

Statement on Monetary Policy

AUGUST 2019



RESERVE BANK OF AUSTRALIA

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Overview

The Australian economy has been navigating a period of slow growth, with subdued growth in household income weighing on consumption spending. In contrast, employment growth has been strong. The response of labour supply has been even stronger, taking the participation rate to a record level. Despite the strong employment growth, the unemployment rate has increased to 5.2 per cent, where it has remained for three months. Domestic inflation pressures remain subdued. Housing-related inflation has been particularly soft lately, compounding the ongoing effects of spare capacity in the labour market and the resulting slow growth in labour costs.

GDP growth is likely to have troughed around the middle of this year and is expected to reach about 2½ per cent over 2019. It is expected to pick up gradually to 2¾ per cent over 2020, and around 3 per cent over 2021, which is a little higher than previously forecast. Growth is expected to be supported by a number of factors, including lower interest rates and recent tax measures. The established housing markets in some cities are showing signs of a turnaround, which should support spending. The mining sector is also likely to support output growth; in the near term, resource exports are recovering from recent supply disruptions, while a pick-up in mining investment will boost growth further out.

Given the slower output growth over recent quarters, the unemployment rate is expected to remain around its current level for a time, before declining to around 5 per cent in 2021. Wages

growth is therefore likely to remain low and to increase more gradually than earlier expected. As a result, inflation is likely to take longer to rise to 2 per cent. Trimmed mean inflation is forecast to remain around 1½ per cent for the rest of this year, before increasing to be a little under 2 per cent over 2020 and a little above 2 per cent over 2021. Headline inflation is expected to follow a similar trajectory.

Global growth remains reasonable, but the risks have become more clearly tilted to the downside. Global trade has declined noticeably in the context of continuing trade and technology disputes. There is considerable uncertainty about possible future tariff measures and the potential for global technological standards to become fragmented. This uncertainty has weighed on investment and investment intentions in a number of economies, and poses a significant risk to the global outlook.

In China, growth slowed further in the June quarter. Additional policy measures have been announced to support growth in the face of the negative effects of tariff measures. Some of these policy measures have been focused on enabling infrastructure spending, which has been a positive for steel production – and thus demand for some bulk commodities – even as conditions in the industrial sector more broadly have remained weak. This has benefited the Australian economy.

These trade-related developments have particularly affected the economies in east Asia

that are most exposed to Chinese domestic demand and are most integrated into global manufacturing supply chains. Growth in investment has also turned down in some of these economies. By contrast, growth has been more resilient in economies such as Indonesia, where manufacturing for export is a smaller share of activity.

Growth in the major advanced economies has slowed over the past year, driven by slower external demand and business investment. Consumption growth is still reasonable, however, and labour markets in these economies remain tight. Faster wages growth is supporting consumption, but is yet to translate into materially higher inflation in these economies. Inflation generally remains below central bank targets, though it is around target in several advanced economies.

In response to the weaker growth outlook and ongoing low inflation, a number of central banks have lowered policy interest rates in recent months. This has added to already accommodative financial conditions. Sovereign bond yields have declined further – in many cases to historical lows – and credit spreads remain narrower than a year ago. Equity market valuations have generally been supported by the effect of accommodative monetary policies on risk-free yields and positive expectations for earnings growth, though prices have declined recently in response to heightened concern about the trade and technology disputes. These expansionary financial conditions have also benefited emerging markets, although risks surrounding global trade developments remain.

Domestic financial conditions have also eased. The reductions to the cash rate in June and July have largely been passed through to deposit and lending rates. Australian government bond yields have reached a new historical low. Bank funding costs have also declined to historically low levels. Equity prices declined in response to

the global trade tensions, but are still noticeably higher over the year to date. Credit growth has continued to slow, but there was an increase in housing loan approvals in the month of June, in line with better conditions in housing markets more generally. Some lenders have announced changes to their lending criteria in response to the Australian Prudential Regulation Authority revising its guidelines, which have boosted borrowing capacity for some customers.

The Australian dollar has depreciated over recent months and is at its lowest level of recent times. The depreciation over the past year is consistent with the decline in Australian bond yields relative to those in other major markets over that period.

There have been some large movements in commodity prices in recent months. Iron ore prices had increased in response to restricted seaborne supply and strong Chinese demand, but have fallen more recently, along with oil prices, following the recent escalation in trade tensions. Coal prices have also declined because demand has weakened somewhat at a time when seaborne supply has been ample. Taken together, though, prices of Australia's commodity exports remain at high levels. The terms of trade are therefore higher than previously expected. This represents a boost to Australia's national income, as a portion of the higher profits of mining companies are distributed to domestic shareholders and via government revenues.

GDP growth was a touch slower in the March quarter than expected at the time of the *May Statement on Monetary Policy*. Early indications for the June quarter are for reasonable growth. Some of the temporary factors that weighed on growth in recent quarters, including supply disruptions to resource exports, have been resolved. However, consumption growth remains slow, consistent with ongoing weakness in household incomes and the effects of recent

falls in housing prices. The adjustment in housing markets is also evident in declining dwelling investment and low turnover rates for existing homes.

Following a period where labour market data were stronger than other data on economic activity implied, labour market conditions were more mixed in the June quarter. Employment growth continues to run well above growth in the working-age population, taking the employment-to-population ratio close to its historical peak. The participation rate reached its highest level on record, driven by strong rises in participation by older workers and women aged between 25 and 54. However, the unemployment rate also picked up a little and has remained at 5.2 per cent for a few months. Leading indicators point to a moderation in employment growth in the period ahead.

With increasing demand for labour being met by an expansion in labour supply, spare capacity remains in the labour market. This has weighed on wages growth. Wages growth has picked up a little in the private sector over the past year, but remains stable in the public sector, consistent with government wages policies. Labour income growth has therefore been underpinned more by the strong employment growth of recent times than by rising wages. Growth in non-labour income has been weak, partly because unincorporated business income has been held down by declining housing construction and sales turnover, as well as drought-related weakness in farm incomes. Household disposable income growth has also been lowered by the unusually fast growth in household tax payments over 2018.

Slow growth in household incomes has dampened consumption spending for some time. This is likely to have continued into the June quarter; the volume of retail sales increased only a little in the quarter. Household incomes will receive a boost in the second half of 2019

from the low- and middle-income tax offset. The outlook for consumption more broadly continues to be the main uncertainty facing the domestic economy, especially in the context of ongoing high levels of household debt.

A more positive signal for future consumption is that established housing markets appear to have stabilised. Prices in Sydney and Melbourne have stopped falling and, although prices are still falling in some other markets, the pace of decline has eased. The rate of sales turnover also appears to have troughed and auction clearance rates have risen. Rental vacancies remain low in most cities, except in Sydney, where the vacancy rate has increased as new apartments continue to be added to the rental stock.

Similarly, the mining sector is also expected to support growth over the next few years, after a long period during which declining mining investment was a drag on growth. Mining investment is forecast to increase moderately in coming years as firms invest to sustain and expand production. Resource exports had experienced some weakness earlier in the year, related to supply disruptions, but have increased in recent months because these disruptions have been resolved and production at recently completed liquefied natural gas facilities continues to ramp up.

The investment outlook in Australia more generally is broadly positive. Non-mining business investment continues to expand at a moderate pace, supported by a solid pipeline of non-residential building work and infrastructure projects (particularly transport and renewable energy). Infrastructure projects have also been an important element of public demand's ongoing support to growth.

Inflation remains low. Trimmed mean inflation increased a little to 0.4 per cent in the June quarter, but remained at 1.6 per cent over the year. Measures of underlying inflation have now been below 2 per cent for around three years.

Housing-related inflation, including both rents and prices of newly built dwellings, has been a significant contributor to the low inflation outcomes. The prices of some administered items have also risen at a below-average pace lately. This has been only partly offset by higher prices for some retail goods affected by the drought or the pass-through of exchange rate depreciation.

Headline inflation was affected by higher petrol prices and increased to 0.7 per cent in the June quarter and 1.6 per cent over the year. Oil prices have fallen more recently, suggesting that some of this effect will reverse in the September quarter. Further out, inflation is still expected to drift up gradually. However, this is now forecast to take place over a more extended period than previously envisaged, because there appears to be more spare capacity remaining in the labour market than had been thought.

Together, the recent data on wages, prices, output and unemployment suggest that there was more spare capacity in the economy than had previously been recognised. They also suggest that, like a number of other countries, Australia can sustain lower rates of unemployment and underemployment without running inflation risks.

In response to this accumulation of evidence, the Reserve Bank Board lowered the cash rate at both its June and July meetings, to a new low of 1 per cent. While the stance of policy had already been accommodative for some time, the Board judged that additional monetary stimulus would assist with faster progress in reducing unemployment, and help create the conditions for more assured progress towards the inflation target. Given the current environment, it is reasonable to expect that an extended period of low rates will be needed to achieve the Board's employment and inflation objectives. The Board will continue to monitor developments in the labour market closely and is prepared to ease

monetary policy further if needed to support sustainable growth in the economy and the achievement of the inflation target over time. ✎

1. The International Environment

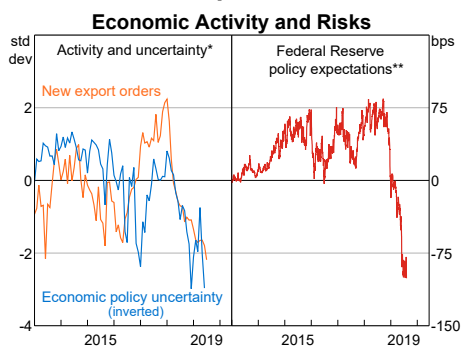
Growth in Australia's major trading partners remains reasonable. The growth outlook is a little lower than was expected three months ago because there have been further signs of slowing in activity indicators that are related to trade, such as exports, manufacturing and investment, and the US–China trade and technology disputes have escalated further (Graph 1.1). In contrast, consumption growth has been relatively resilient. Labour markets are tight but global inflation continues to be subdued. Downside risks to the outlook have increased: policy uncertainty remains high and the potential for the US–China dispute to escalate further has risen, which would adversely affect business investment.

Financial market conditions remain accommodative. Several major central banks have either eased policy or signalled a greater willingness to do so in response to subdued inflation and persistent downside risks to

growth. The more accommodative outlook for policy in major economies, as well as subdued domestic inflation outcomes, has also provided space for a growing number of emerging market central banks to ease monetary policy in support of growth.

The shift in the expected path for policy rates has contributed to sharp declines in government and corporate bond yields and provided some support to equity prices. This constellation of lower interest rates and elevated prices for riskier assets over much of this year suggest that market participants believe that central banks will respond to downside risks and thereby sustain the economic expansion. However, risky asset prices fell sharply following the recent escalation in the US–China dispute, highlighting the potential for financial market conditions to tighten quickly if market participants become more concerned about the outlook for global growth.

Graph 1.1



* Average between 2014 and 2018

** Cumulative expected change in the Federal Reserve policy rate target over the preceding 12 months implied by futures

Sources: Bloomberg; Economic Policy Uncertainty; Markit; RBA

Trade and technology disputes have escalated ...

The US–China trade dispute has escalated over recent months after negotiations between the two countries stalled. In June, the United States increased tariffs from 10 to 25 per cent on US\$200 billion of imports from China and China retaliated with higher tariffs on US\$60 billion of imports from the United States. About half of US imports from China are now covered by a 25 per cent tariff rate and most Chinese imports from the United States are covered by 5–25 per cent tariffs (Graph 1.2); average US tariff

rates on Chinese imports are now 12 per cent, which is substantially above those on other US trading partners at around 1 per cent. More recently, the US administration announced it will impose a 10 per cent tariff on almost all remaining imports from China from 1 September and further tariff increases have been threatened. A decision by the US administration on increasing tariffs on automotive imports from a number of countries has been delayed to November. Trade tensions have broadened in recent months, with some countries using them to address political disputes. For example, the United States threatened, but then suspended, higher tariffs on imports from Mexico in response to a dispute over immigration flows.

The escalation in the trade dispute is weighing on global economic activity. The direct impact of the measures currently in place is relatively small, but the indirect effects of uncertainty on investment have been more significant. The risk of further escalation also poses a major downside risk to global growth, particularly through adverse effects on business investment and confidence more generally, and the potential for amplification through highly integrated global supply chains. Nonetheless, some economies that provide a competitive production alternative to China, such as

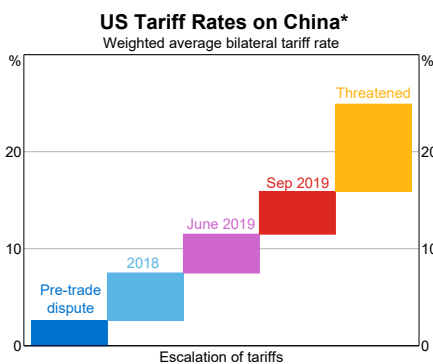
Vietnam, appear to be benefiting from trade diversion due to the trade dispute.

The US–China technology dispute has also escalated in recent months. The United States imposed export and transfer controls that restricted access to key US technologies for certain Chinese entities, particularly targeting advanced semiconductor integrated circuits; the United States is the dominant global producer of advanced circuits (Graph 1.3). The Chinese Government is reportedly considering controlling exports of rare earth minerals; China is the largest global producer of these minerals, which have various uses in high-technology processes. The economic effects of the technology disputes are uncertain and are likely to play out over a long period.

... creating downside risks to the outlook for trading partner growth

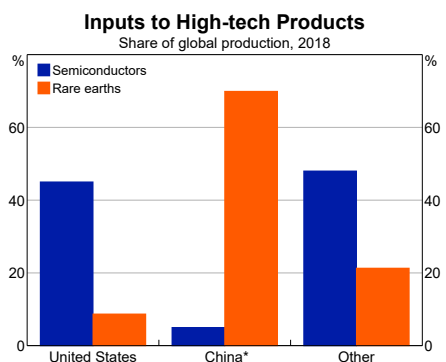
Major trading partner growth is expected to be around 3.7 per cent in 2019 and 2020 and pick up a little to 3.8 per cent in 2021 (Graph 1.4). This is a little lower than forecast in the *May Statement on Monetary Policy* because of the escalation in the US–China disputes and weak investment indicators. While this outlook is still reasonable, the downside risks have increased substantially, given the potential for further

Graph 1.2



* Excludes steel and aluminium tariffs introduced in 2018
Sources: RBA; World Integrated Trade Solution

Graph 1.3



* Rare earths production based on production quotas; estimate of actual production (including illegal and undocumented) based on magnet production indicates a share closer to 80 per cent
Sources: SIA; USGS

escalation in US disputes with China and other economies. At the same time, however, monetary policy is expected to become more accommodative across a range of economies, in part because of the easing in global growth, but also in response to the rise in downside risks and subdued inflation.

In China, activity indicators have moderated

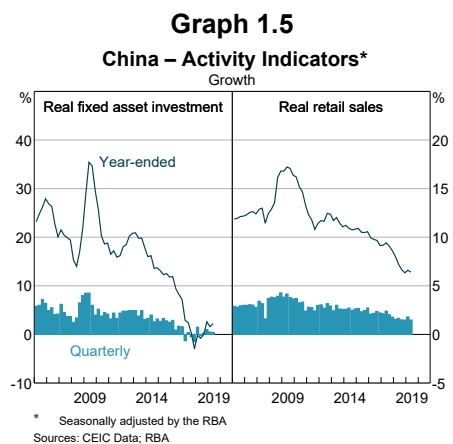
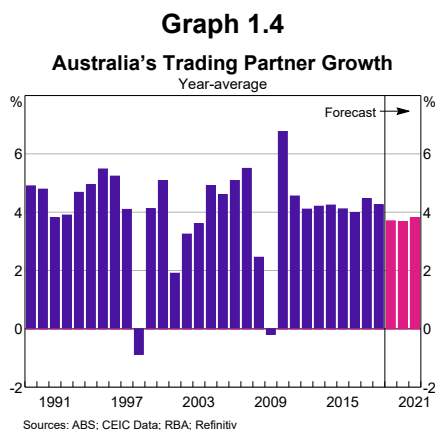
In China, economic conditions have softened since last year and GDP growth is expected to slow over the next two years. The direct effect of the US–China trade and technology disputes on Chinese activity has been limited to date; however, the impact of the associated uncertainty on investment decisions is expected to add to medium-term downward pressures on growth, which had already been slowing as a result of tighter financial regulations and longer-term structural factors. Various government measures have been introduced to support the domestic economy.

In the June quarter, growth moderated for a range of official activity indicators despite some supportive temporary factors (Graph 1.5). Growth in real retail sales eased despite a temporary boost from retailers attempting to reduce stocks of vehicles that were not compliant with tighter emission standards

effective from early July. Fixed asset investment has been supported by continued growth in real estate investment, as well as policy measures to facilitate public spending on infrastructure, although the pace of growth in both sectors eased in the June quarter. Falling exports subtracted a little from GDP growth in the quarter.

Many industrial sector indicators remain weak: growth in the output of industrial products remains subdued, manufacturing purchasing managers indices (PMIs) have trended lower and industrial sector profits have been weak. Nonetheless, the production of some items, such as steel and plate glass, have continued to rise, supported by high construction-related demand (Graph 1.6). This demand has also underpinned high margins for steel production, although increases in bulk commodity prices over the past year have eaten into these margins.

Conditions in Chinese property markets were mixed in the June quarter (Graph 1.7). While construction investment continued to grow relatively strongly, residential property sales declined. Property prices have continued to rise but, over the past year, growth in non-official measures of property prices compiled by the private sector firm China Index Academy have



been notably weaker than official price indicators.

Core consumer price inflation in China has been little changed in recent months, after easing over the past two years, while headline inflation has risen further because of higher food price inflation stemming from supply disruptions in the rural sector (Graph 1.8). Producer price inflation has moderated further, partly driven by sharp falls in international oil prices in June.

Chinese authorities have eased policy further to support growth

Authorities have responded to slowing economic activity by announcing a further

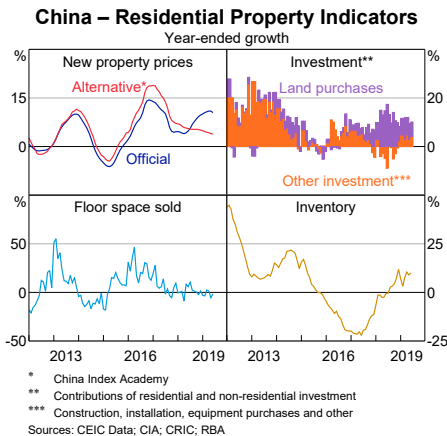
range of policies designed to support growth. The People's Bank of China (PBC) has lowered reserve requirements for some county-level banks over the past few months. PBC officials have reiterated that the central bank has significant room to adjust policies if further downside risks were to materialise, and market participants expect that it will do so.

Authorities have also taken further measures to ease fiscal policy. The general government fiscal deficit has continued to widen in recent months (Graph 1.9). Moreover, central authorities have authorised local governments to use proceeds from special bonds as project capital for some infrastructure projects, including large railway, highway, power supply and gas supply projects. Measures to support consumption have also been announced.

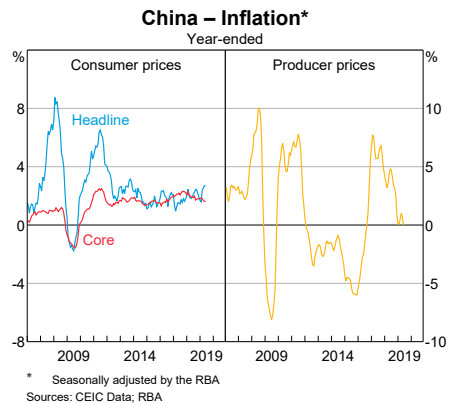
Graph 1.6



Graph 1.7



Graph 1.8



Economic activity overall has slowed in the major advanced economies

Year-ended growth has slowed in the major advanced economies. Policy uncertainty and weaker external demand, particularly from China, has weighed on investment. Conditions in manufacturing have eased, as have new export orders; the deterioration has been especially sharp in the United States after the escalation in US–China trade and technology disputes in recent months (Graph 1.10). Surveys

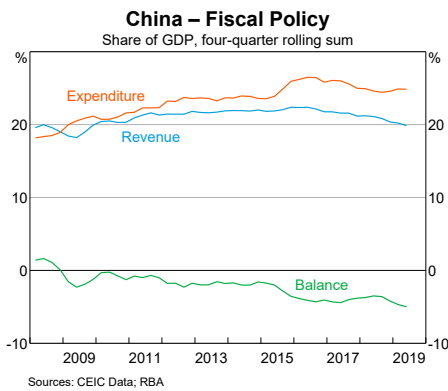
of conditions in the services sector have been relatively resilient in Japan and the euro area, but have deteriorated in the United States since May. In marked contrast, consumption growth has been robust in the major advanced economies, supported by strong labour markets and rising wages growth.

In the United States, consumption growth has recovered in recent months from its temporary weakness at the start of the year, supported by the strong labour market (Graph 1.11). However, GDP growth overall slowed in the June quarter because business investment growth slowed; net exports and inventories also subtracted from growth. A recovery in investment is unlikely in

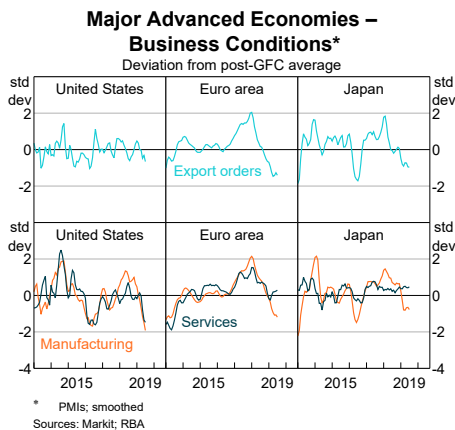
the near term, given that investment intentions, capital goods orders growth and business conditions have declined sharply over the past six months (Graph 1.12). This is, at least in part, due to the sharp rise in uncertainty associated with US trade and technology policies. Together with the effect of higher import tariffs on trade and the diminishing boost from earlier fiscal stimulus, the weaker outlook for investment is expected to lead to slightly slower growth in 2019 and 2020 than was previously thought.

In the euro area, GDP growth eased in the June quarter, which is likely to have been driven by a fall in exports. Indicators of investment

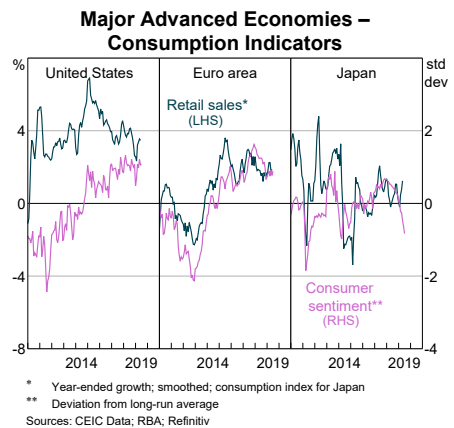
Graph 1.9



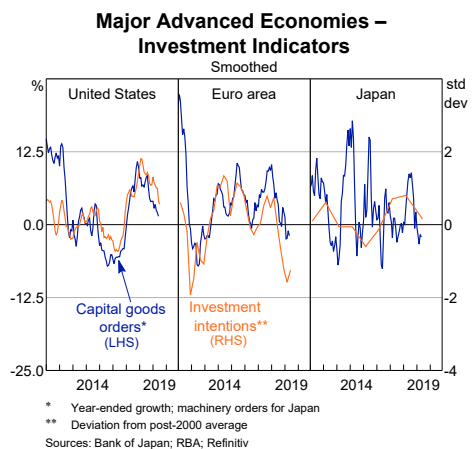
Graph 1.10



Graph 1.11



Graph 1.12



intentions and manufacturing conditions have remained weak while, in contrast, growth in household consumption has been strong, supported by strong labour markets. Growth has slowed because of the slowdown in global trade, moderating growth in China, and country-specific factors in some of its important trading partners (including in the United Kingdom and Turkey). Subdued external demand is expected to continue to weigh on growth in the near term. The potential for a disorderly exit of the United Kingdom from the European Union is an additional source of uncertainty for the euro area outlook.

In Japan, growth in domestic demand and exports slowed sharply early in 2019. External demand, particularly from China and the rest of Asia, has weakened since late 2018 and is weighing on the manufacturing sector. However, investment intentions remain relatively strong and have been supported by the need to address severe labour shortages. While consumer sentiment has eased, partial indicators suggest that consumption growth picked up strongly in the June quarter ahead of the consumption tax increase in October. Growth is expected to slow in late 2019 and early 2020 because fiscal policy will tighten following the consumption tax increase.

Labour market conditions in advanced economies remain tight

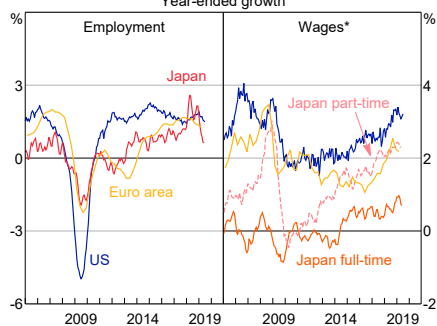
Employment growth in many advanced economies has slowed, but remains well above working-age population growth and, thus, strong enough to continue absorbing spare capacity in the labour market. The slowing in employment growth has been most pronounced in Japan and in the global manufacturing sector (Graph 1.13). Nevertheless labour markets remain tight, unemployment rates are at multi-decade lows and firms continue to report widespread difficulties in filling jobs.

Wages growth increased notably over 2018 in the major advanced economies and remains around the highest levels since 2010. Wages growth has slowed a little in the United States and the euro area this year. In Japan, full-time wages growth has stepped up to around the highest rate since late 2000 and wages growth in the more cyclically sensitive part-time sector has also been high and continues to increase. Wages are also growing at around their fastest pace since the global financial crisis in the United Kingdom and New Zealand, where labour markets are also tight.

Inflation remains subdued in the major advanced economies

Inflation is below target in each of the major advanced economies, despite tight labour market conditions (Graph 1.14). Core inflation eased in the United States early this year after being close to the 2 per cent inflation target, although other underlying inflation measures, such as trimmed mean inflation, have remained close to the inflation target. Inflation is around target in several other advanced economies including the United Kingdom, Canada, Sweden and Norway. Oil prices have been volatile over the past few months after declining in late 2018;

Graph 1.13
Major Advanced Economies –
Labour Market and Wages
Year-ended growth



* Average hourly earnings for the US; compensation per employee for the euro area; smoothed matched-sample average full-time scheduled wages and part-time hourly wages for Japan
Sources: CEIC Data; ECB; Eurostat; RBA; Refinitiv

at current levels, oil prices will not exert upward pressure on headline inflation.

Persistently low inflation and slowing GDP growth have lowered some measures of inflation expectations. Market-implied measures of long-term inflation expectations have declined this year across all major advanced economies. The decline has been especially large in the euro area where market-implied measures are around their lowest levels in more than a decade (Graph 1.15). Economists' long-term inflation expectations have also eased but by much less. In contrast, in Japan, consumer inflation expectations have increased ahead of the consumption tax increase in October.

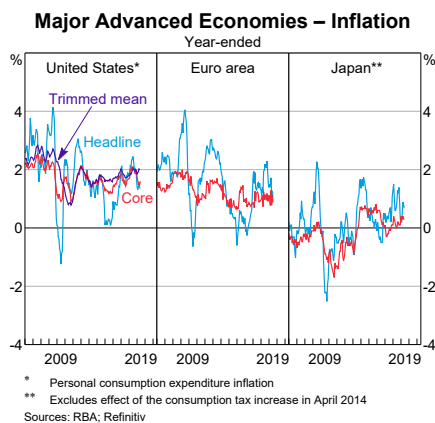
Major central banks have eased policy or are prepared to do so in coming months

Major central banks have eased monetary policy pre-emptively or indicated a willingness to do so in response to downside risks to growth and subdued inflation outcomes and expectations. Consistent with this shift, market participants now expect most major central banks to ease policy by more than was the case a few months ago (Graph 1.16).

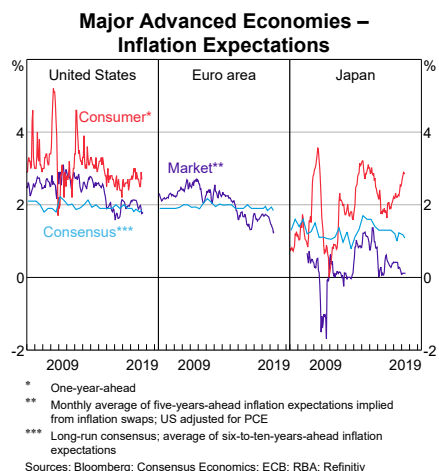
In the United States, the Federal Reserve (Fed) lowered its policy rate target by 25 basis points

in July. The Fed noted that the US economy remains strong but there was room for some easing of monetary policy given the implications of global developments for the US economic outlook and subdued inflation pressures. This stands in contrast to Federal Open Market Committee (FOMC) projections earlier in the year, where most members envisaged one increase of 25 basis points in the policy rate over 2019. Market pricing implies that the Fed is expected to lower its policy rate by a further 100 basis points over the next 12 months. The Fed also announced that it would cease winding down its balance sheet in August, two months earlier than previously indicated.

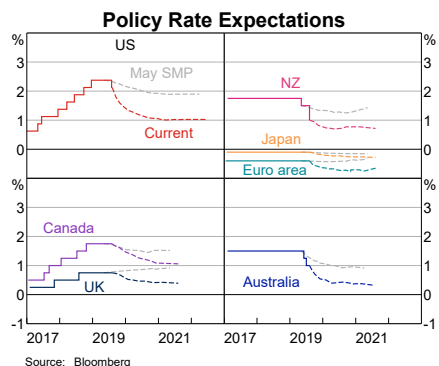
Graph 1.14



Graph 1.15



Graph 1.16



The European Central Bank (ECB) has emphasised that it will provide additional stimulus in the absence of a further improvement in the outlook for inflation. In particular, it has noted that this could involve a combination of lowering the policy rate, strengthening its guidance on the future path of the policy rate, and resuming the expansion of its balance sheet through the purchase of government and private-sector securities. Analysts expect a package of measures to be announced in September, with market pricing now implying that the ECB is expected to lower its policy rate by 30 basis points to -0.7 per cent over the next 12 months. The ECB has also provided more details on its upcoming 'Targeted Longer-term Refinancing Operations' (TLTRO-III), which are designed to provide continued support for bank lending to the real economy (Graph 1.17).

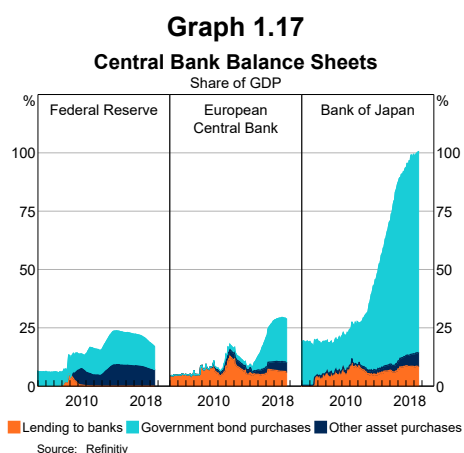
The Bank of Japan (BoJ) has continued to provide monetary stimulus by maintaining very low interest rates and expanding its balance sheet. The BoJ expects to maintain its current policy settings until at least the second quarter of 2020, although the BoJ has noted that policy could be eased further if necessary. Market pricing implies that the BoJ is expected to lower its policy rate by 10 basis points to -0.2 per cent by the end of the year.

Market pricing suggests that policy rates are expected to be lowered in a number of other advanced economies, or otherwise remain accommodative for an extended period. The Bank of Canada continues to assess that its current accommodative stance for monetary policy remains appropriate and future policy decisions will be data dependent; inflation has remained around the 2 per cent target and the Bank of Canada judges GDP growth to be nearing its potential rate. The Bank of England continues to point to the outcome of Brexit as a significant source of uncertainty, and notes that the next move in its policy rate could be up or down. The Reserve Bank of New Zealand (RBNZ) lowered its policy rate by 50 basis points at its August meeting to 1.0 per cent. The RBNZ noted that while employment is strong, inflation remains below the 2 per cent mid-point of the target range, growth in domestic and global activity has slowed, and risks remain tilted to the downside. In contrast, some central banks, such as those in Sweden and Norway, expect to increase their policy rates in the coming year, reflecting solid domestic growth and inflation around target.

Government bond yields have fallen, in many cases to historical lows

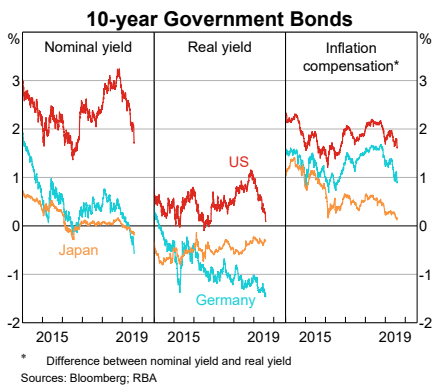
Yields on long-term government bonds have fallen further to around record lows in some cases (Graph 1.18). Ten-year yields are at or below central bank policy rates in most major markets. In Japan, Germany, France, the Netherlands, Sweden and Switzerland, both 2- and 10-year yields are negative and around their lowest levels on record.

Part of the decline reflects lower real short-term interest rates, which is consistent with expectations that central banks will ease monetary policy and/or keep policy settings accommodative for an extended period. The declines also reflect a fall in inflation compensation, which suggests that market

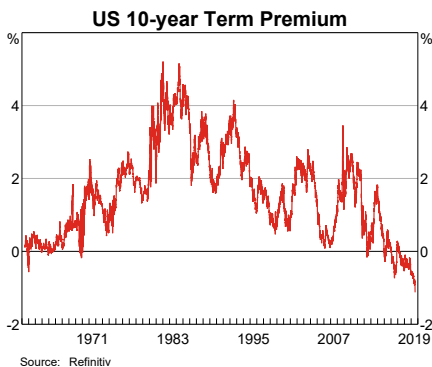


participants have lowered their expectations for future inflation, and/or that they believe that there is little if any risk that inflation will increase in the future. In addition, term premiums – the compensation that investors demand for holding long-term rather than short-term bonds – have declined to be around record low levels and, by some measures, are negative (Graph 1.19). This reflects unusually low perceived uncertainty about future interest rates and inflation outcomes, and demand for government securities from less price-sensitive buyers such as central banks, insurers and pension funds.^[1]

Graph 1.18



Graph 1.19

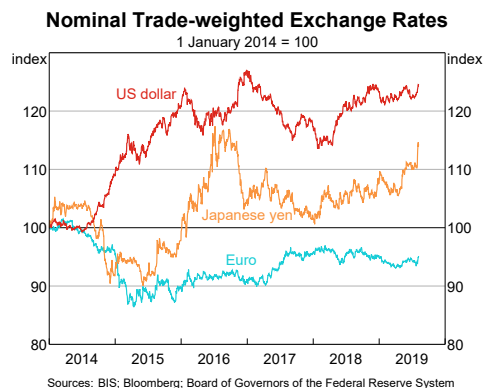


The US dollar and the Japanese yen have appreciated, while the Chinese renminbi has depreciated

The US dollar has appreciated recently, but remains within its relatively narrow range following a sustained appreciation over 2018 (Graph 1.20). The Japanese yen has appreciated sharply, as it often does during periods of heightened uncertainty, and is around its highest level in several years on a trade-weighted (TWI) basis. The appreciation of the yen over the past few months is consistent with market participants expecting future monetary easing in Japan to be more modest than for other major markets. Japanese Ministry of Finance officials have signalled that they are closely monitoring for ‘excessive movements’ in foreign exchange markets. The euro is in the middle of its narrow range of recent years.

Following the recent escalation of US–China disputes, the Chinese renminbi has depreciated on a TWI basis and against the US dollar (Graph 1.21). The renminbi depreciated in early August, moving above 7 yuan per US dollar. Market participants had been widely of the view that the Chinese authorities would not want to see the exchange rate move through this level while trade negotiations were ongoing. The Chinese authorities attributed the depreciation to market forces, while the US government

Graph 1.20



formally labelled China a ‘currency manipulator’ and stated that it will engage with the International Monetary Fund over China’s approach to exchange rate determination.

The cost of financing for corporations remains low

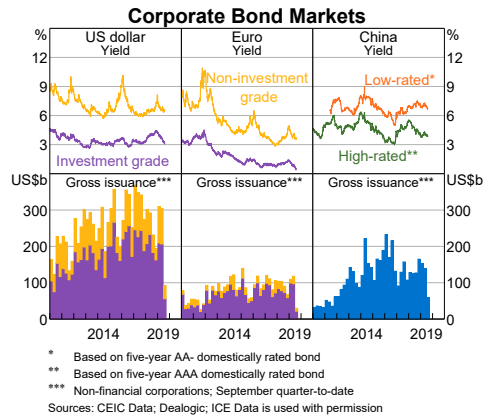
The cost of financing for corporations in bond markets has declined since the start of this year, reflecting both lower government bond yields and narrower credit spreads. This improvement in conditions has encouraged non-financial firms to issue more bonds, particularly firms with lower credit ratings (Graph 1.22). In China, the cost of financing for highly rated corporations has been stable in recent months, but it is lower than in the first half of 2018. In part, this reflects the effect of policy measures aimed at improving financing conditions for private enterprises.

The cost of funding in short-term US dollar money markets has declined since earlier this year (Graph 1.23). Continued inflows into US dollar prime money market funds, a key source of US dollar supply in the market, have contributed to the easing in conditions. These favourable conditions have contributed to a pick-up in issuance of commercial paper by both US and non-US financial institutions.

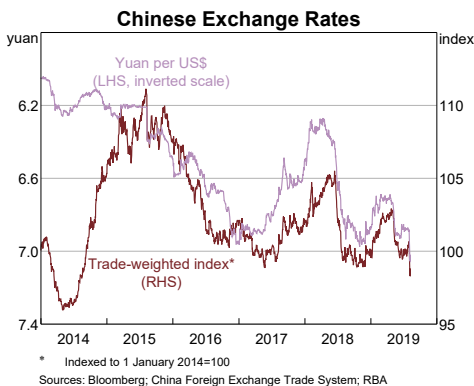
In China, money market rates have generally remained low alongside efforts by the PBC to ensure there is ample liquidity in the banking system. However, there has been some tightening in funding conditions for small banks following the takeover of a small bank by regulators due to concerns about its solvency and reported misappropriation of funds (see ‘Box A: Small Banks in China’).

Despite the sharp declines seen since the beginning of August, global equity prices have risen strongly this year (Graph 1.24). Through much of this year, equity prices had been supported by lower sovereign bond yields, which increase the discounted value of future corporate earnings (equity risk premiums appear

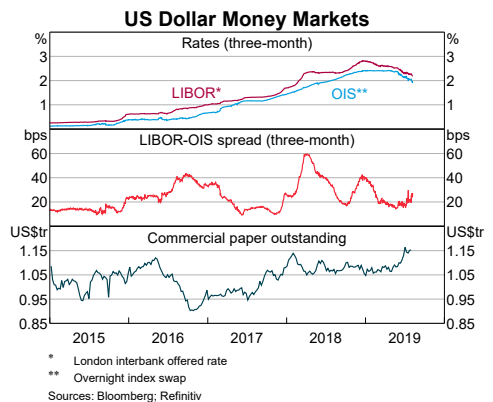
Graph 1.22



Graph 1.21



Graph 1.23



little changed). At the same time, market analysts have maintained their forecasts for strong growth in earnings next year, despite some slowing in earnings growth this year (Graph 1.25). This suggests that participants have judged that downside risks to growth are either unlikely to affect corporate earnings materially, or that such risks will be offset by central bank policy accommodation if needed.

In east Asia, the decline in global trade has weighed on growth

Persistent weakness in external demand, especially from China, and intensification of the US–China trade dispute have weighed on the

outlook for growth in east Asia. For most economies in the region, export growth has remained negative, new export orders are below average and industrial production has contracted (Graph 1.26). The ongoing weakness in global trade and the escalation in the US–China trade and technology disputes are likely to have a relatively more severe impact on these economies because of their integration in global supply chains.

Overall, exports from east Asia to China have declined sharply since late 2018, partly as a result of weaker Chinese exports to the United States, which use significant inputs from the region's economies (Graph 1.27). An easing in Chinese domestic demand has also had an effect; for most economies in east Asia, their exposure to domestic Chinese demand is significantly larger than their exposure to Chinese exports to the United States. Intraregional trade has also declined because of the region's highly integrated production chains. However, in Vietnam and some of the high-income economies in the region, export growth to the United States has picked up, supported by the relocation from China of production of exports to the United States.

Weaker external demand is affecting domestic conditions in the region and growth has slowed

Graph 1.24

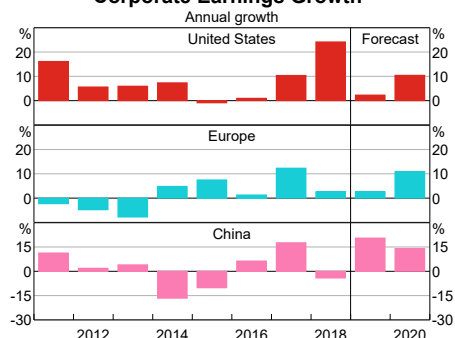
Equity Prices
2 January 2017 = 100



Source: Bloomberg

Graph 1.25

Corporate Earnings Growth*

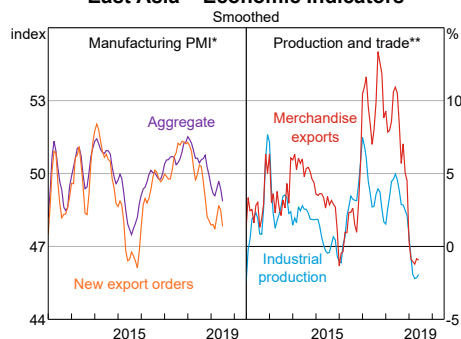


* Net income of financial and non-financial corporations adjusted for one-off items; earnings are for companies included in benchmark indices

Source: Refinitiv

Graph 1.26

East Asia – Economic Indicators



* Purchasing Managers' Index

** Year-ended growth

Sources: CEIC Data; IHS Markit; RBA

over the past year (Graph 1.28; Graph 1.29). Policy actions have muted some of the effects of weaker external demand more recently, including in South Korea, where GDP growth picked up in the June quarter, boosted by government spending. In most of the more trade-exposed east Asian economies, business investment has fallen sharply over the past year and consumption growth has slowed. In the less-trade-exposed economies, investment growth has also slowed but remains relatively high and consumption growth has remained resilient.

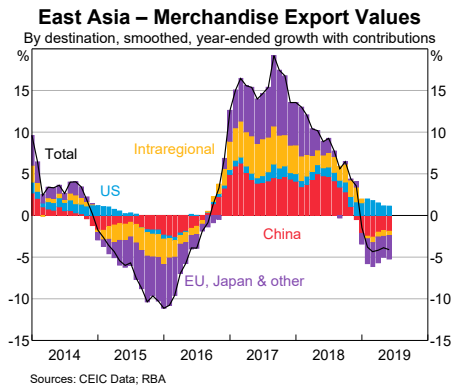
Inflation remains subdued in east Asia (Graph 1.30). Indonesian core inflation has increased, driven by higher durable goods and

housing services inflation, but headline inflation remains in the bottom half of the inflation target band. Inflation in the Philippines has eased back to its target range, following tighter monetary policy in 2018. In Malaysia, inflation rose in June because of base effects from changes in consumption taxes a year ago.

Accommodative global financial conditions have supported emerging financial markets

Expectations that major central banks will ease policy have supported financial market conditions in emerging market economies (Graph 1.31). Easier external financing conditions have provided space for many emerging market

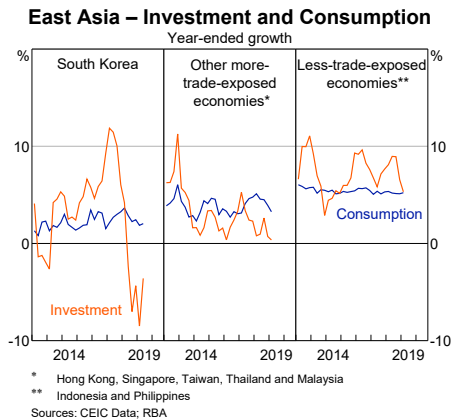
Graph 1.27



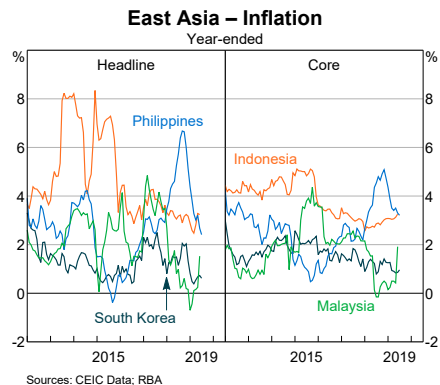
Graph 1.29



Graph 1.28



Graph 1.30

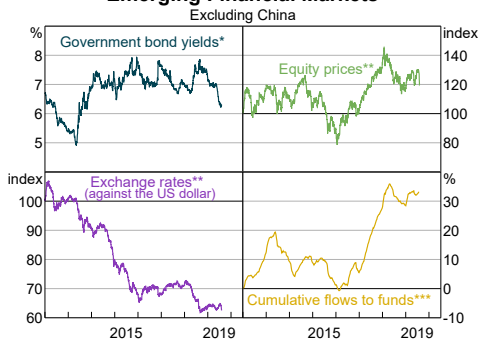


central banks to ease monetary policy in response to downward revisions to domestic growth forecasts, subdued domestic inflationary pressures and downside risks to growth. This has contributed to a sharp decline in yields on government bonds denominated in local currencies. Spreads for bonds denominated in US dollars have also tightened for sovereign and corporate issuers in emerging markets.

Since the start of the year, emerging markets have experienced steady inflows of foreign capital into their bond markets, while foreign flows to their equity markets have been more mixed. There were some capital outflows from mutual and exchange-traded funds that invest in equities in emerging markets, following the escalation of the US–China trade and technology disputes in early May (Graph 1.32). The economies that are most integrated into Chinese supply chains were the most affected. Meanwhile, inflows into emerging market bond funds have persisted in response to relatively higher yields (vis-à-vis advanced economies) and further expected policy easing by emerging market central banks. The recent escalation in trade and technology disputes presents a downside risk to capital flows into emerging markets.

Graph 1.31

Emerging Financial Markets



* Local currency bonds, weighted by market value
 ** 1 January 2012 = 100
 *** Includes flows to exchange-traded funds and mutual funds
 Sources: Bloomberg; EPFR Global; IMF; JP Morgan; RBA

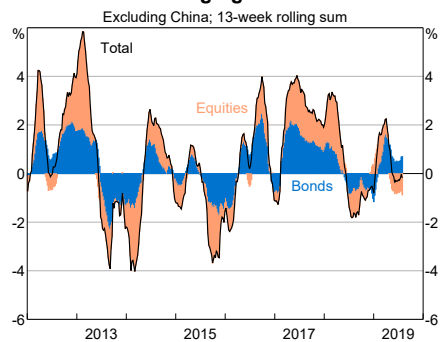
Growth in India has slowed, and the central bank has responded

In India, GDP growth slowed in the March quarter, driven by a fall in the level of investment (Graph 1.33). More recent monthly activity indicators have been mixed. Steel output and industrial production have begun to pick up, but remain weak. A range of service sector indicators have also eased in recent quarters, after being elevated last year (Graph 1.34).

Future growth is expected to be weaker than previously forecast, partly because of slower growth in the industrial sector, lower-than-expected fiscal expenditure in 2019/20, weaker external demand and emerging trade tensions. In the recent budget, the Indian Government

Graph 1.32

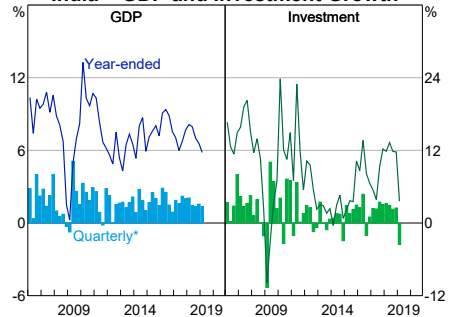
Flows to Emerging Market Funds*



* Per cent of assets under management; includes bonds denominated in US dollars and local currencies
 Source: EPFR Global

Graph 1.33

India – GDP and Investment Growth



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

announced a slightly smaller fiscal deficit for 2019/20 than in 2018/19. The budget included an INR 700 billion recapitalisation of state-owned banks, which should support these institutions' lending activity. In May, the United States announced that India would no longer qualify as a 'beneficiary developing country', which had given India preferential access to the US market, prompting retaliatory tariffs from India.

Meanwhile, rebounding food and fuel prices have boosted headline inflation but core inflation has continued to moderate; even so, headline inflation remains below the Reserve Bank of India's 4 per cent target (Graph 1.35). In response to slower growth and subdued inflation, the Reserve Bank of India lowered its policy rate by 35 basis points in August, following earlier cuts in February, April and June.

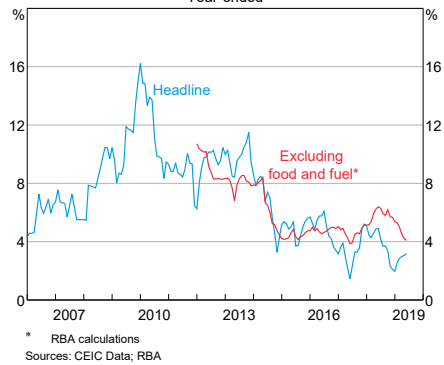
Iron ore prices have moved in a wide range in recent months ...

The benchmark iron ore spot price has been volatile in recent months. For most of the period since the previous *Statement on Monetary Policy*, prices continued to strengthen and reached their highest level since early 2014 (Graph 1.36). Disruptions in Australia and Brazil have limited available supply in the seaborne market while, at the same time, Chinese demand for iron ore had been relatively resilient because steel

production has increased strongly over recent months (see 'Box B: The Recent Increase in Iron Ore Prices and Implications for the Australian Economy'). However, in recent weeks, reports have been suggesting Chinese iron ore demand has moderated because of production curbs that are in place in some cities. The escalation in trade tensions has led to sharp falls in iron ore prices since the start of August. The outlook for iron ore seaborne supply and prices remains highly uncertain; although Chinese steel demand is expected to remain elevated in the near term, supply constraints should continue to ease following approval for some Brazilian production to resume.

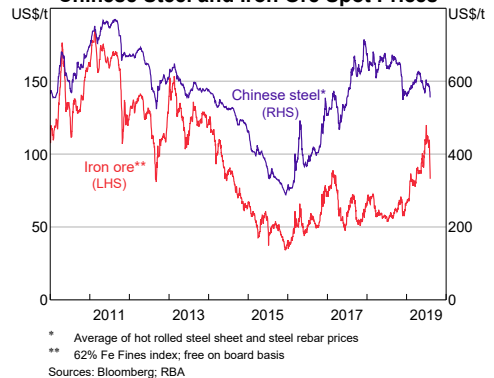
Graph 1.35

India – Inflation
Year-ended



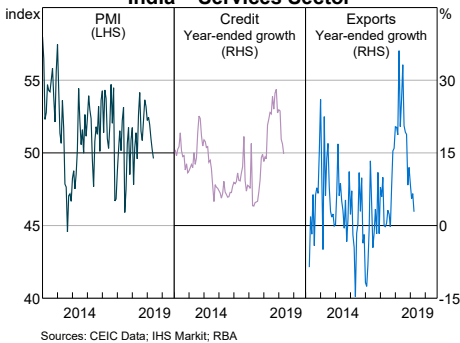
Graph 1.36

Chinese Steel and Iron Ore Spot Prices



Graph 1.34

India – Services Sector



... while most other commodity prices have declined

Australian thermal coal prices have steadily declined over the past year (Graph 1.37; Table 1.1). Price declines in recent months have reflected ample supply from exporting countries, while Asian demand has declined because of a combination of elevated stockpiles, an increase in renewable generation and some substitution towards lower-cost LNG and cheaper Russian thermal coal. Coking coal prices have also declined since the previous *Statement* alongside an increase in global supply, notably from Australia, and because demand from some key steel-producing economies has eased.

Oil prices have declined since their peak in mid May because renewed trade disputes have raised concerns about the outlook for global oil demand (Graph 1.38). Some partially offsetting support for prices has come from OPEC members and a number of other oil-exporting countries agreeing to extend production cuts through to March 2020, as well as rising geopolitical tensions between major producers which have raised concerns around the outlook for global supply.

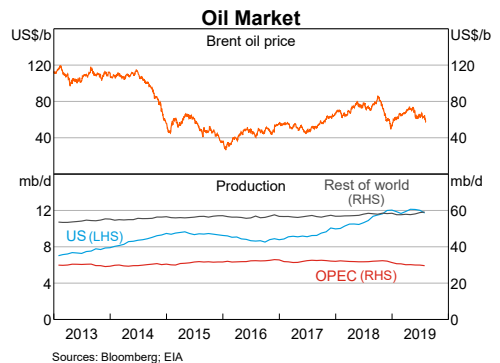
Base metal prices have generally declined in recent months as trade tensions escalated (Graph 1.39). Zinc prices have declined considerably alongside rising global supply,

particularly from China, while lead prices have increased following supply disruptions in Australia and declining global inventories.

Prices for Australian rural exports have been mixed since the previous *Statement*. Lamb prices have increased, supported by strong demand from China and the United States. In contrast, wool prices have declined alongside subdued northern hemisphere demand, and wheat prices have declined recently as the outlook for global supply from some key producing regions has picked up.

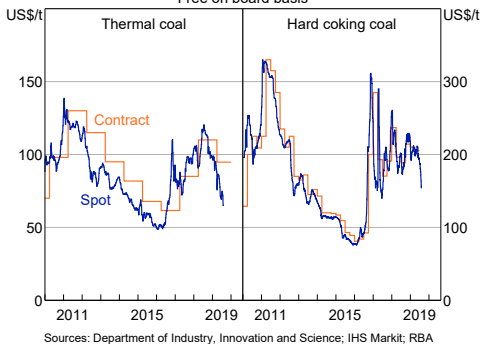
Australian export prices (including the prices of non-commodity exports) are expected to have increased in the June quarter, largely reflecting higher iron ore prices, supporting an increase in Australia's terms of trade. Export prices are still

Graph 1.38



Graph 1.37

Coal Prices
Free on board basis



Graph 1.39

Base Metal and Rural Prices
January 2014 = 100

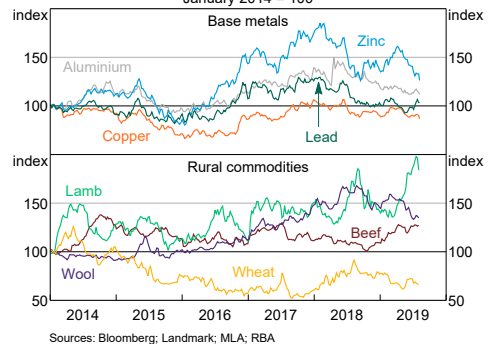


Table 1.1: Commodity Price Growth^(a)

	Since previous <i>Statement</i>	Over the past year
Bulk commodities	12	7
– Iron ore	–5	40
– Coking coal	–23	–11
– Thermal coal	–23	–43
Rural	–1	–11
Base metals	–4	–10
Gold	18	26
Brent crude oil ^(b)	–19	–22
RBA ICP	5	14
– Using spot prices for bulk commodities	–6	1

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

(b) In US dollars

Sources: Bloomberg; IHS Markit; RBA

likely to decline over the next few years as Chinese demand for bulk commodities moderates and low-cost global supply of these commodities increases. Even so, the outlook for

the terms of trade over the next year or so has been revised higher compared to the May *Statement* (see ‘Economic Outlook’ chapter). ✎

Endnotes

- [1] RBA (2019), ‘Box B: Why Are Bond Yields So Low?’, *Statement on Monetary Policy, May*, pp 27–31. Available at <<https://www.rba.gov.au/publications/smp/2019/may/box-b-why-are-long-term-bond-yields-so-low.html>>

Box A

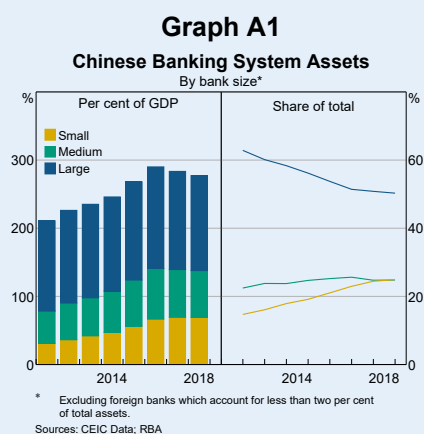
Small Banks in China

In recent months, vulnerabilities of small banks in China have been in focus following a tightening in liquidity conditions, which has prompted a concerted response by the authorities. Small banks in China have expanded rapidly over recent years and play an increasingly significant role in China's financial system.^[1] In particular, small banks are important providers of financing to private enterprises, including micro- and small-sized enterprises (MSEs), which struggle to compete with larger firms for credit from large banks. However, the rapid growth of small banks has also increased some risks, in part because the small banks have become increasingly reliant on wholesale (often short-term) funding and much of their credit has been extended via opaque channels where questions of credit quality have surfaced.

There are around 4,000 small banks in China – defined as those outside of the 20 largest domestic banks by asset size. Together, these banks now account for around a quarter of banking system assets (up from 10 per cent a decade ago), equivalent to around 70 per cent of China's GDP (Graph A1). While these banks are individually small relative to the big state-owned banks that have traditionally dominated China's banking system, many of them are still quite large by international standards. For example, the largest small bank in China has more than A\$200 billion in reported assets, larger than the fifth largest bank in Australia.

Vulnerabilities of small banks have been building

Concerns about the balance sheets of small banks have been building for some time.^[2] The rapid expansion of their assets has been driven by an increase in opaque forms of credit. In particular, small banks have lent to, and purchased securities issued by, non-bank financial institutions (NBFIs), which in turn extend credit to firms, including MSEs. This has enabled small banks to circumvent restrictions on lending to certain sectors and other prudential requirements, including holding lower capital than otherwise. In addition, lending by small banks has tended to be concentrated in certain industries and/or regions. Almost all are unlisted, limiting their scope to access fresh capital quickly. Some small banks also have weak corporate governance and/or underdeveloped risk-management systems. In recent years, for example, a number of small banks have failed to publish financial accounts and provide data to independent auditors. These factors



have contributed to the broader build-up of indebtedness in China and associated medium-term risks to financial stability.

Small banks tend to have weaker asset quality than large banks, and typically report lower capital adequacy ratios (Graph A2). Small banks have a relatively high share of distressed loans despite also having a greater share of loans being written off or disposed of in other ways. Some small banks, especially those based in regions experiencing significant economic slowdowns, have reported a substantial rise in non-performing loans (NPLs). Moreover, Chinese authorities have strengthened standards for recognising NPLs, which has required an increase in provisions at small banks. These developments have led to a decline in small banks' profitability and capital levels over the past few years. That has prompted several banks to raise capital in order to lift their capital adequacy ratios.

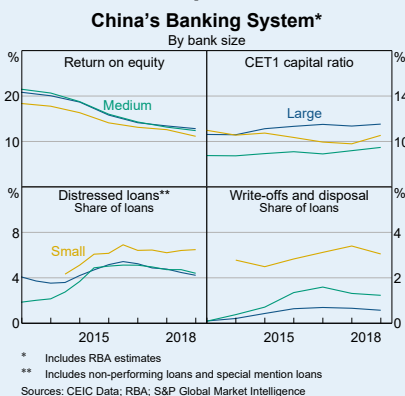
Small banks are also exposed to considerable liquidity risks. The expansion of the balance sheets of small banks has been mainly funded by an increase in wholesale debt, as an implicit regulatory ceiling on deposit rates has made it harder for them to attract

conventional deposits than for larger state-owned banks (Graph A3).^[3] In addition, small banks have relied heavily on short-term funding, with around 90 per cent of wholesale funding (including wholesale debt and inter-bank deposits) of small banks expected to mature within one year. Many small banks have also accumulated significant implicit liabilities through their use of off-balance sheet investment vehicles to raise funding. This has increased the potential calls on the capital and liquidity of small banks.

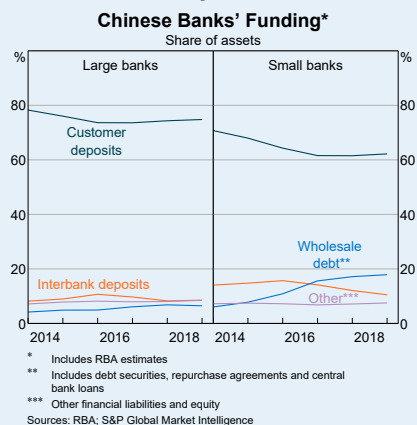
In recent months, investors have been reluctant to lend to small banks

In May, Chinese regulators announced that they would take over Baoshang Bank – the 36th largest bank in China, with around A\$120 billion in reported assets – due to concerns about its solvency and reported misappropriation of funds. This was the first reported takeover of a private bank by Chinese regulators since 1998. In addition, while China's deposit insurance fund took over some debts of Baoshang Bank, the authorities allowed some large creditors to bear losses (in contrast to the widely held

Graph A2



Graph A3



perception of government guarantees).^[4] More recently, state-owned financial institutions have acquired shares in the Bank of Jinzhou, the country's 30th largest lender, following the suspension of its Hong Kong listed equity some months earlier.

The Baoshang takeover prompted investors to reassess the risks of lending to other small banks, and liquidity conditions for small banks tightened sharply (Graph A4). For example, interest rates on negotiable certificates of deposit (NCDs), which are unsecured funding instruments predominantly used by small banks, increased relative to larger banks.^[5] In addition, net issuance of NCDs by small banks declined sharply in May, although it has increased more recently. There have also been reports that small banks have experienced difficulty accessing funding markets altogether or have had to provide higher-quality collateral when borrowing on a secured basis.

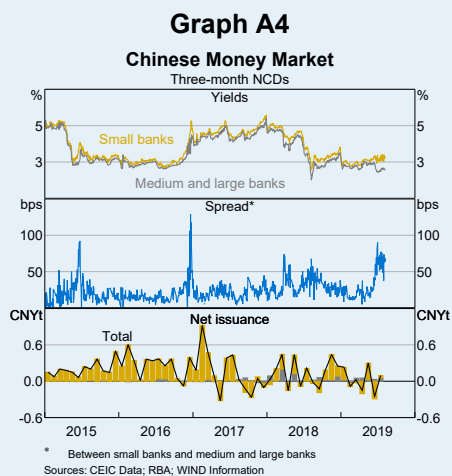
The authorities have responded

The direct implications of the takeover of Baoshang Bank appear to be limited, given

the bank's small size relative to China's banking system (0.2 per cent of total banking assets). In addition, the fact that some large creditors will bear losses might help in reducing perceptions of implicit guarantees in the Chinese banking system, which could improve risk management and credit allocation over the medium term. However, in the short term, the associated tightening in liquidity conditions has increased some risks to China's small banks and the broader financial system. This includes the risk that small banks will be unable to roll over wholesale funding, which could disrupt funding markets more generally. In turn, this could tighten financial conditions and undermine the authorities' efforts to ensure favourable financing conditions, particularly for MSEs.

The People's Bank of China (PBC) has sought to maintain favourable financing conditions by ensuring a generally high level of liquidity in China's banking system. It has reduced reserve requirement ratios for banks and injected liquidity into money markets via open market operations and various lending facilities. However, in light of recent developments, the authorities have implemented additional targeted measures to support funding conditions for small banks, including by:

- directing state-owned financial institutions to make strategic investments in the Bank of Jinzhou
- adding NCDs and bank bills to the list of eligible collateral in PBC operations
- increasing the quotas for certain PBC lending facilities that are accessible to small banks^[6]
- providing additional funding to a prominent issuer of credit risk mitigation



instruments. These instruments are a form of insurance that compensates investors if the issuer of the underlying asset defaults. To date, these have been used by at least one small bank (Bank of Jinzhou) to facilitate access to the NCD market

- instructing financial institutions to continue trading in instruments that are issued by small banks. The PBC has also allowed brokerages to raise additional funds to support their operations in money markets.

The recent measures have contributed to a stabilisation in funding conditions for small banks, although yields on NCDs issued by

small banks remain elevated relative to larger banks. Small banks are likely to continue to face challenges in the period ahead, including issues with asset quality and thin capital buffers, particularly those in regions with weaker economic conditions. There is also ongoing uncertainty around the authorities' approach to bank resolution and, relatedly, the role of government agencies and state-owned firms in absorbing potential losses. These issues are likely to remain in focus as Chinese authorities continue their efforts to manage risks in China's financial system, while ensuring favourable financing conditions for private enterprises. ✎

Endnotes

[1] Small banks include city and rural commercial banks, village banks, rural credit unions, and credit cooperatives. Analysis in this box is based on city and rural commercial banks where data for other small banks are not available. Medium banks refers to joint-stock banks and large banks captures large state-owned commercial banks.

[2] For more details, see RBA (2016) 'Box A: Recent Growth of Small and Medium-sized Chinese Banks', *Financial Stability Review*, October, pp 14–16. Available at <<https://www.rba.gov.au/publications/fsr/2016/oct/box-a.html>>.

[3] The explicit ceiling on deposit rates was abolished in 2015.

[4] China's deposit insurance scheme was created in 2015 and covers personal and corporate deposits at participating financial institutions in foreign

and local currency up to a maximum of CNY500,000. However, in Baoshang Bank's case, the scheme and Chinese authorities guaranteed corporate and interbank deposits valued up to CNY50 million, and personal deposits were fully guaranteed.

[5] NCDs and other interbank funding instruments account for around 10 per cent of small banks' liabilities.

[6] The PBC expanded the size of its rediscount facility by CNY200 billion, which enables banks to obtain funding from the PBC in exchange for loans that they have extended to customers, typically small businesses. The Standing Lending Facility, which provides banks with access to emergency liquidity, was expanded by CNY100 billion. The stock of lending under each facility remains well below their respective limits.

2. Domestic Economic Conditions

The Australian economy has been growing at a below-trend rate over recent times. This largely reflects that consumption growth has been weighed down by a period of low growth in household income and declining housing prices. By contrast, labour market outcomes have been generally strong. In the June quarter, employment continued to grow faster than the working-age population and labour force participation rose to a record level, but the unemployment rate increased. Economic growth is expected to gradually strengthen. Partial indicators suggest economic growth was firmer in the June quarter partly because of stronger growth in resource exports.

Employment growth has been strong ...

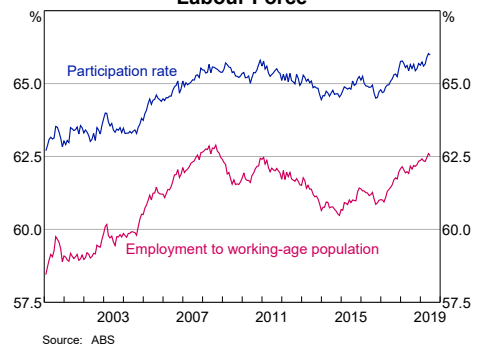
Employment growth has remained strong at 2.6 per cent over the year to the June quarter. Growth in employment has exceeded population growth and the share of the working-age population employed is close to a record-high level (Graph 2.1). In the June quarter, the bulk of growth was in part-time employment, though full-time employment has accounted for most of the growth over the past year. Strong labour demand has been met recently by an increase in labour supply that has seen the participation rate increase further to a record-high level. More people are entering the workforce as opportunities arise, particularly young people and women aged 25–45 years; older workers are also retiring later than in the past (Graph 2.2).

Victoria and New South Wales continue to account for a higher-than-average share of employment growth. Employment has outpaced the relatively strong working-age population growth in both states over the past year, whereas the employment to working-age population ratio has declined in Queensland.

By industry, education and health care & social assistance have been a consistent source of

Graph 2.1

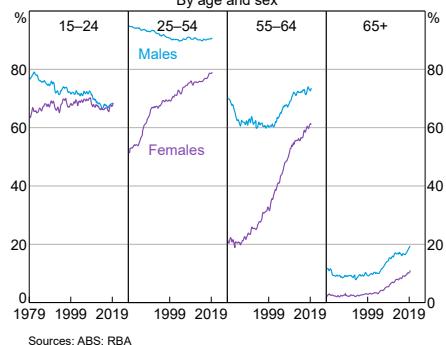
Labour Force



Graph 2.2

Participation Rate

By age and sex



employment growth (Graph 2.3). This reflects longer-term trends in demand in the economy, especially for health-related jobs as the population ages and the National Disability Insurance Scheme (NDIS) is rolled out across Australia. While employment in professional, scientific & technical services has picked up in recent quarters, there has been little employment growth elsewhere in the business services sector over the past year. Despite the recent moderation in residential building activity, employment in the construction industry has continued to rise, though at a slower pace than a year ago.

... but the unemployment rate has increased

The unemployment rate increased to 5.2 per cent in the June quarter (Graph 2.4). This followed a period over late 2018 and early 2019 during which the unemployment rate was stable at around 5 per cent. The share of underemployed workers – who want and are available to work additional hours – also increased in the June quarter. As a result, a broader measure of labour market underutilisation, which captures both the hours sought by the unemployed and the additional hours that underemployed people would like to work, has increased in recent months but

remains slightly lower than it was a year ago. Unemployment rates have increased across most states in recent months, with Western Australia a notable exception.

It remains likely that the labour market can absorb additional labour demand before anything more than gradual upward pressure is generated for wage and price inflation. Estimates of the unemployment rate associated with full employment are subject to considerable uncertainty. However, given that wage and price inflation have been lower than past relationships would have suggested, it is likely that this rate has trended down recently, to perhaps be around 4½ per cent, although uncertainty around any estimate of full employment is high.

Leading indicators suggest employment growth will moderate

Forward-looking indicators of labour demand have moderated since mid 2018 (Graph 2.5). Job vacancies declined slightly in the three months to May, but remain at a high share of the labour force. Vacancies in health care continue to increase strongly, in line with the strength in the employment data for this industry. By contrast, vacancies in construction and several other industries have declined this year. Measures of job advertisements have declined further in

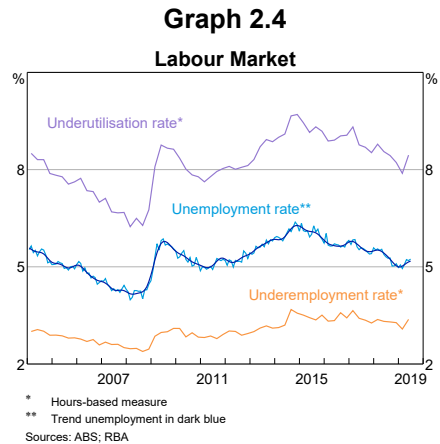
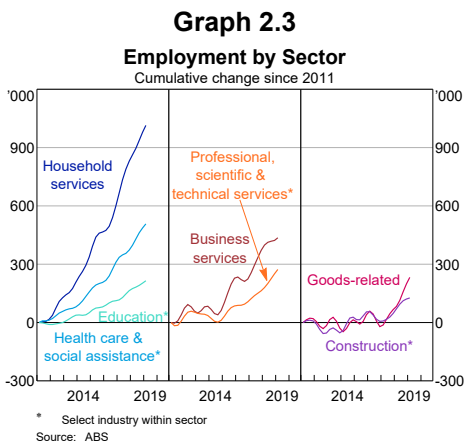


Table 2.1: Demand and Output Growth

Per cent

	March quarter 2019	December quarter 2018	Year to March quarter 2019	Share of GDP 2017/18
GDP	0.4	0.2	1.8	100
Domestic final demand	0.1	0.4	1.6	99
– Consumption	0.3	0.4	1.8	56
– Dwelling investment	–2.5	–2.9	–3.1	6
– Mining investment ^(a)	–1.8	–7.4	–10.6	3
– Non-mining investment ^(a)	1.2	2.5	1.4	10
– Public consumption	0.8	2.0	5.1	19
– Public investment ^(a)	0.4	1.0	7.2	5
Change in inventories ^(b)	–0.1	0.2	0.0	n/a
Exports	1.0	–0.5	1.7	22
Imports	–0.1	0.4	–0.5	–21
Mining activity ^(a)	0.9	–2.6	–1.6	13
Non-mining activity ^(a)	0.3	0.6	2.3	87
Farm GDP	–0.2	–5.2	–6.8	2
Non-farm GDP	0.4	0.3	2.0	98
Nominal GDP	1.4	1.2	4.9	n/a
Terms of trade	3.1	3.0	6.1	n/a

(a) RBA estimates

(b) Contribution to GDP growth

Sources: ABS; RBA

recent months, though the timing of public holidays and the federal election can account for some of the weakness in April and May.

Employment intentions in the NAB survey and the Bank's liaison program have moderated, but remain above long-term averages.

Growth in the domestic economy remained subdued in the March quarter

Real GDP increased by 0.4 per cent in the March quarter to be 1.8 per cent higher over the year (Table 2.1; Graph 2.6; Graph 2.7). Subdued growth in income and lower housing prices in recent years continued to weigh on growth in

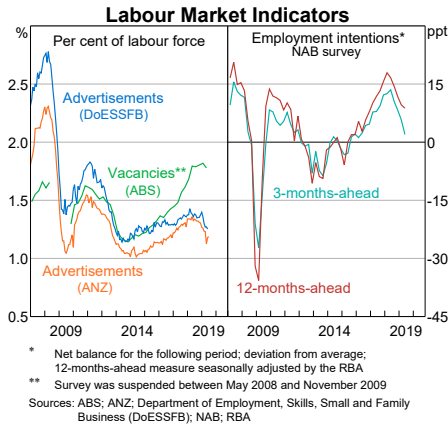
consumption. There were also further declines in dwelling investment. Public demand remained strong. Elevated infrastructure spending has been a recent feature of both public and private investment; non-mining business investment added modestly to growth in the March quarter though mining investment subtracted from it. That GDP growth has been subdued despite strong employment growth implies very weak growth in labour productivity: there has been little growth in non-farm labour productivity over the past three years.

Growth in household discretionary spending slowed further

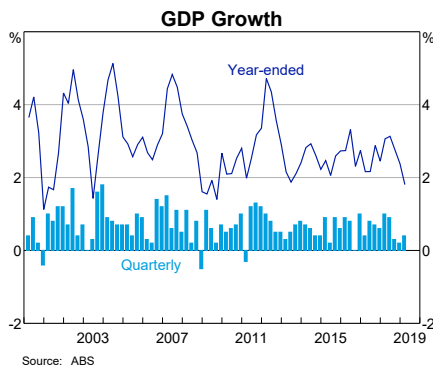
Household consumption grew by 0.3 per cent in the March quarter to be 1.8 per cent higher over the year, the slowest rate of growth in several years (Graph 2.8). In addition to subdued income growth, weak housing market conditions have contributed to the slowdown in consumption. The slowdown in consumption growth in recent quarters has been more pronounced for discretionary items, particularly those typically associated with housing turnover and household wealth (Graph 2.9). By category, year-ended growth has eased the most since mid 2018 for furnishing & household equipment and sales of new cars.

More recent indicators suggest household consumption growth remained soft in the June quarter. Retail sales volumes grew by 0.2 per cent over the year to the June quarter, the slowest rate of growth since the early 1990s; sales of household goods and at food retailers declined over the year. Information from the Bank's business liaison program has indicated that strong price rises for meat and vegetables during the first few months of 2019, as a result of supply shortages associated with the drought, contributed to reduced sales volumes for food. Sales of new cars to households declined in the June quarter and remained much lower than a year ago. Households' sentiment about the

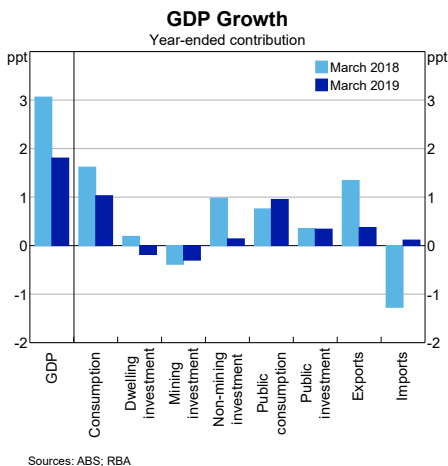
Graph 2.5



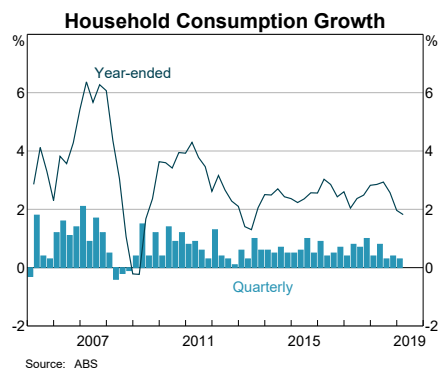
Graph 2.6



Graph 2.7



Graph 2.8



economic outlook has declined in recent months but sentiment towards their current finances has improved; both measures are close to their long-run average.

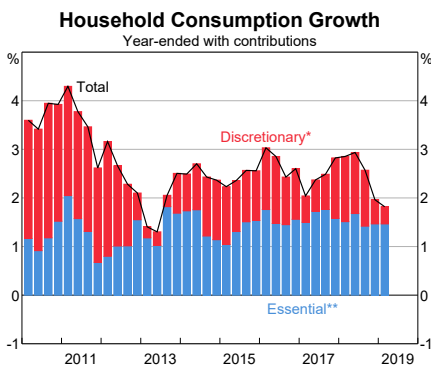
Non-labour sources of income continued to weigh on household income growth

Household disposable income grew by 0.8 per cent in the March quarter and growth remained subdued in year-ended terms at 2.3 per cent (Graph 2.10). Growth in labour income supported household disposable income growth in the March quarter, consistent with strong employment growth. Non-labour income declined by 0.3 per cent in the March quarter, however, and year-ended growth slowed to 1.5 per cent. Income from unincorporated businesses declined in the quarter and over the year because of lower residential construction activity, lower turnover in the housing market and weakness in the farming sector (Graph 2.11). Growth in other forms of non-labour income, such as social assistance and rental income, also remained low. Strong growth in household tax payments of 7.6 per cent over the year to the March quarter has weighed on disposable income growth,

although these tax payments declined slightly in the March quarter. Nominal income growth was a little faster than growth in household consumption spending, so the household saving ratio increased for the second consecutive quarter.

Year-ended growth in disposable income is expected to remain subdued in the June quarter, before picking up over the second half of 2019. The reductions in the cash rate in June and July and application of the low- and middle-income tax offset will boost disposable income in the September quarter.

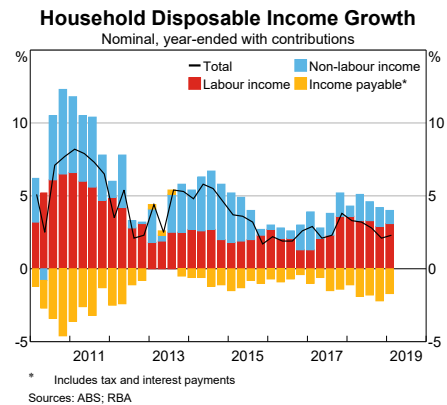
Graph 2.9



* Includes furnishing & household equipment, clothing & footwear, recreation & culture, motor vehicles, alcohol & tobacco, air & water transport, hotels, cafes & restaurants, and 'other goods and services'
** Calculated as a residual; includes categories such as food, housing, health, education and utilities

Sources: ABS; RBA

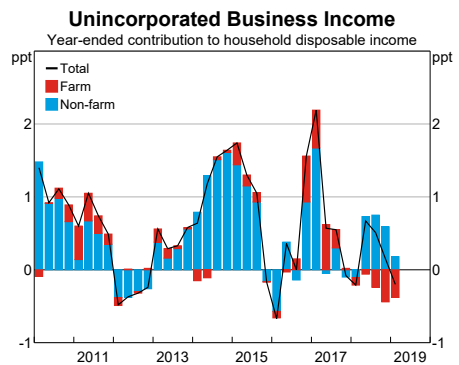
Graph 2.10



* Includes tax and interest payments

Sources: ABS; RBA

Graph 2.11



Sources: ABS; RBA

Dwelling investment continued to decline

Private dwelling investment declined by 2.5 per cent in the March quarter and by 3.1 per cent over the year (Graph 2.12). The quarterly decline was broad based across dwelling investment types. The pipeline of work to be done remains at a high level, particularly for higher-density projects in New South Wales and Victoria, though it has declined in most states (Graph 2.13). The number of dwellings in the pipeline is expected to continue to fall as completions outpace approvals. Residential building approvals declined further over May and June, to be more than 20 per cent lower over the year.

Conditions in the earlier stages of residential property development remain weak. Contacts in the Bank's liaison program indicate that demand for new houses and apartments has remained around the low levels of late 2018. Given this, the typical lags between the sale and construction of new dwellings imply that the decline in dwelling investment will continue for some time, despite the recent signs of stabilisation in the established housing market.

Established housing markets appear to have stabilised

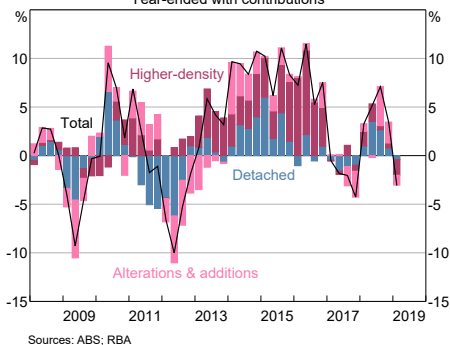
Conditions in a number of housing markets have stabilised recently, following the removal of uncertainty that preceded the federal election, APRA's announcement of proposed changes to mortgage serviceability requirements and the lowering of the cash rate. After declining for more than a year, established prices in Sydney and Melbourne increased slightly over recent months (Table 2.2; Graph 2.14). Auction clearance rates have strengthened further in Sydney and Melbourne on low auction volumes (Graph 2.15). The share of households expecting further price declines has eased in recent consumer surveys.

Conditions remain subdued in established housing markets outside Sydney and Melbourne, though they have recovered a little in most capital cities and some regional areas more recently. Prices increased in July in Brisbane, following declines for most of the past year. The size of price declines in some other areas, including Perth, have moderated in recent months.

Rental vacancy rates were below their long-run average in the March quarter in most cities (Graph 2.16). The Perth rental market has tightened since mid 2017; vacancy rates have fallen and advertised rent inflation has turned

Graph 2.12

Dwelling Investment Growth
Year-ended with contributions



Graph 2.13

Residential Dwelling Pipeline*

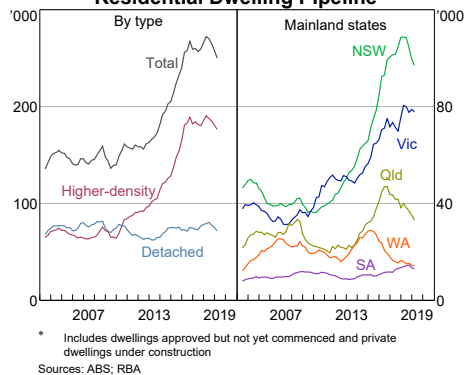


Table 2.2: Growth in Housing Prices

Percentage change, seasonally adjusted

	July	June	May	April	Year-ended	Growth over previous five years
Sydney	0.1	0.0	-0.5	-0.7	-9.0	18
Melbourne	0.2	0.1	-0.5	-0.6	-8.2	24
Brisbane	0.3	-0.4	-0.4	-0.4	-2.4	7
Adelaide	-0.3	-0.3	-0.0	-0.3	-0.8	10
Perth	-0.4	-0.7	-0.9	-0.6	-8.9	-20
Darwin	0.2	-0.8	-1.1	-1.1	-8.7	-29
Canberra	0.0	-0.4	-0.1	0.1	1.1	22
Hobart	0.3	0.3	-0.1	-1.1	2.8	36
Capital cities	0.1	-0.1	-0.4	-0.6	-7.3	13
Regions	0.0	-0.1	-0.2	-0.4	-3.0	11
National	0.1	-0.1	-0.4	-0.6	-6.4	13

Sources: CoreLogic; RBA

positive. Sydney rental vacancy rates remain an outlier and have risen further, particularly in areas where the supply of new apartments has increased significantly; advertised rents have declined over the past year.

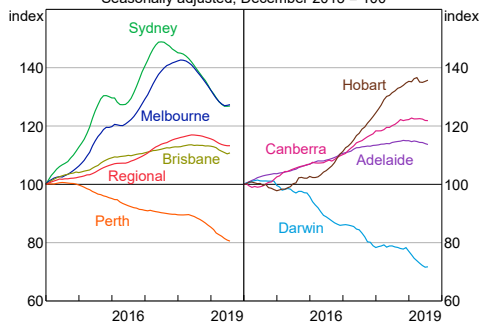
Despite some stabilisation in established market conditions, housing market turnover remains around its lowest level in recent decades. The decline in housing market turnover led to a sharp decline in the national accounts measure

of private ownership transfer costs in the March quarter, which subtracted 0.2 percentage points from quarterly GDP growth. Private ownership transfer costs measure the services associated with buying housing, including costs such as fees and commissions paid to real estate agents, auctioneers and lawyers and stamp duty. This component will be less of a drag on GDP growth as turnover in the housing market stabilises.

Graph 2.14

Housing Prices

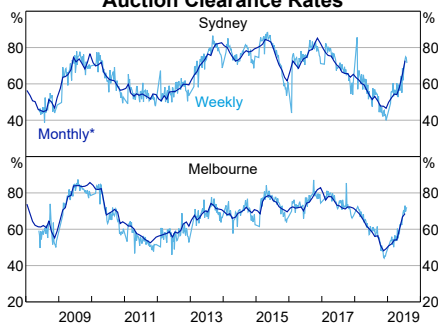
Seasonally adjusted, December 2013 = 100



Sources: CoreLogic; RBA

Graph 2.15

Auction Clearance Rates



* Seasonally adjusted
Sources: APM; CoreLogic; RBA; REIV

Household net wealth was unchanged in the March quarter because declines in housing prices were offset by an increase in financial wealth. In the June quarter, equity prices increased further and declines in housing prices were smaller, which should have supported growth in household net worth.

Public demand has supported economic growth

Strong growth in public demand has continued the recent trend of contributing a larger share of economic growth as private demand has slowed (Graph 2.17). Public demand increased by 0.8 per cent in the March quarter to be 5.5 per cent higher over the year. Growth in public consumption was driven by ongoing federal government spending on social benefits to households, reflecting the rollout of the NDIS and increased spending on the Pharmaceutical Benefits Scheme. Public investment, which includes spending on infrastructure and public buildings across all levels of government, grew strongly over the year.

The projections for the underlying cash balance across the latest consolidated government budgets is mostly unchanged since last year's updates. The underlying cash deficit is expected to be around 1 per cent of GDP in 2018/19 and

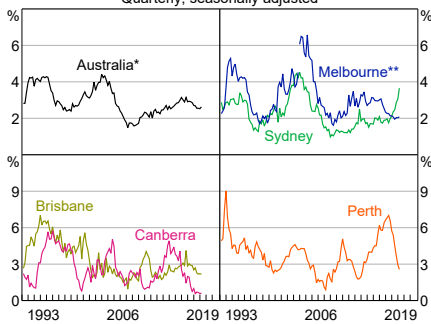
2019/20. After this, the reduction in the consolidated deficit is expected to occur more gradually than the contraction that occurred in 2017/18. The federal government cash balance is projected to be in surplus by 2019/20, while the deficit of the states and territories is projected to peak this year (Graph 2.18).

Infrastructure investment has been strong

Investment in infrastructure has picked up over recent years (Graph 2.19). This has been led by both public and private investment in transport infrastructure in metropolitan areas. There has also been a large increase in electricity-related

Graph 2.16

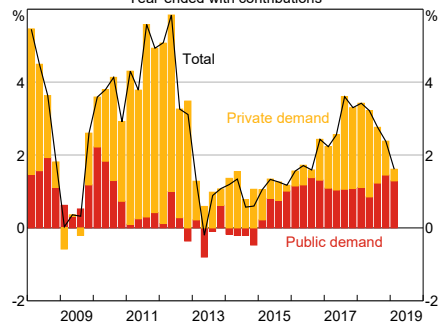
Rental Vacancy Rates
Quarterly, seasonally adjusted



* Capital cities excluding Adelaide, Darwin and Hobart
** Series break December quarter 2002
Sources: RBA; REIA

Graph 2.17

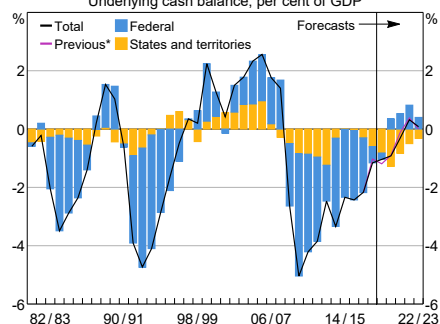
Domestic Final Demand Growth*
Year-ended with contributions



* Adjusted for second-hand asset transfers between the public and other sectors
Sources: ABS; RBA

Graph 2.18

Consolidated Government Balance
Underlying cash balance, per cent of GDP



* Updated 2018/19 budgets; includes federal mid-year economic and fiscal outlook
Sources: ABS; Australian Treasury; RBA; State and territory budgets

infrastructure spending, particularly private-sector renewable energy projects. The pipeline of infrastructure work yet to be done suggests the level of activity will remain elevated in coming years, supported by roads and electricity (particularly renewables) projects.

Growth in other non-mining investment has slowed over the past year

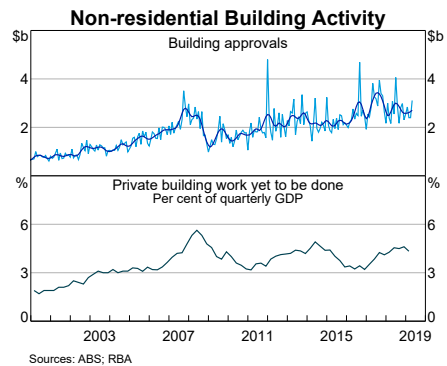
Non-mining investment apart from infrastructure remains elevated, but has been growing slowly over the past year. In particular, growth in non-residential building investment has slowed, after a period of strong growth over 2017 and the first half of 2018. However, building approvals remain around their average since 2016 and the stock of work yet to be done on private non-residential buildings remains elevated, reflecting work underway on offices, warehouses and other commercial buildings (Graph 2.20).

Investment in machinery & equipment and other assets has also been growing at a subdued pace (Graph 2.21). In contrast, firms' investment in computer software has increased steadily in recent years. Investment intentions for 2019/20 reported by non-mining firms in the Australian Bureau of Statistics (ABS) Capital Expenditure

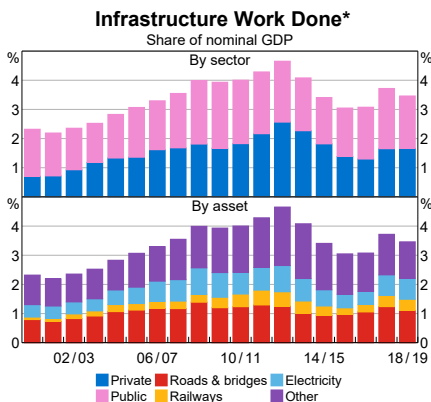
(Capex) survey suggest capital expenditure on machinery & equipment investment will ease; that said, early estimates of capital expenditure have historically been subject to a large degree of uncertainty.

Consistent with the slower growth outlook for non-mining business investment, survey measures of expected capital expenditure and business conditions have eased since early 2018 and remain close to average for most industries; conditions are more subdued in the retail and transport & utilities industries (Graph 2.22). By contrast, non-mining profits increased strongly in the March quarter and should support conditions for firms to invest.

Graph 2.20

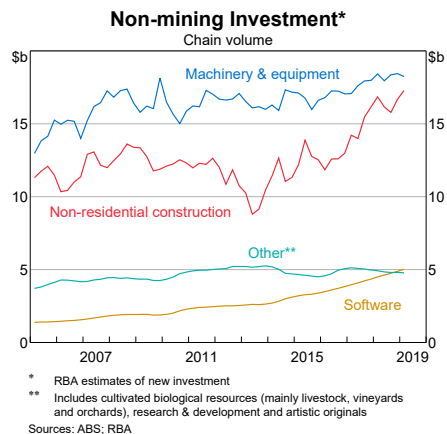


Graph 2.19



* Excludes explicitly identified resources and other heavy industry projects, but captures some resource-related work; 2018/19 includes projections for the June quarter

Graph 2.21



* RBA estimates of new investment

** Includes cultivated biological resources (mainly livestock, vineyards and orchards), research & development and artistic originals

Mining investment and resource exports are expected to recover from recent soft outcomes

Mining investment declined further in the March quarter as construction on the remaining liquefied natural gas (LNG) projects continued to wind down. The decline in the quarter, taken together with the recent Capex survey for 2018/19, suggests that mining investment is around its trough (Graph 2.23). Information from the Capex survey for 2019/20, the Bank's liaison program and company announcements continue to suggest that mining investment will pick up gradually over the next year or so as mining firms invest to sustain production levels and, in some instances, expand productive capacity.

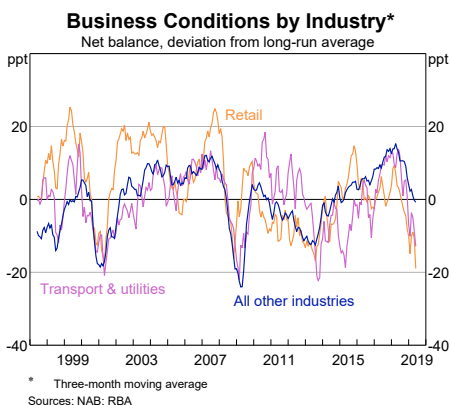
Resource export volumes were unchanged in the March quarter, as a strong rebound in non-monetary gold exports offset declines in other resource exports (Graph 2.24). Partial trade data suggest that resource exports should increase in the June quarter. Growth is expected to be led by LNG exports, as recently completed projects ramp up production, and iron ore exports as they recover from supply disruptions including Tropical Cyclone Veronica in late March. The strength in iron ore prices over recent months is not expected to affect resources sector activity directly, although there are likely to be spillovers

to the broader economy from the boost to national income (for more discussion, see Box B: The Recent Increase in Iron Ore Prices and Implications for the Australian Economy).

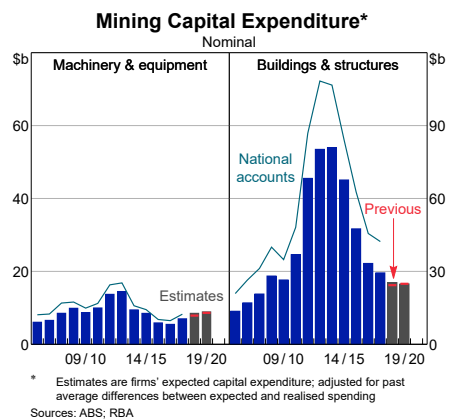
Drought conditions have weighed on the farm sector

Drought conditions have persisted across south-eastern Australia, although some regions have had rainfall in recent months, particularly South Australia, Victoria and southern New South Wales. Farm GDP has fallen by around 7 per cent since the middle of 2018, driven by lower crop production. With lower output and elevated input costs (including higher feed and water costs), nominal farm profits declined by 6 per cent in the March quarter, to be

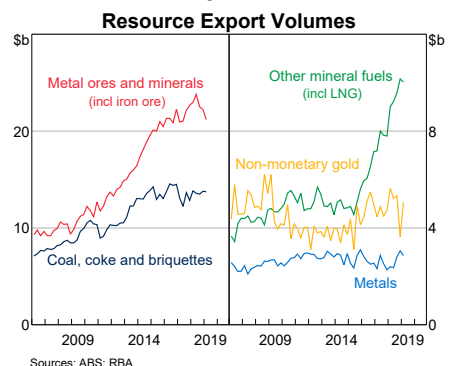
Graph 2.22



Graph 2.23



Graph 2.24



24 per cent lower than June quarter 2018. The most recent climate outlook published by the Bureau of Meteorology indicates that drier-than-average conditions are expected for large parts of the country over the next three months, which suggests further weakness in activity in the rural sector in coming quarters.

Rural exports increased solidly in the March quarter, because strong growth in meat exports more than offset continued weakness in cereal exports (Graph 2.25). Dry conditions have kept slaughter rates elevated over recent months and demand for meat products has been supported by strong overseas demand and a lower Australian dollar. Assuming that seasonal conditions gradually return to average over the next year or so, meat exports should ease from their elevated levels as producers focus on herd rebuilding.

Service and manufactured exports continue to grow steadily

Australia's service and manufactured exports have grown steadily over recent years, supported by the continued economic expansion in Australia's major trading partners and a modest depreciation of the Australian dollar. Increasing enrolments of overseas students and visitor arrivals should continue to support growth in service exports over the next

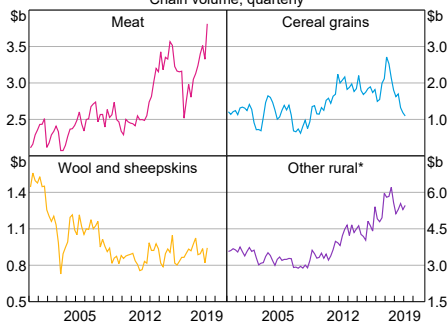
couple of years. The importance of travel services to Australia's export base has increased considerably over the past two decades, from around half of total service exports in the early 2000s to around two-thirds more recently, with most of the increase driven by education-related travel exports (Graph 2.26).

Growth in total import volumes has eased over the past year or so, alongside slower growth in both public and private investment, which are relatively import-intensive components of expenditure. Partial data suggest that import volumes declined modestly in the June quarter.

An increase in Australia's export volumes, higher export prices, and a modest decline in import volumes resulted in a further increase in the trade surplus in the March quarter, to its highest share of nominal GDP since the March quarter 1973 (Graph 2.27). Available data suggest another sizeable trade surplus is expected in the June quarter. The recent increases in the trade surplus have offset some widening in the net income deficit, leaving the current account deficit at its narrowest as a share of GDP since the late 1970s. The widening in the net income deficit over the past couple of years is consistent with a pick-up in dividend payments to non-residents because revenues in the largely foreign-owned mining sector have increased. ✖

Graph 2.25

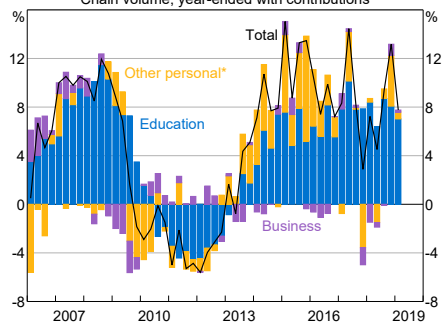
Rural Exports
Chain volume, quarterly



* Includes horticulture and dairy exports
Sources: ABS; RBA

Graph 2.26

Travel Service Exports Growth
Chain volume, year-ended with contributions

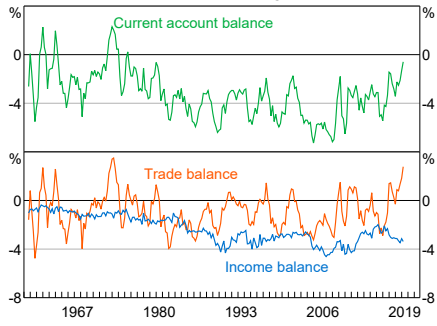


* Includes tourism
Sources: ABS; RBA

Graph 2.27

Current Account Balance

Per cent of nominal GDP



Sources: ABS; RBA

Box B

The Recent Increase in Iron Ore Prices and Implications for the Australian Economy

Iron ore prices have increased sharply in recent months

Developments in the global iron ore market are important for Australia's economy. Australia is the largest global producer and exporter of iron ore and in 2018 exported around 830 million tonnes of iron ore worth A\$63 billion. This accounted for around 15 per cent of total exports by value, and was equivalent to 3.3 per cent of nominal GDP.

Between late January and mid July the benchmark iron ore spot price increased significantly. Although this price has declined sharply in recent days as global trade tensions have escalated, it remains around 25 per cent higher than at the start of the year, and well above the levels of recent years (Graph B1). A key driver of the recent price increase has been a significant decline in iron ore production in Brazil, following a tailings dam collapse earlier this year and the subsequent closure of several mines. Brazil is the second-largest exporter of iron ore, and these closures sidelined around 6 per cent of global seaborne supply (Graph B2). While some production has come back online recently, market reports suggest that it could take two to three years for Brazilian exports to return to their former capacity.

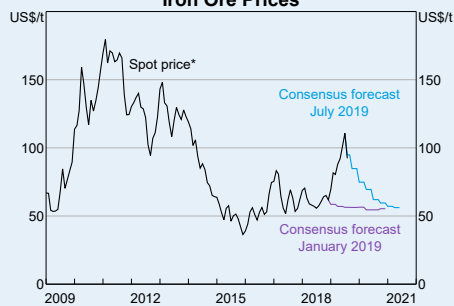
In recent months, shorter-term supply disruptions to Australian iron ore exports have also affected the global iron ore market. The most notable of these disruptions was Tropical Cyclone Veronica in late March, which reduced large firms' iron ore exports

from Western Australian ports by close to 25 million tonnes (around 3 per cent of Australia's annual export volumes).

Meanwhile, demand for iron ore has been strong in recent months as Chinese steel production has been increasing, supported by policy measures targeted at steel-intensive infrastructure projects. Although trade tensions are creating significant uncertainty for the global economic outlook,

Graph B1

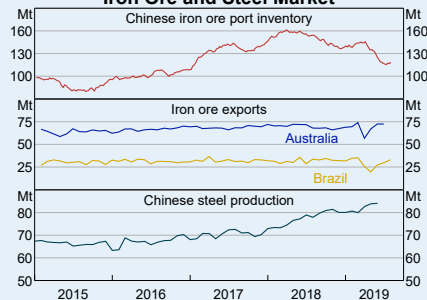
Iron Ore Prices



* 62% Fe Fines index; free on board basis; monthly average; actual prices received may vary based on product characteristics
Sources: Bloomberg; Consensus Economics

Graph B2

Iron Ore and Steel Market



Sources: ABS; Bloomberg; CEIC Data; RBA

Chinese policy measures are expected to continue to support demand for steel in the near term. Iron ore prices are therefore expected to remain elevated over the near term but to decline gradually over coming years as global supply increases and demand, particularly from China, slowly eases.^[1]

Higher prices are unlikely to see much lift in export volumes or investment in additional capacity ...

The recent strength in iron ore prices is not expected to drive much of a near-term increase in iron ore production in Australia, beyond what was already in train. Australian export volumes have recovered over the past few months as disruptions have been resolved, but production was already near full capacity before the disruptions, so volumes have little scope to increase much further in the near term (Graph B3). Some smaller producers could increase their exports, either through shipping stockpiled lower-grade ore or increasing production rates at existing operations, but available information suggests this might boost annual iron ore export volumes by only around 1 per cent.

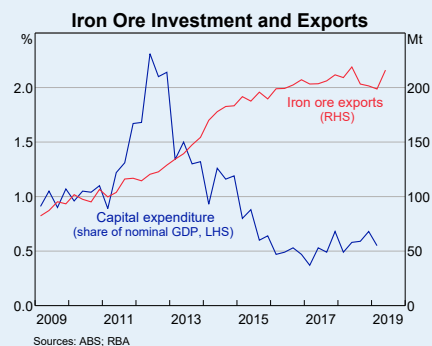
Because Brazilian production is expected to continue recovering, market participants expect that prices will ease further (Graph B1). The recent strength in prices is therefore not expected to spur additional investment in expanding production in Australia, given that such projects take several years to plan and build. While there is renewed interest in expansionary projects for very high grade (magnetite) ore, this appears to be driven primarily by expectations of strong future demand for such products rather than a response to the recent strength in prices.

However, iron ore mining firms continue to invest to sustain production levels, as part of their long-term plans.^[2] Over recent years Australian iron ore capital expenditure has averaged around 0.5 per cent of nominal GDP. Sustaining investment is expected to increase over the next few years as several large replacement iron ore mines are constructed in Western Australia. But the amount of investment expected over coming years is much lower than a decade ago, when iron ore production capacity expanded significantly in response to a large increase in global demand. During that period, investment in other parts of the resource sector also increased strongly, and there were large spillovers to the rest of the economy through employment, wages and non-mining activity more broadly.

... and the boost to incomes is likely to increase GDP growth only a little

While higher iron ore prices are therefore unlikely to have much *direct* effect on domestic mining sector activity, mining firms' profits could be significantly higher, which will have some *indirect* effects on the broader economy.

Graph B3



In the first instance, recent higher prices will boost state and federal government revenues, through mining royalties and company income tax payments, although these will be received with lags (ranging from a few months to over a year). Iron ore prices have followed a higher path than was expected at the time the 2019/20 state and federal budgets were prepared. The iron ore price was around US\$90 per tonne in May, and the federal budget assumed prices would decline to US\$65 per tonne by March quarter 2020. Since then, the iron ore price reached as high as US\$120 and, despite recent declines, is still around levels prevailing in early May. A period of higher-than-expected prices is likely to mean significantly more revenue being realised than was factored into the budget outlooks.^[3] Should the public sector spend some of this higher income on consumption or investment, or if it is distributed to and then spent by other sectors in the economy, this will boost GDP growth.

Stronger mining firm profits will also boost household sector incomes via shareholdings. Estimates suggest between a fifth and a quarter of the Australian iron ore mining industry is owned by the Australian household sector (either through direct holdings or via intermediaries such as superannuation funds), with most of the remainder owned by foreign investors.^[4] Market expectations and guidance from mining firms suggest that much of the increase in profits could be returned to shareholders. The distribution of higher

profits will increase household income, which in turn could be used for household consumption. A lift in household wealth because of higher mining company share prices may further support household consumption.

Higher iron ore prices are therefore likely to increase nominal incomes in the Australian economy for a period. Given the recent strength in prices, and assuming prices gradually decrease in line with the path suggested by market expectations, nominal household disposable income and government revenue combined could be around A\$5–10 billion higher each year on average over the next few years, relative to a scenario where prices had evolved as was expected in early 2019.

Focusing just on this flowthrough of higher prices to the household and public sectors, the effect on the economy could be fairly small.^[5] The effect would be a little larger if households or the public sector spent more of the extra income or if iron ore prices stayed higher for longer than currently expected, but smaller if the exchange rate appreciated in response to higher commodity prices. However, the ultimate effect on the economy is difficult to predict, given the uncertain outlook for iron ore prices and that, as other episodes of commodity price strength have demonstrated, higher prices and incomes could affect the economy through other channels. ❖

Endnotes

- [1] See also RBA (2017), 'Box A: The Chinese Steel Market and Demand for Bulk Commodities', *Statement on Monetary Policy*, November, viewed 7 August 2019. Available at

- <<https://www.rba.gov.au/publications/smp/2017/nov/box-a-the-chinese-steel-market-and-demand-for-bulk-commodities.html>>.
- [2] For more discussion of sustaining investment in the mining sector, see Jenner K, A Walker, C Close and T Saunders (2018), 'Mining Investment Beyond the Boom', *RBA Bulletin*, March, viewed 7 August 2019. Available at <<https://www.rba.gov.au/publications/bulletin/2018/mar/mining-investment-beyond-the-boom.html>>.
- [3] As an indication of the sensitivity of government revenue to the iron ore price, a US\$10 per tonne increase in prices would increase Western Australian Government royalty revenue by around \$0.8 billion per year, and would see Australian Government tax receipts grow to be around \$3.7 billion larger in 2020/21. See Western Australian Government Budget 2019/20 (Budget Paper 3, Chapter 3, Table 13) and Australian Government Budget 2019/20 (Budget Paper 1, Statement 7, Box 1).
- [4] Estimates of institutional sector and domicile are based on ABS financial accounts information and company reports. See, for instance, Arsov, I, B Shanahan and T Williams (2013), 'Funding the Australian Resources Investment Boom', *RBA Bulletin*, March, viewed 7 August 2019. Available at <<https://www.rba.gov.au/publications/bulletin/2013/mar/6.html>>.
- [5] Using the Bank's MARTIN model to explore a range of scenarios for the path of the iron ore price and for income and spending, the boost in income might increase year-ended growth in GDP by an average of around 0.1 percentage points a year over the period to the end of 2021. For a discussion of the Bank's macroeconomic model, see Cusbert T and E Kendall (2018), 'Meet MARTIN, the RBA's New Macroeconomic Model', *RBA Bulletin*, March, viewed 7 August 2019. Available at <<https://www.rba.gov.au/publications/bulletin/2018/mar/meet-martin-the-rbas-new-macroeconomic-model.html>>.

3. Domestic Financial Conditions

Domestic financial conditions are accommodative for most households and large businesses, and have become increasingly so following the reductions in the cash rate in June and July. Financial market prices imply that market participants expect the cash rate to be reduced by a further 25 basis points later this year. Government and corporate bond yields have continued to decline over 2019 across all maturities to be at historic lows. Banks' funding costs also declined to historically low levels. Notwithstanding recent declines, Australian equity prices have risen across all sectors since the start of the year. The value of the Australian dollar is at its lowest level in some time.

Banks have passed through most of the reductions in the cash rate to housing interest rates and to retail deposit rates. Both housing loan and deposit rates are very low by historical standards, as are rates on business loans. Growth in housing credit continued to decline, largely reflecting weaker demand for housing over the past year. However, there was a rise in housing loan approvals in the month of June, consistent with improvement in other indicators of housing market conditions. Meanwhile, growth in business debt remains higher than the average of recent years. However, this has been driven entirely by lending to large businesses, whereas access to funding for small businesses has tightened further over the past year or so.

Investors expect a further reduction in the cash rate later this year

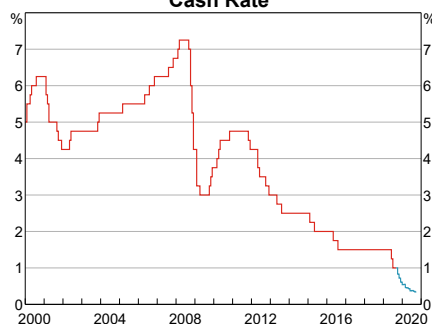
The cash rate target stands at 1.0 per cent, following two 25 basis point reductions at the June and July Board meetings. Financial market prices imply that participants expect the cash rate to be lowered by a further 25 basis points later in 2019 (Graph 3.1).

Government bond yields have continued to decline

Yields on Australian Government Securities (AGS) have declined over 2019 across all maturities, with 10-year AGS yields reaching a historic low of around 1 per cent (Graph 3.2). In recent months this has reflected expectations for an easing of monetary policy, and was broadly in line with changes in yields on government securities in a number of advanced economies; weaker-than-expected domestic data also contributed. The spread between US

Graph 3.1

Cash Rate*



* Data from September onwards are expectations derived from interbank cash rate futures

Sources: ASX; Bloomberg

Treasury and AGS yields has stabilised, with the AGS 10-year yield around 75 basis points below the 10-year US Treasury yield. AGS yields for even longer maturities have also declined over 2019. The yield on the longest AGS (maturing in March 2047) has declined by around 110 basis points over 2019, to be below 1.70 per cent.

Short-term money market spreads have narrowed a little further

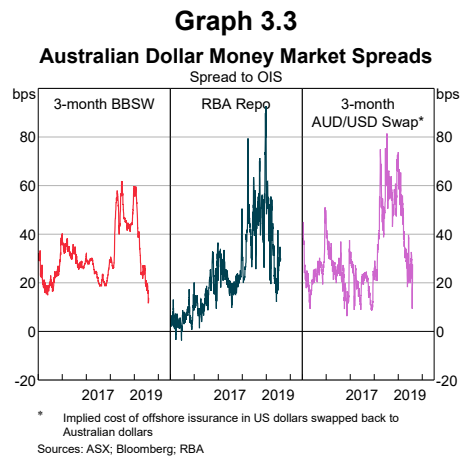
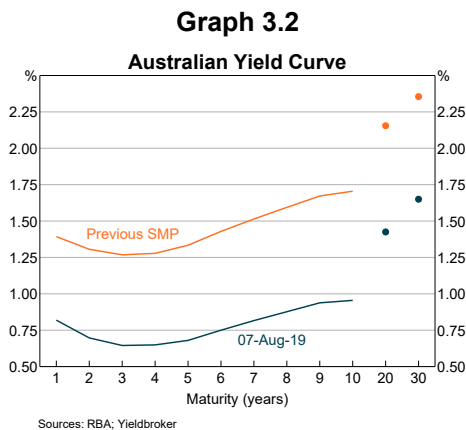
After declining over the first quarter of this year, spreads of interest rates to overnight indexed swaps (OIS) in the markets for bank bills and foreign exchange (FX) swaps declined a little further in recent months. The spread of 3-month bank bills relative to OIS moved lower over the June quarter, to be around 15 basis points, which is around its lowest level in the past 5 years (Graph 3.3). Similarly, the cost of raising US dollar funding and then converting these funds into Australian dollars for a short term in the FX swap market declined a little relative to OIS over recent months. Repurchase agreement (repo) rates were little changed relative to OIS overall in recent months. The cash rate continued to trade at the Reserve Bank Board's target.

Banks' senior bond issuance has slowed ...

Australian banks have issued bonds at a slower pace than in previous years, with around \$60 billion of bonds issued in the first seven months of 2019 (Graph 3.4). Given that the volume of scheduled maturities is higher than gross issuance, this means that net issuance is negative. The decline in net issuance is consistent with lower funding needs due to slower asset growth. In July, the Australian Prudential Regulation Authority (APRA) announced that it would require major banks to increase their total capital by 3 percentage points by January 2024. It is likely that this additional capital will be sourced from issuance of Tier 2 hybrid instruments. Hybrid securities have both equity and debt features and can be used to fulfil a part of regulatory capital requirements. Because this capital represents an additional source of bank funding, this requirement is also likely to reduce the need for banks to issue senior unsecured debt for a time.

... while RMBS issuance increased in the June quarter

Issuance of residential mortgage-backed securities (RMBS) increased strongly in the June quarter to its highest level since the global



financial crisis (Graph 3.5). The increase was driven by non-authorized deposit-taking institutions (non-ADIs) and non-major banks; this reflects the strong credit growth in 2018 by non-ADIs (who are largely funded via securitisations).

Banks' funding costs continued to decline to new historical lows

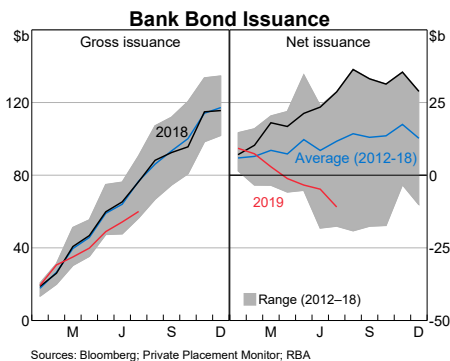
Banks' funding costs are at a very low level, reflecting both low wholesale funding costs – including as a result of decreases in bank bill swap (BBSW) rates – and low deposit rates. Bank bond yields have declined since the start of 2019, in line with declines in other market rates. The spreads of major bank bond

yields to reference rates also declined over the first half of the year (Graph 3.6).

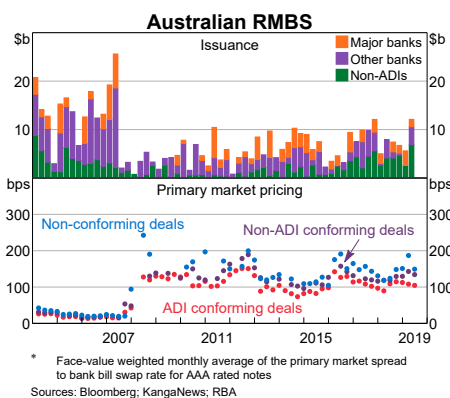
Banks passed through most of the cash rate cuts to retail deposit rates

Over recent months, banks lowered the interest rates on a large share of the value of their retail deposits (which account for one-third of debt funding) (Graph 3.7). As is typical, however, the interest rates on transaction accounts (which are close to zero) did not change following the reductions in the cash rate. Other at-call deposit rates are estimated to have decreased by 40 to 45 basis points. A number of banks also reduced their interest rates on term deposits by around 20 to 60 basis points over recent months.

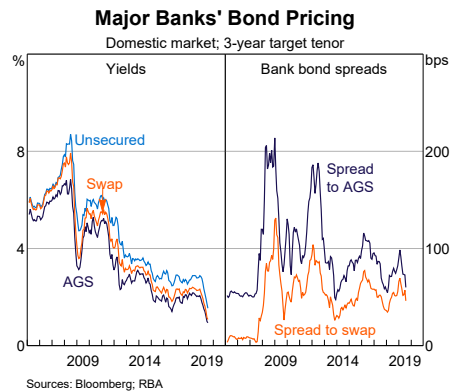
Graph 3.4



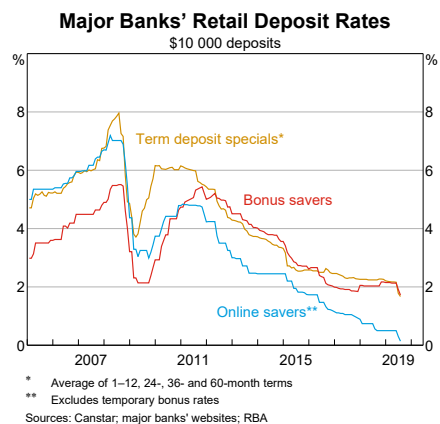
Graph 3.5



Graph 3.6



Graph 3.7



Prior to the most recent reduction in the cash rate in July, the major banks reported in June that they paid no interest on just under 10 per cent of the value of their (retail and wholesale) deposits (Graph 3.8). This share is estimated to have increased only marginally since February. The share of deposits that paid some interest, but less than 50 basis points, was also a little under 10 per cent in June (up from around 5 per cent of deposits in February).

Lenders passed through most of the cash rate cuts to housing interest rates

Following the reductions in the cash rate, lenders reduced their standard variable rates (SVRs) on housing loans by an average of 44 basis points (23 basis points in June and 21 basis points in July). The extent of pass-through was similar across different types of banks.

The average interest rate paid on outstanding variable-rate loans in the Securitisation Dataset decreased by 23 basis points in June, the same as the average reduction in SVRs announced by the banks (Graph 3.9 and Graph 3.10). Moreover, preliminary data suggest that actual rates paid on new loans decreased by more than the SVR decreases in the June quarter for some banks.

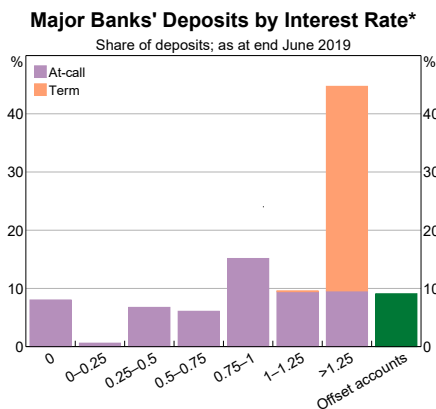
The average outstanding interest rate paid had already been drifting lower over the eight months before June, reflecting the fact that interest rates on new loans remain well below those on outstanding loans and existing customers have been refinancing at these lower rates. In addition, customers have been continuing to switch from interest-only to principal-and-interest loans with lower interest rates. Consistent with this, liaison with the major banks, mortgage brokers and non-ADI lenders indicates that competition for high-quality borrowers remains strong.

Interest rates on fixed-rate housing loans also continued to decline. Advertised fixed rates have fallen substantially over the past year. This is consistent with lower interest rate swap rates, which are often used as a pricing benchmark.

Credit growth slowed across all components

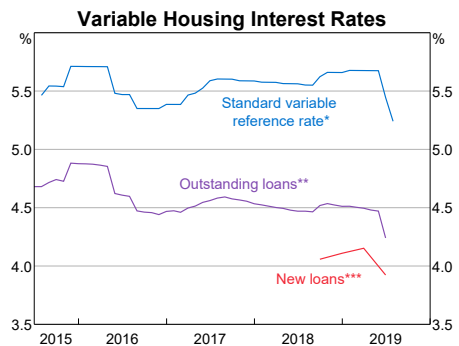
Total credit growth slowed to 2¼ per cent on a six-month-ended annualised basis in June (Graph 3.11 and Table 3.1). This was driven by a slowing in housing and business credit growth, although growth of a broader measure of business debt has been stable over the course of this year.

Graph 3.8



* Interest rates were estimated as weighted average rates for various deposit product types by depositor type
Sources: Major banks; RBA

Graph 3.9



* Average across major banks' rates; data to July
** Data from the Securitisation Dataset, re-weighted using housing credit shares; data to June
*** Average new variable lending rates based on APRA quarterly data; data to June; latest observation preliminary
Sources: APRA; major banks' websites; RBA; Securitisation System

Table 3.1: Financial Aggregates

Percentage change^(a)

	Three-month-ended annualised		Six-month-ended annualised	
	Mar 2019	Jun 2019	Dec 2018	Jun 2019
Total credit	3.1	1.4	4.3	2.2
– Housing	3.1	2.7	4.1	2.9
– Owner-occupier housing	4.4	4.1	5.6	4.2
– Investor housing	0.3	-0.2	1.0	0.0
– Personal	-3.9	-4.4	-2.8	-4.1
– Business	4.4	-0.2	6.1	2.1
Broad money	9.9	1.9	2.2	5.8

(a) Seasonally-adjusted and break-adjusted

Sources: ABS; APRA; RBA

From the July 2019 release onwards, the financial aggregates published by the Reserve Bank will incorporate an improved conceptual framework and a new data collection. The changes are likely to result in revisions, some of which may be significant. For further information about the upcoming changes and the new data collection, see Updates to Australia's Financial Aggregates.

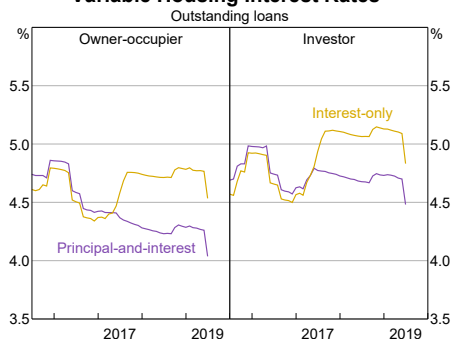
Housing credit extended to owner-occupiers grew by around 4¼ per cent on a six-month-ended annualised basis over the first half of 2019, down from its recent peak of 10 per cent in 2016 (Graph 3.12). Loan approvals to owner-

occupiers picked up in June but were little changed in the first half of 2019, after declining from their 2017 peak (Graph 3.13).

Housing credit for investors was unchanged over the past six months. Credit extended by the major banks to investors has contracted since mid 2018. Investor credit extended by other financial institutions has been a little stronger and has offset the reduction of investor lending by the major banks in recent months. Loan approvals to investors have declined for the past two years, to be around 50 per cent below their

Graph 3.10

Variable Housing Interest Rates*

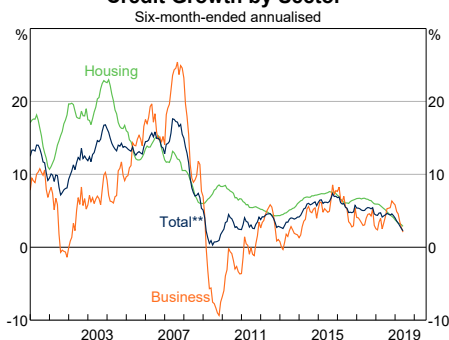


* Average of securitised loans, re-weighted using housing credit shares; data to June

Sources: RBA; Securitisation System

Graph 3.11

Credit Growth by Sector*



* Seasonally adjusted and break-adjusted; including securitisation

** Includes housing, personal and business credit

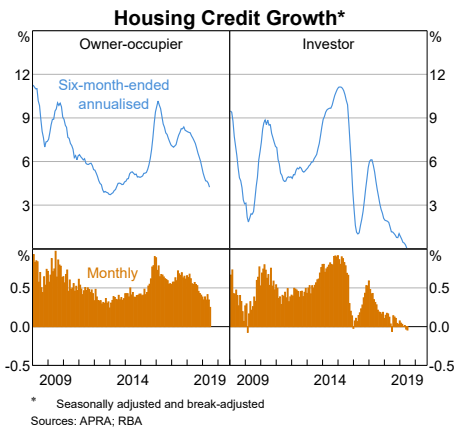
Sources: ABS; APRA; RBA

level in early 2017, although they, too, increased slightly in June.

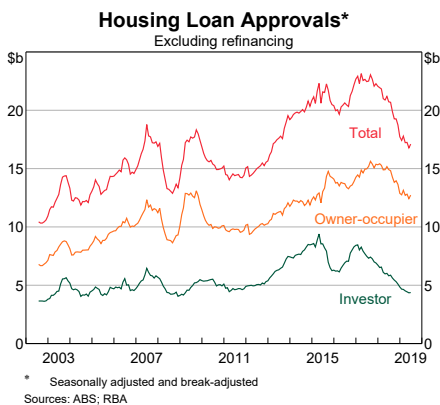
Demand for housing credit remains weak ...

The soft conditions in the housing market have contributed to the slowing in housing credit growth over the past couple of years. The declines in housing prices and the associated reduction in housing turnover have reduced the demand for credit, particularly from investors, who are especially sensitive to expectations of capital losses. Liaison with mortgage brokers, banks and non-ADIs suggests that housing loan applications are well down over the past year.

Graph 3.12



Graph 3.13



However, consistent with the increase in loan approvals in June, in liaison some lenders have reported tentative signs of a pick-up in applications since May.

... and banks' assessment of mortgage applications continues to evolve

Housing credit conditions tightened following the strengthening of lending policies and practices over recent years. These changes reduced the maximum loan size available to many households, though only a small share of households borrow close to the maximum amount that they are offered. One way in which banks improved their processes for assessing mortgages has been the more thorough verification of expenses in loan applications. In liaison, the banks indicated that they have recently made this process more efficient, following an increase last year in the time it took to approve loans. The banks also noted that the rates of loan applications that are approved were little changed at high levels and that over the past year, households' maximum borrowing capacity has not changed materially.

Banks are continuing to make a number of changes to the way that they assess serviceability. Comprehensive credit reporting (CCR) is being expanded from consumer credit to mortgages. In liaison, the banks indicated that CCR is not expected to have a significant effect on the supply of credit. The income and expenses verification process should already be picking up existing mortgages through examination of bank statements and the banks have found little deliberate misreporting so far. APRA has amended its guidance to ADIs on the interest rates they use in serviceability assessments for residential mortgage applications.^[1] ADIs now use the higher of an interest-rate floor they set themselves and an interest rate that is a minimum 2.5 percentage points over a loan's actual interest rate.

Previously, ADIs were required to use the higher of interest rates comfortably above a floor of 7 per cent and a 2 percentage point buffer over a loan's interest rate (in practice, ADIs were using the higher of 7.25 per cent or a 2.25 percentage point buffer). ADIs have announced interest-rate floors of around 5¼ to 5¾ per cent. These changes will have different effects on different borrowers. They will generally result in an increase in borrowing capacity for borrowers eligible for lower-rate loans, such as owner-occupier principal-and-interest loans. By contrast, there would be little change, or even a small tightening, in borrowing capacity for borrowers that pay higher interest rates, which is more typical of investors with interest-only loans.

Large businesses' funding conditions remain accommodative ...

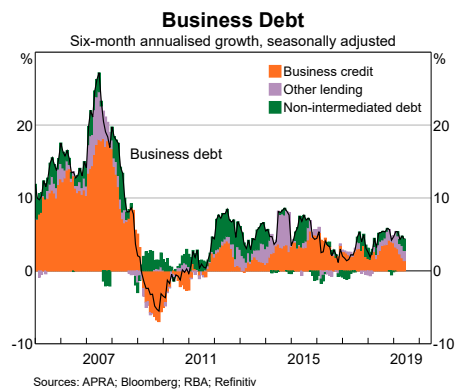
Growth in business borrowing has been little changed at a relatively strong pace over 2019, although the composition of this borrowing has changed. A pick-up in growth in borrowing through bond issuance and continued growth in borrowing through syndicated lending has offset slower growth in borrowing from ADIs (that is, business credit) (Graph 3.14). The slowing in growth in business credit over the past six months was driven by a decline in credit extended by the major banks and slower growth in credit extended by the foreign banks (Graph 3.15). Lending to large businesses accounted for all of the growth in business credit over the past year or so; lending to small businesses declined over this period.

Over the past few months, business loan approvals picked up, retracing much of their decrease earlier in the year. This reflects an increase in loan approvals for commercial property and across a range of other industries including manufacturing, property & business services and transportation & storage. By contrast, loan approvals for residential property

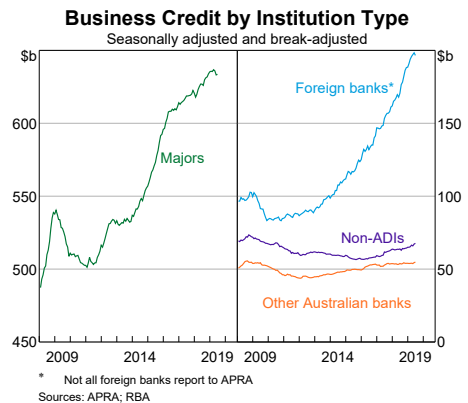
are around 40 per cent lower than their peak in 2016, reflecting a decrease in approvals for both the purchase and construction of residential property.

As noted above, a pick-up in business borrowing through bond issuance in 2019 has offset the slowing growth in business borrowing from banks. The pace of bond issuance by non-financial corporations continued to increase in the June quarter (Graph 3.16). Issuance by companies in the infrastructure sector has driven non-resource related bond issuance. Secondary market yields continued to decline, further easing funding conditions for large corporations.

Graph 3.14



Graph 3.15



... while small businesses' access to funding remains difficult

Lending to small businesses declined over the past year. Small businesses also reported in surveys that they are finding it difficult to obtain finance. In July, the Reserve Bank hosted the 27th Small Business Finance Advisory Panel, which provided valuable information on the financial conditions facing small businesses throughout Australia.^[2] The panellists indicated that banks' heightened verification of expenses and income has made it more difficult to access finance. This is consistent with liaison with banks that suggests that the verification process for lending to consumers (including lending for housing) has been extended to many small businesses. While the Australian Securities and Investments Commission does not require consumer responsible lending obligations to be applied to business lending, the distinction between business and personal borrowing for small businesses is often unclear. Relatedly, the panellists suggested that small businesses find that it has become increasingly difficult to provide the evidence required by banks that they can service a loan. The panellists noted that non-traditional sources of finance are being increasingly used by small businesses, but these sources are often expensive.

Interest rates on business loans are low

Interest rates on loans to large businesses – which tend to move with BBSW rates – are estimated to have declined over recent months (Graph 3.17). Large business interest rates are at low levels.

Lending rates on outstanding loans to small businesses decreased by around 20 basis points following the reduction in the cash rate in June (the latest data available). Small business lending rates are noticeably higher than interest rates for large businesses. This partly reflects the higher default rates associated with small business loans.

Australian equity prices have increased this year

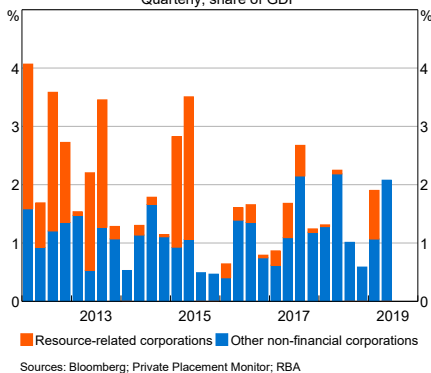
The ASX 200 is 20 per cent higher than its trough at the end of 2018, and has moved broadly in line with overseas markets since the beginning of the year (Graph 3.18). The ASX 200 reached a record high at the end of July, before uncertainty related to the US–China dispute led to some price falls.

Share prices across all industry sectors of the ASX 200 are materially higher than they were at the start of the year (Graph 3.19). Share prices of resources companies have been supported by higher iron ore prices. The industrials and

Graph 3.16

Australian Corporate Bond Issuance

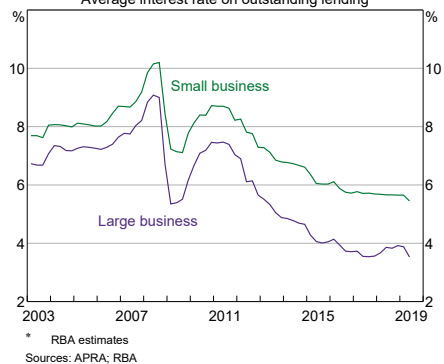
Quarterly; share of GDP



Graph 3.17

Variable Business Lending Rates*

Average interest rate on outstanding lending

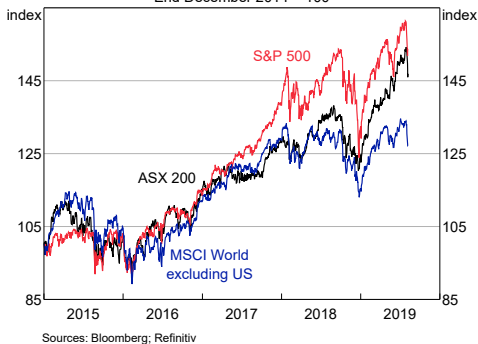


communications sectors have also performed strongly since the start of the year. Banks' share prices have risen this year but have underperformed the broader market, following weakness in global banking stocks and recent reductions in the official cash rate.

Analysts' forecast earnings for the broader share market were little changed overall in recent months. Earnings expectations for resources companies were revised up due to higher commodity prices, while earnings forecasts for most sectors outside of resources declined marginally. Consistent with earnings expectations, price-to-earnings ratios for resources ticked down slightly, while those of financials edged up (Graph 3.20). Ratios for other sectors remain elevated.

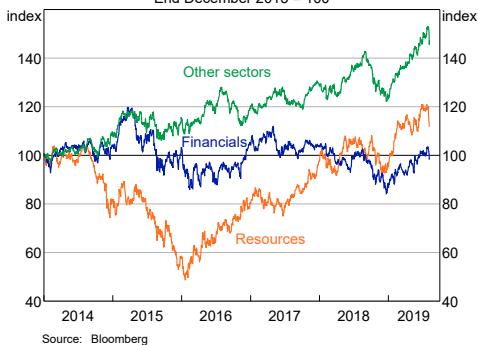
Graph 3.18

Total Return Indices
End December 2014 = 100



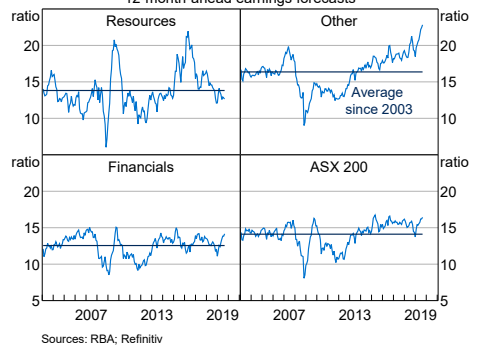
Graph 3.19

Australian Share Prices
End December 2013 = 100



Graph 3.20

ASX 200 Price-earnings Ratios
12-month-ahead earnings forecasts



The Australian dollar is at its lowest level in some years

Over the past year, the Australian dollar depreciated by about 7 per cent on a trade-weighted (TWI) basis to be at its lowest level in some time (Graph 3.21). Over this period, Australian Government bond yields declined further relative to those in major markets as market participants revised lower their expectations for monetary policy in Australia, and notwithstanding expectations of lower policy rates also in major economies. The RBA Index of Commodity Prices fell in recent weeks but is little changed over the past year. The net effect of these developments is consistent with the Australian dollar being around its lowest level for some time on a TWI basis.

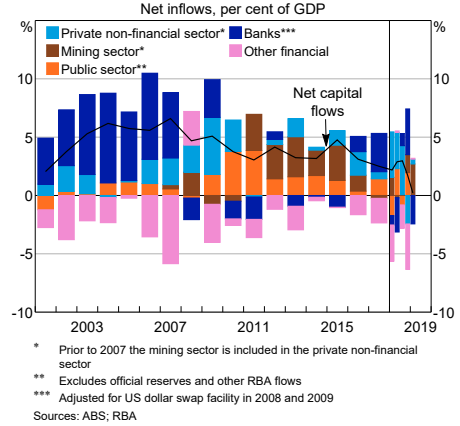
Net capital inflows to Australia declined in recent quarters, consistent with the decline in the current account deficit (Graph 3.22) (see 'Domestic Economic Conditions' chapter). At a sectoral level, there were increased flows of foreign investment to the non-mining corporate sector and a decline in flows to the mining sector in the past few years.

Australia's net foreign liability position declined as a share of GDP over recent years to be around its lowest level since 2002 (Graph 3.23). This reflected a decline in net capital inflows at a time when nominal output was growing. The

value of the net foreign liability position has been little changed since early 2016, as a modest increase in the value of net foreign long-term debt liabilities has been offset by an increase in Australia's net foreign equity asset position. This is consistent with the sizeable offshore equity holdings of the Australian superannuation sector, and foreign equities outperforming Australian equities over the past couple of years. ✨

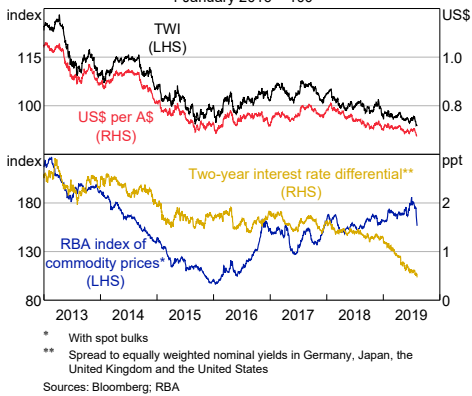
Graph 3.22

Australian Capital Flows



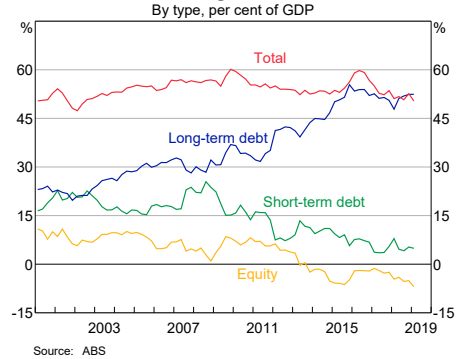
Graph 3.21

Australian Dollar
1 January 2016 = 100



Graph 3.23

Net Foreign Liabilities



Endnotes

- [1] See APRA (Australian Prudential Regulation Authority) (2019), 'APRA finalises amendments to guidance on residential mortgage lending', Media Release, 5 July. Available at <apra.gov.au/media-centre/media-releases/apra-finalises-amendments-guidance-residential-mortgage-lending>.
- [2] For information about the small business advisory panel see the Reserve Bank website at <https://www.rba.gov.au/about-rba/panels/small-business-finance-advisory-panel.html>.

4. Inflation

Inflation remains low

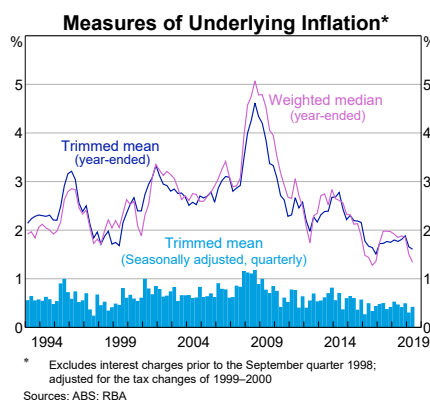
Trimmed mean inflation increased a little to 0.4 per cent in the June quarter but remained at 1.6 per cent over the year (Table 4.1; Graph 4.1). This was in line with the forecast in the *May Statement on Monetary Policy*. There has been some pass-through of the earlier exchange rate depreciation to retail prices, while the ongoing drought has boosted food inflation. However, housing-related inflation was particularly weak in the first half of 2019. Headline inflation increased to 0.7 per cent (seasonally adjusted) in the June quarter and 1.6 per cent over the year (Graph 4.2). Automotive fuel prices rose by 10 per cent in the quarter, while fruit prices declined.

Underlying inflation has been below 2 per cent for around three years. This reflects spare capacity in the economy and associated low wages growth. The slowing in the housing market, a decline in wholesale electricity prices and various government policy decisions have also put downward pressure on inflation over the past year. However, inflation also remains low in many advanced economies where unemployment rates are at multi-decade lows. This suggests there are common global factors also weighing on wage and price inflation. In particular, globalisation and advances in technology have both lowered the cost of production of goods and services, and led to increased competition.

Non-tradable inflation increased in the June quarter, but has slowed notably over the past year (Graph 4.3). The decline in year-ended non-

tradable inflation reflects a slowing in inflation in the prices of new dwellings and administered items, including utilities (Graph 4.4). Following several years of deflation, prices of tradable items (excluding volatile items) increased in the June quarter and over the year. This is consistent with some pass-through to retail prices from the

Graph 4.1



Graph 4.2

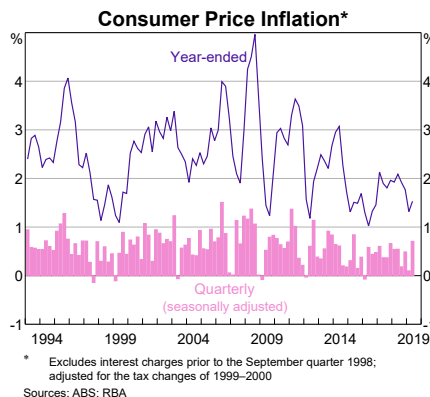


Table 4.1: Measures of Consumer Price Inflation

Per cent

	Quarterly ^(a)		Year-ended ^(b)	
	June quarter 2019	March quarter 2019	June quarter 2019	March quarter 2019
Consumer Price Index	0.6	0.0	1.6	1.3
Seasonally adjusted CPI	0.7	0.1	–	–
– Tradables	1.1	–0.2	1.1	0.4
– Tradables (excl volatile items) ^(c)	0.5	0.2	1.0	0.3
– Non-tradables	0.5	0.2	1.8	1.8
<i>Selected underlying measures</i>				
Trimmed mean	0.4	0.3	1.6	1.6
Weighted median	0.4	0.1	1.2	1.4
CPI excl volatile items ^(c)	0.5	0.3	1.5	1.3

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

(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

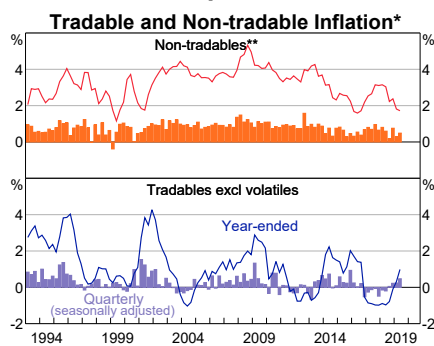
Sources: ABS; RBA

exchange rate depreciation. Grocery food (excluding fruit & vegetables) inflation is higher than a year ago because of the ongoing drought conditions in eastern Australia and adverse weather in some other parts of Australia.

Conditions in housing markets have weighed on inflation ...

The two largest housing components of the CPI basket are rents and new dwelling purchases by owner-occupiers, which together account for around one-sixth of the CPI basket. Inflation in

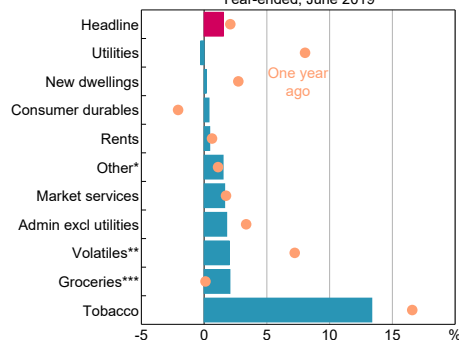
Graph 4.3



* Adjusted for the tax changes of 1999–2000
 ** Excludes interest charges and indirect deposit & loan facilities
 Sources: ABS; RBA

Graph 4.4

Inflation by Component
 Year-ended, June 2019



* Includes alcoholic beverages, travel, telecommunications and pet products
 ** Includes fruit, vegetables and automotive fuel
 *** Excludes alcoholic beverages, fruit, vegetables, meals out and takeaway
 Sources: ABS; RBA

these components remains around historical lows (Graph 4.5).

Rent inflation has been low over the past few years because the effect of strong population growth has been offset by large additions to the stock of housing. Rents were unchanged in the June quarter, although conditions in rental markets continue to vary noticeably across capital cities (Graph 4.6). In Sydney, rent inflation has continued to slow, consistent with a sharp increase in the vacancy rate and a decline in newly advertised rents over the past year. Perth rents have fallen by 22 per cent since 2014, although the pace of decline has eased gradually. This is consistent with an increase in Perth's newly advertised rents and a decline in the vacancy rate. Rents have been little changed in Brisbane for some years, while Melbourne rents continue to increase at a modest rate because a substantial increase in new housing supply has been largely absorbed by relatively strong population growth. Hobart rents have increased by more than 5 per cent over the past year.

Prices of newly built dwellings declined again by 0.2 per cent in the quarter. In year-ended terms, new dwelling inflation is at its lowest rate since it was included in the CPI in 1998 (Graph 4.7). Information from liaison suggests that bonus

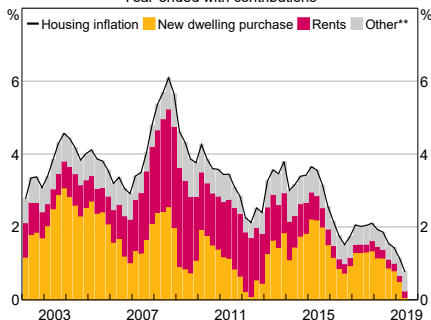
offers and purchase incentives for new detached dwellings were widespread in the June quarter in several cities. These incentives typically take the form of including appliances at no charge or direct 'cash-back' offers, which reduce the measured price of the dwelling. Liaison reports suggest that competition from infrastructure projects has put upward pressure on material prices and construction wages in Sydney, although this pressure has eased somewhat over the past year. Consistent with these reports, new dwelling inflation remains relatively strong in Sydney in contrast to Melbourne, Brisbane and Adelaide, where prices for new dwellings have declined over the past year. New dwelling prices in Perth have steadied in recent quarters following three years of deflation.

... while government pricing decisions have also lowered inflation

Utilities prices are little changed compared to a year ago (Graph 4.8). In the June quarter, utilities prices declined a little in non-seasonally adjusted terms owing to declines in market offer electricity prices in some capital cities. Gas prices were generally unchanged across all capital cities in the June quarter. More broadly, electricity and gas inflation has eased notably since 2018 as the earlier strong increases in

Graph 4.5

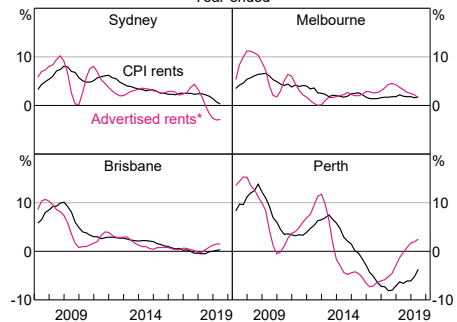
Housing Inflation*
Year-ended with contributions



* Excludes utilities
** Includes dwelling maintenance and property rates & charges
Sources: ABS; RBA

Graph 4.6

Rent Inflation
Year-ended



* Hedonic three-month average
Sources: ABS; CoreLogic; RBA

wholesale electricity and gas prices have passed through.

Electricity prices are expected to decline in the September quarter owing to the introduction of the Default Market Offer and the Victorian Default Offer. The Default Market Offer places a cap on standing offer electricity prices in New South Wales, South Australia and southern Queensland. This cap has been set at the mid-point between the median market offer and the median standing offer in each electricity distribution zone. Because market offers are usually cheaper than standing offers, the cap is likely to result in lower average electricity prices in those states. In Victoria, all standing offer electricity customers have been moved onto the Victorian Default Offer, which has been set below the median standing offer price in each zone.

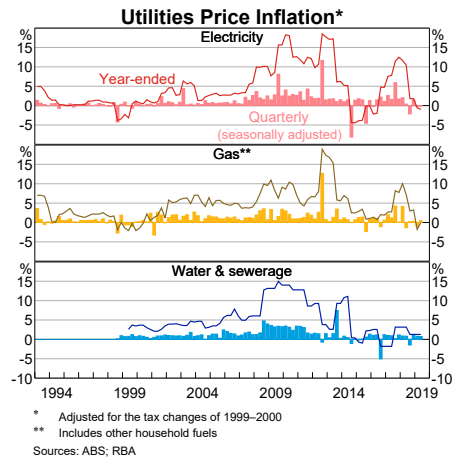
Inflation in the prices of other administered items declined a little in the June quarter and is now at its lowest since 1999 (Graph 4.9). Health inflation declined in the quarter, driven by the smallest increase in private health insurance premiums since 2001. The decline in administered price inflation over the past year reflects several government pricing decisions, including lower-than-average increases in property rates, public transport fares and motor

vehicle-related charges, and the 2018 reforms to child care subsidies.

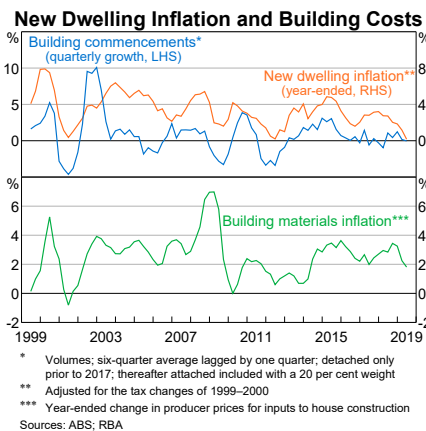
Market services inflation remains stable

Inflation in the prices of market services, which include hairdressing, financial services and meals out & takeaway, remains low (Graph 4.10). The prices of these services are generally driven by domestic factors such as commercial rents and labour costs. Commercial rents have increased relatively slowly over recent years. Labour cost growth has also been relatively low since 2013, but has picked up recently, putting some upward pressure on prices for market services.

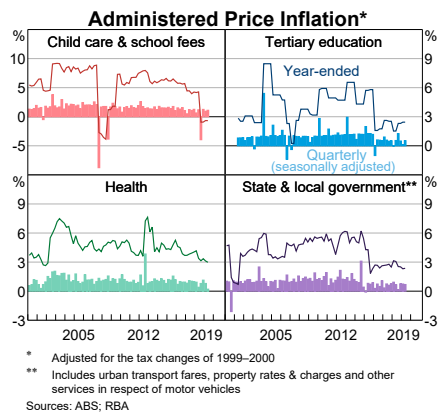
Graph 4.8



Graph 4.7



Graph 4.9



Higher import prices have put upward pressure on retail prices

Retail prices had been declining for a sustained period as a result of strong competition for market share among retailers. Liaison reports suggest that this competition is continuing to put downward pressure on most retail prices. In recent quarters, however, retail prices have increased modestly and are now 0.9 per cent higher over the year. This reflects the pass-through of the exchange rate depreciation to higher import prices (Graph 4.11). Within the category of consumer durable goods, year-ended motor vehicles inflation has increased to its highest level since 2002, and higher import prices have been passed through to consumer prices for clothing & footwear and several household goods. The timing of the effect of the depreciation on consumer prices is uncertain; liaison reports suggest that most large retailers hedge their exchange rate exposure around 6–12 months in advance.

Grocery price inflation remains elevated due to adverse weather

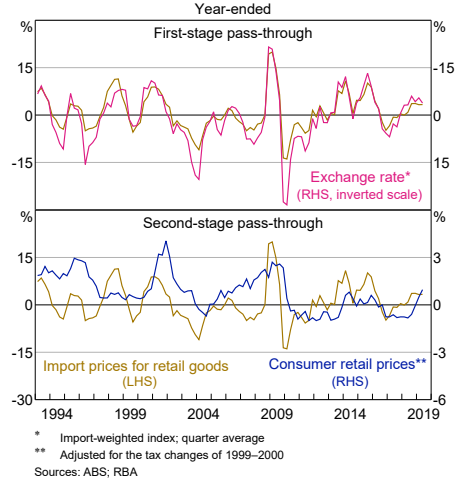
Grocery price inflation moderated in the June quarter but remains higher than one year ago (Graph 4.12). Drought-related supply disruptions have put upward pressure on food prices over

the past year, particularly bread (through higher grain input costs) and meat (through higher wholesale prices). Strong international demand, particularly for lamb and beef, has also put upward pressure on meat prices over the past year. Milk prices increased in the June quarter following decisions by major supermarkets to raise private-label milk prices.

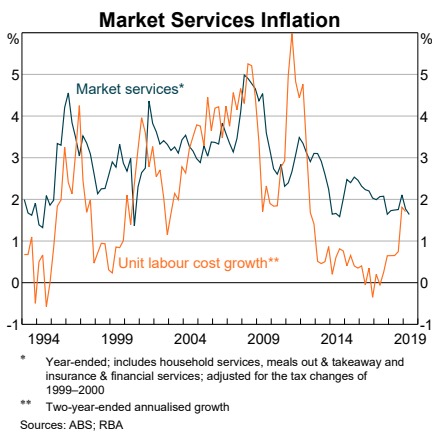
Some measures of inflation expectations have declined a little

Wage- and price-setting behaviour can be affected by expectations about the future rate of

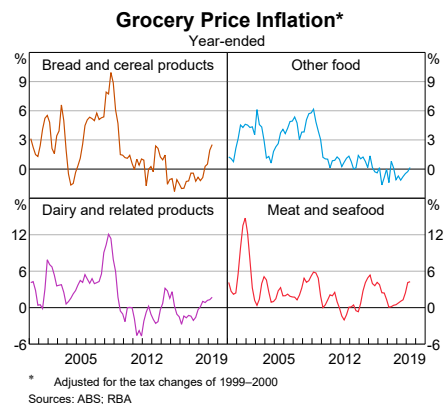
Graph 4.11
Retail Prices and the Exchange Rate



Graph 4.10



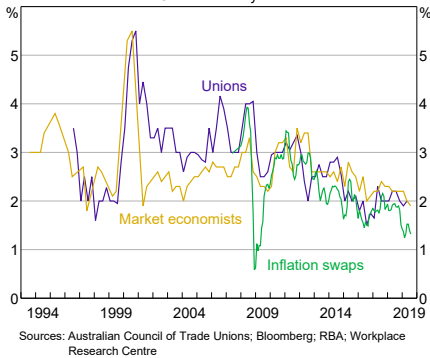
Graph 4.12



inflation. Short-term market-based measures of inflation expectations remain low (Graph 4.13). Long-term market-based measures of inflation expectations have continued to decline and are now at their lowest since 1992 (Graph 4.14). Similar declines have also occurred in other advanced economies this year and reflect unusually low perceived uncertainty about future inflation outcomes. Survey-based measures of inflation expectations have eased slightly or been little changed over recent months. However, they remain consistent with the Bank's medium-term inflation target.

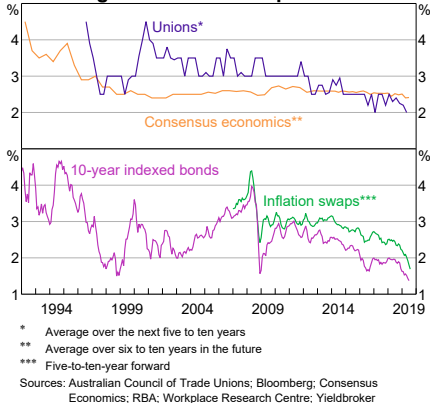
Graph 4.13

Short-term Inflation Expectations
Over the next year



Graph 4.14

Long-term Inflation Expectations



Wages growth remains low

Growth in wages has picked up a little, but remains modest (Graph 4.15). The low rate of wages growth reflects a number of factors. There is still considerable spare capacity in the labour market despite strong employment growth over the past year or so. The adjustment to the end of the mining investment boom has led to a prolonged period of relatively weak wages growth in mining-exposed states and industries, although this effect has largely dissipated. Government policies have also kept public sector wages growth stable at around 2½ per cent over the past few years. There are a number of other potential explanations for low wages growth, both in Australia and globally, including low productivity growth, and the effect of technological change and globalisation on workers' perceived bargaining power.^[1] It is difficult to know how persistent or important these structural factors are, although wages growth has increased over the past year in other advanced economies, where labour markets are very tight.

Growth in the Wage Price Index (WPI) was broadly steady in the March quarter at 0.5 per cent to be 2.3 per cent higher over the year. Year-ended wages growth in the private sector increased to 2.4 per cent, which is its

Graph 4.15

Wages Growth
Year-ended



fastest pace in four years. There has been a more noticeable pick-up in wages growth in industries where wages are more sensitive to labour market conditions and where workers tend to be on individual agreements.^[2] This includes the professional, scientific & technical services and mining industries (Graph 4.16)

The Fair Work Commission increased federal awards and the national minimum wage by 3 per cent on 1 July, which followed an increase of 3.5 per cent in the previous year. These recent increases have supported wages growth at the lower end of the skill distribution and for those that are employed on a casual basis, given the prevalence of award-reliant jobs in these parts of the labour market. The share of employees that are award-reliant is around 20 per cent, although there will also be some pass-through to wage decisions that are in some way linked to awards.

Wages growth in enterprise bargaining agreements (EBAs) has been relatively steady at a low level in recent years. This reflects that public sector workers account for around two-thirds of EBA employees and government policies have been in place in many jurisdictions to keep public sector wages growth steady at around 2½ per cent in recent years. There are some clear differences across the public sector (Graph 4.17). Wages growth for the Western

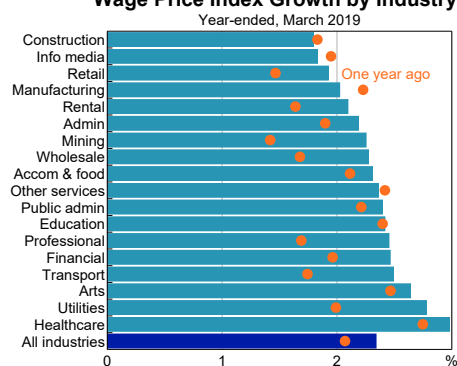
Australian public sector has generally been the lowest across state governments in recent years following a period of above-average growth during the mining boom, while Victorian public sector wages growth has been relatively strong in recent years with many workers receiving wage increases of around 3 per cent. Average wages growth for Commonwealth Government jobs has increased following a period where protracted EBA negotiations led to widespread wage freezes. Within the private sector, several large retailers have recently signed new EBAs after a lengthy period of renegotiation, during which employee wages were frozen. This should boost average wages growth in the retail industry in the near term.

Firms' expectations of wages growth have stabilised

Union and consumer expectations of wages growth over the next year have declined (Graph 4.18). An increasing share of firms in the RBA's liaison program expect wages growth to be broadly stable at current levels over the next year. The share of firms expecting stronger growth in the year ahead is similar to the share of firms expecting weaker wages growth. Around 60 per cent of firms in the NAB quarterly survey report that the availability of labour is

Graph 4.16

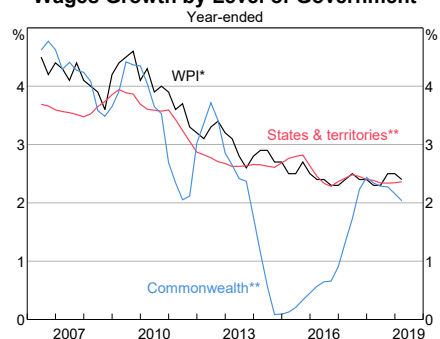
Wage Price Index Growth by Industry*



* Excluding bonuses and commissions; non-seasonally adjusted
Source: ABS

Graph 4.17

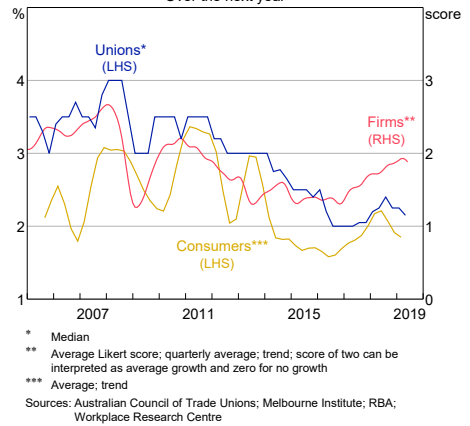
Wages Growth by Level of Government



* Public; excluding bonuses
** RBA estimates based on publicly available EBA data; states and territories weighted by number of employees
Sources: ABS; RBA

either a minor or major constraint on their business, while job vacancies remain at a very high share of the labour force. However, there is little evidence that these perceived shortages have translated into broader wage pressures, with reports from liaison that businesses are using non-wage incentives such as flexible work arrangements to attract and retain staff. 🗨️

Graph 4.18
Short-term Wages Growth Expectations
 Over the next year



Endnotes

[1] These potential explanations were discussed at the recent RBA conference on ‘Low Wage Growth’. For more information, see RBA (2019), *Low Wage Growth*, Proceeding of a Conference, Reserve Bank of Australia. Available at <<https://www.rba.gov.au/publications/confs/2019/>>

[2] For more information on how wages growth dynamics can differ across different pay-setting methods, see Bishop J and N Cassidy (2019), ‘Wages Growth by Pay-setting Method’, RBA *Bulletin*, June. Available at <<https://www.rba.gov.au/publications/bulletin/2019/jun/wages-growth-by-pay-setting-method.html>>

5. Economic Outlook

Domestic economic growth in the first half of the year was a little lower than expected at the time of the *May Statement*. As a result, the forecast for GDP growth over 2019 has been revised down. Further out, expectations for growth are marginally higher. Following the recent data, the unemployment rate is now expected to be a little higher than previously forecast over the next couple of years, and forecasts for inflation have been revised lower. In summary, year-ended GDP growth is expected to be 2½ per cent over 2019, 2¾ per cent over 2020 and around 3 per cent over 2021. The unemployment rate is expected to remain around 5¼ per cent for some time, before gradually declining to around 5 per cent as GDP growth picks up. Underlying inflation is forecast to pick up to a little above 2 per cent over 2021.

Growth in Australia's major trading partners has eased since mid 2018 but it remains reasonable. The forecast for growth in this group of economies has been revised a little lower since the *May Statement* because of the escalation in the US–China trade and technology dispute and the related weakness in investment indicators in a number of economies. Major trading partners' growth is expected to be around 3¾ per cent over the forecast period, which is noticeably lower than 2017 and 2018.

There are a number of global and domestic uncertainties around the forecasts. The potential for a further escalation in trade and technology tensions has increased the downside risk to the global growth outlook. The Chinese authorities continue to face a number of policy trade-offs

and uncertainties remain about how they will be resolved. Accommodative global financial conditions may support growth more than expected, although potential also exists for a tightening in financial conditions that would lower growth.

Domestically, the near-term risks to growth are more to the downside. Some leading indicators suggest that employment growth could moderate by more than forecast, which could lead to lower than expected growth in household incomes and consumption. Conditions in the earlier stages of residential development remain weak, which raises the risk that dwelling investment will decline by more than currently forecast.

In the medium term, however, there are a number of upside risks that contribute to a more balanced outlook. In particular, the housing market appears to have stabilised sooner than previously expected which, combined with the impact of lower interest rates and tax cuts, raises the possibility that consumption and dwelling investment could contribute more to growth towards the end of the forecast period than previously expected. There are also a number of upside risks to the forecasts for mining activity towards the end of the forecast period.

Domestic growth is expected to strengthen

Australian GDP growth in the March quarter was a little lower than expected (Table 5.1). Private-sector demand has been weak since the middle

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

Per cent

	Year-ended					
	June 2019	Dec 2019	June 2020	Dec 2020	June 2021	Dec 2021
GDP growth	1¾	2½	2¾	2¾	3	3
(previous)	(1¾)	(2¾)	(2¾)	(2¾)	(2¾)	(n/a)
Unemployment rate ^(b)	5.2	5¼	5¼	5¼	5	5
(previous)	(5)	(5)	(5)	(5)	(4¾)	(n/a)
CPI inflation	1.6	1¾	1¾	1¾	2	2
(previous)	(1¾)	(2)	(2)	(2)	(2)	(n/a)
Trimmed mean inflation	1.6	1½	1¾	1¾	2	2
(previous)	(1½)	(1¾)	2	2	2	(n/a)
Year-average						
	2018/19	2019	2019/20	2020	2020/21	2021
GDP growth	2¼	2	2½	2¾	3	3
(previous)	(2¼)	(2)	(2½)	(2¾)	(2¾)	(n/a)

(a) Technical assumptions set on 7 August include the cash rate moving in line with market pricing, TWI at 59, A\$ at US\$0.68 and Brent crude oil price at US\$58 per barrel; shaded regions are historical data; figures in parentheses show the corresponding forecasts in the May 2019 Statement

(b) Average rate in the quarter

Sources: ABS; RBA

of 2018, mainly because consumption growth has been weighed down by an extended period of low growth in household income and weak conditions in the housing market. Dwelling investment has also declined. Some of the other contributors to the slow growth in the domestic economy in recent quarters, particularly slower mining activity, were transitory. Partial indicators point to reasonable GDP growth in the June quarter.

Year-ended growth is expected to be 2½ per cent over 2019, 2¾ per cent over 2020 and around 3 per cent over 2021, supported by accommodative monetary policy and some recovery in household income growth, boosted by tax cuts. The outlook for consumption growth continues to be one of the important sources of uncertainty for the domestic growth forecasts, although the risks in the medium term are more balanced than they have been for some time. Growth in consumption is expected

to increase gradually alongside an increase in household disposable income growth. The signs of stabilisation in the housing market reduce one possible source of downside risk to consumption growth and could provide some upside risk towards the end of the forecast horizon. Dwelling investment is expected to subtract from GDP growth for several quarters, though the drag on growth is expected to diminish by late 2020. Public demand and non-mining business investment are expected to continue supporting growth over the forecast period, complemented by ongoing export growth. Mining investment is expected to turn around from being a drag on growth to making a material contribution over the latter part of the forecast period.

The domestic forecasts are conditioned on the technical assumption that the cash rate moves in line with market pricing. Current market pricing implies one 25 basis point cut in the cash

rate by the end of this year, to 0.75 per cent, and a further 25 basis point cut in the first half of 2020. This compares with market pricing for an ongoing cash rate at around 1 per cent at the time of the *May Statement*. The exchange rate is assumed to be constant at around 2 per cent below where it was at the time of the *May Statement*. The oil price is assumed to remain at the current level, which is about 15 per cent lower than at the time of the *May Statement*. The population aged 15 years and over is assumed to grow by 1.8 per cent per annum over 2019 and 2020 (up from 1.7 per cent at the *May Statement*) and by 1.7 per cent in 2021, which is unchanged compared with the assumption in May.

Consumption growth has been revised lower in the near term

Growth in consumption was a little lower than expected in the March quarter and recent partial indicators suggest this softness continued into the June quarter. As a result, year-ended growth in consumption is expected to slow to 1¼ per cent over the year to June 2019. Growth in consumption is expected to pick up in the second half of 2019 because of the boost to income from lower tax payments, including the low- and middle-income tax offset, and lower

net interest payments for the household sector, which is a net borrower in aggregate.

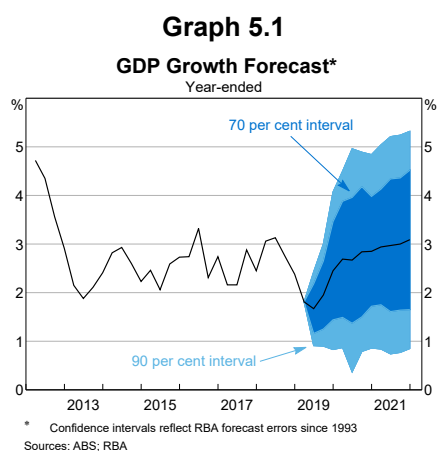
Over coming years, growth in nominal household disposable income is expected to pick up to around 4 per cent annually, supported by growth in employment. However, the expected contribution from labour income has been revised a little lower over 2020 reflecting the downward revision to wages growth. Beyond 2019, growth in consumption is forecast to increase gradually, consistent with the underlying improvement in household disposable income growth and a recovery in housing market conditions. Consumption is forecast to grow by 2¾ per cent over 2021, which is unchanged relative to the *May Statement*. The household saving ratio has increased modestly over recent quarters and is expected to increase a little further over coming quarters.

Dwelling investment will decline further over coming quarters

Dwelling investment has declined broadly in line with expectations at the *May Statement* to be around 5 per cent below the September quarter 2018 peak. Dwelling investment is expected to continue to decline for several quarters. The near-term outlook for dwelling investment has been revised lower partly because of slightly weaker-than-expected building approvals data over recent months. However, the projected trough in dwelling investment is now expected in late 2020. This is about half a year earlier than previously anticipated because of the earlier-than-expected signs of a turnaround in established housing market conditions and the lower profile assumed for the cash rate.

Public demand is expected to continue supporting growth ...

The forecast for growth in public demand is unchanged relative to the *May Statement*.



Growth in public consumption is expected to moderate but remain above 3 per cent over much of the forecast period, partly supported by ongoing spending on the National Disability Insurance Scheme (NDIS). Spending on the NDIS is projected to increase as much this financial year as it did last year. The pipeline of infrastructure work to be done is elevated relative to work done, pointing to growth in public investment in the near term. However, growth in public investment is also expected to moderate over coming years because additional investment projects are considered likely to sustain the relatively high level of activity rather than contribute much more to growth.

... along with growth in business investment

The outlook for business investment is little changed from the previous *Statement*. Both non-mining and mining investment are expected to contribute to growth throughout the forecast period. In non-mining sectors, the outlook for non-residential construction remains positive; building approvals remain fairly steady, and there is a solid pipeline of private infrastructure projects (particularly transport and electricity). Investment in machinery & equipment and software is also expected to grow throughout the forecast period.

Mining investment declined further in the March quarter as construction on the final liquefied natural gas (LNG) projects continued to wind down. The decline in the quarter, taken together with the ABS Capital Expenditure survey and business liaison information, suggests that mining investment is close to its trough. Mining investment should gradually pick up over the next year or two as sustaining investment continues, along with some expansionary projects. However, there is a fair degree of uncertainty regarding the timing of expenditure for mining investment and some risk that there will be more expenditure on these projects than

is currently incorporated into the outlook. There are also several projects under consideration but not yet approved. The recent strength in iron ore prices is not expected to drive much change in the outlook for iron ore investment, given industry expectations that the recent price increase is largely a response to supply constraints that will be resolved over time.

Exports continue to contribute to growth

Recent trade data indicate that exports continued to expand in the June quarter; growth in resource exports is expected to have picked up, partly because iron ore exports are recovering from earlier disruptions. The outlook for exports remains broadly unchanged since the previous *Statement*. Resource exports are expected to grow over the remainder of 2019 and into 2020, supported by some growth in iron ore and coking coal production, as well as the continued ramp-up of LNG exports from the final projects. Growth should then slow as this ramp-up finishes. From mid 2021, some decline in LNG exports is expected as existing gas fields are depleted; although some replacement projects are under consideration, lags in construction mean that they are unlikely to commence production during the current forecast period.

Service exports are expected to continue growing steadily, underpinned by overseas student enrolments. Data for the June quarter suggest manufactured exports were stronger than previously expected and the lower exchange rate is expected to continue supporting growth in this category. In addition, the underlying rate of growth in exports of some categories of manufactured goods, including medicinal & pharmaceutical goods and professional & scientific instruments, has increased in recent years as markets for them open up. Rural exports are expected to be modestly higher in the near term, largely

reflecting elevated slaughter rates, but to ease by more than previously forecast further out because dry conditions are expected to persist at least until the end of the year. Rural exports are now expected to trough around the September quarter of 2020 before picking up, assuming a gradual return to average weather conditions supports increased crop production over time.

Imports are expected to grow a little more slowly than at the time of the previous *Statement*, reflecting slower domestic demand growth and the recent exchange rate depreciation, which has increased the relative price of imports.

Elevated iron ore prices have lifted the terms of trade

The terms of trade have been revised higher, largely driven by higher-than-expected iron ore prices in recent months (Graph 5.2). Iron ore prices rose considerably in the months following the previous *Statement*, reaching their highest level since early 2014. Supportive factors included limited supply in the seaborne market (mainly because of disruptions in Brazil) and more resilient Chinese demand than previously expected. The escalation in trade tensions has led to sharp falls in iron ore prices since the start of August. Iron ore prices are expected to decline further as supply gradually comes back on line and Chinese demand moderates. However, there is considerable uncertainty around the outlook.

Coking coal prices have also been revised a little higher in light of the lift in expected Chinese steel production, but are still expected to decline over the forecast horizon. Thermal coal prices have declined further since the previous *Statement* because seaborne supply has continued to increase while there has been some softening in Asian demand. Further out, rising seaborne supply and a gradual transition

away from coal-fired power generation are expected to weigh on thermal coal prices.

The unemployment rate is expected to remain higher for longer

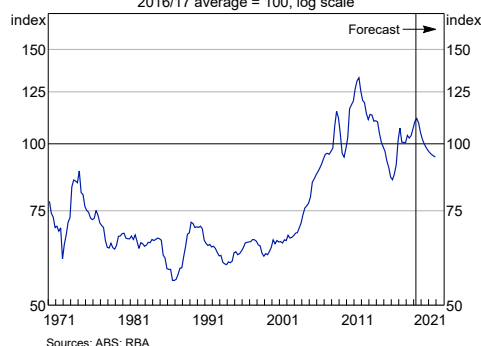
The unemployment rate increased by $\frac{1}{4}$ percentage point in the June quarter (Graph 5.3). Leading indicators suggest that the unemployment rate is likely to remain around $5\frac{1}{4}$ per cent for some time. As GDP growth picks up to an above-trend pace, the unemployment rate is expected to edge lower to around 5 per cent. The upward revision to the unemployment rate outlook suggests that there will be more spare capacity in the labour market over the next few years than previously forecast, although there is considerable uncertainty around its extent.

Employment growth has been stronger than expected over the past year, despite the slowing in economic activity. Leading indicators such as job vacancies and firms' hiring intentions point to a slowing in employment growth over the remainder of the year, although growth is expected to remain a little above working-age population growth over the next couple of years. Consistent with solid employment growth, the participation rate is expected to remain around its current record level. However, there is considerable uncertainty around how

Graph 5.2

Terms of Trade

2016/17 average = 100, log scale



much any increase in labour demand will be met by unemployed workers finding jobs, existing employees working more hours or a further increase in the participation rate.

Wages growth has been revised a little lower

Wages growth is expected to remain stable over the next year. At the time of the *May Statement*, wages growth was expected to continue to lift modestly over the year ahead. However, there is limited upward pressure stemming from current labour market conditions and the majority of surveyed firms in the liaison program now anticipate little change in wages growth over the next year. The 3 per cent increase in award and minimum wages (which is lower than in previous years) and wage increases in a number of significant enterprise bargaining agreements have been incorporated into the near-term forecasts. Private sector wages growth is expected to increase modestly from 2020 as the unemployment rate declines. Public sector wages growth is expected to remain stable over the next couple of years, consistent with government wage policies in most jurisdictions. Average earnings from the national accounts, which is a broader measure of labour costs, is expected to be growing at a slightly faster pace than the wage price index (WPI) by 2021. This

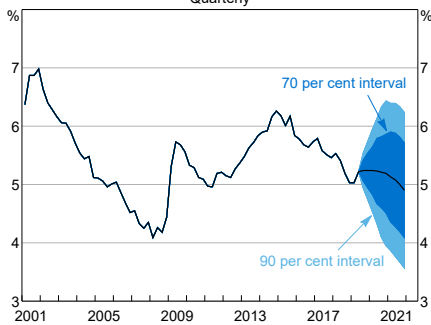
assumes that the compositional changes in the labour market or weakness in non-wage labour costs that have been holding average earnings growth below WPI growth in recent years will have dissipated by then. How far this pick-up in earnings growth translates into inflationary pressures will depend on whether there is an accompanying increase in productivity growth.

Inflation has been revised lower

The June quarter inflation outcome was largely as expected. However, the forecast for year-ended underlying inflation over the next couple of years has been revised lower by around ¼ percentage point. Underlying inflation is expected to be around 1½ per cent over 2019 and gradually increase to a little above 2 per cent in 2021 (Graph 5.4). Headline inflation is expected to be a little higher than underlying inflation over 2019 as a result of earlier increases in volatile prices.

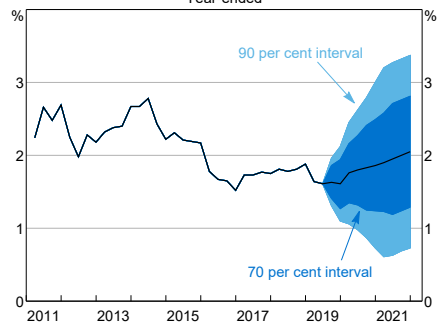
In the near term, there has been a modest downward adjustment to the September quarter forecast for inflation to incorporate some government policy changes that will affect administered and electricity prices, and the recent decline in fuel prices. Further out, the downward adjustment reflects more spare capacity in the labour market than previously

Graph 5.3
Unemployment Rate Forecast*
Quarterly



* Confidence intervals reflect RBA forecast errors since 1993
Sources: ABS; RBA

Graph 5.4
Trimmed Mean Inflation Forecast*
Year-ended



* Confidence intervals reflect RBA forecast errors since 1993
Sources: ABS; RBA

forecast and the associated lower wages growth. Nevertheless, a modest increase in underlying inflation is still expected to occur over the next few years alongside the gradual increase in wages growth from 2020 and GDP growth picking up to be above potential.

Inflation is expected to remain low across a range of components of the CPI. Rent growth is expected to remain low in some capital cities for some time; over the longer term, rent growth will depend on the balance between construction activity and population growth. Inflation in the prices of newly built dwellings is expected to remain subdued until dwelling investment begins to pick up again. Retail competition is expected to continue to weigh on prices, but the recent modest exchange rate depreciation will continue to put some upward pressure on the prices of consumer durable goods over the year ahead. The recent increase in grocery food inflation related to the drought is likely to be temporary. A number of commentators also anticipate that wholesale electricity prices will decline over the next couple of years as a large volume of new renewable energy generation comes on line.

There are a number of uncertainties around the global growth forecasts

Over the past three months, the global growth outlook has been revised slightly lower and downside risks have increased because of the re-escalation of US–China trade and technology tensions. In addition to the direct effects of any further escalation of trade tensions on trade, a long period of unresolved trade tensions poses a risk to global growth because the associated uncertainty could depress business investment. Further US–China tariff rate increases or restrictions on technology transfers, trade and investment would have the most significant effects on growth in the United States, China and highly trade-exposed economies in east Asia. The United Kingdom's expected exit from

the European Union and sovereign indebtedness in some euro area economies continue to pose risks to growth in Europe. Negative developments on these issues could have significant spillovers to other economies through trade, investment and confidence.

The Chinese authorities continue to face a number of policy trade-offs and uncertainties about how they will be resolved present risks to the outlook for the Chinese economy, demand for bulk commodities and Australia's terms of trade. To date, policy easing measures have supported Chinese domestic demand and partly offset the effects on overall activity of the trade and technology disputes with the United States. The stimulus to the Chinese domestic economy has benefited Australia and mitigated some of the impact of the trade dispute on the Australian economy. However, the Chinese economy was already facing headwinds as a result of the earlier deleveraging and a range of structural factors. A further escalation of disputes with the United States would be likely to disrupt investment plans and the downward pressure on growth could be larger than current policy settings can counteract. In that event, the government could introduce further policy easing but would be constrained by a desire to avoid a rebound in economy-wide leverage. A further depreciation in the renminbi could also support growth, but recent currency moves have already aggravated trade tensions. The evolution of policies towards property markets, infrastructure spending and the environment will also be significant for China's growth trajectory and, in particular, the outlook for Chinese steel demand.

Global financial conditions have become more accommodative since the turn of the year, which will offset some of the impact of the trade dispute on the global economy. A material tightening in financial conditions could still weigh on global growth, however, and there are several possible triggers for such a scenario. Risk

premiums are currently very low and could increase if market participants become more concerned about the global growth outlook. Conversely, there are also scenarios where global financial conditions could remain accommodative for an extended period.

The near-term risks to domestic growth and inflation are more to the downside

In the near term, the risks to domestic growth are more to the downside. It is possible that employment growth, which is stronger than can be explained by recent activity indicators, will moderate by more than forecast. If these outcomes occur, wages growth and labour income growth may be lower than expected and this would have implications for consumption growth in coming quarters. Weak residential construction activity in the near term may depress profits from unincorporated businesses by more than expected, which would weigh on household income growth if the owners of these businesses are unable to find opportunities in other sectors of the economy. Weak conditions in the earlier stages of residential development also raise the risk that dwelling investment will decline by more than currently forecast in the near term.

For some time, it has been noted that the gradual increase in inflation that is forecast over the next two years is underpinned by a forecast for a gradual pick-up in wages growth. There is now less certainty around the increase in wages growth. Furthermore, there has been little inflationary pressure evident in advanced economies that have experienced a stronger pick-up in wages growth associated with very tight labour market conditions. It may be the case that the lags between any pick-up in wages growth and price inflation are longer than they have been in the past, or it may be that other more structural factors, such as the ongoing disinflationary effects of technological advances and globalisation are more material.

In the near term, administered and housing-related inflation are likely to remain low. A number of state governments announced further cost-of-living initiatives, which will also weigh on inflation. Electricity prices are likely to grow at a below-average pace over the forecast period, and may even fall. Wholesale electricity costs are expected to decline on the back of a large increase in renewable energy generation capacity, while recent regulatory determinations suggest that network costs will increase only modestly over the forecast period. Advertised rents are falling or stable in most capital cities and some developers have been offering purchase incentives on new dwellings, which lowers measured prices. Any turnaround in these housing-related costs seems some way off. While there is some uncertainty around how long developers will offer discounts on new dwellings, the longer building activity stays low, the more likely it is that population growth will induce demand pressures on rents further out.

Other sources of uncertainty around the inflation forecast have more two-sided risks. These include uncertainty about the extent of any further pass-through from the earlier exchange rate depreciation to retail prices in the near term, and how long the temporary effects of the drought will persist in food prices. Overall, dynamics in retail prices will depend on a number of factors, such as movements in the exchange rate (which is assumed to remain constant over the forecast period), the degree to which consumer spending will pick up and the effect of heightened competition.

The medium-term risks to the economic and inflation outlook are more balanced

The medium-term risks around the household consumption forecasts are more balanced than they have been for some time. This is partly because consumption has already slowed, and partly because some established housing markets appear to have stabilised earlier than

previously assumed. This has reduced the risk of sustained weakness in some types of housing-related consumption, such as household appliances and furnishings.

Recent policy measures, including the cuts in the cash rate and the tax offsets, provide a reasonable amount of stimulus for the household sector. Together with the stabilisation in the housing market, the combined effect could be larger than is embodied in the forecast. However, the high level of household debt remains a key consideration for household consumption, and it is uncertain how much of the stimulus will be used by households to pay down debt more quickly. Household consumption accounts for close to three-fifths of GDP so, if consumption growth was to exceed expectations, it would affect the forecasts for overall GDP growth, employment growth and inflation.

The signs of stabilisation in some established housing markets also present some upside risk to dwelling investment towards the end of the forecast period. If housing prices recover faster than expected, property developers could respond by more than expected. This scenario is more likely if the weakness in construction is initially more prolonged than expected because, in an environment of strong population growth, this will lead to an undersupply of housing and more upward pressure on prices.

Activity in the mining sector may also support the economy by more than expected. Based on current information, the strength in iron ore prices over 2019 is expected to have only a small direct effect on the real economy. Information from liaison and company reports suggest that mining investment and export volumes are unlikely to respond much to these higher prices, since a large part of the iron ore price increase is because of temporary supply factors. This is in contrast to the response to higher prices seen a decade ago, when a large structural increase in

global demand (led by China) drove an intensive period of investment to lift export capacity.

Although the forecasts assume that the higher iron ore prices will not significantly increase mining investment or exports, the strength in prices over 2019 is nonetheless materially boosting mining sector profits. While the bulk of these profits will accrue to foreign shareholders, some will flow to domestic households through direct and indirect share ownership. The combination of additional household income and an increase in household wealth could provide additional support for consumption. Public sector revenue will also receive a boost, mainly through Australian Government income tax receipts and Western Australian Government mining royalties. It remains uncertain how the public sector might respond to the revenue gains.

Separate from the effects of higher iron ore prices, it is also possible that mining investment in general could be stronger than currently expected. There is some uncertainty regarding the timing and magnitude of spending on projects that are under way or that have been approved and are expected to commence within the forecast period. There are also some projects that have not had a final investment decision but which are likely to proceed. Given these uncertainties, a conservative outlook has been incorporated into the central forecast. Should there be more expenditure on approved projects than is currently incorporated, or if more projects are approved and commence, there would be a larger contribution to growth from the mining sector.

Overall, this range of developments suggest that, beyond the next few quarters, the risks around the forecasts are more balanced. Should a number of the upside risks come to pass, it is possible that the combined effect would be greater than the sum of the expected effects from each individual source of stimulus. ✎

