1. International Economic Developments

Global economic growth is lower than average but appears to have stabilised over recent months (Graph 1.1). Economic conditions in China have steadied over the past six months. Growth in a number of the higher-income economies of east Asia remains below average, having been adversely affected by the slowdown in global trade in recent years and, in particular, slowing demand from China. Growth in New Zealand and India has been relatively strong over the past year.

Growth in the major advanced economies has eased over the past year but is expected to pick up over the second half of 2016. The economic recovery in these economies is expected to continue, supported by accommodative monetary policy. Growth is likely to exceed potential in the coming quarters, leading to a further reduction in excess capacity. However, potential growth appears to have declined over the course of the past decade or so as a result of lower growth in investment and productivity and the effect of population ageing.

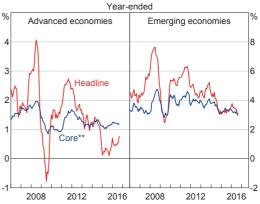
Growth in global industrial production, manufacturing activity and trade remains subdued. Growth in these indicators has been below average for much of the period since the global financial crisis, reflecting heightened uncertainty and weak investment. It is possible that industrial activity and trade will continue to lag behind aggregate global growth, given the relative resilience of consumption and service-industry growth globally.

Inflation has remained below most central bank targets since 2010, despite substantial reductions in unemployment rates in a number of economies (Graph 1.2). Low wage growth, particularly in the

Graph 1.1 **Global Economic Activity** MTP GDP* Industrial production** Year-ended 10 Quarterly 10 index % РМІ Export volumes*** Services 15 Services Manufacturing Merchandise 40 -15 30 -30 2006 2011 2016 2006 2011

- * Major trading partners' (MTP) GDP, weighted using Australia's export shares; RBA estimate for September quarter 2016
- * Industrial production is weighted by world industrial production shares at market exchange rates; year-ended growth
- *** Services exports are for select MTPs and Australia; year-ended growth Sources: ABS; Bloomberg; CEIC Data; CPB; IMF; Markit Economics; OECD; RBA; Thomson Reuters

Graph 1.2 Global Inflation*



- PPP-weighted; sum of emerging and advanced economies accounts for around 80 per cent of world GDP
- ** Excludes food and fuel

Sources: CEIC Data: IMF: RBA: Thomson Reuters

major advanced economies, suggests that there remains some spare capacity in labour markets. However, in the United States and Japan, unit labour cost growth is noticeably higher than it has been for some time and this has put pressure on business margins. Further gradual reductions in spare capacity are expected to place upward pressure on inflation in advanced economies, while the recent increases in oil prices, and commodity prices more generally, are also likely to contribute to global inflation. The recent turnaround in oil prices has already been evident in headline inflation measures picking up in advanced economies over the past year. In contrast, headline measures in emerging economies have fallen in response to easing food price inflation.

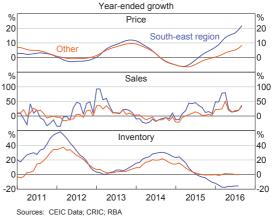
China and East Asia

Chinese economic growth has steadied over the course of the past six months or so. Growth has been supported by a pick-up in the property sector and continued strong infrastructure investment, underpinned by ongoing financial accommodation and fiscal expansion. While these developments have had positive flow-on effects to upstream industries, excess capacity problems in the industrial sector have persisted and private sector investment has slowed noticeably over the past year or more.

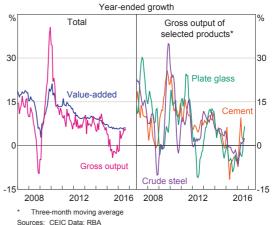
Residential property prices have increased sharply over the course of this year, partly reflecting speculative buying in larger cities (Graph 1.3). Buoyant conditions have supported overall growth of housing investment. Sales have grown strongly over the year to date and inventories of unsold housing have fallen. The fall in inventories has been concentrated in larger cities on the eastern seaboard, while a large overhang of housing inventory has persisted in smaller cities.

The pick-up in growth of residential and non-residential property construction has been associated with a recovery of manufacturing production in related industries, such as cement, plate glass and steel (Graph 1.4). In recent months,

Graph 1.3
China – Residential Property Market Indicators



Graph 1.4
China – Industrial Production



the authorities have increased public spending on infrastructure, including transport-related projects. This has also helped to support the demand for steel.

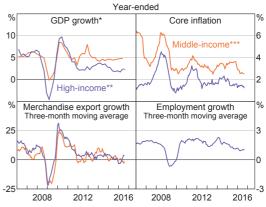
The rise in the demand for steel, combined with some reductions in the domestic supply of coal and iron ore in China, has contributed to higher bulk commodity prices globally (see 'Box A: Production of Iron Ore and Coal in China'). In part driven by stronger commodity prices, Chinese producer prices have been rising recently, a marked turnaround from the earlier deflationary trend (Graph 1.5). These upstream price pressures are yet to translate into higher consumer price inflation, which remains subdued in China and across east Asia.

Graph 1.5 China - Growth of Producer Prices Raw materials Minina Manufacturing 20 Year-ended (RHS) -20 (LHS) 2013 2016 2013 2016 2013 2016 Sources: CEIC Data; RBA

It is uncertain how long the current strength in the Chinese property sector and associated demand for upstream manufactured items will be sustained. Local government authorities have responded to rising property prices by introducing a range of measures, including increases in minimum downpayments in numerous cities and direct restrictions on house purchases in some locations. To date these initiatives have not been enough to stop prices from rising further; instead, price rises have become more widely dispersed across the country. But it is likely that continued efforts to restrict price growth will eventually result in slower residential investment and dampen demand for related industrial products and commodities.

Developments in China will continue to influence outcomes in other Asian economies, which as a group account for a significant share of Australia's trade. Weakness in global trade, including weaker trade with China, has contributed to lower growth in the high-income economies in east Asia, which are all quite reliant on trade (Graph 1.6). Business investment growth in these economies has declined over the past two years and, more recently, consumption and employment growth has also slowed. Fiscal stimulus has supported domestic demand since 2015 but the prospect of further fiscal support is diminishing as the authorities adjust to self-imposed fiscal discipline rules. The middle-income east Asian economies are also

Graph 1.6
East Asia – Economic Indicators



- Estimate for September quarter 2016
- Hong Kong, Singapore, South Korea and Taiwan
- *** Indonesia, Malaysia, Philippines and Thailand

Sources: CEIC Data; IMF; RBA; Thomson Reuters

facing subdued external demand but, because they are less reliant on trade, the impact on their growth has been more limited. A number of central banks in the east Asian region have eased monetary policy in the past year.

Major Advanced Economies

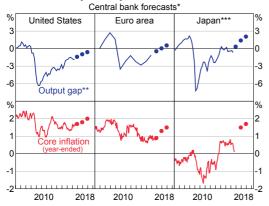
The economic recovery in the major advanced economies has continued. Over the past year, growth in demand has been driven by consumption, while business investment has remained weak. GDP growth is now around, or a little above, estimates of potential. Growth is expected to be supported over the period ahead by accommodative monetary policies and further improvements in labour market conditions. At the same time, the effect of population ageing has weighed on potential growth, especially in Japan. The weak investment and productivity growth of recent years, if maintained, will also exert a drag on potential growth.

Growth in output is expected to lead to further reductions in spare capacity over the next two to three years, leading to an increase in inflation. Policymakers in the United States expect to reach the Federal Reserve's inflation goal by 2018 (Graph 1.7). Inflation in the euro area and Japan is

Graph 1.7

Major Advanced Economies –

Output Gaps and Inflation



- ECB and FOMC forecasts as at September 2016; BoJ forecasts as at November 2016
- ** Output gap projections based on central banks' forecasts for GDP growth and potential GDP growth estimates from the BoJ, Congressional Budget Office and European Commission
- *** BoJ forecasts are for fiscal years; inflation forecasts are for CPI excluding fresh food in 2017 and 2018; inflation data exclude the effects of the consumption tax increase in April 2014

Sources: Bank of Japan; ECB; FOMC; RBA; Thomson Reuters

likely to remain below the respective central banks' targets until at least 2018.

Growth in the United States picked up in the September quarter and continued at the modest pace of recent quarters in the euro area, while GDP in Japan has been little changed over the past year or so (Graph 1.8). Private consumption has been a key driver of growth in the United States and the euro area over the past two years. In contrast, consumption in Japan has remained subdued following the consumption tax increase in early 2014. Conditions in the major advanced economies remain supportive of household consumption, with low borrowing costs, a recovery in housing prices, relatively strong employment growth and above-average consumer confidence.

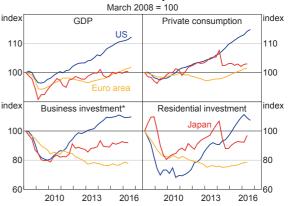
However, investment growth in advanced economies has been weak in recent years.

The United States has experienced a broad-based slowing in business investment for over a year.

The weakness has been most acute in the oil & gas and manufacturing sectors. Residential investment eased recently, but residential construction activity

Graph 1.8

Major Advanced Economies –
GDP and Components



 Non-residential public and private investment shown for euro area Sources: RBA: Thomson Reuters

is at a high level. In the euro area and Japan, residential and business investment remain well below pre-crisis levels, although, in the euro area, machinery and equipment investment has grown at an above-average pace since early 2015. The large appreciation of the yen since late 2015 has weighed on Japanese corporate profits and business investment.

Labour markets have improved considerably in recent years across the major advanced economies (Graph 1.9). Employment growth has been robust, encouraging an increase in workforce participation that has offset, at least temporarily, some of the effects of population ageing on labour supply. Unemployment rates in the United States and Japan have declined to be at or below their longrun average levels. The unemployment rate in the euro area has also declined and is now only a little above levels seen in the mid 2000s.

Tightening labour markets have been accompanied by stronger growth in some measures of labour compensation in the United States and Japan over the past 2½ years. Of particular note, given its relevance to inflation pressures, unit labour costs in the US and Japanese economies have been growing at above-average rates, putting pressure on business margins.

Graph 1.9
Major Advanced Economies –
Labour Market



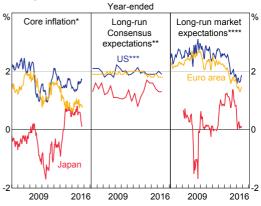
- * Three-month moving average for Japan
- ** Three-month moving average year-ended growth

Sources: Eurostat; RBA; Thomson Reuters

Headline inflation in the major advanced economies remains below central banks' targets. In the United States and the euro area, core inflation is above its recent trough and, in the United States, core inflation is not far below the Federal Reserve's inflation objective (Graph 1.10). Short-term measures of inflation expectations have declined in recent years to historically low levels, coinciding with the fall in oil prices and lower headline inflation. Economists' longer-term expectations have declined only marginally and remain close to these central banks' inflation targets, suggesting that expectations remain relatively well anchored. Longer-term market-based measures of inflation expectations have moderated since early 2016, but are likely to have been influenced by other financial market developments, such as declining risk premia, and there are signs that these measures may have picked up recently.

In contrast, in Japan, core inflation has fallen in recent months. Longer-term market and consumer inflation expectations have fallen sharply since late 2015, returning to where they were before the Bank of Japan (BoJ) adopted its inflation target and started its quantitative easing program in early 2013. The BoJ recently committed itself to

Graph 1.10
Major Advanced Economies – Inflation



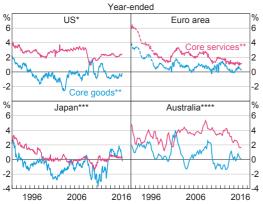
- * PCE inflation for the US; CPI for the euro area and Japan; Japan data exclude the effects of the consumption tax increase in April 2014
- Euro area series is from the Survey of Professional Forecasters
 US expectations adjusted for the average difference between CPI and PCE
- **** Inflation expectations from 5 and 10-year inflation swaps; latest month is an average in the month-to-date

Sources: Bloomberg; Consensus Economics; ECB; RBA; Thomson Reuters

'overshooting' its 2 per cent inflation target, with the intention of raising inflation expectations; however, measures of inflation expectations have been little changed since this announcement.

In the advanced economies, lower inflation in the prices of services has been an important driver of subdued core inflation in the post-crisis period (Graph 1.11). As services are more likely to be nontradable, this is likely to reflect the weak domestic price pressures arising from spare capacity – in labour and product markets – that followed the global financial crisis. In Australia's case, the increase in spare capacity in the labour market followed the end of the resources boom. On the other hand, goods inflation across advanced economies, which on the whole contains more tradable items, has remained low but has not generally contributed to inflation being lower in the post-crisis period. In Australia, the depreciation in the exchange rate since 2013 has supported inflation of tradable items, although heightened competition recently in the retail sector means that inflation of these items has been lower than otherwise.

Graph 1.11
Advanced Economies – Core Inflation



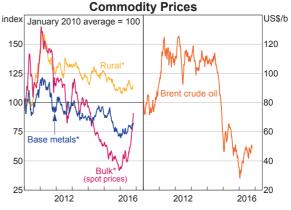
- * Personal Consumption Expenditures (PCE) inflation
- Core measures exclude volatile items: food, energy and for some economies alcohol and tobacco; euro area dashed lines are estimates
- Excludes the effects of the 1997 and 2014 consumption tax increases
 For Australia, non-tradables and tradables inflation (excluding volatile items) are shown instead of core services and core goods, respectively; adjusted for the tax changes of 1999–2000 and excludes interest charges and deposit & loan facilities, where relevant

Sources: ABS; ECB; RBA; Statistics Japan; Thomson Reuters

Commodity Prices

Commodity prices have been driven higher, since early 2016, by the sharp rise in bulk commodity prices (Graph 1.12; Table 1.1). This rise in commodity prices has been reflected in the first increase in Australia's terms of trade in 2½ years. As discussed in the 'Outlook' chapter, the outlook for the terms of trade is now more positive than previously thought, and it is expected that the trough is now past.

Graph 1.12



* RBA Index of Commodity Prices (ICP) sub-indices Sources: Bloomberg; RBA

The spot price of iron ore remains well above its recent low of December 2015, reflecting both higher Chinese demand and lower iron ore production in China. However, the global supply of low cost iron ore is expected to increase further, as capacity expansions come on line in Australia and Brazil. This is likely to exert some downward pressure on prices in the period ahead.

The spot prices of both hard-coking and thermal coal have increased sharply since the previous *Statement*, to levels not reached in several years (Graph 1.13). Coal prices have been supported by cuts to Chinese production and temporary

Table 1.1: Commodity Price Growth(a) SDR, three-month-average prices, per cent

	Since previous Statement	Over the past year
Bulk commodities	37	42
– Iron ore	7	9
– Coking coal	95	120
– Thermal coal	40	41
Rural	-1	1
Base metals	5	5
Gold	2	16
Brent crude oil ^(b)	2	0
RBA ICP	9	7
 using spot prices for bulk commodities 	20	21

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

(b) In US dollars

Sources: Bloomberg; IHS; RBA

Graph 1.13 Coal Prices



Sources: Department of Industry, Innovation and Science; IHS; RBA

disruptions to global supply. However, most of Australia's coal exports are still sold under contract, at prices that are currently lower than those in the spot markets. Contracts for the December quarter have settled at US\$200 per tonne, representing an increase of 116 per cent from the September

quarter benchmark price of US\$92.5 per tonne. So while the profitability of Australian coal miners has improved, the immediate gains are a bit less than implied by the very sharp rise in spot prices. The Bank's liaison suggests that prices would need to remain elevated for some time to induce any noticeable increase in Australian production. Recent price increases are expected to partly unwind as temporary disruptions to supply ease.

Oil prices have risen since early 2016, although they have been relatively stable over the past few months (Graph 1.12). In late September, OPEC members agreed in principle to cap production at between 32.5 and 33 million barrels per day, which is below current production levels. Government officials in Russia have indicated that they might join OPEC in capping oil production. The oil price increases since the beginning of the year have started to be reflected in higher regional liquefied natural gas (LNG) prices.