1. The International Environment

The ongoing rollout of COVID-19 vaccines and significant policy stimulus has laid the groundwork for a sustained global economic recovery. Activity has generally recovered quickly once vaccination coverage has risen, allowing mandated restrictions and health concerns to be eased. GDP is expected to return to its pre-pandemic trend in many advanced economies over the next year. GDP in China has already returned to its pre-pandemic path; however, growth has slowed of late, in part because of authorities' efforts to reduce leverage in the economy, as well as other recent policy shifts that have introduced considerable uncertainty to the outlook in China. Concerns about the financial health of Evergrande, a large private Chinese property developer, led to some volatility across global financial markets since the last *Statement*. There are similar concerns about a number of other Chinese property developers, but risk sentiment outside the property development sector has stabilised.

Capacity constraints in many countries could result in the recent increase in global inflation pressures persisting for longer than initially expected, and pose a downside risk to the growth outlook. Strong global demand this year has run up against a lack of spare capacity in manufacturing and transportation networks, while shortages have also emerged more recently in energy markets. This has seen a sharp rise in the price of shipping, energy, base metals and other inputs with energy-intensive processes. Some economies have also experienced a pick-up in wages growth. Consumer price inflation has increased to its highest rate in several years in a number of economies, though central banks still generally expect inflation to return to levels consistent with their targets next year.

Central banks in some advanced economies have begun to increase their policy rates, and market pricing suggests that some others will do so in the next few quarters. A number of these central banks assess their economies to have limited spare capacity and that inflationary pressures will persist beyond the next year, while some have pointed to concerns about the build-up of financial imbalances at very low interest rates. Central banks in most advanced economies have implemented or discussed the timing of reductions in the pace of asset purchases. The market-implied path of expected policy rates has shifted higher in recent months as upside risks to the inflation outlook have increased. Yields on government bonds have increased in advanced economies, although financial conditions overall have remained very accommodative. Financial conditions among emerging market economies have continued to diverge, with a number of central banks outside Asia having tightened policy substantially in response to rising inflation. Central banks in emerging Asia have kept policy rates unchanged, but some are expected to begin raising rates before the end of the year.

As vaccination rates rise, COVID-19 restrictions have been reduced

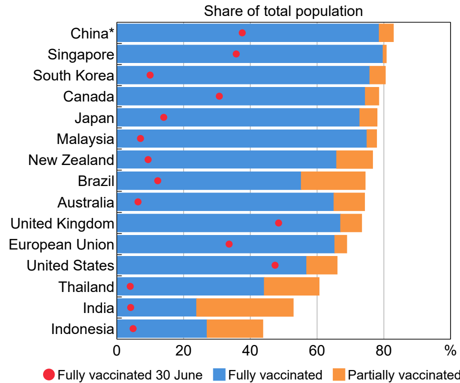
Vaccination coverage has increased in many economies over recent months (Graph 1.1). This has enabled restrictions to be eased in advanced

economies from around mid year. While the number of COVID-19 cases subsequently increased as a result of this easing, hospitalisations and deaths have remained much lower than in earlier waves, reflecting the protection provided by the vaccines (Graph 1.2). In China, localised restrictions have been introduced intermittently to manage COVID-19 outbreaks. Case numbers and deaths have been declining in the rest of Asia since August, which has allowed restrictions to ease there.

Graph 1.1

Vaccinations – Selected Countries

Share of total population



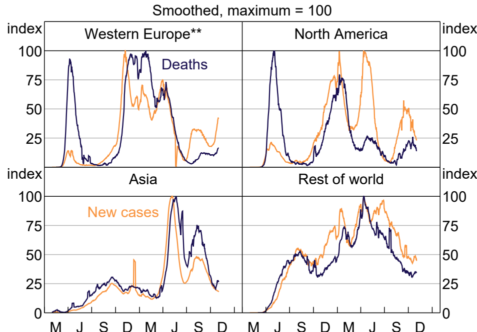
* First and second doses estimated from total vaccinations and recommended delay between doses

Sources: CEIC Data; Our World in Data; RBA

Graph 1.2

COVID-19 – New Cases and Deaths*

Smoothed, maximum = 100



* Jurisdictions in some continents likely have less effective testing regimes leading to more conservative case and death counts

** Includes the Schengen Area, the United Kingdom and Ireland

Sources: JHU CSSE; Our World in Data; RBA

Activity has been recovering in countries with high vaccination rates

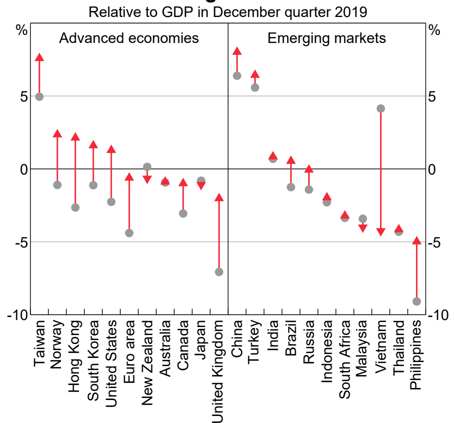
The improvement in health outcomes and the easing of restrictions over the course of the year have enabled a strong recovery in many advanced economies (Graph 1.3). Policy measures implemented early in the pandemic supported private incomes and balance sheets, which limited the amount of scarring on the economy from the COVID-19 shock. Fiscal measures have since largely pivoted towards those aimed at driving the recovery and stimulating private demand. Consumption has led the recovery, but business and dwelling investment have also picked up strongly and in some countries are back above pre-pandemic levels. Economic activity in the United States has now more than retraced its decline. Activity throughout Europe, the United Kingdom and Canada has risen substantially but is still slightly below pre-pandemic levels. There are signs that supply constraints are limiting activity in some industries.

The recovery in consumption in advanced economies has been driven by a recovery in discretionary services (Graph 1.4). Consumer

Graph 1.3

Change in GDP

Relative to GDP in December quarter 2019



* Forecasts used where September quarter GDP has not yet been reported

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

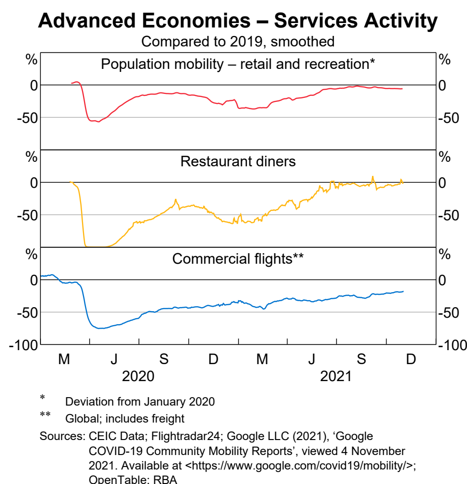
spending on many services has now returned to pre-pandemic levels, with air travel a notable exception. Nonetheless, goods consumption has remained strong even as discretionary services consumption has recovered. It is expected that the share of consumption spent on goods will fall back over time, although the pandemic may have prompted some changes in expenditure patterns that persist for a while.

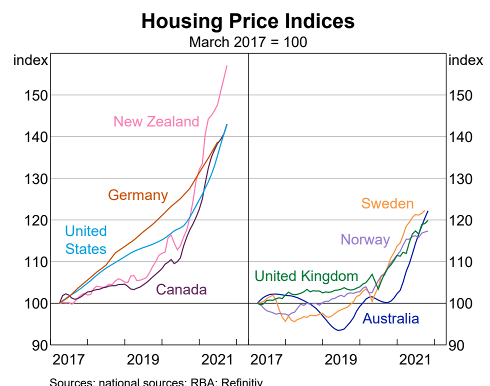
Consumption will be supported in the period ahead by the general improvement in household balance sheets seen during the pandemic and as wages growth picks up; this experience stands in contrast to previous economic downturns. Overall, household wealth has risen because of the increased savings during the pandemic and the strong growth in housing and equity prices (Graph 1.5). An upswing in housing prices has been a feature of the recovery globally. Strong housing demand has been supported by low interest rates, growth in incomes from fiscal support and a recovery in labour market conditions, as well as changes in household preferences.

The extent of recovery has been mixed in the Asia-Pacific region. The recovery in most advanced economies in Asia has continued, underpinned by strong export growth and investment in manufacturing capacity, despite disruptions caused by COVID-19-related restrictions and some supply shortages. Activity in India is likely to have recovered strongly following a sharp contraction mid year related to its Delta wave. In contrast, a tightening in COVID-19 containment measures stalled the recovery in some economies in the region in recent months, including New Zealand, Thailand and Indonesia. Mobility data throughout Asia has picked up as containment measures have eased, which should support consumption and overall activity in the December quarter.

China's economic growth has slowed amid targeted regulatory tightening …

GDP in China has already returned to its pre-pandemic path. However, growth slowed considerably in the September quarter, in part because of authorities' efforts to reduce leverage in the economy. Localised restrictions imposed in response to short-lived COVID-19 outbreaks also weighed on growth over this period, particularly household spending on services (Graph 1.6). The weakness was concentrated in July and August, with retail sales rising in September after activity restrictions were eased. Strong global demand for goods has provided some offset by continuing to support industrial production and exports, and manufacturers



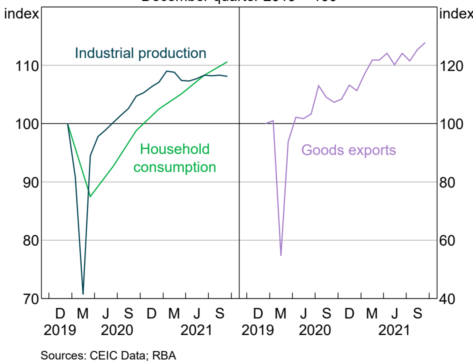


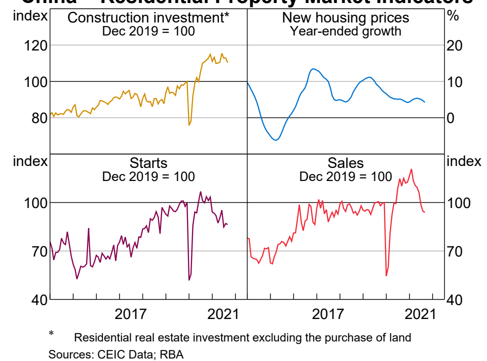
have increased investment in response. However, power shortages have weighed on manufacturing output over the past month or so.

The decline in consumption growth during the September quarter compounded the dampening effect of longstanding efforts by the Chinese authorities to reduce leverage in the economy, most prominently in the residential property sector. From late 2020, the authorities have restricted the capacity of developers to finance new projects if those developers cross one of 'three red lines' – that is, for having leverage or gearing ratios that are too high, or cash holdings that are too low. This has resulted in a decline in both construction starts and the pipeline of work under construction (Graph 1.7). New home sales have also fallen sharply in Tier 2 and Tier 3 cities since late July.[1] This policy has had a particularly adverse effect on one property developer – China Evergrande – and has increased funding costs for a number of other highly leveraged property developers (see 'Box A: Stress in the Chinese Property Development Sector'). While the slowing in China's real estate sector has been moderate to date, there is a risk that construction activity could decline sharply, particularly if households become reluctant to purchase from property developers in the current environment. Chinese authorities also appear to be less likely than in the past to respond to slowing construction activity by easing credit conditions, given the trade-off that would imply for leverage in the economy.

Regulatory restrictions have also slowed growth in some other sectors. Restrictions on the ability of local governments to commence and finance new infrastructure projects have induced a steady decline in infrastructure investment over the past year. Steel output caps introduced by the authorities to reduce air pollution and carbon emissions over recent months have also contributed to the sharp fall in steel production. As a result, iron ore prices have fallen by more than 50 per cent since their recent peak in May (Graph 1.8). At the same time, Chinese steel prices have been elevated. This divergence implies that the decline in steel supply has more than offset a small decline in domestic steel demand. Production of a range of other materials, most notably aluminium, has also been hampered by power shortages. These shortages are the result of strong demand for energy from other sources, as well as disruptions to energy supply – including because of the authorities' efforts to restrict energy usage.

Over this year, there has been an increased public focus on 'common prosperity' goals, which has been interpreted as reducing inequality and improving living standards for the





broader population. Another policy focus has been on stricter enforcement of anti-monopoly and consumer protection rules in the technology sector. While these objectives may enhance growth in the medium term, the breadth of policy adjustment recently has created uncertainty and raised the risk of an unintended slowing in the economy.

… but financial conditions in China overall remain stable

While financing conditions have tightened for property developers and some companies directly exposed to Evergrande, overall financial conditions in China have remained stable. Yields have increased only slightly for investment-grade corporate bonds (both onshore and offshore), in contrast to the sharp rise for high-yield offshore Chinese bonds, which are predominately issued by property developers. Money market rates have also been largely stable, in part reflecting liquidity injections by the People's Bank of China (PBC). Equity prices have been little changed since the August *Statement*, although offshore-listed equities have been more volatile than onshore equities; this is partly because mainland Chinese property developers make up a sizeable portion of Hong Kong's exchange.

Financing restrictions for real estate companies and off-balance sheet investment activities of local governments have contributed to a gradual slowing in the growth of debt. Total social financing (TSF) has been stable as a share of GDP over the past year, in line with the target set by Chinese authorities earlier this year (Graph 1.9).

Over recent months, the PBC announced a number of targeted easing policies to help support credit provision, particularly for small businesses and disadvantaged provinces in China. At the same time, China's national cabinet has requested that local governments accelerate their investment and expenditure plans, which may support TSF growth over coming months, as authorities utilise more of their unspent annual special bond quotas.

The Chinese renminbi remains around its highest level in recent years against the US dollar and it has appreciated around 6 per cent on a trade-weighted basis since the start of the year (Graph 1.10). Trade surpluses and foreign investment continue to support the currency, although foreign inflows into China's securities markets moderated in the September quarter (Graph 1.11). This is in contrast to the episode in the mid 2010s when financial stability concerns were also elevated. During that earlier

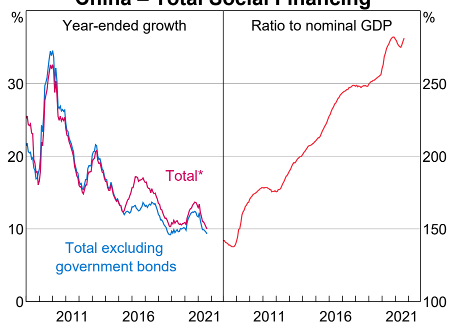
Graph 1.8

Chinese Steel and Iron Ore Spot Prices

* Average of hot-rolled steel sheet and steel rebar prices
** 62% Fe fines index; free-on-board basis
Sources: Bloomberg; RBA

Graph 1.9

China – Total Social Financing



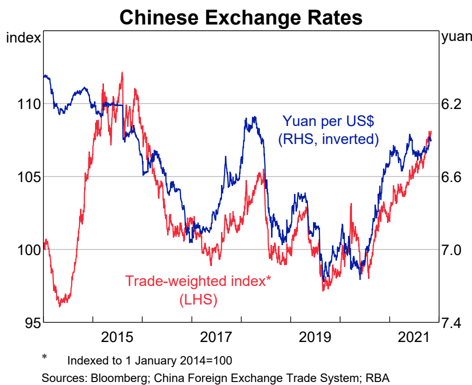
* Measure targeted by authorities which incorporates net government bond issuance; includes local government bonds issued to refinance and substitute for state-backed corporate debt; RBA estimates prior to 2016
Sources: CEIC; RBA

period, capital controls were tightened to support the exchange rate in the face of large capital outflows and exchange rate depreciation.

In September, the authorities proceeded with further easing of controls on cross-border portfolio flows as planned. Additional outbound investments are now allowed, with mainland banks and institutional investors able to purchase certain bonds in Hong Kong's market. This is in line with the long-stated goal of capital account liberalisation, and may boost liquidity and offshore issuance of renminbi-denominated debt. In addition, individual investors in Hong Kong will also be allowed to purchase wealth management products in select cities in South China, and vice versa.

Graph 1.10

Chinese Exchange Rates

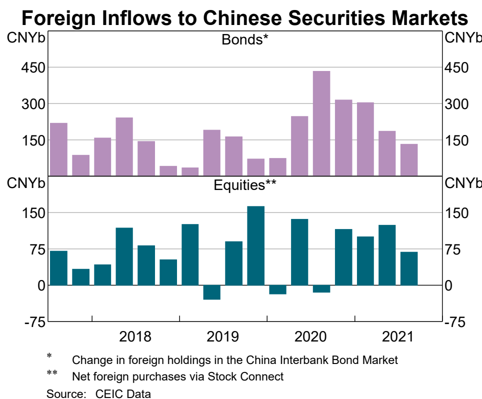


* Indexed to 1 January 2014=100

Sources: Bloomberg; China Foreign Exchange Trade System; RBA

Graph 1.11

Foreign Inflows to Chinese Securities Markets



* Change in foreign holdings in the China Interbank Bond Market

** Net foreign purchases via Stock Connect

Source: CEIC Data

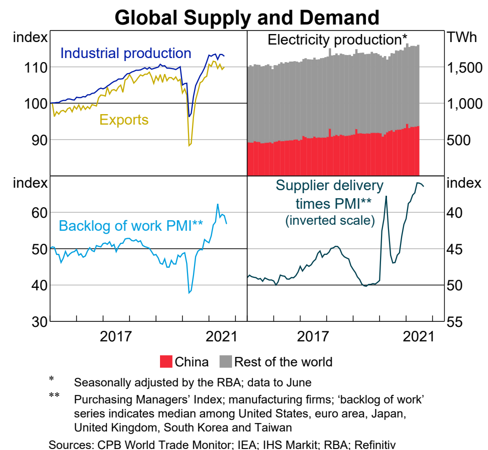
Capacity limits to global production are boosting commodity and other prices

Capacity constraints in global goods markets have been surprisingly persistent and have broadened in recent months, straining transport networks and weighing on downstream production in a number of areas. Container shipping costs, the backlog of unfinished work and supplier delivery times all remain around historically high levels (Graph 1.12; Graph 1.13). The supply of semiconductors has not kept pace with demand, which has increasingly disrupted downstream manufacturing in an environment of strong demand for finished goods. Most notably, global automotive production declined by around 15 per cent over the first half of this year, across a wide range of countries. More recently, there have been reports of shortages in the supply of building materials and furniture in various countries. Inventories of finished goods have declined further from already low levels, as retailers struggle to secure enough supply to meet strong demand for goods.

Capacity constraints have also substantially boosted the prices of energy-related commodities since the middle of the year (Graph 1.13; Table 1.1). The prices of thermal coal and LNG – key Australian exports – have increased sharply in recent months and, despite

Graph 1.12

Global Supply and Demand



* Seasonally adjusted by the RBA; data to June

** Purchasing Managers' Index; manufacturing firms; 'backlog of work' series indicates median among United States, euro area, Japan, United Kingdom, South Korea and Taiwan

Sources: CPB World Trade Monitor; IEA; IHS Markit; RBA; Refinitiv

Table 1.1: Commodity Price Growth[(a)]

SDR terms; percentage change

	Since previous *Statement*	Over the past year
Bulk commodities	–6	52
– Iron ore	–43	–21
– Coking coal	87	289
– Thermal coal	34	262
Rural	6	28
Base metals	5	38
Gold	–1	–9
Brent crude oil[(b)]	14	104
RBA ICP	–3	35
– Using spot prices for bulk commodities	–2	45

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

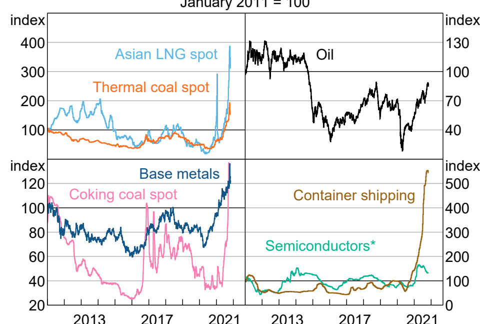
(b) In US dollars

a recent easing, are still higher than at any other time in over a decade. The tightness in gas markets has been most evident in the United Kingdom and Europe, where it has adversely affected production, compressed margins and started to flow into significant rises in prices for some downstream industries. Similar increases in gas prices have not been seen in Australia because the domestic and export gas markets are segmented. China experienced widespread power shortages during September and October that curtailed production of energy-intensive products like aluminium, other base metals and cement. High prices for coal and LNG have also contributed to oil prices rising to around their highest level in seven years, with OPEC oil supply only increasing gradually. The rise in energy prices has also amplified the rise in base metals prices in recent months.

The broad and persistent nature of these capacity constraints in goods and energy markets primarily reflects ongoing strength in global demand for goods as economies have reopened – and the resulting impact on the energy intensity of the economic recovery. This is illustrated by global merchandise trade, industrial output and electricity production all having increased or remaining elevated as capacity constraints have tightened (Graph 1.12, top panel). Demand for energy has recently been exacerbated by unseasonably warm weather in the northern hemisphere.

Persistent supply disruptions have played some part in these constraints. COVID-19-related shutdowns to factories and ports in Asia have continued, delaying the ability of firms to increase shipments of a wide range of goods. Idiosyncratic supply disruptions – such as

Graph 1.13



* Dynamic Random Access Memory (DRAM) chips

Sources: Bloomberg; IHS Markit; RBA; Refinitiv

weather-induced reductions in the supply of renewable energy and China's efforts to reduce pollution from coal-fired electricity generation – have also contributed to tightness in energy markets of late. Firms have been significantly increasing investment to expand production of items such as semiconductors, ships and containers, but this is unlikely to add materially to supply until well into next year.

The combination of strong global goods demand and supply pressures has resulted in high producer price inflation in many economies (Graph 1.14). Goods producer price inflation has risen to the highest rates in many years, with the rise in prices for energy-related commodities further amplifying these price pressures.

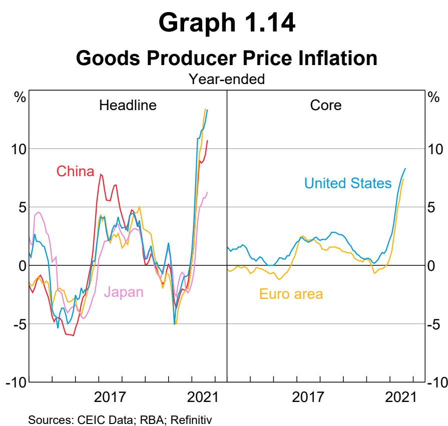
GDP is expected to converge towards pre-pandemic trends in a number of advanced economies

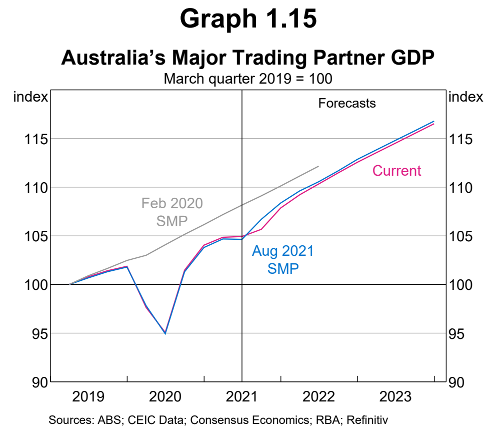
Further recovery in the global economy is expected over the next few years. Growth in Australia's major trading partners (MTP) slowed in mid 2021, largely due to the effects of Delta outbreaks in Asia, as well as capacity constraints in some advanced economies. However, as the disruptions caused by the Delta variant have generally peaked, most economies are expected to continue or resume their earlier recoveries.

The expected level of GDP for Australia's MTP by the end of the forecast period is little changed compared with three months ago, though the timing of the recovery has been pushed out slightly in the near term. Year-average MTP growth is expected to be strong in 2021 and 2022 (6 per cent and 5 per cent, respectively) (Graph 1.15).

Quarterly GDP growth in advanced economies is expected to remain elevated through to mid 2022, before easing to more typical (pre-pandemic) rates. Most advanced economies are expected to regain their pre-pandemic path for GDP during 2022. China is expected to continue growing along its pre-pandemic path over the forecast period, with a slowdown in real estate construction broadly offset by stronger consumption and infrastructure investment. The pace of growth in China is expected to continue to moderate, in line with the trend before the pandemic.

By contrast, many emerging market economies in Asia and elsewhere are not expected to return to their pre-pandemic paths over the forecast horizon. Regionally, this shortfall is most pronounced for India, Indonesia and the Philippines. In these economies, vaccination rates remain low, private sector balance sheets have deteriorated and international tourism is expected to resume only slowly.



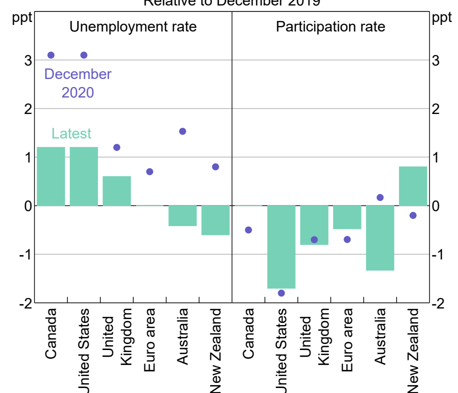


There are three main risks to the outlook for global growth:

1. Capacity constraints could restrain the recovery and result in price pressures remaining high for longer than assumed. The central assumption in the global outlook is that labour supply and production capacity lift over the coming year, allowing a period of strong growth but without triggering persistent inflationary pressures. However, it is possible that the global economic recovery could be held back by supply constraints in product and labour markets, and more persistent inflationary pressures could reduce household purchasing power or trigger an earlier or larger tightening in global monetary policy than currently anticipated.
2. The outlook for global consumption remains uncertain. The emergence of a vaccine-resistant strain of COVID-19 could require mobility restrictions to be re-imposed and, even in the absence of this, consumers might remain cautious about resuming the consumption of a wide range of services. On the other hand, the recovery in consumption could be stronger than expected as a result of pent-up demand, the accumulation of savings during the pandemic and the large increase in housing and financial wealth. It is also uncertain whether, or how quickly, the share of consumption allocated between goods and services returns to pre-pandemic norms; this could affect the global inflation outlook given price pressures have been concentrated in goods markets where demand has been unusually strong.
3. In China, the number of policy adjustments that have taken effect in recent times could weigh on growth by more than currently expected. This could result in a larger-than-expected decline in construction activity. Residential construction activity directly accounts for slightly over 10 per cent of China's economy (and a larger share after taking into account indirect links); a slowing in this sector would dampen demand for upstream manufacturing and, in turn, commodities. Increased uncertainty about economic policy, or unintended economic consequences from recent political directives, could also result in a sharper slowing in activity than envisaged. A broad-based growth slowdown in China would weigh on demand throughout the region and reduce commodity demand, including from Australia.

Labour markets are tightening, with increasing reports of labour shortages

Employment in advanced economies has continued to recover, and unemployment rates have declined to be either close to, or back at, pre-pandemic levels (Graph 1.16). However, job furlough schemes have wrapped up recently in the United Kingdom and will end in some euro area countries in coming months. As workers who were furloughed re-enter the labour force, they will add to available labour supply, which could temporarily slow progress in reducing measured unemployment rates. Regardless, labour demand remains strong globally, with job vacancies at elevated levels in many economies.



Participation rates remain well below pre-pandemic levels in some other economies, including the United States, the United Kingdom and Germany. Reports of shortages of available labour are widespread in these countries, particularly for customer-facing roles and in industries where activity has lifted sharply as economies have reopened. The shortfall in participation rates in these countries, compared with pre-pandemic levels, is most evident among older age groups, suggesting early retirements or lingering health concerns that may be weighing on people's willingness to participate in the labour force. In contrast, prime-age participation rates generally returned to pre-pandemic levels earlier this year; the United States is the exception, possibly because school closures and limited day-care availability have been more widespread and extensive, constraining the participation of those with child care responsibilities.

A number of other factors are making it hard to match workers to jobs in these countries. The rate of resignations has been significantly elevated in the United States, across a wide range of jobs but particularly for roles where demand for workers has been strong and new jobs are easy to find. Vaccine mandates for certain industries or jobs in the United States and the United Kingdom, and a relatively high (though falling) share of workers having to isolate because of possible COVID-19 exposure, are also constraining labour supply. In addition, reduced supply of foreign labour in the United Kingdom has exacerbated labour shortages in certain sectors, most prominently fuel and goods distribution.

Wages growth has increased in economies where reports of labour shortages have been most prominent, such as the United States, the United Kingdom and New Zealand (Graph 1.17). In the United States, these wage increases have been reasonably broad-based across industries and occupations, but have been fastest for low-wage workers. This in part reflects an increase in the relative wages of customer-facing and some other roles, possibly owing to increased health risks or less stable hours during the pandemic. These factors help to explain why measured wages growth in the United States and the United Kingdom has picked up despite still elevated unemployment rates. On the other hand, and as has been the case in Australia, wages growth has been subdued in Canada and the euro area, despite strong labour market recoveries.

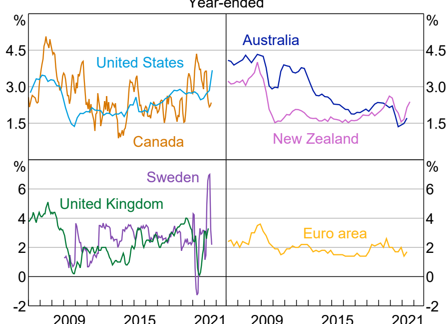
Inflation has increased, but medium-term inflation expectations are still consistent with targets

Consumer price inflation in advanced economies has increased to elevated rates in recent months (Graph 1.18). A sizeable portion of this increase has been driven by large rises in prices for new and used cars and for services such as travel and hospitality (where supply has been slower to recover than demand as these economies reopen). Central banks expect most of these price increases to moderate, and some to reverse, during 2022. Sharp increases in petrol and energy prices have also added to headline inflation measures since the beginning of the year. Nevertheless, the pace of inflation has

Graph 1.17

Wages Growth*

Year-ended



* Compositionally controlled labour cost indices used for United States, Australia, New Zealand and euro area; Canada, United Kingdom and Sweden are compositionally controlled average earnings measures that capture more volatility and cyclicality than labour cost indices

Sources: BoE; RBA; Refinitiv; Statistics Canada

increased across a broad range of other items compared with pre-pandemic outcomes (Graph 1.19). Consistent with this, underlying measures of consumer price inflation have also increased and in some cases are above central bank targets.

Supply shortages for energy-related commodities are likely to contribute significantly to inflation in coming months, particularly in the euro area and the United Kingdom. Related supply disruptions in downstream industries, if prolonged, have the potential to generate second-round inflationary pressures. Housing inflation, which tends to be more persistent, is also picking up across advanced economies. More generally, if wages growth remains stronger than expected it would see inflation remain high for a prolonged period.

Most central banks still expect inflation to return to target next year, although risks are tilted to the upside and developments in inflation expectations and labour markets are being closely monitored. Market economists forecast inflation in the United States and the United Kingdom to be moderately above target next year, but forecasts in coming years are consistent with targets in most other advanced economies; the range of forecasts among economists has increased sharply for US inflation, consistent with a rise in uncertainty. Financial market measures of expected inflation over the next three years have risen in a number of advanced economies, but most notably in the euro area and the United Kingdom, reflecting compensation for both higher expected inflation and the increase in upside risks to inflation. Medium-term inflation expectations have also increased, in some cases to their highest levels in many years, but are still mostly consistent with central bank targets (Graph 1.20).

Inflation in many emerging markets has also increased significantly. The increase has been most pronounced in countries where inflation expectations are not well-anchored, such as throughout Latin America, Russia and Turkey. In contrast, consumer price inflation has risen only modestly throughout Asia.

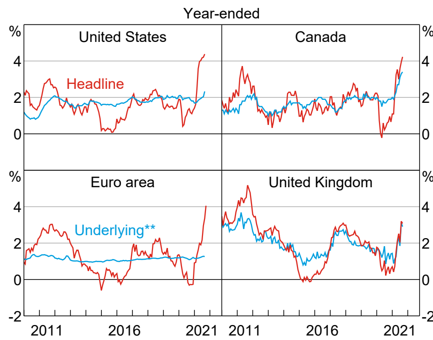
Government bond yields have risen

Yields on longer-term government bonds have increased over recent months in advanced economies, reaching or surpassing levels reached earlier in the year (Graph 1.21). This reflects the expectations of market participants that inflation will be higher and central banks

Graph 1.18

Consumer Price Inflation*

Year-ended



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

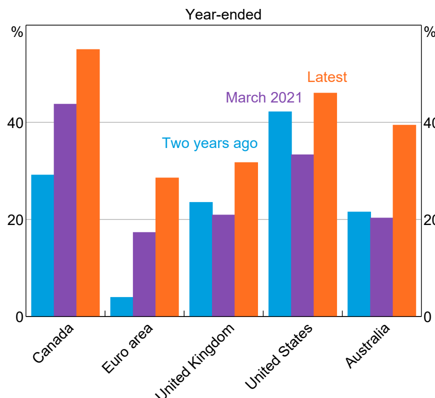
** Trimmed mean for the United States and Canada; Persistent and Common Component of Inflation for the euro area; core for the United Kingdom

Source: Refinitiv

Graph 1.19

Share of CPI Basket Running Above 3 Per Cent Inflation

Year-ended



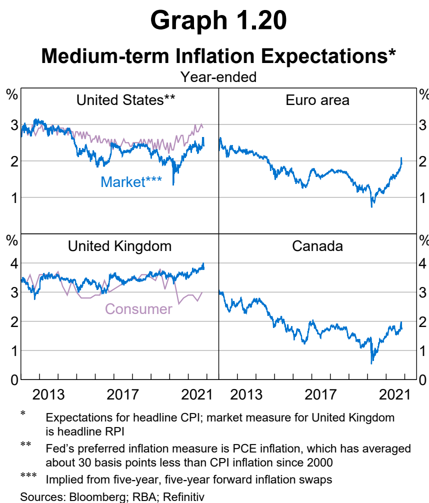
Sources: ABS; BLS; Eurostat; ONS; RBA; Statistics Canada

will tighten policy earlier than previously envisaged, as well as increased compensation for the risk that inflation or policy rates increase by more than anticipated. Shorter-term government bond yields have also increased in most advanced economies alongside a shift higher in market-implied expectations for the path of central bank policy rates (Graph 1.22).

Longer-term real yields have increased somewhat in most advanced economies over recent months, though they remain negative and around historically low levels (Graph 1.23). In recent years, the low level of real yields has been attributed to a range of slow-moving changes in advanced economies – including a decline in potential growth rates, a decline in the risk appetite of firms, rising inequality and the ageing of the population. Moreover, expectations of a prolonged period of monetary stimulus, including sizeable bond holdings by central banks, have exerted downward pressure on yields in both nominal and real terms.

Central banks in some advanced economies have increased policy rates …

Central banks in advanced economies continue to provide significant monetary policy stimulus through low policy rates, large holdings of assets (primarily government bonds) and term funding

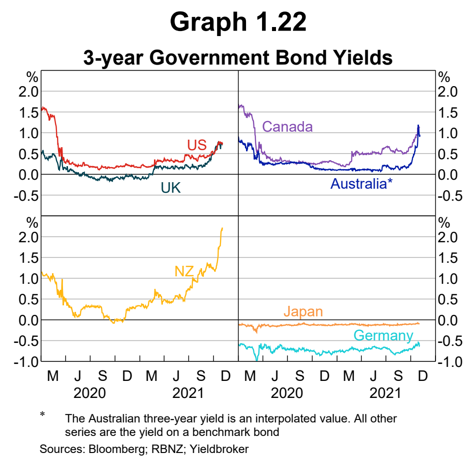


* Expectations for headline CPI; market measure for United Kingdom is headline RPI

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

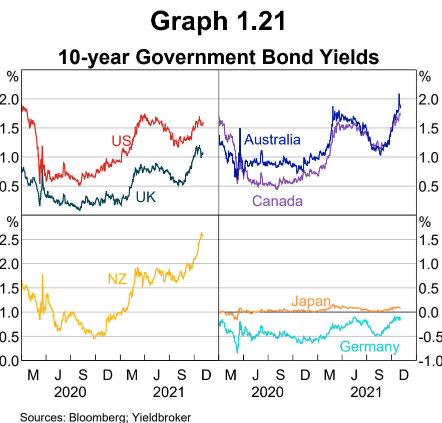
*** Implied from five-year, five-year forward inflation swaps

Sources: Bloomberg; RBA; Refinitiv

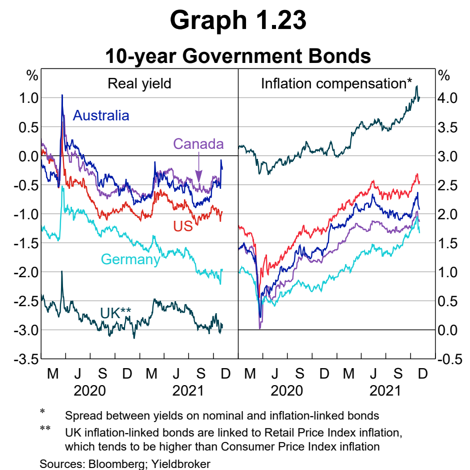


* The Australian three-year yield is an interpolated value. All other series are the yield on a benchmark bond

Sources: Bloomberg; RBNZ; Yieldbroker



Sources: Bloomberg; Yieldbroker



* Spread between yields on nominal and inflation-linked bonds

** UK inflation-linked bonds are linked to Retail Price Index inflation, which tends to be higher than Consumer Price Index inflation

Sources: Bloomberg; Yieldbroker

schemes. However, in response to progress in the economic recovery and rising inflationary pressures, some central banks have begun reducing stimulus by raising policy rates, or are expected to start doing so soon. Central banks continue to indicate that inflation is likely to ease over time to be close to inflation targets as supply constraints are resolved. However, a number of central banks have acknowledged that there is an increased risk that a lack of spare capacity will persist longer than expected, and that inflation will be higher and economic activity lower as a result.

A few central banks have raised their policy rate or have flagged that they expect to do so soon. These central banks have retained their approach of setting policy rates in response to their forecasts for inflation, unlike the US Federal Reserve (Fed) and the Reserve Bank of Australia (RBA), which both have forward guidance on policy rates explicitly linked to actual inflation outcomes. A number have said that spare capacity is now limited and that this is leading to upward pressure on underlying inflation, including through rising wage growth (see above). Some central banks have also noted that concerns about financial imbalances – in particular strong growth of housing prices and credit – have played a role in their decisions. Over recent months:

- The Bank of Korea (BoK) increased its policy rate by 25 basis points to 0.75 per cent in August, reflecting progress in the economic recovery, rising inflationary pressures and the need to curb financial imbalances. The BoK has indicated that it could raise rates by a further 25 basis points in November.
- Norges Bank raised its policy rate by 25 basis points to 0.25 per cent in September, in line with its earlier communication, and indicated that it is likely to raise the policy rate again in December. Norges Bank said the increase was motivated by continued progress in the economic recovery and a desire to counter the build-up of financial imbalances.
- The Reserve Bank of New Zealand (RBNZ) raised its policy rate by 25 basis points to 0.50 per cent in October as was widely expected. The RBNZ assessed that capacity pressures remain evident in the economy, particularly in the labour market, despite recent COVID-19-related restrictions. The RBNZ indicated that it expects to raise its policy rate further if the medium-term outlook for inflation and employment evolves as expected.
- Minutes from the Bank of England's (BoE) September meeting noted that the policy rate could be increased before the end of the year. Subsequent comments from BoE officials indicated that the recent increase in inflationary pressures has strengthened the case for a tightening of policy. As a result, market expectations of an increase in the BoE's policy rate have been brought forward to late this year (Graph 1.24).
- The Bank of Canada (BoC) indicated in October that it expected spare capacity to be absorbed and an increase in the policy rate to be appropriate in the second or third quarters of 2022. This was somewhat earlier than the BoC had projected in its previous forecasts in July.

Elsewhere, market pricing suggests that the Fed is expected to raise its policy rate around mid 2022 while the European Central Bank (ECB) is expected to do so in the second half of 2022. Market participants expect policy rates to be unchanged until at least 2025 in Japan.

… while others are focused on tapering their asset purchases

Most advanced economy central banks have purchased significant amounts of government bonds in secondary markets during the COVID-19 pandemic. These purchases have

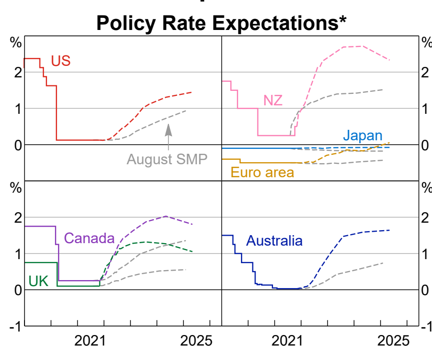
contributed to easier financial conditions by lowering government bond yields and putting downward pressure on yields on other assets.[2] As economic recoveries have progressed, most central banks have either reduced the pace of their purchases or are expected to do so soon. The pace of net asset purchases by the RBA is currently quicker than most other central banks in advanced economies, as a proportion of the eligible stock and relative to GDP, although the level of the Bank's holdings remains lower than most (Graph 1.25; Graph 1.26). Recent announcements include:

- In November, as was widely expected, the Federal Open Market Committee (FOMC) announced a reduction in the pace of the Fed's asset purchases, because there had been substantial further progress towards the FOMC's inflation and employment goals. The pace of purchases of Treasury securities will be reduced by US$10 billion per month (from US$80 billion currently) in both November and December, while the pace of mortgage-backed security purchases will also be reduced by a proportionate amount. The FOMC indicated that similar reductions are likely to be appropriate in subsequent months, implying that net purchases are likely to reach zero in mid 2022. The FOMC noted that the pace of purchases could be adjusted if there were changes to the economic outlook.
- In September, the ECB announced that it would moderately reduce the pace of its asset purchases under the Pandemic Emergency Purchase Programme and that it would review the future of the ECB's asset purchase programs at its December meeting.
- In October, the BoC announced an end to the quantitative easing phase of its bond purchase program and the start of the reinvestment phase. It will now purchase bonds only at the rate required to offset maturities over time, and so keep its holdings constant until at least the first policy rate increase.

The BoE's government bond purchase program is scheduled to finish by December this year, when the target stock of purchases is reached. In August, the BoE said that it will continue to reinvest proceeds from maturing government bonds until the policy rate reaches at least 0.5 per cent, and that it will not consider actively selling bonds until the policy rate reaches 1 per cent.

Graph 1.24

Policy Rate Expectations*



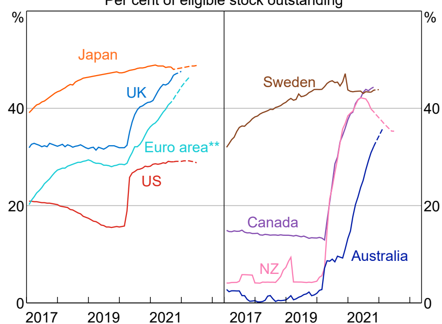
* Dashed lines show expectations implied by overnight indexed swap rates

Sources: Bloomberg; RBA

Graph 1.25

Central Bank Government Bond Holdings*

Per cent of eligible stock outstanding



* Central government debt only for all countries except the euro area. Dashed lines represent forecasts based on announced purchase programs or recent pace of purchases

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

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

Private sector funding conditions in advanced economies remain accommodative

Conditions in corporate bond markets remain accommodative. Over recent months, corporate bond yields have risen alongside increases in government bond yields (Graph 1.27). Credit spreads on sub-investment grade bonds denominated in euros have also widened a little but remain close to their post-pandemic lows. Corporations have continued to issue debt at a steady pace in recent months. Corporate default rates have declined since early 2021 after rising noticeably through 2020.

Equity prices in most major markets have remained around record highs, supported by positive corporate earnings results in the banking sector in particular (Graph 1.28). Concerns about the Chinese property sector caused some volatility in late September. Equity prices in Japan have fluctuated as political change has created uncertainty about the outlook for fiscal policy. Meanwhile, the value of mergers and acquisitions deals has reached a record high this year in the United States.

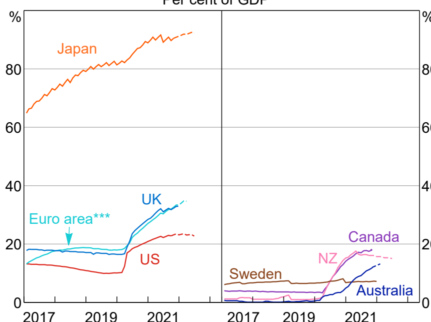
The US dollar has appreciated further over recent months

The US dollar has appreciated a little further over recent months on a trade-weighted (TWI) basis, and is around 2½ per cent higher than at the beginning of 2021 (Graph 1.29). Over the same period, the euro and Japanese yen have depreciated, recently reaching their lowest levels on a TWI basis since the start of the year. These movements are consistent with the smaller increase in bond yields in the euro area and Japan relative to those in the United States and other advanced economies. The euro area and Japan have also experienced a deterioration in their terms of trade recently, owing to rising natural gas and oil prices. The currencies of

Graph 1.26

Central Bank Government Bond Holdings*

Per cent of GDP**



* Central government debt only for all countries except the euro area. Dashed lines represent forecasts based on announced purchase programs or recent pace of purchases

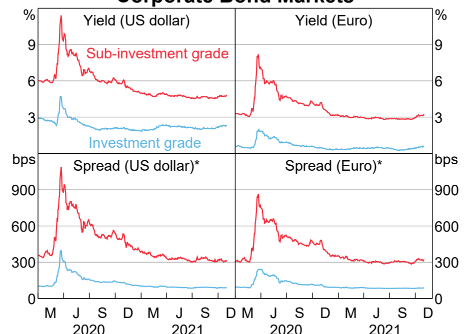
** Four-quarter rolling sum; forecasts are based on the IMF's World Economic Outlook

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

Sources: Central banks; IMF; RBA; Refinitiv

Graph 1.27

Corporate Bond Markets



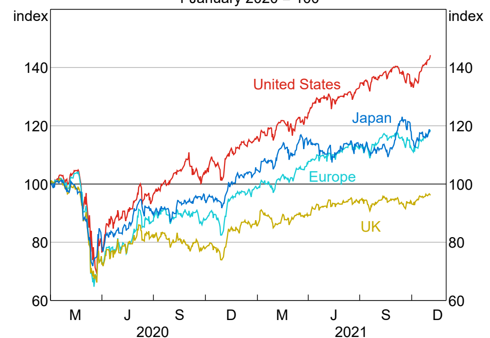
* Spread to equivalent maturity government bond yield

Source: ICE Data is used with permission

Graph 1.28

Equity Prices

1 January 2020 = 100



Source: Bloomberg

other advanced economies, including the Australian dollar, have generally appreciated or been little changed from their levels a few months ago on a TWI basis.

Some emerging market economies have tightened policy further in response to inflation …

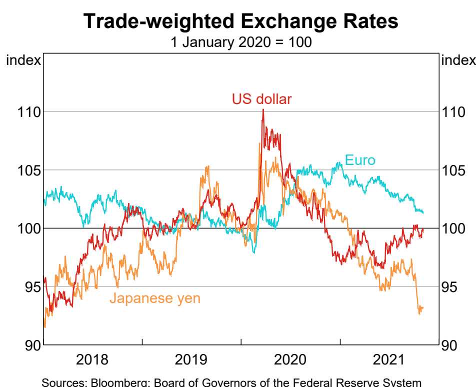
In response to rising inflation and inflation expectations, some emerging market economy central banks outside Asia have continued to tighten policy over recent months. A number of central banks in Latin America and emerging Europe have raised their policy rates several times this year in response to inflation rising to be well above target levels. The central banks of Brazil and Russia now assess that policy rates are above their neutral rates despite sizeable slack remaining in both economies. By contrast, the central bank of Turkey surprised markets by lowering policy rates by a total of 3 percentage points over September and October despite inflation remaining significantly above target.

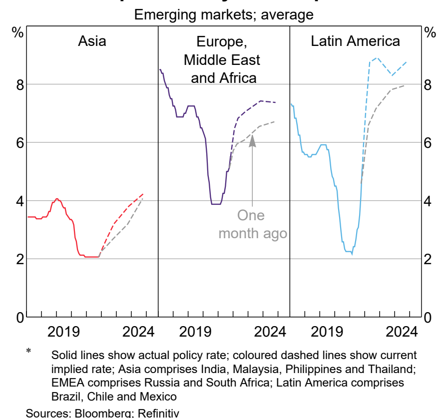
Market pricing implies that further rate increases are anticipated, and the expected path of rates has shifted higher in Latin America and Russia in recent months (Graph 1.30). In particular, markets expect the Central Bank of Brazil to increase the policy rate by another 250 basis points by the end of the year, which is a faster pace than the central bank has indicated.

Broader financial conditions have also tightened for emerging market economies outside Asia (Graph 1.31). Yields on local-currency government bonds have continued to increase, particularly in Latin America where they are significantly above the peaks seen in March 2020. This mainly reflects the domestic inflation and monetary policy outlook rather than investor concerns over sovereign credit risk. Indeed, spreads between US dollar-denominated bonds issued by emerging market economies and equivalent US Treasury bonds remain near the low levels that prevailed before the pandemic. Equity prices in Latin America have fallen to be below their pre-pandemic levels, while currencies have depreciated over recent months alongside net portfolio outflows.

… while others have kept rates at historic lows

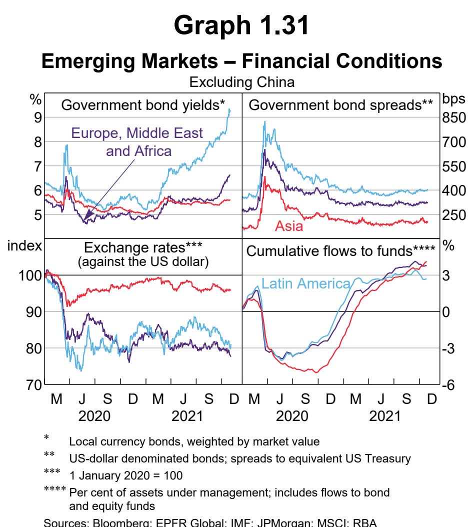
In contrast, central banks in emerging Asian economies have left policy rates unchanged. These central banks have either characterised inflation pressures as subdued and/or viewed recent increases as temporary. Market-implied paths of policy rates in these economies have





been little changed since August and continue to indicate that some central banks will start raising rates at a gradual pace this year. Local-currency government bond yields in Asia have not risen markedly, and spreads between US dollar-denominated bonds and equivalent US Treasury bonds remain low. Net portfolio inflows have continued, reflecting strong inflows into equity funds. The currencies of most emerging Asian economies have depreciated slightly against the US dollar.

More generally, some emerging market economies remain vulnerable to a tightening of global financial conditions at a time when their economic recoveries are still tentative, particularly as central banks in advanced economies progress with tapering their asset purchases and raising policy rates. A tightening in global financial conditions would be of particular concern for emerging market economies with large fiscal deficits, high levels of debt and/or a large share of external financing, such as Brazil, Turkey and South Africa.



In light of the ongoing challenges facing the global economy, the International Monetary Fund (IMF) allocated an additional US$650 billion worth of Special Drawing Rights (SDRs; an international reserve asset created by the IMF) to its member countries in August. This marked the first allocation of SDRs since 2009 and was intended to help foster the resilience and stability of the global economy by addressing the long-term need for reserve assets. The allocation is particularly beneficial for those economies with vulnerable external positions, as countries can choose to sell part or all of their SDRs for freely useable currencies. To enhance the impact of the allocation on the global economy, some countries with strong external positions have also discussed the possibility of using a share of their new allocation to support more vulnerable countries. A few countries have already made formal commitments to do this, including Australia. ✠

Endnotes

[1] China's cites are commonly (although not officially) grouped in 'tiers' according to size, ranging from the largest 'Tier 1' cities (such as Beijing and Shanghai) to medium-size 'Tier 2' cities (the capital cities of China's provinces) and smaller 'Tier 3' and below cities (which typically are less developed and have smaller populations).

[2] See RBA (2021), 'Box A: Central Bank Purchases of Government Bonds', *Statement on Monetary Policy*, August. Available at <https://www.rba.gov.au/publications/smp/2021/aug/box-a-central-bank-purchases-of-government-bonds.html>