

Statement on Monetary Policy

MAY 2016

Contents

Overview	1
1. International Economic Developments	5
2. International and Foreign Exchange Markets	15
3. Domestic Economic Conditions	27
Box A: Australian Services Trade	36
4. Domestic Financial Markets	39
5. Price and Wage Developments	49
Box B: Wage Developments by Industry	55
6. Economic Outlook	59

Reserve Bank

The material in this *Statement on Monetary Policy* was finalised on 5 May 2016. The next *Statement* is due for release on 5 August 2016.

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

The graphs in this publication were generated using Mathematica.

Statement on Monetary Policy Enquiries

Secretary's Department
Tel: +61 2 9551 9830
Fax: +61 2 9551 8033
Email: rbainfo@rba.gov.au

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

Overview

Economic conditions in Australia's major trading partners generally appear to have eased a little of late. Growth in China moderated further in the March quarter. Subdued investment growth in the manufacturing sector was partly offset by rising public infrastructure investment and a return to growth in real estate investment. The latter was consistent with a strengthening in the property market in recent months in response to a range of earlier measures to stimulate demand. The moderation of Chinese growth has affected Asian economies and emerging economies in other regions that have strong trade links with China. Economic activity remained weak in Japan, while growth eased in the United States but continued at an above-trend rate in the euro area. Meanwhile, there have been further improvements in labour market conditions across all three economies. Despite that, inflation in the major advanced economies remains below central banks' targets and inflation expectations have declined. This has been an important concern for central banks and contributed to the European Central Bank's decision to ease monetary policy further in March. Monetary policy settings remain very accommodative in Japan and the United States (where markets expect no further increase in the policy rate before late 2016).

Changes in expectations about the course of the monetary policies of the major central banks have been reflected in exchange rates and financial market prices more generally. Sentiment in global financial markets has improved since late February.

The outlook for growth in Australia's major trading partners in 2016 has been revised a little lower since the February *Statement on Monetary Policy* to incorporate generally weaker-than-expected growth in the March quarter and a reassessment of growth momentum, particularly in Asia. Despite the moderation in Chinese growth in the March quarter, the outlook there is much as it was earlier forecast, based on the expectation of further support being provided by more stimulatory policy settings. The Chinese authorities appear, at present, to be giving greater priority to short-term growth objectives than to the longer-term goals of deleveraging and achieving growth that is less reliant on investment and heavy industry. The outlook for the Chinese economy continues to be a key source of uncertainty for the forecasts. One risk is that the pursuit of the authorities' near-term growth targets is likely to increase already elevated levels of debt and could potentially delay addressing the problem of excess capacity in the manufacturing and resources sectors.

While commodity prices are significantly lower than the peaks of a few years ago, the expectation of more policy stimulus in China has been accompanied by a sizeable increase in commodity prices over recent months. Iron ore and coking coal prices are around 60 per cent and 30 per cent above their low points in late 2015, respectively. This amounts to a rise in Australia's terms of trade in the near term. However, it is assumed that the prices of bulk commodities are not sustained at current levels. Chinese steel demand is still

expected to decline over the next couple of years and a substantial amount of new, low-cost iron ore supply is likely to enter the market over that period. Meanwhile, liquefied natural gas (LNG) prices are expected to be higher than previously forecast, which will tend to increase the terms of trade. The net result of these various movements is that the terms of trade are expected to be around recent levels by the end of the forecast period.

Growth in the Australian economy over 2015 was a bit stronger than earlier anticipated, and a little above estimates of potential growth. Growth was moderate in the December quarter, however, and appears to have continued at about this pace into 2016, much as was forecast at the time of the February *Statement*. Consistent with this, employment growth has slowed from the strong pace of last year and leading indicators of employment have been somewhat mixed of late. Nevertheless, labour market conditions remain much better than a year ago. The unemployment rate has been around 5¾ per cent in recent months, having been as high as 6¼ per cent last year.

There has been no material change to the forecast for GDP growth or the unemployment rate. GDP growth is expected to strengthen gradually to an above-trend rate, reflecting the effects of low interest rates and the depreciation of the exchange rate since early 2013. Both have been helping activity to rebalance towards the non-resource sectors of the economy. As before, the unemployment rate is forecast to remain around current levels for the next year or so and then gradually decline as growth in economic activity strengthens. The outlook for the unemployment rate is consistent with spare capacity remaining in the labour market throughout the forecast period.

Growth in household consumption picked up in the second half of last year and is expected to be sustained at around that rate in the period ahead. The pace of growth in retail sales volumes was maintained in early 2016. And while surveys suggest that households' perceptions of their own finances

have eased, they were around long-run average levels in April. Growth in consumption is forecast to be maintained at a pace that is a bit above average, despite only modest growth in wages. This implies a further gradual decline in the household saving ratio over the forecast period.

The amount of residential construction work still in the pipeline is substantial and has continued to increase. This points to further strong growth in dwelling investment, albeit at a gradually declining rate consistent with the decline in building approvals since last year. In established housing markets, conditions have stabilised over the past six months or so. Housing prices have grown moderately over 2016 to date, following a small decline at the end of 2015. Housing credit growth has eased a little over recent months to be around 7 per cent in six-month-ended annualised terms in early 2016. This follows increases in mortgage rates and the strengthening of banks' non-price lending terms in response to supervisory actions.

Surveyed conditions in the business sector remain above average and business credit growth has picked up over the past year or so. Nevertheless, indicators of investment intentions suggest that non-mining business investment is likely to remain subdued for a time, although it is expected to gradually pick up later in the forecast period as overall demand strengthens. Mining investment is expected to continue to fall as projects are progressively completed, although the magnitude of the falls should diminish over the next couple of years, consistent with the forecasts presented in the February *Statement*. Project completions will support further growth in resource exports. Net service exports are expected to continue to make a noticeable contribution to growth.

Inflation was lower than expected in the March quarter. The various measures suggest that underlying inflation declined to a little less than ¼ per cent in the quarter (compared with about ½ per cent in the December quarter), to be about 1½ per cent over the year. Headline inflation was

lower still, partly reflecting some temporary factors. Nonetheless, the CPI data indicate that there has been broad-based weakness in domestic cost pressures. This is evident in the further decline in non-tradables inflation in the March quarter. In part, this reflects lower-than-expected growth in labour costs, with unit labour costs being little changed for four or more years now. In addition, there has been heightened retail competition, a moderation in conditions in housing rental and construction markets, and declines in the cost of some business inputs, such as fuel and utilities. A number of these factors are also likely to have mitigated some of the upward pressure on the prices of tradable items arising from increasing import prices following the depreciation of the exchange rate since early 2013.

The forecast for underlying inflation has been revised lower, reflecting the lower-than-expected outcome for inflation in the March quarter and an expectation that domestic cost pressures, including labour costs, will pick up more gradually than anticipated at the time of the February *Statement*. The outlook for domestic cost pressures is a key source of uncertainty. Despite above-trend growth in economic activity and improvements in labour market conditions over the past year, it is possible that domestic cost pressures may weaken further, and so inflation may not pick up as expected. However, it may be that the strengthening in the labour market embodied in the forecasts is associated with growth of labour costs picking up sooner or by more than is currently forecast.

The substantial exchange rate depreciation over recent years is expected to continue to place some upward pressure on inflation for a time. While the exchange rate is assumed to remain around current levels over the forecast period, it may respond to a number of influences, including any unanticipated changes to the outlook for growth in China, commodity prices or the monetary policy decisions of the major central banks. It therefore represents a significant source of uncertainty for the forecasts of inflation, as well as for the outlook for growth in activity.

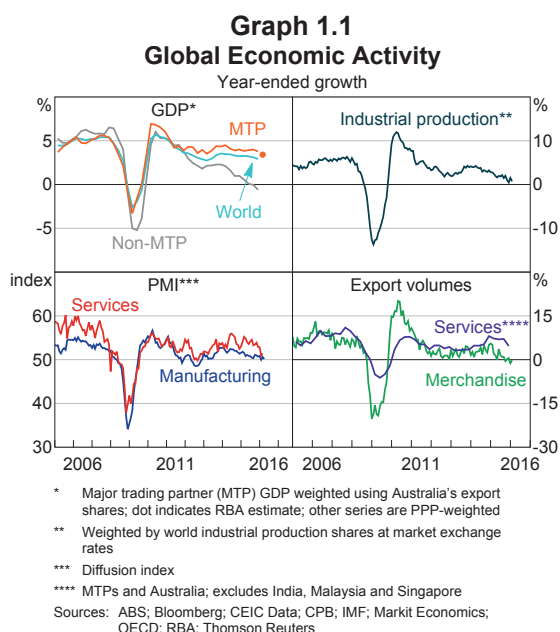
For some time, the Reserve Bank Board had noted that the inflation outlook provided scope for a further easing in monetary policy. After taking account of developments over recent months, the Board's assessment at its May meeting was that the outlook for economic activity and the unemployment rate was little changed, but that the inflation outlook was lower than earlier anticipated. At the same time, the Board took careful account of developments in the housing market, noting the effects of supervisory measures to strengthen lending standards, the recent easing in housing credit growth and the abatement of strong price pressures. Taking all of these considerations into account, the Board judged that the prospects for sustainable growth in the economy, with inflation returning to target over time, would be improved by further easing of monetary policy. Accordingly, the cash rate was reduced by 25 basis points. The Board will continue to assess the outlook and adjust policy as needed to foster sustainable growth in demand and inflation outcomes consistent with the inflation target over time. ✎

1. International Economic Developments

Growth in Australia's major trading partners moderated around the turn of the year to be below its decade average in early 2016 (Graph 1.1). Over the past year or so, growth eased in the United States and stalled in Japan, but continued at an above-trend rate in the euro area. Growth in China has moderated, although the Chinese authorities remain committed to supporting growth, announcing a growth target for 2016 of 6.5–7 per cent. The slowing in growth in China has had significant flow-on effects on Asian economies and emerging economies in other regions that have strong trade links with China. Commodity prices have increased in recent months, but still remain low relative to recent years. The low level of oil prices should support growth in Australia's major trading partners, which are generally net oil importers. Expansionary monetary policy in most economies is also supporting growth.

Growth in Australia's major trading partners has been higher than growth in the world as a whole over recent years. Lower growth has been most pronounced in commodity-exporting emerging market economies, such as Brazil, with which Australia has little direct trade. The resilience of Australia's major trading partners' growth also reflects the increase in the share of Australia's exports going to China, where GDP growth remains relatively strong despite some moderation.

The growth of global industrial production and merchandise trade (which accounts for around 80 per cent of total trade) has declined over the past couple of years. Although services sector conditions had been more positive and growth

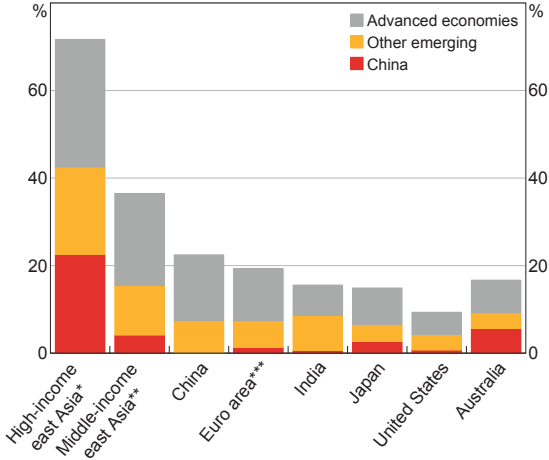


in global service exports remains higher than it was a few years ago, surveys suggest that global services sector activity has weakened recently. The slowing growth in global trade has had a material impact on conditions in the high-income east Asian economies, which are significantly more trade exposed than the rest of Australia's major trading partners (Graph 1.2). In particular, a substantial share of these economies' exports goes to China and other trading emerging economies where growth has slowed noticeably. In contrast, the major advanced economies are less exposed to trade.

Globally, inflation remains low and is below central banks' targets in most advanced economies (Graph 1.3). Year-ended headline inflation has

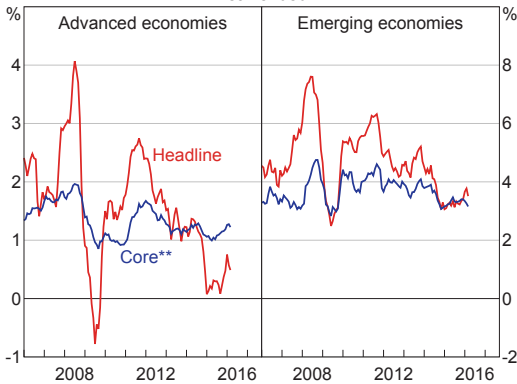
Graph 1.2

Merchandise Export Values by Destination
Per cent of GDP, 2014



* Hong Kong, Singapore, South Korea and Taiwan
 ** Indonesia, Malaysia, Philippines and Thailand
 *** Excludes intra-euro area trade
 Sources: IMF; United Nations

Graph 1.3
Global Inflation*
Year-ended



* PPP-weighted; sum of emerging and advanced economies accounts for around 80 per cent of world GDP
 ** Excluding food and fuel
 Sources: CEIC Data; IMF; RBA; Thomson Reuters

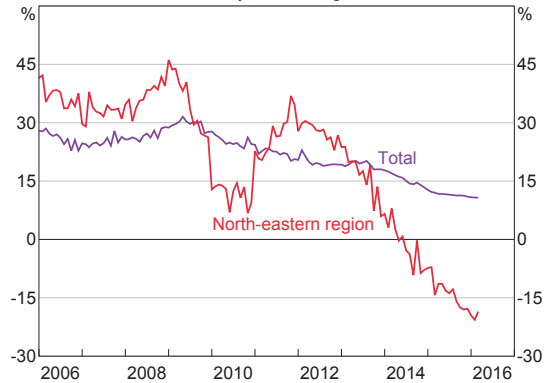
picked up a little in recent months, as the direct effect of some of the earlier oil price decline has moved out of the year-ended calculations. Core inflation has also increased in advanced economies over the past year, most notably in the United States, but it has been little changed over the past two years in emerging economies.

Asia-Pacific

In March, the Chinese Government announced a GDP growth target for 2016 of 6.5–7 per cent, down from ‘around 7 per cent’ in 2015. In related policy documents, the authorities acknowledged risks facing the domestic economy and financial system, including rising corporate debt, but placed considerable priority on meeting the new growth target. Consistent with this, the projected headline budget deficit for 2016 was increased to 3 per cent of GDP from 2.4 per cent and the authorities suggested that more fiscal and monetary support could be provided if required.

China’s economic growth has moderated further in 2016, as excess capacity in the industrial sector has continued to weigh on growth in investment. Chinese GDP increased by 1.1 per cent in the March quarter, to be 6.7 per cent higher over the year. Longer-term structural factors, including an easing in growth in productivity and the urban workforce, may also be contributing to slower growth in China. Investment has fallen particularly sharply in the north-eastern region where there has been a substantial build-up of excess capacity in the mining and manufacturing industries (Graph 1.4). The slowing in industrial activity during the past year has been accompanied by a decline in industrial profits, which has been most pronounced

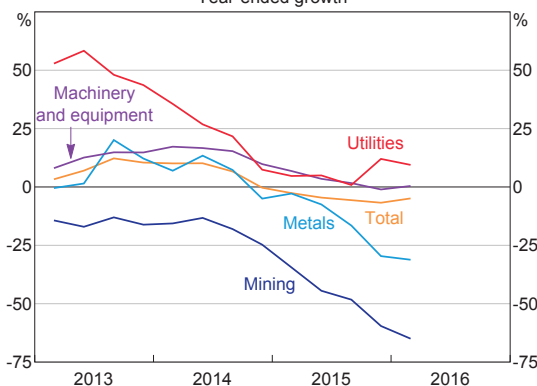
Graph 1.4
China – Fixed Asset Investment
Nominal year-ended growth



Sources: CEIC Data; RBA

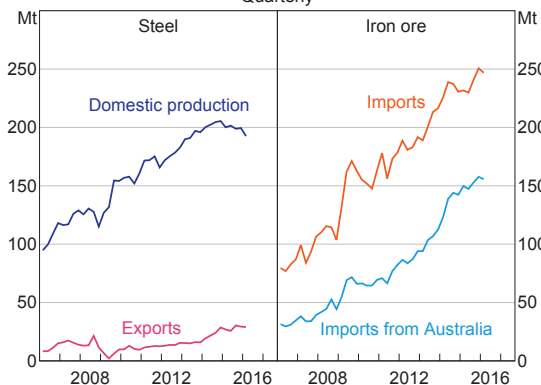
for the mining and metals manufacturing industries (Graph 1.5). Mining profits have been declining for several years now, in line with the falls in commodity prices, and profits in the metals industry have been declining over the past year or more. The domestic production of crude steel and iron ore declined in the March quarter in seasonally adjusted terms (Graph 1.6). Iron ore imports remain around record highs and imports from Australia have maintained their market share. Chinese trade overall has continued to decline in 2016 in response to weaker domestic and external demand.

Graph 1.5
China – Industrial Profits*
Year-ended growth



* Four-quarter moving average
Sources: CEIC Data; RBA

Graph 1.6
China – Steel and Iron Ore*
Quarterly



* Seasonally adjusted by RBA
Sources: CEIC Data; RBA

Conditions in the Chinese residential property market have improved noticeably in early 2016. The volume of floor space sold increased significantly in the first few months of the year, which has helped to reduce inventory-to-sales ratios. Real estate investment also picked up in the first quarter of 2016 (Graph 1.7). Property prices increased further in the larger cities and many smaller cities showed signs of price growth after a prolonged period of weakness. This follows a series of supportive measures introduced by the authorities over 2015 and early 2016, including lowering minimum mortgage down payments and benchmark lending rates. Stronger conditions in a few of the larger cities have prompted those local authorities to tighten borrowing requirements and restrictions on the number of properties people can purchase.

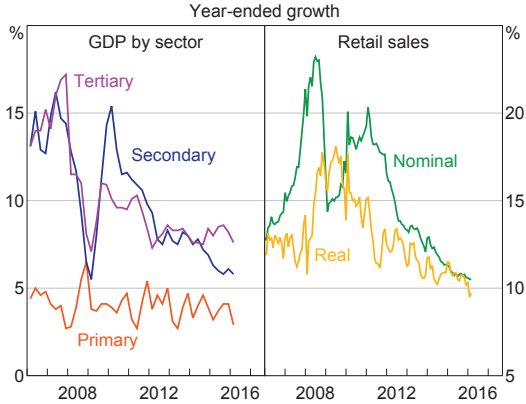
Graph 1.7
China – Residential Property Market Indicators



* Newly constructed property in 69 large and medium-sized cities
** Year-ended growth of trend series, includes non-residential land
Sources: CEIC Data; RBA; WIND Information

Growth in the services (tertiary) sector has been sustained at a relatively strong pace, which has helped to support overall growth in the face of lower growth in the industrial (secondary) sector (Graph 1.8). Financial services activity, which grew rapidly in the first half of 2015, has slowed in recent quarters, although a pick-up in real estate services activity in the March quarter has provided some offset to that. Growth in a number of indicators of household consumption has also eased, but remains relatively strong. Retail sales volumes

Graph 1.8
China – Activity Indicators



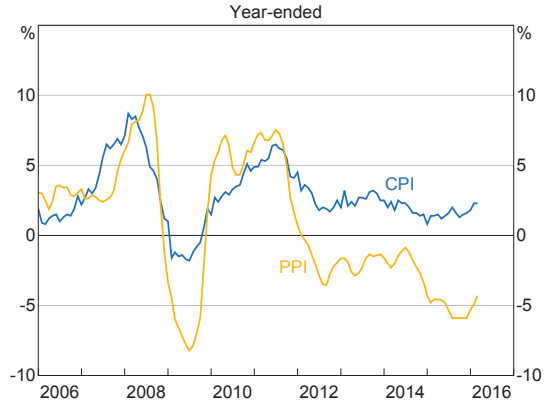
Sources: CEIC Data; RBA

growth has moderated over the past year, while automobile sales declined in the March quarter after increasing strongly in late 2015, partly in response to earlier tax cuts.

Financial conditions remain very accommodative in China. Growth in total social financing (TSF) has increased strongly in 2016 to date, particularly when adjusted for the impact of the local government debt restructuring program. At the National People's Congress in March, a target for TSF growth in 2016 of 13 per cent was introduced. Although no specific quota of debt issuance was announced as part of the local government debt restructuring program, it is likely that local government bond issuance will make a sizeable contribution to growth of economy-wide financing in 2016. More generally, bank credit growth and corporate bond issuance have remained strong, offsetting weakness in a range of off-bank balance sheet components.

Inflationary pressures are subdued in China, consistent with excess capacity in a number of industries, although downward pressure on prices has moderated somewhat. CPI inflation has increased a little in recent months, driven by higher food prices (Graph 1.9). The rate of decline in the producer price index (PPI) has also eased, in part reflecting increases in commodity prices over recent months.

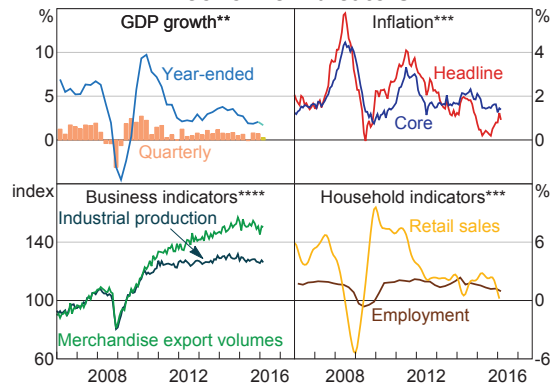
Graph 1.9
China – Inflation



Sources: CEIC Data; RBA

Economic growth in the high-income east Asian economies slowed in 2015 – driven by the softer demand from China and other emerging economies for the region's exports – and appears to have continued at a below-average rate in early 2016 (Graph 1.10). Merchandise export volumes have been little changed for around two years, despite substantial exchange rate depreciations in the region over the past year. Industrial production has not grown for two years. Investment was

Graph 1.10
High-income East Asia – Economic Indicators*



* Hong Kong, Singapore, South Korea and Taiwan

** March 2016 estimate based on advance releases from Singapore, South Korea and Taiwan

*** Year-ended growth; retail sales is a 13-term Henderson trend; employment is a quarter average.

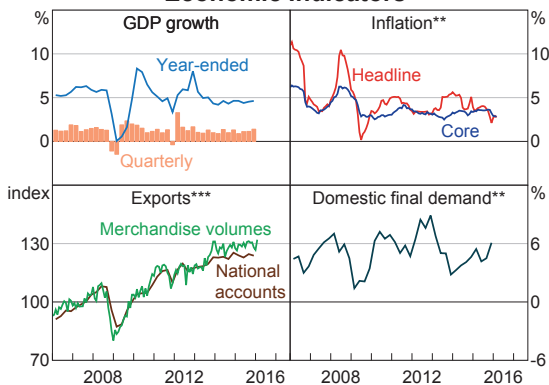
**** 2007 average = 100

Sources: CEIC Data; RBA; Thomson Reuters; United Nations

subdued over 2015 and recent indicators across the region suggest that this remained the case in early 2016. Consumption growth had been resilient over 2015, but in recent months consumer confidence has declined and retail sales growth has slowed. This may reflect the moderation in employment growth over the past six months. Core inflation has eased since late 2014, and headline inflation remains low. A number of central banks in the region have reduced policy rates since mid 2014 and several governments have increased spending and implemented temporary tax reductions during the past year.

In the middle-income east Asian economies, growth has been more resilient and remains at around its average rate over recent years (Graph 1.11). While these economies are also facing subdued external demand, they are less exposed to international trade than the high-income east Asian economies. Domestic final demand has continued to expand due to moderate consumption growth and a marked increase in investment growth over the second half of 2015. Both headline and core inflation remain relatively low across the region and have eased in recent months.

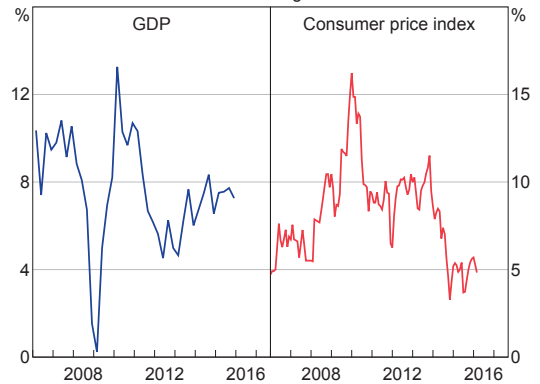
Graph 1.11
Middle-income East Asia – Economic Indicators*



* Indonesia, Malaysia, Philippines and Thailand
 ** Year-ended growth
 *** 2007 average = 100
 Sources: CEIC Data; RBA; Thomson Reuters; United Nations

In India, economic growth has picked up over recent years (Graph 1.12). Growth has been underpinned by household consumption and public sector investment, while private investment and external demand have been relatively weak. Subdued commodity prices have helped to contain inflation and support domestic demand. They have also assisted the process of fiscal consolidation by reducing government expenditure on energy subsidies. CPI inflation slowed to around 5 per cent in March 2016, driven by declining food price inflation. The Reserve Bank of India (RBI) eased the policy rate further in April, bringing the reduction over the past year to 100 basis points. The RBI cited weaker-than-expected inflationary pressures and downward pressure on growth stemming from the government's fiscal consolidation and muted global demand. The RBI is seeking to achieve CPI inflation of 5 per cent by March 2017.

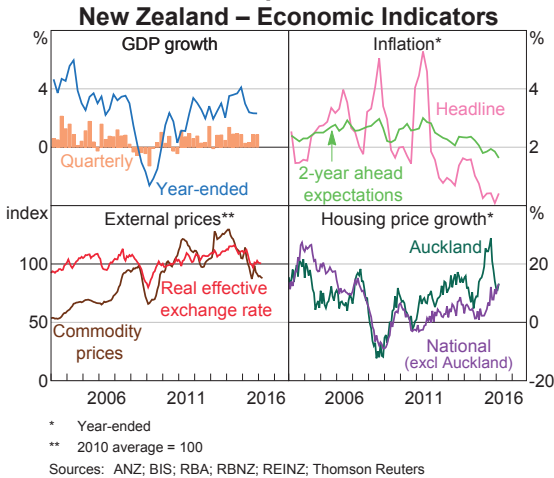
Graph 1.12
India – GDP Growth and Inflation
Year-ended growth



Source: CEIC Data

Growth in the New Zealand economy picked up in the second half of 2015, supported by accommodative monetary policy and the earlier exchange rate depreciation (Graph 1.13). Record high net immigration has boosted growth of the labour force, buoyed private consumption and added pressure to housing price growth. Tax and regulatory changes aimed at curtailing investor activity in the housing market have seen housing

Graph 1.13



price growth moderate in Auckland since October last year, although it picked up in March. More generally, housing price growth remains relatively high across New Zealand and has picked up in recent months. Falling food and energy prices continue to exert downward pressure on inflation; headline inflation is around its lowest rate since 1999. Underlying inflationary pressures are also subdued. In early 2016, prices for New Zealand commodity exports declined, while the exchange rate was little changed. This, along with declining inflation expectations and low wage growth, led the Reserve Bank of New Zealand to reduce its policy rate by 25 basis points in March, following a cumulative 100 basis point reduction over 2015.

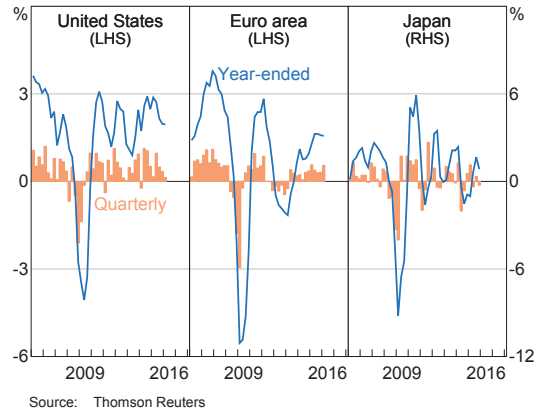
Major Advanced Economies

Growth in the major advanced economies over the past year has led to continued improvements in their labour markets. However, growth slowed over recent quarters in the United States and stalled part-way through 2015 in Japan (Graph 1.14). The euro area economy has continued to expand at above its trend growth rate.

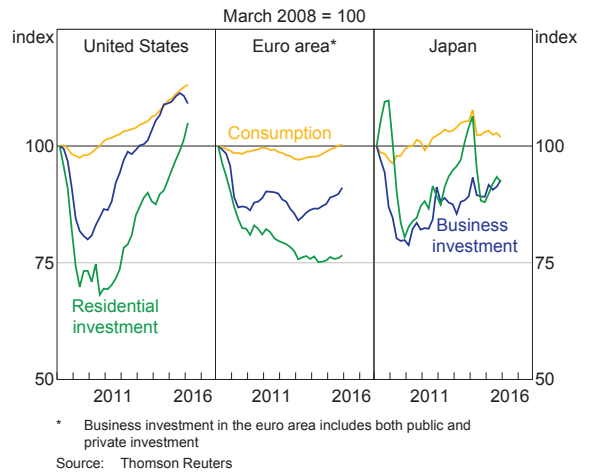
Over the past two years private consumption growth has been a key driver of growth in the United States and the euro area (Graph 1.15). In contrast, consumption in Japan has remained subdued since the consumption tax increase

Graph 1.14

Major Advanced Economies – GDP Growth



Major Advanced Economies – Economic Indicators

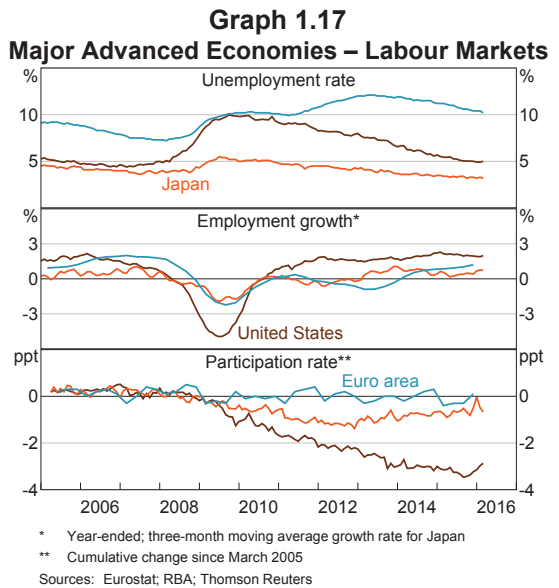
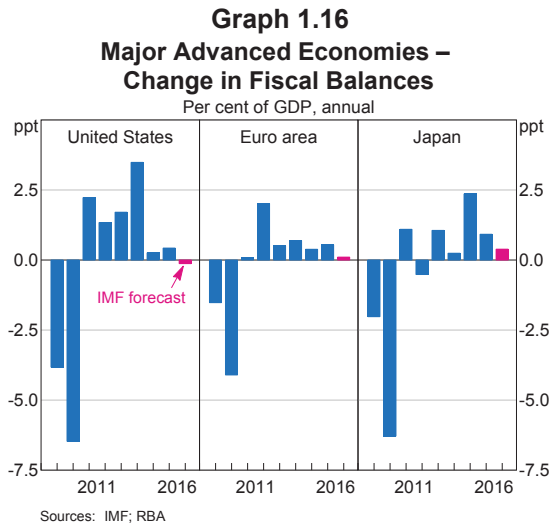


in early 2014, after growing over much of the preceding few years. Conditions in the major advanced economies generally remain supportive of consumption: employment growth has been strong; accommodative monetary policies are keeping borrowing rates low; household net wealth has been recovering, with housing prices approaching, or even exceeding, pre-crisis levels; and low fuel prices have been boosting real incomes. At the same time, however, nominal wage growth remains low and consumer confidence has declined recently, although it remains at or above long-run average levels.

A recovery in business investment has made an important contribution to growth in the major advanced economies over recent years. More recently, the strength in business investment waned in the United States, where declining investment in the oil & gas and manufacturing sectors, due to declining oil prices, weak external demand and the appreciation of the US dollar, subtracted from growth in recent quarters. In contrast, residential investment continued to grow strongly, supported by improvements in housing market conditions and low borrowing rates. In the euro area and Japan, investment has continued to grow, but remains well below its pre-crisis levels. Euro area investment growth, particularly in machinery and equipment, picked up in 2015 supported by above-average business confidence, and timely indicators suggest that this momentum has continued into early 2016. Similarly, timely indicators suggest that business investment has continued to grow in Japan, supported by strong corporate profit growth following the significant depreciation of the yen between 2012 and 2014. However, the recent appreciation of the yen and a decline in surveyed business conditions are less positive for the investment outlook.

After earlier fiscal tightenings, fiscal policy in the United States and Japan became less of a drag on economic activity recently and this is projected to continue this year (Graph 1.16). In the euro area, fiscal policy is also expected to be less contractionary in 2016.

Labour markets have improved considerably in recent years across the major advanced economies (Graph 1.17). Employment growth has been robust in all three economies, resulting in declining unemployment rates. Unemployment rates in the United States and Japan are now at or below their long-run averages, indicating increasingly limited spare capacity. In contrast, the euro area unemployment rate remains well above its long-run average level. The strength in labour market conditions seems to have encouraged an increase

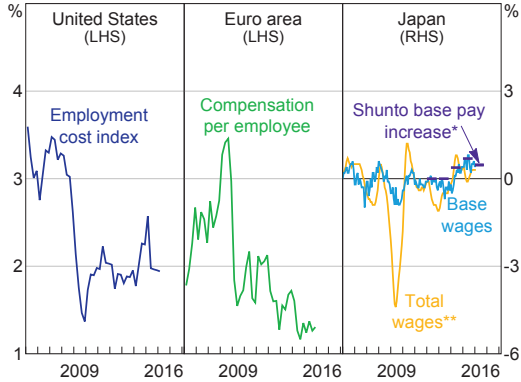


in workforce participation in Japan, and more recently in the United States, after earlier declines. Nonetheless, participation rates remain at or below their levels of a decade earlier, partly because of population ageing.

Nominal wage growth in the major advanced economies remains low despite the improvements in labour markets (Graph 1.18). In the United States, low productivity growth may be restraining wage growth in the face of the tightening labour

market; unit labour costs have been growing at an above-average pace. Wage growth in Japan has been positive since 2014, consistent with the strengthening in the labour market. However, recent negotiations between labour unions and large employers (the so-called 'Shunto') point to some moderation in base-wage growth in the coming year. Growth in euro area compensation per employee remained close to its historic low during 2015, consistent with the relatively high level of unemployment.

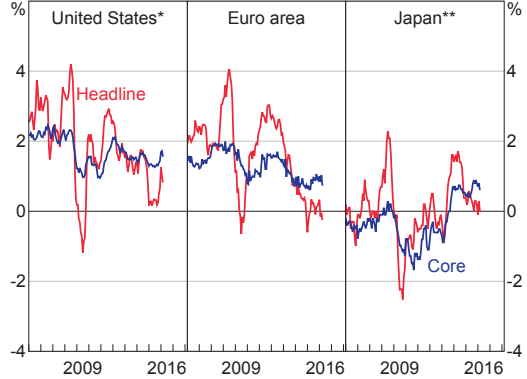
Graph 1.18
Major Advanced Economies – Wage Growth



* Reported agreed base-wage increases in the annual Shunto negotiations between labour unions and large employers; 2016 estimate is based on a sample of negotiated wage agreements reported to date
 ** 13-term Henderson trend
 Sources: CEIC Data; Eurostat; Nomura; RBA; Thomson Reuters

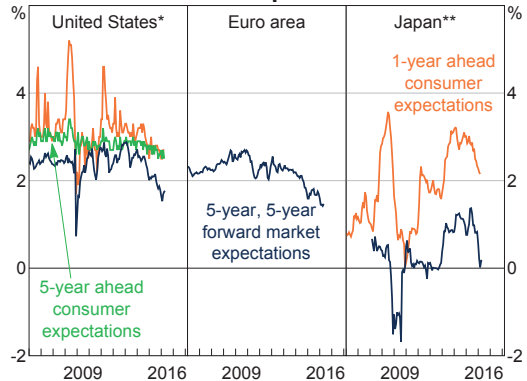
Inflation in the major advanced economies remains below central banks' targets (Graph 1.19). Low nominal wage growth and the earlier decline in oil prices have contributed to the restrained price pressures. Even though core inflation has increased from its recent lows, most measures of inflation expectations in the major advanced economies have declined in recent years, and in the United States and euro area they are at around their lowest levels since the global financial crisis (Graph 1.20). To a large extent, the decline in inflation expectations has coincided with the decline in headline inflation. While long-term market-based measures of inflation expectations

Graph 1.19
Major Advanced Economies – Inflation



* Personal consumption expenditures (PCE) inflation
 ** Excluding the effects of the consumption tax increase in April 2014
 Sources: RBA; Thomson Reuters

Graph 1.20
Major Advanced Economies – Inflation Expectations



* US expectations are for CPI inflation
 ** Calculated as a weighted average of responses to a monthly consumer survey; the survey asks respondents to indicate their price expectations over the next year within a given range
 Sources: Bloomberg; RBA; Thomson Reuters

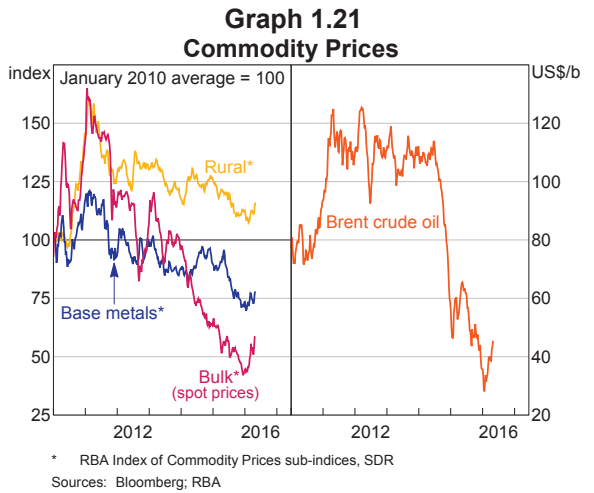
declined sharply in early 2016, especially in Japan, some caution should be applied in interpreting these measures because they can be affected by other developments in financial markets. Nevertheless, the European Central Bank (ECB) has noted its concern about the further decline in inflation expectations over recent months. In Japan, the anticipated effect of the scheduled increase in the consumption tax in April 2017 may be boosting consumers' short-term inflation expectations.

The persistence of low inflation (and the decline in oil prices up to early 2016) had prompted central banks in the major advanced economies to revise down their forecasts of inflation. The ECB undertook further monetary policy steps in March aimed at inflation reaching its target over an acceptable timeframe (see 'International and Foreign Exchange Markets' chapter).

Commodity Prices

The RBA Index of Commodity Prices (ICP) has increased in recent months, led by a large increase in the price of iron ore (Table 1.1; Graph 1.21). Nonetheless, commodity prices are around 50 per cent below their 2011 peak, reflecting both substantial increases in global supply as new resource projects have started production and weakness in global demand, especially from Asia. Lower bulk commodity prices contributed to a decline in Australia's terms of trade of 3 per cent in the December quarter and of 12 per cent over 2015.

The spot price of iron ore has increased significantly over recent months to be around 60 per cent above the low reached in December 2015, although it remains 70 per cent below its 2011 peak (Graph 1.22). The prices of iron ore and steel rose sharply after the Chinese Government announced



its growth targets for 2016 in early March, which led to improvements in the near-term outlook for steel demand. Re-stocking of iron ore inventories and some production cuts from high-cost global iron ore producers, including in China, are also likely to have supported prices. Speculative activity in futures markets may also have played a role. At the same time, however, the expected increase in the global supply of iron ore, as capacity expansions come on line in Australia and Brazil, may exert downward pressure on prices, and Chinese steel production is expected to moderate over the year ahead.

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

	Since previous Statement	Over the past year
Bulk commodities	18	-9
– Iron ore	31	-1
– Coking coal	9	-19
– Thermal coal	-1	-17
Rural	0	-7
Base metals	4	-17
Gold	13	3
Brent oil ^(b)	5	-33
RBA ICP	5	-15
– using spot prices for bulk commodities	9	-12

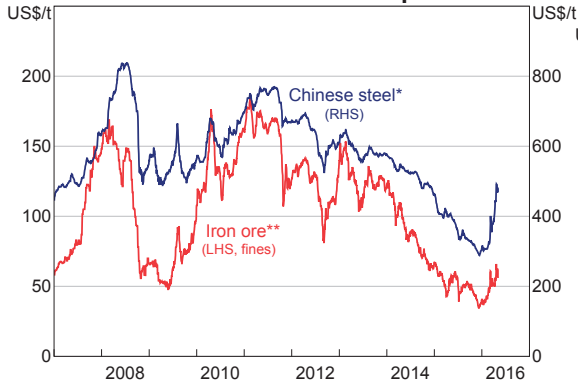
(a) Prices from the RBA ICP; bulk commodities prices are spot prices

(b) In US dollars

Sources: Bloomberg; IHS; RBA

Graph 1.22

Chinese Steel and Iron Ore Spot Prices



* Average of hot rolled steel sheet and steel rebar prices

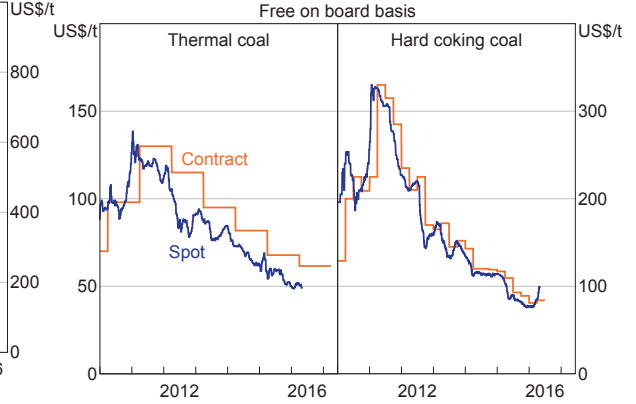
** Free on board basis

Sources: Bloomberg; RBA

Graph 1.23

Coal Prices

Free on board basis



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

After declining for much of the past five years, coking coal prices have been supported by improved sentiment surrounding Chinese steel demand of late (Graph 1.23). Thermal coal prices remain under pressure from weaker global demand, particularly from the Asian region. At current prices, a substantial share of global coal production, including in Australia, remains unprofitable. Concerns about global demand, particularly subdued growth of global industrial production, have also led to declines in the prices of base metals over the past year, although these are also a little above their lows around the turn of the year. Declines in the production of some of these commodities may have provided some support to prices of late.

The Brent crude oil price has risen noticeably over recent months, after falling to its lowest level in over a decade around the turn of the year (Graph 1.21). The recent increase has been supported by speculation about potential production freezes by some of the major producers, although global supply remains little changed at relatively high levels. Changes in oil prices tend to be reflected in regional liquefied natural gas (LNG) prices with a lag of a few quarters. Looking further ahead, increased supply from Australian LNG exporters is likely to place downward pressure on regional LNG spot prices over the next couple of years. ↘

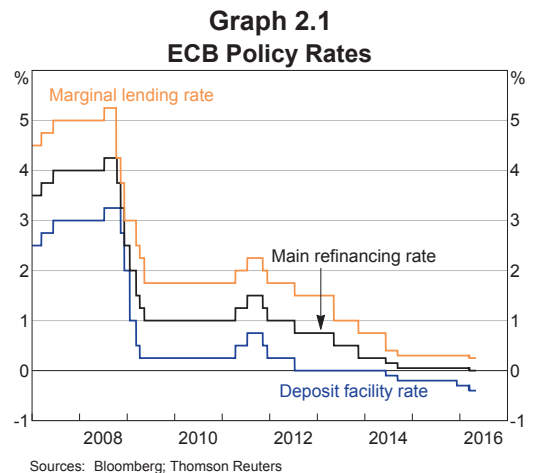
2. International and Foreign Exchange Markets

Sentiment in global financial markets has improved over the past few months as concerns about the outlook for the Chinese economy have eased and commodity prices have increased from their recent troughs. Current and expected policies of the major central banks continue to be an important driver of developments in global financial markets, with the European Central Bank (ECB) easing policy further and expectations for further policy tightening by the Federal Reserve being scaled back, which contributed to a depreciation of the US dollar and a decline in major market sovereign bond yields. The Japanese yen has appreciated sharply over recent months following the Bank of Japan's (BoJ) announcement of a negative policy rate.

Central Bank Policy

The ECB eased policy further at its March meeting to address concerns about low inflation. The package of policy measures included a reduction in interest rates, an expansion of asset purchases and an enhanced term funding facility for banks. The ECB lowered the interest rate on its deposit facility by a further 10 basis points to -0.40 per cent and the interest rates for its main refinancing operations and marginal lending facility by 5 basis points to 0 per cent and 0.25 per cent, respectively (Graph 2.1).

The ECB also increased its monthly asset purchases by €20 billion to €80 billion and widened the scope of eligible assets to include bonds of investment-grade corporates (excluding banks). The reduction in policy rates and changes to the asset purchase program were supplemented by a new round of

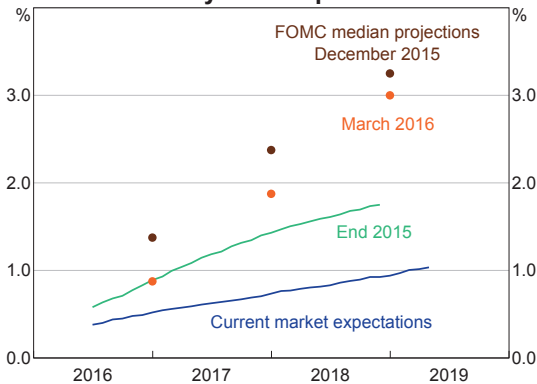


four targeted long-term refinancing operations (TLTRO II) starting in June 2016, which will provide four-year term funding (with optional repayment after two years) to euro area banks. The maximum amount that can be borrowed through TLTRO II is 30 per cent of a bank's eligible stock of business and personal loans (this compares to a maximum of 7 per cent under TLTRO I, which have been disbursed quarterly to banks since September 2014), implying total TLTRO II borrowing could be as much as €1.7 trillion. The interest rate at the time the loan is extended will be the main refinancing rate (currently 0 per cent), but can be as low as the deposit rate (currently -0.40 per cent) if the bank meets certain benchmarks for lending to the private sector.

The US Federal Open Market Committee (FOMC) left the target range for the federal funds rate at 0.25–0.50 per cent at both its March and April meetings. The March decision reflected the

assessment of the majority of members that heightened global risks warranted caution in adjusting monetary policy. The FOMC toned down references to these risks in April, but cautioned about slightly weaker developments in the domestic economy. Consistent with these concerns, the FOMC reduced the median projections for the path of its policy rate for 2016 and 2017 by 50 basis points at the March meeting (Graph 2.2). Nonetheless, the pace of adjustment projected by the median FOMC member remains faster than the pace implied by market pricing: the most recent FOMC projections suggest two policy rate increases this year, while markets have priced at most one increase.

Graph 2.2
US Policy Rate Expectations



Sources: Bloomberg; Board of Governors of the Federal Reserve System

The BoJ has left its policy stance unchanged since the introduction of a negative interest rate on certain deposits in late January, though at its April meeting it pushed back the date by when it expects to achieve its 2 per cent inflation target to early 2018. The BoJ has been adjusting its tiered interest rate system to ensure only a small share of central bank deposits (currently around 10 per cent) attracts negative interest rates. At its March meeting, the BoJ exempted deposits of money reserve funds at trust banks from negative interest rates and allowed a greater proportion of deposits of banks participating in the BoJ's funding-for-lending programs to incur zero interest rather than a negative rate.

A number of other central banks have also eased policy in recent months (Table 2.1). The Swedish Riksbank reduced its policy rate by 15 basis points to -0.5 per cent and the Reserve Bank of New Zealand lowered its policy rate by 25 basis points to 2.25 per cent, amid concerns that persistently low inflation could make it harder to achieve inflation targets in both countries. The Riksbank also announced that it will extend its government bond purchase program over the second half of 2016. Norway's central bank also reduced its policy rate by 25 basis points in March, noting that growth prospects for the Norwegian economy had softened. The People's Bank of China (PBC) lowered system-wide reserve requirement ratios (RRRs) by 50 basis points in late February, to be 300 basis points below their end-2014 levels (Graph 2.3). The reduction in

Table 2.1: Monetary Policy

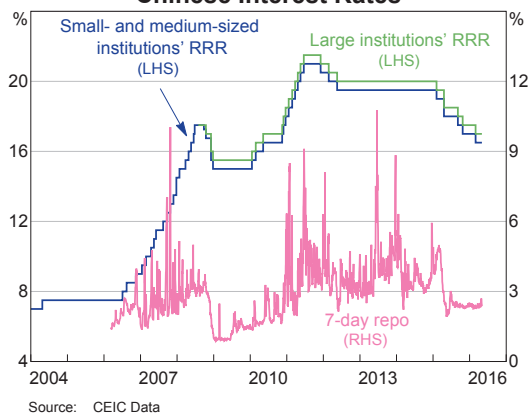
	Policy rate Per cent	Most recent change
Euro area ^(a)	-0.40 ↓	Mar 16
Japan ^(a)	-0.10 ↓	Jan 16
United States ^(b)	0.375 ↑	Dec 15
Australia	1.75 ↓	May 16
Brazil	14.25 ↑	Jul 15
Canada	0.50 ↓	Jul 15
Chile	3.50 ↑	Dec 15
India	6.50 ↓	Apr 16
Indonesia	6.75 ↓	Mar 16
Israel	0.10 ↓	Feb 15
Malaysia	3.25 ↑	Jul 14
Mexico	3.75 ↑	Feb 16
New Zealand	2.25 ↓	Mar 16
Norway	0.50 ↓	Mar 16
Russia	11.00 ↓	Jul 15
South Africa	7.00 ↑	Mar 16
South Korea	1.50 ↓	Jun 15
Sweden	-0.50 ↓	Feb 16
Switzerland ^(b)	-0.75 ↓	Jan 15
Thailand	1.50 ↓	Apr 15
Turkey	7.50 ↓	Feb 15
United Kingdom	0.50 ↓	Mar 09

(a) Marginal rate paid on deposits at the central bank

(b) Midpoint of target range

Sources: Central banks; RBA; Thomson Reuters

Graph 2.3
Chinese Interest Rates



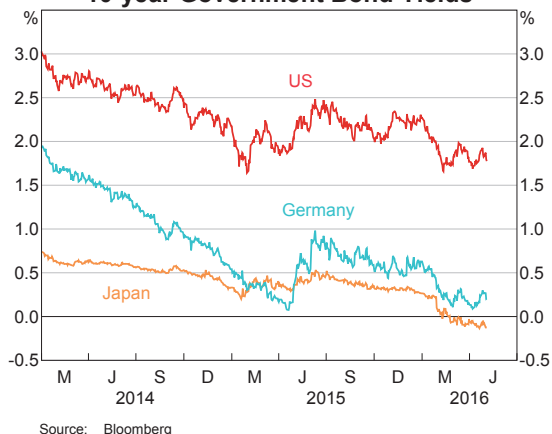
RRRs appears to have been a response to domestic liquidity needs arising from capital outflows and Chinese New Year rather than a signal of substantial policy easing, as evidenced by interbank interest rates having remained at low and stable levels.

Among other emerging market central banks, both the Reserve Bank of India and Bank Indonesia have eased their policy rates recently to boost economic activity, amid expectations of a further decline in inflation. Bank Indonesia has reduced its policy rate by a total of 75 basis points this year to 6.75 per cent. In contrast, the central banks of Mexico and South Africa raised their policy rates by 50 and 25 basis points, respectively, to stem inflationary pressure mainly arising from further exchange rate depreciation.

Sovereign Debt Markets

Ten-year sovereign bond yields in major developed markets have fallen since the beginning of the year, reflecting additional easing measures announced by the ECB and the BoJ, as well as a scaling back of expectations of further increases in the US policy rate target (Graph 2.4). Yields on 10-year US Treasuries have declined by around 50 basis points, with commentary from Federal Reserve officials over recent months about the need for caution in tightening monetary policy contributing to the fall. Yields on 10-year German Bunds have declined

Graph 2.4
10-year Government Bond Yields

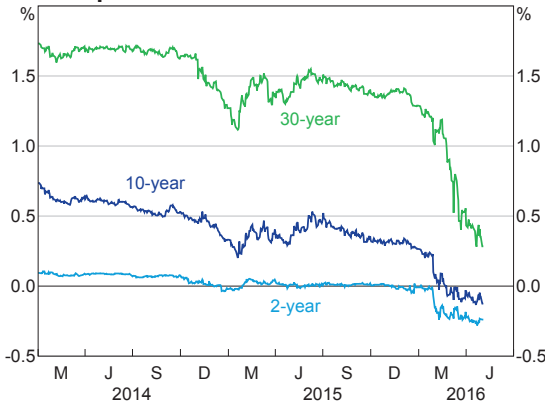


to around their historic low following the ECB's announcement of additional policy measures. Yields on German short-term sovereign securities have also declined materially since the beginning of 2016. Around 30 per cent of euro area government debt securities are currently trading at yields below zero.

The yield on 10-year Japanese government bonds (JGBs) fell below zero for the first time in February, following the BoJ's announcement of a negative deposit rate, and has been little changed since then at around -0.10 per cent (Graph 2.5). Yields on very long-term JGBs have also declined sharply and around two-thirds of JGBs are currently trading at yields below zero. In addition to ongoing purchases by the BoJ, foreign residents have continued to be net purchasers of JGBs so far this year, particularly of long-term bonds.

Spreads on bonds issued by governments in the European periphery over German Bund yields of equivalent maturity have narrowed since mid February as market sentiment has improved, although spreads on Greek and Portuguese bonds remain well above the levels recorded in late 2015. In particular, concerns remain about the Greek Government's ability to negotiate an acceptable package with creditors and legislate the required reforms in time to receive further bailout funds, which will allow it to meet upcoming large debt

Graph 2.5
Japanese Government Bond Yields

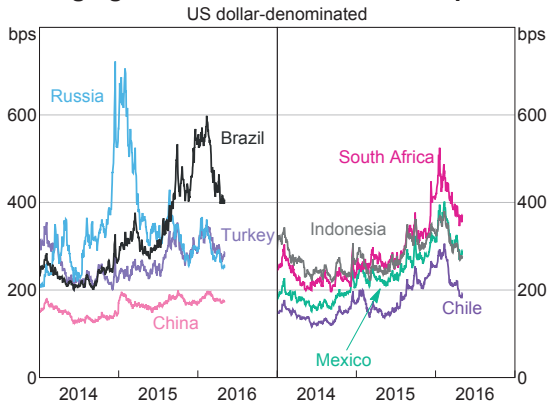


Source: Bloomberg

repayments (including €750 million due to the International Monetary Fund (IMF) and €2.3 billion due to the ECB in June and July 2016).

Yields on emerging market local currency-denominated sovereign bonds have generally declined since the start of the year, albeit to varying degrees across countries, consistent with the falls in US Treasury yields. Yields on Brazilian government bonds fell with rising anticipation of a change in the country's government as a consequence of the ongoing presidential impeachment process. Spreads to US Treasuries on emerging market US dollar-denominated sovereign bonds have narrowed considerably since the start of the year, with higher commodity prices supporting bonds of commodity-exporting countries (Graph 2.6). Argentina issued US\$16.5 billion in government bonds to international investors in a heavily oversubscribed offering, the first such debt offering since the country defaulted in 2001. Part of the proceeds has been used to pay holdout investors, who have agreed to a settlement after previously blocking the Argentine Government from making payments on the restructured debt from the 2001 default.

Graph 2.6
Emerging Market Government Bond Spreads*



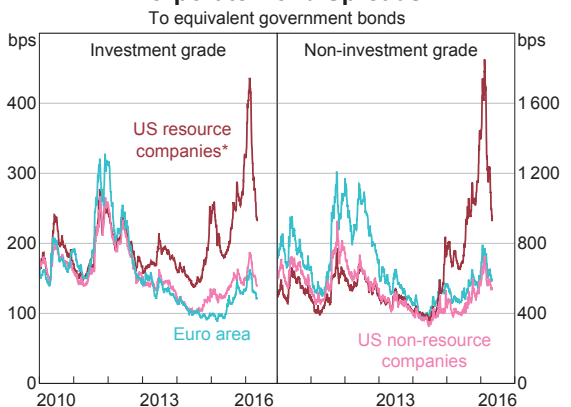
* To US Treasury bonds; duration matched
Sources: JP Morgan; Thomson Reuters

Credit Markets

Conditions in both developed and most emerging corporate bond markets have eased since mid February, consistent with the improvement in financial market sentiment and higher commodity prices. Borrowing costs have fallen, largely driven by a narrowing in credit spreads (Graph 2.7). In contrast, conditions in Chinese corporate bond markets have tightened.

Alongside the increase in commodity prices, spreads on resource-related corporate bonds in the United States have fallen sharply since their peak

Graph 2.7
Corporate Bond Spreads



* Energy, metals, mining and steel sectors
Sources: Bank of America Merrill Lynch; RBA; Thomson Reuters

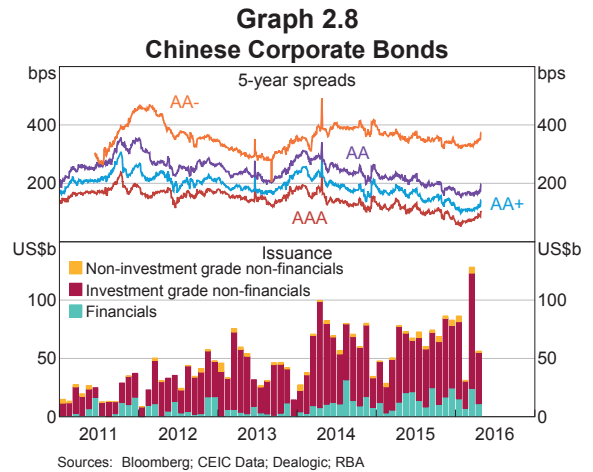
in mid February, reversing much of their increase since mid 2015. Nevertheless, spreads on these bonds remain elevated, consistent with the low level of commodity prices. Reflecting the elevated spreads, borrowing costs for non-investment grade resource companies are above historical averages. The default rate on US non-investment grade bonds has increased steadily from 2 per cent in mid 2015 to around 4 per cent, driven largely by resource company defaults.

Spreads on bonds of US non-resource companies have also fallen as sentiment has improved. In particular, spreads on financial corporations' bonds have now reversed most of their increase since the start of 2016.

In the euro area, the improvement in conditions has been supported by the ECB's announcement that its asset purchase program would be extended to include bonds issued by non-bank investment-grade corporates. Spreads on these bonds have fallen by around 35 basis points since the announcement, while spreads on investment-grade bank bonds have fallen by less.

Issuance of both US and euro area corporate bonds has recovered after slowing in early February, in part due to corporations having postponed issuance while market conditions were volatile. Most notably, Apple and Exxon Mobil each raised US\$12 billion in the second half of February, while brewer AB InBev followed its large bond issue in January by raising a further €13 billion in March.

Chinese corporate bond issuance was strong in the March quarter, with record high gross issuance in the month of March (Graph 2.8). Issuance by companies in the real estate and construction sectors grew quickly over the year to March, with growth concentrated in the onshore local currency-denominated market. However, issuance was lower in April and the number of planned corporate bond issues that have been cancelled has increased, reportedly due to concerns in the market over recent missed bond payments by some corporates,

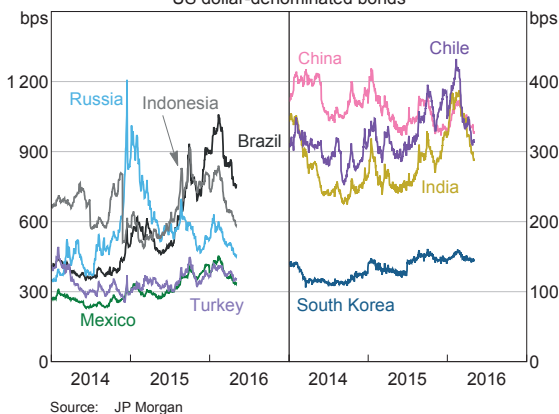


including some state-owned enterprises. Local currency-denominated corporate bond spreads have widened considerably over April, alongside heightened concerns about deteriorating corporate conditions and missed bond payments, to be back around their levels of mid 2015. Local government bond issuance remained strong in the March quarter, consistent with the continuation of the local government debt swap program.

Chinese authorities have stated they are considering a debt-for-equity swap program to reduce the debt burden of large companies in 'overcapacity' industries. Additionally, Chinese authorities have reportedly granted quotas to six large banks allowing them to issue asset-backed securities with non-performing loans as underlying assets.

Spreads to US Treasuries of US dollar-denominated bonds issued by emerging market corporations outside of China fell alongside higher commodity prices and the improvement in market sentiment (Graph 2.9). The narrowing in spreads was particularly pronounced for Indonesian and Brazilian corporations, consistent with the falls in sovereign spreads for those countries. New issuance remains relatively subdued, with cumulative gross issuance by emerging market corporations in the year-to-date at its slowest pace since 2009.

Graph 2.9
Emerging Market Corporate Bond Spreads
 US dollar-denominated bonds



Equities

After sharp price declines of about 10 per cent between early January and mid February, equity prices in many economies have risen considerably and recovered most of their losses (Graph 2.10; Table 2.2). Share prices in the energy and materials sectors have seen the strongest increase, underpinned by a rise in the price of oil and other commodity prices. Share prices in Japan are a notable exception, which have declined alongside the appreciation of the Japanese yen. Overall, volatility declined and was relatively low over March and April.

Graph 2.10
Major Share Price Indices
 1 January 2014 = 100

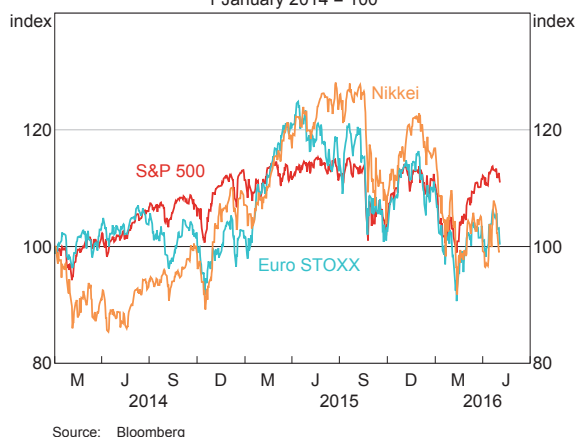


Table 2.2: Changes in International Share Prices
 Per cent

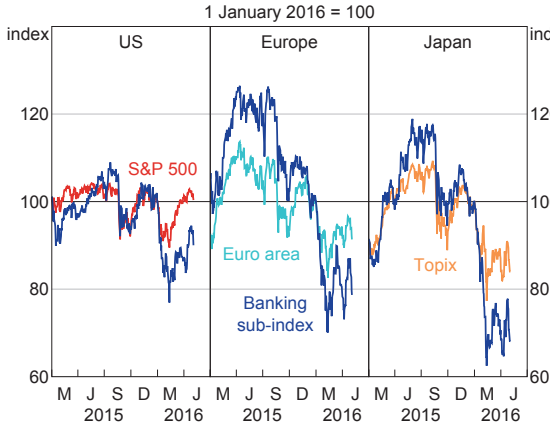
	Over 2015	2016 to date
United States – S&P 500	-1	0
Euro area – STOXX	8	-9
United Kingdom – FTSE	-5	-2
Japan – Nikkei	9	-15
Canada – TSE 300	-11	5
Australia – ASX 200	-2	0
China – MSCI All China	2	-13
MSCI indices		
– Emerging Asia	-8	-3
– Latin America	-11	13
– Emerging Europe	-4	6
– World	-1	-3

Source: Bloomberg

Bank share prices have risen since mid February, but are still well below their levels at the beginning of the year (Graph 2.11). The sell-off in bank shares – particularly in the euro area and Japan – reflected a broad range of concerns, including a weaker outlook for economic growth, persistently high levels of non-performing loans in some countries (in particular in Italy and Greece), the impact on bank profitability of a low interest rate environment and relatively flat yield curves (which reduce the profitability of banks' long-term lending) as well as a number of bank-specific concerns.

Major US banks reported that net income declined notably in the March quarter compared to the same quarter last year, generally driven by a sharp decline in institutional banking revenues (in particular, from fixed income trading), and a notable increase in provisions for credit losses in relation to exposures to the energy sector. These falls were partially offset by an increase in net interest income from the traditional banking business. The Federal Deposit Insurance Corporation and the Federal Reserve found shortcomings in the 'living wills' (recovery and resolution plans in the event of financial distress or failure) of five large US institutions: JP Morgan,

Graph 2.11
Major Market Bank Share Prices



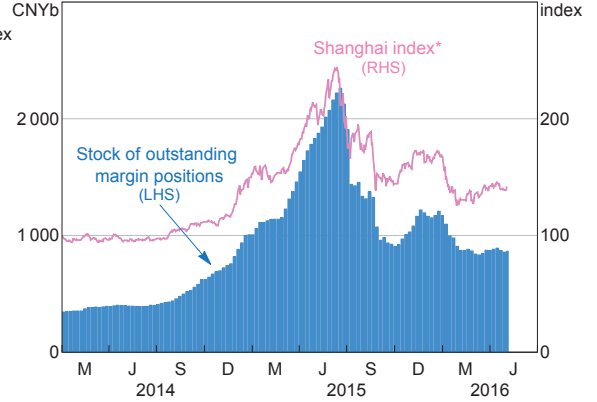
Source: Bloomberg

Bank of America, Wells Fargo, State Street and Bank of New York Mellon. The institutions have until October 2016 to address the identified deficiencies or face potential regulatory sanctions, which may include higher capital requirements. Most European banks also reported a decrease in earnings, largely driven by a decline in trading revenue.

Share prices in most emerging markets have outperformed those in advanced economies since mid February and over 2016 to date, reflecting higher commodity prices (most notably oil) and an increase in capital inflows. Of note, Brazilian equity prices have increased by about 20 per cent since the start of the year, more than offsetting the falls in 2015.

Chinese share prices have recovered some of their falls in early 2016 and have been less volatile recently (Graph 2.12). Overall, Chinese margin financing is only a little above its level in mid February, despite a resumption of short-term lending by China Securities Finance Corporation to brokerage firms for margin trading and an easing of capital requirements for brokerages by the China Securities Regulatory Commission.

Graph 2.12
Chinese Equities

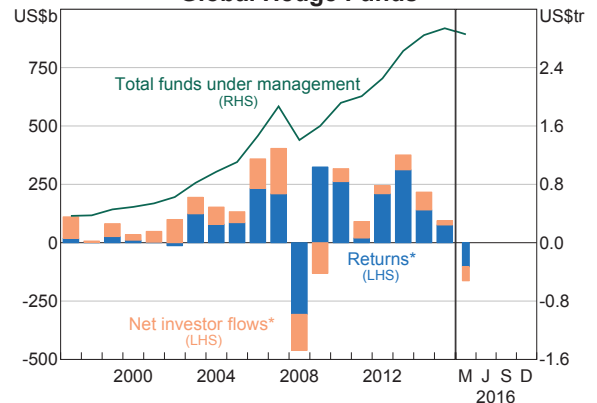


* 1 January 2014 = 100
Sources: Bloomberg; WIND Information

Hedge Funds

Global hedge funds recorded an asset-weighted return on investment of -2.2 per cent over the March quarter of 2016, underperforming a balanced portfolio of global bonds and equities (Graph 2.13). This follows a 0.5 per cent return on investment over the December quarter for the sector and a return close to zero over 2015. The global hedge fund losses in the March quarter primarily stem from equity hedge funds, in particular those with large exposures to the technology and healthcare sectors. Funds focused on emerging markets did a little

Graph 2.13
Global Hedge Funds



* Annualised for 2016 data
Sources: Hedge Fund Research, Inc.; RBA

better, led by the outperformance of funds targeting Latin American securities amid a rebound of Brazilian equity prices. Investors made net withdrawals from hedge funds for the second consecutive quarter, marking the largest quarterly outflows since 2009. Overall, assets under management declined by 1.4 per cent over the quarter to US\$2.9 trillion.

Foreign Exchange

In recent months, foreign exchange markets have primarily been influenced by the current and expected stance of monetary policy in the major advanced economies and an increase in commodity prices.

On a trade-weighted basis, the US dollar appreciated by around 25 per cent between mid 2014 and late January 2016, but has since depreciated by 5 per cent (Graph 2.14; Table 2.3). The depreciation has occurred alongside the FOMC lowering its median projection for the federal funds rate and market participants' expectations for the timing of the next rate increase also being pushed back. The depreciation has generally been more pronounced against the currencies of commodity exporters.

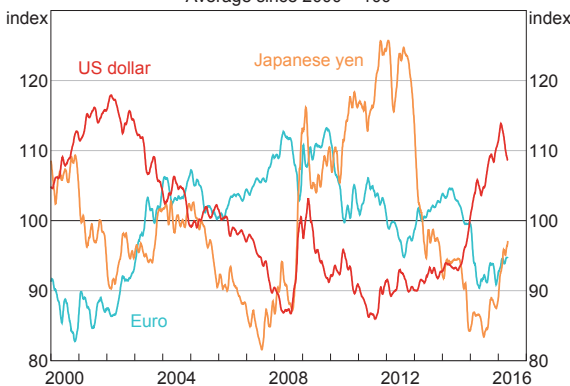
The Japanese yen has moved within a wide range over recent months alongside changes in expectations about further policy easing by the BoJ. Between late January and mid April the yen

Table 2.3: Changes in the US Dollar against Selected Currencies
Per cent

	Over 2015	2016 to date
Mexican peso	17	3
UK pound sterling	6	2
Philippine peso	5	1
Indian rupee	5	1
Chinese renminbi	5	0
New Zealand dollar	14	-1
New Taiwan dollar	4	-1
South Korean won	8	-2
Australian dollar	12	-2
Thai baht	10	-2
Indonesian rupiah	11	-4
Singapore dollar	7	-4
Swiss franc	1	-4
Swedish krona	8	-4
European euro	11	-5
Malaysian ringgit	22	-6
Canadian dollar	19	-7
Russian rouble	24	-7
Brazilian real	50	-10
Japanese yen	0	-11
TWI	10	-3

Sources: Bloomberg; Board of Governors of the Federal Reserve System

Graph 2.14
Nominal Trade-weighted Indices*
Average since 2000 = 100



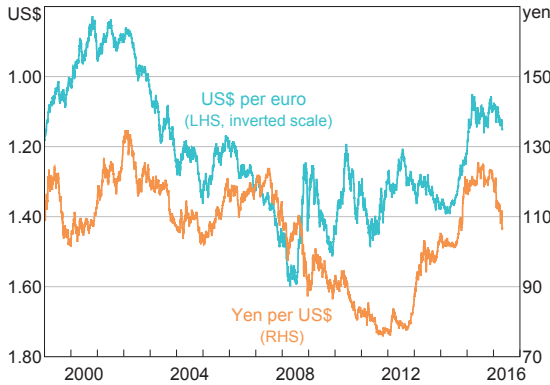
* 22-day rolling average

Sources: BIS; Bloomberg; Board of Governors of the Federal Reserve System

appreciated sharply, partly reflecting speculation by market participants that the BoJ may be approaching its limit to ease policy further. However, the yen then depreciated alongside increasing expectations of additional policy easing by the BoJ at its April meeting. Following the BoJ's decision to leave its policy stance unchanged, the yen appreciated sharply. Overall, the yen has appreciated by 7 per cent on a trade-weighted basis and by 11 per cent against the US dollar since late January (Graph 2.15).

The euro has appreciated by 6 per cent on a trade-weighted basis and by 9 per cent against the US dollar since its recent trough in late November. The appreciation has occurred despite the ECB's decision to ease policy at both its December and

Graph 2.15
US Dollar

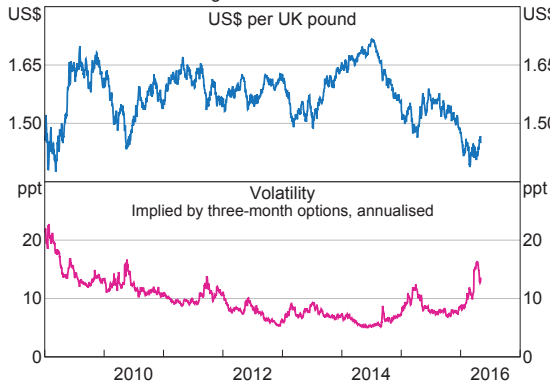


Source: Bloomberg

March meetings. Over recent months, the UK pound has been affected by uncertainty around the possibility of Britain exiting the European Union. Relatedly, the upcoming referendum on 23 June has resulted in a sharp increase in forward-looking measures of volatility in the GBP/USD currency pair; in mid April volatility reached its highest level since the UK general election in mid 2010 (Graph 2.16). While the UK pound has appreciated by around 5 per cent against the US dollar since its trough in late February, it remains around 15 per cent lower than its peak in mid 2014.

Graph 2.16
UK Pound

Against the US dollar

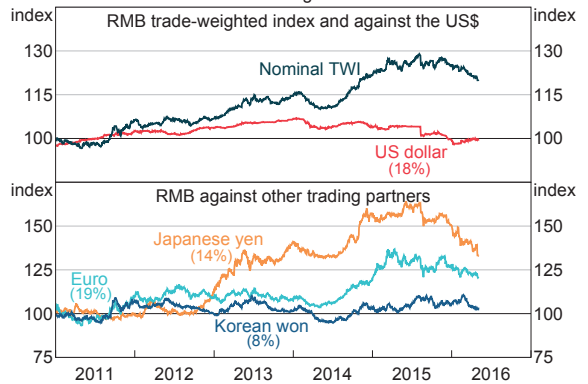


Source: Bloomberg

The Chinese renminbi (RMB) has appreciated by 1 per cent against the US dollar since its low in early January and has tended to move in a wider range in recent months, consistent with the PBC's policy aim to increase flexibility of the RMB (Graph 2.17). Except for the Chinese New Year period, the spread between RMB exchange rates in the onshore and offshore markets has been minimal. On a trade-weighted basis, the RMB has depreciated by 4 per cent since early January to be 7 per cent below its August 2015 peak. The value of the PBC's foreign currency reserves fell by US\$118 billion over the March quarter 2016, largely as a result of a decline in January of around US\$100 billion (Graph 2.18). The PBC's foreign

Graph 2.17
Chinese Renminbi*

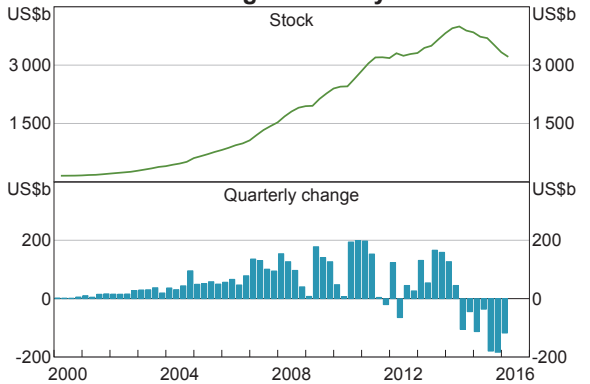
2011 average = 100



* Figures in parentheses represent currencies' weights in the trade-weighted index

Sources: BIS; Bloomberg; RBA

Graph 2.18
Chinese Foreign Currency Reserves

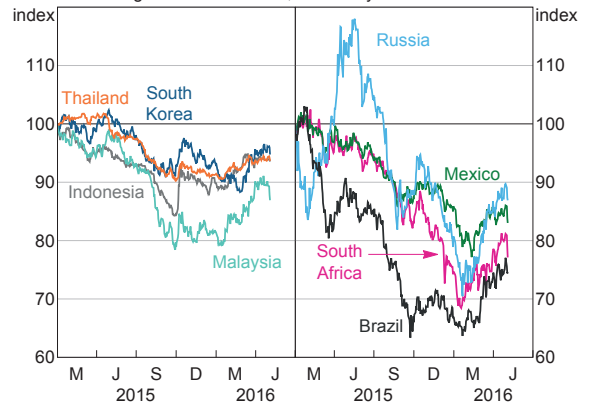


Source: CEIC Data

currency reserves have decreased by US\$781 billion (or 20 per cent) since their peak in June 2014.

Most other Asian and emerging market currencies have appreciated against the US dollar since late January (Graph 2.19). The appreciations have typically been more pronounced for the currencies of commodity exporters. Most notably, the Russian rouble has appreciated by 22 per cent, and the Brazilian real, South African rand and Malaysian ringgit have appreciated by between 10–15 per cent alongside gains in oil and other commodity prices as well as a recovery in risk sentiment. In addition to the increase in commodity prices, the appreciation of the Brazilian real has reflected domestic political developments and has occurred despite recent action by Brazil’s central bank to curb appreciation pressure on the currency. Volatility in most emerging market currencies remains above its average since 2010.

Graph 2.19
Asian and Emerging Market Currencies
Against the US dollar, 1 January 2015 = 100



Source: Bloomberg

The gross foreign currency reserves of most emerging market economies have been little changed or increased slightly since the end of December (Table 2.4). Saudi Arabian reserves have continued to decline but at a slower pace

Table 2.4: Gross Foreign Currency Reserves^(a)

	Percentage change since:		Level US\$ equivalent (billions)
	End March 2015	End December 2015	
China	-14	-4	3 213
Saudi Arabia	-16	-5	576
Taiwan ^(b)	4	1	432
South Korea	2	0	360
Brazil	-1	0	350
Hong Kong	9	0	348
India	6	3	338
Russia	6	3	316
Singapore	-1	-1	244
Mexico	-8	2	171
Thailand	12	12	166
Indonesia	-4	1	101
Turkey	-6	3	94
Malaysia	-7	3	89
Argentina	10	41	29

(a) Data to end March for China, Hong Kong, Indonesia, Mexico, Saudi Arabia, Singapore, South Korea, Taiwan and Thailand; to 15 April for Malaysia; to 22 April for India, Russia and Turkey; to end April for Argentina and Brazil.

(b) Foreign exchange reserves (includes foreign currency and other reserve assets).

Sources: Bloomberg; CEIC Data; central banks; IMF; RBA

than in late 2015 and early 2016, consistent with IMF projections for a smaller fiscal deficit in 2016. Argentina's gross foreign currency reserves increased by US\$6.7 billion following the US\$16.5 billion sovereign debt issuance. Since the start of 2016, gross foreign currency reserves have increased by around 40 per cent in Argentina; this also includes a loan to the central bank from a number of commercial banks in late January.

Australian Dollar

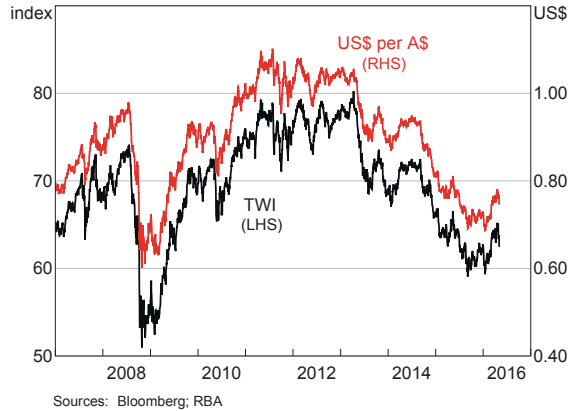
Overall, the Australian dollar is little changed on a trade-weighted (TWI) basis since the previous *Statement* (Table 2.5; Graph 2.20). Between early February and late April the Australian dollar appreciated by 6 per cent on a TWI basis and by 9 per cent against the US dollar, reflecting the

Table 2.5: Changes in the Australian Dollar against Selected Currencies
Per cent

	Over 2015	2016 to date
UK pound sterling	-6	4
Indian rupee	-7	3
Chinese renminbi	-7	3
US dollar	-11	2
New Zealand dollar	2	2
South Korean won	-4	1
Thai baht	-2	0
South African rand	19	-1
Indonesian rupiah	-1	-2
Singapore dollar	-5	-2
Swiss franc	-10	-2
European euro	-1	-3
Malaysian ringgit	9	-4
Canadian dollar	6	-5
Japanese yen	-11	-9
TWI	-6	0

Sources: Bloomberg; RBA

Graph 2.20
Australian Dollar



markets' response to stronger-than-expected national accounts data, increases in commodity prices (including a 45 per cent increase in the iron ore price), and reduced expectations of the pace of policy tightening in the United States by both the FOMC and the market. However, the Australian dollar then depreciated sharply following lower-than-expected inflation data and the RBA's decision to ease monetary policy in early May.

The Australian dollar is currently around 8 per cent higher against the US dollar and 6 per cent higher on a TWI basis than the low it reached in September 2015. In recent months, the average intraday trading range for the AUD/USD exchange rate was slightly above its post-2000 average.

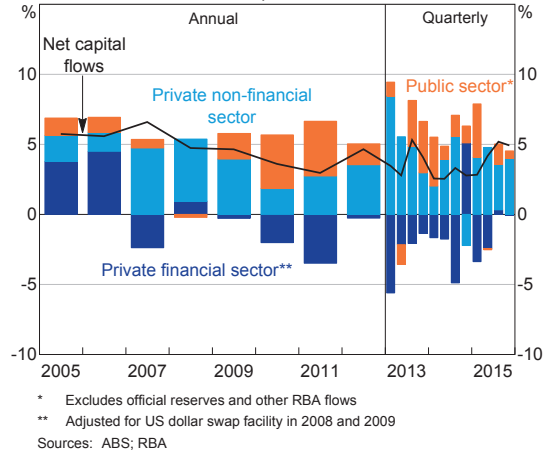
Capital Flows

Net capital inflows to the Australian economy were equivalent to 4.9 per cent of GDP in the December quarter, largely reflecting inflows to the private non-financial sector, in particular the mining sector (Graph 2.21). Within the financial sector, a net outflow from the banking sector in the quarter offset a net inflow to 'other financials' (which includes superannuation funds and other investment funds).

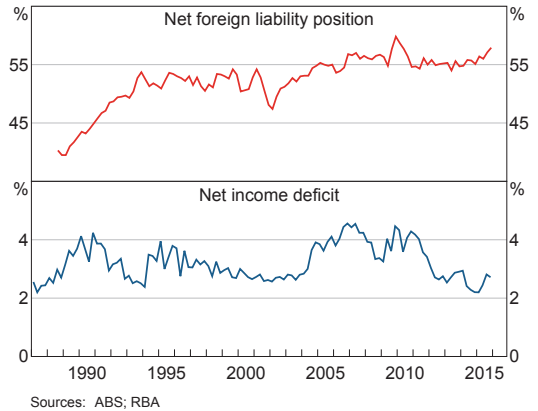
There was a modest net inflow to the public sector in the December quarter. This primarily reflected a net inflow to the general government sector, which was largely proportional to net issuance of Australian Government securities (AGS) in the quarter. As a result, the foreign ownership share of AGS remained unchanged at 63 per cent.

Consistent with net capital inflows in the December quarter, Australia's net foreign liability position increased to 58 per cent of GDP (Graph 2.22). The net income deficit, which largely comprises payments made on Australia's net foreign liabilities, narrowed to 2.7 per cent of GDP in the December quarter, primarily reflecting an increase in the estimated yield received on Australia's foreign debt and equity assets. ✎

Graph 2.21
Australian Capital Flows
Net inflows, per cent of GDP



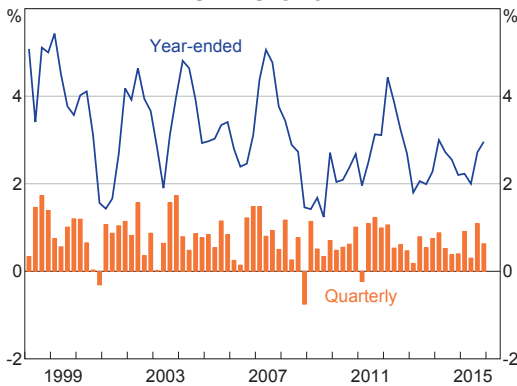
Graph 2.22
Australia's External Position
Per cent of GDP



3. Domestic Economic Conditions

The Australian economy grew by 3 per cent over 2015, which is a little above central estimates of the economy's potential growth rate and was stronger than had been anticipated (Graph 3.1). In part, this reflected very strong growth in the September quarter following an upward revision to that estimate. GDP grew by 0.6 per cent in the December quarter and indications are that GDP has increased at a similar rate in early 2016.

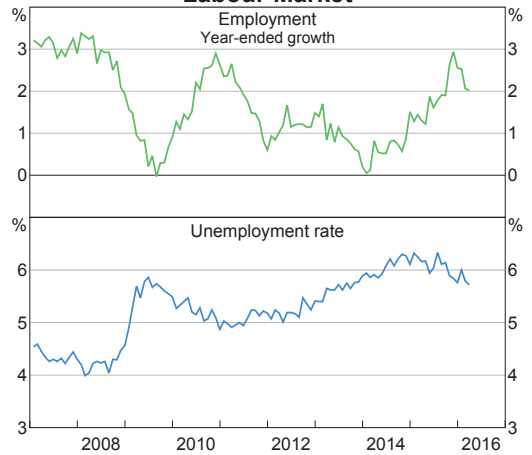
**Graph 3.1
GDP Growth**



Source: ABS

Stronger output growth over 2015 was accompanied by a large increase in employment and a decline in the unemployment rate (Graph 3.2). After particularly strong outcomes in late 2015, employment growth has moderated over the past few months, and forward-looking indicators provide mixed signals about the underlying pace of improvement in the labour market. The unemployment rate has continued to edge down, to be about ½ percentage point below its peak in 2015. Nevertheless, there is still evidence

**Graph 3.2
Labour Market**



Source: ABS

of spare capacity in the labour market, with wage growth remaining very low. While the protracted period of low wage growth has allowed for more employment than otherwise, it has also constrained growth in nominal household income in recent years. At the same time, gains in asset prices have supported increases in household wealth.

The rebalancing of economic activity away from the resources sector towards other sectors has continued. Activity in the non-resource sectors of the economy increased at an above-average rate over 2015, with output expanding fastest in industries that provide services to households and businesses. Growth in household consumption picked up in the second half of the year to be around average and dwelling investment continued to strengthen, supported by the very low level of interest rates (Table 3.1). Demand for

Table 3.1: Demand and Output Growth
Per cent

	December quarter 2015	September quarter 2015	Year to December quarter 2015
GDP	0.6	1.1	3.0
Consumption	0.8	0.9	2.9
Dwelling investment	2.2	1.9	9.8
Business investment	-2.7	-4.5	-12.0
Public demand	1.4	-0.8	3.5
Exports	0.6	5.4	5.7
Imports	0.6	-2.3	1.2
Nominal GDP	0.4	1.1	2.4
Real gross domestic income	0.0	0.5	0.3

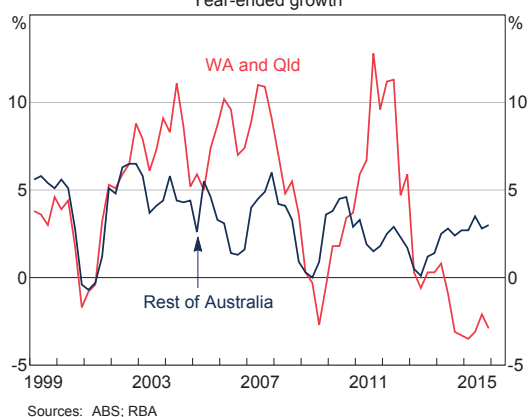
Sources: ABS; RBA

Australian production in trade-exposed industries continued to be boosted by the depreciation of the exchange rate since early 2013. Exports of services, in particular, increased noticeably over 2015 and imports of services have declined. Public demand contributed to growth over the year, while non-mining business investment remained subdued and has been little changed for several years.

In contrast, activity in the resources sector looks to have declined slightly over 2015. Mining investment continued to decline sharply, as more projects reach completion. This was partly offset by significant increases in the volume of resource exports. Mining activity is expected to pick up over the period ahead, reflecting further increases in resource exports – particularly liquefied natural gas (LNG) – and smaller declines in mining investment.

There continue to be significant differences in economic conditions across the country, consistent with the rebalancing of economic activity. Outside the resource-rich states of Queensland and Western Australia, growth has picked up over recent years (Graph 3.3). Unemployment rates have fallen noticeably in the eastern states, supported by an increase in demand, particularly for services. Overall, economic conditions in Queensland have improved a little of late, with weakness in the mining sector offset by improvements in construction and tourism

Graph 3.3
State Final Demand
Year-ended growth



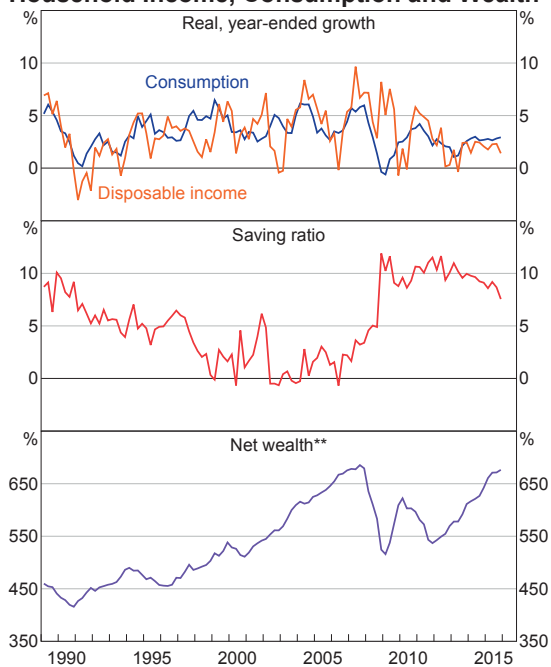
activity. In contrast, activity remains weak in Western Australia as investment and employment in the mining sector have fallen, and the unemployment rate has risen over the past few years.

Household Sector

Household consumption growth increased in the second half of 2015 to around its decade average in year-ended terms, driven by relatively strong growth in New South Wales and Victoria. Factors supporting the pick-up in consumption growth include solid employment growth and low interest rates, as well as the ongoing effects of lower petrol

prices and a further increase in household wealth. With growth in household disposable income remaining below average, the saving ratio has continued to decline (Graph 3.4).

Graph 3.4
Household Income, Consumption and Wealth*



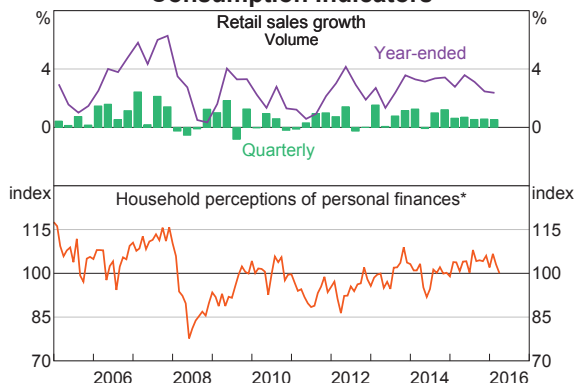
* Household sector includes unincorporated enterprises; disposable income is after tax and interest payments; income level smoothed with a two-quarter moving average between March quarter 2000 and March quarter 2002; saving ratio is net of depreciation

** Per cent of annual household disposable income, before the deduction of interest payments

Sources: ABS; RBA

Retail sales volumes grew at a similar pace in the March quarter as in late 2015, although other timely indicators of household consumption have eased of late (Graph 3.5). Motor vehicle sales to households have continued to decline in early 2016, though at a slower pace than in late 2015, and households' perceptions of their own finances have declined of late, although they remain around their long-run average. However, in the past these indicators have had only a modest correlation with quarterly aggregate consumption growth. Liaison suggests that trading conditions in the retail sector have softened in recent months, but remain generally positive.

Graph 3.5
Consumption Indicators



* Average of the ANZ-Roy Morgan and Westpac-Melbourne Institute consumer sentiment measures of respondents' perceptions of their personal finances relative to the previous year; average since 1980 = 100

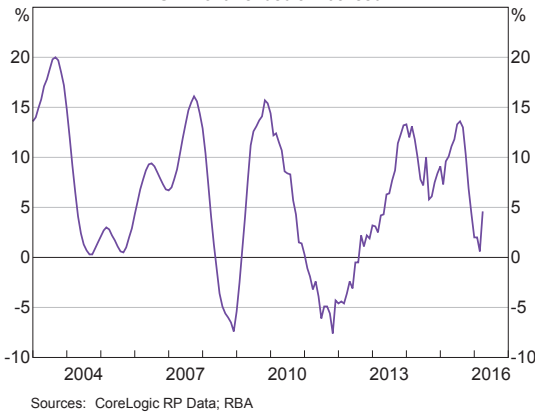
Sources: ABS; ANZ-Roy Morgan; RBA; Westpac and Melbourne Institute

Conditions in the established housing market have stabilised somewhat over the past two quarters or so. Housing prices increased in the early months of 2016, after easing slightly in the December quarter of 2015 (Graph 3.6). Auction clearance rates are above average in Sydney and Melbourne, although they remain lower than a year ago (Graph 3.7). The average number of days that a property is on the market is a little higher than the lows of last year, while the eventual discount on vendor asking prices is little changed. Housing turnover rates are below average.

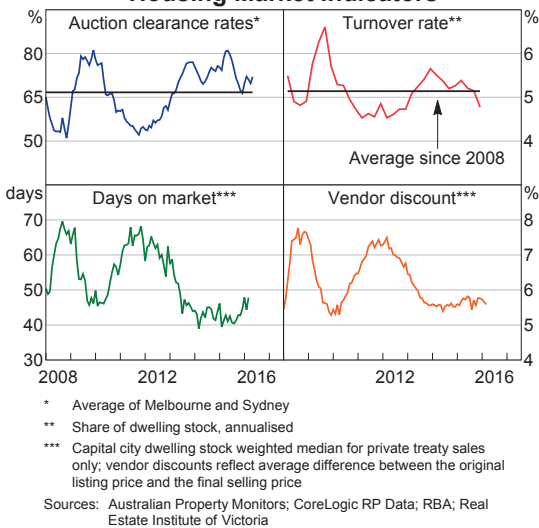
Housing credit growth has eased a little in recent months, after stabilising in the second half of 2015. This follows an earlier period of rising credit growth, driven in large part by investor lending. This moderation has been consistent with the increases in mortgage interest rates implemented by most lenders towards the end of 2015 and the tightening of lending standards (see 'Domestic Financial Markets' chapter for further details on the developments in housing finance).

Conditions in the rental market have continued to soften. Growth in rents has declined and the aggregate rental vacancy rate has increased to around its average since 1990. While the recent increase in the national vacancy rate mainly reflects

Graph 3.6
Housing Price Growth
Six-month-ended annualised



Graph 3.7
Housing Market Indicators

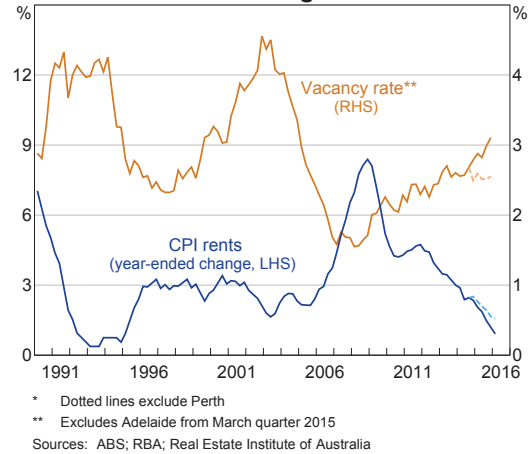


developments in the Perth rental market, growth in rents has eased in most capital cities (Graph 3.8).

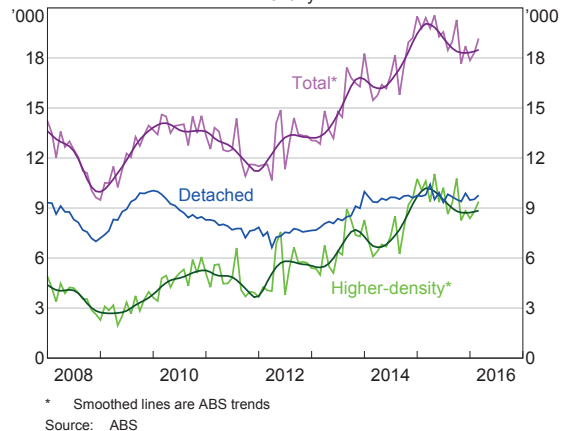
Dwelling investment has continued to grow strongly, supported by low interest rates and the significant increase in housing prices in recent years. Investment in higher-density housing grew at close to 30 per cent over 2015, accounting for most of dwelling investment growth over that period. More recently, the amount of residential construction work still in the pipeline has continued to rise and points to further strong growth in

dwelling investment. The pace of growth is likely to moderate, however, consistent with the decline in building approvals since last year (Graph 3.9).

Graph 3.8
Rental Housing Market*



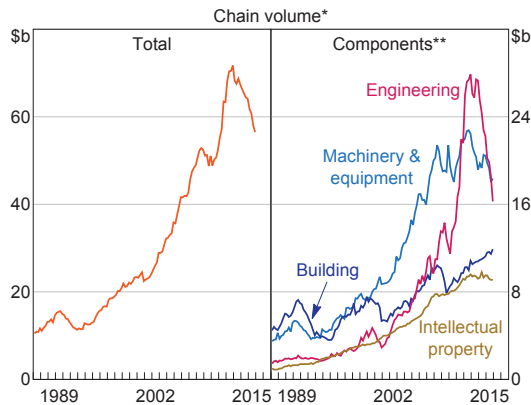
Graph 3.9
Private Residential Building Approvals
Monthly



Business Sector

Private business investment fell by 3 per cent in the December quarter and by 12 per cent over 2015 (Graph 3.10). The annual decline was led by a sharp fall in mining investment. Non-mining investment has been little changed for several years in real terms, notwithstanding a pick-up in profits in the non-mining sector in 2015 and above-average business conditions.

Graph 3.10
Private Business Investment



* Adjusted for second-hand asset transfers between the private and other sectors; reference year is 2013/14

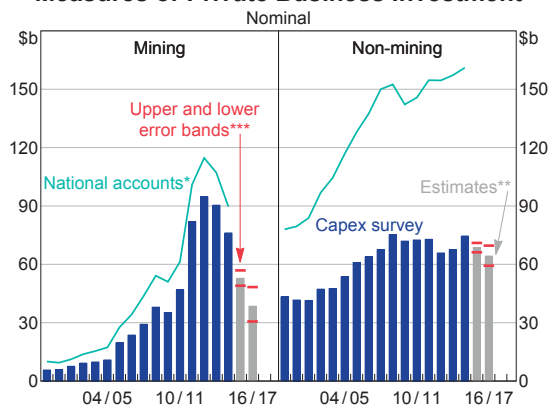
** Excluding cultivated biological resources

Sources: ABS; RBA

The decline in mining investment is expected to continue over coming years. Few new projects are expected to commence as the global supply of commodities has increased markedly, resulting in a significant fall in bulk commodity prices over recent years and a decline in mining sector profits. The recent rise in commodity prices, even if sustained, is unlikely to lead to additional mining investment over the next two years or so. The ABS capital expenditure (Capex) survey, along with Bank liaison, suggests that the decline in mining investment is likely to continue, although the largest subtraction from GDP growth is expected to be in the current financial year (Graph 3.11). It is likely that, by the end of 2016, the bulk of the decline in mining investment will have occurred; mining investment is currently 4 per cent of nominal GDP, down from its peak of 8 per cent in 2012.

Indicators of investment intentions suggest that non-mining investment will remain subdued for at least the next few quarters. The latest Capex survey continues to imply that a recovery in non-mining investment will not occur in either 2015/16 or 2016/17. Consistent with this, non-residential building approvals remain at relatively low levels, in part reflecting weak underlying conditions in the commercial property market. The estimates

Graph 3.11
Measures of Private Business Investment



* Adjusted for second-hand asset transfers between the private and other sectors; excluding cultivated biological resources

** Estimates are firms' expected capital expenditure, adjusted for the past average difference between expected and realised spending

*** Error bands are based on the root mean square error of each adjusted estimate compared with the final outcome for investment in each year

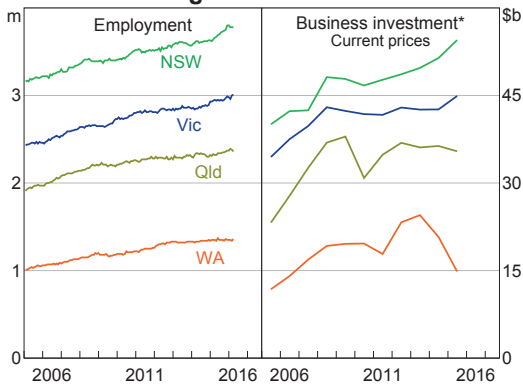
Sources: ABS; RBA

from the Capex survey are, however, subject to considerable uncertainty. Moreover, the survey does not cover a large share of non-mining investment that is captured in the national accounts, such as investment in agriculture, education, healthcare or intangible items.

Patterns in non-mining investment spending across the states appear to have varied considerably (Graph 3.12).¹ The direct and indirect effects of conditions in the mining sector on activity in the non-mining sector appear to be quite significant for the resource-rich states of Western Australia and Queensland. The direct effect arises because many non-mining firms provide inputs and support to firms involved in mining investment or resource extraction. There is also an indirect effect, whereby conditions in the mining sector affect economic conditions more broadly, for example via spending of profits, wages and tax revenues

¹ Measurement issues suggest that the state-level estimates should be regarded as indicative. For each state, private non-mining business investment is estimated as total private business investment (excluding second-hand asset transfers) less mining investment. Mining investment by state is estimated as the sum of mining capital expenditure on machinery & equipment and buildings & structures (sourced from the Capex survey) and mining exploration expenditure (sourced from the ABS Mineral and Petroleum Exploration survey).

Graph 3.12
Employment and
Non-mining Business Investment



* Refer to footnote 1 in the text
Sources: ABS; RBA

generated in mining and mining-related activities. Hence, declines in commodity prices and mining investment are likely to have had a larger 'knock-on' effect on employment and investment in Western Australia and Queensland. In contrast, in New South Wales and Victoria, which are less resource intensive, the recovery in non-mining business investment appears to have begun, supported by stronger demand growth due to very low interest rates and the depreciation of the Australian dollar over the past few years. Consistent with this, survey measures of business conditions in New South Wales and Victoria are clearly above average, while those in the resource-related states are more subdued.

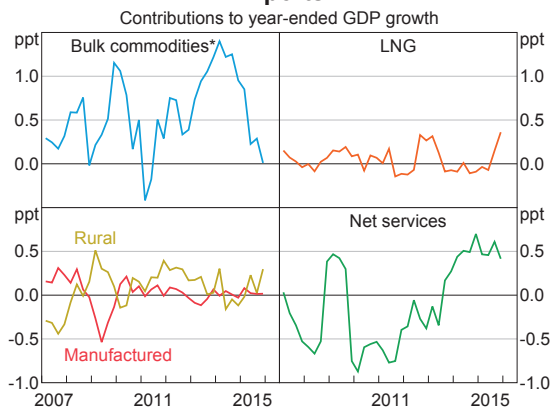
External Sector

Export volumes rose by 6 per cent over 2015, with strength in resource, service and rural exports. Much of the strength in resource exports was driven by exports of LNG, which are expected to continue to increase substantially over the next couple of years as a number of LNG projects are completed and production capacity increases. Exports of iron ore grew at a more moderate pace over 2015 than they had previously. Iron ore exports are expected to continue to grow over the next couple of years,

as production from the large, low-cost producers continues to expand. The recent weakness in coal exports is expected to continue, reflecting weak global demand and the relatively high cost of some Australian production.

Net service exports contributed more to GDP growth over 2015 than exports of bulk commodities, which is the first time this has happened since 2008 (Graph 3.13). This was assisted by the improved competitiveness associated with the depreciation of the Australian dollar. Tourism, education and business service exports have all expanded, while service imports have declined noticeably over the past couple of years, particularly for travel and business services (for more detail, see 'Box A: Australian Services Trade').

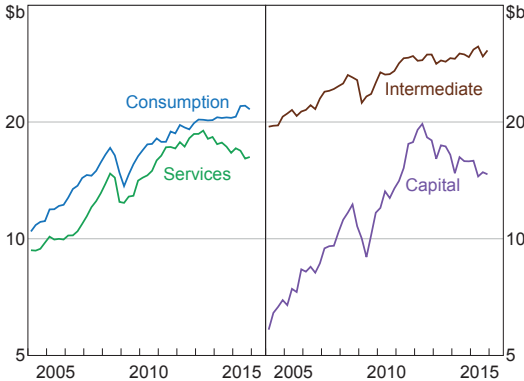
Graph 3.13
Exports



* Iron ore and coal
Sources: ABS; RBA

Overall import volumes increased modestly over 2015, reflecting growth in consumption and intermediate imports (Graph 3.14). The increase in intermediate imports was led by higher fuel import volumes, consistent with the substantial decline in oil prices over 2015. These increases were partly offset by a decline in service import volumes and the downward trend in capital goods imports associated with the decline in mining investment over recent years.

Graph 3.14
Import Volumes*
Log scale, quarterly

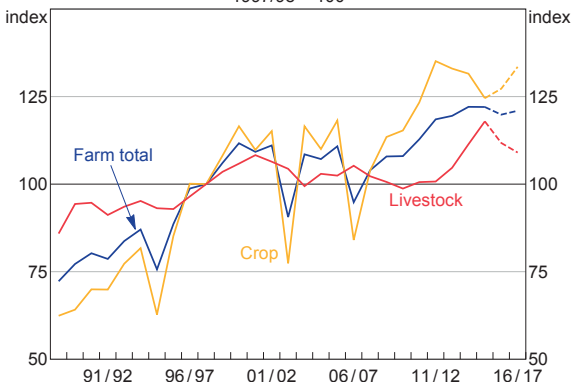


* Reference year is 2013/14
Source: ABS

Farm Sector

The Australian Bureau of Agricultural and Resource Economics and Sciences expects the volume of farm production to decline modestly in 2015/16 (Graph 3.15). Farm production has been supported in recent years by high levels of production from livestock, but these are expected to moderate in 2015/16 as herds are rebuilt; crop production is expected to grow modestly.

Graph 3.15
Farm Production Volumes*
1997/98 = 100

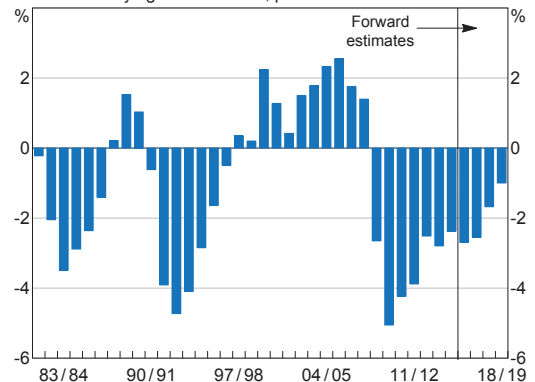


* Dotted lines represents 2015/16 and 2016/17 forecasts
Source: ABARES

Government Sector

Recent federal and state government budgets suggest there will be fiscal consolidation over coming years. Lower-than-expected growth of labour income has led to downward revisions to revenue growth in 2015/16, although this has been offset in part by higher-than-expected growth in stamp duty revenue in some states. The consolidated deficit is projected to be little changed from previous forecasts. In 2016/17, the consolidated deficit is expected to narrow to around 2½ per cent of GDP, and progressively lower deficits are expected in subsequent years (Graph 3.16).

Graph 3.16
Consolidated Budget Balance*
Underlying cash balance, per cent of nominal GDP

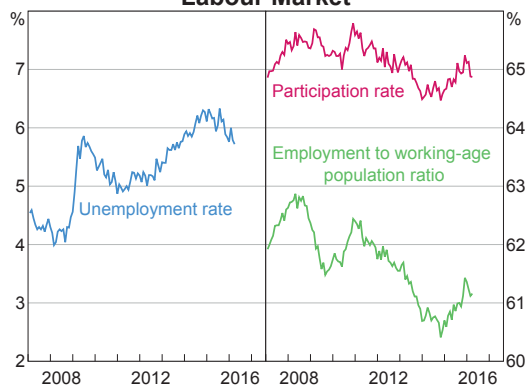


* Based on the 2016/17 Australian Government and Victorian budgets and 2015/16 mid-year updates for the other States and Territories; excludes the effect of the federal grant to the RBA in 2013/14
Sources: ABS; Australian Treasury; State and Territory Treasuries

Labour Market

Labour market conditions are noticeably stronger than a year ago, although momentum has eased of late. Employment growth has been a little above its long-run average in year-ended terms, the unemployment rate has been on a downward trend since around mid 2015, and the employment-to-population ratio and participation rate have been on upward trends over the past year or so (Graph 3.17). This improvement has been broad based across part-time and full-time employment. Average hours

**Graph 3.17
Labour Market**



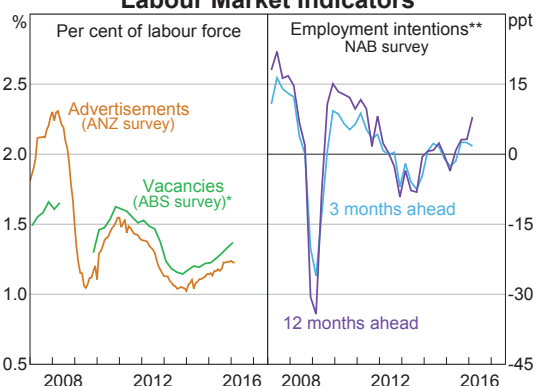
Source: ABS

worked have been little changed. As expected, there has been some moderation in employment growth in early 2016, following very strong employment growth in late 2015. The unemployment rate has remained around 5¾ per cent, about ½ percentage point below its peak in 2015.

Other labour market indicators also suggest that conditions are better than a year ago, but provide mixed signals about how labour market conditions are likely to evolve in the near term. The NAB survey measures of businesses' hiring intentions remain above their long-run averages and job vacancies have continued to increase as a share of the labour force (Graph 3.18). However, the number of unemployment benefit recipients as a share of the labour force increased slightly in March, after having declined since mid 2015, and job advertisements have levelled out in recent months after a period of relatively consistent increases.

In recent years, the household and business services sectors have made the largest contributions to employment growth. This trend was somewhat reversed in the March quarter, although health & social assistance employment remains much higher than a year ago (Graph 3.19). Employment in a number of business services industries is also higher than a year ago, supported by a range of activities, including strong growth in residential building activity, public infrastructure spending

**Graph 3.18
Labour Market Indicators**



* This survey was suspended between May 2008 and November 2009

** Net balance of employment intentions for the following period; deviation from average; 12-months-ahead measure seasonally adjusted by the RBA

Sources: ABS; ANZ; NAB; RBA

**Graph 3.19
Employment Growth
Year to February 2016**



* Includes personal services; religious, civic, professional and other interest group services; repair and maintenance activities; and private households employing staff

Source: ABS

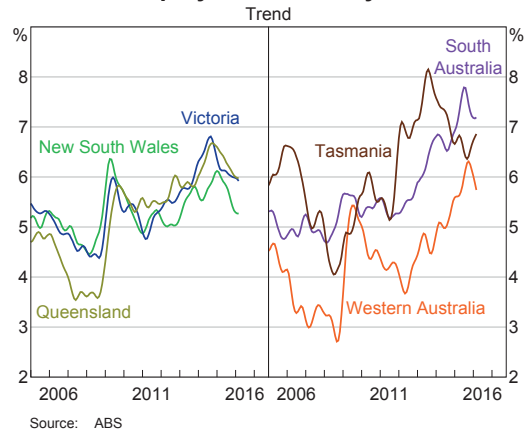
in some states and the increase in service exports following the depreciation of the Australian dollar since 2013. Employment has risen in retail trade, transport, postal & warehousing and construction in recent quarters, consistent with the increased pace of consumption growth and continued dwelling investment.

The improvement in labour market conditions over the past year or so has been concentrated in the eastern states, consistent with other economic

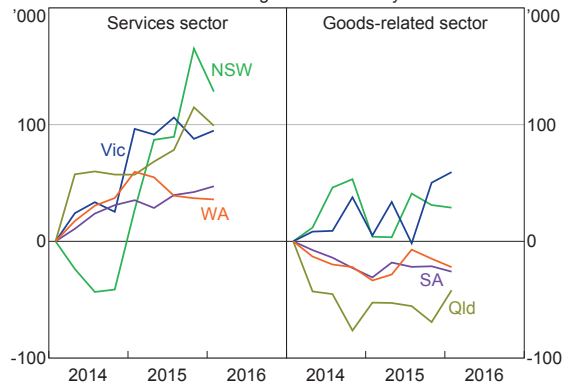
activity indicators. Unemployment rates have fallen in New South Wales, Victoria and Queensland (Graph 3.20). In contrast, the unemployment rate in Western Australia has risen over the past few years to be close to the national average in trend terms, after having been well below average during the mining investment boom. The strong growth in services employment over the past year or so has also been concentrated in the eastern states (Graph 3.21). Services employment has declined in Western Australia, reflecting the exposure of business services there to mining investment-related activity. Similarly, goods-related employment has increased a little in New South Wales and Victoria over the past year or so, while it has fallen in Western Australia and Queensland as a result of declining mining and mining-related employment.

Notwithstanding the improvement in labour market conditions over the past year, there is still evidence of spare capacity. In all states, unemployment rates remain above the lows of recent years and wage growth is still very low (see 'Price and Wage Developments' chapter). ✎

Graph 3.20
Unemployment Rates by State



Graph 3.21
Employment by State and Sector*
Cumulative change since February 2014



* Seasonally adjusted using ABS state seasonal factors; does not remove sectoral seasonal patterns

Sources: ABS; RBA

Box A

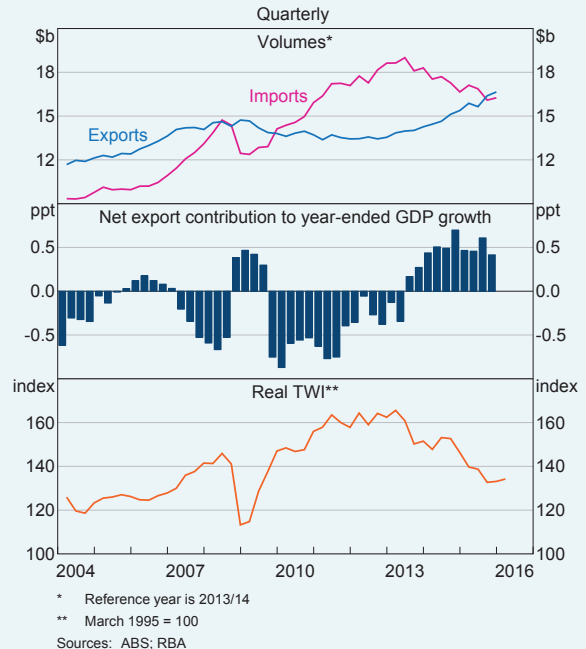
Australian Services Trade

Net service exports have contributed around ½ percentage point to annual GDP growth in Australia over the past couple of years, reflecting a pick-up in service export volumes and a decline in service imports (Graph A1). This follows a period of about four years during which net service exports subtracted from GDP growth, as service export growth was relatively subdued and service import volumes grew strongly. This Box discusses the key drivers of Australia's service exports and imports since the early 2000s and considers the prospects for net service exports over the coming years.

A range of factors affect Australia's services trade, including global demand for services in the case of exports and domestic demand for services in the case of imports. The exchange rate has also been a key driver. The resources boom in Australia was associated with a large appreciation of the Australian dollar.¹ Over the decade to 2013, this contributed to subdued growth in Australia's service exports, which became relatively more expensive in foreign currency terms. Slower growth in global demand since the financial crisis also played a role. Over the same period, the high level of the exchange rate supported strong growth in service imports to Australia, as they became relatively less expensive compared with domestically produced services.

1 The resources boom has had a significant impact on production, demand and prices in Australia. Movements in the Australian dollar are heavily influenced by commodity prices (see Hambur J, L Cockerell, C Potter, P Smith and M Wright (2015), 'Modelling the Australian Dollar', RBA Research Discussion Paper No 2015-12). Large movements in the exchange rate have contributed to the relatively smooth adjustment of the macroeconomy to date. See, for example, Lowe P (2015), 'Managing Two Transitions', Speech at the Corporate Finance Forum, Sydney, 18 May.

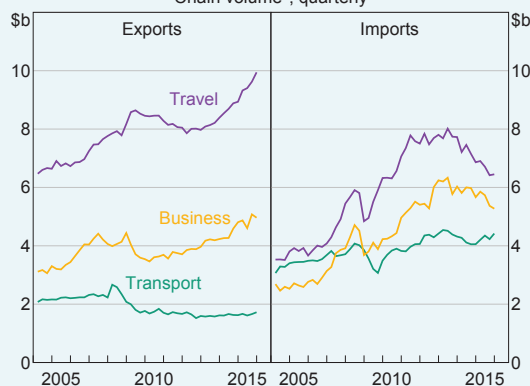
Graph A1
Services Trade



Since 2013, with the decline in commodity prices and mining investment, and the depreciation of the Australian dollar, these trends in services trade have reversed. Australia's exports of services, including education, tourism and business services, have increased over the past few years, while service imports to Australia have declined noticeably (Graph A2).

Trade in travel services, which includes tourism and education, has been particularly responsive to movements in the exchange rate. Exports of travel services have increased significantly in recent years in line with the substantial increase in visitor

Graph A2
Services Trade Components
 Chain volume*, quarterly

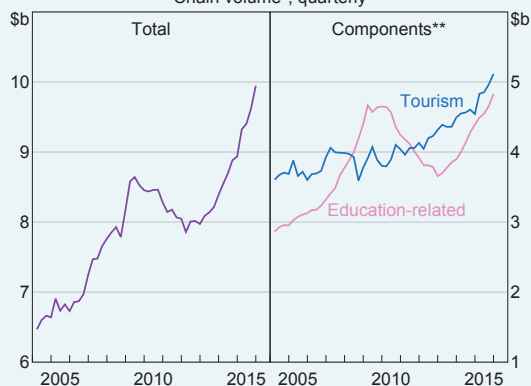


* Reference year is 2013/14
 Source: ABS

arrivals, particularly from China and east Asia.² The spending of foreign visitors in Australia typically responds rapidly to the increase in the purchasing power of foreign currency in Australian dollar terms. The number of visitors appears to adjust more slowly, consistent with the substantial lead time in planning overseas travel. Education exports, which make up around half of travel service exports and capture the expenditure of overseas students studying in Australia, have been a major contributor to growth in travel service exports (Graph A3). While education exports are likely to respond to changes in the exchange rate, they also depend on other factors, such as the perceived quality of educational institutions and changes in migration policies, including requirements for student visas and the ability to use study in Australia as a pathway to permanent migration.³

2 Travel service exports provide an estimate of spending on goods and services by foreigners while they are in Australia, including tuition fees for international students. International transport fares, together with freight services, are included in transport service exports.
 3 For further discussion of the factors affecting demand for education exports, see Productivity Commission (2015), 'Barriers to Growth in Service Exports', Research Report, Canberra. Available at <<http://www.pc.gov.au/inquiries/completed/service-exports/report/service-exports.pdf>>

Graph A3
Travel Service Exports
 Chain volume*, quarterly



* Reference year is 2013/14
 ** Tourism service exports are travel service exports less education-related exports; education-related exports are seasonally adjusted by RBA
 Sources: ABS; RBA

While travel exports have risen substantially over recent years, travel imports have declined by almost as much, as Australians have shifted some of their spending away from international holidays – which have become relatively more expensive – to domestic trips. Growth in the number of Australians travelling internationally has slowed, especially to popular east Asian destinations such as Thailand.⁴ The second largest component of services trade is business services. The depreciation of the Australian dollar has also improved the international competitiveness of Australian business service firms. Consulting, financial and technical services provided by firms in Australia appear to be benefiting from the lower exchange rate, as business service exports have grown steadily in recent years and imports have declined. In the short to medium term, the depreciation is more likely to affect contract-based

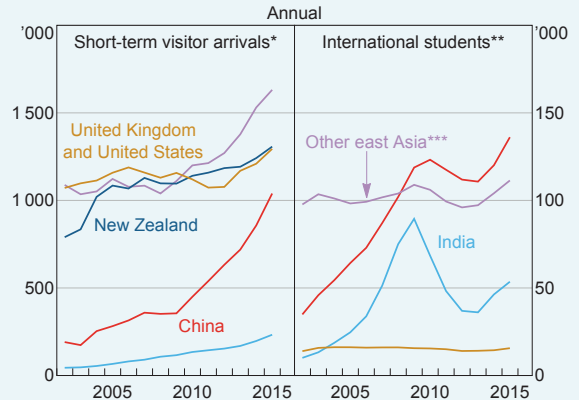
4 For discussion of developments in Australia's tourism industry, with perspectives from the Bank's business liaison program, see Dobson C and K Hooper (2015), 'Insights from the Australian Tourism Industry', RBA *Bulletin*, March, pp 21-31. See also, Tourism Research Australia (2016), 'Travel by Australians: December 2015 Quarterly Results of the National Visitor Survey', March. Available at <<http://www.tra.gov.au/research/Travel-by-Australians-December-2015-quarterly-results-of-the-National-Visitor-Survey.html>>.

work. However, if the exchange rate remains at lower levels for an extended period, some firms may choose to bring production of services back to Australia that had previously moved offshore to benefit from lower costs.

The east Asian region has been an important source of demand for Australia's service exports. Australia has benefited from its geographical proximity to the expanding middle class in China and the broader east Asian region. The strong growth in service exports to this region over recent years means that east Asia now accounts for about one quarter of Australia's business service exports and almost half of travel service exports. Around half of international students in Australia come from east Asia, and another 10 per cent or so come from India (Graph A4). The increase in travel service exports to the east Asian region has been most dramatic for China; Chinese visitors make up almost 15 per cent of total short-term arrivals, up from less than 5 per cent in the early 2000s.

There is considerable scope for Australian service exports to the Asian region to continue to increase over time. The prospects for further increases in per capita incomes in Asia imply that the demand for Australia's service exports is likely to continue to rise. As households' disposable incomes increase, they tend to consume more services such as education and travel, some of which they will pursue offshore. Similarly, as the region continues to grow, firms in east Asia are likely to demand more business services. Australia is well positioned to capitalise on this demand, although the future growth in Australia's services trade will also depend on the extent of competition, which is likely to be intense, and exchange rate movements, which will affect Australia's price competitiveness. ✎

Graph A4
Visitors and International Students



* Visitors with length of stay less than 12 months; some students are also captured in the short-term arrivals data

** Students studying on an international student visa; New Zealand students do not require a student visa to study in Australia

*** Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand

Sources: ABS; Department of Education and Training; RBA

4. Domestic Financial Markets

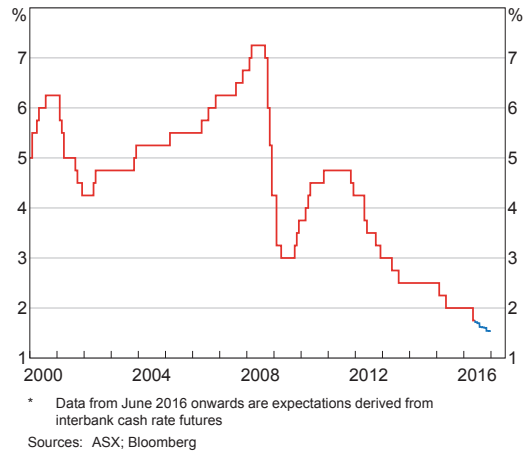
After a period of volatility at the start of the year, driven mainly by concerns about the outlook for the Chinese economy and declines in oil prices, conditions in domestic financial markets have been more stable. The cash rate was reduced at the May Board Meeting, and interest rates on the stock of housing and business loans have declined in response. Yields on paper issued by banks and non-financial corporations remain low. The increase in wholesale funding costs for banks earlier in the year has translated into only a modest pick-up in their average funding costs. Banks have been readily sourcing funding from wholesale markets, while deposit growth has slowed. Housing lending growth eased following the increases in lending rates in 2015 and the measures taken to strengthen lending standards. Business lending rates are at historic lows and business lending has continued to grow strongly. Australian equity prices have risen in recent months from their lows in February, particularly in the resource sector following increases in commodity prices.

Money Markets and Bond Yields

The Reserve Bank Board reduced the cash rate target to 1.75 per cent at its May meeting. Rates on overnight indexed swaps (OIS) suggest an expectation of a further reduction in the cash rate (Graph 4.1). Bank bill rates have also declined, with spreads between these rates and OIS remaining relatively stable.

Yields on long-term Australian Government securities (AGS) remain near historic lows.

**Graph 4.1
Cash Rate***

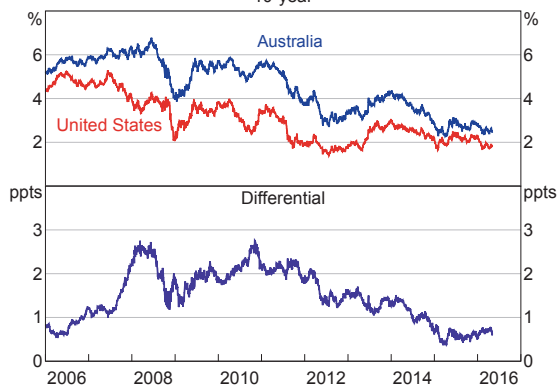


Movements in AGS yields have continued to be largely influenced by movements in US Treasury yields, with the spread between the two remaining broadly steady over the past year or so (Graph 4.2).

The Australian Office of Financial Management has announced plans to issue around \$70 billion of AGS in the 2016/17 financial year in net terms, which would see total AGS rise to around \$500 billion (30 per cent of GDP) at the end of June 2017.

State and territory governments ('semis') have raised around \$30 billion in bonds in the current financial year. After taking account of maturities, the total stock of bonds outstanding has declined to \$239 billion. An increase in net borrowing by Western Australia was offset by reduced borrowing elsewhere. In early February, Moody's downgraded Western Australia's long-term credit rating by one notch to AA (Standard & Poor's equivalent) with a stable outlook.

Graph 4.2
Government Bond Yields
10-year



Sources: Bloomberg; RBA

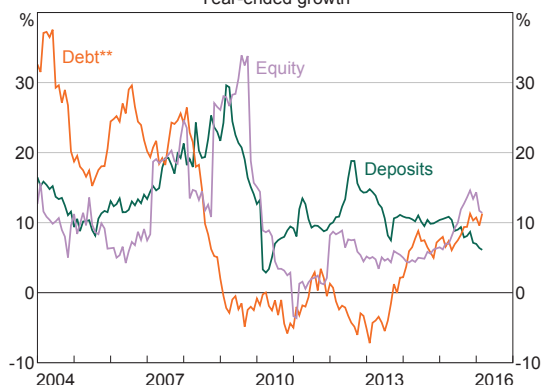
Bond issuance by non-residents into the domestic market ('Kangaroo' issuance) has totalled around \$10 billion since the start of 2016. There has been a modest reduction in issuance over the past year, although a broad range of issuers remain active in the market. Secondary market spreads to AGS on Kangaroo bonds have widened over the past year, consistent with pricing trends in other markets.

Financial Intermediaries

Banks' balance sheets have continued to grow at a moderate pace. Over the past year, growth in deposits has slowed, while growth in both wholesale and equity funding has picked up noticeably (Graph 4.3). Consistent with this, deposits as a share of total bank funding has declined a little, to around 57 per cent of total funding (Graph 4.4).

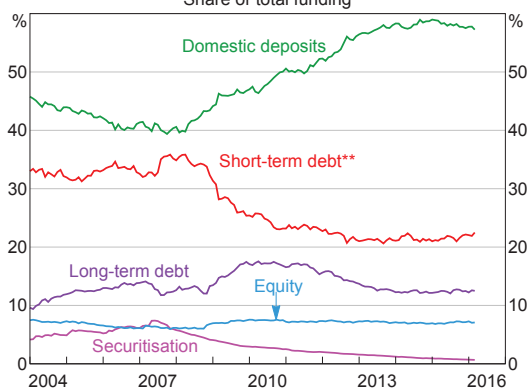
Prior to the May cash rate reduction, major banks' average debt funding costs were little changed since November 2015, notwithstanding increases in the cost of new wholesale debt. Funding costs on outstanding short-term wholesale debt are estimated to have risen by around 10 basis points over this period. The cost of new long-term issuance also rose, although it remains below the cost of outstanding issuance. Banks reported that higher wholesale funding costs had also begun to feed through to higher deposit rates, particularly wholesale term deposits. However, there was little

Graph 4.3
Banks' Funding Liabilities*
Year-ended growth



* Adjusted for movements in foreign exchange rates
** Includes long-term debt, short-term debt and securitisation
Sources: APRA; RBA

Graph 4.4
Funding Composition of Banks in Australia*
Share of total funding



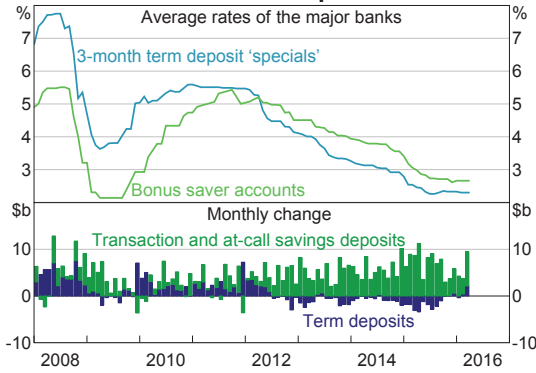
* Adjusted for movements in foreign exchange rates; tenor of debt is estimated on a residual maturity basis
** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA; Standard & Poor's

pass-through of higher wholesale costs to overall deposit costs, which are estimated to have been little changed in recent months. Over this period, deposit growth slowed, and the business sector switched towards investing in banks' wholesale debt instruments. Household deposit growth remained strong, driven by growth in 'at-call' deposit products, such as offset accounts (Graph 4.5).

Australian bank bond issuance has been relatively high, with \$53 billion in bonds issued since the start of the year (Graph 4.6). After accounting

Graph 4.5

Household Deposits

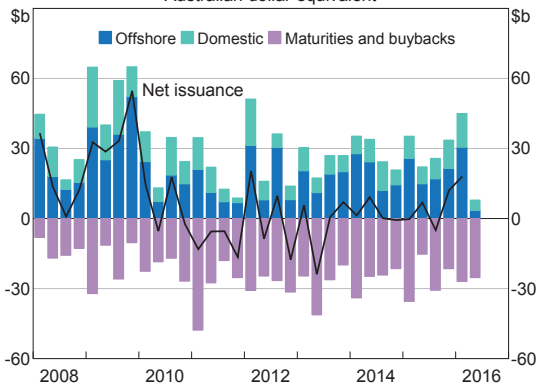


Sources: APRA; Canstar Cannex; RBA

Graph 4.6

Australian Banks' Bond Issuance*

Australian dollar equivalent



* Latest quarter issuance to date

Source: RBA

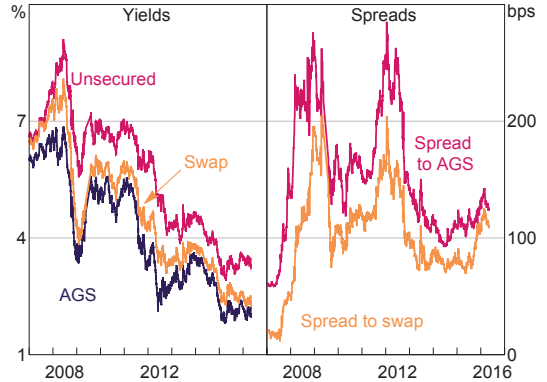
for maturities, net bond issuance was around \$21 billion and the stock of bank bonds outstanding has increased to \$514 billion. Secondary market yields on major banks' bonds have declined since the start of the year; spreads to benchmark rates increased in February amid concerns around banks globally, though the move has since moderated (Graph 4.7).

Australian banks have issued \$2.6 billion in Basel III-compliant hybrid securities in 2016, the largest of which was Commonwealth Bank's \$1.5 billion Additional Tier 1 hybrid note. The pace of issuance so far this year has been slower than in previous years. Hybrid issues in the secondary

Graph 4.7

Major Banks' Bond Pricing

5-year residual maturity, Australian dollar bonds



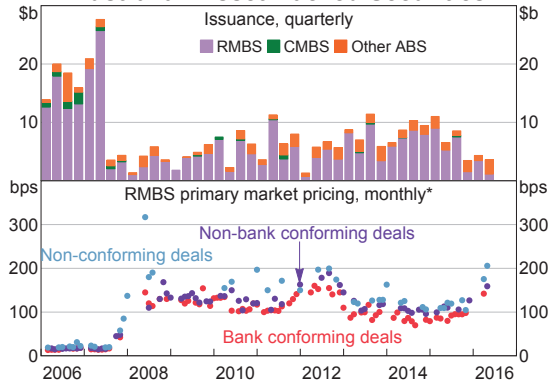
Sources: Bloomberg; UBS AG, Australia Branch

market are generally trading at a spread above the bank bill rate of around 475 basis points, an increase of around 100 basis points over the past year.

After a period of inactivity around the turn of the year, issuers of asset-backed securities have raised around \$8 billion in recent months. Deals were backed by a broad range of collateral including conforming mortgages, non-conforming mortgages, automotive loans and equipment leases (Graph 4.8). Consistent with other wholesale funding markets, primary issuance spreads to the bank bill rate have widened compared to similar deals issued late last year.

Graph 4.8

Australian Asset-Backed Securities



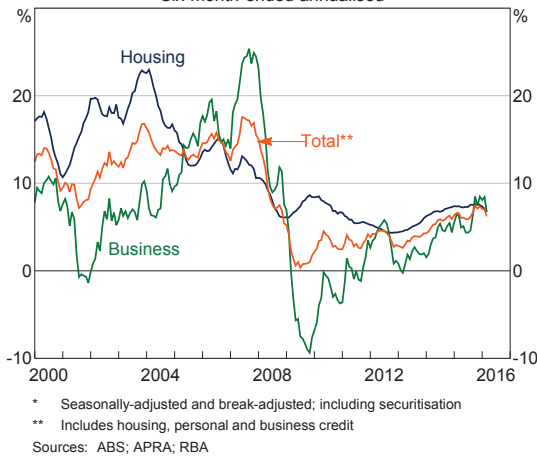
* Face-value weighted monthly average of the primary market spread to bank bill swap rate for AAA rated notes

Source: RBA

Financial Aggregates

Total credit growth has been steady in recent months at around 6 per cent in six-month annualised terms (Graph 4.9). Growth in housing credit has eased a little; business credit growth has continued to grow at a robust pace, notwithstanding some monthly volatility. Credit has been growing at around the same pace as broad money (Table 4.1).

Graph 4.9
Credit Growth by Sector*
Six-month-ended annualised



Household Financing

The pace of housing credit growth has eased in recent months, to around 7 per cent. This follows increases in variable lending rates by most lenders

in late 2015 and measures introduced by the Australian Prudential Regulation Authority (APRA) to strengthen lending standards. In particular, loan serviceability criteria have been tightened by lenders, which reduce the amount that some households can borrow. Consistent with these developments, there has been a decline in turnover in the housing market, along with slower growth in the average size of loans. Net housing debt has continued to grow around 1¼ percentage points slower than housing credit due to ongoing rapid growth in deposits in mortgage offset accounts (Graph 4.10). Recent housing loan approvals data suggest that housing credit will continue to grow at about its current pace.

Graph 4.10
Housing Credit Growth*
Year-ended

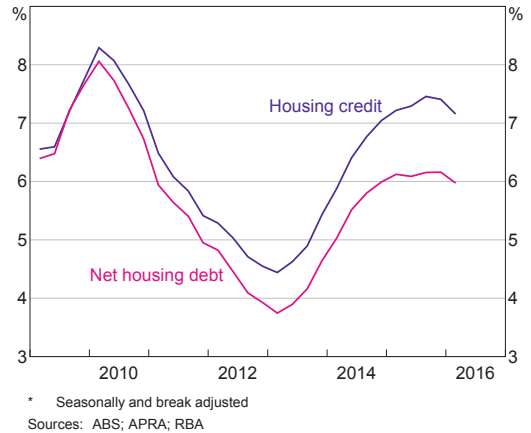


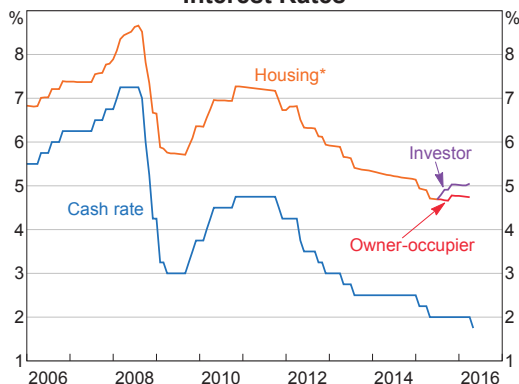
Table 4.1: Financial Aggregates
Percentage change^(a)

	Three-month ended		Year-ended
	December 2015	March 2016	March 2016
Total credit	1.6	1.4	6.4
– Housing	1.8	1.5	7.2
– Owner-occupier	2.2	1.7	7.2
– Investor	1.1	1.3	7.0
– Personal	–0.4	–0.7	–1.0
– Business	1.6	1.7	6.5
Broad money	1.3	1.8	6.3

(a) Growth rates are break adjusted and seasonally adjusted
Sources: APRA; RBA

Prior to the May cash rate reduction, the estimated average outstanding housing interest rate had been little changed since lenders increased interest rates in the second half of 2015 (Graph 4.11). Following the May rate reduction, banks have lowered their standard variable rates by 19–25 basis points.

**Graph 4.11
Interest Rates**



* Estimated outstanding rate prior to the May cash rate reduction.
Sources: ABS; APRA; Perpetual; RBA

More broadly, there are signs that competition for both owner-occupier and investor loans is intensifying. New loans are typically benchmarked to standard variable rates, with lenders then offering discounts below these rates. Over recent months, interest rate discounts for new owner-occupier loans have increased and may be offsetting some of the increase in standard variable rates last year. Discounts for investors on variable-rate housing loans were reduced substantially last year but have increased in recent months. Fixed interest rates for housing loans continue to be priced competitively and, consistent with this, a higher share of mortgages has been taken out with fixed interest rates (Table 4.2).

Since the introduction of differential pricing for investor and owner-occupier lending by most major banks in the second half of 2015, growth in investor lending has slowed considerably, while growth in owner-occupier lending has accelerated. As noted previously, a large number of borrowers have contacted their existing lender to change the

purpose of their loan, while there has also been a surge in owner-occupier refinancing and a drop in investor refinancing with different lenders.

Business Financing

Business credit has continued to grow strongly over recent months. This partly reflects a re-intermediation of business debt, with businesses engaging in less bond issuance. There has also been a slow-down in equity raisings.

The strength in business credit has been broad based across lending to both private non-financial corporations and unincorporated (typically smaller) businesses. The recent pace of business credit growth is consistent with business loan approvals which remain at a relatively high level. Foreign banks have increased their market share to around 15 per cent over the past year. The local operations of Japanese, Chinese and Singaporean institutions have driven the increase in business lending by foreign banks.

Prior to the May cash rate reduction, the estimated average outstanding cost of business borrowing had risen slightly in recent months, reflecting higher variable rates, alongside increases in rates for products linked to market interest rates (Graph 4.12). Lenders, including the major banks, raised average advertised variable rates on small business loans by around 15 basis points. Competition for large business lending has contributed to a narrowing of bank margins on these loans in recent years although this appears to have stabilised recently.

Australian corporate bond issuance for the year to date has totalled \$5 billion, which is low compared to recent years. While secondary market corporate bond yields remain low for issuers outside the resource sector, spreads have risen over the past couple of years. For resource-related issuers, yields increased sharply in February, but have eased back as commodity prices have recovered (Graph 4.13).

Table 4.2: Intermediaries' Fixed and Variable Lending Rates
Prior to the May Cash Rate Reduction

	Interest rate Per cent	Change since January 2016 Basis points	Change since July 2015 Basis points
Housing loans			
– Standard variable rate ^{(a)(d)}			
– Owner-occupier	5.63	0	17
– Investor	5.87	–3	41
– Package variable rate ^{(b)(d)}			
– Owner-occupier	4.83	0	16
– Investor	5.07	–4	40
– Fixed rate ^{(c)(d)}			
– Owner-occupier	4.43	0	–23
– Investor	4.66	–4	–43
– Average outstanding rate ^(d)	4.85	–1	16
Personal loans			
– Variable rate ^(e)	11.40	9	19
Small business			
– Term loans variable rate ^(f)	6.75	15	15
– Overdraft variable rate ^(f)	7.63	15	15
– Fixed rate ^{(c)(f)}	5.42	–1	4
– Average outstanding rate ^(d)	5.71	6	–1
Large business			
Average outstanding rate ^(d)	3.98	5	2

(a) Average of the major banks' standard variable rates

(b) Average of the major banks' discounted package rates on new, \$250 000 full-doc loans

(c) Average of the major banks' 3-year fixed rates

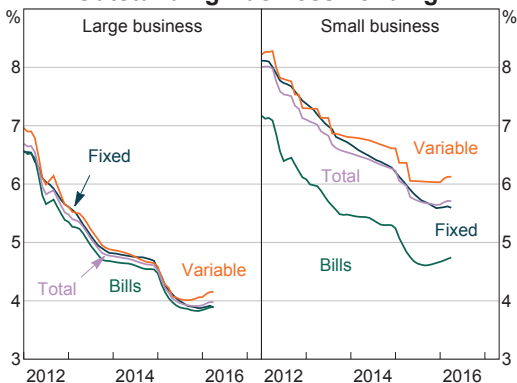
(d) RBA estimates

(e) Weighted average of variable rate products

(f) Residentially secured, average of the major banks' advertised rates

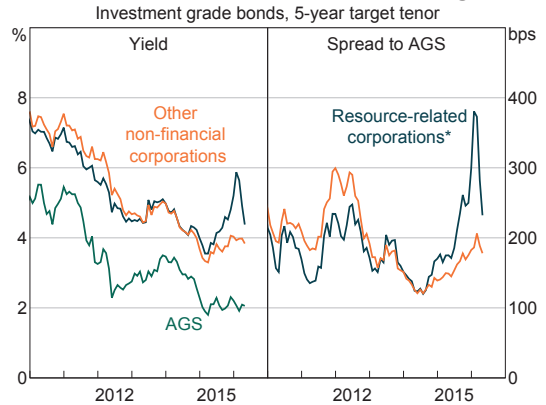
Sources: ABS; APRA; Canstar Cannex; RBA

Graph 4.12
Average Interest Rates on Outstanding Business Lending*



* RBA estimates; prior to the May cash rate reduction
Sources: APRA; RBA

Graph 4.13
Australian Corporate Bond Pricing



* Includes Origin Energy
Sources: Bloomberg; RBA; S&P Capital IQ

The relatively weak conditions in the resource sector have led to ratings downgrades for several Australian firms. Since the start of the year, 19 resource-related firms, including BHP Billiton and Rio Tinto, have had their credit ratings downgraded or been placed on review for downgrade by the major ratings agencies.

Equity raisings by non-financial corporations (including real estate companies) have been relatively small so far this year. Raisings by corporations that are already listed have been low, though this follows a number of large equity raisings in the second half of last year. There have been only a limited number of initial public offerings.

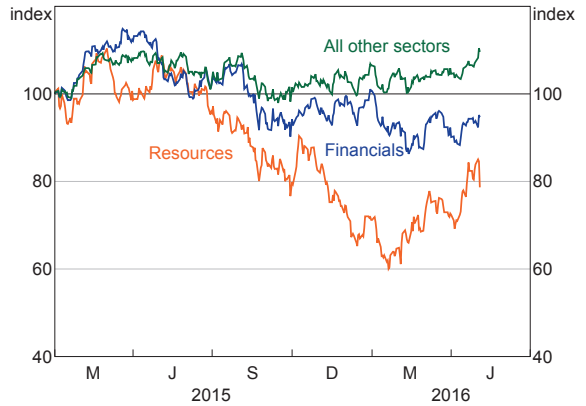
Mergers and acquisitions (M&A) activity in recent months has included the \$9 billion takeover bid for Asciano by a consortium of investors including Qube Holdings and Brookfield, which was accepted in March. Excluding this deal, other M&A activity has totalled around \$7 billion since the start of the year, which is below the average seen in recent years.

Equity Markets

The Australian equity market has risen from its lows in February, supported by large increases in resource sector share prices and a more recent recovery in financial sector share prices (Graph 4.14). Nevertheless, financials have underperformed the broader Australian market, which is slightly lower than at the start of the year.

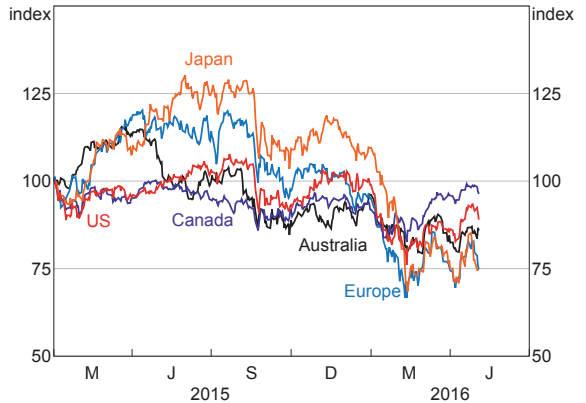
Financial sector share prices have traded in a wide range since the start of the year; bank share prices have fallen by 11 per cent over this period. Falls in global banking stocks amid increased concerns about bank profitability have been a factor, as has been the evidence of a levelling out in housing activity in Australia and signs of financial vulnerability in the resource sector (Graph 4.15). The latter has raised concern about the potential for a rise in bad debts. Against this backdrop, short selling of the major banks and their credit default swap (CDS) premia have increased.

Graph 4.14
Australian Share Price Indices
End December 2014 = 100



Source: Bloomberg

Graph 4.15
Banks' Share Prices
End December 2014 = 100

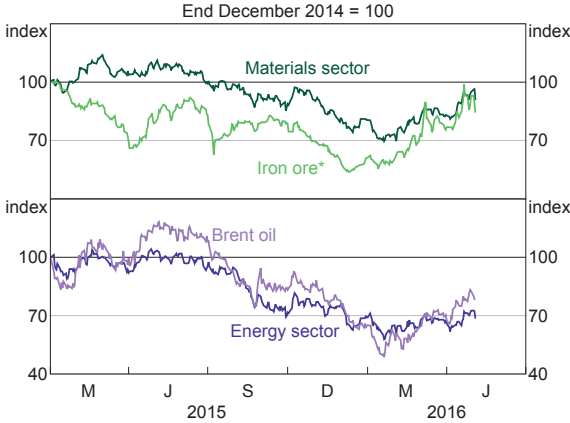


Sources: Bloomberg; RBA

Materials sector share prices have risen alongside a substantial increase in iron ore prices over recent months; energy sector share prices have also risen, albeit by less than oil prices (Graph 4.16). Equity prices for companies outside the financial and resource sectors have been mixed: share prices for consumer staples have fallen while industrials stocks have increased substantially.

Analyst earnings expectations for 2015/16 and 2016/17 have been revised lower since the start of the year, particularly for the resource sector. Analysts expect no earnings growth in the other sectors this financial year.

Graph 4.16
Resources Share Prices and Commodity Prices



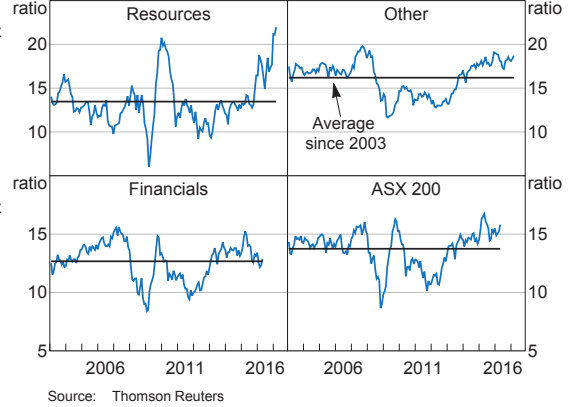
* Qingdao import iron ore spot price
 Sources: Bloomberg; RBA

Valuations of Australian equities, as measured by forward price-earnings ratios, remain around or above their long-term averages across all broad sectors (Graph 4.17). Financial sector valuations have declined amid lower bank share prices. The sharp rise in resource sector valuations reflects the combination of higher equity prices and lower earnings expectations; the range of analysts' earnings expectations for the resource sector has been unusually wide recently.

ASX 200 companies reported their December half 2015 results in February. Aggregate underlying profits declined by 8 per cent from the same period last year, reflecting a sharp fall in resource sector profits (Graph 4.18).

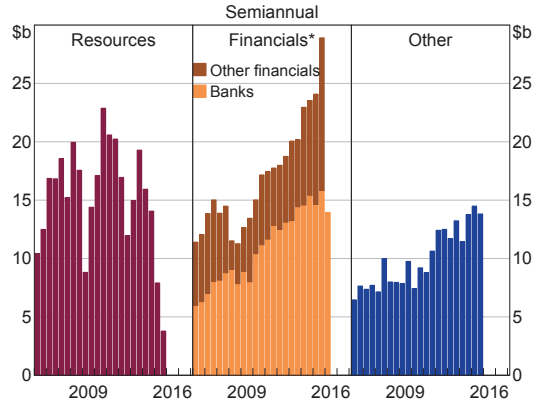
Resource sector profits were around 70 per cent lower than the same period last year, largely tracking lower commodity prices. The decline in profits was partly offset by extensive cost-cutting (including further capital expenditure reductions) and the depreciation of the Australian dollar, which lowered production costs for the major miners that report in US dollars. Many resource companies also recorded sizeable asset impairments as commodity price assumptions were revised downward.

Graph 4.17
ASX 200 Forward Price-earnings Ratios



Source: Thomson Reuters

Graph 4.18
ASX 200 Underlying Profits



* The June 2016 half observation for banks is based on reported results during the half and consensus expectations for companies that have not yet reported

Sources: Bloomberg; Morningstar; RBA

Financial companies reported a large increase in underlying profits in the December half driven by real estate and diversified financial companies. Profits of real estate companies were supported by sizeable revaluation gains, as well as heightened activity in the residential property market.

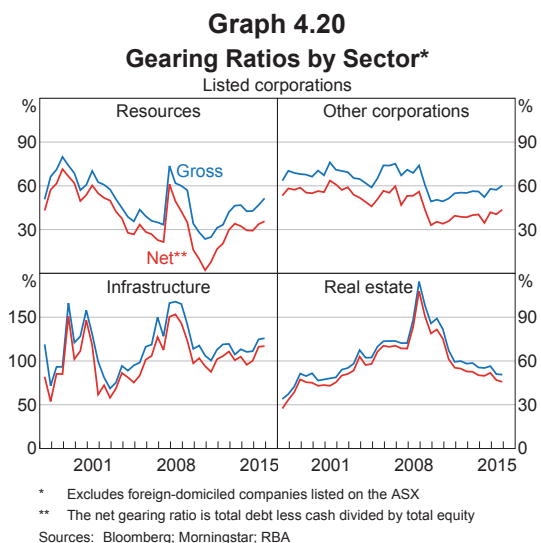
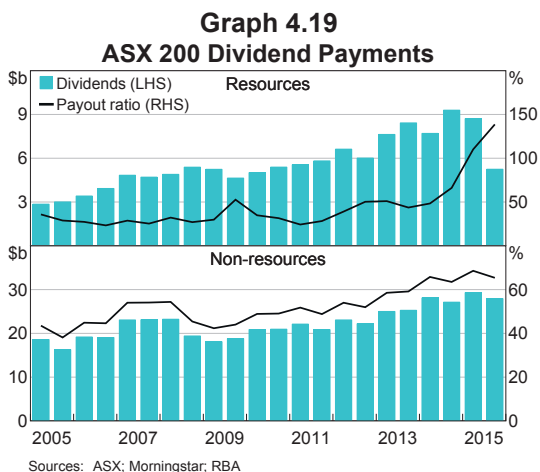
Banks reported lower underlying profit in the half year to March compared with the same period in the previous year. Net interest income was supported by growth in interest-earning assets. Net interest margins for the major banks were little changed, with higher interest rates on housing

lending offset by competition in business lending markets. Bad and doubtful debt charges increased, primarily driven by a relatively small number of exposures including to businesses in the resources sector and in Asia.

Underlying profits for companies outside the resource and financial sectors were generally higher in the December half. Industrial sector profits increased substantially, supported by transportation companies which benefited from lower oil prices. In contrast, companies in the consumer staples and discretionary sectors reported lower profits in aggregate, weighed by mixed performance across the major supermarkets and lower earnings from consumer service companies.

Reflecting the decline in profits, aggregate shareholder distributions fell by almost 10 per cent in the December half 2015 from the same period last year, and the payout ratio – the ratio of dividends to earnings – remained unchanged. Much of the decline in dividends was attributable to resource companies, which substantially reduced their dividend payments in order to preserve cash and reduce leverage (Graph 4.19). In particular, the major diversified miners both shifted from progressive dividend policies to more flexible regimes. Nonetheless, the payout ratio for the resource sector increased to over 100 per cent reflecting the sharp fall in earnings.

Listed corporations balance sheets expanded by 1 per cent over the December half 2015, largely driven by acquisitions outside the resource sector (Graph 4.20). The increase in assets was largely funded by debt, while aggregate equity declined slightly. As a result, the gross gearing ratio (the ratio of debt to equity) rose by 3 percentage points to 59 per cent. ↘

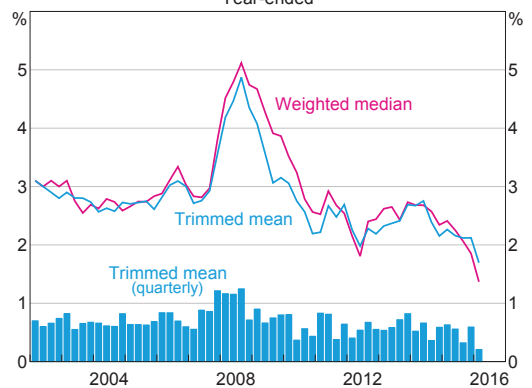


5. Price and Wage Developments

Recent Developments in Inflation

Inflation was low in the March quarter. Measures of underlying inflation declined to a little less than ¼ per cent in the March quarter, to be around 1½ per cent over the year (Table 5.1 and Graph 5.1). The headline consumer price index (CPI) fell by 0.1 per cent (in seasonally adjusted terms) to be 1.3 per cent higher over the year, partly reflecting a decline in fuel prices (Graph 5.2). The March quarter inflation data were lower than the forecast in the February *Statement*. Although some temporary factors contributed to the low result, the data indicate that there has been broad-based weakness in domestic cost pressures, reflecting low wage

Graph 5.1
Measures of Underlying Inflation
Year-ended



Source: ABS

Table 5.1: Measures of Consumer Price Inflation
Per cent

	Quarterly ^(a)		Year-ended ^(b)	
	March quarter 2016	December quarter 2015	March quarter 2016	December quarter 2015
Consumer Price Index	-0.2	0.4	1.3	1.7
Seasonally adjusted CPI	-0.1	0.4		
- Tradables	-0.7	0.3	0.6	0.8
- Tradables (excl. volatile items and tobacco) ^(c)	0.1	0.6	0.5	0.8
- Non-tradables	0.2	0.4	1.7	2.3
<i>Selected underlying measures</i>				
Trimmed mean	0.2	0.6	1.7	2.1
Weighted median	0.1	0.4	1.4	1.9
CPI excl. volatile items ^(c)	0.2	0.7	1.7	2.1

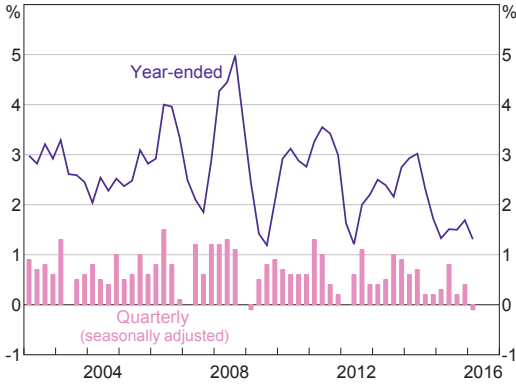
(a) Except for the headline CPI, quarterly changes are based on seasonally adjusted data; those not published by the Australian Bureau of Statistics (ABS) are calculated by the RBA using seasonal factors published by the ABS

(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

Graph 5.2
Consumer Price Inflation

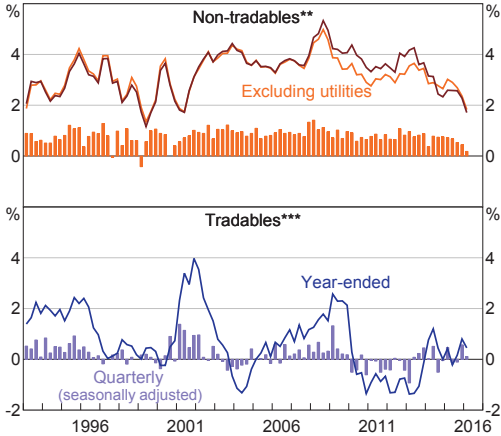


Source: ABS

growth, heightened retail competition, softer conditions in rental and housing construction markets and declines in the cost of business inputs such as fuel and utilities. This has been partly offset by some upward pressure on the prices of tradable items following the depreciation of the Australian dollar over the past few years.

Non-tradables inflation declined further in the March quarter and, in year-ended terms, was around its lowest level since the late 1990s (Graph 5.3). Most components of non-tradables

Graph 5.3
Non-tradables and Tradables Inflation*



* Adjusted for the tax changes of 1999–2000
 ** Excluding interest charges prior to the September quarter 1998 and deposit & loan facilities to June quarter 2011
 *** Excluding volatile items (fruit, vegetables and automotive fuel) and tobacco

Sources: ABS; RBA

inflation were well below their inflation-targeting averages. Market services inflation was particularly low, consistent with low growth in unit labour costs (Graph 5.4). Residential rent inflation was also very low across capital cities (Graph 5.5). Inflation in the cost of new dwellings has also declined over the past few quarters, following a period of higher inflation. Outcomes for housing inflation (including rents and the cost of new dwellings) have been particularly low in Perth, consistent with weaker demand for housing following the end of

Graph 5.4
Market Services Inflation
Year-ended

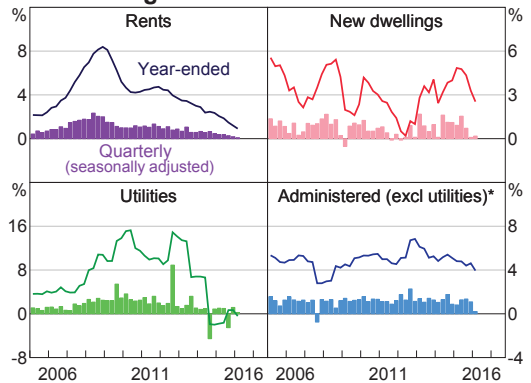


* Excludes deposit & loan facilities to June quarter 2011, housing services and domestic travel; adjusted for the tax changes of 1999–2000

** Non-farm, moved forward by four quarters

Sources: ABS; RBA

Graph 5.5
Housing and Administered Inflation



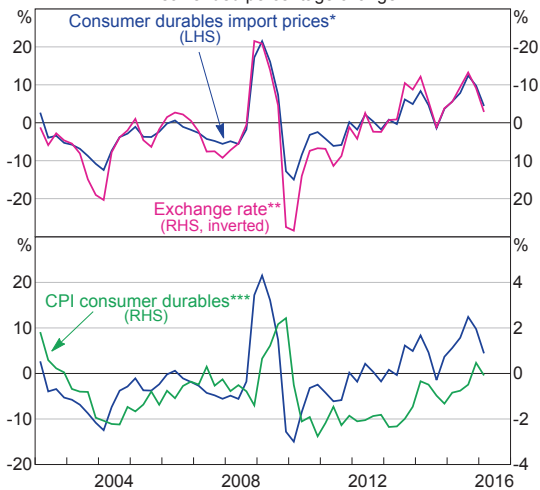
* Includes education, child care, health services, property rates, urban transport fares, postal services, some motor vehicle services and pharmaceutical products

Sources: ABS; RBA

the mining investment boom and the large fall in commodity prices over recent years. Inflation in items with administered prices was also low in the quarter; urban transport fares, education and pharmaceutical prices all declined (in seasonally adjusted terms), in part due to temporary factors.

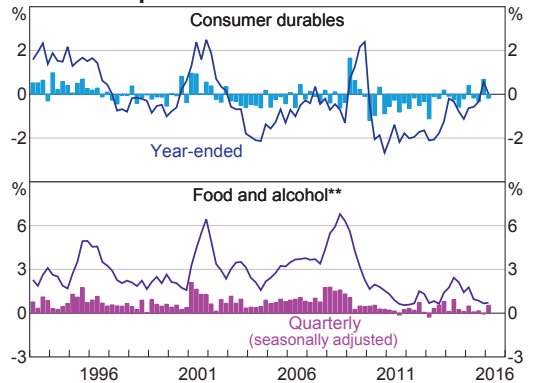
The prices of tradable items (excluding volatile items and tobacco) were little changed in the March quarter and were 0.5 per cent higher over the year. The final prices of tradable items are influenced by external factors as they are exposed to international trade via imports and exports. The substantial depreciation of the exchange rate over the past few years has increased import and export prices in Australian dollar terms, placing upward pressure on the final prices of tradable items (Graph 5.6). On the other hand, low wage growth and heightened retail competition have placed downward pressure on retail prices. The net effect has been subdued inflation in consumer durables, following price falls for several years, and continued subdued inflation in food and alcohol (Graph 5.7).

Graph 5.6
Consumer Prices and the Exchange Rate
Year-ended percentage change



* Consumption goods (excluding food and beverages), reweighted using CPI weights
 ** Import-weighted index, quarter average
 *** Retail items (excluding food and alcohol)
 Sources: ABS; RBA

Graph 5.7
Components of Retail Inflation*

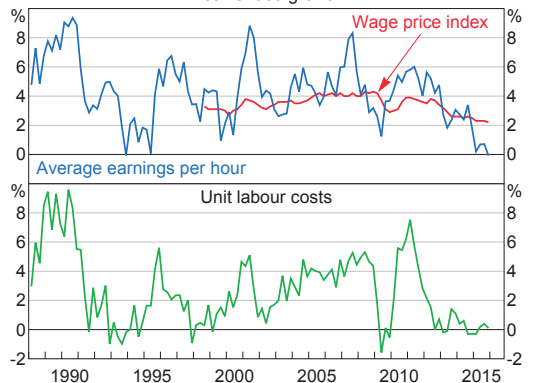


* Adjusted for the tax changes of 1999–2000
 ** Excluding fruit, vegetables, and meals out and take away foods
 Sources: ABS; RBA

Labour Costs

Labour cost pressures remain weak. The wage price index (WPI) increased by 0.5 per cent in the December quarter, to be 2.2 per cent higher over the year (Graph 5.8). Average earnings per hour from the national accounts (AENA) – which captures a broader range of payments to labour as well as the effect of changes in the composition of employment – declined in the December quarter and was little changed over the year. This growth is comparable to the period of weakness in the early to mid 1990s at a time of considerably higher unemployment.

Graph 5.8
Labour Costs
Year-ended growth

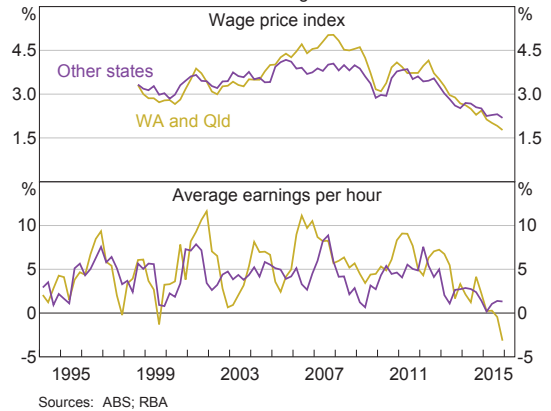


Sources: ABS; RBA

Growth in AENA has been much weaker than WPI growth over the past year, as was the case in previous episodes of declining wage growth. Most of the decline in earnings growth of late appears to have been driven by changes that are occurring within industries, rather than shifts in employment between industries. One factor contributing to this is the movement of some workers from high-paying jobs in mining-related activities to similar work in lower-paying positions in the non-mining economy. For example, liaison suggests that many workers employed in construction during the investment phase of the mining boom have returned to jobs in civil and residential construction at lower wage rates. In addition, liaison suggests that spare capacity in the labour market more generally is allowing firms to replace workers who leave their jobs with new employees on lower salaries, while promotion rates may also be below average. Low growth in AENA may also reflect changes in non-wage payments. For example, liaison suggests that firms have been able to reduce allowances for travel and accommodation.

Wage growth is low in all states and industries (see 'Box B: Wage Developments by Industry' for further detail). Nevertheless, the largest declines in wage growth over recent years have taken place in the mining states, where wage growth had previously been above the national average for some time (Graph 5.9). AENA has fallen more sharply relative to the WPI in the mining states, consistent with compositional change in employment and weakness in non-wage payments being most pronounced in those states.

Graph 5.9
Labour Costs
Year-ended growth



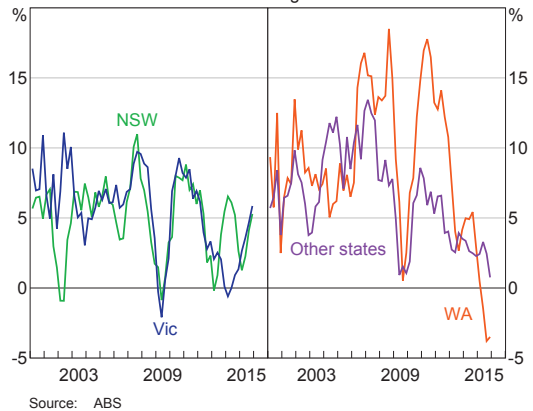
Low wage growth is consistent with a degree of spare capacity in the labour market. However, wage growth has been lower than implied by its historical relationship with the unemployment rate. Several factors may have contributed to this, including the decline in inflation expectations over recent years and the significant fall in the terms of trade, which implies a decline in national income.¹ Increased labour market flexibility over the past few decades may have also provided firms with greater scope to adjust wages in response to a given change in demand for their goods and services. Moreover, low wage growth has been evident in a range of advanced economies, even where unemployment rates have fallen significantly (see 'International Economic Developments' chapter).

Firms' unit labour costs have been little changed for around four years, as any growth in average earnings per hour has been broadly matched by growth in labour productivity (output per hour worked). Together with the depreciation of the nominal exchange rate over recent years, low unit labour cost growth is helping to improve the international competitiveness of Australia's labour, following a period of relatively strong growth in unit labour costs.

¹ For a more detailed discussion of these factors, see Jacobs D and A Rush (2015), 'Why is Wage Growth So Low?', *RBA Bulletin*, June Quarter, pp 9–18.

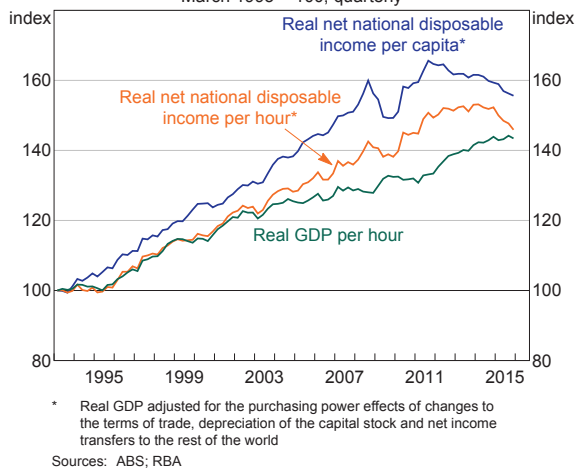
While low wage growth has directly contributed to low growth in household disposable income, lower growth in labour costs may have encouraged firms to employ more people than otherwise, thereby supporting growth in overall household spending. Growth in total compensation of employees – which reflects growth in both earnings and the number of employees – has picked up to around its long-run average in New South Wales and Victoria over the past year (Graph 5.10). In contrast, compensation of employees declined in Western Australia over 2015, after growing strongly during the mining investment boom, and growth has been low in the other states over recent years.

Graph 5.10
Compensation of Employees
Year-ended growth



A broader indicator of living standards is net national disposable income (NNDI) per capita. This takes into account changes to national income due to movements in labour productivity, the terms of trade, depreciation of the capital stock and the share of the population in paid employment. NNDI per capita has declined over recent years, after growing relatively strongly during the terms of trade boom (Graph 5.11). The effect of the sharp fall in the terms of trade over 2015 was offset to some extent by an increase in hours worked as the employment-to-population ratio rose, while labour productivity was little changed.

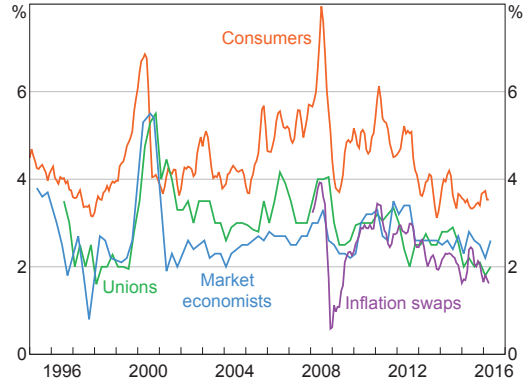
Graph 5.11
Productivity and Income
March 1993 = 100, quarterly



Inflation Expectations

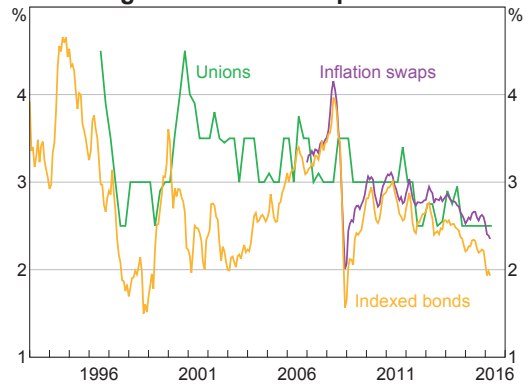
Measures of inflation expectations – from consumers, market economists, union officials and inflation swaps – remain below average (Graph 5.12 and Graph 5.13).² Long-term financial market measures of inflation expectations have declined noticeably over the past few months, although they may have been affected by other developments in financial markets. The expectations of consumers and market economists have been little changed over the past year or so. Unions’ short-term inflation expectations have declined of late, but their longer-term expectations remain anchored at 2½ per cent. Inflation expectations in Australia have not fallen to the same extent as they have in a range of other advanced economies (see ‘International Economic Developments’ chapter). ↗

Graph 5.12
Short-term Inflation Expectations
Over the next year



Sources: Australian Council of Trade Unions; Bloomberg; Melbourne Institute of Applied Economic and Social Research; RBA; Workplace Research Centre

Graph 5.13
Long-term Inflation Expectations



Sources: Australian Council of Trade Unions; Bloomberg; RBA; Workplace Research Centre; Yieldbroker

² Of the short-term measures: the series for consumer expectations is the three-month moving average of the trimmed mean of individuals’ inflation expectations over the next year; union expectations are the median of union officials’ expectations of inflation over the next year; market economist expectations are the median of market economists’ expectations of inflation over the next year; inflation swap expectations are those implied by one-year zero-coupon inflation swaps. Of the long-term measures: union expectations are the median of union officials’ expectations of inflation on average over the next five to 10 years; inflation swap expectations are those implied by 10-year zero-coupon inflation swaps; the series for indexed bonds is the break-even 10-year inflation rate on indexed bonds (where interpolation is used to match exact maturity).

Box B

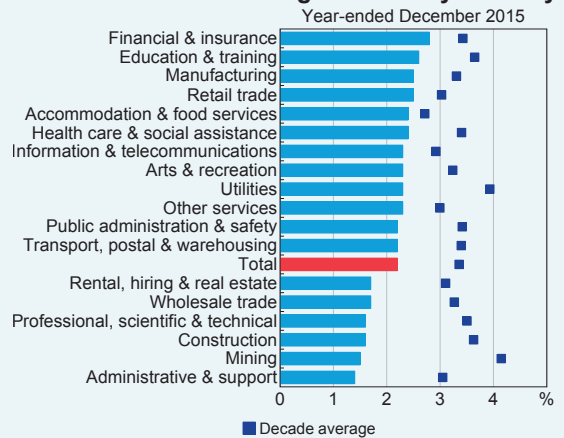
Wage Developments by Industry

As discussed in the 'Price and Wage Developments' chapter, wage growth in Australia has been very low, and lower than implied by its historical relationship with the unemployment rate. Wage growth is well below its decade average in all industries, and dispersion across industries is around its lowest level since the late 1990s when the wage price index (WPI) began (Graph B1 and Graph B2).

While wage growth is low in every industry, it is currently lowest in industries that are more exposed to the end of the mining investment boom, such as mining, construction and administrative & support services (which include labour hire companies that provide a range of workers – such as construction labourers, truck drivers and administrative assistants – to mining and mining-related firms). In addition, wage growth has been relatively weak in professional, scientific & technical services, and rental, hiring & real estate services, which also include firms that support the mining industry.

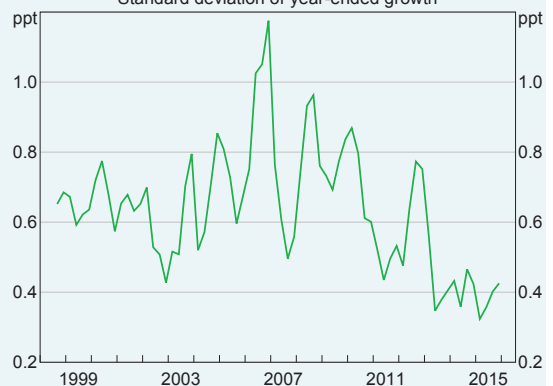
While these industries have experienced wage growth below the national average of late, this follows a period of above-average wage growth for many of them during the mining investment boom. The overall level of earnings in the mining, construction and professional, scientific & technical service industries (based on average weekly earnings data) appears to have risen somewhat relative to the national average since the mid 2000s (Graph B3).¹ In contrast, the level of earnings in the rental, hiring & real estate industry has fallen relative

Graph B1
Wage Growth by Industry*



* Wage price index; total uses seasonally adjusted data
Source: ABS

Graph B2
Dispersion of Industry Wage Growth*
Standard deviation of year-ended growth



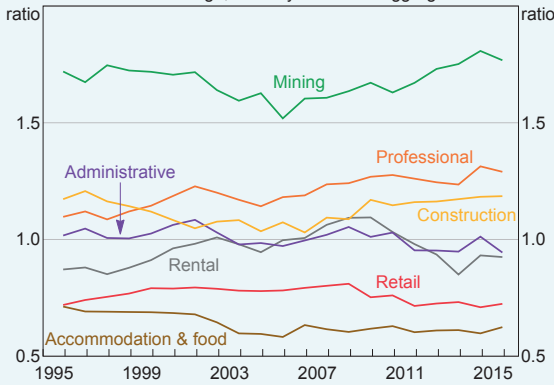
* Wage price index
Sources: ABS; RBA

¹ The average weekly earnings series is designed to estimate the level of wages, rather than the change over time. It is affected by compositional change in employment unlike the WPI, which holds the quality and quantity of labour constant. See Australian Bureau of Statistics (2014), 'Feature Article: Average Weekly Earnings and Wage Price Index – What Do They Measure?', *Average Weekly Earnings*, May.

Graph B3

Average Hourly Earnings*

Annual average, industry relative to aggregate

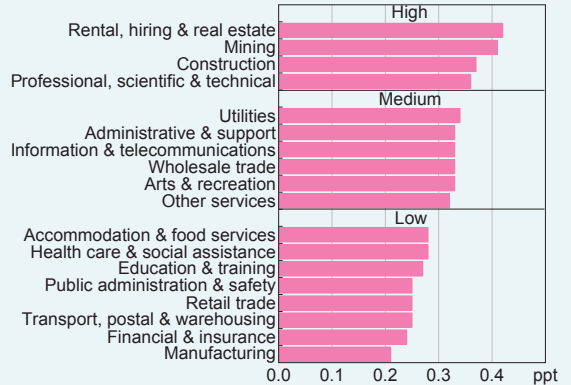


* Average weekly earnings divided by average weekly hours worked
Source: ABS

Graph B4

Wage Growth Volatility

Standard deviation of quarterly growth rates*



* Wage price index; seasonally adjusted; since series began in 1997
Sources: ABS; RBA

to the national average. Wage relativities have been more stable for most other industries.

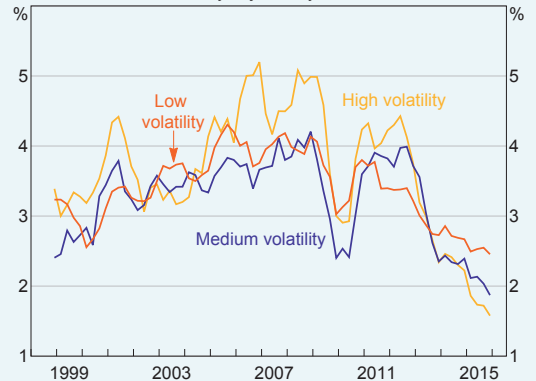
Most of the industries that have experienced relatively low wage growth recently also experience more volatile wage growth (from quarter to quarter) than other industries over time (Graph B4 and Graph B5). It is unclear to what extent this volatility reflects: the nature of wage setting in these industries; the possibility that these industries are more cyclically sensitive than others; and/or the possibility that they have just been affected by the largest changes in labour demand and supply associated with the rise and fall of mining investment.

Wage growth has generally been higher in industries where employment growth has been stronger of late, with a few notable exceptions (Graph B6). For example, while wage growth has been weak in administration & support services, employment in the industry rose quite strongly in 2015. Liaison suggests that the wages in labour hire companies, which fall into this category, have declined as there has been a shift in demand for their workers from mining-related businesses that paid relatively high wages to other firms that pay

Graph B5

Wage Growth by Industry Group*

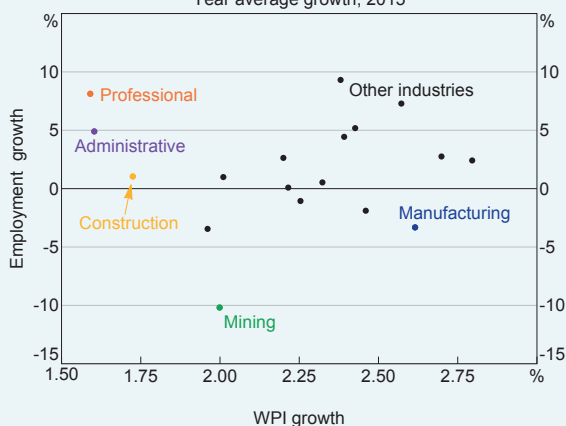
Seasonally adjusted, year-ended



* Wage price index; industries grouped by standard deviation of seasonally adjusted quarterly growth
Sources: ABS; RBA

lower wages. In addition, labour hire firms may have also experienced an increase in the availability of labour, as similar workers have left mining and mining-related firms. Professional, scientific & technical services firms have also had weak wage growth and strong employment growth in the past year. This may also reflect a change in the composition of the clients they work for and an increase in labour availability as similar workers have left the mining industry. In contrast, manufacturing wage growth remains high relative to other

Graph B6
Employment and Wages
 Year average growth, 2015



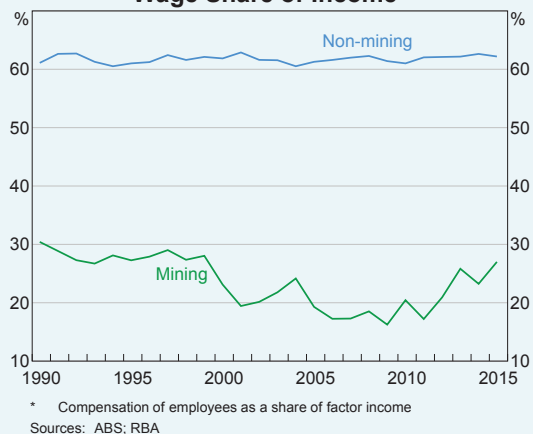
Sources: ABS; RBA

industries at the same time as employment in manufacturing has declined.

Growth in average earnings per hour from the national accounts, a broader measure of labour income, tends to be higher in industries that have stronger growth in labour productivity over the long run.² This would be expected if wages remain a constant share of an industry's total income. Indeed, the wage share of total factor income has been relatively stable in the non-mining sector, despite below-average wage growth (Graph B7). However, there has been an increase in the wage share of income in the mining industry because the decline in commodity prices over recent years has weighed more heavily on profits than wages, just as the earlier increase in commodity prices accrued more to profits than to wages.

2 Average earnings per hour from the national accounts is affected by compositional change and a broader range of labour income payments than the WPI, such as payments related to redundancies, allowances and fringe benefits. The relationship between earnings and productivity growth by industry is not always clear from one year to the next because productivity growth is volatile and productivity improvements are more difficult to measure for some industries than others. Productivity is more challenging to measure for services than for goods. It is also more difficult to measure productivity for services where public sector provision is a significant share of output than for services where prices are market determined.

Graph B7
Wage Share of Income*



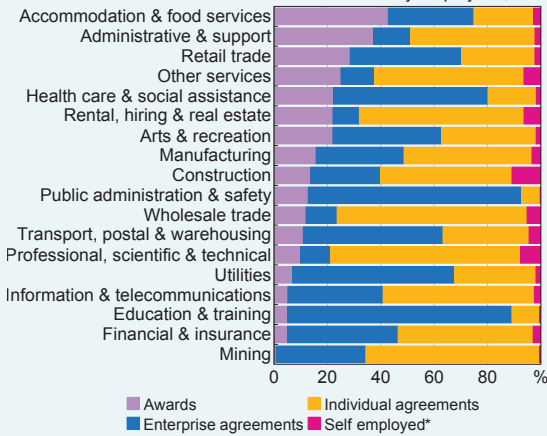
* Compensation of employees as a share of factor income
 Sources: ABS; RBA

Wage-setting methods vary significantly across industries. Enterprise agreements between employers and groups of employees are used to set the pay and conditions for a little more than 40 per cent of employees. Individual agreements between employers and employees cover almost another 40 per cent of employees, while around 20 per cent of employees have their pay determined directly by awards. Most awards are determined by the Fair Work Commission and also indirectly affect a significant proportion of employees covered by enterprise agreements or individual contracts where they set minimum standards for an occupation or industry.

Industries that have the highest share of workers whose pay is directly determined by awards include accommodation & food services (43 per cent), administrative & support services (37 per cent) and retail trade (29 per cent) (Graph B8). Industries with a significant public sector presence, such as education & training, public administration & safety, and health care & social assistance, tend to have a large share of enterprise agreements. In most other industries, at least half of all employees have their pay and conditions determined by individual agreements.

Graph B8
Method of Setting Pay

Per cent of industry employees, 2014



* Owner-manager of incorporated enterprise

Source: ABS

The relationship between wage-setting methods and wage outcomes is unclear. Awards are more prevalent in industries with lower wages as they provide minimum standards. Changes in wage growth and labour market outcomes by industry may reflect differences in wage flexibility or bargaining power, but these are difficult to distinguish from a wide range of other determinants of wages, including variation in industry performance, the balance of demand and supply for different skills, and productivity. ❖

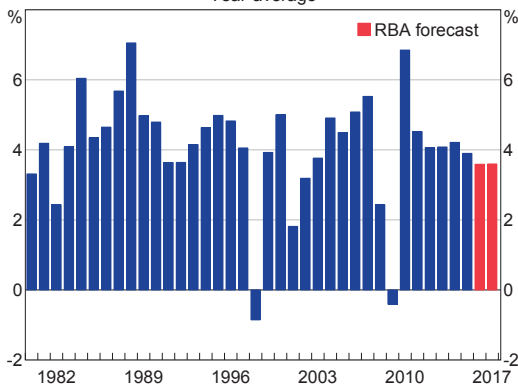
6. Economic Outlook

The International Economy

The outlook for GDP growth of Australia’s major trading partners has been lowered a little since the February *Statement*, reflecting weaker-than-expected data for the March quarter across a number of major trading partners, and some reassessment of growth momentum, particularly in Asia. Despite that, the recent rise in commodity prices suggests that Australia’s terms of trade are likely to be a bit higher in the near term than earlier forecast.

Over the next two years, growth of Australia’s major trading partners is expected to be about ½ percentage point below its decade average (Graph 6.1). Growth will be supported by accommodative monetary policies, less restrictive fiscal policy in some advanced economies and some modest fiscal stimulus in the Asian region.

Graph 6.1
Australia’s Trading Partner Growth*
Year-average



* Aggregated using total export shares
Sources: ABS; CEIC Data; RBA; Thomson Reuters

Notwithstanding the recent increase, oil prices remain relatively low, which should also support growth because most of Australia’s major trading partners are net oil importers.

Growth in China is expected to moderate over the forecast period, largely as forecast previously. In the near term, weaker-than-expected growth of activity in the March quarter is expected to be offset by the effects of policy stimulus over the coming year as the authorities seek to achieve their economic growth target for 2016.

Over the next two years, Japanese GDP growth is expected to be below its trend rate, in part as a result of the scheduled increase in the consumption tax in early 2017. In other east Asian economies, the ongoing weakness in external demand conditions is likely to continue to dampen export demand and investment growth in the private sector; consumption is also likely to be more subdued than previously expected. Although growth in the region is expected to pick up gradually, it is likely to remain below its decade average over the next two years.

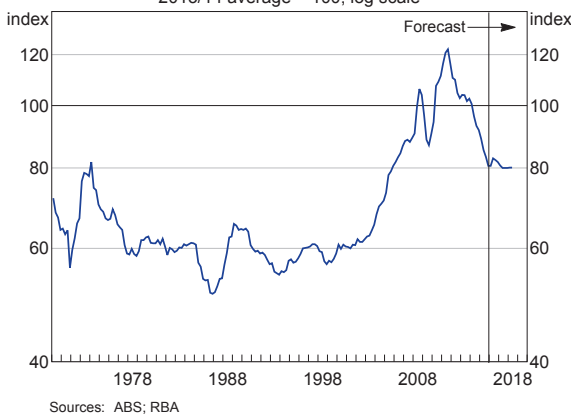
Despite some slowing in growth recently, the US economy is expected to grow at an above-trend rate over the next two years. Conditions in the US labour market remain strong and should support consumption growth. US monetary policy remains very accommodative and, after a few years of fiscal consolidation, government spending is likely to add to growth this year. In the euro area, growth is also expected to remain above trend, supported by accommodative monetary policy, fiscal policies that are becoming less contractionary and a gradually improving labour market.

Globally, core inflation has been low for some years, reflecting spare capacity in many labour, product and commodity markets. This suggests that headline inflation rates will remain below central bank targets for some time yet, particularly in advanced economies, although the recent rise in oil prices, if sustained, should place a little upward pressure on inflation.

The terms of trade have been revised a bit higher in the near term since the February *Statement*, following the increase in commodity prices over recent months (Graph 6.2). The rise in commodity prices partly reflects the effect of positive sentiment on commodity demand following the announcement of China's growth target for 2016. However, it is assumed that the prices of bulk commodities will not be sustained at current levels. Indeed, the forecasts for iron ore and coal prices after 2016 have not been revised higher. This reflects an expectation that Chinese steel demand will decline over the next few years, largely as previously forecast. Also, a substantial increase in global production of low-cost iron ore is expected over the next year or two. Furthermore, the forecasts assume that there will be only a limited reduction in the supply of iron ore from high-cost producers, particularly those in China, over the forecast period.

Graph 6.2
Terms of Trade

2013/14 average = 100, log scale



The increase in oil prices over recent months has also affected the terms of trade and its outlook. Currently, higher oil prices tend to reduce the terms of trade because Australia is a net oil importer. However, as exports of liquefied natural gas (LNG) ramp up, a rise in oil prices will, by itself, tend to increase Australia's terms of trade because the price of LNG is linked to the price of oil.

Domestic Activity

In preparing the domestic forecasts, a number of technical assumptions have been employed. The forecasts are conditioned on the assumption that the cash rate moves broadly in line with market pricing as at the time of writing. This assumption does not represent a commitment by the Reserve Bank Board to any particular path for policy. The exchange rate is assumed to remain at its current level over the forecast period (trade-weighted index (TWI) at 62.5 and A\$ at US\$0.75). The TWI is little changed from the assumption underlying the forecasts in the February *Statement*. The forecasts are based on the price of Brent crude oil being US\$47 per barrel over the forecast period, which is around 30 per cent higher than the assumption used in February and in line with futures pricing for the near term. Similar to the previous *Statement*, the working-age population is assumed to grow by 1.5 per cent over 2016 and by 1.6 per cent over 2017, drawing on forecasts from the Department of Immigration and Border Protection.

The starting point for the forecasts is that the Australian economy grew at an above-trend pace over the year to the December quarter 2015. This was stronger than expected at the time of the February *Statement* and, in part, reflected upward revisions to growth, particularly in the September quarter, which is now recorded as having been very strong. Growth was also slightly stronger than expected in the December quarter, though still moderate. Recent indicators are consistent with that moderate pace being maintained in the early part of 2016.

Activity continued to shift from the mining to non-mining sectors of the economy over 2015, supported by low interest rates and the ongoing effects of the exchange rate depreciation since early 2013. Non-mining activity grew at an above-average pace and growth was strongest in industries that provide services to households and businesses. Net service exports increased noticeably over 2015. Growth in household consumption increased in the latter part of the year and dwelling investment continued to grow strongly. Public demand contributed to growth over the year, while non-mining business investment remained subdued. Further sharp declines in mining investment were offset in part by increases in the volume of resource exports.

Overall, the forecast for GDP growth is little changed from that presented in the February *Statement*, although the year-ended growth rate in the near term is a little higher given the recent national accounts data. Growth is forecast to be 2½–3½ per cent over the year to December 2016, and to increase to 3–4 per cent over the year to June 2018, which is above estimates of potential growth in the Australian economy (Table 6.1).

Low interest rates and gains to employment are expected to support continued strength in household demand, despite only modest growth in household income in the near term. Forecasts

for growth in real household disposable income have been revised down as a result of a somewhat weaker outlook for nominal wage growth, which has been offset to some extent by downward revisions to the outlook for inflation. Nevertheless, consumption growth is projected to be a little above its longer-term average over the forecast period, consistent with the forecasts in the February *Statement*. Together, the forecasts for household consumption and income growth imply that the household saving ratio will continue the mild downward trend of the past few years.

The substantial amount of residential construction work in the pipeline is expected to translate into further strong growth in dwelling investment in the near term. However, the decline in higher-density dwelling approvals suggests that the pace of growth in dwelling investment will moderate over time.

The outlook for resource exports by the end of the forecast period is little changed. However, there have been some changes to the profile for iron ore and LNG exports, reflecting expected production delays for some of these projects. While exports of iron ore are expected to increase and production of LNG is set to ramp up substantially, the scope for additional growth in coal exports appears limited, given weak global demand for coal and the relatively high cost of some Australian production. The depreciation of the Australian dollar since

Table 6.1: Output Growth and Inflation Forecasts^(a)
Per cent

	Year-ended					
	Dec 2015	Jun 2016	Dec 2016	Jun 2017	Dec 2017	Jun 2018
GDP growth	3	2½–3½	2½–3½	2½–3½	2½–3½	3–4
CPI inflation	1.7	1	1–2	1½–2½	1½–2½	1½–2½
Underlying inflation	2	1½	1–2	1½–2½	1½–2½	1½–2½
	Year-average					
	2015	2015/16	2016	2016/17	2017	2017/18
GDP growth	2½	2½	2½–3½	2½–3½	2½–3½	2½–3½

(a) Technical assumptions include A\$ at US\$0.75, TWI at 62.5 and Brent crude oil price at US\$47 per barrel; shaded regions are historical data
Sources: ABS; RBA

early 2013 has been assisting domestic producers of tradable items. Net service exports, which are particularly sensitive to exchange rate movements, are forecast to continue growing.

Mining investment is expected to continue to fall over the forecast period, as large resource-related projects are completed and few new projects are expected to commence, although the extent of this contraction is expected to diminish over time. The recent increases in commodity prices are not expected to result in a significant increase in planned mining investment over the next few years, given the existing capacity and expectations that there will only be moderate growth in global demand for commodities.

Non-mining business investment is expected to remain subdued in the near term, consistent with the ABS capital expenditure survey of firms' investment intentions and the low level of non-residential building approvals. However, very low interest rates and the depreciation of the Australian dollar over the past few years have supported an improvement in business conditions (which is clearly evident in the various survey measures and consistent with the rise in employment) and there is evidence that investment has increased in areas of the economy that have been less affected by the decline in mining investment and commodity prices.

The labour market forecasts are little changed from the February *Statement*. The pace of employment growth has moderated in early 2016, much as expected, following particularly strong outcomes in late 2015. As GDP growth is expected to be a little lower over 2016 compared with 2015, employment growth is also likely to remain lower than last year. Leading indicators of labour demand, such as survey measures of hiring intentions, job advertisements and vacancies, have been mixed of late but, when taken together, they suggest that conditions in the labour market are continuing to improve, albeit at a slower pace than last year. Employment growth is expected to pick up to an above-average pace by the end of the forecast

period, driven by a pick-up in GDP growth. Employment appears to have been supported by much lower wage growth than would have been implied by historical relationships with the unemployment rate. In this respect, the forecast for low wage growth can be viewed as providing some further assistance to employment growth. The participation rate is expected to increase as more people enter the labour force in response to the improvement in labour market conditions. In combination, this implies that the unemployment rate is expected to remain around its current rate until mid 2017, before declining gradually, and that there is likely to be a degree of spare capacity in the labour market for some time.

Inflation

The March quarter underlying inflation outcome was around $\frac{1}{4}$ percentage point lower than expected at the time of the February *Statement*. The broad-based nature of the weakness in non-tradables inflation and the fact that wage outcomes were lower than expected over 2015 has resulted in a reassessment of the extent of domestic inflationary pressures, leading to downward revisions to the forecasts for inflation and wage growth. Underlying inflation is now expected to remain around 1–2 per cent over 2016 and to pick up to $1\frac{1}{2}$ – $2\frac{1}{2}$ per cent at the end of the forecast period.

Wage growth has been low over recent years and has been much lower than suggested by its historical relationship with measures of spare capacity, such as the unemployment rate. This may reflect the effect of the decline in inflation expectations and/or the terms of trade, as well as a more flexible labour market than in earlier decades. It is notable also that the phenomenon of surprisingly low wage growth for given labour market conditions has been apparent across a number of advanced economies. Furthermore, the recent inflation data indicate that the weakness in domestic cost pressures is not only evident in

low growth of nominal wages but is more broadly based. Indeed, unit labour costs, which incorporate a broader range of labour costs than the wage price index (WPI) and account for changes in the composition of the labour force, have been growing more slowly than the WPI. This reflects the usual cyclical effects of compositional change and weakness in non-wage payments such as allowances. It is also consistent with the movement of workers from highly paid mining-related jobs to other employment.

Given data observed over the past few months, the recovery in wage growth and labour costs underpinning the inflation forecasts has been revised lower. The expectation is that growth in the WPI will remain around current low levels for longer than previously forecast and pick up only very gradually over the forecast period. Unit labour cost growth, which is strongly correlated with non-tradables inflation, is expected to pick up a little faster than the WPI. This reflects an expectation that the dampening effects of compositional change will wane, including because the movement of labour from mining and mining-related firms is already well advanced. In addition, employers may increase bonuses and other labour income payments before increasing the pace of growth in wages. Based on historical experience, unit labour cost growth tends to pick up after the unemployment rate has started to decline. Even so, the increase in unit labour costs is expected to be slower than has occurred in previous comparable episodes, such as the mid 1990s or following the global financial crisis.

The prices of tradable items are expected to rise over the next few years, notwithstanding low global inflation, as the increases in import prices resulting from the exchange rate depreciation since early 2013 are gradually passed through to the prices paid by consumers. Based on historical relationships, the direct effects of the exchange rate depreciation since early 2013 are expected to add a bit less than ½ percentage point to underlying inflation over each year of the forecast period.

However, assessments of the size and timing of exchange rate pass-through are inevitably imprecise and other influences are also at work. Heightened competitive pressures in the retail market are expected to continue to limit the extent to which higher import prices become evident in final retail prices for some time.

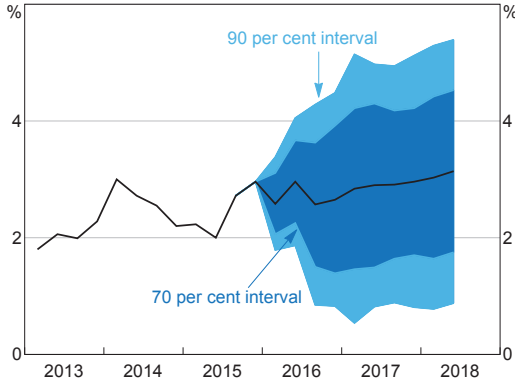
Headline inflation has been lower than underlying inflation over the past year or so, partly as a result of factors that are likely to have a temporary effect, such as lower fuel prices and changes to utility prices stemming from regulatory and policy decisions. As the direct effects of these factors pass, headline inflation is expected to converge towards underlying inflation over the forecast period. The declines in fuel and utility prices over the past year or so have reduced input costs for a range of businesses, and these lower costs are expected to be passed on gradually to the prices that these businesses charge for their goods and services. The magnitude and timing of these indirect effects on inflation are difficult to gauge. A further increase in the tobacco excise later in 2016 is expected to contribute around ¼ percentage point to year-ended headline inflation, but to have little effect on underlying inflation.

Uncertainties

The forecasts are based on a range of assumptions about the evolution of some variables, such as the exchange rate, and judgements about how developments in one part of the economy will affect others. One way of demonstrating the uncertainty surrounding the central forecasts is to present confidence intervals based on historical forecast errors (Graph 6.3, Graph 6.4 and Graph 6.5).

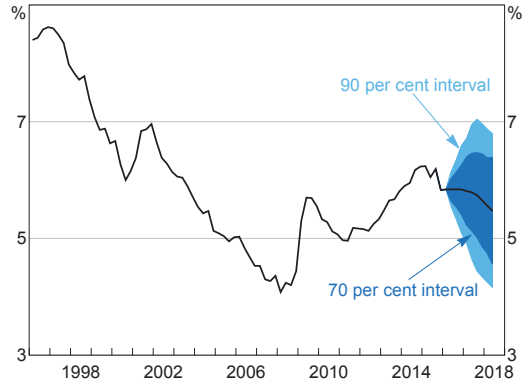
It is also worth considering the consequences that different assumptions and judgements might have on the forecasts and the possibility of events occurring that are not part of the central forecast. One of the key sources of uncertainty continues to be the outlook for growth in China and the implications of high levels of debt there. In turn,

Graph 6.3
GDP Growth Forecast*
 Year-ended



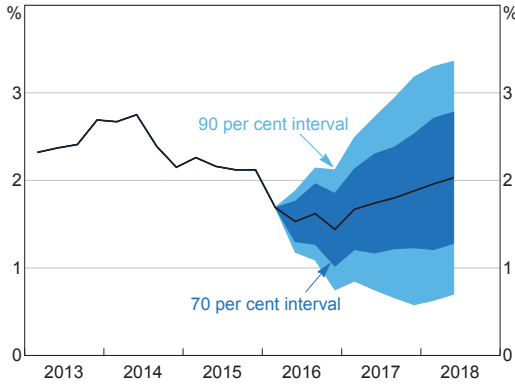
* Confidence intervals reflect RBA forecast errors since 1993
 Sources: ABS; RBA

Graph 6.5
Unemployment Rate Forecast*
 Quarterly



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

Graph 6.4
Trimmed Mean Inflation Forecast*
 Year-ended



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

that has implications for commodity demand and ultimately for the forecasts for the terms of trade. The outlook for commodities also depends on the responsiveness of supply to price movements seen to date. Another uncertainty arising from the international environment is the extent to which labour market tightness in a number of advanced economies will affect wage growth and, ultimately, inflation.

Developments in both commodity prices and the expected path of monetary policy in major advanced economies (based on changes in their

outlook for inflation) will have potential implications for the Australian dollar. Based on a number of estimates produced by Reserve Bank staff and academic researchers, a useful rule of thumb is that, all else constant, an exchange rate appreciation of 10 per cent reduces the level of GDP by between ½ and 1½ per cent, generally within two years. However, an exchange rate appreciation caused by a sustained increase in commodity prices may even be associated with a modest increase in economic activity, particularly if higher prices allow some of the smaller Australian resource firms to remain in the market. Domestically, there is also considerable uncertainty about the extent to which wage growth and domestic inflationary pressures more broadly will pick up over the next few years. This raises uncertainty about the outlook for inflation and activity.

The Chinese economy

China's growth outlook continues to represent a considerable source of uncertainty for the Australian economy. The recent improvement in Chinese property market conditions appears to reflect policy efforts to support the sector over the past year. Stronger property prices and activity could assist the process of reducing China's large

stock of unsold residential property and could, for a time, underpin more resilient demand in a range of upstream industries, including the steel industry. However, the sustainability of the present improvement in property markets is uncertain and it appears that substantial excess capacity persists in the manufacturing sector, including the steel industry. More generally, the outcomes of the March political meetings suggest that the Chinese Government is, for the time being, prioritising short-term growth over its longer-term objectives of achieving deleveraging and growth that is less reliant on investment and heavy industry. On the one hand, an increase in debt-funded growth, including a strong pick-up in public spending on infrastructure, may lead to stronger growth in overall activity than otherwise in 2016. On the other hand, this growth would be likely to be achieved by adding to the already substantial stock of debt, potentially delaying efforts to reduce excess capacity in the manufacturing and resources sectors. Declining industrial profits and deteriorating economic conditions in the north-east of the country have the potential to cause financial distress. This poses risks for financial institutions with sizeable on- and off-balance sheet exposures to affected industries and regions, and to China's growth trajectory more broadly.

Commodity prices and trade

The outlook for commodity prices is sensitive to demand, particularly from the Chinese industrial and construction sectors. The current forecasts assume that the level of Chinese steel demand continues to decline over the forecast period, albeit at a slower rate in the near term than assumed in the previous *Statement*. The medium-term trajectory is underpinned by lower steel demand from construction and manufacturing and, more generally, a gradual shift away from investment-led growth, which is relatively steel intensive, toward a more consumption-led growth path. However, recent signs of a pick-up in construction activity

and increased policy support for growth may mitigate or even temporarily reverse the expected moderation in steel demand. This, in turn, would keep iron ore prices higher for longer than expected and so represents an upside risk to the forecasts for Australia's terms of trade.

Global inflation

Labour markets in a number of advanced economies have been improving over recent years. Unemployment rates have been declining, and are close to levels consistent with most estimates of full employment in the United States, the United Kingdom and Japan. Broader measures of labour underutilisation have also declined towards long-run average levels.

Despite this, nominal wage growth has remained subdued and this has contributed to low inflation outcomes. In the United States, low productivity growth has meant that growth in unit labour costs, which is what matters for inflationary pressures, has been above its long-run average. Nonetheless, there is uncertainty about the extent to which the increasing tightness of labour markets will feed through to growth in wages and unit labour costs, and subsequently to inflation. In some advanced economies, some measures of inflation expectations have declined further, and this has increased the uncertainty about the outlook for inflation.

Concerns about the prospects for a sustained pick-up in inflation have contributed to expectations of easier monetary policy in the major advanced economies. Should inflationary pressures build more rapidly in some advanced economies than currently expected, this could imply a significant change in the expected path of monetary policy, which would have implications for exchange rates. This could be expected to lead to a depreciation of the Australian dollar.

Domestic cost pressures

There is also considerable uncertainty about the extent to which wage growth, and domestic inflationary pressures more broadly, will pick up over the next few years in Australia. The forecasts for wage growth and inflation have been revised lower to take into account recent data, which suggest that domestic cost pressures have been lower than previously anticipated. However, despite above-trend growth in economic activity and improvements in labour market conditions over the past year or so, it is possible that domestic cost pressures will be weaker than reflected in the forecasts, and so inflation may not pick up as expected. It is possible, for example, that inflation expectations will be persistently lower for longer than currently anticipated, given the forecast of a period of low inflation, which could weigh on wage outcomes.

It is also possible, however, that wage growth will pick up more quickly than forecast. In particular, some of the explanations for why wage growth has been much lower than suggested by its historical relationship with the unemployment rate, such as increased flexibility in the labour market, would be consistent with wage growth picking up quite quickly as spare capacity in the labour market diminishes. For instance, employees may demand larger-than-forecast wage increases to compensate for the prolonged period of unusually low wage growth. Also, the compositional change associated

with labour moving from mining and mining-related industries to the non-mining economy is likely to have lowered growth in average earnings per hour. As this process of structural change slows, it is possible that the downward pressure on earnings growth in the non-mining economy will diminish more quickly than expected. Moreover, the unemployment rate may decline more rapidly than anticipated, which would allow wage and earnings growth to pick up by more than currently forecast.

Consumption and income growth

The outlook for wage growth has implications for household consumption growth. The forecasts assume that households will respond to near-term weakness in income growth by reducing their rate of saving to sustain their consumption growth. This is likely to be a reasonable assumption if households expect the weakness in income growth to be temporary, especially given relatively high rates of saving and gains to household wealth over recent years. If, however, a longer period of low wage growth leads households to lower their expectations for income growth over the longer term, household consumption may not increase to the extent forecast. It is also worth considering alternative explanations for lower wage growth. For example, if wage growth is currently lower than expected because of a rise in the effective supply of labour, the effect on household income is likely to be mitigated by higher-than-expected employment growth. ❖