

Statement on Monetary Policy

AUGUST 2021



RESERVE BANK OF AUSTRALIA

Statement on Monetary Policy

AUGUST 2021

Contents

Overview	1
1. The International Environment	5
Box A: Central Bank Purchases of Government Bonds	21
2. Domestic Economic Conditions	27
Box B: COVID-19 and Commercial Property in Australia	37
3. Domestic Financial Conditions	41
Box C: Use of the Reserve Bank's Term Funding Facility	57
4. Inflation	61
5. Economic Outlook	69

The material in this *Statement on Monetary Policy* was finalised on 5 August 2021. The next *Statement* is due for release on 5 November 2021.

The *Statement* is published quarterly in February, May, August and November each year. All the *Statements* are available at www.rba.gov.au when released. Expected release dates are advised ahead of time on the website. For copyright and disclaimer notices relating to data in the *Statement*, see the Bank's website.

The graphs in this publication were generated using Mathematica.

Statement on Monetary Policy enquiries:

Secretary's Department
Tel: +61 2 9551 8111
Email: rbainfo@rba.gov.au

ISSN 1448–5133 (Print)
ISSN 1448–5141 (Online)

© Reserve Bank of Australia 2021

Apart from any use as permitted under the *Copyright Act 1968*, and the permissions explicitly granted below, all other rights are reserved in all materials contained in this publication.

All materials contained in this publication, with the exception of any Excluded Material as defined on the RBA website, are provided under a Creative Commons Attribution 4.0 International License. The materials covered by this licence may be used, reproduced, published, communicated to the public and adapted provided that the RBA is properly attributed in the following manner:

Source: Reserve Bank of Australia 2021 OR Source: RBA 2021

For the full copyright and disclaimer provisions which apply to this publication, including those provisions which relate to Excluded Material, see the RBA website.

Overview

The Australian economy had been recovering faster than expected over the first half of this year. Output had surpassed pre-pandemic levels and, as at June, the unemployment rate had declined below pre-pandemic levels. Supported by fiscal and monetary policy stimulus, the Australian economy – along with many others globally – was on track to a robust expansion. In the absence of the latest virus outbreaks and lockdowns, the outlook would have been noticeably upgraded from 3 months ago.

The recent outbreaks of the Delta variant of the COVID-19 virus are interrupting the recovery. The near-term outlook is highly uncertain and dependent on health outcomes. Further large outbreaks are possible, but the need for extended lockdowns should diminish as vaccination coverage increases. GDP will contract noticeably in the September quarter, and it is expected that employment will decline and the unemployment rate increase for a time. The experience of previous lockdowns is that much of the labour market adjustment will come through a decline in hours worked and labour force participation. The longer the lockdowns continue, however, the more likely it is that jobs are lost.

Other countries are also contending with outbreaks of the Delta variant. Several trading partners in the Asian region that had previously managed to keep case numbers low are now having to tighten restrictions on activity. In a number of advanced economies where vaccination rates are higher, case numbers have increased but hospitalisations and deaths have stayed relatively low. Some of these countries

have reintroduced containment measures, but others have seen case numbers peak and decline despite a substantial easing in restrictions.

The experience both in Australia and overseas is that the recent lockdowns have been less damaging to the economy than the lockdowns in the first half of last year. This is because business models have adapted to restrictions on activity, and the restrictions themselves have generally become more targeted now that more is known about how the virus is transmitted. Past experience has also shown that when virus outbreaks are contained and restrictions are eased, spending bounces back as consumption possibilities return.

The Australian economy is expected to bounce back, although further major outbreaks and extended lockdowns would delay this. Under the baseline scenario, output and employment are expected to have returned to their previously anticipated paths by early next year. GDP growth is expected to be a little over 4 per cent over 2022 and around 2½ per cent over 2023. The unemployment rate is expected to resume its downward path, approaching 4 per cent by the end of 2023. Measures of growth in wages and labour costs more broadly are expected to return over the next few quarters to pre-pandemic rates, and increase gradually from there. This baseline scenario is premised on a significant share of the population being vaccinated by the end of this year and a gradual opening up of Australia's international border from mid 2022.

As foreshadowed in previous *Statements*, CPI inflation spiked over the year to the June quarter, reaching 3.8 per cent. Most of this increase reflected the earlier reversals of price falls related to the pandemic. CPI inflation was also higher in the quarter, driven by increases in the prices of petrol, fruit and vegetables, which tend to be volatile. In underlying terms, inflation remains low, at around 1¾ per cent. The introduction and unwinding of government rebates and other subsidy programs continues to affect prices of some items.

In the Bank's baseline scenario, it takes some years for the stronger economy to feed through into wage and price increases that are consistent with the inflation target. In underlying terms, inflation is expected to be 1¾ per cent over 2022 and 2¼ per cent over 2023. One source of uncertainty is how wages and prices will behave once unemployment reaches the low levels currently forecast. It has been some decades since Australia has sustained an unemployment rate around 4 per cent, so there is little historical experience to guide estimates of the sensitivity of this relationship.

Fiscal and monetary policy have been instrumental in supporting the economy during lockdowns and other restrictions, as well as underpinning the subsequent recoveries. In response to the latest outbreaks, the Australian Government has extended disaster payments to affected households, and state governments have introduced packages to support affected businesses. While different from the combination of JobKeeper and higher welfare payments used previously, the level of support for those most affected is broadly similar. The Bank is directly supporting these measures through its government banking services, which enable rapid payments to households and firms.

Although the global outlook remains uncertain, economic activity and labour markets are recovering quickly as vaccination rates rise and many economies open up. Conditions in

services sectors are improving noticeably where health-related restrictions have been eased. Global demand for goods nonetheless remains strong, as has been the case throughout most of the pandemic. This has been positive for many economies in Asia, including China, where recent growth has been led by exports and manufacturing investment. The Chinese economy continues to grow in line with pre-pandemic expectations, having recovered ahead of many other economies. Stronger manufacturing investment to expand production capacity, particularly for semiconductors, has also featured in the response to strong global demand for goods in some of the export-oriented economies in the Asian region. However, supply chain bottlenecks are still being worked through and shipping costs are unusually high.

Strong demand for goods has also boosted the prices of many commodities, including some of Australia's main exports. Australia's terms of trade are therefore expected to reach a record high in the September quarter, surpassing the peak reached during the mining boom. Despite these high commodity prices, the Australian dollar has depreciated to around its lowest levels this year.

Monetary policy support, both in Australia and overseas, is maintaining highly accommodative financial conditions. Financing conditions for firms remain very favourable in advanced economies, including Australia. Yields and spreads on corporate bonds are low and equity prices are elevated. Interest rates on business and housing loans in Australia are around historic lows, and credit growth to businesses and for housing has picked up over the first half of this year.

Over recent months, yields on longer-term bonds have fallen globally, unwinding much of the increase seen earlier in the year. The rapid spread of the Delta variant has dampened earlier optimism among market participants about the pace of economic recovery. Even so, market

pricing implies that the expected path of central bank policy rates is higher than at the start of the year. Rates are expected to start increasing soonest in economies where underlying inflation pressures are greatest. Inflation pressures have risen, partly reflecting pressures related to rapid economic reopening, bottlenecks in supply chains and other pandemic-related factors. Further out, inflation in advanced economies will hinge on how quickly the spare capacity in labour markets is absorbed. In some emerging market economies, central banks are already lifting policy rates in response to rising inflation – in some cases, despite slow recoveries in output and ongoing virus outbreaks.

Domestically, the rapid recovery to date in the labour market had resulted in solid growth in labour income, more than offsetting the withdrawal earlier in the year of the JobKeeper program and other fiscal support measures. This and the strong rise in household wealth had underpinned a robust increase in consumption. However, consumption is the category of spending most affected by lockdowns and, as in the previous outbreaks, it is expected to decline in the September quarter before rebounding as restrictions are eased later in the year.

After declining during the initial virus outbreak last year, housing prices have been rising in all major markets. Demand for existing housing has been boosted by the economic recovery and the low level of mortgage interest rates. Growth in housing credit has picked up. On top of the strong demand from first-home buyers and existing owner-occupiers, demand for finance from investors has also increased recently. Given the environment of rising housing prices and low interest rates, it is important that lending standards are maintained. The Bank is monitoring trends in housing borrowing carefully.

Dwelling investment has been increasing strongly and is likely to remain at high levels

despite slow population growth and the closure of the HomeBuilder program to new applications. Residential building approvals have declined since the program ended; however, they remain well above pre-pandemic levels, which implies that underlying demand for new housing is strong. A significant pipeline of HomeBuilder-supported projects remains to be completed over this year and next; the prices of these new homes as recorded in the CPI will be held down as the subsidies under the program are paid out. Health-related restrictions will interrupt construction in some parts of Australia in the near term. Given the strength of underlying demand, however, dwelling investment is expected to recover quickly.

Likewise, tax incentives and other policy measures have encouraged some types of business investment, especially purchases of machinery & equipment. High levels of business confidence, declining spare capacity and strengthened balance sheets have also supported the rebound. By contrast, the near-term outlook for non-residential construction is weak; indicators such as building approvals have increased lately, however, supporting expectations of a recovery in the new year.

The package of monetary policy measures introduced by the Bank in response to the pandemic has been supporting the Australian economy. By lowering the structure of interest rates, funding costs across the economy have declined to historic lows and the exchange rate is lower than it would otherwise be. Interest rates on business and housing loans continue to move lower, which is positive for the cash flows of businesses and households overall. Very low interest rates have also supported asset prices, which has strengthened the balance sheets of firms and households. Banks' funding costs have benefited from significant final drawdowns from the Term Funding Facility. This effect will persist, as funding under this facility is being provided to mid 2024.

At its July meeting, the Reserve Bank Board decided to retain the yield target for the April 2024 Australian Government bond, rather than extend the target to the November 2024 bond. This decision was taken in light of the significantly faster-than-expected recovery to that point. The Board also decided to continue with the bond purchase program once the second \$100 billion of purchases is completed in September. Doing so will assist with progress towards the goals of full employment and inflation consistent with the target. The purchases until at least November will be at the rate of \$4 billion a week, rather than the current \$5 billion. This adjustment reflected the better-than-expected progress that has been made towards the Bank's goals and the improved outlook for the next couple of years. The Board agreed to keep the rate of bond purchases under review and adjust the rate of purchases in either direction as appropriate.

At its August meeting, the Board decided to maintain the current settings for the cash rate and yield target. It also decided to continue with the previously announced change in the rate of bond purchases, having considered the case for delaying this change. The recent virus outbreaks and lockdowns have interrupted the recovery, and many households and firms are facing difficult conditions. The need for additional

policy support in response to the outbreaks is in the short term; the economy entered the current episode of outbreaks with more momentum than previously thought, and fiscal and monetary policy support are already cushioning the economic effects. Strong growth is expected to resume next year. In the Board's assessment, fiscal policy is the more appropriate instrument in the current circumstances of a temporary, localised reduction in incomes. The Board therefore welcomed the additional fiscal measures announced recently. The Board will nonetheless keep the rate of bond purchases under review in light of the evolving health situation, and is prepared to act if worsening health outcomes affect the economic outlook.

The Board remains committed to maintaining highly accommodative monetary conditions to support a return to full employment in Australia and inflation consistent with the 2–3 per cent target. It will not raise the cash rate until inflation is sustainably within the target range. Meeting this condition will require the labour market to be tight enough to generate wages growth that is materially higher than current levels. Under the current central scenario for the economy this will not be until 2024. 🏠

1. The International Environment

The global economy continued to recover over the first half of this year from the largest and sharpest decline in decades. In a number of large economies, the very substantial fiscal and monetary policy response, together with vaccinations and the associated relaxation of containment measures, enabled a rapid recovery with less economic scarring than previously feared. The outlook over the next few years is for the global recovery to continue, underpinned by significant and ongoing policy support and vaccination programs. However, global economic conditions are likely to remain uneven for some time. New outbreaks of the COVID-19 virus, including of more transmissible variants, are currently hampering the recovery in many economies, especially where vaccination rates remain low. For many developing and emerging market economies, the outlook will remain dependent on obtaining access to vaccines. A noticeable increase in inflation globally has been driven by a range of factors related to the pandemic. These factors are expected to be mainly transitory, but inflation pressures could persist if demand strengthens relative to supply and inflation expectations move higher on a sustained basis.

Yields on longer-term government bonds have declined over recent months, partly reflecting concerns about the new outbreaks of the virus. This has unwound much of the increase seen earlier in the year associated with optimism about the prospects for economic recovery underpinned by vaccinations and better-than-expected economic data. Advanced economy central banks have maintained very

accommodative monetary policy settings. Most advanced economy central banks have announced some slowing in the pace of their asset purchases in recent months or are expected to do so in the near future. Market pricing implies that some central banks are expected to begin lifting policy rates sooner than others, in economies where spare capacity is assessed to be lower and underlying inflation pressures greater. Even so, financial conditions in advanced economies remain very accommodative. That is also the case in emerging market economies, but some central banks have tightened monetary policy in recent months in response to rising inflation.

The global recovery is expected to continue

The outlook is for further recovery in the global economy over the next few years, at a pace that is broadly unchanged since the May *Statement*. However, the near-term outlook has become more uncertain given the global spread of the Delta variant. There is also a widening gap in the outlook across economies, largely reflecting differences in vaccination progress and health outcomes. The outlook remains solid for Australia's major trading partners; year-average growth is expected to be around 7 per cent in 2021 and 5 per cent in 2022 (Graph 1.1). This would see the level of output in these economies in late 2022 only a little below what was expected prior to the pandemic.

The outlook for advanced economies in North America and Europe has strengthened this year. Economic activity has picked up sharply in the

United States and is expected to exceed its pre-pandemic path by late 2021; this is largely due to highly stimulatory fiscal and monetary policies and an easing of restrictions earlier in the year after vaccinations reached relatively high rates. Similarly, the recovery is well underway in much of the euro area. However, output in the euro area is expected to remain a little below the pre-pandemic path throughout 2022; this is because of the smaller fiscal policy stimulus there and the greater importance in some member economies of the tourism industry, which has been significantly impacted by travel restrictions imposed during the pandemic.

In China, where authorities have been successful in containing outbreaks over the past year, GDP is expected to continue growing around its pre-pandemic path. Some advanced economies in Asia have experienced outbreaks recently amid a slow start to their vaccination programs. GDP in these economies is expected to reach or surpass pre-pandemic paths over the next few years. Strong demand for manufactured exports, particularly for semiconductors and related products, should support the recoveries there.

Slow vaccinations, limited vaccine supplies and large recent outbreaks have weighed on the recovery prospects in many emerging market economies, including in Asia. In India, economic

activity has picked up as state governments have lifted lockdowns, but the lingering impact of the pandemic on private sector finances and the labour market is expected to weigh on output over the next two years. Similarly, severe pandemic-related disruptions and limited policy responses are likely to have resulted in significant economic scarring in many emerging economies; business closures and skill losses will contribute to this. As a result, the level of GDP is expected to remain well below pre-pandemic paths for an extended time in many emerging market economies.

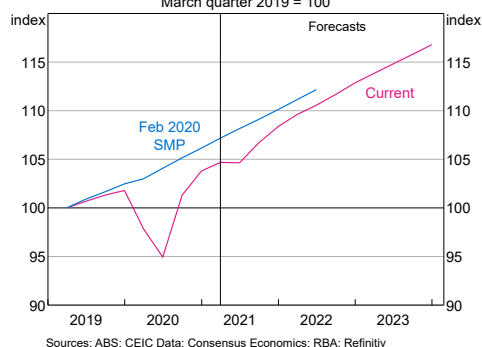
Significant uncertainties continue to surround the global economic outlook:

- In the near term, further outbreaks of the highly transmissible Delta variant could slow the recovery, particularly in countries with low vaccination rates. The potential emergence of vaccine-resistant virus strains poses a risk to all countries. Conversely, reduced circulation of the virus and a faster rollout of vaccines, particularly in emerging market economies, could speed up and strengthen their recoveries relative to current projections.
- Recent inflation pressures could turn out to be more persistent if labour markets tighten faster than expected. The pandemic could also depress labour mobility within and across economies for a number of years, resulting in a prolonged period of skills mismatches. Financial conditions in advanced economies could tighten substantially if the recent upswing in inflation was expected to persist and materially exceed central banks' targets. In turn, this could spill over into tighter financial conditions for many emerging market economies while they are still dealing with virus outbreaks and/or at a relatively early stage of recovery. Conversely, inflation could return to be below central banks' targets prior to the pandemic if

Graph 1.1

Australia's Major Trading Partner GDP

March quarter 2019 = 100



demand does not fully recover and spare capacity in labour markets persists.

Vaccinations have ramped up but many countries are being hindered by limited vaccine supplies and fresh COVID-19 outbreaks

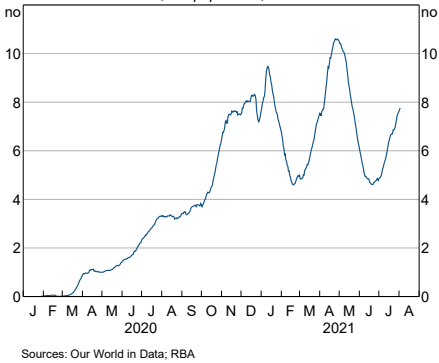
COVID-19 vaccinations have accelerated over recent months in a range of countries (Graph 1.2). Some were able to vaccinate significant shares of their populations in the first half of the year, such as the United States and the United Kingdom, where COVID-19 case numbers had been high in 2020 and early 2021. China has also significantly sped up its vaccination rollout in recent months. However, in most emerging market economies, vaccination coverage remains low largely as a result of limited vaccine supplies.

Global infections have risen again since early July due to the spread of the highly contagious Delta variant (Graph 1.3). This follows a decline in global case numbers from their recent peak in May, after a major outbreak in India was brought under control and vaccination programs contributed to declining case numbers in the United States and Europe. The recent resurgence in infections has been very strong across much

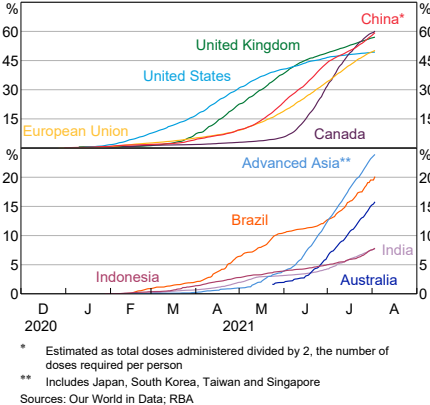
of Asia, including among many of Australia’s trading partners such as Japan, South Korea, Indonesia and Thailand.

Infections have also increased sharply in some highly vaccinated countries. However, as the rise in hospitalisations and deaths in these countries has been much smaller, the containment measures used so far have been less severe than earlier in the pandemic; there are also early signs that infections have already peaked in some of these countries (Graph 1.4). Because of this, and because households and firms have adapted their behaviour over time, the effects on economic activity have been less severe than earlier in the pandemic.

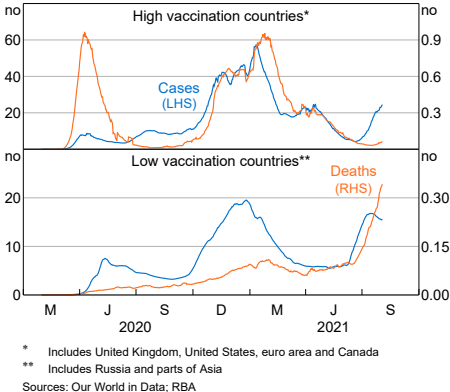
Graph 1.3
COVID-19 – Global New Cases
Per 100,000 population, smoothed



Graph 1.2
People Fully Vaccinated
Share of population



Graph 1.4
COVID-19 – Health Indicators
Per 100,000 population, smoothed



Activity is picking up quickly where restrictions have been relaxed

A key feature of the global recovery to date is that it has remained highly uneven (Graph 1.5). Activity has picked up quickly in economies where restrictions have eased following strong vaccination campaigns or where infection rates have remained low. Some economies have received a boost from being highly integrated in global goods trade. Elsewhere, including in many emerging market economies, the recovery has been hampered by resurgences in infections, renewed containment measures and more constrained policy responses.

Economic activity picked up strongly in the June quarter in North America and Europe led by a resumption in consumer spending on services (Graph 1.6). This was enabled by the quick unwinding of containment measures following high rates of vaccination achieved during the first half of the year; however, in some jurisdictions, containment measures have been tightened a little again to slow the spread of the Delta variant. Consumer and business sentiment in these economies has recovered to around or above long-run averages. The recovery in the United States has been further boosted by

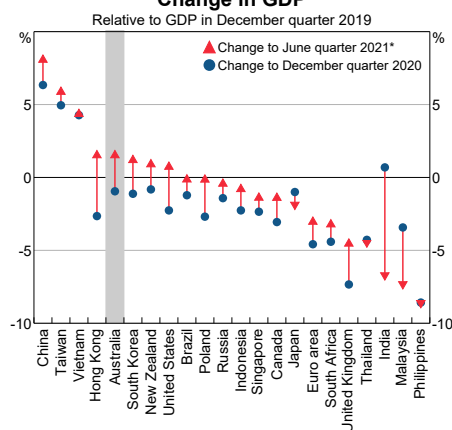
sizeable fiscal stimulus earlier this year, which has continued to support the global demand for goods. Favourable financing conditions have supported a strong recovery in residential and business investment in North America and to a lesser extent in Europe over the past year. Widespread vaccinations have also allowed for some international travel to resume, particularly in European economies intent on restarting their tourism sectors.

In China, where the economic recovery is most progressed, activity has continued to expand at a solid pace (Graph 1.7). This has been driven primarily by manufacturing investment and exports. Household consumption growth has also been strong overall, despite spending on services remaining sensitive to ongoing outbreaks of COVID-19. However, fiscal spending and infrastructure investment have slowed since the start of the year, possibly reflecting a shift in the authorities' focus towards addressing longer-term fiscal sustainability and financial stability issues. New restrictions on property developer debt levels have also contributed to a slowing in real estate construction.

Elsewhere in Asia, a tightening of containment measures weighed on consumption in the first half of the year, particularly for contact-intensive services. For the more export-oriented advanced

Graph 1.5

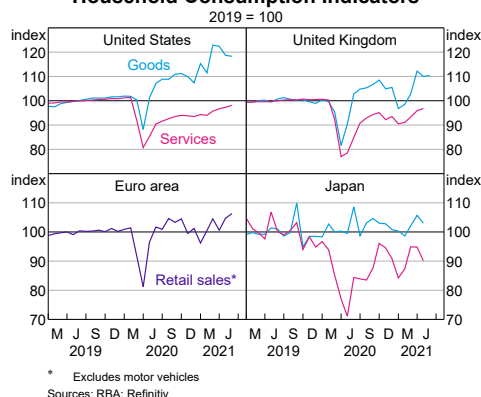
Change in GDP



* Forecasts used where June quarter GDP has not yet been reported
Sources: ABS; Bloomberg; CEIC Data; Consensus Economics; RBA; Refinitiv

Graph 1.6

Household Consumption Indicators



economies in this region, this has been offset by buoyant external demand, which has supported exports and prompted an uplift in business investment, including in semiconductor capacity.

In India, economic activity declined sharply in the June quarter, though by less than was seen a year earlier. This was because the containment measures introduced during the recent outbreak were more localised and population mobility was less affected than in 2020. Likewise, severe outbreaks in the emerging economies in Southeast Asia have led to weaker domestic demand in the June quarter; significant containment measures are likely to remain in place throughout the September quarter. The recoveries in a number of large emerging market economies outside Asia, including in Brazil and Russia, have also slowed since the start of the year because of surging infections and tightened containment measures. Recent civil unrest in South Africa has set back the economic recovery there. The potential for financial conditions to tighten before recoveries are well entrenched has also weighed on the growth outlook for some emerging market economies. Such a tightening could occur if above-target inflation is expected to persist, or if

expectations about monetary policy tightening in advanced economies were brought forward.

Housing prices have picked up globally supported by low interest rates

Conditions in housing markets have strengthened considerably in advanced economies and much faster than following typical recessions (Graph 1.8). Housing prices and demand are being supported by very low interest rates, increased household savings during the pandemic and household balance sheets that have remained in better shape than is typical for an economic contraction. Regulators in some jurisdictions have expressed concerns about the financial stability risks associated with buoyant housing market conditions, including rapid mortgage growth, and some jurisdictions have tightened macroprudential policies to address these risks.

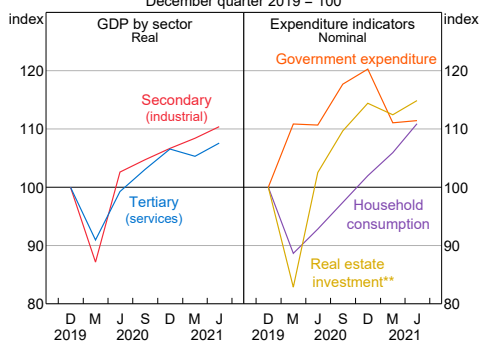
Labour markets have continued to improve but spare capacity remains

Despite the strong recovery in economic activity, employment, participation rates and hours worked are still well below pre-pandemic levels in many economies (Graph 1.9). This suggests that there is spare capacity remaining in these labour markets – a point recognised by a number of central banks – although labour

Graph 1.7

China – Activity Indicators*

December quarter 2019 = 100



* Seasonally adjusted by the RBA

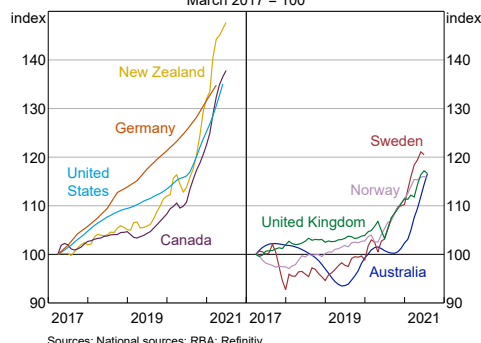
** Excludes land

Sources: CEIC Data; RBA

Graph 1.8

Housing Price Indices

March 2017 = 100



Sources: National sources; RBA; Refinitiv

market conditions have tightened relatively quickly for some industries. Demand for labour has picked up strongly in advanced economies where containment measures have been eased; timely labour market indicators, including job ads, vacancies and surveyed measures of employment conditions, are at elevated levels. Labour market support measures are generally pivoting from supporting incomes and employment relationships to incentivising job creation and the return to work.

Labour supply has generally been slow to recover. This has been most evident in the United States, where GDP recovered to pre-pandemic levels in the June quarter while labour force participation remained well below its previous levels. The slow recovery in labour supply in most advanced economies reflects a range of factors, including school closures increasing child caring responsibilities, lingering health concerns and, in some economies, ongoing wage subsidies. Mismatches between labour demand and supply have contributed to high job vacancies in some industries and pockets of wage pressures; however, overall wages growth has remained moderate.

A relatively robust labour market recovery is expected in most advanced economies because of the strong rebound in activity and limited economic scarring. Unemployment rates are

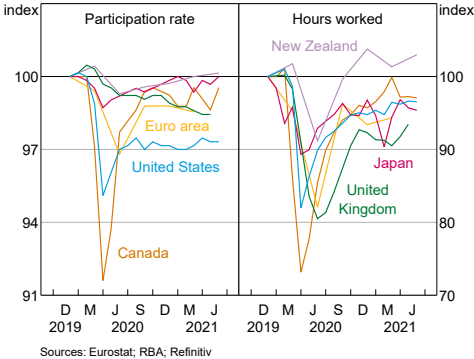
expected to fall over the next couple of years to levels similar to before the pandemic and, in many cases, to levels broadly consistent with some estimates of full employment (Graph 1.10). This should contribute to a pick-up in wages growth.

Strong demand for goods and ongoing supply disruptions are putting pressure on global supply chains ...

Recent COVID-19 outbreaks, particularly in Asia, are disrupting global supply chains that were already stretched by the strong global demand for goods. Global merchandise trade has remained robust alongside ongoing strong demand for goods from advanced economies; exports from Asia continue to increase strongly as a result (Graph 1.11). Supplier delivery times have also increased further, which is causing some downstream production disruptions, notably in automotive manufacturing. This has led to temporary falls in industrial production in some economies with large automotive sectors, including Japan, South Korea and Germany. Supply capacity is expected to increase gradually in key sectors in response to strong demand. For example, significant investment is planned over the next couple of years in the global semiconductor and shipping industries

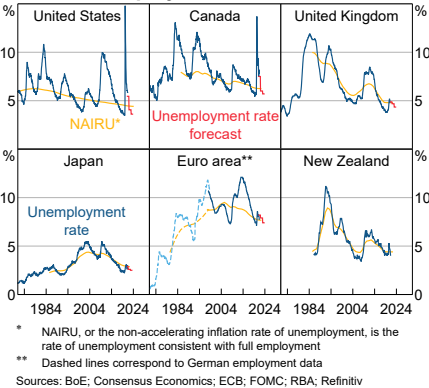
Graph 1.9

Labour Market
December 2019 = 100



Graph 1.10

Unemployment and Full Employment Rate Estimate



where shortages have been pronounced. Strong global goods demand has also supported strong growth in Chinese steel production and, in turn, Chinese imports of iron ore; around 60 per cent of iron ore imports are sourced from Australia (Graph 1.12).

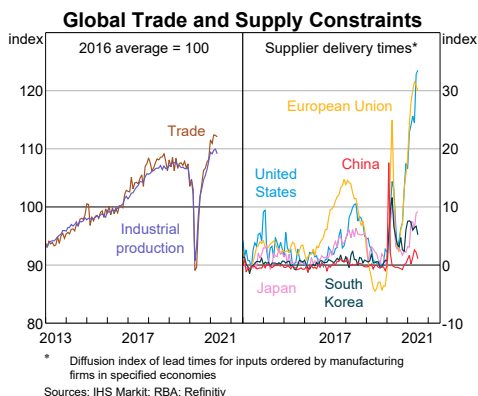
... which has boosted prices of resource commodities and other inputs

The combination of strong goods demand and supply pressures has seen the prices for certain key inputs – including commodities, semiconductors and container shipping – rise sharply since the beginning of the year. Producer price inflation in many economies has risen to the highest rates in more than a decade,

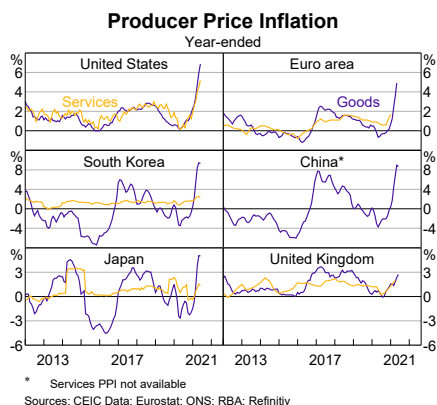
partly due to the increase in input prices (Graph 1.13). Survey measures suggest that producers have been passing on some of the increase in their input costs to consumers. However, downstream inflationary pressures are expected to subside over time as global supply bottlenecks are resolved and as global consumption rebalances away from goods to services following the relaxation of containment measures.

Among key Australian commodity exports, prices for coal and LNG have increased further since the previous *Statement* (Graph 1.14; Table 1.1). This has driven Australia's terms of trade to historically high levels.

Graph 1.11

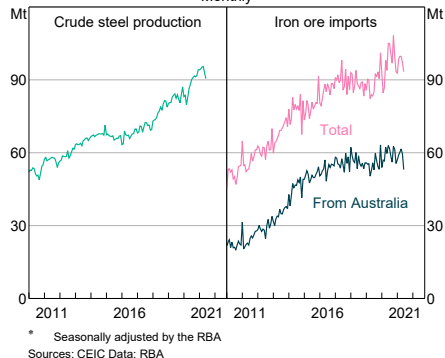


Graph 1.13



Graph 1.12

China – Steel Production and Iron Ore Imports*



Graph 1.14

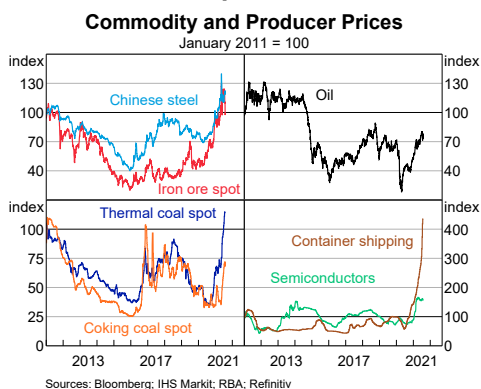


Table 1.1: Commodity Price Changes^(a)
Per cent

	Since previous <i>Statement</i>	Since start of year
Bulk commodities	3	31
– Iron ore	–14	13
– Coking coal	91	107
– Thermal coal	63	87
Rural	2	14
Base metals	–1	24
Gold	–1	–4
Brent crude oil ^(b)	3	37
RBA ICP	12	27
– Using spot prices for bulk commodities	3	23

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

(b) In US dollars

Sources: Bloomberg; IHS; RBA

Iron ore prices reached a record high level in May, underpinned by robust demand from China and the rest of the world as global steel production has recovered (Graph 1.14). On the supply side, persistent weather-related disruptions and maintenance at some Australian mines and ports contributed to elevated prices. However, prices have since fallen following signs that Chinese authorities will reduce steel output over environmental concerns and as temporary supply issues ease. Chinese authorities have also sought to discourage speculative trading activity in the iron ore and steel markets in an effort to moderate prices. More broadly, analysts have noted that the recovery in supply from Brazil and easing demand from China could weigh on prices over the remainder of the year.

Strong global steel production and elevated steel prices have also supported the price of coking coal, which has almost doubled the previous *Statement*. Indian demand for coking coal has rebounded as domestic restrictions have been eased and steel mills have started to restock. The price of some base metals, notably zinc and copper, remain elevated, supported by

the continued recovery in global industrial production. However, they have eased in recent months, partly in response to China releasing government reserves of industrial metals in an effort to ease price pressures.

The ongoing global economic recovery and strong energy demand from Asia ahead of a warm northern hemisphere summer have also supported energy-related commodity prices. The Newcastle thermal coal spot price has increased further since the previous *Statement* to be at its highest level in 12 years; the spot price for LNG in Asia has also picked up. The price of Brent crude oil has increased further since the previous *Statement* and is now around its highest level since early 2019 (Graph 1.14). Oil prices are also being supported by an increase in travel as economies reopen, alongside tighter global supply.

Recent inflationary pressures are likely to be transitory, but some upside risk remains

Headline consumer price inflation has picked up noticeably in some advanced economies this

year. The increase reflects a combination of factors, including base effects from some price declines early in the pandemic, the pick-up in input prices and a rapid recovery in demand for some consumer items as economies have reopened. In many economies, the increase in inflation has largely come from a small set of pandemic-affected items and is less apparent in trimmed mean measures of underlying inflation (Graph 1.15).

Most central banks expect pandemic-related shocks to supply and demand to wash through in coming quarters. Once this has occurred, inflationary pressures will depend on the extent of spare capacity and the speed at which it is absorbed, which also remains more uncertain than usual. It is possible, however, that the concurrent nature of the global upswing could see bottlenecks persist into next year, in part because of ongoing strength in private demand due to household and business balance sheets being in reasonable health. While medium-term inflation expectations in advanced economies are higher than a year ago, they have generally risen to rates consistent with, or only a little below, central banks' inflation targets (Graph 1.16).

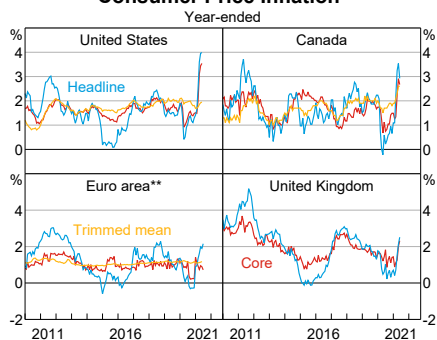
Longer-term yields have declined

Longer-term government bond yields have declined over recent months in most advanced economies, unwinding much of the increase that occurred over the first 3 months of the year (Graph 1.17). That earlier rise in yields reflected the improving economic outlook, aided by fiscal support measures. Real yields rose, as did market measures of inflation expectations, which moved closer to central banks' inflation targets (Graph 1.18). Central banks had continued to emphasise that monetary policy would remain very stimulatory until inflation outcomes were higher on a sustainable basis.

Longer-term yields have since declined. Real yields are back around the historic lows they reached at the start of the year. Measures of longer-term inflation expectations have declined a little despite the increase in inflation outcomes in some economies (Graph 1.19). The decline in real yields in part reflects concerns among market participants about longer-run growth prospects in advanced economies. Over the past month, the decline in yields has been amplified by some market participants closing out positions that were designed to benefit from higher yields.

Graph 1.15

Consumer Price Inflation*



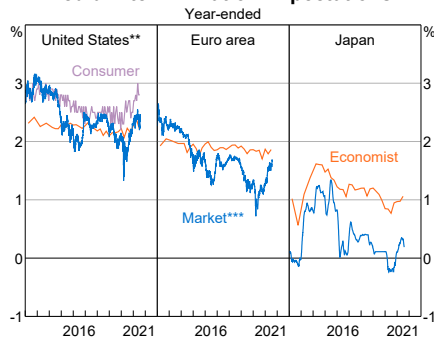
* Personal consumption expenditure deflator used for the United States; CPI used elsewhere

** The euro area trimmed mean shows the Persistent and Common Component of Inflation

Source: Refinitiv

Graph 1.16

Medium-term Inflation Expectations*



* Expectations for headline CPI

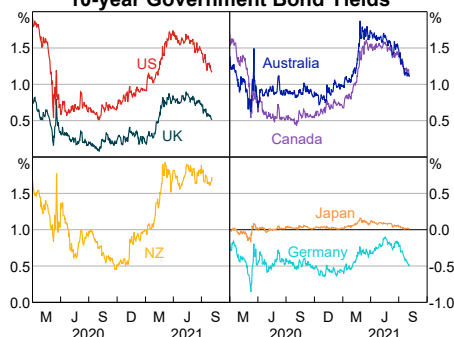
** Fed's preferred inflation measure is PCE inflation, which has averaged about 30 basis points less than CPI inflation since 2000

*** Implied from 5-year, 5-year forward inflation swaps; smoothed for Japan

Sources: Bloomberg; Consensus Economics; RBA; Refinitiv

Graph 1.17

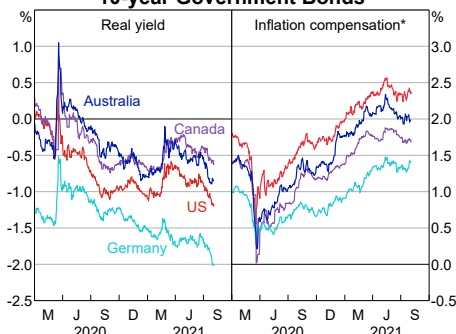
10-year Government Bond Yields



Sources: Bloomberg; Yieldbroker

Graph 1.18

10-year Government Bonds

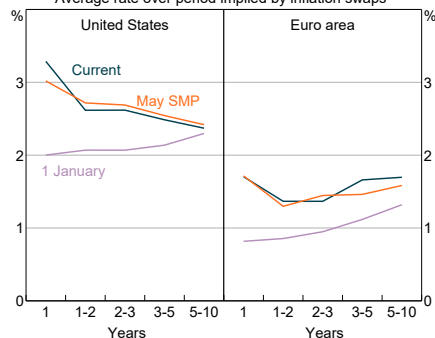


* Spread between yields on nominal and inflation-linked bonds
Source: Bloomberg

Graph 1.19

Inflation Expectations

Average rate over period implied by inflation swaps*



* Swaps return a payoff based on observed values of consumer price indexes (CPI). The prices of these swaps also embed time-varying risk premia to compensate investors for uncertainty about the outlook for inflation, which can complicate the interpretation of these prices as expected inflation

Source: Bloomberg

Movements in shorter-term government bond yields over recent months have been in line with changes in the outlook for monetary policy in advanced economies (see below). Shorter-term bond yields have increased sharply in New Zealand, and to a lesser extent in Canada and the United States (Graph 1.20). In contrast, shorter-term bond yields in Germany and Australia have declined a little alongside developments in longer-term yields.

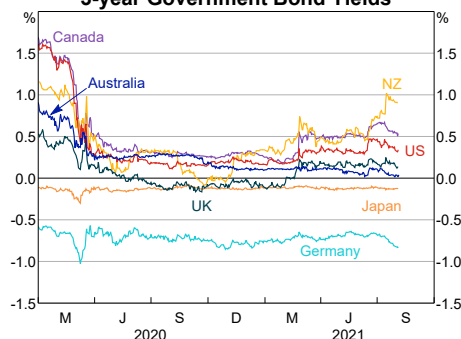
Central banks have maintained very accommodative monetary policies

Central banks in advanced economies continue to provide substantial monetary policy support through very low policy rates, sizeable asset purchases and lending programs; their balance sheets have increased substantially and in some cases will continue to grow under announced policies (Graph 1.21). Central banks have continued to signal that recent increases in inflation outcomes to above-target levels are likely to be transitory and that monetary stimulus will be maintained until there is sustained progress towards employment and inflation goals.

Most central banks in advanced economies continue to provide support through asset purchases (see 'Box A: Central Bank Purchases of Government Bonds'). In response to progress in

Graph 1.20

3-year Government Bond Yields



Sources: Bloomberg; RBA; RBNZ; Yieldbroker

the economic recovery, several central banks have reduced the pace of purchases in recent months:

- Following a gradual slowing of purchases since the start of the year, the Reserve Bank of New Zealand (RBNZ) halted asset purchases in July, having purchased a little over half of the NZ\$100 billion upper limit of their purchase program.
- As was widely expected, the Bank of Canada (BoC) further reduced the pace of its asset purchases from C\$3 billion to C\$2 billion per week in July. This followed a similar-sized reduction in April. The BoC indicated that the latest adjustment reflected continued progress towards recovery and increased confidence in the economic outlook.
- The Bank of England (BoE) reduced the pace of its government bond purchases from around £4.4 billion to £3.4 billion per week in May, but emphasised that this did not reflect a change in policy stance since the target stock of purchases remained at £875 billion.
- The US Federal Reserve (Fed) has continued to purchase Treasury securities at a pace of US\$80 billion per month. However, Chair Powell flagged that the Federal Open Market Committee (FOMC) is likely to discuss an appropriate tapering timeline at upcoming meetings, consistent with Fed officials’

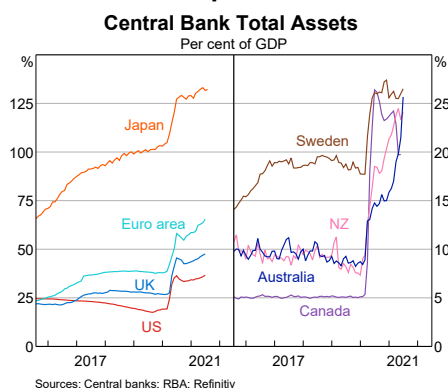
expectations that the economy will continue to make progress towards the Fed’s inflation and employment goals. Market expectations are that the Fed will begin reducing its pace of purchases in late 2021 or early 2022 and that net purchases will cease by the end of 2022.

Progress in the global economic recovery over the course of this year has also led to a shift higher in the market-implied path of expected policy rates in a number of advanced economies, although these paths have generally declined over the past month due to concerns about new outbreaks of the COVID-19 virus (Graph 1.22). However, expectations for the policy rate have risen further over the past month in New Zealand, with current market pricing suggesting that the RBNZ is expected to raise its policy rate before the end of this year. This is in response to stronger-than-expected economic data and indications from the RBNZ that domestic capacity constraints are expected to begin putting upward pressure on wages and inflation.

In June, Norges Bank indicated that it expects to raise its policy rate in September this year, in line with its earlier communication that this was expected to occur in the second half of the year. Market pricing suggests that the BoC is expected to raise its policy rate in mid 2022. In mid July, the BoC reaffirmed that it expects the first increase in its policy rate to occur in the second half of 2022, provided that the economic outlook evolves as expected at the time. The BoE is expected to raise its policy rates around mid-to-late 2022.

In the United States, market pricing suggests that the Fed is expected to start raising policy rates around early 2023. At the June FOMC meeting, the majority of participants indicated that they expected the policy rate to increase by 50 basis points during 2023; this is in contrast to March when the majority expected that the policy rate would remain unchanged until at

Graph 1.21



least 2024. This adjustment was accompanied by upward revisions to FOMC participants' projections for economic growth and inflation in the near term.

In the euro area and Japan, market pricing continues to indicate that investors do not expect changes to policy rates for at least several years. The European Central Bank (ECB) announced its new monetary policy strategy in July following a comprehensive review. The ECB now has a symmetric inflation target of 2 per cent inflation over the medium term that aims to provide a clear anchor for inflation expectations; the previous target was for inflation to be 'below, but close to, 2 per cent'. In updated forward guidance, the ECB said that it does not expect to increase the policy rate until inflation is forecast to reach 2 per cent on a sustainable basis 'well ahead' of its 3-year forecast horizon. This suggests a somewhat higher threshold for a policy rate rise than previously.

The ECB's strategy also committed the central bank to a climate-related action plan, which includes incorporating climate factors into monetary policy assessments. The Bank of Japan (BoJ) has also announced its new strategy on climate change – it will establish a climate-based lending facility this year, which will provide banks with funding for green and sustainability-linked bonds and loans, and

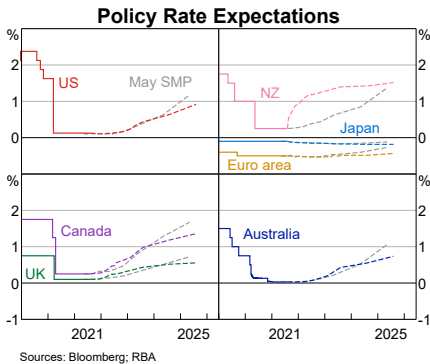
transition finance. The BoJ will also purchase foreign-currency-denominated green bonds to form part of its foreign exchange reserves.

Private sector funding conditions in advanced economies remain very accommodative

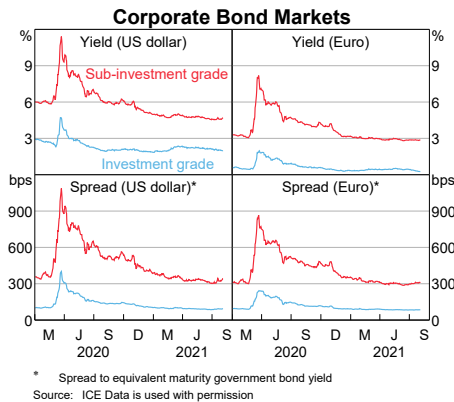
Conditions in corporate bond markets remain highly accommodative. Over recent months, corporate bond yields have declined further alongside the decline in government bond yields at similar maturities (Graph 1.23). Credit spreads remain close to their lowest levels since the start of the pandemic. In particular, credit spreads on US investment grade corporate bonds have fallen to around their lowest levels since 2007. Issuance has declined since the start of the year, though corporations continue to take advantage of low borrowing costs and have issued debt at a steady pace in recent months.

Equity prices have increased further in most major markets and are either at all-time or post-pandemic highs (Graph 1.24). Measures of equity price volatility have increased over the past month as concerns have risen about the new outbreaks of COVID-19. Equity issuance in the United States and Europe in the year to date remains higher than pre-pandemic levels. However, activity in the United States has slowed considerably in recent months as

Graph 1.22



Graph 1.23



issuance by so-called ‘blank-cheque’ vehicles (Special Purpose Acquisition Companies), which raise funds to identify and invest in private companies to take public, has declined sharply due to waning investor appetite.

There has been a broad-based appreciation of the US dollar

The US dollar has appreciated since June on a trade-weighted (TWI) basis alongside the rise in shorter-term government bond yields in the United States (Graph 1.25). Some other advanced economy currencies, including the Australian dollar, have depreciated since June on a TWI basis alongside the broad strength of the US dollar (see ‘Domestic Financial Conditions’ chapter for recent developments in the Australian dollar). While the US dollar is around its levels at the beginning of the year, the Japanese yen and euro are lower since that time, consistent with the relatively modest increase in government bond yields in those economies over the period.

Emerging market financial conditions have remained stable, but are tighter than at the start of the year

Financial conditions in many emerging market economies have remained stable over the past few months, following a tightening of

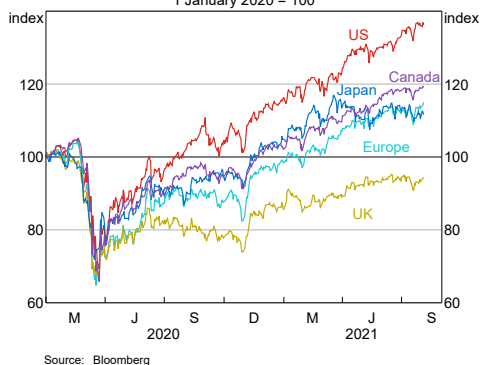
conditions in early 2021 (Graph 1.26). Yields on local-currency government bonds have generally remained higher than earlier in the year, while yields in Latin America have increased noticeably alongside recent policy rate increases in Brazil, Mexico and Chile. Spreads between US dollar-denominated bonds in emerging markets and equivalent US Treasury bonds have increased a little and remain slightly above their pre-pandemic levels. Portfolio flows into bond and equity funds have picked up again after slowing earlier in the year. Despite increases in actual or expected policy rates, the currencies of most emerging market economies have depreciated slightly against the US dollar. In Asia, some currencies have depreciated sharply over recent months, including the Philippine peso and Thai baht, in part because the pace of their economic recoveries has been hampered by the ongoing increases in COVID-19 cases.

Some emerging market economies remain vulnerable to a tightening of global financial conditions at a time when their economic recoveries are still tentative, including because of the ongoing health crisis. This is of particular concern for economies with large fiscal deficits, high levels of debt and/or a large share of external financing, such as Turkey, Brazil and South Africa. In South Africa, social unrest over

Graph 1.24

Equity Prices

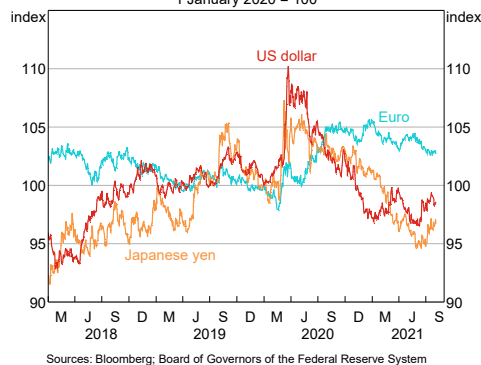
1 January 2020 = 100



Graph 1.25

Trade-weighted Exchange Rates

1 January 2020 = 100



recent weeks has caused some volatility in domestic financial markets and has slowed the country's vaccine rollout program.

Some emerging market central banks face rising inflation despite a weak economic recovery

In emerging market economies, some inflation-targeting central banks are now facing the difficult task of balancing rising inflation and weak economic recoveries. Inflation has risen most notably for those economies with exchange rates that remain well below their pre-pandemic levels and where inflation expectations are not well anchored. The market-implied paths of expected policy rates have shifted higher, with many central banks in these economies expected to begin lifting policy rates this year. However, a premature withdrawal of monetary policy support could exacerbate existing financial vulnerabilities and slow recoveries.

These pressures have been most pronounced in Latin America where a number of central banks have already increased policy rates in the past few months and are expected to lift them substantially further by the end of the year

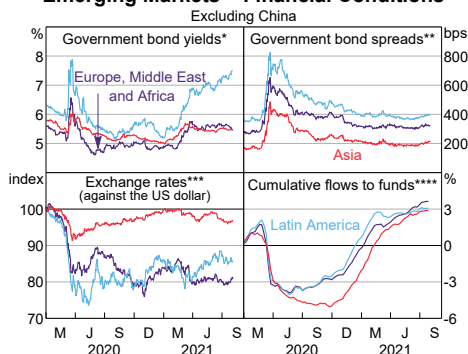
(Graph 1.27). The central banks of Brazil and Russia have raised their policy rates several times this year in response to rising inflation that has remained persistently above target; both central banks have signalled further increases this year. In Mexico, the central bank unexpectedly raised its policy rate for the first time since 2018, also in response to concerns about inflation. The central bank of Turkey continued to hold its policy rate unchanged, after having raised it in early 2021 to be above the rate of inflation. Policy rates have been left unchanged by a number of other emerging market central banks that view recent increases in inflation to be temporary or for which inflation remains subdued.

Chinese financial conditions remain accommodative but growth in total financing has slowed

Chinese financial conditions remain accommodative as policy continues to support economic activity. In early July, the People's Bank of China (PBC) announced an unexpected cut to the reserve requirement ratio (RRR) of 50 basis points for most banks, the first such cut since the early phase of the pandemic (Graph 1.28). The authorities cited two reasons for the cut: lowering costs for smaller businesses; and

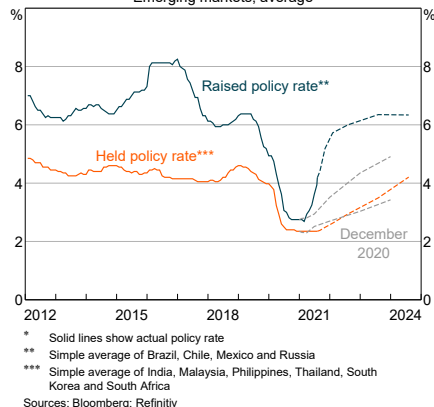
Graph 1.26

Emerging Markets – Financial Conditions



Graph 1.27

Market Implied Policy Rate Expectations*



supporting liquidity. By lowering bank-funding costs, the cut was aimed at reducing financing costs for micro, small and medium enterprises, some of which have recently faced a sharp rise in input costs. Policymakers have placed considerable focus on improving these firms' access to bank credit in recent months. A part of the additional liquidity from the RRR cut will offset maturing medium-term lending facility funds.

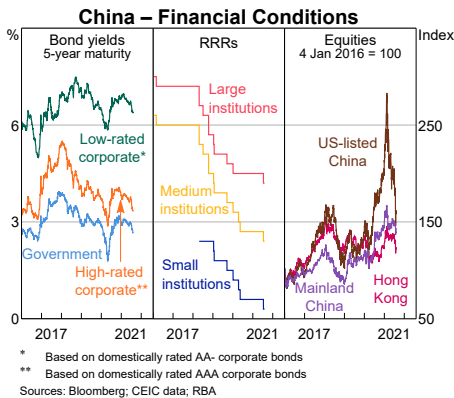
Yields on government and corporate bonds have declined in recent months to around pre-pandemic levels, and moved lower on news of the RRR cut. Money market rates have also remained slightly lower than pre-pandemic levels. Chinese equity prices fell sharply in late July as investors reassessed the prospects for a range of private-sector companies in light of recent regulatory actions. The decline was triggered by authorities announcing extensive reforms of the for-profit education sector, and followed earlier regulatory actions against Chinese technology companies and listings outside mainland China.

The recent measures to ease overall financial conditions have occurred against the backdrop of ongoing actions to address medium-term financial stability risks. Recently, new measures have continued to target the property sector and less transparent financing channels, such as

the trust industry. These measures have contributed to a slowing in the growth of debt over recent months and total social financing has been stable as a share of GDP, in line with the target set by Chinese authorities earlier in the year (Graph 1.29).

The Chinese renminbi has been little changed against the US dollar in recent months, and remains close to its recent highs (Graph 1.30). Ongoing pressure on the renminbi to appreciate eased as market participants brought forward their expectations for policy normalisation in the United States, and with a decision in June by the PBC to increase the reserve requirement for foreign currency deposits. However, trade surpluses and portfolio inflows to Chinese equity and bond markets this year have continued to support the renminbi, and interest rates on Chinese government bonds remain higher than those in advanced economies. ✎

Graph 1.28

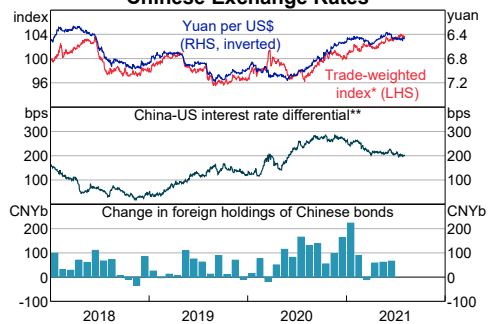


Graph 1.29



Graph 1.30

Chinese Exchange Rates



* Indexed to 1 January 2018 = 100

** 5-year government bond yields

Sources: Bloomberg; CEIC; China Foreign Exchange Trade System

Box A

Central Bank Purchases of Government Bonds

Most advanced economy central banks have made large-scale purchases of government bonds during the COVID-19 pandemic. While employed for the first time in Australia, such purchases in the secondary market for government bonds have become an increasingly important monetary policy tool.^[1]

In the early months of the pandemic – following a sharp rise in the cost of transacting in government bonds as market participants sought to convert bond holdings into cash – central bank bond purchases were primarily used to support market functioning. Without central bank intervention, the resulting tightening of financial conditions would have exacerbated the shock to the real economy.

The motivation for central bank bond purchases since then has been to contribute to a further easing of financial conditions, given that policy rates had already been reduced to the point of being constrained by the effective lower bound. Bond purchases contribute to a decline in government bond yields. This contributes to lower yields on other assets as well as putting downward pressure on the exchange rate.^[2] This box outlines the channels through which central bank bond purchases contribute to easier financial conditions, and discusses some differences in the characteristics of bond purchase programs at different central banks in advanced economies.

How Have Government Bond Purchases Worked?

Central bank bond purchases contribute to easier financial conditions through a combination of three channels:^[3]

- *Signalling low policy rates*: bond purchases can help to signal that the central bank will not raise its policy rate for some time and so reinforce other guidance on the policy rate.
- *Improving liquidity*: central bank purchases reduce the liquidity premiums on bonds by improving market functioning and reducing the risk that bonds are difficult to sell. This channel can be particularly important in periods of financial market stress.
- *Portfolio rebalancing*: the announcement of government bond purchases bids up their price, causing yields to decline as they move inversely to the price. Financial markets are forward looking and price in the impact of the central bank purchases that are expected to occur in addition to those already completed. By lowering the yield on government bonds, central bank purchases cause investors to switch into alternative assets, including corporate bonds, asset-backed securities and equities. This contributes to a rise in the price of these assets, and a broad easing of financial conditions.

The effect of a central bank's bond purchase program on bond yields and broader financial conditions depends on the total

expected size of that program.^[4] The rate of purchases being conducted can provide some guide to the ultimate size that a purchase program is likely to reach, especially in open-ended bond purchase programs (see below).

To assess the size and hence the degree of stimulus provided by central bank bond purchases, it is relevant to consider purchases both as a share of bonds outstanding and relative to nominal GDP. The size relative to the bond market indicates how the central bank's purchases have affected the share of government bonds held by other market participants. The size relative to GDP accounts for differences in the size of the government bond market in different economies, and is particularly relevant for considering the size of the possible portfolio rebalancing effects as investors seek alternative assets.

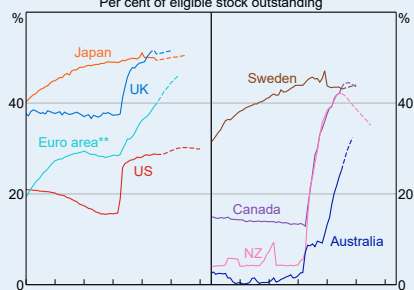
Graphs A.1 and A.2 depict bond purchases along these two dimensions, including projections of future purchases based on available information from central banks, surveys of market expectations and in lieu of those a continuation of the recent pace of purchases is assumed. Comparing across economies, the size of stimulus is particularly large in Japan based on both measures. In countries with less government debt on issue relative to the size of their economies like Australia, Canada, New Zealand and Sweden, the scale of stimulus is larger when considered as a share of the bond market.

Research generally supports the view that it is the total expected size of bond purchases that matters for financial conditions. When expectations arise for *additional* bond purchases, beyond those already expected by market participants, this provides *additional* stimulus.^[5] A related point is that

when a central bank ceases net purchases of government bonds, and maintains a constant stock of bonds on its balance sheet, it is maintaining a consistent level of stimulus via the portfolio rebalancing channel (akin to the effect of maintaining the policy rate at a given level). The available research supports this view and suggests that the stimulus begins to be withdrawn when the central bank is expected to allow for a reduction in the size of its bond holdings.^[6]

Graph A.1

Central Bank Government Bond Holdings*
Per cent of eligible stock outstanding



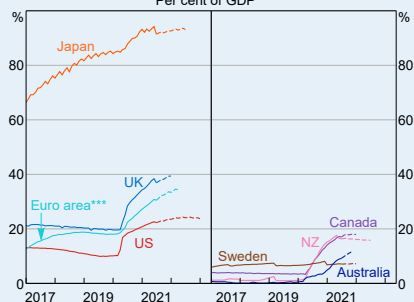
* Central government debt only for all countries except the euro area. Dashed lines represent forecasts based on announced purchase programs, recent pace of purchases, or market expectations in the case of US and Canada

** Holdings data for euro area only include bonds held as part of asset purchase programs; holdings for other central banks also include bonds held for operational or liquidity purposes

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

Graph A.2

Central Bank Government Bond Holdings*
Per cent of GDP**



* Central government debt only for all countries except the euro area. Dashed lines represent forecasts based on announced purchase programs, recent pace of purchases, or market expectations in the case of US and Canada

** Four-quarter rolling sum; forecasts are based on the IMF's World Economic Outlook

*** Holdings data for euro area only include bonds held as part of asset purchase programs; holdings for other central banks also include bonds held for operational or liquidity purposes

Sources: Central banks; IMF; RBA; Refinitiv

How Have Government Bond Purchase Programs Differed?

Central bank bond purchase programs conducted since the emergence of COVID-19 fall into a few broad categories (Table A.1).^[7]

Some programs designate a fixed size of purchases and a date for the completion of those purchases, such as the Bank of England's program. A close variant are those that have set an upper limit on purchases, as well as a completion date for purchases, such as those at the Reserve Bank of New Zealand and the European Central Bank.

Another category specifies the rate of purchases (per week or per month), with guidance on how the rate of purchases will be updated depending on how economic conditions evolve. This style of program has been implemented by the US Federal Reserve and the Bank of Canada.

Some central banks have programs based on yield targets for certain government bonds, rather than specifying their bond purchases in terms of a stock or flow of purchases. Since 2016, the Bank of Japan has set a target to maintain the 10-year bond yield within a certain range.

Policy measures implemented by the Reserve Bank of Australia include bond purchases to address market dysfunction, to support a yield target and as part of a separate bond purchase program.^[8] The design of the Bank's bond purchase program has evolved over the course of the economic recovery. The first two tranches designated a fixed size of purchases – \$200 billion in total – with an end date, most recently of September 2021. During this period, the weekly rate of purchases has been \$5 billion. In July, the Bank announced that from September bond purchases will occur at a rate of \$4 billion a

week, and that the Board would adopt a flexible approach, regularly reviewing the rate of those purchases with the option to adjust its purchases in either direction. The Board's decision will be based on an assessment of progress towards the Bank's goals for full employment and inflation, considering both actual outcomes as well as the outlook. In addition, the Bank remains committed to a yield target of 10 basis points for the April 2024 government bond. The April 2024 yield has remained consistent with the Bank's target over recent months, and purchases in support of the target have not been required since late February. The Bank stands ready to operate in the market to support the target if that is necessary.

At central banks with asset purchase programs that specify an end date, that date is generally between the end of 2021 and mid 2022. For those programs that are framed in terms of a rate of purchases, surveys of economists or market participants can provide a guide about the extent of future purchases. For example, the Federal Reserve Bank of New York conducts regular surveys of the expectations of bond market dealers and other market participants for the US Federal Reserve's program. There are no reliable methods for observing expectations for central bank bond purchases directly from market pricing – unlike expectations for the policy rate, which can be derived from rates on overnight index swaps and some other financial products. ❖

Table A1: Central Bank Government Bond Purchase Programs

Programs announced since 3 March 2020

Program characteristics ^(a)	
US Federal Reserve	US\$80 billion per month, open-ended
Bank of Canada	• C\$5 billion per week prior to October 2020 • C\$4 billion per week between October 2020 and April 2021 • C\$3 billion per week between April 2021 and July 2021 • C\$2 billion per week since July 2021, open-ended
Bank of Japan	Yield curve control, targeting 10-year bond yield of around zero per cent
Sveriges Riksbank	Up to SEK700 billion by December 2021 ^(b)
Bank of England	£440 billion by December 2021 at the latest
European Central Bank	Up to €1,850 billion by March 2022 ^(b)
Reserve Bank of New Zealand	Up to NZ\$100 billion by June 2022 (purchases halted since July 2021)
Reserve Bank of Australia	• Yield target on April 2024 bond of 0.10 per cent • A\$200 billion by September 2021 • A\$4 billion per week from September 2021 until at least November

(a) Includes state and local government debt purchases where applicable; excludes purchases to address market dysfunction in some cases

(b) Includes purchases of some private sector assets

Sources: Central banks; RBA

Endnotes

[1] For a discussion of the use of asset purchase programs since 2008, see Committee on the Global Financial System (CGFS) (2019), 'Unconventional Monetary Policy Tools: A Cross-country Analysis', CGFS Paper No 63, October, pp 26–32. Available at <bis.org/pub/cgfs63.pdf>.

[2] For a discussion of the transmission to the broader economy, see Bailey A, J Bridges, R Harrison, J Jones and A Mankodi (2020), 'The Central Bank Balance Sheet as a Policy Tool: Past, Present and Future', Bank of England Staff Working Paper No 899. Available at <bankofengland.co.uk/working-paper/2020/the-central-bank-balance-sheet-as-a-policy-tool-past-present-and-future>.

[3] For a discussion of the transmission mechanisms in the context of the Reserve Bank's Bond Purchase Program, see Debelle G (2021), 'Monetary Policy During COVID', Speech at Shann Memorial Lecture, University of Western Australia,

Perth, 6 May. Available at <<https://www.rba.gov.au/speeches/2021/sp-dg-2021-05-06.html>>.

[4] For example, the Reserve Bank's bond purchase program announced in November 2020 is estimated to have reduced longer-term Australian Government Security yields by around 30 basis points. For details of these estimates, see Finlay R, D Titkov and M Xiang (2021), 'An Initial Assessment of the Reserve Bank's Bond Purchase Program', RBA *Bulletin*, June, viewed 31 July 2021. Available at <<https://www.rba.gov.au/publications/bulletin/2021/jun/an-initial-assessment-of-the-reserve-banks-bond-purchase-program.html>>.

[5] However, that additional stimulus is often hard to observe in movements in bond yields because market participants gradually price in their expectation of further purchases. Research that

adjusts for information on the expectations of market participants includes Cahill et al (2013), 'Duration Risk versus Local Supply Channel in Treasury Yields: Evidence from the Federal Reserve's Asset Purchase Announcements', FEDS Discussion Paper 2013-55.

- [6] For example, see Ihrig J, E Klee, C Li, M Wei and J Kachovec (2018), 'Expectations about the Federal Reserve's Balance Sheet and the Term Structure of Interest Rates', *International Journal of Central Banking*, March.

- [7] In some cases, these asset purchase programs include the purchase of non-government securities such as asset-backed securities.

- [8] In March and April 2020, the Reserve Bank purchased in secondary markets around \$50 billion of Australian Government Securities (AGS) and securities issued by the state and territory central borrowing authorities. These purchases were intended to alleviate the dysfunction in the Australian government bond market at the time, as well as support the target for the 3-year AGS yield.

2. Domestic Economic Conditions

Australia's economic recovery had been stronger than earlier expected, prior to the recent outbreaks of COVID-19. GDP had exceeded its pre-pandemic level and the unemployment rate declined further over the June quarter to be below its level prior to the pandemic. The broad-based rebound in private domestic demand has been supported by accommodative fiscal and monetary policy, and timely indicators suggest growth in private demand remained strong in the June quarter.

The recent lockdowns in several states will weigh heavily on activity and the labour market in the September quarter. The Australian Government and state and territory governments have introduced substantial additional fiscal measures to support households and businesses through this period. The near-term outlook is highly uncertain and largely dependent on health outcomes; however, past experience of these events, both in Australia and elsewhere, suggests the negative effects on the economy will be temporary. Beyond the near term, the outlook is a little stronger than expected at the time of the previous *Statement*. The closure of the international border and other pandemic-related disruptions will continue to have a significant effect on some parts of the economy (see 'Economic Outlook' chapter).

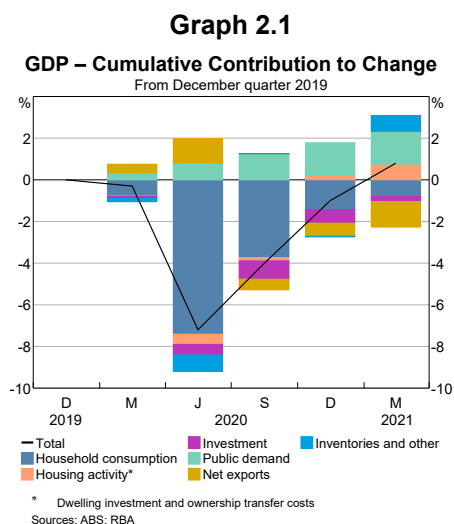
The economy recovered to above pre-pandemic levels in the March quarter

The Australian economy grew by 1.8 per cent in the March quarter, to be around 1 per cent above its level at the end of 2019 (Graph 2.1).

Both public demand and housing activity were above pre-pandemic levels, and household consumption had almost reached its pre-pandemic level. Growth in the quarter was broad based across expenditure components. A large increase of firms' inventories significantly contributed to growth in the quarter, as supply constraints eased and firms restocked to meet ongoing strong demand. The terms of trade increased to their highest level in nearly a decade, supporting business profits and government revenues.

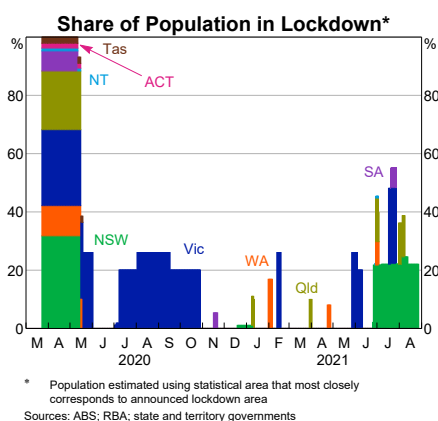
The effect of recent outbreaks and accompanying restrictions is expected to be temporary

From late May, community transmission of the virus resulted in the reintroduction of strict containment measures and border restrictions in several states (Graph 2.2). Localised population

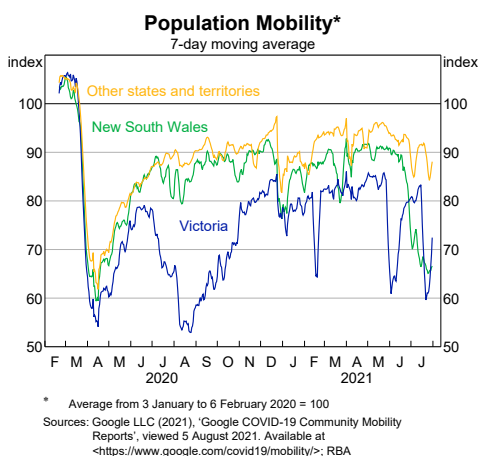


mobility, which is a timely indicator of economic activity, declined sharply following the 2-week lockdown in Victoria in late May, but bounced back after restrictions were eased (Graph 2.3). In response to the increase in COVID-19 cases in New South Wales from late June, the state government reintroduced stay-at-home orders in Greater Sydney and surrounding areas, comprising around a quarter of the Australian population. Mobility indicators declined in Greater Sydney as restrictions were progressively tightened. Shorter lockdowns were also introduced in Victoria and South Australia in July and in south-east Queensland in early August.

Graph 2.2



Graph 2.3



The recent outbreaks of the Delta variant of COVID-19 and accompanying lockdowns will depress economic activity, especially in the September quarter, and temporarily reverse the improvement in the labour market. Output in the September quarter is now expected to contract by at least 1 per cent – instead of rising by a similar amount as expected prior to the lockdowns – with some but not all of the decline recovered in the December quarter (assuming limited further lockdowns). The main effects for the economy are through a reduction in household consumption. Household spending has declined through June and July. Information from the Bank's business liaison program and high-frequency payments data suggest the decline in spending has been broadly in line with the declines seen in earlier extended lockdowns. Spending on services has fallen and there has been an increase in food purchases and online activity, although these have only partly offset the decline in non-food sales.

Construction in Greater Sydney, south-east Queensland and South Australia has also been affected as a result of restrictions on activity and, in the case of Greater Sydney, ongoing restrictions on worker mobility and activity in a number of local government areas of concern. Information from the Bank's liaison program suggests that construction activity in Greater Sydney is likely to suffer from further delays in coordinating the deliveries of materials and rescheduling of subcontractors as they adjust to the recent pause in activity and ongoing restrictions.

Substantial fiscal support from the federal and state governments, including increased COVID-19 disaster relief payments, business support grants and tax relief, has been made available to businesses and workers in areas affected by longer lockdowns. Lockdowns are expected to result in a decline in employment in the September quarter, but the effects on the

labour market are expected to be temporary, consistent with the forecast rebound in activity later in the year. The experience domestically and internationally over the past year has shown that economic activity recovers quickly following the removal of containment measures.

Employment increased further, alongside an increase in labour force participation

Employment increased by over 110,000 people over the June quarter, to be 1.2 per cent above its February 2020 level. Full-time employment accounted for all of this increase (Graph 2.4). The recovery in employment since 2020 has occurred alongside an upwards trend in average hours for both full-time and part-time employees. There was a drop in average hours in June due to activity restrictions in Victoria in response to a COVID-19 outbreak; for the most part, lockdowns have been accommodated through a reduction in employees' hours, rather than a reduction in employment. This suggests that underlying demand for labour remained resilient and that firms have generally been able to adjust to periods of disruption when they are expected to be short-lived.

The sustained strength in labour market conditions has encouraged more people to seek employment, and labour force participation has increased above pre-pandemic levels for all age

cohorts (Graph 2.5). Female participation has increased the most, in part reflecting strength in employment in industries that tend to have higher shares of female workers, such as healthcare. Since February 2020, female employment increased by around 90,000 people, compared to an increase of around 65,000 for male employment.

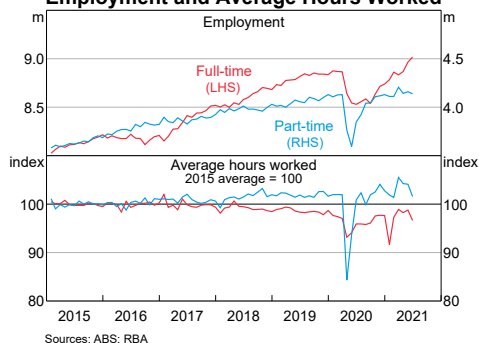
While employment is now higher than its pre-pandemic level in most industries, it is yet to fully recover in areas of the economy that continue to be the most affected by COVID-19 restrictions, such as hospitality, air travel and education. The hospitality industry also tends to employ a relatively high share of workers on temporary visas. Closed international borders have contributed to reported labour supply shortages; the number of people in Australia on a visa with working rights has declined by over 250,000 since March 2020 (Graph 2.6).

Labour underutilisation has declined to below its pre-pandemic level

The unemployment rate decreased to 4.9 per cent in June, to be 2½ percentage points below its recent peak and a little below its February 2020 level. The decline in the unemployment rate over recent months was faster than expected, in part due to stronger employment outcomes and a more muted

Graph 2.4

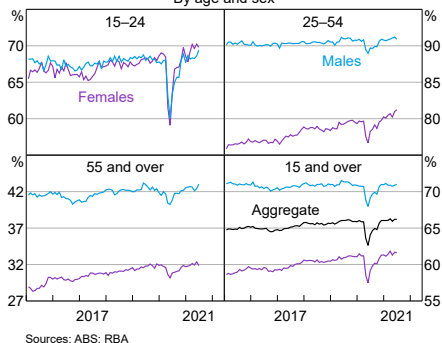
Employment and Average Hours Worked



Graph 2.5

Participation Rate

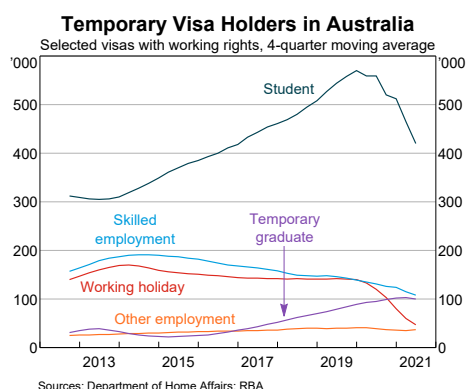
By age and sex



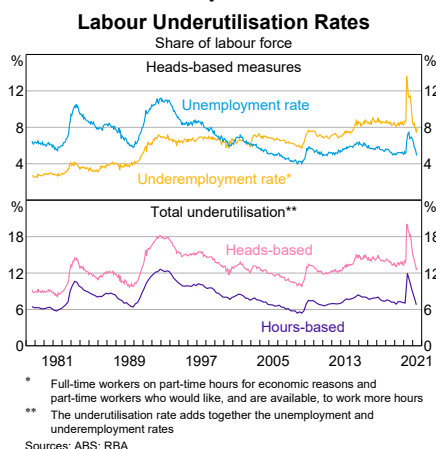
impact from the end of JobKeeper than anticipated at the time of the previous *Statement*.

Other indicators also point to a further reduction in labour market spare capacity. The heads-based underemployment rate was 7.9 per cent in June, around its lowest level since 2014 (Graph 2.7). Hours-based measures of underutilisation – which reflect the additional hours that unemployed and underemployed people would like to work – also declined, consistent with the upwards trend in average hours worked since last year.

Graph 2.6



Graph 2.7

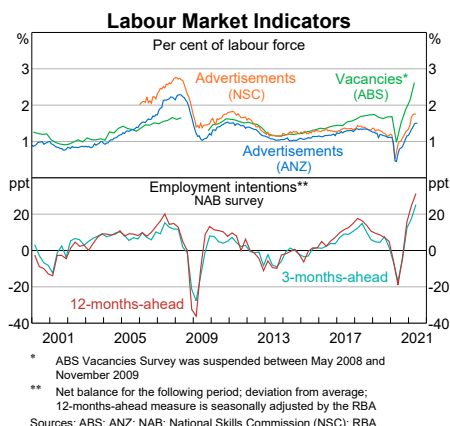


Leading indicators of the labour market have been strong

Forward-looking employment indicators were very positive ahead of the extended lockdown in Greater Sydney, pointing to strong underlying momentum in the labour market (Graph 2.8). In May, job vacancies were at a record high relative to the size of the labour force, reflecting the refilling of a large number of jobs lost throughout the pandemic, new hiring in parts of the economy experiencing strong demand, and Australia's closed international borders that have reduced the availability of workers on temporary visas.

The strength in leading indicators of labour demand is consistent with information from the Bank's liaison program – a majority of firms intend to increase headcount over the coming months and very few plan to reduce headcount. There were increased reports of labour availability concerns over the June quarter, but these still generally relate to difficulties finding workers with specific skills that are in high demand – particularly in residential construction and in the resources sector in Western Australia.

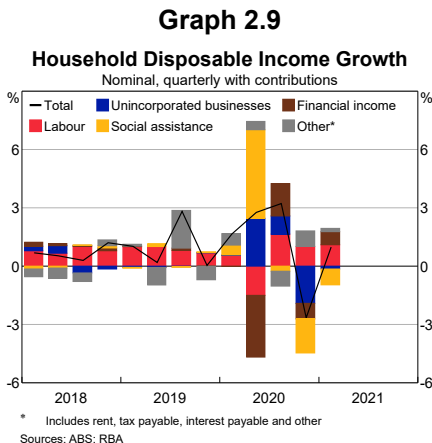
Graph 2.8



The labour market recovery supported household income and consumption in the first half of the year

Nominal household disposable income increased by 1 per cent in the March quarter to be 6 per cent above its pre-pandemic level (Graph 2.9). Lower social assistance payments were offset by growth in labour and financial income in the quarter. Labour income is expected to have increased further in the June quarter, alongside the strength in the labour market.

Household spending continued to support the economic recovery in the first half of the year. Consumption increased by 1.2 per cent in the March quarter, supported by greater opportunities to spend on discretionary services as restrictions were unwound. Discretionary goods consumption remained elevated (Graph 2.10). Timely indicators suggest spending was growing at a similar pace in the June quarter, prior to recent lockdowns coming into effect. Retail sales values grew 1.4 per cent in the June quarter, but declined by 1.8 per cent in the month of June. Sales declined sharply in New South Wales and Victoria, where spending was affected by lockdowns during that month (Graph 2.11).



The saving rate remained elevated in the March quarter. This largely reflected ongoing restrictions on households' ability to consume some types of services, even as growth in household income and wealth remained robust.

Conditions in housing markets remained strong

Housing prices increased by 6 per cent in the June quarter (Graph 2.12) (Table 2.1). Strong price growth continued through July, including in Sydney, such that national housing prices were around 15 per cent higher than the start of the year. Demand for housing remained strong nationally with turnover remaining around its highest level in more than a decade. Owner

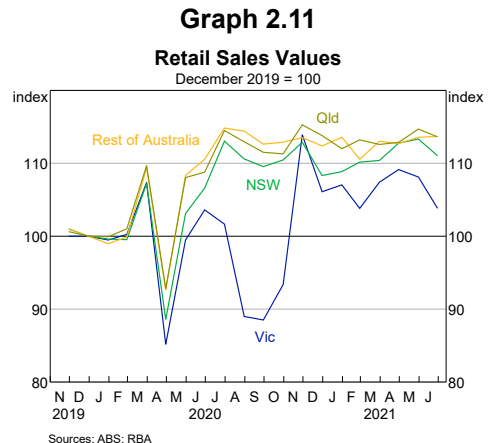
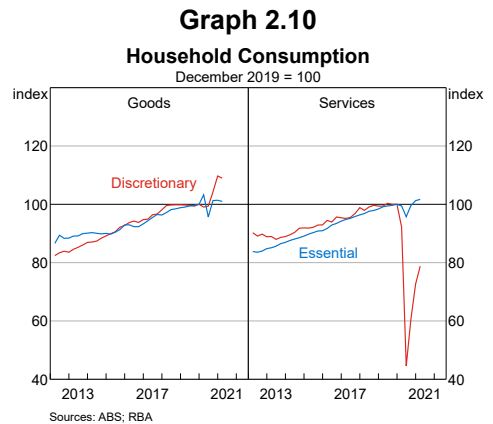


Table 2.1: Housing Price Growth

Percentage change, seasonally adjusted

	July	June	May	April	Year-ended	Past 5 years
Sydney	2.3	2.8	3.0	2.2	18.2	30
Melbourne	1.9	1.9	2.0	1.3	10.4	25
Brisbane	2.1	2.2	2.1	1.7	15.9	21
Adelaide	1.9	1.9	1.7	1.8	15.7	24
Perth	0.8	0.6	1.3	0.7	10.8	−6
Darwin	1.8	1.0	2.9	2.4	23.4	−2
Canberra	2.5	2.7	2.0	1.8	20.5	45
Hobart	2.0	3.0	2.9	1.2	21.9	66
Capital cities	2.0	2.2	2.4	1.7	15.1	24
Regional	1.9	2.2	2.0	1.8	19.6	30
Australia	2.0	2.2	2.2	1.7	16.1	25

Sources: CoreLogic; RBA

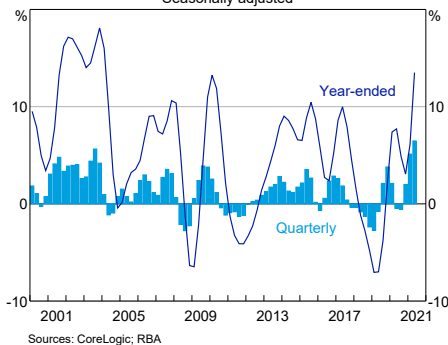
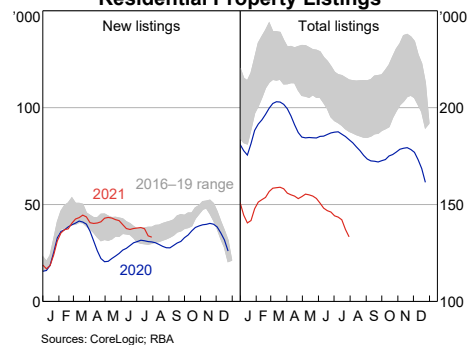
occupiers accounted for a large share of housing loan commitments in the past year, but investor activity has picked up over recent months (see ‘Domestic Financial Conditions’ chapter). Housing price growth has moderated a little since the reintroduction of stay-at-home orders in Sydney, and auction market withdrawals have increased.

The supply of properties newly listed for sale had been around the top end of the range of the past few years, although listings have declined over the past month alongside

restrictions on activity in some markets (Graph 2.13). Total listings declined further as properties have continued to clear quickly from the market, indicating that demand has remained strong relative to the volume of properties listed for sale.

Rental market conditions have tightened across most of the country

Advertised rents for houses have increased substantially since the September quarter last year. In regional areas and smaller cities, growth

Graph 2.12**Housing Price Growth**
Seasonally adjusted**Graph 2.13****Residential Property Listings**

in rents has been strong and vacancy rates remain very low (Graph 2.14). Rental conditions in apartment markets in Sydney and Melbourne began to stabilise, and demand picked up following the earlier decline in rents; advertised unit rents remain 8 per cent below pre-pandemic levels in Melbourne and 2 per cent below in Sydney. As part of their response to the outbreak in Greater Sydney, the New South Wales Government introduced a short-term eviction moratorium for rental arrears for tenants who have been significantly affected by the lockdown. Rental yields have declined in much of the country as advertised rents have continued to be outpaced by housing prices.

Housing investment is supporting economic growth

Dwelling investment increased in all states over the first half of the year, supported by fiscal and monetary policy. Construction of new houses and renovations drove a 6½ per cent increase in investment in the March quarter. Approvals for houses and alterations & additions declined in the June quarter from record high levels as the effect of HomeBuilder waned, though approvals remain well above pre-pandemic levels (Graph 2.15). Underlying demand for new dwellings remains strong, with low interest rates

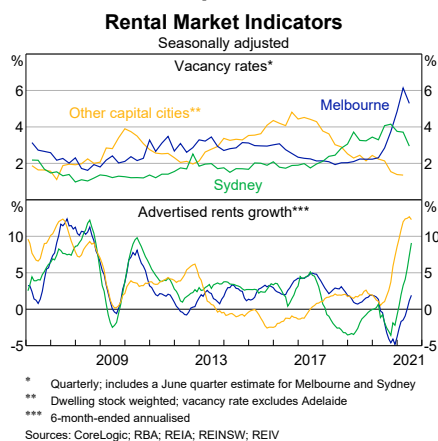
and robust growth in housing prices supporting approvals. Notwithstanding the temporary disruptions to construction activity in some states, the large pipeline of work to be completed on approved projects will also continue to support construction activity over the coming year.

Business investment increased faster than expected

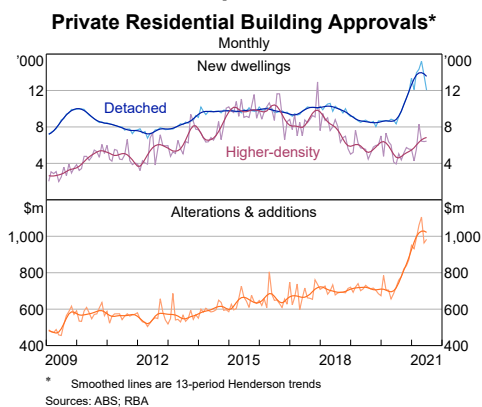
Business investment recovered more quickly than expected after falling sharply at the onset of the pandemic. Private non-mining business investment increased by 4 per cent in the March quarter. The increase was underpinned by strong machinery & equipment investment, particularly in the manufacturing, construction, retail and agriculture sectors (Graph 2.16). Firms have responded to the tax incentives for investment from the Australian Government, the rapid recovery in domestic activity and strong growth in profits over the past year. These factors, together with further increases in surveyed measures of business conditions and capacity utilisation, are likely to have continued to support machinery & equipment investment in the June quarter (Graph 2.17).

In contrast to the rapid recovery in machinery & equipment investment, private non-residential construction investment declined by more than

Graph 2.14



Graph 2.15



expected in the March quarter (Graph 2.18). This partly reflected lower investment in sectors that have been adversely affected by the pandemic, such as office buildings and retail property (see 'Box B: COVID-19 and Commercial Property in Australia'). However, forward-looking indicators, such as building approvals and measures of investment intentions from the ABS Capital Expenditure (Capex) survey, have picked up significantly from last year. Building approvals for industrial buildings have increased. This is consistent with information from the Bank's liaison program of demand for warehouses in response to the shift towards online retailing during the pandemic (Graph 2.19).

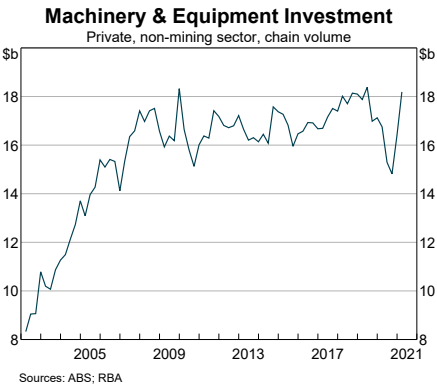
Mining investment increased in the March quarter, supported by a strong rise in machinery

& equipment investment, and is at its highest level since 2017. The Capex survey measures of investment intentions point to further increases in mining investment in the 2021/22 financial year. The intended projects are primarily to replace existing capacity, rather than to expand capacity (Graph 2.20).

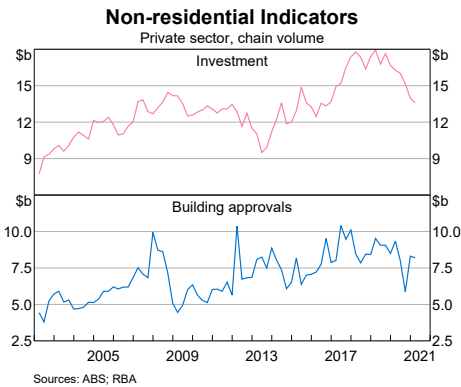
Goods trade continues to recover ...

The value of goods exports has grown strongly since the middle of last year, mainly because of higher iron ore prices (Graph 2.21). The value of goods imports recovered its pre-pandemic level in March, underpinned by higher volumes as the strong domestic recovery drew in imports. By

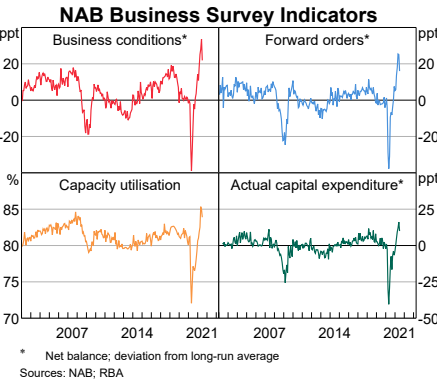
Graph 2.16



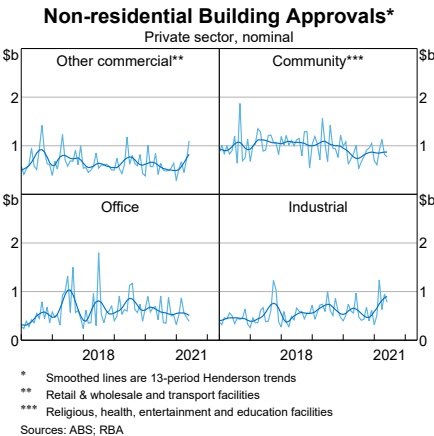
Graph 2.18



Graph 2.17



Graph 2.19



contrast, services trade remains at subdued levels due to ongoing restrictions on international travel. The rebound in prices of key Australian export goods has driven recent increases in the trade surplus, which reached a record level in June.

... with further increases in rural and resource exports ...

Growth in rural and resource exports supported export volumes in the March quarter. Rural exports grew by 14 per cent, led by cereals, as grain exporters continued to operate at capacity following the strong winter crop harvest. Improved pasture conditions and the recovery in the global economy have also supported

exports for higher-value products such as meat and wool.

Resource export volumes increased in the March quarter, driven by record iron ore export volumes as producers took advantage of high prices. Partial trade data suggest that iron ore export volumes declined in the June quarter because of additional maintenance activity and weather-related disruptions in April.

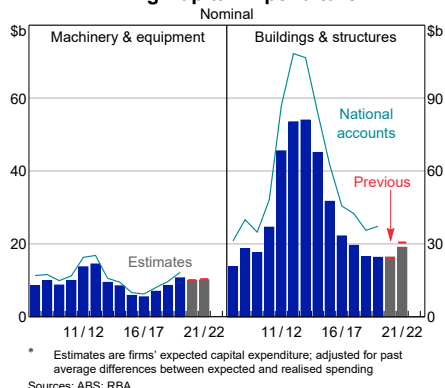
Nonetheless, iron ore exports are expected to remain around capacity in the near term, supported by high prices and robust demand from China.

Coal exports rose modestly in the March quarter. Although coal exports to China have been minimal for most of the year, this has been broadly offset by higher demand from other markets, including India and Japan, reflecting the ongoing recovery in global demand (Graph 2.22). Partial trade data suggest maintenance activity will weigh on coal exports in the June quarter.

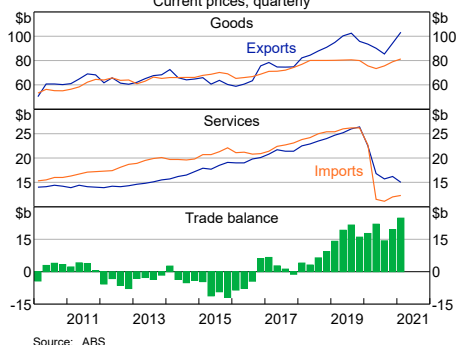
... and a continued recovery in imports supported by strong domestic demand

Goods import volumes continued to increase strongly in the March quarter, in line with the recovery in domestic activity. Capital goods imports, particularly of machinery and industrial

Graph 2.20
Mining Capital Expenditure*

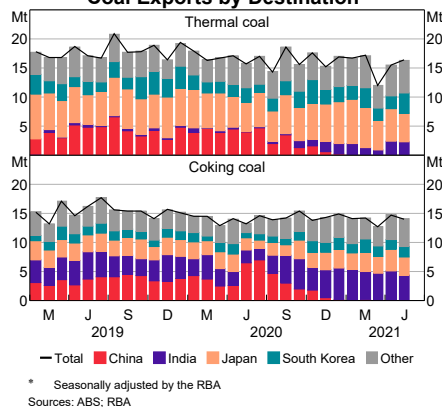


Graph 2.21
Trade in Goods and Services
Current prices, quarterly



Graph 2.22

Coal Exports by Destination*



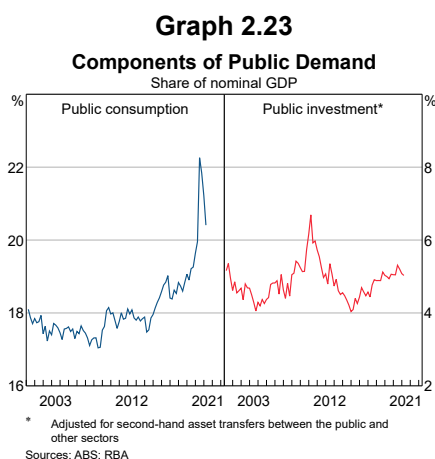
equipment, have been supported by tax incentives from the Australian Government. The recovery in activity should have further supported import volumes in the June quarter, though global production and shipping disruptions weighed on imports of several key categories of goods, including motor vehicles. Services import volumes are around half of their 2019 levels and are unlikely to materially increase until the international border reopens.

Public demand continues to support activity

Extraordinary policy support has underpinned the economic recovery and public demand remains a relatively large share of economic activity (Graph 2.23). However, growth in public spending has slowed over the past year and public consumption declined in the March quarter. Recent federal and state government budgets included new spending, supported by higher revenue from the stronger-than-expected rebound in economic activity and higher commodity prices. These programs will support public consumption over coming quarters.

Federal and state government budgets over the past year have also included significant commitments of public investment in infras-

tructure. While public investment increased for the third consecutive quarter in March – and is expected to have increased further in the June quarter – the pace of growth has been slower than foreshadowed by government budgets. Information from the Bank's liaison program suggests that the rollout of these large investment programs may be delayed further, with ongoing reports of administrative challenges in awarding public construction contracts and constraints on the availability of materials, equipment and labour. 🏗️



Box B

COVID-19 and Commercial Property in Australia

The COVID-19 pandemic has resulted in large changes to where people are working and how they are purchasing goods. Most office staff shifted to working from home in early 2020 and the share of employees making use of these arrangements is expected to remain higher over the long term than prior to the pandemic. As a result, demand for office space has declined and is expected to remain lower than it would have been in the absence of the pandemic, although this may be partially offset by increased social distancing requirements and a desire by firms to accommodate larger collaborative work spaces. The pandemic has also accelerated the shift toward online retailing and away from retail outlets in central business districts (CBDs). This has exacerbated the challenges facing the bricks-and-mortar retail sector, but has led to a significant increase in demand for industrial property such as logistics and warehouse space.

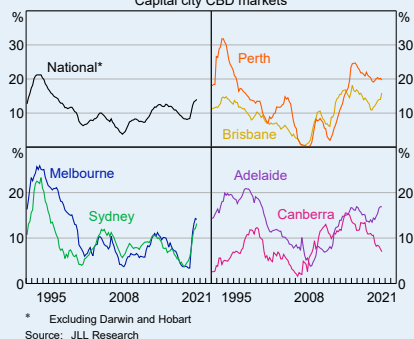
Increased remote working has contributed to a sharp decline in demand for office space ...

Office vacancy rates have risen sharply in Australia since the onset of the pandemic. This has been most pronounced in Sydney and Melbourne, where recommendations that employees work from home were in place for longer and large volumes of office space have arrived on the market since the pandemic began (Graph B.1). There has been little demand for the office space left vacant by firms moving into newly completed properties.

A distinctive feature of the pandemic has been the increased use of remote working arrangements. The ABS Business Conditions and Sentiments survey, released in April 2021, indicated that the share of businesses with remote working arrangements had increased notably following the onset of the pandemic and had been largely maintained despite activity restrictions being progressively unwound since mid 2020 (Graph B.2). Large businesses, which account for a significant share of CBD office space, were able to accommodate a particularly sizeable increase in remote working in 2020; these firms were already much more likely to have remote working arrangements in place than smaller businesses. Information from the Bank's liaison program – which mostly includes large and medium-sized businesses – suggests that most office staff were working remotely on a full-time basis in the middle of 2020.

Graph B.1

Office Vacancy Rates
Capital city CBD markets



... and is likely to weigh on office demand in the longer term

Office occupancy rates have generally increased in line with decreasing social restrictions and transmission risk (Graph B.3). However, occupancy rates have remained 10–30 per cent below pre-pandemic levels even in cities that have had little transmission of COVID-19 since the initial phase of the pandemic, due to the continued higher use of remote working arrangements. Office occupancy in Sydney and Melbourne improved noticeably in the first half of 2021, although recent outbreaks have largely reversed this progress.

Firms are expecting the use of remote working arrangements to remain higher than prior to the pandemic over the long term and this will continue to weigh on demand for office space. Liaison suggests that the majority of firms are adopting a ‘hybrid’ model for their office staff, where employees have the option of working remotely for part of each week. Around a quarter of surveyed liaison contacts have decided to reduce their floor space by an average of 25 per cent in response to these changes in work patterns (although this may overstate the impact on

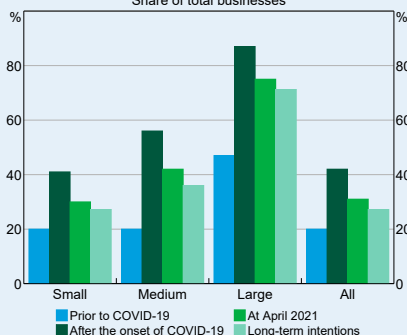
the office market as a whole given that the sample of liaison firms is biased towards larger firms, which have embraced remote working arrangements the most). While many of these firms have attempted to sublease their underutilised space, few have managed to secure tenants since the beginning of the pandemic.

Despite most large firms planning to adopt a hybrid model of work, around half of surveyed liaison contacts have no intention of changing the amount of office space they lease. One reason for this is that the amount of office space required depends on ‘peak’ usage, rather than average usage across the week. Other reasons noted by firms include the need to accommodate larger collaborative work spaces, social distancing and future growth in headcount.

The remaining quarter of firms surveyed in liaison remain undecided on their long-term work arrangements and office space requirements. The decisions of these firms will have a large bearing on the extent of the negative effect of the pandemic on office demand in the long term. The long length of

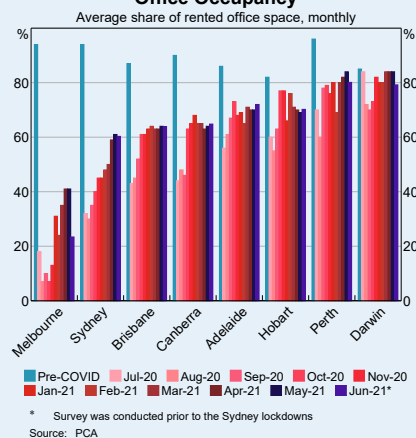
Graph B.2

Businesses with Remote Working



Graph B.3

Office Occupancy



many existing office leases means that the full impact of these decisions will likely take a number of years to resolve.

Office construction is expected to decline, although the outlook remains very uncertain

Office construction activity over the next few years is likely to be well below 2020 levels. Few large-scale office projects have commenced construction since the beginning of the pandemic, consistent with the heightened uncertainty about the longer-term outlook for demand. Developers and private sector analysts have also noted difficulties in attracting the tenant pre-commitments necessary to obtain debt financing, which has prevented the start of construction on some projects.

However, there are a large number of potential projects in the office construction pipeline, suggesting that developers remain poised to take advantage of a recovery in office demand (Graph B.4). Development approvals typically remain valid for 1–5 years and liaison contacts have suggested that developers may hold off on proceeding with new office construction until vacancy rates begin to fall, rents stabilise, and questions around major tenants' long-term occupancy intentions are resolved – a process that may take several years.

Greater online shopping has supported industrial property demand and construction, while retail property demand has declined

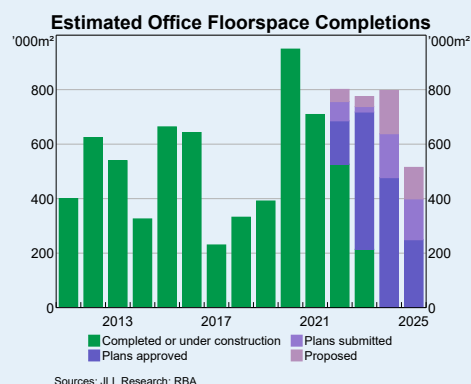
The COVID-19 pandemic has accelerated the shift toward e-commerce as consumers attempted to maximise social distancing and comply with lockdown measures. As a result, tenant take-up of industrial property such as

logistics and warehouse space in the year to the March quarter 2021 was around 45 per cent higher than its 10-year average. Liaison contacts have also noted that strong growth in food sales and firms increasing inventory levels in response to pandemic-related supply chain issues have supported demand for industrial property.

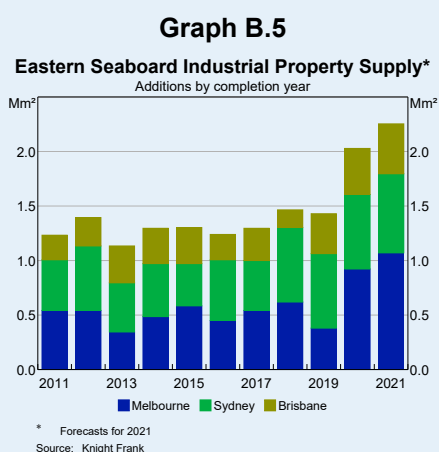
Construction timelines for industrial projects are short (typically in the order of 6–9 months) and so construction has been able to respond rapidly to increased demand. One measure of completions over 2020 was close to 50 per cent higher than its 10-year average, and will increase a further 10 per cent over 2021 (Graph B.5). Industrial properties have typically cost less to build than other commercial property types. However, contacts have noted that tenants are demanding facilities with greater technological capacities (i.e. automation and robotics), which is likely to increase the cost of building these properties.

The accelerated shift toward e-commerce has exacerbated the challenges and risks facing the bricks-and-mortar retail sector.^[1] This is particularly the case for shopping centres with high exposures to discretionary

Graph B.4



retailing such as regional and sub-regional centres.^[2] Neighbourhood centres, which



derive most of their income from supermarket anchor tenants and have benefitted from office employees continuing to work from home, have been less affected. Construction commencements of retail floor space over the past year were around 70 per cent below the 10-year average and are expected to remain weak for a number of years. In liaison, some contacts have noted intentions by retailers to reformat well-located stores to better facilitate 'click-and-collect' in-store collections of online orders, but this has yet to translate into a pick-up in construction activity. 🦋

Endnotes

[1] See RBA (2021), 'Box B: Risks in Retail Commercial Property', *Financial Stability Review*, April. Available at <<https://www.rba.gov.au/publications/fsr/2021/apr/box-b-risks-in-retail-commercial-property.html>>

[2] Regional centres are anchored by department store tenants such as Myer or David Jones, while sub-regional centres are anchored by discount department stores such as K-Mart or Big W.

3. Domestic Financial Conditions

The policy measures implemented by the Reserve Bank since March 2020 continue to underpin very low interest rates in the Australian economy. These measures include the reductions in the cash rate, the use of forward guidance, the yield target, the bond purchase program and the Term Funding Facility (TFF). Banks accessed most of their TFF allowances before it closed to new drawdowns on 30 June. The scheme will be providing a substantial source of low-cost funding for the next 3 years. In July, the Bank announced that it would continue the bond purchase program following the completion of \$200 billion of purchases under the program in September, purchasing \$4 billion of government bonds per week from early September until at least November. In recent months, banks' funding costs and lending rates have declined a little further to new lows.

Long-term Australian government bond yields have declined over recent months, returning to be close to levels seen in the early months of the year. This has occurred alongside declines in bond yields globally. The Board's decisions to retain the yield target for the April 2024 bond (rather than extend it to the November 2024 bond), and reduce the pace of purchases under the bond purchase program from early September, had little effect on market pricing. Conditions in Australian government bond markets have remained stable, while money market rates remain near historical lows.

The Australian dollar has depreciated over recent months and is below its levels at the start of the year. The depreciation occurred at the same time as the US dollar appreciated against a

range of currencies following the June Federal Open Market Committee (FOMC) meeting and as yields on Australian government bonds declined relative to those of the major advanced economies. On the other hand, prices of Australia's key commodity exports recently reached their highest levels in almost a decade.

The bond purchase program will be extended, with the pace of purchases to be \$4 billion per week from early September

At the July Board meeting, the Board decided to continue purchasing government bonds after the completion of the current program in early September, at a pace of \$4 billion per week (adjusted from \$5 billion per week) until at least November. The Board will maintain a flexible approach to the rate of bond purchases, reviewing it in light of the expected progress towards full employment and the inflation target.

The Bank has purchased \$179 billion of longer-term bonds since November 2020 under the bond purchase program, consisting of \$142 billion of Australian Government Securities (AGS) and \$37 billion of semi-government securities (semis) (Graph 3.1). It now holds 28 per cent of outstanding AGS and 14 per cent of outstanding semis. These shares are projected to increase to a little more than 30 per cent and a little more than 15 per cent respectively by mid November.

Long-term AGS yields declined over the quarter

Yields on long-term AGS have declined by around 60 basis points since early May, a slightly larger fall than seen in US Treasury yields, with the spread between 10-year AGS and US Treasury yields now a little below zero (Graph 3.2). The 10-year AGS yield is currently around its lowest level since the sharp rise in bond yields in late February. The declines in yields partly reflected downward revisions to longer-term inflation expectations in June, although a larger part of the reduction owed to a decline in measures of real rates, with increasing concerns about outbreaks associated with the Delta variant of COVID-19 weighing on market sentiment in July. There was little market reaction to the July Board announcement that the bond purchase program would continue at a pace of \$4 billion per week from September until at least mid November. Most market participants were anticipating a more flexible approach to future bond purchases by the Bank, and the announced pace of purchases was within the range of market expectations.

The Board's decision to retain the April 2024 bond as the bond for the yield target had little effect on market pricing

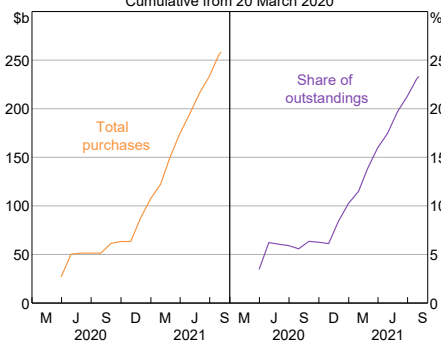
Overall, the yield on the April 2024 bond has declined a little over the past 3 months, and is currently around 4 basis points (Graph 3.3). Government bond yields rose in response to the June FOMC meeting and the stronger-than-expected domestic labour force release; the yield on the April 2024 bond rose to around 10 basis points for a period. However, yields drifted down again towards the end of July as increasing concerns globally around the Delta variant of COVID-19 led market participants to push-back their expectations for policy rate increases and also increased demand for risk-free assets. The decision at the July Board meeting to retain the April 2024 bond as the yield target bond (rather than extend it to the November 2024 bond) had been widely anticipated by market participants.

Bond markets have been functioning smoothly

The AGS and semis markets have continued to function smoothly. Bid-offer spreads across the yield curve have remained stable and around the levels seen over the past year, although AGS spreads in the 3-year and 5-year segments are a

Graph 3.1

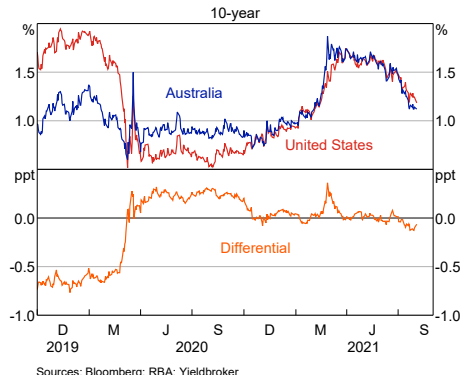
RBA Purchases of AGS and Semis*
Cumulative from 20 March 2020



* Includes purchases made: under the bond purchase program, to support market function; and to support the yield target
Sources: AOFM; Bloomberg; RBA; state and territory central borrowing authorities

Graph 3.2

Government Bond Yields
10-year



Sources: Bloomberg; RBA; Yieldbroker

little elevated compared with their levels over the second half of 2020 (Graph 3.4).

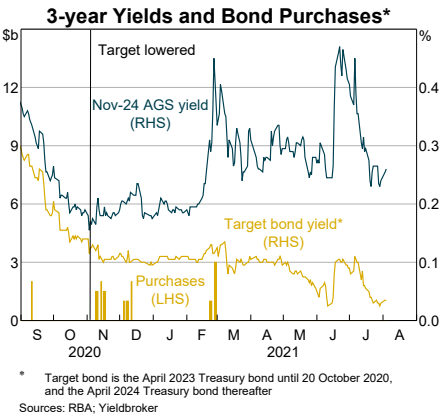
Demand to borrow AGS from the Bank had risen in recent months. There were \$15 billion of securities borrowed in June – more than double the previous highest monthly total – although borrowing eased in July. The majority of borrowing from the Bank was for the current or previous yield target bond (the April 2024 and April 2023 bonds), with most of the other borrowing conducted for bonds with a residual maturity of between 4 and 8 years (Graph 3.5). The increased borrowing activity is related to the Bank’s ongoing bond purchases, which has seen its ownership share of bonds on issue increase. In particular, borrowing activity has been

elevated in the April 2024 and April 2023 bonds, with the Bank having purchased 60 per cent and 39 per cent of the outstanding bonds, respectively. By lending these bonds back into the market for short periods the Bank supports market function without affecting the yields on these bonds.

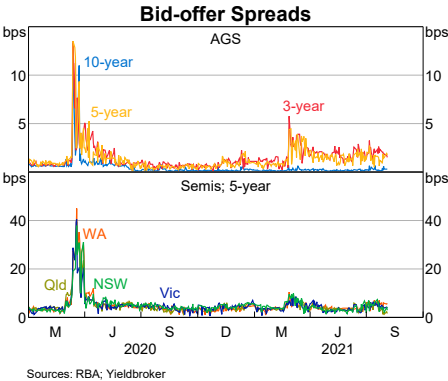
Government bond issuance has slowed

Bond issuance by the Australian Office of Financial Management (AOFM) and the state and territory borrowing authorities slowed into the end of the financial year, with borrowing authorities generally ahead on their annual funding tasks (Graph 3.6). Issuance has continued at a measured pace since then. Reflecting stronger-than-expected revenues, funding requirements for governments in the current financial year were generally revised lower than previous projections. Meanwhile, cash positions remain elevated. However, funding requirements for the period ahead remain subject to a considerable degree of uncertainty, as highlighted by the recent lockdowns and associated fiscal responses. Spreads between the yields on semis and AGS remained relatively low. At the same time, AOFM and semi-government auctions and syndications continue to find solid demand.

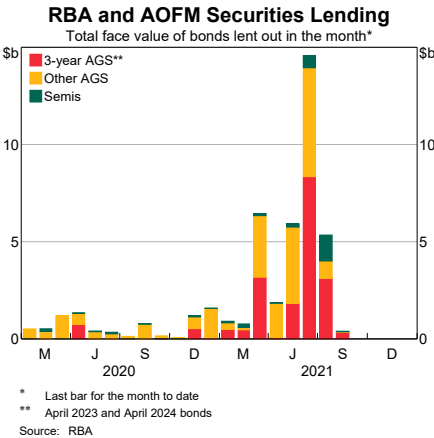
Graph 3.3



Graph 3.4



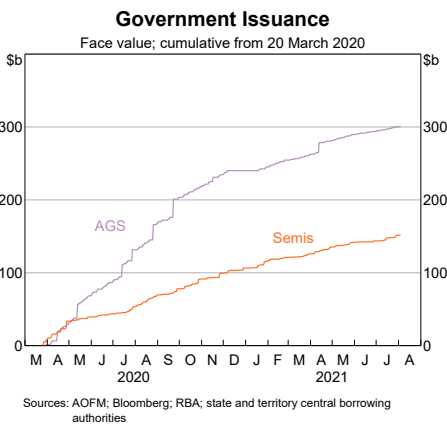
Graph 3.5



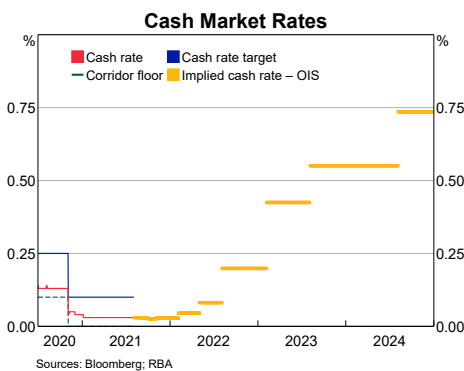
Cash market activity remains subdued

Activity in the cash market remains subdued because of the high level of system liquidity. The cash rate has remained at 3 basis points over the past 3 months, with expert judgement relied upon to determine the cash rate on most days during this period. Market expectations for the cash rate have declined a little from early May, and prices for overnight indexed swap (OIS) contracts imply that market participants on average expected the cash rate will remain around its current level over the next year before rising to around 50 basis points over 2023 and 75 basis points by late 2024 (Graph 3.7).

Graph 3.6



Graph 3.7



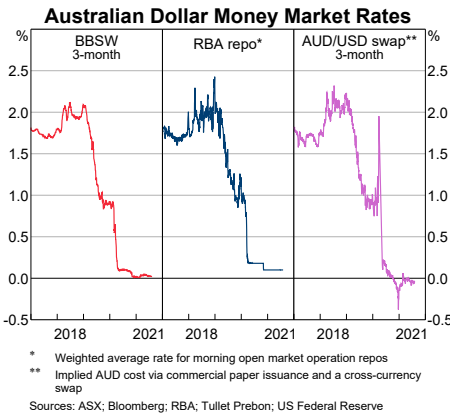
Short-term money market rates remain at very low levels

Short-term money market rates remain at historically low levels given the low level of the cash rate and the high liquidity in the banking system (Graph 3.8). Bank bill swap rates (BBSW) have edged lower over recent months, with the 3-month BBSW rate currently at 2 basis points. The cost of Australian dollar funding from offshore short-term issuance (via the foreign exchange swap market) also declined slightly. Repo rates at the Bank's daily open market operations remain at 10 basis points, while repo rates in the private repo market are close to zero for terms of up to 3 months. Demand for short-term liquidity at the Bank's daily open market operations has averaged around \$200 million per day through the quarter, around half the average of the preceding six months and well below the daily average of around \$2 billion prior to the pandemic.

Most of the available funding from the TFF was taken up

Drawdowns of remaining funding available from the TFF picked up significantly ahead of the deadline at the end of June. The facility has provided \$188 billion in funding to banks out of \$213 billion of total allowances available – this is equivalent to around 4 per cent of overall bank

Graph 3.8



funding and around 6 per cent of credit outstanding. Given the term to maturity of 3 years on funds provided, the scheme will be a substantial source of low-cost funds to the banking system for the next 3 years.

By bank type, the major banks and mid-sized Australian banks drew all of their available allowances, while small banks and foreign banks drew a little over half. For more information on the TFF, including some details regarding use by the 10 banks with the largest drawdowns, see 'Box C: Use of The Reserve Bank's Term Funding Facility'.

The Bank's balance sheet and liquidity in the banking system have continued to increase

The Bank's balance sheet has tripled in size since the onset of the pandemic as a result of the Bank's policy measures. Since the previous *Statement*, the balance sheet has increased by \$150 billion to around \$560 billion. Over this period, growth in the Bank's assets has reflected a large increase in funds lent under the TFF and a rise in holdings of AGS and semis, owing to the Bank's ongoing bond purchases (Graph 3.9). Funding provided via open market operations declined further. On the liabilities side, exchange settlement (ES) balances have risen significantly as a result of the Bank's policies (Graph 3.10). Liquidity in the banking system – as measured by surplus ES balances – is currently around \$350 billion compared with around \$2 billion–\$3 billion in the period before the pandemic.^[1]

Bank bond issuance picked up, although it remained low

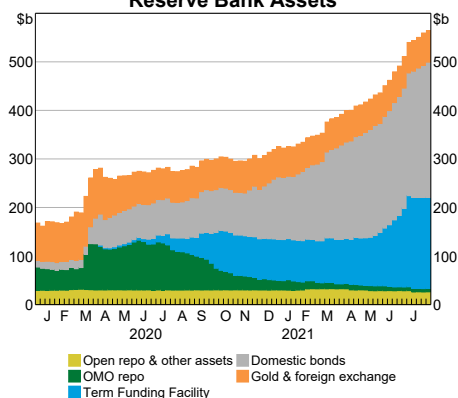
Bank bond issuance picked up in recent months, but remains low in the year to date (Graph 3.11). The average tenor of recent issuance is around six years, with a large share being raised offshore. Banks sought, and are likely to continue to seek, funding at relatively long tenors beyond the

period where TFF funding has been drawn. For these longer tenors, overseas markets are typically deeper and more liquid.

Bank bond yields remained low by historical standards, with typical 3-year tenor bonds attracting yields of around 55 basis points in the domestic market (Graph 3.12). The spread to swap rates (for converting fixed to floating rate interest payments) has been little changed at low levels since the beginning of the year, so movements in yields have followed movements in the swap rate. The low yields on bank debt reflect a number of factors, including the Bank's

Graph 3.9

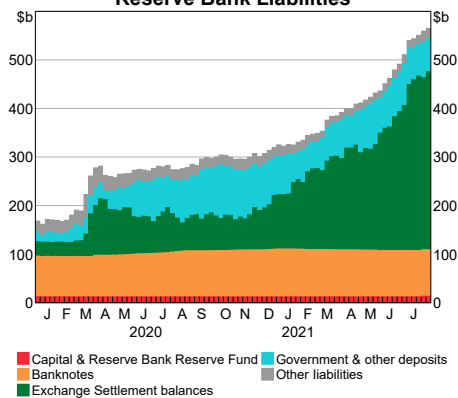
Reserve Bank Assets



Source: RBA

Graph 3.10

Reserve Bank Liabilities



Source: RBA

package of policy measures and, relatedly, low issuance of bank bonds throughout the pandemic.

Issuance of RMBS from non-banks remained high

Issuance of residential mortgage backed securities (RMBS) remained high in the first half of 2021, driven by issuance from non-banks (Graph 3.13). The low level of bank issuance is consistent with banks' ready access to alternative funding sources, including the TFF. Even so, in July Macquarie Bank issued the second-largest RMBS since the Global Financial Crisis, at \$3.8 billion.

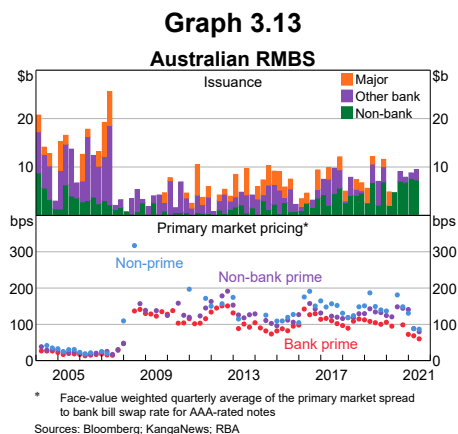
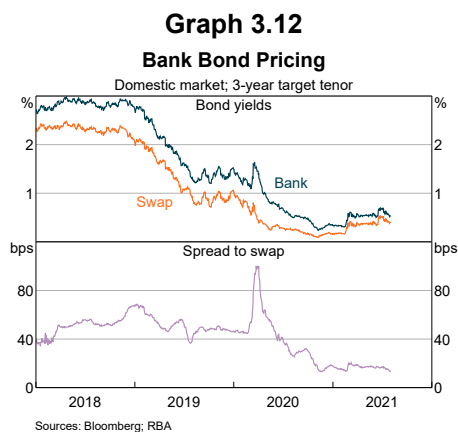
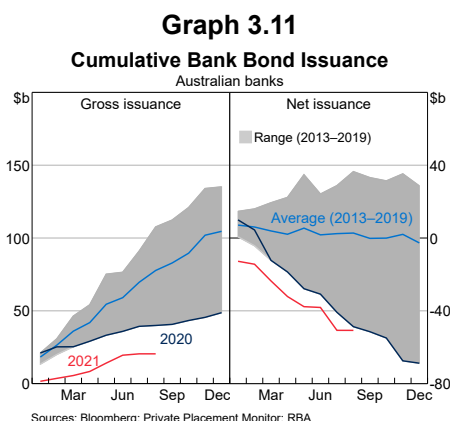
RMBS spreads to benchmark rates remained well below pre-pandemic levels as investors sought

alternative investments to bank bonds. Ongoing demand from private investors has meant that the AOFM's Structured Finance Support Fund (SFSF) has not made any new investments to support RMBS since November 2020. Moreover, the SFSF's position in several securitisation warehouses – typically used by non-banks – has been replaced by private investors.

Deposit rates have declined a little further

Deposit rates have edged a little lower in recent months, after declining sharply over 2020. Since the end of February 2020, interest rates for at-call deposits have fallen by a little over 55 basis points and interest rates for new term deposits have fallen by around 125 basis points (Graph 3.14).

Liaison with major banks earlier in the year indicated that around half of outstanding deposits were paying interest of between zero and 25 basis points. With deposit rates at historically low levels, some banks have indicated that there is limited room to lower deposit rates much further. Nevertheless, low rates on new term deposits are leading to a gradual reduction in outstanding term deposit rates as maturing higher-rate deposits get replaced, thereby contributing to further declines in funding costs for banks.



The final TFF drawdowns have led to a further decline in banks' overall funding costs

Banks' non-equity funding costs declined a little further in recent months as banks drew down much of the remaining TFF allowances (Graph 3.15). The TFF has provided banks with low-cost funding for 3 years and so will continue to support low funding costs until mid 2024.

Over the past year or so, banks' funding costs have also benefited from the strong growth in low-rate deposits, which has been driven in part by the Reserve Bank's purchases of government bonds from non-banks (Graph 3.16). The continuation of the bond purchase program,

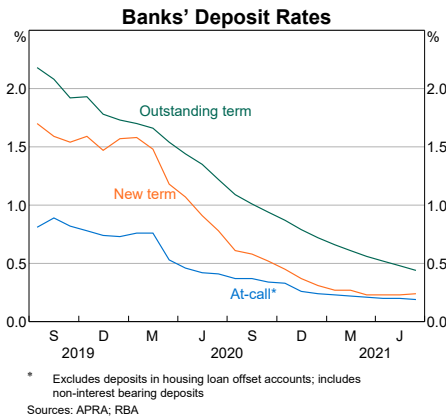
following the completion of the current bond purchase program in September, will continue to contribute to low funding costs for banks. In addition, because banks have been drawing significantly on the TFF, they have largely refrained from issuing new bonds. Hence, the outstanding stock of bank bonds has declined as existing bonds have matured. Those funds from maturing bonds have contributed to deposit growth. Deposits now account for around 60 per cent of banks' total funding – around 5 percentage points higher than before the pandemic.

Interest rates on new housing loans are at historical lows

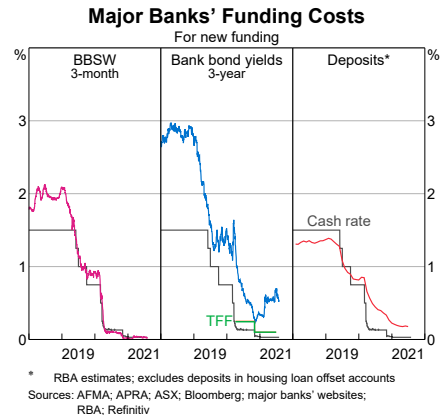
Interest rates on new variable-rate loans – which account for 70 per cent of the stock of total mortgages – have continued to edge lower over recent months, after declining significantly in 2020.

Interest rates on new fixed-rate loans remain substantially lower than the interest rates on new variable-rate loans (by around 60–75 basis points). In recent months, some banks have increased their rates on longer-term fixed-rate housing loans, leading to a small rise in the average advertised rates for terms of 3 to 5 years, in response to a rise in swap rates at this maturity. Even so, the increase in longer-term

Graph 3.14



Graph 3.15



Graph 3.16

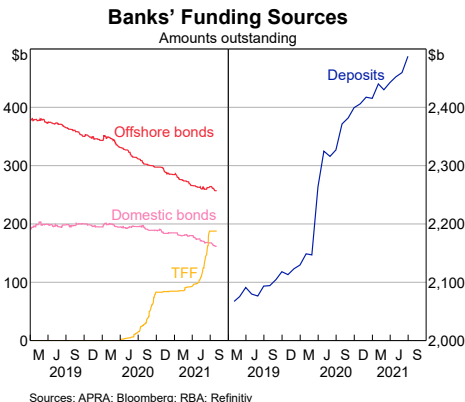


Table 3.1: Average Outstanding Housing Rates

June 2021

	Interest rate (Per cent)	Change since February 2020 (Basis points)
Variable-rate loans		
– Owner-occupier	3.07	–51
– Investor	3.41	–56
All variable-rate loans	3.19	–53
Fixed-rate loans		
– Owner-occupier	2.38	–135
– Investor	2.76	–125
All fixed-rate loans	2.52	–134
By repayment type^(a)		
– Principal-and-interest	2.88	–74
– Interest-only	3.52	–71

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

Sources: APRA; RBA

fixed rates has been modest to date and interest rates on these loans remain at low levels after declining sharply last year (Graph 3.17).

Longer-term fixed-rate loans account for a small share of the overall stock of housing credit, despite the share having increased earlier this year as banks offered particularly attractive interest rates for these loans. In recent months, the share has declined a little as new borrowers have been attracted to the lower rates on offer at shorter terms. Overall, the effect of recent increases in longer-term fixed-rate housing loans on mortgage rates is small, and shorter-term fixed rates remain around historical lows.

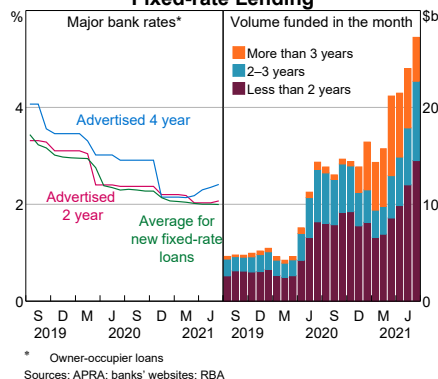
Interest rates on outstanding housing loans have continued to decline

Interest rates on outstanding housing loans have continued to decline over recent months. This is likely to continue for a time, as the very low level of new lending rates encourages new housing lending and ongoing refinancing by existing borrowers at lower rates. Borrowers reaching the end of their fixed-rate period have

been able to obtain more favourable interest rates now on offer. Interest rates on outstanding variable-rate mortgages have declined by around 55 basis points since the end of February 2020, while interest rates on outstanding fixed-rate mortgages have declined by around 135 basis points (Table 3.1; Graph 3.18).

Graph 3.17

Fixed-rate Lending



Interest rates on business loans have declined to historical lows

Interest rates on outstanding business loans continued to drift lower in recent months (Graph 3.19). Since February 2020, interest rates on variable-rate loans to small- and medium-sized enterprises (SMEs) and large businesses have declined by around 95 basis points and 90 basis points, respectively. Interest rates on fixed-rate loans to SMEs and large businesses have declined by around 80 basis points and 55 basis points over the same period, respectively. The more recent declines in outstanding interest rates have been mostly for small business fixed-rate loans, and there is elevated refinancing activity among businesses to access the lower interest rates on offer.

Growth in total credit has increased further over recent months

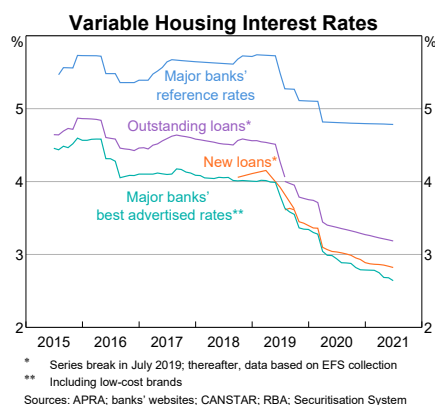
Total credit growth increased over recent months to be around 5½ per cent in 6-month-ended-annualised terms in June (Graph 3.20). The increase in total credit was driven by both a pick-up in business credit and strong demand for housing credit. An increase in the pace of growth of bank deposits has led to a pick-up in the growth of broad money in June.

Owner-occupier housing credit strengthened over the quarter to be 8½ per cent higher in 6-month-ended-annualised terms. Investor housing credit also picked up over recent months, and is more than 3¼ per cent higher in 6-month-ended-annualised terms. Demand for housing credit continued to be supported by low interest rates, strong activity in housing markets and government policy measures targeted at first home buyers. Credit growth has been particularly strong for non-bank lenders, which have benefitted from favourable conditions in securitisation markets that provide the bulk of their funding.

Growth in business credit picked up strongly in the month of June, to be 4½ per cent higher on a 6-month-ended-annualised basis. The pick-up in business lending was consistent with improvements in economic conditions over the first half of 2021 and an increase in business confidence. However, this increase in the stock of outstanding business credit largely predates recent lockdowns due to COVID-19 outbreaks. These may reduce demand for credit for a time, although some firms may draw upon lines of credit to shore up liquidity.

The pace of decline in personal credit eased in the June quarter. Much of this reflected an

Graph 3.18



Graph 3.19

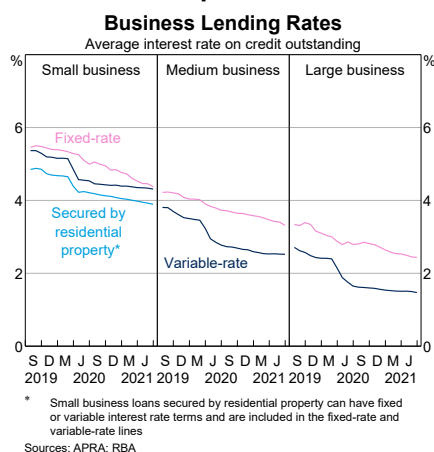


Table 3.2: Growth in Financial Aggregates

Percentage change^(a)

	3-month annualised		6-month annualised	
	Mar 21	Jun 21	Dec 20	Jun 21
Total credit	3.9	7.0	0.8	5.5
Household	5.1	6.9	2.9	6.0
– Housing	5.8	7.4	4.0	6.6
– Owner-occupier	7.8	9.3	5.8	8.5
– Investor	2.5	4.1	0.7	3.3
– Personal	–4.0	–1.1	–9.8	–2.6
Business	1.5	7.7	–3.2	4.5
Broad money	4.1	8.4	9.1	6.2

(a) Seasonally adjusted and break-adjusted

Sources: ABS; APRA; RBA

increase in spending on credit cards alongside the recovery in economic conditions as restrictions to contain the virus had eased.

Demand for housing loans has increased

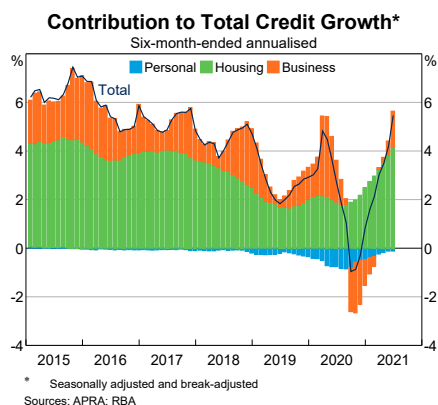
Housing credit growth picked up over the June quarter to be 6¾ per cent on a 6-month-ended-annualised basis. Growth has increased for both owner-occupiers and investors (Graph 3.21).

Commitments for housing loans increased further in the quarter to new highs. Housing loan commitments to first home buyers have

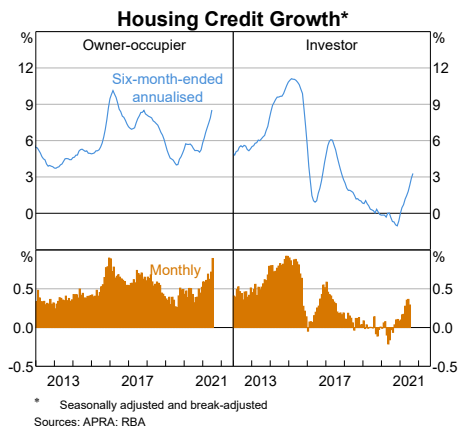
been steady at a high level, while commitments to other owner-occupiers and investors increased further in the quarter (Graph 3.22).

In late 2020 and early 2021, growth in housing credit had been driven by increases in loan commitments for the purchase of new dwellings or housing construction. More recently, credit growth has been increasingly driven by commitments for purchases of existing dwellings (Graph 3.23). The levelling-off in loan commitments for construction activity has followed the closure of the Australian Govern-

Graph 3.20



Graph 3.21



ment's HomeBuilder scheme at the end of March. While this scheme is likely to have brought forward some demand, reports from liaison indicate that demand for new housing remains above pre-pandemic levels.

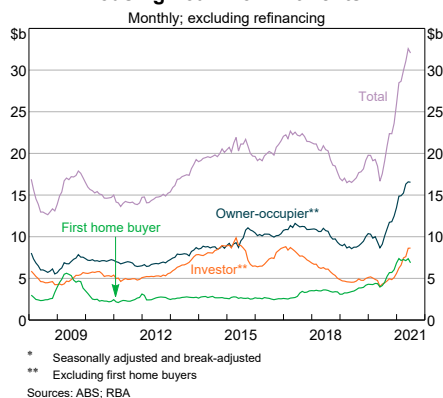
Banks have noted in liaison that they expect demand for housing credit to remain strong in the coming months, given the recent strength in housing market activity and low level of interest rates. Government policy measures targeted at first home buyers will also support demand, with new places available in the Australian Government's first home buyer deposit guarantee schemes from 1 July 2021. Housing finance activity may slow for a time if measures

to contain the recent outbreaks of COVID-19 are in place for an extended period.

Given the environment of rising house prices and low interest rates, it is important that lending standards are maintained. In June, the Council of Financial Regulators concluded that, while there have been signs of some increased risk taking, overall lending standards remain sound. In other developments, the implementation of the Australian Government's updated mandatory comprehensive credit reporting requirements from 1 July 2021 will enhance the ability of lenders to assess borrowers' creditworthiness. Similarly, the increased availability of consumers' banking data through the Consumer Data Right program (open banking) will facilitate sharing of data between consumers and lenders.

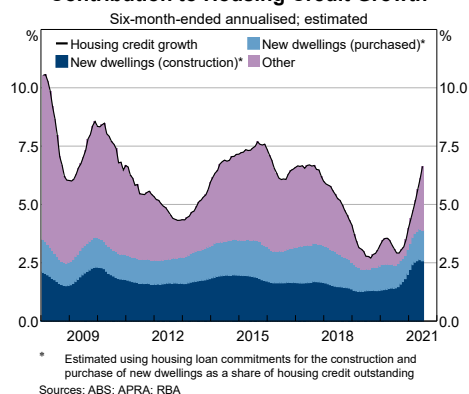
Graph 3.22

Housing Loan Commitments*



Graph 3.23

Contribution to Housing Credit Growth



Payments into housing loan offset and redraw accounts have declined

Net payments into offset and redraw accounts have declined from the high levels of last year (Graph 3.24). The decline in payments since mid 2020 has been consistent with the increase in consumption in the first half of 2021, a tapering in fiscal payments and the removal of access to early-release superannuation at the end of 2020. Since the onset of the pandemic, mortgage borrowers' payments into offset and redraw accounts have been substantial, totalling about 3½ per cent of disposable income (around \$54 billion).

Reductions in housing loan interest rates since March 2020 have flowed through to borrowers in the form of lower interest payments (Graph 3.25). As a result, interest payments have declined by around ¾ percentage point as a share of disposable income, despite outstanding housing credit increasing over that period. This reflects the combined effect of the pass-through of the Bank's policy easing, borrowers refinancing to lower interest rates and growth in disposable income.

In response to the recent COVID-19 outbreaks, many banks have made available a range of support measures, including payment deferrals for affected mortgagees and business borrowers. The Australian Prudential Regulation Authority (APRA) also reinstated the regulatory support for loans affected by the lockdowns, as was the case in mid 2020.

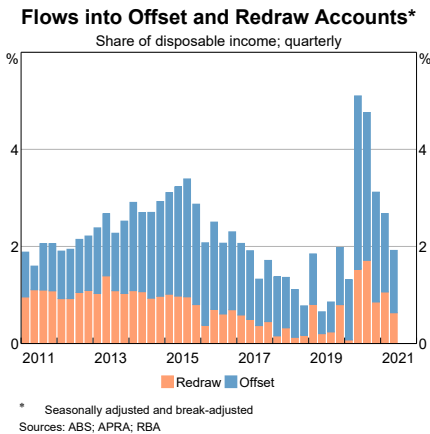
Lending to businesses had picked up

Business lending had picked up over recent months (Graph 3.26). Lending to large businesses had increased since the start of 2021, and the volume of lending to SMEs increased in

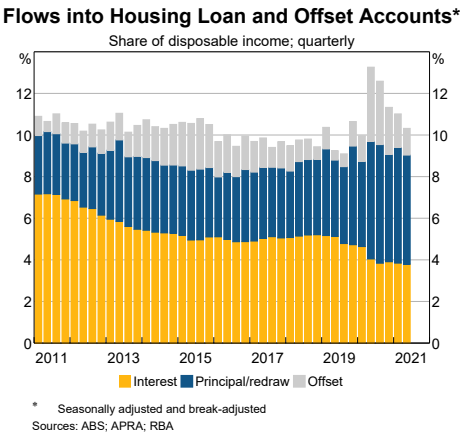
the June quarter. Commitments for new business loans, which are volatile, increased sharply in June, but remain well below pre-pandemic levels in trend terms.

Liaison with banks suggested there had been a little more appetite for business borrowing up to June, consistent with the improvement in economic conditions over the first half of this year. Surveys conducted by the ABS in early 2021 indicated that some businesses accessing support in the March quarter expected to seek additional funds in the period ahead. However, economic uncertainty continues to weigh on some industries, and more recent restrictions to contain the spread of COVID-19 are likely to adversely affect a range of businesses. As a result, firms may be reluctant to take on new debt to expand their business, although some may draw on credit lines to shore up liquidity positions. Nonetheless, many businesses still have little immediate need to borrow, including for precautionary purposes, in part because of the cash buffers they had accumulated in 2020. These messages were reinforced in July by participants at the Reserve Bank's annual Small Business Finance Advisory Panel – drawn from small businesses across Australia – which provided valuable perspectives on the financial conditions facing small businesses.

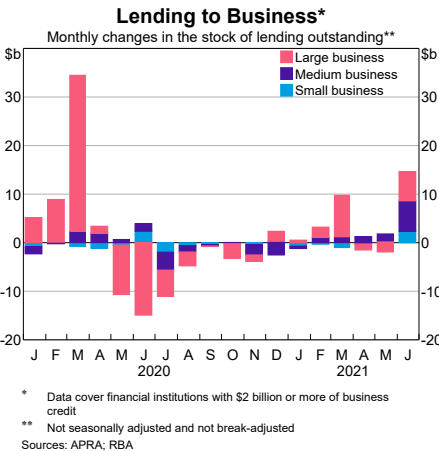
Graph 3.24



Graph 3.25



Graph 3.26



The volume of new loan commitments extended to SMEs increased up to June, and the volume of commitments extended in the 2020/21 financial year was only marginally lower than in the previous year (Graph 3.27).

Commitments for the purchase of property and construction picked up in June. Lending for machinery and equipment has been supported by the Australian Government's enhancements to the temporary full expensing scheme, which provides an incentive to invest in these assets. Meanwhile, total SME refinancing activity was higher in the 2020/21 financial year compared with the year prior, as some businesses availed themselves of the lower interest rates on offer.

The Australian Government's \$40 billion SME Guarantee Scheme, which started in late March 2020 and was enhanced in October 2020, closed to new applications at the end of June 2021. Overall, take-up of the scheme was modest, with around \$6½ billion of loan commitments made to around 66,000 businesses. In April, the government introduced the SME Recovery Loan Scheme, which is an enhanced and extended loan guarantee scheme for SMEs that had received JobKeeper payments in the March quarter of 2021. This scheme is more flexible for borrowers in terms of the maximum loan size, the ability to refinance existing loans and the repayment terms. Further, advertised interest rates under the new scheme are generally lower

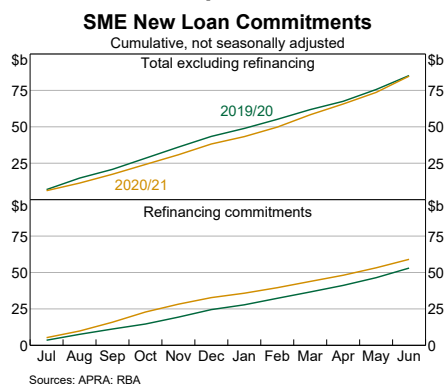
than comparable products under the original scheme.

Banks reported in liaison that they are seeking more opportunities to lend to businesses, including smaller businesses. In part, this reflects the earlier improvement in economic conditions relative to 2020 and an increase in competition between lenders. However, some banks remain cautious about businesses that continue to be adversely affected by the pandemic.

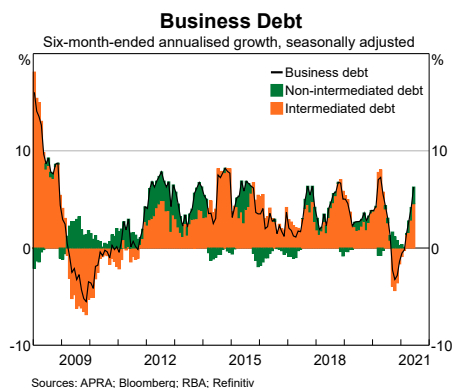
Growth of broader measures of business debt had also increased

Growth in a broader measure of business debt picked up over the first half of 2021 to be above its average pace over the past decade (Graph 3.28). Until recently, this increase had been driven by an increase in syndicated lending to large businesses by entities that do not report to APRA. In June, however, the growth was broad based across other sources of debt, including business credit and bond issuance. Australian corporations raised around \$23 billion via corporate bond issuance in the first half of 2021 (Graph 3.29); two-thirds of this funding was raised offshore.

Graph 3.27



Graph 3.28



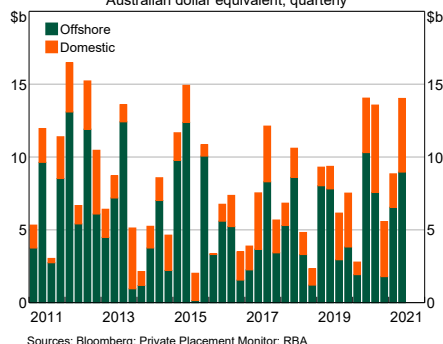
Australian equity prices have increased this year

The ASX 200 increased further over recent months to be around 9 per cent higher than its February 2020 peak on a total return basis, which takes dividends into account. The rebound in global equity prices since March last year reflects the recovery in the global economy along with an improvement in sentiment as effective COVID-19 vaccines have been developed and administered (Graph 3.30). The ASX 200 has been at record levels in early August, with little reaction in aggregate to COVID-19 Delta outbreaks and related restrictions.

Graph 3.29

Australian Corporate Bond Issuance

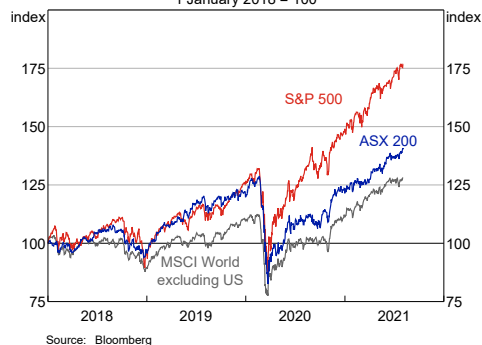
Australian dollar equivalent; quarterly



Graph 3.30

Total Return Indices

1 January 2018 = 100



In general, the sectors that saw the highest price increases in the first few months of the year have seen the weakest performance over recent months (Graph 3.31). Information technology (IT) stocks have seen the largest gains, supported by a fall in long-term government bond yields. By contrast, financials have underperformed the market as growth expectations have waned. So far in 2021, the price of mining materials stocks has increased by around 17 per cent, buoyed higher by rising commodity prices.

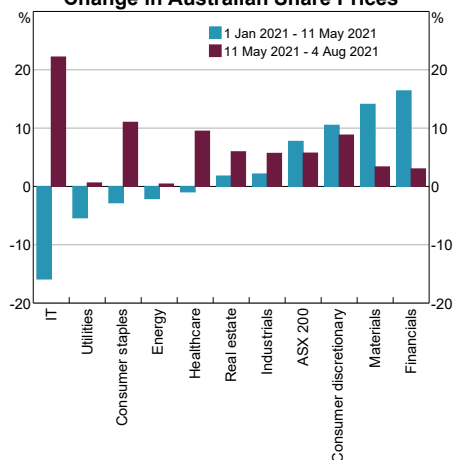
Capital market activity has been strong in 2021 thus far

In the first half of 2021, there were 292 merger and acquisition (M&A) deals announced for a total value of around \$48 billion (Graph 3.32). This is significantly larger than the average for the first half of a year over the past decade, and the highest level since 2007 when there were a total of \$53 billion worth of deals announced in the first half of the year.

In the first 6 months of 2021, there were 69 initial public offerings, which raised \$3.6 billion (Graph 3.33). This is the strongest start to the year since 2014.

Graph 3.31

Change in Australian Share Prices



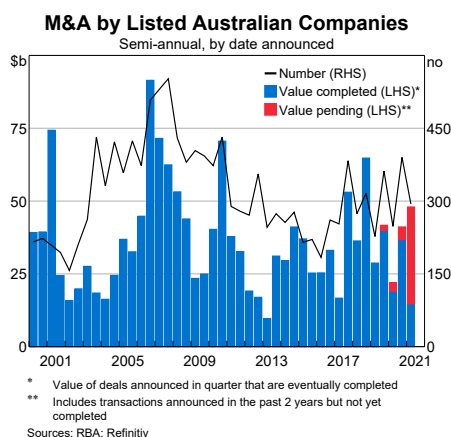
The Australian dollar has depreciated

After moving in a narrow range since the start of the year, the Australian dollar has depreciated over the past few months on a trade-weighted basis and against the US dollar (Graph 3.34). It depreciated in the period following the June FOMC meeting, and is close to its lowest levels this year.

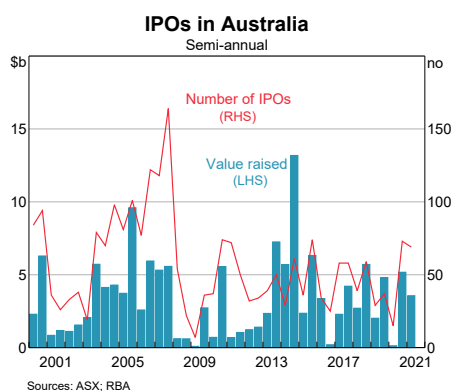
Yields on shorter-term Australian government bonds have declined a little relative to those of the major advanced economies over recent months, partly reflecting the rise in yields on shorter-term US government bonds following the June FOMC meeting (Graph 3.35). The differential on longer-term yields has also

declined. The depreciation of the Australian dollar over recent months has occurred despite prices of Australia's commodity exports having been around their highest levels in a decade. This may reflect an expectation that the very high level of commodity prices will not persist. Consistent with this, the investment intentions of major mining companies in Australia have not increased in response to higher commodity prices and more recently the prices of some commodities have declined. The exchange rates of some other commodity-exporting economies, such as the Canadian dollar and Norwegian krone, have also depreciated over recent months.

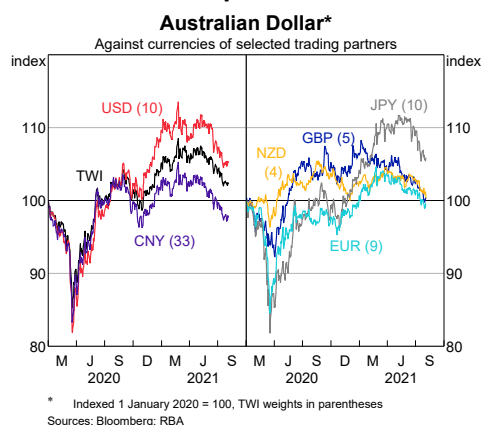
Graph 3.32



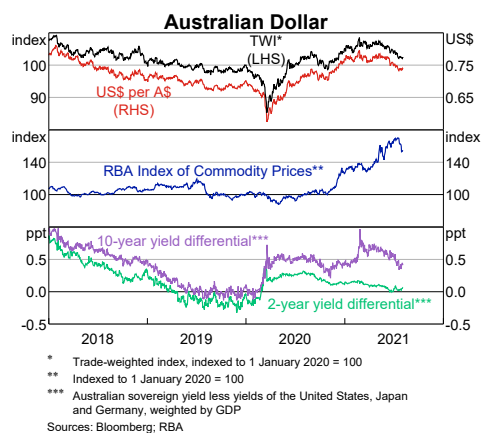
Graph 3.33



Graph 3.34

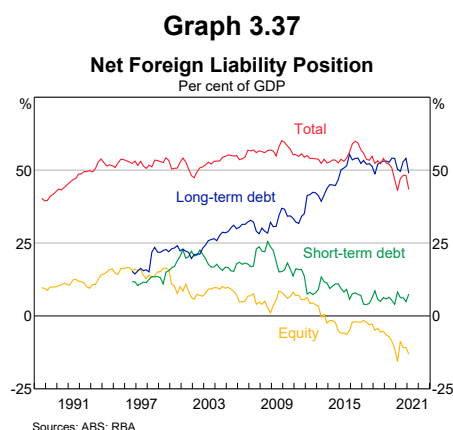
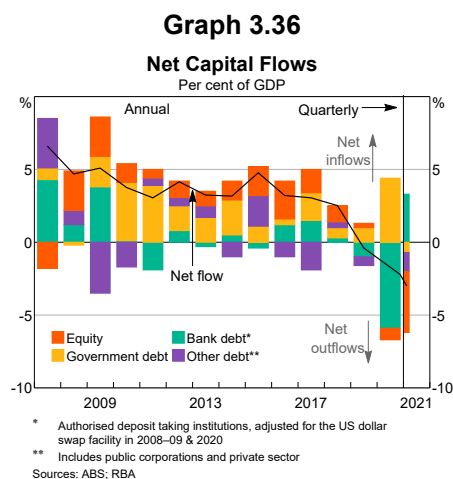


Graph 3.35



Australia continued to be a net lender of capital in the March quarter

Net capital outflows increased in the March quarter as Australia's current account surplus widened. Net outflows reflected portfolio equity investment as Australian superannuation and other investment funds continued to purchase foreign equities (Graph 3.36). The increase in the value of Australia's foreign equity holdings over recent years – which primarily reflects asset valuation effects – has contributed to a widening in Australia's net foreign equity asset position (Graph 3.37). Partly reflecting this, Australia's net foreign liability position remains around its lowest level in a number of decades as a percentage of GDP. 🦋



Endnotes

- [1] Surplus ES balances are total ES balances net of contracted open repo positions. See RBA, 'Domestic Market Operations and Standing Facilities'. Available at <<https://www.rba.gov.au/mkt-operations/domestic-market-ops-and-standing-facilities.html>>.

Box C

Use of the Reserve Bank's Term Funding Facility

The Term Funding Facility (TFF) was announced by the Reserve Bank Board in March 2020 as part of a comprehensive policy package to support the Australian economy in response to the COVID-19 pandemic. The facility has provided low-cost 3-year funding to banks operating in Australia (against high-quality collateral, as is the case for all central bank funding). The TFF had three overall aims:

1. to support the banking sector to continue to extend credit to households and businesses at a time when wholesale funding markets were significantly disrupted
2. to lower funding costs for banks and, in turn, lower borrowing rates for their business and household customers
3. to encourage banks to increase their lending to businesses, particularly small and medium-sized enterprises (SMEs).

While the facility closed to new drawdowns at the end of June 2021, it will continue to provide low-cost funding to banks for up to 3 years until final funding from the facility matures in mid 2024.

The amount each bank could draw upon under the TFF was the sum of three allowances:

- The 'initial allowance' was fixed at the start of the scheme to be equivalent to 3 per cent of each bank's total credit outstanding; banks could access their initial allowance until 30 September 2020.

- The 'supplementary allowance' was equivalent to 2 per cent of each bank's total credit outstanding; made available from 1 October 2020.
- The 'additional allowance' was available to any bank that managed to expand their business credit, particularly for SMEs. For every extra dollar of loans (relative to a pre-pandemic baseline) a bank made to large businesses, the bank could access one additional dollar of funding from the Reserve Bank. For every extra dollar lent to SMEs, it had access to an additional \$5 of funding.

The cost of TFF funding was 0.25 per cent initially, and 0.1 per cent since November 2020 (in line with the reduction in the cash rate target at that time).

Banks accessed \$188 billion of funding from the TFF

The TFF has provided \$188 billion in funding to banks. This funding is equivalent to 4 per cent of banks' non-equity funding, or 6 per cent of credit. Drawdowns were concentrated over two periods of heightened activity in the lead up to expiry dates for allowances (Graph C.1).

Most banks took up most of their allowances

In aggregate, banks drew down 88 per cent of the total funding of \$213 billion available over the life of the facility. By bank type, the major banks and mid-sized Australian banks took up all of their allowances in aggregate,

while small banks and foreign banks took up a little over half of their total allowances (Graph C.2). By number, around two-thirds of banks accessed the TFF. Those that did not access the facility represented a very small share of allowances by value (Graph C.3). In large part these banks were small Australian banks and foreign banks, many with very small allowances, and some with larger allowances but with less ready access to collateral.

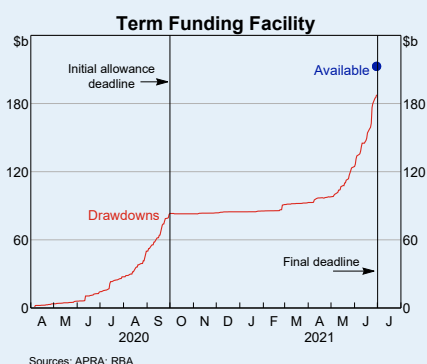
The top 10 largest users of the TFF account for almost 90 per cent of drawdowns from the facility (Table C.1). Differences in the amount drawn from the TFF within this

group largely reflect differences in banks' total credit outstanding; this is consistent with each bank's initial and supplementary allowances having been based on its credit outstanding when the allowances were set in March 2020 and September 2020. However, for some of these banks the additional allowances they accumulated were significant, reflecting strong growth in their loans to businesses since early 2020.

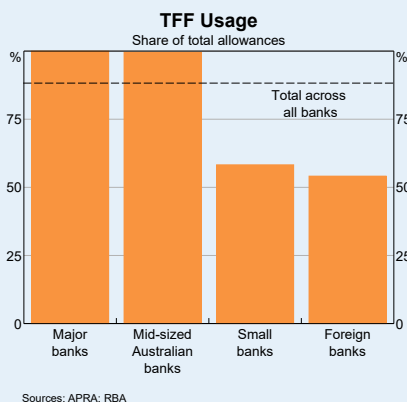
The TFF has contributed to keeping bank funding costs low ...

The TFF lowered banks' funding costs by providing a low-cost source of funds. In particular, the TFF provided funds for 3 years at a cost that has been well below the cost of wholesale debt for the same term. The estimated cost of sourcing 3-year unsecured funding in domestic wholesale debt markets for the major banks was around 0.6 per cent at the end of June 2021, compared with 0.1 per cent for TFF funding (Graph C.4). Taking into account the lower cost of funds and the share of bank funding provided, the Bank's estimates suggest that the direct effect of the TFF has been to lower major bank funding costs by a little more than 5 basis points. For smaller banks, the

Graph C.1



Graph C.2



Graph C.3

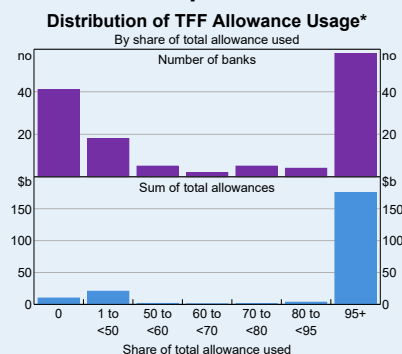


Table C.1: Top 10 Largest Drawdowns of the Term Funding Facility by Bank

Bank name	Total Allowance		of which			
	Drawn-down (\$ billion)	Share of allowance (Per cent)	Initial ^(a) Drawn-down (\$ billion)	Share of allowance (Per cent)	Supplementary and Additional ^(b) Drawn-down (\$ billion)	Share of allowance (Per cent)
CBA	51.14	100.0	19.15	100.0	31.99	100.0
NAB	31.87	100.0	14.27	100.0	17.60	100.0
Westpac	29.78	100.0	17.90	100.0	11.89	100.0
ANZ	20.09	100.0	12.00	99.8	8.09	99.9
Macquarie	11.26	99.1	1.72	100.0	9.53	98.9
ING Bank (Aust.)	5.42	100.0	1.87	100.0	3.55	99.9
Bendigo Bank	4.72	100.0	1.83	100.0	2.89	100.0
Suncorp	4.13	100.0	1.74	100.0	2.39	100.0
Judo Bank	2.86	33.1	0.03	99.8	2.83	32.9
BoQ	2.15	100.0	1.24	100.0	0.92	100.0

(a) Closed on 30 September 2020. More information on these allowances is available in the TFF Operational Notes.

(b) Closed on 30 June 2021. More information on these allowances is available in the TFF Operational Notes.

Source: RBA

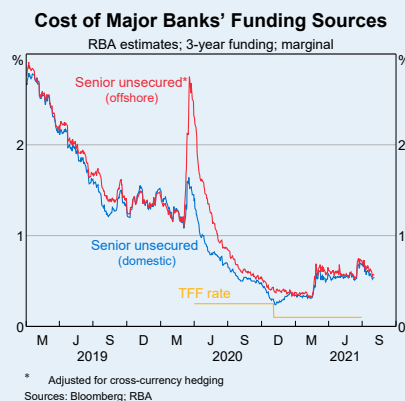
difference between the TFF funding rate of 0.1 per cent and their cost of wholesale term funding is larger than for the major banks. Since the last of this low-cost funding is not due to mature until mid 2024, the TFF will keep bank funding costs lower than otherwise for a number of years.

The TFF has also had an indirect effect on banks' funding costs. As banks have drawn on the TFF, they have largely refrained from issuing new senior unsecured debt in wholesale funding markets, so the total stock of bank bonds has declined as existing bonds have matured. The lower supply of bank bonds has narrowed spreads on these bonds in the secondary market, and in turn contributed to narrowed spreads for other (financial and non-financial) institutions' debt, thereby reducing costs of new issuance for banks and other institutions.

... and, in turn, contributed to lower lending rates

As a result of the Reserve Bank's policy measures, including the TFF, bank funding costs and lending rates are at historically low levels. On average, lending rates have

Graph C.4



declined in line with banks' overall funding costs, although the extent of reductions in interest rates has varied across different types of housing and business loans. Rates on outstanding variable-rate mortgages have declined by around 55 basis points since the end of February 2020, while interest rates on outstanding fixed-rate mortgages have declined by around 135 basis points. Since February 2020, interest rates on variable-rate loans to SMEs and large businesses have declined by around 95 basis points and 90 basis points, respectively. Interest rates on fixed-rate loans to SMEs and large businesses have declined by around 80 basis points and 55 basis points, respectively.

The TFF refinancing task that the banks will face is sizeable but manageable

Over the next 2 to 3 years, banks will need to repay the funding they have accessed from the TFF. The amount banks will source from wholesale debt markets over that period will depend on a number of factors, including their asset growth and the price and

availability of other funding, including deposits. Liaison with banks suggests that their current plans are to raise a sizeable amount of funds to repay TFF funding (on or before maturity) from wholesale debt markets, thereby at least partly reversing the process whereby debt issuance declined as TFF drawdowns increased. There are a number of factors that suggest the banking sector is well prepared for this task. First, although TFF maturities in the peak quarters are sizeable compared with issuance over much of the past decade, banks have indicated in liaison that they plan to smooth out their issuance over a period of time, in amounts that would be in line with their issuance in the past. Second, the medium-term economic outlook is positive, which suggests that banks will be well placed to issue sizeable amounts on favourable terms. Third, Australian banks are highly rated by global standards, including because of continued profitability (see April 2021 *Financial Stability Review*).^[1] The Reserve Bank will continue to monitor the situation going forward, along with APRA, which as usual will monitor banks' liquidity management. ✎

Endnotes

- [1] See RBA (2021), 'Chapter 3: The Australian Financial System', *Financial Stability Review*, April. Available at <<https://www.rba.gov.au/publications/fsr/2021/apr/australian-financial-system.html>>

4. Inflation

Underlying price and wage pressures in the economy remain subdued. Headline inflation has continued to be affected by government subsidies and rebates as well as other one-off effects, and increased by 3.8 per cent over the year to the June quarter. Fuel prices increased further in the quarter, having now fully rebounded from the global demand shock in the first half of 2020. Goods inflation has picked up over the year, in part reflecting stronger demand and some global price pressures; however, this has been offset by subdued inflation in rents and services. Trimmed mean inflation was 0.5 per cent in the June quarter and 1.6 per cent over the year.

Wages growth in the March quarter continued to recover from the mid-2020 trough, and is returning to pre-pandemic rates. In the private sector, temporary wage cuts implemented in response to the pandemic have been mostly unwound, and some firms resumed wage reviews that were put on hold over the last year. Wages growth in the public sector remained soft, reflecting deferrals of increases and caps on wage growth in many states.

Headline inflation spiked as temporary government policies unwound, but underlying inflation remains subdued

Inflation spiked over the year to June as government subsidies for some services were removed, alongside a recovery in fuel prices from the low levels seen a year ago. The headline Consumer Price Index (CPI) increased by 0.8 per cent (seasonally adjusted) in the quarter and by 3.8 per cent over the year (Graph 4.1; Table 4.1).

Several one-off price increases over recent quarters have boosted year-ended headline inflation temporarily (Graph 4.2). The earlier unwinding of subsidies for child care and after school care, together with medical & hospital services inflation, contributed around 1¾ percentage points to the increase; health insurance premiums increased twice over the past year, after the scheduled annual premium increase in 2020 was delayed from April to October. The recovery in fuel prices and the final scheduled increase in the tobacco excise in September made smaller, but still material, contributions to inflation over the year.

Measures of underlying inflation, which largely exclude these temporary pandemic-related effects, have steadied in recent quarters but remained subdued, reflecting the extent of spare capacity in the economy and associated low wages growth. Trimmed mean inflation was 0.5 per cent in the June quarter and 1.6 per cent over the year (Graph 4.3).

Graph 4.1

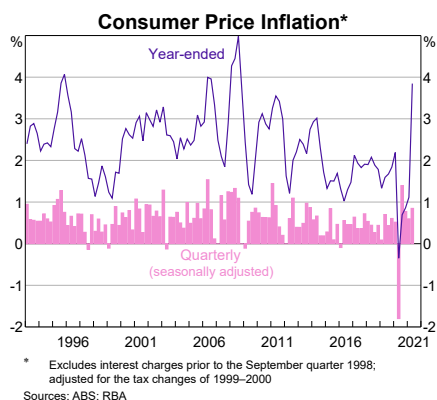


Table 4.1: Measures of Consumer Price Inflation

Per cent

	Quarterly ^(a)		Year-ended ^(b)	
	June quarter 2021	March quarter 2021	June quarter 2021	March quarter 2021
Consumer Price Index	0.8	0.6	3.8	1.1
Seasonally adjusted CPI	0.8	0.6	–	–
– Tradables	1.4	1.2	3.6	0.7
– Tradables (excl volatile items) ^(c)	0.3	0.5	1.2	1.4
– Non-tradables	0.6	0.3	4.0	1.3
Selected underlying measures				
Trimmed mean	0.5	0.4	1.6	1.1
Weighted median	0.5	0.4	1.7	1.3
CPI excl volatile items ^(c)	0.5	0.4	3.1	1.4

(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

Other government policies also continue to affect price outcomes

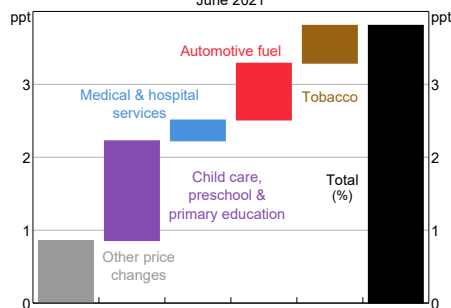
Inflation outcomes over recent quarters have been heavily shaped by the effects of government policies. Observed prices for newly constructed dwellings rose materially in the quarter, in part reflecting strong demand induced by government subsidies such as HomeBuilder; however, the statistical treatment of these subsidies offset the effect of observed

price increases in the CPI. Utilities prices rose in the June quarter as a household electricity rebate in Western Australia ended. Government subsidy and voucher programs also affected demand and prices as measured in the CPI for items such as domestic travel, dining and recreation.

Graph 4.2

Contributions to Year-ended CPI Inflation

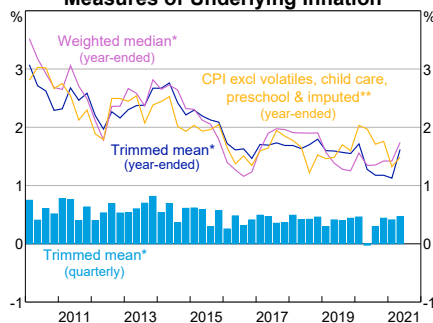
June 2021



Sources: ABS; RBA

Graph 4.3

Measures of Underlying Inflation



* Seasonally adjusted

** Not seasonally adjusted; excludes fruit, vegetables, automotive fuel, child care, preschool & primary education and items that were imputed using headline CPI for all capital cities in the June or September quarter 2020

Sources: ABS; RBA

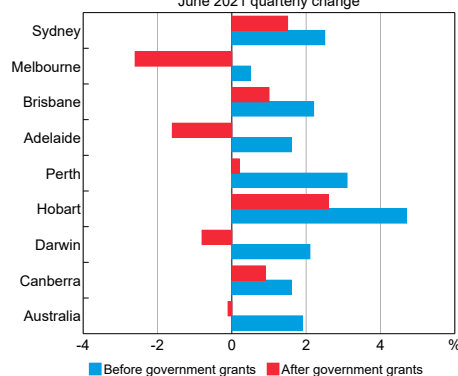
New dwelling inflation

New dwelling prices, which make up just under one-tenth of the CPI basket, declined a further 0.1 per cent in the June quarter; this is because HomeBuilder grants and similar state government programs are treated by the ABS as price reductions (Graph 4.4). Although applications for these grants had closed by the end of March, their effects are incorporated into the CPI as they are paid out, and so affect inflation with a lag. HomeBuilder grants are expected to weigh on new dwelling inflation until late 2022, by which time construction is required to have commenced on all eligible dwellings.

These government construction incentives have boosted demand for new dwellings significantly. Information from liaison contacts indicates that strong demand has in turn contributed to higher material prices and subcontractor rates in recent quarters, as have supply chain disruptions for some imported materials (Graph 4.5). These higher input costs are being passed on to consumers through higher base prices; without the offset from the statistical treatment of government grants, new dwelling prices would have risen by 1.9 per cent in the June quarter.

Graph 4.4

New Dwelling Price Inflation
June 2021 quarterly change



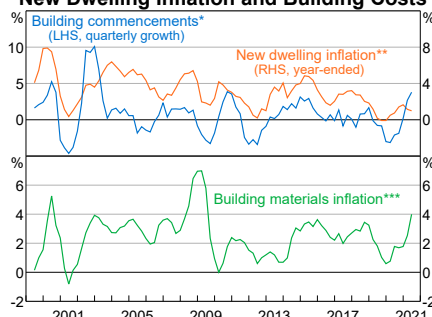
Source: ABS

Utilities

Government rebates have driven large movements in electricity prices in Perth in recent quarters. A rebate was introduced in the December quarter of 2020, which effectively made electricity free for around 4 months; most households used up the last of the available rebate in the June quarter. The return of Perth electricity bills to more normal levels led to a 6 per cent increase in aggregate electricity prices, contributing around ¼ percentage point to quarterly headline CPI (Graph 4.6). Electricity prices declined or remained frozen in all other capital cities in the quarter.

Graph 4.5

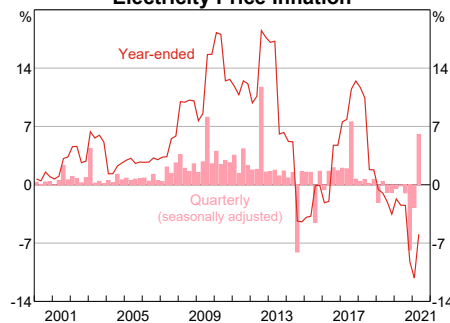
New Dwelling Inflation and Building Costs



* Volumes: 6-quarter average lagged by one quarter; detached only prior to 2017; thereafter attached included with a 20 per cent weight
 ** Adjusted for the tax changes of 1999–2000
 *** Year-ended change in producer prices for inputs to house construction
 Sources: ABS; RBA

Graph 4.6

Electricity Price Inflation



Source: ABS

Other government initiatives

A number of state governments have implemented voucher programs to support intrastate travel, dining and recreational activities. These programs subtracted from price inflation for takeaway, restaurant meals and other recreational activities in the quarter (Graph 4.7). Prices for domestic travel have also been affected by government subsidies, most notably the Australian Government's half-price airfares program. Accommodation prices rose in the quarter, reflecting buoyant demand for domestic holiday travel. However, this increase was offset by a substantial fall in airfare prices, driven by the half-price airfare program and increased price competition on major domestic airline routes. While most of these subsidy and discount schemes have now ended, the New South Wales 'Dine & Discover' scheme has been extended to the end of August. Measured prices are expected to normalise as these programs unwind, which will support services inflation in the September and December quarters.

Fuel prices have recovered to pre-pandemic levels

Automotive fuel prices have risen further and are now back to their 2019 levels (Graph 4.8). The 6.5 per cent increase in the June quarter contributed $\frac{1}{4}$ percentage point to headline inflation. Fuel prices continued to rise in the

month of July; at current levels, automotive fuel prices are expected to again contribute to headline CPI in the September quarter.

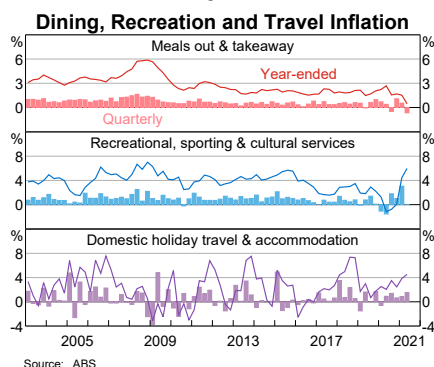
Some imported price pressures have continued for internationally traded goods

Liaison information suggests that retailers of tradable goods continue to face input cost pressures – partly because some overseas suppliers have increased prices in response to strong global demand, and partly because shipping costs are elevated. But firms have also reported that, to date, these costs have been mostly absorbed into margins.

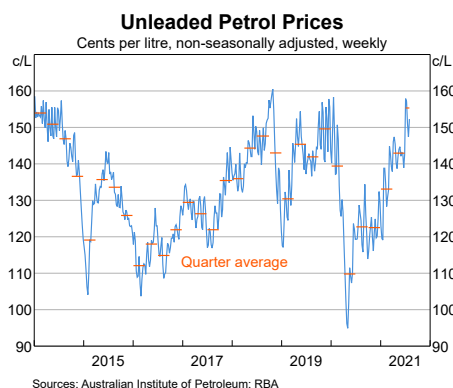
Prices for motor vehicles rose further in the June quarter, reflecting elevated demand as well as continued supply constraints such as semiconductor shortages; motor vehicle prices are 7.4 per cent higher than they were a year ago. Inflation in furniture & household items was also strong at 4.4 per cent over the year, reflecting increased domestic and global demand and constrained supply of timber (Graph 4.9). In contrast, demand for clothing & footwear has been subdued, leaving prices only a little higher than they were a year ago.

Prices for audio, visual & computing equipment declined in the June quarter and were a little lower over the year. Prices for these items have

Graph 4.7



Graph 4.8



fallen consistently over the past decade, although supply disruptions and strong demand for home entertainment-related goods have supported prices for these items over the past 12 months.

Weather events contributed to food inflation in the quarter

Food prices increased in the June quarter, driven by a 6 per cent increase in prices for fresh fruit and vegetables. This price increase reflected the impact of weather events, including floods in New South Wales and Cyclone Niran in Queensland; liaison information suggests labour shortages have not meaningfully affected fresh produce prices to date. Despite the recent increase, food prices were only a little higher over the year to June.

Grocery prices (excluding fruit and vegetables) increased by 0.4 per cent in the quarter, and supermarket discounting behaviour has returned to pre-pandemic patterns. Meat prices increased strongly in the quarter alongside reduced supply as producers aimed to restock following the end of the drought in eastern Australia; prices for other groceries were little changed.

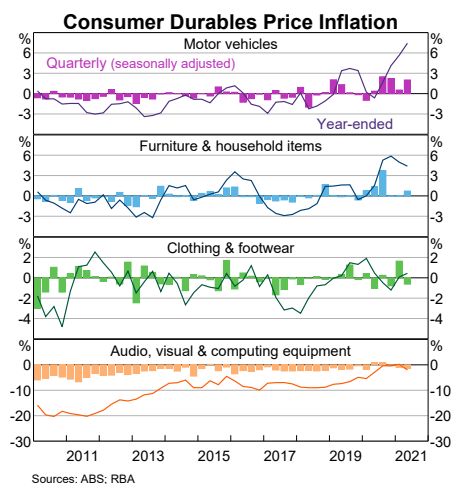
Inflationary pressures have been lower for rents and services more broadly

Rents, which account for 7 per cent of the CPI basket, rose slightly in the June quarter, to be little changed over the year. Subdued CPI rent inflation reflects broadly slow growth in advertised rents over recent years, and ongoing weak rental market conditions in Sydney and Melbourne (Graph 4.10). Vacancy rates are high in those cities, most notably for apartments and other attached dwellings, partly because border closures have meant there are fewer international students and other visitors in the country. Elsewhere, advertised rents and available listings suggest rental markets have tightened a little over recent months.

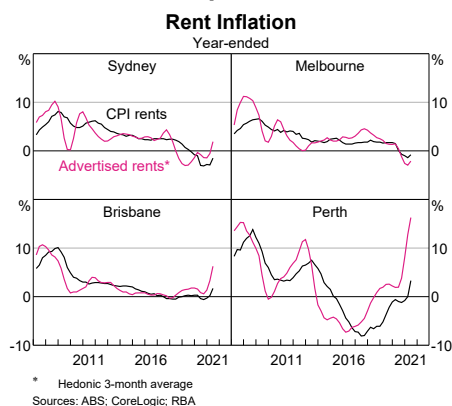
Market services prices were little changed in the June quarter, abstracting from the effects of government policies (discussed above). While demand for financial services has remained relatively steady over the past year, demand for many other market services has been more disrupted by activity restrictions, which has weighed on prices.

Administered prices (excluding utilities) rose a little in the June quarter. This increase was largely due to the annual private health insurance premium increase, with most other administered prices unchanged in the quarter. Over the year, medical & hospital services prices

Graph 4.9



Graph 4.10



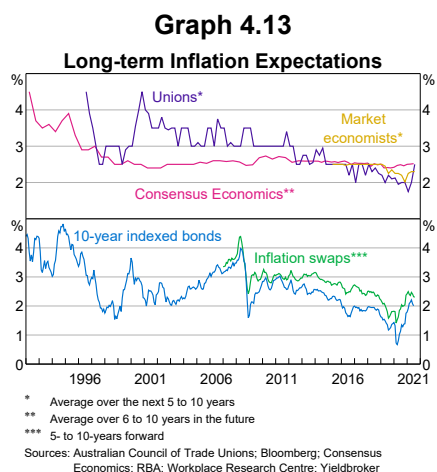
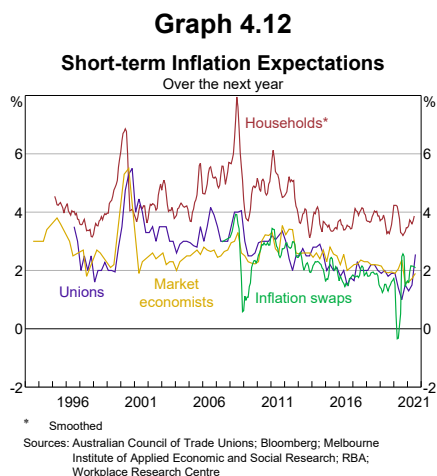
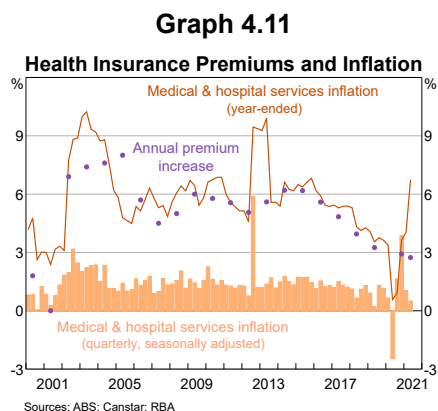
increased by 6.7 per cent, capturing both the 2021 and 2020 premium increases – the 2020 increase was deferred from April to October due to the pandemic and the 2021 increase took effect in May this year (Graph 4.11). Child care prices also rose a little further in the quarter as centres continue to adjust prices after these had been frozen in 2020 while pandemic-related subsidies were in place.

Price inflation for state & local government services has been unusually volatile over the past year, reflecting a combination of rebates, price freezes in some states and the imputation of prices during lockdown periods. These effects have now largely unwound, leaving prices a little higher than they were a year ago. Administered price inflation had trended gradually lower over the 5 years preceding the pandemic and this trend is likely to resume over the coming year, with recent state government budgets announcing below-average price increases for many government services.

Inflation expectations have increased a little over recent months

Price- and wage-setting behaviour can be affected by expectations about the future rate of inflation. Survey-based measures of short-term inflation expectations have increased a little over recent months (Graph 4.12). Survey measures of

long-term inflation expectations also increased to around 2½ per cent, similar to levels seen in 2019 (Graph 4.13). Long-term market-based measures of inflation expectations have declined slightly in recent months but remain well above the low levels seen in early 2020. The pandemic-related market dysfunction observed at times over the past 18 months is no longer affecting market measures of inflation expectations.



Wages growth continued to recover in the March quarter

The Wage Price Index grew by 0.6 per cent in the March quarter, and 1.5 per cent in year-ended terms. Private sector wages increased by 0.6 per cent, driven primarily by regular scheduled enterprise agreement increases and the resumption of some firms' wage reviews that had been postponed at the height of the pandemic (Graph 4.14). Growth was also supported by award wage increases in a range of industries, after these had been delayed from July 2020 to February 2021 by the Fair Work Commission (FWC).

Private sector wages inclusive of bonuses and commissions have picked up faster than base wage measures in recent quarters, in part reflecting higher commissions on the back of strong spending on consumer goods. Firms in the Bank's business liaison program have increasingly reported using a range of non-base wage remuneration strategies, such as bonuses or increased work flexibility, in order to attract and retain staff. While the reported use of bonuses has been reasonably widespread across industries, it has been most prevalent where labour shortages have been most pronounced, such as in construction and resource-related industries.

Public sector wages increased by 0.4 per cent in the quarter, as deferrals of increases and wage caps weighed on outcomes in many states. At 1.5 per cent in year-ended terms, growth in public sector wages in the March quarter was the lowest since the WPI measure was introduced in the late 1990s.

Although the pace of wages growth picked up in a number of industries in the March quarter, in most cases the annual pace of wages growth remained well below that seen a year earlier (Graph 4.15). Growth generally remains lower in industries more adversely affected by pandemic-related restrictions on activity. Wage increases in

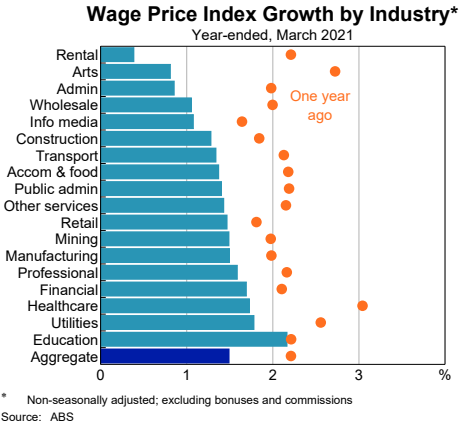
the healthcare & social assistance and education & training industries contributed the most to aggregate wage growth over the past year; outcomes in these industries reflected regularly scheduled increases in enterprise agreements, as well as initial increases paid under newly ratified enterprise agreements.

In June, the FWC determined an increase of 2.5 per cent in the National Minimum Wage and all award wages (Graph 4.16). Employees in most award-reliant industries received the increase on 1 July, while increases have been delayed for a few industries most impacted by the pandemic: to 1 September for the general retail award; and to 1 November for aviation, tourism, hospitality and several other industries. The FWC decision is

Graph 4.14



Graph 4.15



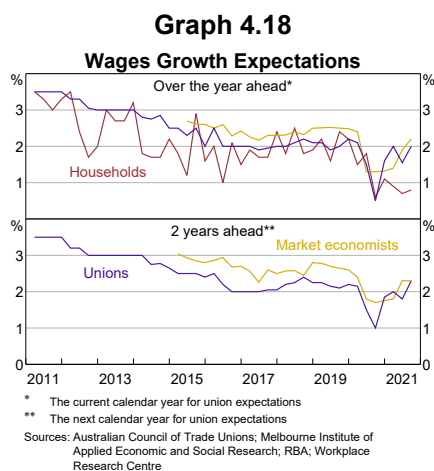
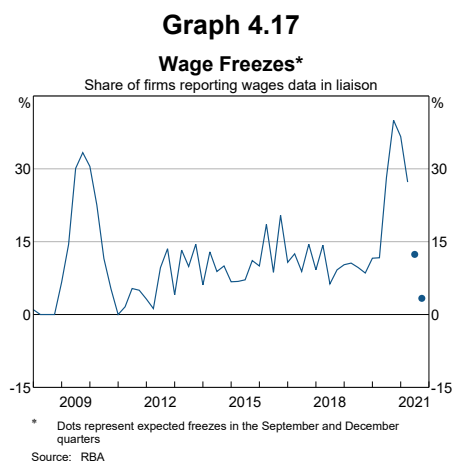
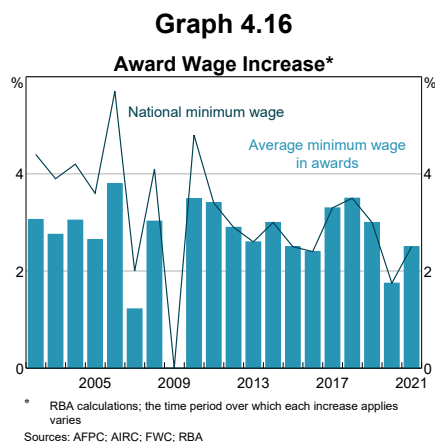
estimated to directly affect around 20 per cent of all jobs (representing around 13 per cent of the national wage bill); a significant share of employees on collective or individual agreements also have their pay set with reference to the decision or relevant award.

The superannuation guarantee increased from 9.5 per cent to 10 per cent of ordinary time earnings on 1 July 2021. Additional increases in the superannuation guarantee of 0.5 per cent are legislated to come into effect each year until 2025. These increases are expected to weigh a little on base wages growth, although the scale and timing of pass through is somewhat uncertain (see ‘Economic Outlook’ chapter).

Leading indicators suggest wages growth will remain moderate in the near term

Information from the Bank’s business liaison program suggests that year-ended wages growth will return to around its pre-pandemic average of 2–2½ per cent by the end of 2021; most firms with wage freezes still in place expect to have unwound these by the end of the year (Graph 4.17). Only a small number of firms

looking to lift wage freezes expect to pay ‘catch up’ wage increases, with most instead anticipating that wages will grow at around the average rates seen immediately prior to the pandemic. Other surveys of wages growth expectations are also broadly consistent with a recovery to around pre-pandemic rates, but with little acceleration beyond that in the next year or so (Graph 4.18). ❧



5. Economic Outlook

A solid global economic recovery is underway, but the near-term outlook for many economies remains uncertain and uneven. China's economy is forecast to continue expanding along its pre-pandemic path, underpinning the outlook for growth among Australia's major trading partners. Significant policy support and progress with vaccinations is supporting the recovery in many advanced economies, particularly in the United States. However, COVID-19 outbreaks in largely unvaccinated populations and more limited scope for policy support is clouding the outlook in many other economies, particularly in emerging markets (see 'The International Environment' chapter).

Recent outbreaks of the Delta variant across Australia, and the resulting lockdowns, have introduced a high degree of uncertainty to the outlook for the second half of this year. Activity will contract in the September quarter and some job losses are expected. Towards the end of this year, the economy is forecast to rebound from this setback as restrictions ease, as it has from previous lockdowns. While the Delta strain is likely to require a more measured reopening of the economy in affected areas than in the past, the Australian economy entered this challenging period in a strong position and fiscal policy is directly supporting households and businesses in the affected areas.

Beyond the near term, the level of output is forecast to be a little higher than expected at the time of the previous *Statement*, underpinned by stronger private investment and public demand. Under the baseline scenario, GDP is forecast to grow by a little above 4 per cent over 2022, and

2½ per cent over 2023 (Table 5.1). The unemployment rate is expected to increase in the near term, before resuming its decline to be around 4 per cent by the end of 2023, which would be the lowest rate in many years. With the unemployment rate forecast to decline to a lower level than previously anticipated, wages growth and underlying inflation are also forecast to pick up a little more relative to the previous *Statement*. Inflation is forecast to rise a little above 2 per cent by the end of 2023 in the baseline scenario.

The baseline scenario assumes that the domestic vaccine rollout accelerates in the second half of the year, reducing the frequency and severity of lockdowns and allowing the international border to be reopened gradually from mid 2022. This scenario assumes that the Sydney lockdown extends through the September quarter and the lockdown in south-east Queensland ends as planned, with some further brief (and less severe) restrictions assumed to occur in the December quarter. Health outcomes are the main uncertainty for the outlook and will determine when and how quickly the economy bounces back. As in recent *Statements*, uncertainty around health outcomes is considered through 2 alternative scenarios:

- A weaker path than the one envisaged in the baseline scenario would occur if the spread of the Delta variant results in more extended and widespread lockdowns and the international border reopens more slowly than assumed in the baseline. In this downside scenario, restrictions on the consumption of discretionary services,

Table 5.1: Output Growth and Inflation Forecasts ^(a)
Per cent

	Year-ended					
	June 2021	Dec 2021	June 2022	Dec 2022	June 2023	Dec 2023
GDP growth	9½	4	4½	4¼	2¾	2½
(previous)	(9¼)	(4¾)	(4)	(3½)	(3)	(n/a)
Unemployment rate ^(b)	5.2	5	4½	4¼	4¼	4
(previous)		(5)	(4¾)	(4½)	(4½)	(n/a)
CPI inflation	3.8	2½	1½	1¾	2	2¼
(previous)		(1¾)	(1¼)	(1½)	(2)	(n/a)
Trimmed mean inflation	1.6	1¾	1½	1¾	2	2¼
(previous)		(1½)	(1½)	(1¾)	(2)	(n/a)
	Year-average					
	2020/21	2021	2021/22	2022	2022/23	2023
GDP growth	1¼	4¾	4½	5	4	2¾
(previous)	(1)	(5¼)	(5)	(4)	(3¼)	(n/a)

(a) Forecasts finalised on 4 August. Forecast assumptions (May *Statement* in parenthesis): TWI at 62 (64), A\$ at US\$0.74 (US\$0.77), Brent crude oil price at US\$70bbl (US\$68bbl), population growth of 0.1 per cent over 2021, 0.4 per cent over 2022 and 1.2 per cent over 2023; cash rate in line with market pricing; and other elements of the Bank's monetary stimulus are in line with the announcement made following the August 2021 Board meeting. 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

coupled with precautionary behaviour, result in higher saving and a weaker profile for household consumption. Private investment and services exports would also be lower. In this scenario, the unemployment rate rises in coming months, and remains above 5 per cent to the end of the forecast period; as a result, underlying inflation remains in the range of 1¼–1½ per cent through to 2023.

- A stronger economic path could eventuate if the virus is contained more quickly than envisaged in the baseline scenario, with household consumption and private investment increasing faster once containment measures are lifted. In this upside scenario, households are more willing and able to consume out of their savings

and wealth than in the baseline scenario, supported by higher labour income and fewer restrictions on discretionary services. International travel recovers more quickly in the event that the international border is opened faster, boosting services exports. In this scenario, the unemployment rate declines faster and to a lower level compared to the baseline. The stronger labour market sees inflation rise to the upper half of the target range by the end of 2023.

The domestic recovery had been stronger than anticipated prior to the recent outbreak and the economy is expected to bounce back when restrictions ease

The recovery in the Australian economy had established strong underlying momentum just

prior to the recent Delta outbreak and associated lockdowns. Domestic demand is expected to have increased at a solid pace in the June quarter. The unemployment rate declined by a further 0.8 percentage points in the quarter to 4.9 per cent in June; this is a much lower level of unemployment than had been expected at the start of the year.

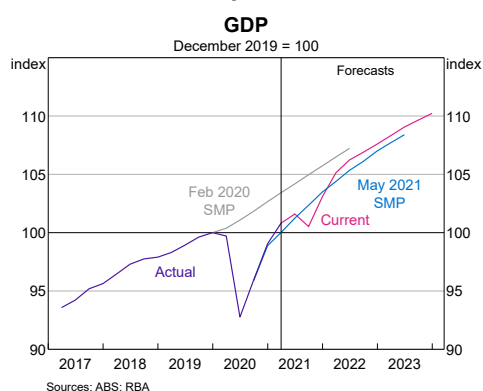
The recent outbreaks of the Delta variant and accompanying lockdowns will depress economic activity, especially in the September quarter, and temporarily reverse the improvement in the labour market. Output in the September quarter is forecast to contract by at least 1 per cent – instead of increasing by a similar amount, as forecast prior to the lockdowns – with some but not all of the decline recovered in the December quarter. The restrictions on activity are expected to result in a substantial decline in average hours worked by employees (including an increase in the number of people on zero hours due to workers being stood down). A decline in employment is also likely and some workers are anticipated to leave the labour force until the lockdowns end, reducing labour force participation in the September quarter. The unemployment rate is forecast to increase in the quarter.

The experience of the past year domestically and abroad is that private demand and the labour market quickly recover when containment measures are relaxed and cases of the virus remain low. Assuming recent outbreaks can be brought under control soon and further outbreaks are limited, the transition from recovery to expansion should be back on track by early 2022. Monetary and fiscal policy settings will support this, alongside significantly higher vaccination rates. However, worse health outcomes and longer lockdowns would deepen the contraction and result in worse labour market outcomes.

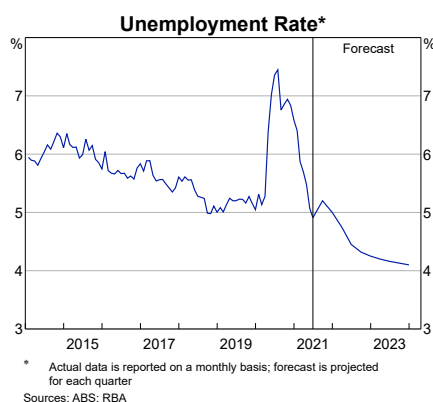
Beyond the near-term impact on activity from the lockdowns, the level of GDP is forecast to be

a little higher in 2023 than was forecast at the time of the previous *Statement* (Graph 5.1). This reflects a higher starting point following the March quarter national accounts and the assumption that the economy will bounce back strongly from recent lockdowns. Private investment and public demand are projected to be slightly stronger over the latter part of the forecast period than previously anticipated. Beyond the near-term, the unemployment rate is forecast to decline steadily to around 4 per cent by the end of 2023 (Graph 5.2). With considerable spare capacity likely to be absorbed by this time, wages growth and inflation is forecast to gradually pick up, with inflation forecast to be a little above 2 per cent by the end of 2023.

Graph 5.1



Graph 5.2



Household consumption, income and saving

Household spending was tracking strongly in the months prior to the recent lockdowns. However, household consumption is forecast to contract in the September quarter, accounting for most of the quarterly decline in GDP.

Consumption is forecast to recover in affected areas across the December 2021 and March 2022 quarters, assuming no further extended lockdowns are required (Graph 5.3). A somewhat stronger profile for employment and wages has supported an upgrade to the outlook for household income and, coupled with the recent increase in household wealth, should support household spending across the forecast period.

The household saving ratio is expected to increase in the September quarter, mainly reflecting reduced consumption opportunities, before declining steadily further out. It is projected to remain above its average level over the 5 years prior to the pandemic.

Private investment

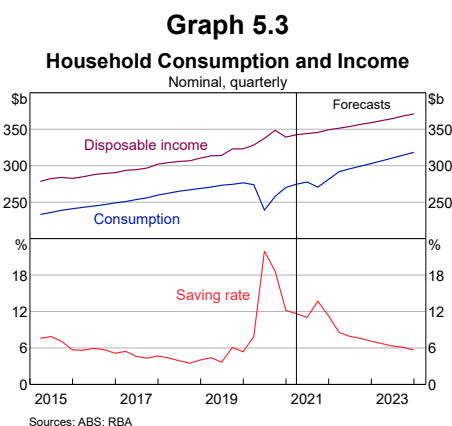
Dwelling and business investment are forecast to boost activity over coming years. Recent lockdowns and temporary restrictions on construction activity in some states will weigh on both residential and non-residential investment in the September quarter, but a rebound is anticipated in the December

2021 and March 2022 quarters after restrictions ease.

Fiscal support and monetary easing over 2021 have underpinned a strong upswing in housing activity. Housing price growth and low interest rates are forecast to sustain a high level of construction of new houses and renovation activity over coming years. Investment in higher-density residential construction is forecast to remain weak in the near term, reflecting the low level of building approvals over the past 3 years. However, as population growth gradually recovers, further declines in rental vacancy rates in larger cities are anticipated and this should support a pick-up in higher-density investment towards the end of the forecast period.

The robust recovery in non-mining business investment is forecast to have continued in the June quarter, and the level of investment over coming years is forecast to be higher than in the previous *Statement*. Machinery & equipment investment is anticipated to have increased strongly in the June quarter, supported by tax incentives, high levels of business confidence, a decline in spare capacity and strong business balance sheets. The forecast recovery in non-residential construction investment has been further delayed by recent restrictions, to the end of the year. The level of non-residential building approvals has edged higher over recent months, from a subdued level, providing some support for an eventual pick-up in construction activity.

Mining investment is forecast to increase over coming years, continuing the steady growth seen since 2019. This partly reflects firms undertaking investment to sustain their level of production, rather than to expand capacity in response to higher commodity prices. Mining machinery & equipment investment is forecast to increase as firms commence programs to replace vehicle fleets.



Public demand

Public demand is expected to have increased in the June quarter and should continue to contribute to GDP growth across the forecast period. The higher level of public consumption expected is based on additional spending announced in this year's federal and state government budgets. Public investment growth is forecast to strengthen over 2021, albeit a little more slowly than projected in the previous *Statement*; recent government budgets have suggested that public investment would be rolled out more slowly.

External sector

The outlook for exports has been downgraded, reflecting lower resource exports in the near term and lower services exports further out. Protracted maintenance and weather-related disruptions are forecast to have weighed on iron ore and coal export volumes in the June quarter. Export volumes are forecast to return to around productive capacity over the second half of the year as these issues are resolved. Services exports are forecast to remain at subdued levels for longer than previously anticipated, and are expected to begin increasing from mid 2022 when international borders are assumed to reopen. By contrast, the recent increase in rural exports is forecast to be sustained as global demand conditions strengthen and ongoing favourable weather conditions support a faster-than-expected herd rebuild and strong cereals exports.

Import volumes are forecast to continue to recover over the forecast period, but the later recovery in travel services imports due to the delayed border reopening, and higher world export prices, are likely to drag on import growth. These factors are expected to outweigh the uplift in imports from stronger domestic demand.

The near-term outlook for the terms of trade has been further boosted by higher iron ore, coal and LNG prices (Graph 5.4). If commodity prices remain around current levels, the terms of trade in the September quarter will exceed its previous peak in 2011. But these levels are not expected to persist. As in the previous *Statement*, iron ore prices are forecast to decline from near-record levels, and higher import prices are also forecast to weigh on the terms of trade over the forecast period.

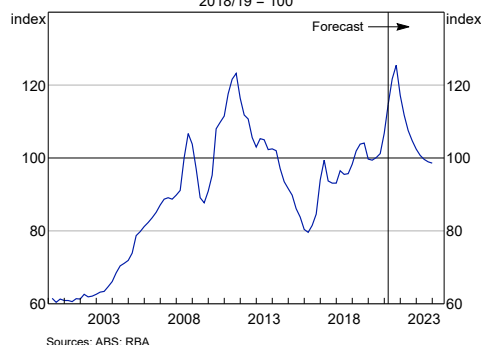
Labour market

Labour market conditions have improved more quickly than expected in recent months. The unemployment rate was 4.9 per cent in June; at the time of the May *Statement*, it had not been forecast to reach this level until late this year. This gives a stronger starting point for the outlook. The current activity restrictions will see some reversal in the near term. Beyond that, the unemployment rate is forecast to decline steadily to around 4¼ per cent by the end of 2022 and 4 per cent by the end of 2023.

The labour market will be negatively affected by the lockdowns in the September quarter. Some employment losses are anticipated; however, a large part of the adjustment to reduced economic activity is expected to occur through a decline in average hours worked by

Graph 5.4

Terms of Trade
2018/19 = 100



employees. Labour force participation is anticipated to decline for a period as people hold off on searching for work while mobility restrictions are in place (Graph 5.5). This is consistent with patterns seen in previous lockdowns over the past year. The temporary fall in labour force participation is expected to limit the increase in the unemployment rate while the lockdowns in Greater Sydney are in place.

Once restrictions are lifted, the underlying strength in economic conditions (including high levels of job vacancies) should see the recovery in the labour market regain momentum towards the end of the year and into the first half of 2022. Beyond this, further improvements in the labour market are forecast to occur but at a more moderate pace, in line with the expected profile for activity. Labour force participation is projected to reach historically high levels as strong labour demand encourages more workers to join the labour force.

Wages and inflation

The sustained improvement in economic activity and labour market conditions over the forecast period is expected to gradually lift wages growth from its current low levels. The Wage Price Index (WPI) is anticipated to pick up to above 2 per cent by the end of 2021 and

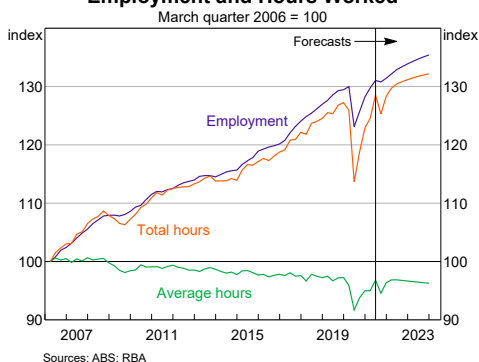
gradually increase to around 2¾ per cent by 2023 (Graph 5.6).

The Superannuation Guarantee increased by 0.5 percentage points on 1 July, and is legislated to increase by an additional 0.5 percentage points on each 1 July over the forecast period. Some but not all of these increases are expected to be passed on as lower growth in base wages paid to employees. Some employees already receive superannuation payments greater than the legislated minimum; for those who do not, employers might absorb some of the increase in labour costs or offer smaller wage rises than otherwise. The cumulative effect of this is expected to see year-ended WPI growth by the end of 2023 at around 0.3 percentage points slower than a broader measure of average earnings, which is expected to be growing at around 3 per cent at this time.

The revised outlook for wages growth since the previous *Statement* reflects a faster expected improvement in the labour market. Liaison information suggests that wages growth in many firms is returning to around the pre-pandemic norm of 2–2½ per cent this year, but not stronger than this. Recent announcements for public sector wage policies are also consistent with slightly faster wages growth, although there are differences across states.

Graph 5.5

Employment and Hours Worked



Graph 5.6

Wages and Earnings Growth



Underlying inflation has stabilised recently but will likely remain subdued over the next few quarters, given the decline in activity in the September quarter and the absence of broad-based inflationary pressures (Graph 5.7). From mid 2022, underlying inflation is forecast to pick up a little more quickly than previously anticipated to be a little above 2 per cent by the end of 2023; this reflects the faster reduction in spare capacity in the economy. There will continue to be some divergence between headline and underlying inflation, as some of the recent one-off boosts to inflation unwind. However, absent further significant government policies affecting measured inflation, headline inflation should converge back toward underlying inflation by mid 2022.

At the component level, services inflation is forecast to pick up gradually from its current low rates, consistent with increasing labour costs. Tradables inflation has increased due to strong global demand for goods and associated issues with some supply chains, but these pressures are forecast to subside over time. Some boost from new dwelling prices is anticipated, reflecting the waning effect of HomeBuilder subsidies on measured inflation. Partly offsetting upward pressure on inflation in the near term are several government subsidies and rebates, coupled with slow growth in administered

prices. Annual 12.5 per cent tobacco excise increases have also ended, after contributing around ½ percentage point to inflation each year since 2014. The outlook for utilities prices is also subdued, reflecting reductions in regulated prices, low wholesale prices and increased electricity supply from renewables.

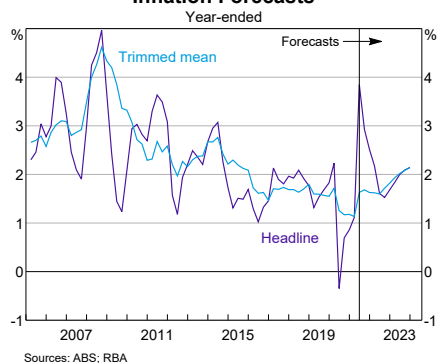
Scenarios

A slower economic path than the one envisaged in the baseline scenario is possible if the spread of the Delta variant (or other new variants of the virus) in Australia results in more extended lockdowns than assumed. The downside scenario assumes that around half of the Australian population experiences rolling lockdowns during both the September and December quarters of 2021, and that a full opening of the international borders is delayed until later in 2022.

These assumptions result in a larger initial decline in activity and, subsequently, a slower pick-up in growth than assumed in the baseline scenario (Graph 5.8). The extended period of lockdown dampens consumer and business confidence, while the slower resumption of international travel delays the recovery in services trade. Households are assumed to increase saving, both for precautionary reasons and because there are fewer opportunities for discretionary spending, especially on services. In this downside scenario, consumption is around 4 per cent lower at the end of the forecast period than in the baseline scenario. Combined with the direct effect of more prolonged restrictions, lower consumption growth weighs on business income, prompting firms to delay investment plans and lay off additional workers. In this downside scenario, the unemployment rate increases over coming months and remains above 5 per cent for the forecast period (Graph 5.9). The slower reduction in spare capacity in the labour market weighs on wages growth and in turn underlying inflation remains

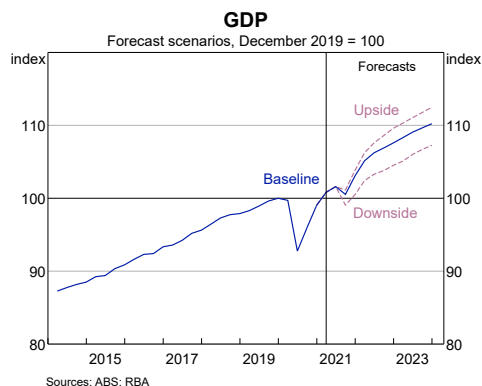
Graph 5.7

Inflation Forecasts

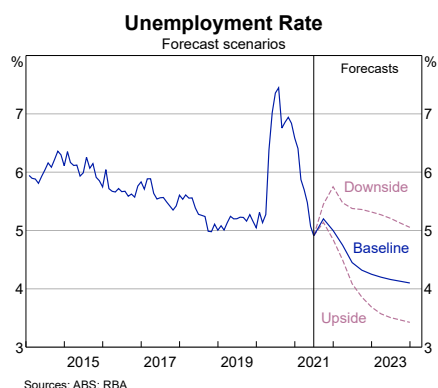


in the range of 1¼–1½ per cent out to the end of 2023 (Graph 5.10).

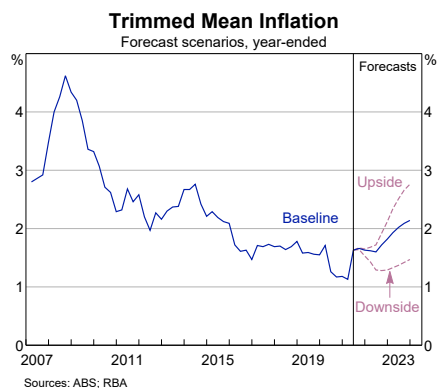
Graph 5.8



Graph 5.9



Graph 5.10



A faster economic path could instead eventuate if the spread of the virus is brought under control and activity restrictions ease more quickly than envisaged in the baseline scenario, supported by a sharp acceleration in the vaccination program. In this scenario, households are more willing and able to spend out of their savings and wealth. International travel is also able to recover more quickly.

The stronger pick-up in household consumption in the upside scenario results in consumption being 3 per cent higher than in the baseline scenario by the end of the forecast period, while the saving ratio falls more sharply, to around 4 per cent by the end of 2023. The faster return to international travel lifts services exports and provides a modest boost to GDP growth. In this upside scenario, higher consumption and reduced uncertainty about the outlook drive a faster pick-up in business investment and employment, and result in a larger decline in the unemployment rate. This in turn leads to a brisk rebound in wages growth and inflation over the next couple of years. In this scenario, the unemployment rate declines below 3½ per cent and inflation picks up to around 2¾ per cent by the end of 2023.

Other risks and uncertainties

The upside and downside scenarios considered above illustrate 2 plausible alternative paths for the economy based on different underlying assumptions about health outcomes. These assumptions affect the extent of domestic lockdowns and activity restrictions, the consumption response out of savings and wealth, and the speed with which international travel recovers. Internationally, rapid spread of more transmissible strains of the virus and delayed vaccine progress could slow the global recovery. Beyond this, other sources of uncertainty remain.

A key domestic uncertainty is how wages and prices respond to declining spare capacity. In

the baseline scenario, the unemployment rate is forecast to decline to around 4 per cent by the end of 2023, resulting in a steady increase in wages growth and inflation. However, since the mid 1970s this rate of unemployment has only been experienced in Australia briefly, in 2007/08 during the height of the mining investment boom. As there is little direct historical experience to draw on, and the longer-term effects of the pandemic on potential growth and full employment are uncertain, it is possible that price pressures build more quickly or slowly than envisaged in the baseline scenario.

One particular element of uncertainty surrounding the outlook for domestic wages and prices relates to the effect of closed international borders. This has reduced the number of temporary migrants in the country, reducing labour supply in some areas and weighing on demand in the economy, mainly via a reduction in education exports and lower population growth. Although prices and wages would typically be expected to adjust fairly smoothly over time to longer-lived changes in the demand for and supply of goods, services and labour, the pandemic has been an abrupt shock. The sudden nature of the resulting changes in demand and supply in the economy, and the possibility of sharp reversals as borders reopen (exacerbated by uncertainty about when this will occur), means there is considerable uncertainty around the future behaviour of wages and prices.

Capacity constraints could also become more prominent in parts of the economy, particularly in residential and non-residential private and public investment where a large amount of activity is forecast over coming years. This volume of investment activity could result in price and wage pressures emerging more quickly than anticipated; restricted interstate labour mobility would exacerbate this.

Alternatively, capacity constraints could result in projects being rationed or delayed, resulting in lower output growth than otherwise.

The outlook for housing and financial asset prices, and the willingness of households to consume out of their wealth and savings, is another source of uncertainty for the outlook. National housing and equity prices have increased very strongly since late last year, boosting household wealth and consumption. But asset price growth could slow or even reverse in some circumstances. For example, in the case of housing, the supply of new dwellings is likely to outpace population growth over the next few years. If this weighs on housing prices, household wealth and consumption growth could be lower than otherwise. However, it is also possible that a prolonged period of low interest rates contributes to further strong growth in asset prices and therefore a higher level of household wealth and consumption than envisaged in the baseline scenario. How willing households are to consume out of a given increase in wealth remains a related source of uncertainty for the outlook. ✎

