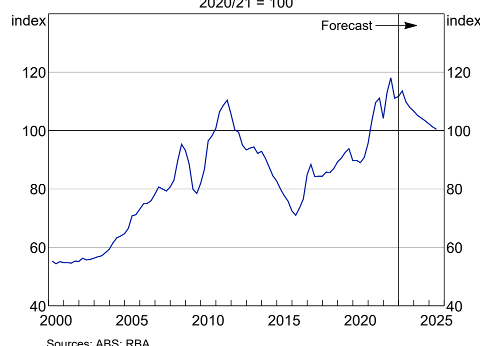
Education and travel exports will continue to recover

Export volumes are expected to continue to grow strongly over 2023, driven by services exports, as travel continues to recover to pre-pandemic levels. The expected number of international students studying in Australia over the next couple of years has been upgraded significantly. Resource exports are expected to grow gradually from the second half of 2023, supported by drier weather. Rural export volumes are expected to decline throughout the forecast period as growing conditions normalise following the conclusion of the third consecutive La Niña event.

The terms of trade are expected to increase in the March quarter, mostly driven by lower import prices, and to remain elevated but decline over the remainder of the forecast period as commodity prices decline, partly offset by a gradual easing in import prices (Graph 5.7).

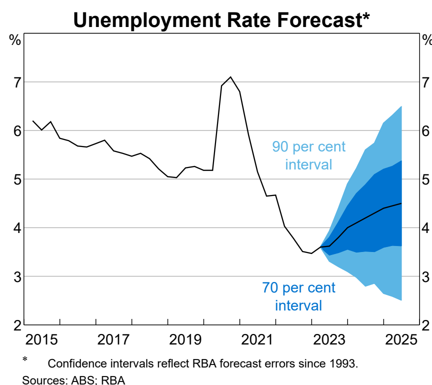
The unemployment rate is expected to increase as economic growth slows

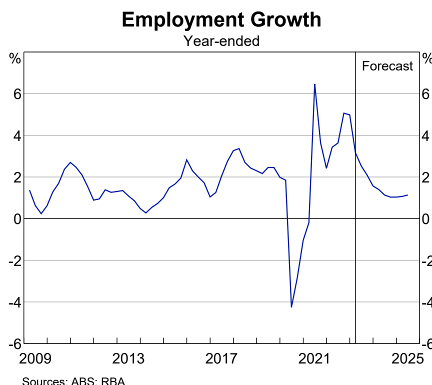
Labour market spare capacity remains around multi-decade lows. Labour underutilisation (as measured by the unemployment rate and by people working fewer hours than they want) is expected to gradually increase as a result of subdued economic growth over coming years;



the unemployment rate is nonetheless expected to remain below pre-pandemic levels (Graph 5.8). Employment growth is expected to moderate, with average hours worked also expected to resume its longer term downward trend from late 2023 (Graph 5.9).

The balance between labour demand and supply has improved recently. The pick-up in overseas migration since the reopening of the international border should further help alleviate labour shortages in some industries over time in the face of solid demand for labour, while also adding to aggregate demand in the economy. Participation in the labour force is expected to be sustained around historically high levels over the forecast period. The effect of the cyclical slowing in the labour market is expected to be partly offset by structural trends, including higher female and older worker participation.





Labour cost growth is expected to be solid

Labour cost growth picked up throughout 2022. The December quarter outcomes for wages and broader measures of labour income were generally softer than expected, suggesting that the very strong September quarter outcomes had overstated the underlying momentum in labour cost growth to some extent. Nonetheless, year-ended labour cost growth reached its highest levels in over a decade at the end of 2022. With productivity growth very weak over 2022, growth in unit labour costs was around multi-decade highs.

Timely indicators suggest that wages growth was solid in the March quarter of 2023. Firms in the Bank's liaison program report their wages growth has stabilised at around 4 per cent and expect growth to moderate in the year ahead. Market economists and unions expect wages growth to be around 3¾ to 4 per cent over the year ahead and to then moderate over the following year. Developments in state government wages policies have evolved broadly as expected a few months ago and support the view that public sector wages growth will increase over coming years.

Growth in the Wage Price Index (WPI) – a measure of changes in base wage rates for a given quantity and quality of labour – is expected to reach 4 per cent in the second half of 2023 before declining to 3¾ per cent in mid-2025 (Graph 5.10). The near-term outlook is lower than a few months ago, reflecting the weaker-than-expected December quarter WPI outcome, the signal from timely indicators of wages growth and the softer labour market outlook. The annual minimum and award wage decision by the Fair Work Commission and the 15 per cent wage increase for aged care workers will support wages growth later in 2023.

WPI growth is expected to ease in the second half of the forecast period as labour market capacity constraints become less binding. However, the expected easing in wages growth remains relatively modest, reflecting inertia in the wage-setting process, elevated inflation putting upward pressure on nominal wages in the near term and a still relatively tight labour market.

Broader measures of labour cost growth are expected to increase at a faster rate than the WPI over the forecast period as employers use bonus payments to retain or attract staff and as more hours are worked at overtime rates. These broader measures imply less of a decline in real incomes than suggested by the WPI measure (Graph 5.11). The forecast for labour costs is consistent with inflation returning to the Bank's target, provided productivity growth picks up back to pre-pandemic trends.

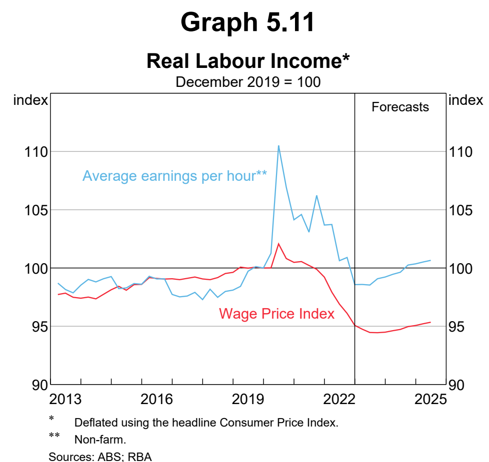
Key domestic uncertainties

Global financial instability could weigh on growth

If recent global financial stability concerns were to re-emerge and prompt tighter financial conditions and slower growth in the global economy, this could pose a downside risk to domestic economic activity. There could be direct effects on Australia's exports due to a slowdown in the growth of Australia's major trading partners, as well as a decline in the terms of trade if demand for commodities were to soften. Widespread financial instability elsewhere could also affect business and consumer sentiment. A loss of confidence in the global banking system or a rise in risk aversion could cause a tightening in domestic financial conditions, including by causing bank funding costs to increase and credit to become more expensive or less easily available, which could affect consumption and investment. However, the risk of financial contagion to Australia may be limited because, as set out in the April *Financial Stability Review*, Australia's banks are well regulated, well capitalised, profitable and highly liquid. As a result, they are well placed to continue supporting the domestic economy, even if economic conditions were to become materially worse than expected.

The outlook for household consumption is subject to competing forces

The outlook for household consumption remains a key uncertainty for domestic activity. Housing prices have stabilised recently and could increase faster than previously expected over the forecast period. This could lead to a



more rapid turnaround in household consumption growth, including via increased housing turnover and increased ability to obtain credit. Further, many households built savings buffers during the pandemic; if households are more willing to spend from these liquid savings than from other forms of wealth, spending could be stronger than anticipated for a time. This would be reflected in a larger fall in the household savings ratio. Stronger-than-expected growth in domestic demand would see domestic inflationary pressures build further.

On the other hand, weakness in household consumption could persist for longer than expected if there is a resumption of housing price declines, or if weak real disposable income growth has a larger effect than expected, particularly on low-income households that typically have lower savings buffers. Many households are well placed to absorb higher interest rate costs without significant spending cuts. However, interest rates have risen quickly and there is a risk that some households with low savings buffers and high debt relative to incomes will have to adjust their spending sharply.

Inflation could be more persistent than expected

Underlying inflation is expected to take a couple of years to return to the inflation target. However, it is possible that the easing in inflation takes longer than this, consistent with the persistence in services inflation experienced overseas so far. 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. While margins outside of the mining sector have been broadly stable in recent years, firms may expand their margins as costs ease if demand remains sufficiently strong. Alternatively, there could be stronger feedback between wages and prices. In either case, inflation would be persistently higher throughout the forecast period, which increases the risk that inflation expectations become de-anchored. Recent outcomes for private sector labour cost growth suggest that the risk that prices and wages start to chase each other is lower than a few months ago. However, larger increases to minimum and award wages and the lifting or removal of wage caps by state governments could have greater spillover effects on the wages of other workers than currently expected.

Inflation could also be more persistent if productivity growth does not pick up, which would make the current outlook for labour costs more inflationary than anticipated. The forecasts presented above require productivity growth to increase to the relatively slow rates recorded in the years preceding the pandemic. Productivity growth is currently weaker than this, and that weakness could persist; that said, the effects of the pandemic have made it difficult to discern the underlying trend. Conversely, productivity growth could rise above the typical pre-pandemic rate if innovations implemented by firms during the pandemic begin to pay dividends.

Rent inflation could also be higher and more persistent than forecast. The pick-up in population growth is occurring at a time when the rental market is already very tight, and it will take time for supply to respond. Higher rents are likely to encourage the average number of people living in each dwelling to increase, which would be a reversal of the decline that occurred during the pandemic as people sought more space. It is possible that rents need to rise by more than expected to bring about this increase in household size. On the other hand, a larger increase in household size would moderate demand and price increases by more than expected.

Goods prices could decline significantly and weigh on inflation outcomes

The inflation forecasts presented above assume that goods prices stabilise at a high level but do not 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 affects demand by more than the sum of individual-economy effects would imply. Alternatively, strong competition for customers in an environment of weaker domestic demand could cause larger-than-expected price discounting. 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 inflation would be around the middle of the target range in the second half of 2024, instead of being above it. ✠

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