

Statement on Monetary Policy

FEBRUARY 2016

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Reserve Bank

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Overview

Globally, monetary policy remains very accommodative and is supporting economic activity, although inflation remains below most central banks' targets. The US Federal Reserve raised the federal funds rate target in December for the first time in nearly 10 years, although the stance of policy in the United States remains very accommodative and the pace of future rate increases is expected to be very gradual. In December, the European Central Bank (ECB) announced a package of measures designed to ease monetary policy further. More recently, the Bank of Japan also eased policy further by reducing the rate it pays on marginal reserves to -10 basis points while announcing that it would continue to expand its balance sheet over 2016 as planned.

The diverging monetary policy trends among the major central banks, concerns about the challenges facing the Chinese authorities and large declines in oil prices have contributed to an increase in volatility in global financial markets of late. Sovereign bond yields have declined noticeably since late last year, as have equity prices. Also, spreads on corporate bonds in the United States, euro area and Australia increased owing to sharp rises in spreads for energy and resource-related companies. Large flows associated with capital outflows from China, together with asset sales by sovereign wealth funds of oil-producing nations, also appear to have contributed to market volatility. Despite this volatility, high-quality borrowers still have access to finance at very favourable rates.

Over 2015, the US and euro area economies grew at or above trend rates, while growth in Asia moderated. Weak conditions in the industrial and construction sectors in China have affected other economies in the Asian region as well as commodity exporters, including Australia, and have been associated more generally with declining growth in global industrial production and trade volumes. At the same time, service sector activity in China and elsewhere has been relatively resilient to date. The sharp fall in oil prices over recent months, largely in response to strong supply, should continue to support growth in Australia's major trading partners, which are generally net oil importers. Other commodity prices, including prices for coal and iron ore, have also declined since the previous *Statement on Monetary Policy*, although to a lesser extent.

In China, economic growth moderated over 2015, largely reflecting a decline in investment growth associated with excess capacity in heavy industry and the large stock of unsold housing. A range of longer-term structural factors, such as declining growth in both productivity and the urban labour force, have also played a role. In contrast, conditions in the services sector have been relatively strong and growth in consumption picked up in the year. Deflationary pressures persist in the industrial sector, which is making it more difficult to service the high level of corporate debt. While housing prices increased slightly over the year, this was driven by price growth in the larger cities and sales volumes overall have declined over recent months.

In Japan, GDP looks to have grown at a moderate rate over 2015. Labour market conditions are tight and nominal wage growth remains higher than it was a couple of years ago. Inflation remains well below the Bank of Japan's target, although core inflation increased a little over 2015. In the rest of east Asia, GDP growth was below average in 2015. Industrial activity and exports have been subdued, in part reflecting the region's significant exposure to the Chinese economy. In contrast, growth in India has picked up since early 2013, reflecting stronger private consumption and public investment.

In the United States, labour market conditions continued to improve even though GDP growth declined towards the end of last year. Private consumption has been the key driver of expenditure growth, supported by further growth in employment and lower oil prices. Investment growth has also added to expenditure and business conditions have been generally positive, although the industries most exposed to oil prices and the appreciation of the exchange rate have experienced more subdued conditions.

Euro area GDP has grown at an above-trend rate over recent quarters, driven by household and government consumption, and the unemployment rate has continued to decline gradually. However, there is still considerable spare capacity in the labour market and inflation remains below the ECB's target.

Growth in Australia's major trading partners is forecast to remain around its current rate over the next two years. The US and euro area economies are expected to grow at an above-trend pace, while growth in the Asian region is expected to ease a little further, driven by a further moderation in Chinese growth.

The outlook for China continues to be a key source of uncertainty for the forecasts. While growth in China has been expected to slow gradually for some time, the recent bout of global financial market volatility has been characterised, in part,

by concerns about the evolving balance of risks in China and the ability of the Chinese authorities to manage a challenging economic transition. The authorities still have scope to respond if the economy turns out to be much weaker than expected, but any sharp slowing in economic activity or increase in financial stresses in China could spill over to other economies in the region and adversely affect commodity prices, including those that are important for Australia.

Australia's terms of trade have declined substantially from their peak of around four years ago and, over the course of the past year or so, the Australian dollar has been adjusting to lower commodity prices. As a result of the decline in bulk commodity prices from late last year, the forecast for Australia's terms of trade has been revised down a little further, although the exchange rate has been little changed since then. The path for commodity prices is uncertain and will depend, in part, on the outlook for the Chinese industrial sector. It will also depend on the responsiveness of the global supply of commodities to the decline in prices seen to date. While the possibility of significant cuts to global production represents an upside risk to commodity prices, the possibility of unexpected cuts to Australian production represents a downside risk to the forecast for export growth.

The Australian economy has continued to grow at a moderate pace and activity is rebalancing away from the resources sector towards non-resource sectors. Even though the available data suggest that GDP continued to grow at a below-trend pace over 2015, employment growth was above average and the unemployment rate fell by around ½ percentage point. In part, employment growth appears to have reflected the relatively strong growth of output in the more labour-intensive sectors of the economy, such as household services. Growth of goods-related production has picked up more recently, but remains modest overall.

Household consumption growth increased in the September quarter, and indicators suggest

that a similar pace of growth has been sustained more recently. The Bank's retail liaison suggests that trading conditions improved in the Christmas and post-Christmas sales period. This is consistent with strong employment growth and households' perceptions of their personal finances being above average.

While dwelling investment grew strongly over the year to the September quarter, conditions in the housing market more generally have eased since then. Building approvals have declined but remain at a high level, while some other indicators of dwelling investment – such as new construction loan approvals – have picked up a bit in recent months. At the same time, housing prices nationally have declined a little and auction clearance rates have fallen to be around their long-run averages. Aggregate housing credit growth has stabilised at around 7½ per cent. However, investor housing credit growth has declined, consistent with the larger increase in mortgage rates for investors and the strengthening of banks' non-price lending terms in response to supervisory actions.

As expected, there was a further sharp decline in mining investment in the September quarter, while non-mining investment was little changed over the year. Indicators of non-residential building activity, including the stock of work yet to be done and private non-residential building approvals, are at relatively low levels. In contrast, survey measures of non-mining business conditions and capacity utilisation remain above their long-run average levels and business credit growth has picked up. The depreciation of the exchange rate has been supporting activity in those parts of the economy exposed to trade. This has been most apparent in the significant contribution to growth made by net service exports. Resource exports have also continued to support growth. Iron ore exports, particularly to China, remained at a high level in 2015 while the ramp-up in liquefied natural gas exports is expected to gain pace as more projects begin production.

There has been no material change to the forecast for GDP growth since the previous *Statement*. Economic growth is expected to increase gradually over the next two years to be a bit above the decade average. A further increase in growth in household incomes and demand is anticipated, supported by rising employment, low interest rates and lower petrol prices. Growth in dwelling investment is expected to moderate gradually from its relatively rapid pace of the past year. Non-mining business investment is forecast to pick up in the second half of the forecast period, reflecting the improvement in domestic demand. Further large falls in mining investment are likely, although the largest subtraction from GDP growth is expected to occur in the current financial year. Resource exports are projected to remain a key driver of GDP growth over the period ahead. More generally, net exports will continue to be supported by the lower exchange rate, particularly in the services sector.

New data over the past three months suggest that there has been a notable improvement in labour market conditions that was not anticipated at the time of the previous *Statement*. The unemployment rate declined to 5.8 per cent in December and the participation rate has continued on an upward trend. Employment grew at an above-average rate over 2015, supported by relatively strong growth in service sector output. Also, the low growth of wages is likely to have encouraged businesses to employ more people than otherwise. Measures of job vacancies and advertisements point to further growth in employment over the coming months. In response to this flow of data, the forecast for the unemployment rate has been revised lower.

The fact that the improvement in labour market conditions has occurred against the backdrop of below-average GDP growth raises some uncertainty about the economic outlook. It is possible that the strength in the labour market data contains information about the economy not apparent in the national accounts data, or that the strong growth in employment of late will be followed by a period

of weaker employment growth. Alternatively, the strength in labour market conditions relative to output growth may reflect a rebalancing of the pattern of growth towards labour intensive sectors and away from capital intensive sectors.

Inflationary pressures remain well contained overall. Underlying inflation was around ½ per cent in the December quarter, to be about 2 per cent in year-ended terms, which was much as expected. Headline inflation was 1.7 per cent over the year, partly owing to lower fuel prices as well as the decline in utilities prices in the September quarter. Domestic inflationary pressures have eased. This is consistent with heightened competitive pressures, declines in the cost of business inputs such as fuel and some regulated utilities, and the fact that spare capacity in the labour market has been contributing to low growth in labour costs. These factors are not expected to dissipate rapidly over the forecast period. Meanwhile, the prices of tradable items (excluding volatile items and tobacco) have increased to be slightly higher over the year, suggesting that some of the price increases for imported goods and services arising from the depreciation of the exchange rate have been passed on to consumers. A gradual pass-through of the exchange rate depreciation is expected to continue to place upward pressure on the prices of tradable items over the next few years. While the inflation forecasts take into account the decline in oil prices, they have not changed materially. Underlying inflation is expected to remain low over the forecast period.

The Reserve Bank Board reduced the cash rate by 50 basis points in the first half of 2015. The available data suggest that the accommodative stance of monetary policy and the depreciation of the exchange rate since 2013 have supported growth and assisted the rebalancing of economic activity towards non-resource sectors of the economy. This process has been particularly apparent in the labour market. Employment growth over 2015 was stronger than was expected a year ago and the unemployment rate fell by more than had been expected. Despite this, output growth has remained below average.

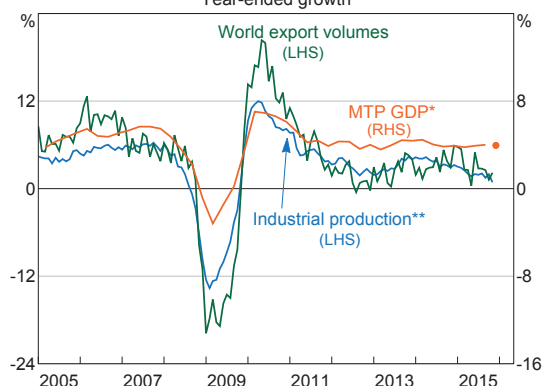
At the February meeting, the Board judged that there were reasonable prospects for continued growth in the economy, with inflation close to target. The Board therefore decided that the current setting of policy remained appropriate.

The Board will continue to assess the outlook over the period ahead. New information should allow the Board to judge whether the recent improvement in labour market conditions is continuing and whether the recent financial turbulence portends weaker global and local demand. Continued low inflation may provide scope for easier policy, should that be appropriate to lend support to demand. ✎

1. International Economic Developments

Overall growth in Australia's major trading partners (MTPs) was little changed in 2015 at a bit below its decade average (Graph 1.1). The US and euro area economies grew at or above trend rates over 2015, supported by very expansionary monetary policies. Growth has slowed in China and this has had flow-on effects to other economies in the region. Lower growth in Asia has been associated with a decline in growth in global industrial production and trade volumes, which has been offset by relatively strong growth in services globally. There has been a further broad-based decline in commodity prices in recent months, reflecting strong supply of some commodities as well as weaker demand growth of late. Lower oil prices should support growth in Australia's MTPs, which are generally net oil importers.

Graph 1.1
Global Economic Activity
Year-ended growth

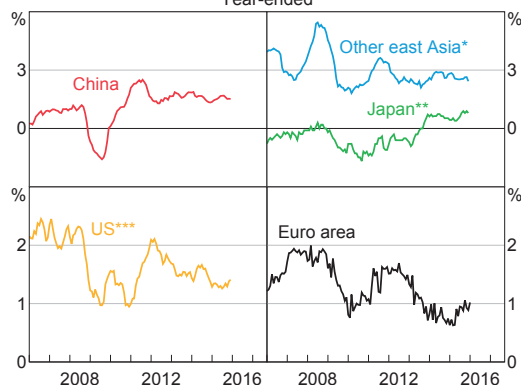


* Weighted using Australia's export shares; dot indicates RBA estimate
 ** Weighted by share of world industrial production at market exchange rates

Sources: CEIC Data; CPB Netherlands Bureau for Economic Policy Analysis; RBA; Thomson Reuters

Inflation remains well below most central banks' targets, in part reflecting spare capacity in many labour and product markets as well as the substantial declines in oil prices since mid 2014 (Graph 1.2). Based on the most recent forecasts from the respective central banks, inflation is not expected to reach targets until at least 2017 in the United States, the euro area and Japan. Monetary policy is accommodative in all the large economies.

Graph 1.2
Core Inflation – Selected Economies
Year-ended



* Selected economies in east Asia excluding China and Japan; weighted by GDP at PPP exchange rates; excluding the estimated effect of the Malaysian goods and services tax implemented in April 2015

** Excluding the effects of the consumption tax increase in April 2014

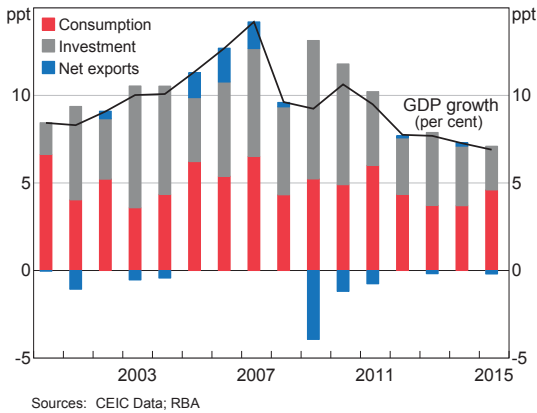
*** Price index for personal consumption expenditures

Sources: CEIC Data; IMF; RBA; Thomson Reuters

Asia-Pacific

In China, economic growth moderated in 2015 (Graph 1.3). In part, this reflected excess capacity in heavy industry and the large stock of unsold housing, although a range of longer-term structural factors – such as falling productivity growth and a

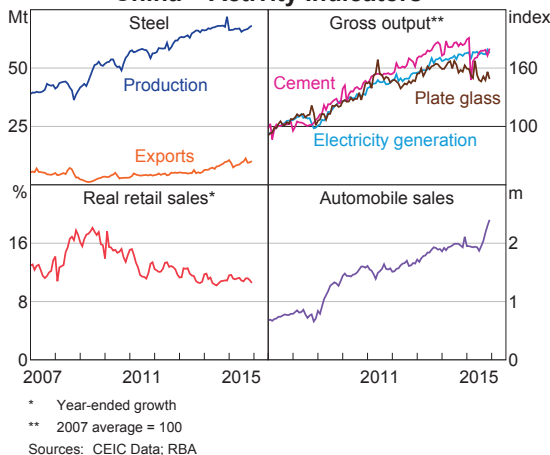
Graph 1.3
China – Contributions to GDP Growth



decline in the growth of the urban workforce – may also have contributed. Weakness in the real estate and industrial sectors led to a decline in aggregate investment growth over the year. Infrastructure investment growth also slowed but remained relatively rapid, supported by numerous project approvals and strong growth in government expenditure. Growth in consumption picked up over the year and automobile sales have risen particularly strongly in recent quarters, supported by a reduction in the sales tax on motor vehicles (Graph 1.4).

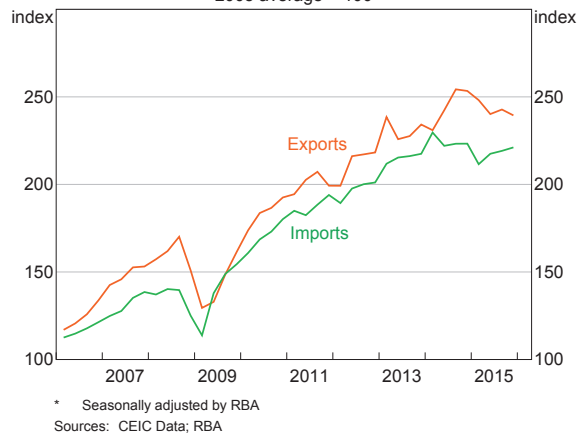
There continues to be a significant divergence between conditions in the services sector, which were relatively strong in 2015, and those in the

Graph 1.4
China – Activity Indicators



industrial sector, which remained weak. Evidence of weakness in the industrial sector can be seen across a range of indicators such as industrial value added, profits, indicators of gross output and PMIs. Production of crude steel declined modestly over 2015, as falls in domestic steel consumption were partly offset by growth in steel exports. Profits of Chinese steel producers fell over the second half of 2015. More generally, Chinese trade was weak in 2015, with export and import volumes below the levels seen in the second half of 2014 (Graph 1.5). The weakness was broad based by trading partner, although the volume of iron ore imports from Australia increased in 2015.

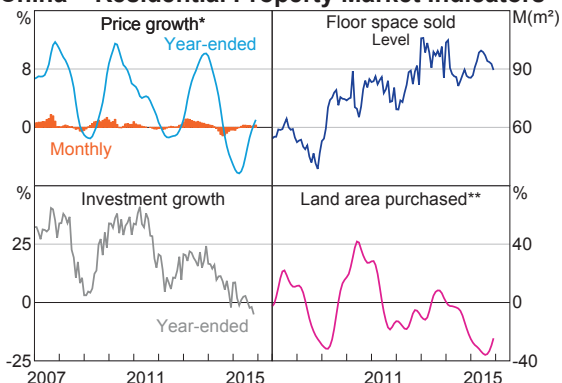
Graph 1.5
China – Merchandise Trade Volumes*
2005 average = 100



The Chinese residential property market remains subdued overall, notwithstanding some improvement in conditions in some of the larger cities. After picking up in the first half of 2015, the volume of floor space sold has declined (Graph 1.6). Average housing prices nationwide were up slightly over the year, driven by growth in the larger cities; prices in smaller cities are yet to pick up. Also, inventory-to-sales ratios have eased in many cities, but the stock of unsold housing is high and real estate investment has declined. Authorities have emphasised the need to run down the stock of unsold housing, and some local governments have introduced subsidies to home buyers who meet certain conditions.

Graph 1.6

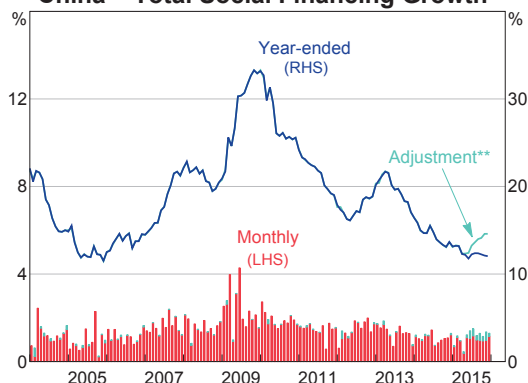
China – Residential Property Market Indicators



* 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

Graph 1.7

China – Total Social Financing Growth*



* Seasonally adjusted by RBA
 ** Upper bound estimate adjusting for impact of local government debt swap program
 Sources: CEIC Data; People's Bank of China; RBA; WIND Information

Consumer price inflation was below the authorities' objective of 3 per cent in 2015, and disinflationary pressures have persisted. Producer prices continue to decline in response to excess capacity in a number of industries in the economy (see 'Box A: Recent Trends in Inflation in China').

In response to the easing in growth in economic activity and low inflation, the People's Bank of China lowered benchmark interest rates five times and cut the reserve requirement ratio four times in 2015. Growth in total social financing (TSF) increased over the year when adjusted for the impact of the local government debt restructuring program (Graph 1.7). This program resulted in CNY3.2 trillion in local government debt being issued in 2015 to replace other sources of finance that are included in TSF. More generally, bank credit and corporate bond issuance were strong in 2015, offsetting weakness in other off-bank balance sheet components. Funding by government-directed 'policy banks' was especially strong, contributing almost 20 per cent of total growth of TSF in 2015. Equity issuance grew rapidly despite the stock market volatility and the temporary ban on initial public offerings, but remains a small share of TSF.

In early November, China's Communist Party issued a proposal for the 13th Five Year Plan, which articulates goals for the economy, social development and

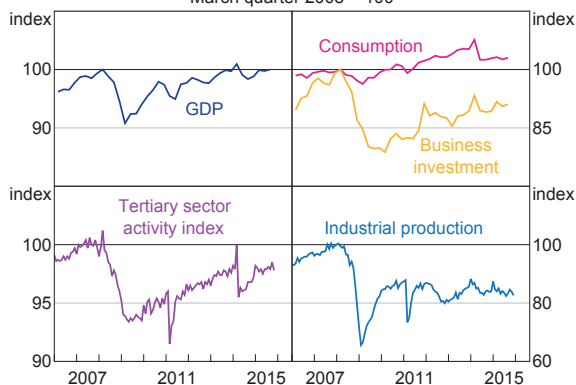
environmental protection. The plan and associated speeches by Chinese officials suggest that the goal for minimum average annual economic growth is 6.5 per cent over 2016–20. Reforms outlined in the plan include: ongoing financial sector reform; improvements to social welfare; environmental reform; industrial and agricultural reform; and continued efforts against corruption.

In Japan, GDP looks to have grown at a moderate rate over 2015, following the slight contraction in 2014 that was largely due to the increase in the consumption tax (Graph 1.8). Growth in the second half of 2015 appeared to have picked up, supported

Graph 1.8

Japan – Economic Activity

March quarter 2008 = 100



Sources: RBA; Thomson Reuters

by expansionary monetary policy, the depreciation of the exchange rate over recent years, lower oil prices and the gradual improvement in labour market conditions.

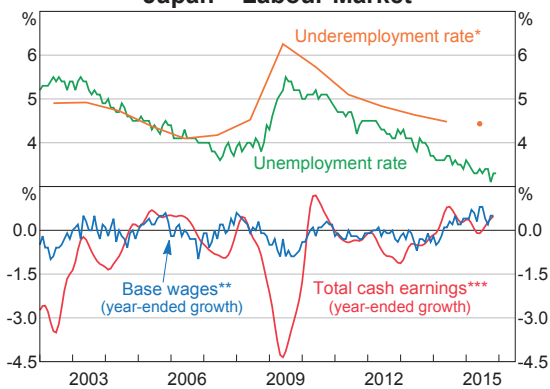
Modest growth in consumption, business investment and public demand has contributed to GDP growth in recent quarters. Residential investment has rebounded following substantial weakness in 2014. Net exports made a positive contribution to growth in 2015, reflecting a strong increase in service exports in response to the earlier yen depreciation. Merchandise exports have been weak; while exports to Europe have increased moderately, exports to the Asian region have been flat in recent months. Overall, conditions in the services sector have been substantially stronger than in the manufacturing and other industrial sectors, as noted by the divergence in surveyed business conditions, stagnant industrial production and the pick-up in the tertiary sector activity index.

Conditions in the Japanese labour market remain tight. The unemployment rate has declined to a two-decade low and the number of job offers relative to applicants has increased steadily (Graph 1.9). The underemployment rate – based on part-time employees who would prefer to work more

hours – has also declined from its peak in 2009, notwithstanding a shift towards more part-time work. This is consistent with an increase in the participation rates of older cohorts and females who may be less likely to want extra hours of work. Employment has increased gradually over the past three years. The overall participation rate has also increased over this period, despite the decline in the working-age population since 2012. Consistent with the tightening in labour market conditions, wage growth has picked up a little over the past couple of years. Inflationary pressures, however, remain subdued. Headline inflation is low, in part reflecting the decline in energy prices. Core inflation increased a little over 2015, but remains well below the Bank of Japan's 2 per cent target for headline inflation. In response to the weaker inflation outlook, the Bank of Japan announced further easing of monetary policy in January (see 'International and Foreign Exchange Markets' chapter).

The rest of east Asia experienced below-average growth in 2015 (Graph 1.10). While GDP growth in the middle-income economies was little changed, growth in the high-income economies slowed, in part reflecting the fact that these economies are more exposed to trade, especially with China. Exports have been particularly subdued in the high-income economies in recent quarters,

Graph 1.9
Japan – Labour Market



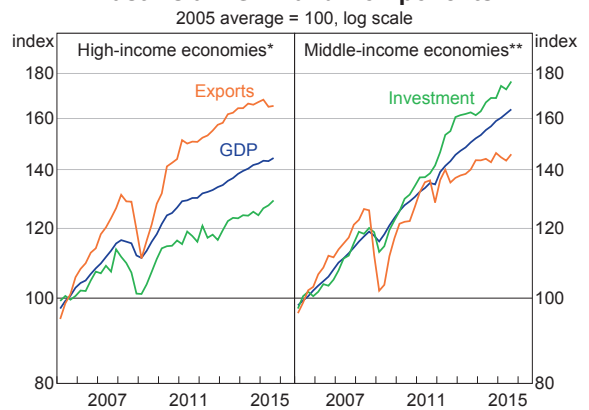
* Part-time workers who would prefer to work more hours as per cent of the labour force; dot represents 2015 RBA estimate using data for the first three quarters of the year

** Full-time workers only

*** 13-period Henderson trend

Sources: CEIC Data; OECD; RBA; Statistics Bureau; Thomson Reuters

Graph 1.10
East Asia – GDP and Components



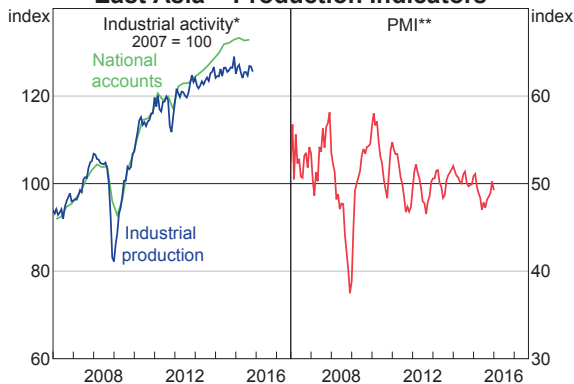
* Hong Kong, Singapore, South Korea and Taiwan

** Indonesia, Malaysia, Philippines and Thailand

Sources: CEIC Data; RBA

although the recent depreciation of a number of east Asian currencies is likely to provide some support to export growth in the period ahead. Business investment has also been generally weaker in the high-income economies, while industrial production has been a key source of weakness for the region overall; industrial output fell, or was flat, in most economies in the region over 2015 and the manufacturing PMIs have been below average (Graph 1.11). Several governments in the high-income economies provided fiscal stimulus in the latter part of 2015. While much of the direct benefit has flowed through to domestic demand already – most notably the sizeable boost to September quarter growth in Korea – fiscal stimulus should continue to provide some support in 2016. Monetary policy was also eased over 2015 in Korea, Singapore, Taiwan and Thailand. In contrast, the Hong Kong Monetary Authority raised its policy rate in response to the tightening of monetary policy in the United States.

Graph 1.11
East Asia – Production Indicators



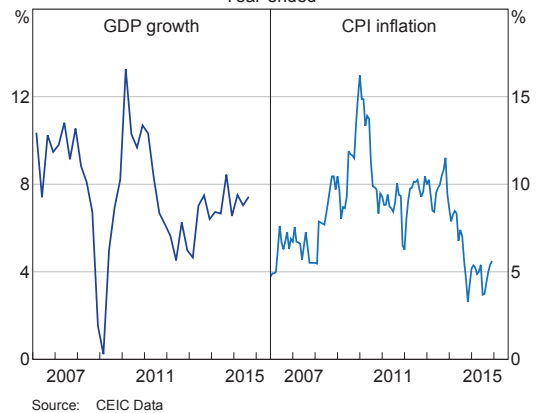
* Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand
 ** Hong Kong, Singapore, South Korea and Taiwan
 Sources: CEIC Data; Markit Economics; RBA; United Nations

Consistent with the moderation in growth in economic activity, employment growth in most high-income east Asian economies has eased over 2015, although unemployment rates have remained mostly low and stable. For the region overall, headline and core inflation remain subdued in most economies. The recent depreciation of several east

Asian currencies may provide a boost to inflation in the period ahead. In Malaysia, the introduction of a goods and services tax in April 2015 has also put upward pressure on inflation.

In India, economic growth has picked up over the past couple of years (Graph 1.12). This has reflected stronger private consumption and an increase in gross fixed capital formation, particularly by the public sector. The services sector continues to grow strongly and, recently, there has been a pick-up in growth in the manufacturing sector. Inflation was little changed in 2015 and remains below the Reserve Bank of India's (RBI) interim target of 6 per cent by January 2016. The RBI eased the policy rate by 125 basis points over 2015, citing weakness in global and domestic demand and capacity underutilisation.

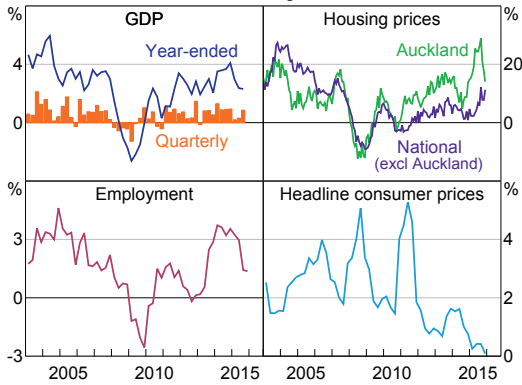
Graph 1.12
India – GDP Growth and Inflation
Year-ended



Source: CEIC Data

In New Zealand, GDP growth in the September quarter picked up from the modest outcomes earlier in 2015 (Graph 1.13). Investment and a recovery in net exports made the most significant contributions to growth in the quarter. However, dairy prices are around their lowest level in a decade and the prices of New Zealand's commodity exports more broadly have declined to below their decade average. With inflation remaining low and a moderation in the pace of employment growth, the Reserve Bank of New Zealand cut its policy rate by a cumulative 100 basis

Graph 1.13
New Zealand – Economic Indicators
 Year-ended growth



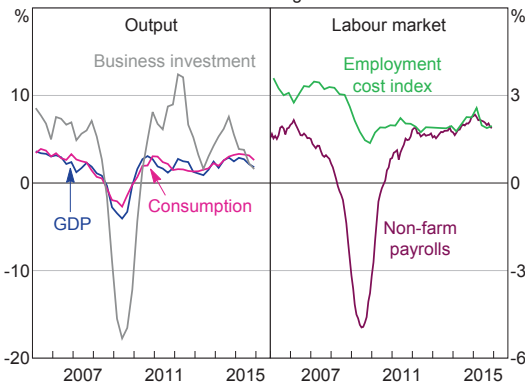
Sources: RBA; RBNZ; REINZ; Thomson Reuters

points over 2015. Housing price growth in Auckland declined in late 2015, possibly reflecting recent changes to taxation and the tightening of lending regulations to investors in Auckland. Excluding Auckland, housing price growth has increased.

United States

The US economy expanded over 2015 at a rate that was close to trend, notwithstanding lower growth in the December quarter (Graph 1.14). Private consumption remained the key driver of growth in expenditure over the year, supported by further improvement in the labour market,

Graph 1.14
United States – GDP and Labour Market
 Year-ended growth



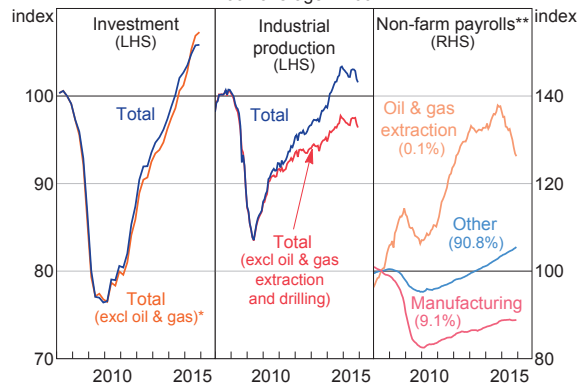
Source: Thomson Reuters

the boost to household incomes from low fuel prices, accommodative monetary policy and rising household wealth. A range of indicators suggest that private consumption will continue to be a key driver of expenditure growth in the near term, with consumer confidence remaining around its long-run average, strong spending on larger-ticket items and motor vehicle sales around their pre-crisis peak.

Private investment growth has declined over the past year, owing in part to the decline in investment in the oil & gas sector (Graph 1.15). Industrial output has been little changed over the past year, in part reflecting subdued conditions in the manufacturing sector as a result of the US dollar appreciation and weaker external demand from emerging economies. However, business conditions in the services sector, which accounts for the majority of economic output, have been generally positive, with survey measures around or above their average levels.

Meanwhile, residential investment and construction activity have grown strongly over the past year, owing in part to the further improvement in housing market conditions. Nominal housing prices are close to their pre-crisis levels (Graph 1.16). Mortgage applications for purchases are around a five-year

Graph 1.15
United States – Oil and Gas Sector
 Relative to Total
 2007 average = 100



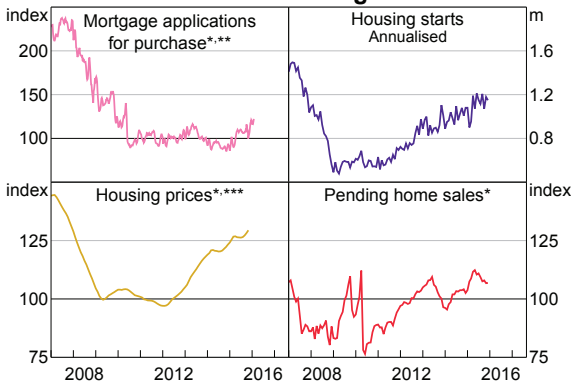
* Excludes structures investment in mining exploration, shafts and wells

** Numbers in parentheses show 2007–2015 average shares of total

Sources: RBA; Thomson Reuters

Graph 1.16

United States – Housing Indicators



* 2012 average = 100
 ** Four-week moving average
 *** S&P/Case-Shiller 20-city composite index
 Source: Thomson Reuters

high. Pending home sales and housing starts are also around their post-crisis highs, although both slowed somewhat over the second half of 2015. US labour market conditions improved further through 2015. The unemployment rate and other measures of labour market underutilisation declined and most are close to their pre-crisis long-run averages. There has not been a significant pick-up in wage growth to date; growth in the employment cost index remained around its post-crisis average over 2015. One possible explanation is that relatively weak productivity growth – which has kept unit labour cost growth in recent years well above its historical average, despite low growth of nominal wages – may be affecting the ability of firms to raise wages. Moreover, while the unemployment rate has declined, it has yet to fall below most estimates of its long-term level.

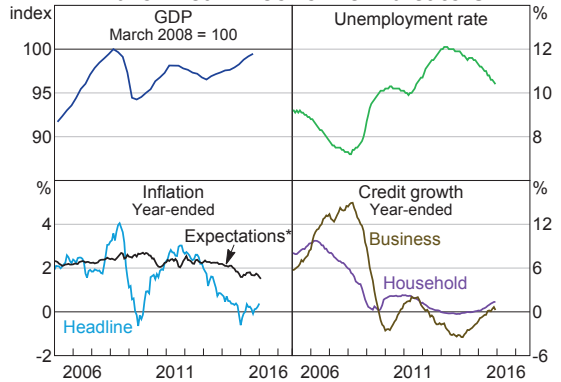
Headline inflation has been low since late 2014, reflecting the effects of lower oil prices. Core inflation has also been low, in part reflecting the impact of the stronger US dollar and the second-round effects of low oil prices, although it ticked up over 2015 to around 1½ per cent. The FOMC raised the federal funds rate target at its December meeting, in response to labour market strength and with the expectation that inflation would increase in the period ahead.

Europe

Economic activity in the euro area continued its gradual recovery in 2015. GDP has been increasing since early 2013 and has been growing at an above-trend rate over the past few quarters; however, the level of GDP is only now returning to its pre-crisis peak (Graph 1.17). Household and government consumption continued to be the main contributors to growth of expenditure over much of 2015, while investment has been little changed. Net exports have made almost no contribution to growth for the past two years despite the depreciation of the euro.

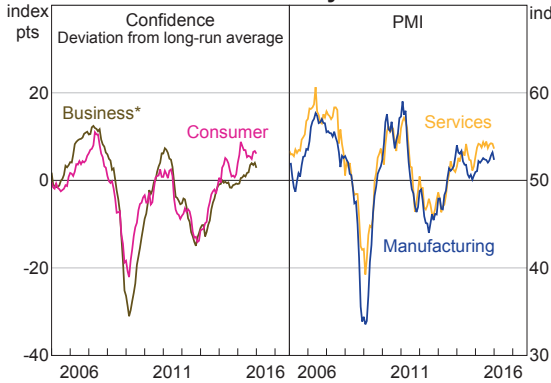
Graph 1.17

Euro Area – Economic Indicators

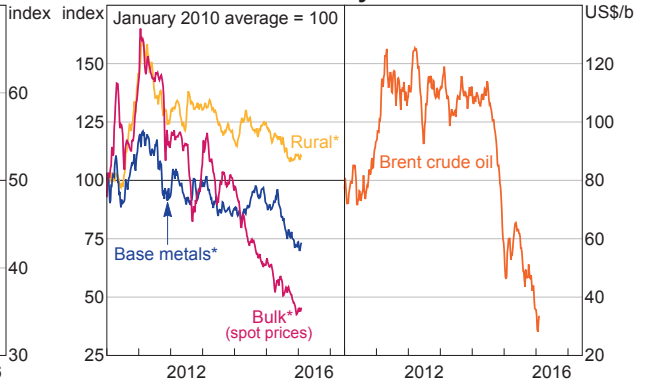


* 5-year, 5-year forward expectations; calculated from 5- and 10- year inflation swaps; latest month is an average in the month-to-date
 Sources: Bloomberg; RBA; Thomson Reuters

Timely indicators for the December quarter suggest that economic activity continued to grow at a similar rate to recent quarters. Consumption is likely to remain the key driver of growth of expenditure, while investment growth is likely to be subdued. Consumer sentiment remains moderately above its long-run average level and retail sales volumes are growing relatively strongly (Graph 1.18). The PMI surveys of manufacturing and services activity have remained around their recent highs, and business sentiment continues to be above average. Household and business credit growth rates have mostly picked up in recent months but remain relatively low. Construction output volumes and industrial production remain little changed over the past year.

Graph 1.18**Euro Area – Survey Indicators**

* Includes industrial, services, retail and construction sector confidence
Sources: Markit Economics; RBA; Thomson Reuters

Graph 1.19**Commodity Prices**

* RBA Index of Commodity Prices sub-indices, SDR
Sources: Bloomberg; RBA

The euro area unemployment rate has continued its gradual decline and employment growth has increased steadily. Nonetheless, there remains considerable spare capacity in the labour market; the unemployment rate remains high, having declined by just 1.7 percentage points since its mid-2013 peak, and the employment-to-population ratio has only recovered a little from its 2013 low.

Headline inflation remains low, owing in part to the decline in oil prices. Core inflation has increased slightly, but remains well below the European Central Bank's target for headline inflation of below but close to 2 per cent. Financial market measures of long-term inflation expectations have been largely unchanged over 2015 at historically low levels.

Commodity Prices

The RBA Index of Commodity Prices (ICP) has fallen further in recent months, led by declines in the prices of oil and the bulk commodities, particularly iron ore (Graph 1.19; Table 1.1). Since the peak in 2011, commodity prices have fallen by around 55 per cent. A combination of a substantial increase in supply as resource projects have started production and weakness in demand more recently, especially from the Asian region, has driven the fall. Nonetheless, commodity prices remain around 60 per cent above the levels seen in the early 2000s. The decline in bulk

commodity prices contributed to a fall in the terms of trade of 10 per cent over the year to September. In the near term, lower oil prices imply an increase in the terms of trade because Australia is a net importer of oil. However, this effect will be offset as exports of liquefied natural gas (LNG) ramp up in the years ahead, since the price of LNG is linked to the price of oil.¹

The spot price of iron ore fell in 2015, in part reflecting lower demand for Chinese steel products, although it has been little changed more recently (Graph 1.20). At the same time, expansions in the supply of iron ore in Australia and elsewhere have continued (albeit at a slower pace than in the recent past). Reductions in production costs over recent years have also contributed to the decline in iron ore prices and are expected to continue, although the scope for further large cost reductions is likely to be more limited than in the past. Some smaller, higher-cost producers remain under pressure and some have cut production, including in China, although most Australian iron ore production appears to be profitable even at current prices.

Prices of thermal and coking coal have continued to decline in recent months, reflecting concerns about demand from China, particularly in the

¹ For further details on the effect of oil prices on the terms of trade, see RBA (2015), 'Box A: The Effect of Oil Price Movements on the Terms of Trade', *Statement on Monetary Policy*, May, pp 14–15.

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

	Since previous Statement	Over the past year
Bulk commodities	-14	-30
– Iron ore	-20	-36
– Coking coal	-5	-29
– Thermal coal	-7	-15
Rural	0	-11
Base metals	-6	-22
Gold	-3	-7
Brent oil ^(b)	-22	-40
RBA ICP	-8	-24
– using spot prices for bulk commodities	-9	-25

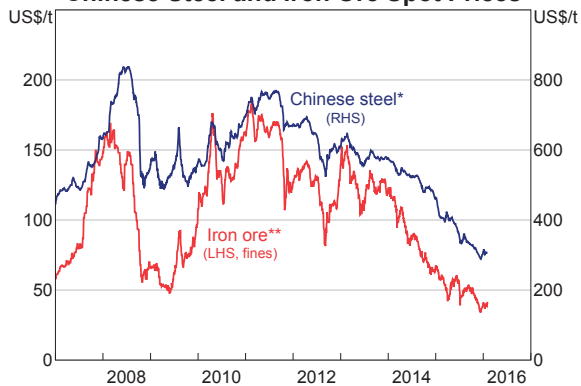
(a) Prices from the RBA Index of Commodity Prices (ICP); bulk commodities prices are spot prices

(b) In US dollars

Sources: Bloomberg; IHS; RBA

Graph 1.20

Chinese Steel and Iron Ore Spot Prices



* Average of hot rolled steel sheet and steel rebar prices

** Free on board basis

Sources: Bloomberg; RBA

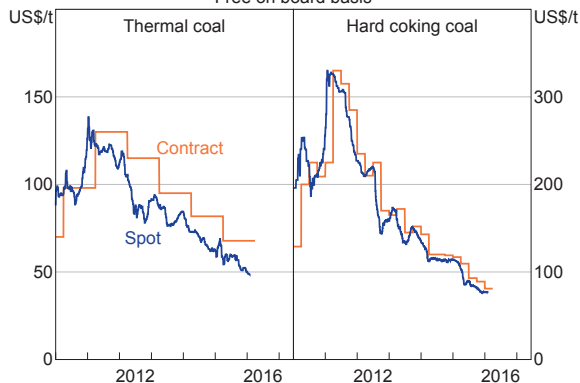
case of coking coal (Graph 1.21). At current prices, a substantial share of global coal production, including in Australia, is estimated to be unprofitable. Concerns about global demand, particularly more subdued growth of global industrial production, led to declines in the prices of base metals through 2015, although they have been little changed more recently. The declines in prices have prompted reductions in the production of some of these commodities globally.

The Brent crude oil price fell to its lowest level in over a decade in recent months (see Graph 1.19).

Graph 1.21

Coal Prices

Free on board basis



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

This largely reflects the combination of rising production (and inventories) in the United States, increased supply from Iraq and expectations of increased supply from Iran, although concerns about demand growth have also been a factor more recently. The decline in oil prices continues to be reflected in weaker LNG prices in the Asian region. Moreover, increased supply from Australian LNG exporters is likely to place further downward pressure on the regional LNG spot price over the next couple of years. ✖

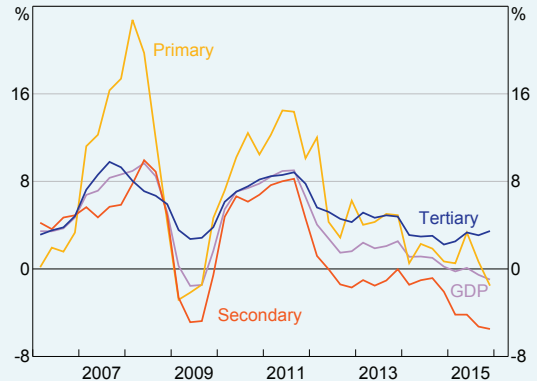
Box A

Recent Trends in Inflation in China

The Chinese economy has experienced low inflation for several years, and output prices have even fallen in some sectors (Graph A1). Since 2012, consumer price inflation has been below the authorities' annual objectives while producer prices have been declining at an increasing rate (Graph A2). This box examines the drivers of – and risks associated with – a protracted period of low inflation in China and even deflation in parts of the economy.

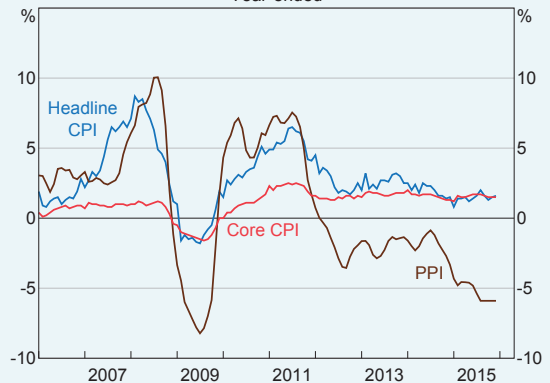
An important driver of the weak inflationary pressures in China over recent years has been excess capacity in the industrial sector, largely owing to major investments that were undertaken as part of the Chinese authorities' stimulus measures in response to the global financial crisis. Excess capacity has placed persistent downward pressure on output prices in many industries including steel, glass and cement production and other heavy industries. More recently, industrial activity has weakened noticeably, further adding to the downward pressure on output prices.¹ As a result, measures of prices that include the output of the industrial sector – such as the secondary sector deflator and the producer price index (PPI) – have declined over recent years (Graph A1 and Graph A2).² In contrast, services price inflation, as reflected in the tertiary sector deflator, has not eased to the same extent, consistent with the relatively strong growth of activity in the services sector.

Graph A1
China – Implied GDP Deflators by Sector*
Year-ended inflation



* RBA estimates
Sources: CEIC Data; RBA

Graph A2
China – Inflation
Year-ended



Sources: CEIC Data; RBA

1 See RBA (2015), 'Box A: China's Industrial Sector', *Statement on Monetary Policy*, November, pp 15–17.

2 The broadest measure of price inflation is the GDP implicit price deflator, which measures the level of prices of new, domestically produced final goods and services, and is calculated as the ratio of nominal to real GDP. The PPI measures prices received by firms for the goods they produce, and excludes prices of services. The Consumer Price Index (CPI) measures the prices paid by households for consumer goods and services.

Falls in commodity prices over the past few years have also contributed to the downward pressure on Chinese inflation. Producer prices have been falling at a faster rate since mid 2014, particularly for industries that are most exposed to commodity prices, such as mining and other producers of raw materials. Rough estimates suggest that around

half of the additional PPI deflation since mid 2014 is the result of lower commodity prices. Also, other business costs have been increasing less rapidly, in particular the cost of both labour and imported inputs.

Wage growth is an important determinant of domestic inflation, as it affects business costs and household demand for goods and services. Slowing labour productivity has been reflected in lower wage growth over recent years; one measure of growth in urban nominal wages was around 15 per cent in 2011, and slowed to around 8 per cent by late 2014. More timely data on migrant wages suggest that this slowing continued in 2015. To the extent that wage growth has been moderating more quickly than labour productivity, it is likely to have contributed to the easing in inflationary pressures.

Another factor adding to downward pressure on inflation has been the appreciation of the renminbi, which has reduced prices for imports. Since mid 2011, and despite the recent depreciation, the renminbi has appreciated by around 30 per cent on a nominal trade-weighted basis. The appreciation was particularly large over the second half of 2014. This has contributed to downward pressure on the domestic prices of imported consumer goods and services, and of imported producer goods such as fuels and other resource commodities.

Downward pressure on the prices of inputs that are used to produce consumer goods can be expected to pass through to consumer prices over time, placing downward pressure on CPI inflation.³ Inflationary pressures facing households in China have often been driven by developments affecting the prices of food, which represents almost one-third of households' expenditure. Since 2011, food inflation has eased and has accounted

for the majority of the slowing in CPI inflation. This has reflected a decline in food prices globally and structural changes to food production in China, which have reduced cyclicality in prices.⁴ More recently, lower oil prices have reduced the energy costs for households and lowered headline CPI inflation. Core CPI inflation, which excludes food and energy prices, has been steady at around 1½ per cent.

The disinflationary pressures facing China in recent years pose challenges for the economy. One consequence of lower inflation is that households and businesses have faced an increase in real (or inflation-adjusted) interest rates, and hence tighter monetary conditions. Over 2014 and early 2015, real interest rates increased by around 50 to 80 basis points, depending on the inflation measure used in the calculation (Graph A3).⁵ From late 2014, the People's Bank of China (PBC) cut benchmark lending interest rates by 165 basis points, and estimates of real interest rates have fallen accordingly, although the extent of this fall again depends on which inflation measure is used. The PBC has noted that higher real financing costs were one of the main reasons for lowering benchmark interest rates during the current period of easing.⁶

Another risk related to China's low inflation environment arises in the presence of high levels of debt. Low inflation tends to be associated with lower nominal income growth, which reduces the capacity of firms and individuals to service a given nominal level of debt. This has the potential to cause financial distress, particularly where leverage

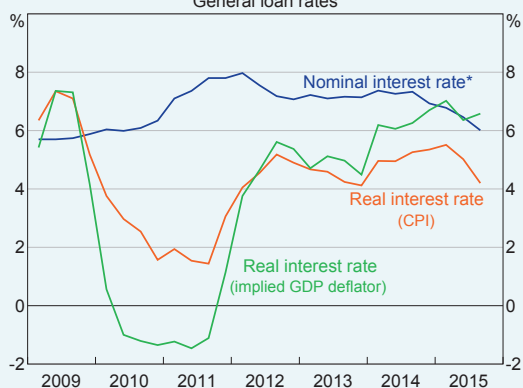
3 The People's Bank of China estimates that a 1 per cent drop in the PPI eventually results in a 0.3 per cent decline in the CPI; see PBC (2015), *China's 2015 Macroeconomic Forecast (Annual Update)*, June.

4 For example, hog rearing has become more sophisticated over time, which has reduced the previously pronounced cycles in pork prices.

5 Nominal interest rates are deflated by the actual CPI and GDP deflator in the absence of reliable measures of inflation expectations. Using CPI inflation expectations derived from Consensus forecasts yields similar results.

6 See, for example, the PBC's October 2015 statement accompanying the interest rate reduction; PBC (2015), 'PBC spokesperson responds to journalists' questions regarding reductions in interest rates and reserve requirement ratios, and removing the ceiling on deposit rates', Media Release, 23 October.

Graph A3
China – Interest Rates
General loan rates



* Nominal average weighted general loan rate
Sources: CEIC Data; RBA

is already high. China's total debt has increased substantially since 2008 and was around 250 per cent of GDP at the end of 2014. The debt of private non-financial companies is high compared to other economies in the Asian region and those at a similar stage of development.⁷ This poses risks for financial institutions with sizeable on- and off-balance sheet exposures to these companies, and the Chinese economy more broadly.

In the near term, inflationary pressures are likely to remain weak. The PBC expects CPI inflation to remain around 1.5 per cent in 2016, and PPI deflation to ease to 1.6 per cent.⁸ Chinese authorities have acknowledged the challenges posed by falling prices in parts of the economy, and have stated that macroeconomic policy will attempt to stimulate demand while avoiding the build-up of debt and higher real interest rates that can trigger a deflationary spiral.⁹ Reforms have been undertaken to reduce these risks. For example, measures to restructure local government debt have reduced the interest burden and the risk of default for local government entities. In the longer term, ongoing structural reform targeting a more sustainable pattern of growth that is less focused on investment growth and the development of heavy industry is likely to reduce excess capacity in the industrial sector. ❖

8 See PBC (2015), *China's 2016 Macroeconomic Forecast*, December.

9 See PBC (2015), 'Box 4: Discussion on Real Interest Rates and Debt', *Report on China's Monetary Policy Implementation in the Third Quarter 2015*, November, pp 44–46.

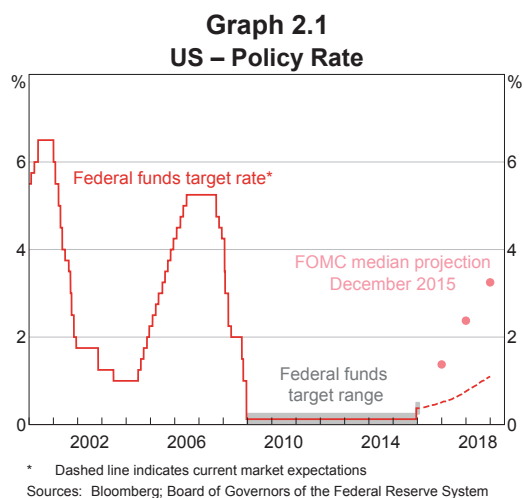
7 See RBA (2015), *Financial Stability Review*, October.

2. International and Foreign Exchange Markets

Concerns about the outlook for the Chinese economy and declines in oil prices have been major drivers of financial markets over the past six months and have recently contributed to large declines in equity and corporate bond prices, a fall in sovereign bond yields and depreciations in the currencies of a range of commodity exporters. Much of the recent concern about China has stemmed from uncertainty about the Chinese authorities' intentions for the future value of the renminbi (RMB). This has seen capital flow out of China and an associated decline in its foreign exchange reserves which, together with asset sales by the sovereign wealth funds of oil-producing nations, has probably contributed to the market volatility. These concerns have overshadowed the first tightening in US monetary policy in almost 10 years and a further easing of monetary policy in the euro area and Japan, although the divergence in monetary policy between these three regions has continued to influence exchange rates.

Central Bank Policy

The US Federal Open Market Committee (FOMC) voted in December to raise its target range for the federal funds rate for the first time in almost 10 years, lifting it by 25 basis points to 0.25–0.50 per cent (Graph 2.1). The Committee judged that there had been a considerable improvement in labour market conditions and it was sufficiently confident that inflation will rise to its objective over the medium term. The Federal Reserve's new operational tools proved effective in raising market rates, with the federal funds rate trading very close

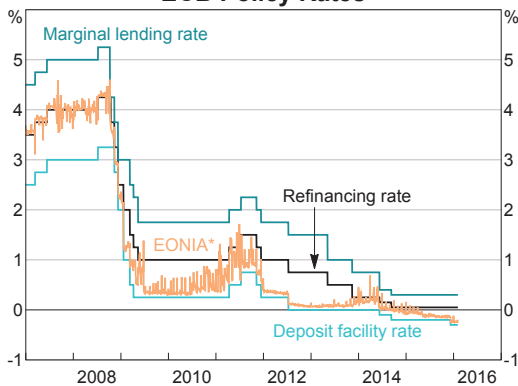


to the midpoint of the target range since the decision (other than briefly at year-end).

The FOMC emphasised that the stance of monetary policy remains very accommodative and that it expects only gradual increases in the federal funds rate over coming years. Consistent with this, the FOMC's median projection at its December meeting was for the federal funds rate to rise by around 100 basis points in each of the next three years, which would be materially slower than in prior periods of tightening. Nonetheless, this is a significantly faster pace of adjustment than was implied by market pricing at that time, and this gap widened further in January as falls in global equity and oil prices led investors to lower their expectations for future policy rate increases. Markets are no longer pricing in an increase in the federal funds rate in 2016.

The European Central Bank (ECB) eased policy further in December by lowering the interest rate it pays on central bank reserves from –20 to –30 basis points (Graph 2.2). The ECB also extended the earliest date at which it will cease purchasing assets (from September 2016 to March 2017) and committed to reinvest principal from maturing security holdings and to meet any liquidity demanded in its open market operations until at least early 2018. This package of measures was less than markets had expected, and with President Draghi subsequently stating that the ECB will ‘review and possibly reconsider’ its monetary policy stance at its next meeting in March, markets are pricing in an additional 10 basis point reduction in the deposit rate at that time. Under current policy settings, the ECB’s balance sheet is scheduled to expand by over €700 billion this year, having increased by €620 billion over 2015, to reach 33 per cent of GDP and exceed its previous peak (Graph 2.3).

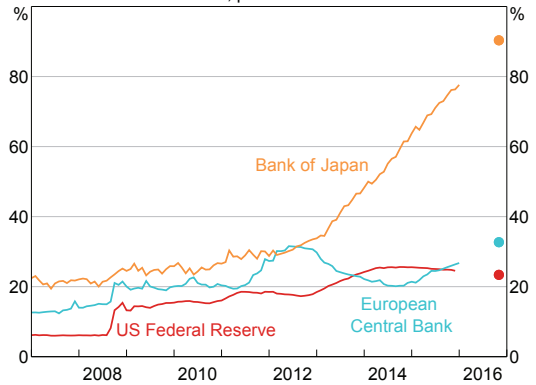
**Graph 2.2
ECB Policy Rates**



* Euro overnight index average
Sources: Bloomberg; Thomson Reuters

The Bank of Japan (BoJ) increased its monetary stimulus in late January by introducing a negative interest rate on deposits held at the BoJ (–10 basis points, compared with +10 basis points since late 2008). Its decision reflected concerns that lower oil prices and uncertainty about the global economy could delay the timing of when inflation will rise to its 2 per cent target. The negative interest rate

**Graph 2.3
Central Bank Balance Sheets***
Assets, per cent of GDP



* Dots are RBA projections for year end based on central bank communications
Sources: Central banks; IMF; RBA; Thomson Reuters

will only apply to a small portion of central bank deposits as a consequence of a tiered interest rate system that leaves most deposits remunerated at +10 basis points, but it sets the marginal cost of new deposits and therefore affects market pricing. The negative interest rate will supplement the BoJ’s ongoing expansion of its balance sheet, which increased by ¥80 trillion (14 per cent of GDP) over 2015 and is expected to expand by a similar amount this year. The BoJ forecasts that the combination of these measures will lift inflation to its target by late 2017, about six months later than it projected in October.

Interbank interest rates in China have been stable since mid 2015, after declining by 225 basis points over the first half of the year as the People’s Bank of China (PBC) reduced system-wide reserve requirement ratios (RRRs) and benchmark term interest rates. The stability in interbank rates came despite large sales of foreign exchange reserves (see section on ‘Foreign Exchange’) and only modest changes to the amount of liquidity supplied by the PBC between late October 2015 (when it last lowered RRRs) and mid January 2016. The PBC recently injected large amounts of short-term liquidity to counter a seasonal increase in demand associated with Chinese New Year, but is wary of

injecting too much liquidity to avoid exacerbating depreciation pressure on the RMB. The PBC is transitioning towards a monetary policy corridor framework that is more comparable to that of other central banks. As part of this process, it lowered the interest rate applicable on its standing lending facility (the likely upper bound on interbank rates) from November.

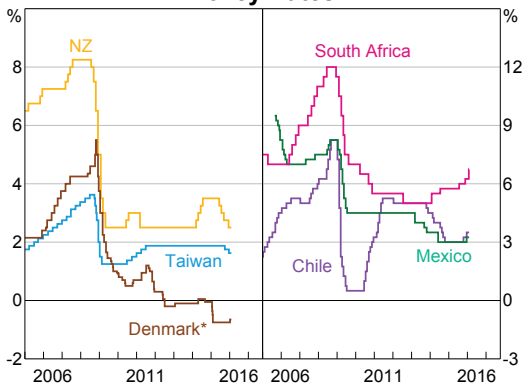
A number of emerging market central banks have recently raised interest rates to stem inflationary pressure emanating primarily from a depreciation of their currencies against the US dollar (including Mexico, Chile and South Africa) (Graph 2.4; Table 2.1). In Chile and South Africa, these tightenings have occurred despite subdued economic activity due in large part to the impact of lower commodity prices. A number of economies whose exchange rates are pegged to the US dollar also raised interest rates immediately after the Federal Reserve's December decision (including Hong Kong), while the central bank of Denmark reversed some of its early 2015 monetary easing in response to abating capital inflows from the euro area (although its policy rate remains well below zero).

Table 2.1: Monetary Policy

	Policy rate Per cent		Most recent change
Euro area ^(a)	-0.30	↓	Dec 15
Japan ^(a)	-0.10	↓	Jan 16
United States ^(b)	0.375	↑	Dec 15
Australia	2.00	↓	May 15
Brazil	14.25	↑	Jul 15
Canada	0.50	↓	Jul 15
Chile	3.50	↑	Dec 15
China ^(c)	na		na
India	6.75	↓	Sep 15
Indonesia	7.25	↓	Jan 16
Israel	0.10	↓	Feb 15
Malaysia	3.25	↑	Jul 14
Mexico	3.25	↑	Dec 15
New Zealand	2.50	↓	Dec 15
Norway	0.75	↓	Sep 15
Russia	11.00	↓	Jul 15
South Africa	6.75	↑	Jan 16
South Korea	1.50	↓	Jun 15
Sweden	-0.35	↓	Jul 15
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
 (c) China does not have an official policy rate
 Sources: Central banks; RBA; Thomson Reuters

**Graph 2.4
Policy Rates**



* Certificate of deposit rate
 Sources: Central banks; Thomson Reuters

In contrast, the Reserve Bank of New Zealand lowered its policy rate by a further 25 basis points in December, having reduced it by a total of 75 basis points earlier in the year, in response to the

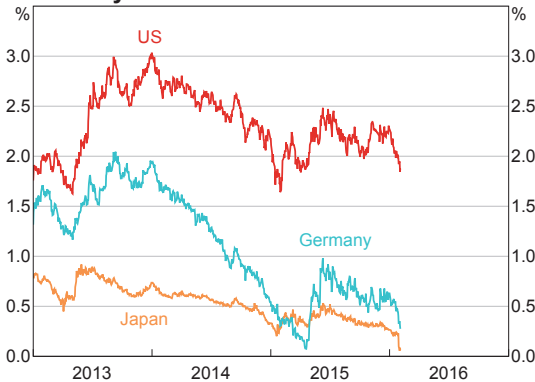
disinflationary impact of a lower terms of trade and the strength of labour supply. Bank Indonesia also reduced its policy rate by 25 basis points in January as it judged that the risks of further exchange rate depreciation had diminished following the smooth implementation of the Federal Reserve's first interest rate increase, while the central bank of Taiwan lowered its policy rate in response to weak external demand.

Sovereign Debt Markets

Yields on 10-year US Treasury bonds increased slightly over 2015, while trading in an 80 basis point range, but have fallen by 40 basis points

since the start of 2016 as concerns about the outlook for the Chinese economy intensified and oil prices fell (Graph 2.5). In contrast, yields on 2-year US Treasuries are still higher than at the start of 2015, as falls early this year only partially offset a notable rise late last year when expectations increased that the Federal Reserve would begin to tighten policy in December. Yields on 10-year German Bunds have closely tracked those on 10-year US Treasuries, but yields on 2-year Bunds have fallen to a record low, reflecting the outlook for monetary policy in the euro area. Yields on 10-year Japanese government bonds fell sharply after the BoJ introduced a negative interest rate, having drifted down since mid 2016, and are now at an historical low of around 5 basis points.

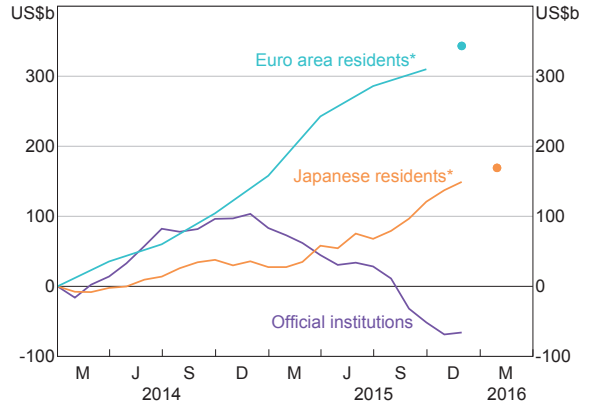
Graph 2.5
10-year Government Bond Yields



Source: Bloomberg

Foreign official institutions sold or let mature a significant amount of US bonds over the first 11 months of 2015 (Graph 2.6). The decline in foreign official holdings of US bonds is consistent with a significant decline in the value of reserves held by China and several oil exporting nations (see section on 'Foreign Exchange'), and is likely to understate the extent of selling due to the use of custodial managers. Sales of US bonds by reserve managers have been offset by sizeable purchases by European and Japanese residents, reflecting a reallocation by these investors from their respective domestic bond markets in response to ECB and BoJ purchases of domestic sovereign bonds.

Graph 2.6
Foreign Purchases of US Bonds
Cumulative since end 2013



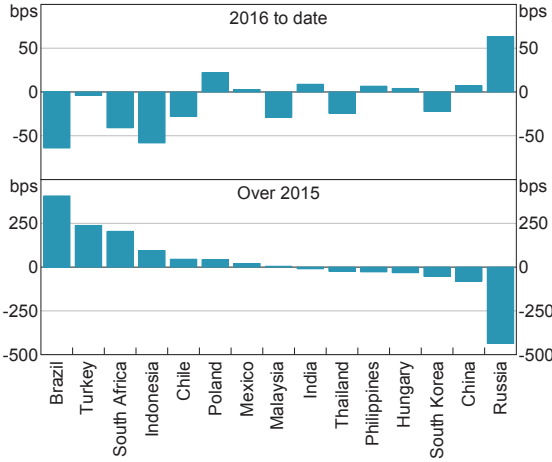
* Preliminary after September 2015 (euro area) and November 2015 (Japan); dots show level if share of US bond purchases remained constant

Sources: Bloomberg; ECB; Ministry of Finance Japan; RBA; Thomson Reuters

The spread between yields on Portuguese government bonds and German Bunds has risen over recent months, to be around 75 basis points wider than over most of 2015. The recent widening is the result of concerns about a partial retreat from fiscal restraint by the country's new government. Spreads on bonds issued by most other governments of the euro area periphery have been reasonably stable since concerns about Greece abated in July.

Yields on 10-year local currency bonds issued by emerging market sovereigns were generally little changed over 2015, broadly consistent with movements in US Treasuries (Graph 2.7). The Federal Reserve's decision to tighten policy had little impact on yields, although emerging market bond funds continue to see redemptions. However, yields on Brazilian, Turkish and South African bonds all rose significantly over 2015 as their exchange rates depreciated, inflation persisted at an elevated level and the Brazilian and South African central banks tightened policy; fiscal and political concerns have been an important additional factor in these countries. Yields on Russian sovereign bonds resumed rising in 2016 as oil prices fell and the rouble depreciated, but remain well below their

Graph 2.7
Change in 10-year Government Bond Yields
 Local currency-denominated



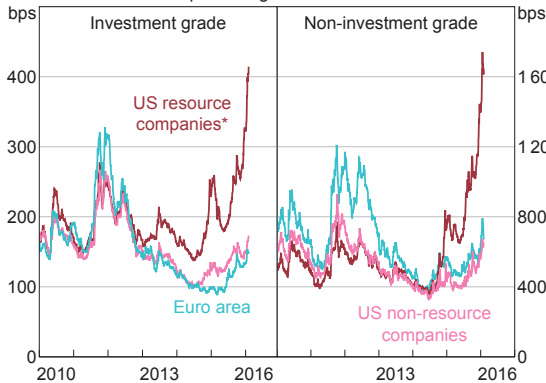
Sources: Bloomberg; Thomson Reuters

level at the start of 2015 when investors were more concerned about the associated sovereign risk.

Credit Markets

Spreads on US corporate bonds have risen notably over recent months, to be well above their trough in mid 2014 (Graph 2.8). This widening continues to be concentrated among bonds issued by resource companies, particularly those with a below-investment grade credit rating, which are now trading at wider spreads than at any time in at least

Graph 2.8
Corporate Bond Spreads
 To equivalent government bonds



* Energy, metals, mining and steel sectors

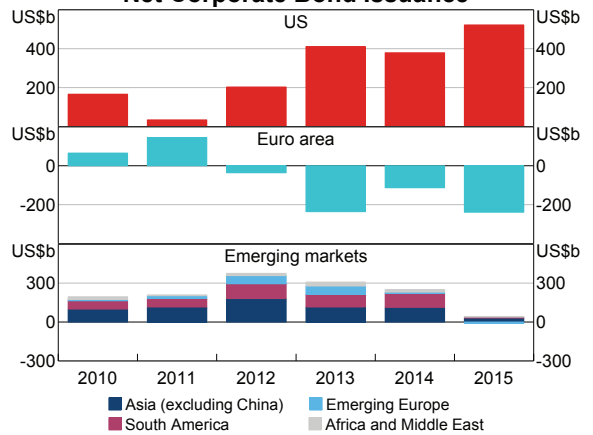
Sources: Bank of America Merrill Lynch; RBA; Thomson Reuters

15 years. Abstracting from such companies, there has been a more modest widening of spreads on non-investment grade bonds – taking them back to their historical average – and only a small rise in spreads on investment grade bonds. Spreads on euro area corporate bonds have also widened since mid 2015 but remain around their historical averages.

Redemptions from US bond funds increased over the last few months of 2015 as credit spreads widened, creating cash flow challenges for some funds. This was most prominent for Third Avenue's Focused Credit Fund, which suspended all redemptions from mid December so that it could liquidate its portfolio (which comprised mostly distressed and highly illiquid debt investments) in a more orderly manner.

Net issuance of US corporate bonds in 2015 was significantly higher than in prior years, with many corporations seeking to fund merger and acquisition activity (which was strong over that period) and/or lock in their funding costs ahead of an expected tightening in US monetary policy (Graph 2.9). Indicative of the former, brewer AB InBev raised US\$46 billion in January 2016, the second largest issue ever. Demand for the bonds was very strong, with a record US\$110 billion of

Graph 2.9
Net Corporate Bond Issuance



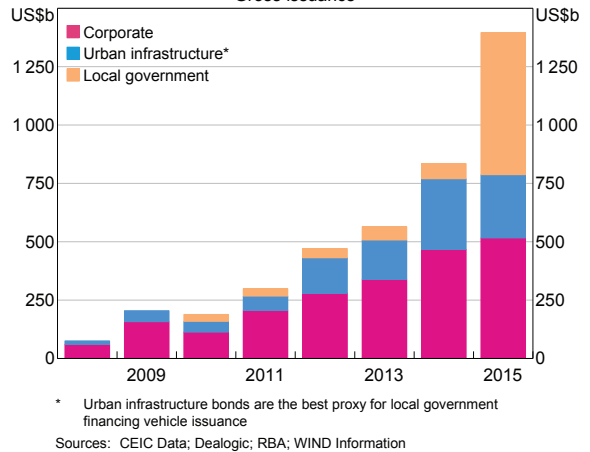
Sources: Dealogic; RBA

subscriptions. In contrast, net issuance by euro area corporations in 2015 was at its lowest since 2007.

Issuance by corporations in emerging markets was low throughout the second half of last year, causing net bond issuance to be minimal in 2015. The decline since mid last year was broad based across regions and industries, but was more pronounced for US dollar-denominated bonds than for local currency-denominated ones. Spreads on US dollar-denominated emerging market corporate bonds generally widened by less than spreads on US non-investment grade bonds, notwithstanding the Federal Reserve having raised rates; the stronger performance of emerging market bonds compared with those issued by US corporations suggests that the decline in issuance by emerging market corporations was more likely to have been due to reduced funding needs than relatively weak demand for their bonds. However, the increase in spreads was more pronounced for Brazilian corporate bonds as lower commodity prices reduced the profitability of the largest US dollar borrowers and political concerns increased.

Chinese gross corporate bond issuance increased a little in 2015, and local currency-denominated credit spreads continued to narrow despite concerns about deteriorating corporate profitability. The increase in issuance was stronger when abstracting from urban infrastructure bonds that are usually issued by (corporate) local government financing vehicles (Graph 2.10). The decline in urban infrastructure bond issuance was largely the result of local governments refinancing such bonds (as well as bank and/or shadow bank loans) by issuing bonds directly as part of the debt swap program. Direct issuance of local government bonds rose sharply as a result, substantially lowering the funding cost of local governments (given spreads on these bonds are well below those charged on urban infrastructure bonds).

Graph 2.10
Chinese Bond Issuance
Gross issuance



Equities

Global equity prices were little changed in aggregate over 2015 (Graph 2.11; Table 2.2). European and Japanese markets increased, supported by monetary stimulus, but US share prices were little changed as strong increases in large technology companies were offset by considerable declines in the energy and material sector. Chinese equity prices finished 2015 little changed, despite large swings during the year, while other emerging market equity indices fell amid capital outflows from emerging market equity funds.

Graph 2.11
Major Share Price Indices
1 January 2010 = 100

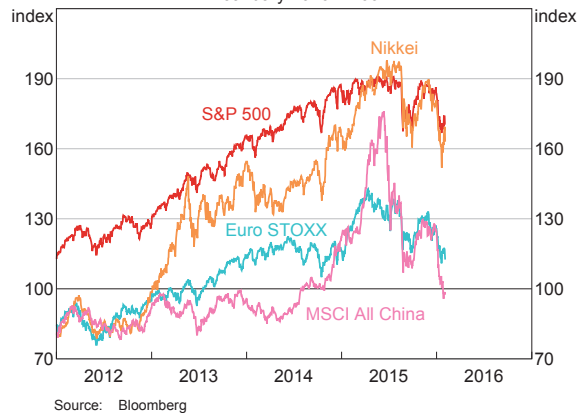


Table 2.2: Changes in International Share Prices
Per cent

	Over 2015	2016 to date
United States – S&P 500	-1	-7
Euro area – STOXX	8	-10
United Kingdom – FTSE	-5	-6
Japan – Nikkei	9	-10
Canada – TSE 300	-11	-3
Australia – ASX 200	-2	-8
China – MSCI All China	2	-22
MSCI indices		
– Emerging Asia	-8	-8
– Latin America	-11	-4
– Emerging Europe	-4	-4
– World	-1	-8

Source: Bloomberg

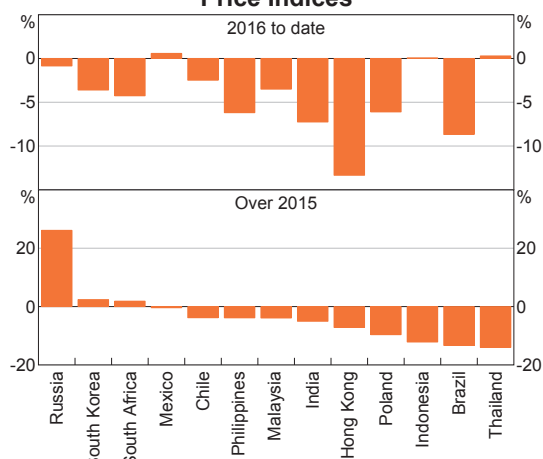
Global share prices fell by up to 10 per cent in early 2016, with a more than 20 per cent decline in Chinese equity prices causing investors globally to question the outlook for the Chinese economy and declines in oil prices further weighing on sentiment.

The declines in Chinese equity prices since the start of 2016 are attributable to a variety of factors that weighed on retail investor sentiment. These include: uncertainty about the authorities' intentions for the RMB (see section on 'Foreign Exchange'); lower-than-expected manufacturing survey data; concerns about the impending end to a selling ban on major shareholders that had been in place for the past six months; and newly introduced market-wide circuit breakers that appear to have exacerbated selling pressure. In response to these declines, the authorities introduced restrictions on the pace at which major shareholders can sell and abolished the market-wide circuit breakers. Chinese share prices are now below the trough seen in early August 2015, but they remain substantially higher than in mid 2014. Regulated margin loans outstanding roughly halved over the second half

of 2015 and fell a little further over January, in part due to the authorities lowering the permissible borrowing limits in December.

Share prices in other emerging markets have continued to fall this year, but the declines have tended to be less pronounced than in advanced economies (Graph 2.12). The main exceptions have been for Hong Kong and Brazil, which are heavily exposed to China and commodity prices, respectively.

Graph 2.12
Change in Emerging Market Equity Price Indices



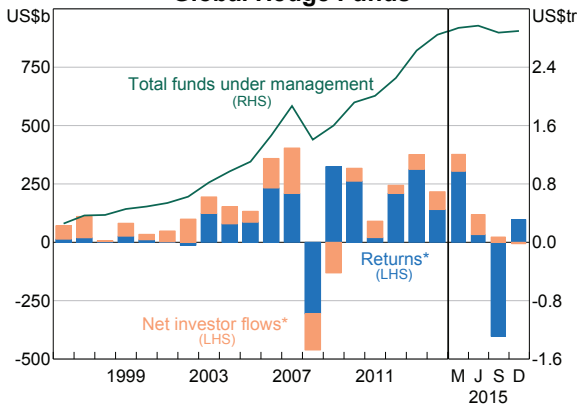
Source: Bloomberg

Annual profits at the six largest US banks increased by almost 25 per cent in 2015 to US\$93 billion. The increase was primarily due to a reduction in litigation and other expenses, while revenue was little changed. Despite falling, litigation expenses continued to weigh on fourth quarter profits at Goldman Sachs due to its US\$5 billion settlement with US authorities over allegations of mis-selling mortgage-backed securities before the financial crisis. This brings the industry-wide value of fines for such offences to US\$68 billion. European banks that have reported to date have, in aggregate, posted lower profits than in 2014, with increased charges for litigation and restructuring costs weighing on results.

Hedge Funds

Global hedge funds recorded an asset-weighted return on investment of 0.5 per cent over the December quarter 2015, underperforming a balanced portfolio of global bonds and equities. The small return over the quarter followed a 3 per cent loss over the September quarter and saw hedge funds in aggregate post zero returns over 2015. Funds focussed on emerging markets and those investing in expectation of particular events underperformed over 2015. Investors made small net withdrawals from hedge funds in the December quarter, but assets under management rose by 2 per cent over the year to US\$2.9 trillion (Graph 2.13).

Graph 2.13
Global Hedge Funds



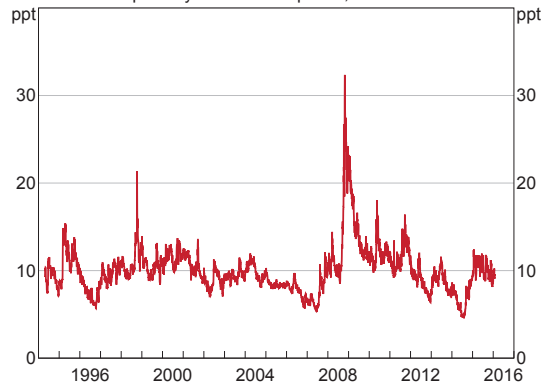
* Annualised for 2015 data
Sources: Hedge Fund Research, Inc.; RBA

Foreign Exchange

Concerns about the outlook for global growth, particularly in China, as well as further declines in oil prices and periods of heightened volatility in global equity markets have led to some sizeable movements in exchange rates over recent months. Changes in the current and prospective stance of monetary policy in the major advanced economies have also contributed. Notwithstanding this, volatility in the main developed market currency pairs has been little changed and is not particularly high (Graph 2.14).

Graph 2.14

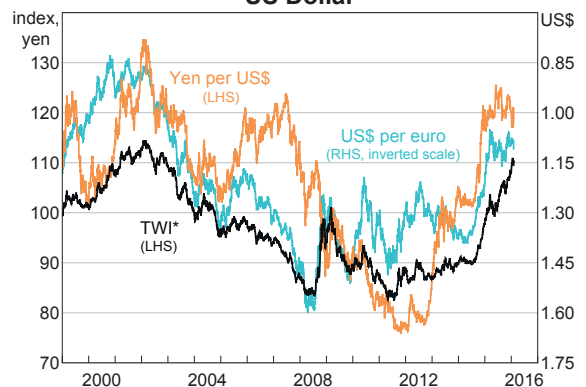
Volatility in Developed Market Currencies*
Implied by one-month options, annualised



* EUR/USD, USD/JPY, GBP/USD, AUD/USD, USD/CAD, USD/CHF, EUR/JPY, EUR/GBP, EUR/CHF; weighted by turnover
Source: Bloomberg

The US dollar has appreciated over recent months (Graph 2.15; Table 2.3). In light of concerns about global growth and sharp falls in some commodity prices, the appreciation of the US dollar has generally been more pronounced against the currencies of commodity exporters. The appreciation has also reflected market participants' expectations of a gradual increase in the federal funds rate while other major economies maintain current monetary policy settings or ease further. The US dollar appreciated by 10 per cent over 2015 and is 22 per cent higher on a trade-weighted basis

Graph 2.15
US Dollar



* 1 January 1999 = 100
Sources: Bloomberg; Board of Governors of the Federal Reserve System

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

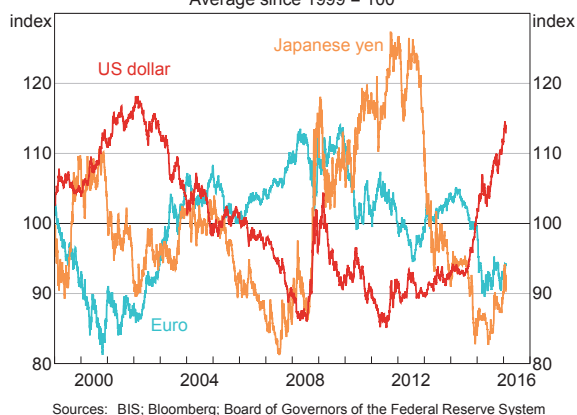
	Over 2015	2016 to date
Russian rouble	24	7
Mexican peso	17	6
South Korean won	8	4
Indian rupee	5	3
New Zealand dollar	14	2
Philippine peso	5	2
Australian dollar	12	2
New Taiwan dollar	4	1
Chinese renminbi	5	1
UK pound sterling	6	1
Swiss franc	1	0
Indonesian rupiah	11	0
Swedish krona	8	0
Canadian dollar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

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

since mid 2014. Nevertheless, in real terms, the US dollar is only around 5 per cent higher than its longer-term average.

The euro depreciated by 4 per cent on a trade-weighted basis and by 7 per cent against the US dollar between mid October and early December alongside market participants' expectations for further easing by the ECB at its December meeting. However, the euro subsequently appreciated as the policy measures announced at the December meeting were seen as less than market participants' expectations (see section on 'Central Bank Policy'). The euro is around 5 per cent higher on a trade-weighted basis than the cyclical low it reached in April 2015 (Graph 2.16).

Graph 2.16
Nominal Trade-weighted Indices
Average since 1999 = 100



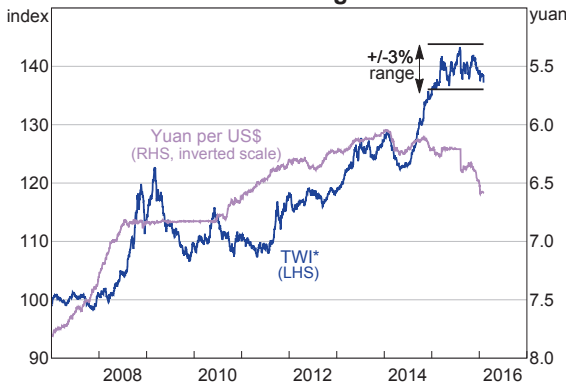
The Japanese yen appreciated by 4 per cent against the US dollar and by 6 per cent on a trade-weighted basis between early December and late January. The appreciation of the yen was particularly sharp in the first week of January, alongside the deterioration in risk sentiment and heightened volatility in global equity markets. Following the BoJ's decision to increase monetary stimulus on 29 January, the yen depreciated by around 2 per cent against the US dollar and on a trade-weighted basis, but has subsequently reversed.

Some other developed market currencies have experienced sizeable depreciations against the US dollar over recent months. In particular, continued declines in global oil prices since mid October have contributed to further large depreciations of the Norwegian krone and Canadian dollar. The UK pound has depreciated by 6 per cent against the US dollar since mid September, alongside a paring back of market participants' expectations for policy tightening by the Bank of England.

The RMB has depreciated by 5½ per cent against the US dollar and by 4 per cent on a trade-weighted basis since August when the PBC changed its methodology for calculating the daily RMB fixing rate against the US dollar. On a trade-weighted basis, the RMB has traded within a ±3 per cent

range since the start of 2015; this is not a large range by the standards of most currencies and the level of the RMB trade-weighted index is still well above its mid 2014 trough (Graph 2.17).

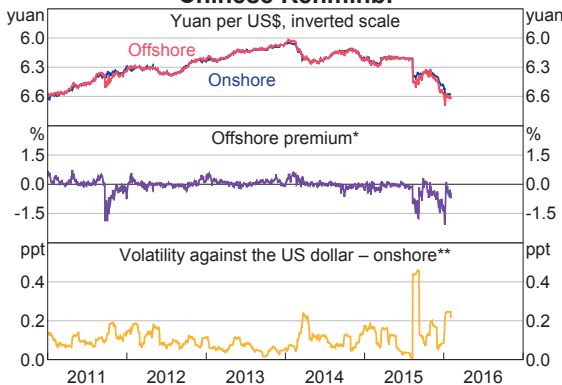
Graph 2.17
Chinese Exchange Rates



* 2007 average = 100
Sources: BIS; Bloomberg; RBA

Since August, the PBC has generally set the daily RMB fixing rate against the US dollar broadly in line with the previous day's closing spot exchange rate and overnight market movements, which has resulted in a gradual depreciation of the currency (Graph 2.18). However, the speed of depreciation of the RMB against the US dollar in the onshore market increased in the first week of January, and the RMB depreciated by more in the offshore

Graph 2.18
Chinese Renminbi



* Negative spread indicates that one US dollar buys more yuan in the offshore market than the onshore market
** Rolling 22-day standard deviation of daily percentage changes
Sources: Bloomberg; RBA

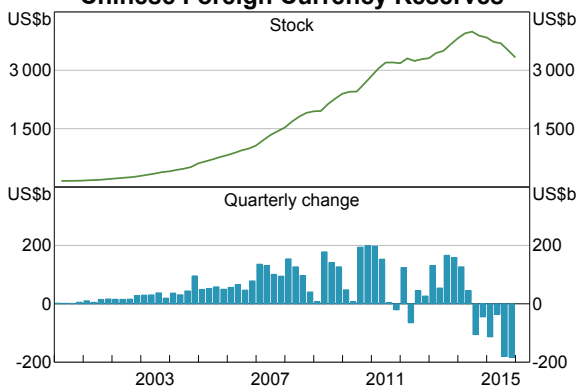
market; the discount for buying RMB in the offshore market widened to 3 per cent intraday on 7 January. The PBC reportedly intervened to close the gap between the onshore and offshore rates by buying RMB in the Hong Kong spot foreign exchange market. This led to a large reduction in the supply of RMB in this market and the overnight interest rate for interbank RMB loans in Hong Kong briefly spiked to 67 per cent. Since 8 January, the PBC has set the RMB daily fixing rate against the US dollar higher than implied by the previous day's closing spot rate and overnight market movements. The offshore discount has widened again recently to the levels seen in November.

On 30 November 2015, the IMF Executive Board agreed to add the RMB to the basket of currencies that determine the value of the IMF's Special Drawing Right (SDR), effective from 1 October 2016. The IMF assessed that there was sufficient basis to determine that the RMB was 'freely usable'. The RMB's weight in the SDR basket will be 11 per cent, which is higher than both the Japanese yen and the UK pound.

On 11 December, the China Foreign Exchange Trade System (CFETS) announced that it will regularly publish RMB exchange rate indices. The official publication of these indices, and subsequent communication by PBC officials, is consistent with the authorities' desire to shift the focus of the market away from the US dollar-RMB bilateral exchange rate towards the trade-weighted index when assessing its commitment to keep the RMB broadly stable. However, it is likely to be difficult to maintain stability of the RMB, given the magnitude of private capital outflows. CFETS has also extended the onshore market's trading hours to 11.30 pm China standard time from 4.30 pm as part of a trial that started on 4 January, although it is still treating the 4.30 pm exchange rates as the official closing prices. On 18 January, the PBC announced that it would apply reserve requirements to onshore yuan deposits from offshore financial institutions, starting from 25 January.

The value of the PBC's foreign currency reserves decreased by US\$183 billion over the December quarter, and by US\$108 billion in the month of December (Graph 2.19). This reflected large net private capital outflows, which have been mainly driven by Chinese residents responding to expectations for RMB depreciation by, for example, paying down their foreign currency-denominated liabilities. The PBC's foreign currency reserves decreased by US\$513 billion (or 13 per cent) over 2015 to US\$3.3 trillion, and are US\$663 billion below their peak in June 2014.

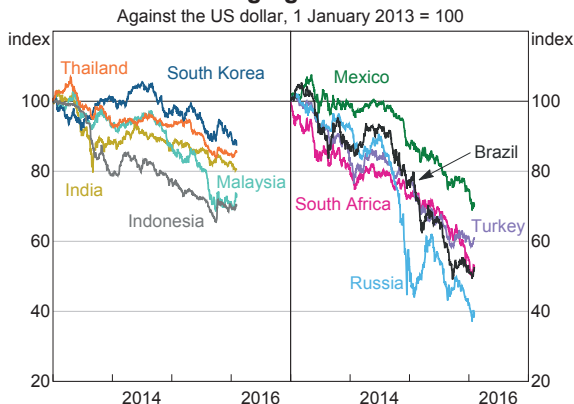
Graph 2.19
Chinese Foreign Currency Reserves



Source: CEIC Data

Most other Asian and emerging market currencies have depreciated further against the US dollar over recent months, continuing a trend that has been evident since mid 2014. The depreciations have tended to be more pronounced for the currencies of oil and other commodity exporters. Most notably, the Mexican peso has depreciated by 10 per cent, and the Russian rouble and South African rand have depreciated by 20 per cent and 18 per cent against the US dollar respectively since mid October (which coincided with the start of another fall in oil prices; Graph 2.20). In addition to the declines in commodity prices, the depreciation of the South African rand has also coincided with increased domestic political uncertainty. Volatility in most emerging market currencies is above its average since 2010.

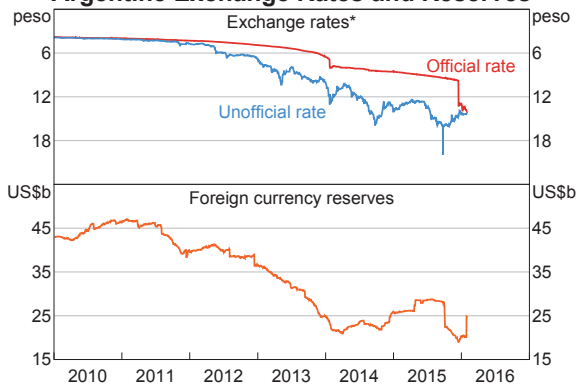
Graph 2.20
Asian and Emerging Market Currencies



Source: Bloomberg

The Argentine peso has depreciated by 30 per cent against the US dollar since early December after capital controls were removed and the peso was allowed to float by the new government (Graph 2.21). Argentina's foreign currency reserves had fallen to US\$20 billion, but increased by around US\$5 billion on 29 January following a loan to the central bank from a number of commercial banks.

Graph 2.21
Argentine Exchange Rates and Reserves



* Against the US dollar, inverted scale

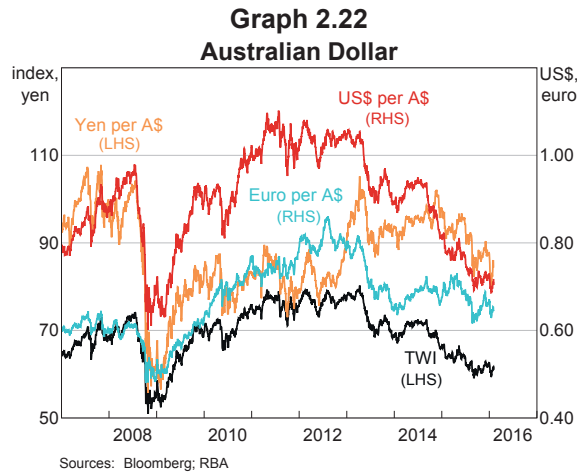
Sources: Bloomberg; IMF; RBA; Thomson Reuters

The gross foreign currency reserves of some oil-producing nations declined significantly over 2015. Most notably, Saudi Arabia's reserves declined by US\$115 billion, reflecting sales of foreign securities alongside a deterioration in the country's fiscal position. Since the end of September 2015, gross

foreign currency reserves of most other emerging market economies have been little changed, with the exception of Mexico and Turkey where reserves have declined further, and Hong Kong and Indonesia where reserves have increased (Table 2.4). The Mexican central bank has continued to intervene in the foreign exchange market by holding regular US dollar sales in an attempt to curb depreciation pressures on the currency. In contrast, the Hong Kong Monetary Authority purchased US dollars in October and early November as the Hong Kong dollar traded close to the upper limit of its trading band.

Australian Dollar

Since the previous *Statement*, the Australian dollar has appreciated a little on a trade-weighted basis and has been little changed against the US dollar, despite having depreciated by around 5 per cent over the first half of January (Graph 2.22; Table 2.5). Over this period, changes in the Australian dollar have reflected fluctuations in global sentiment and commodity prices, which have occurred alongside



uncertainty about the outlook for China. Against the US dollar and on a trade-weighted basis, the Australian dollar is currently around 4 per cent higher than the low it reached in September 2015.

Volatility in the Australian dollar has increased since the previous *Statement*, with the average intraday trading range for the AUD/USD exchange rate in January slightly higher than its post 2000 average (Graph 2.23).

Table 2.4: Gross Foreign Currency Reserves^(a)

	Percentage change since:		US\$ equivalent (billions)	Level
	End December 2014	End September 2015		
China	-13	-5		3 330
Saudi Arabia	-16	-6		604
Taiwan ^(b)	2	0		426
South Korea	1	0		360
Hong Kong	11	6		350
Brazil	-1	-1		350
India	10	-1		325
Russia	-6	0		309
Singapore	-3	-2		245
Mexico	-9	-2		167
Thailand	0	1		149
Indonesia	-5	5		100
Turkey	-13	-8		92
Malaysia	-19	1		86
Argentina	-4	-11		25

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

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

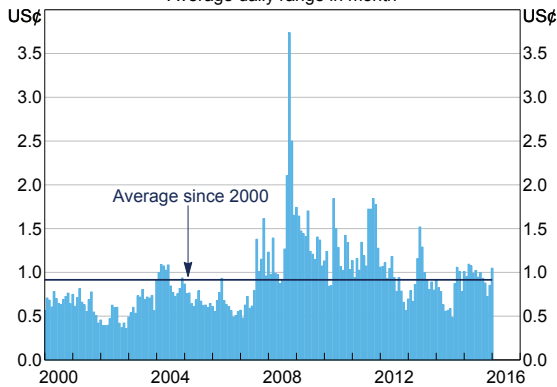
Sources: Bloomberg; CEIC Data; central banks; IMF; RBA

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

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

Sources: Bloomberg; RBA

Graph 2.23
Intraday Range in AUD/USD
Average daily range in month

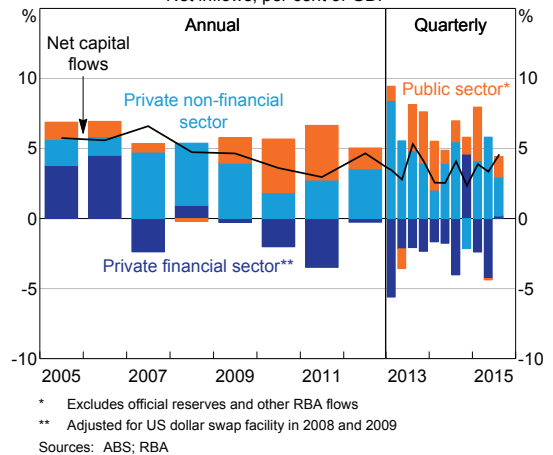


Sources: Bloomberg; RBA

Capital Flows

Net capital inflows to the Australian economy were equivalent to 4.6 per cent of GDP in the September quarter, and were largely directed to the private non-financial sector, in particular the non-mining sector (Graph 2.24). In contrast, the mining sector recorded a small net outflow in the quarter, the first outflow since the December quarter 2010. Net inflows to the private financial sector were negligible in the September quarter, with net inflows to 'other financials' (which includes superannuation funds and other investment funds) mostly offset by net outflows from the banking sector. Net outflows from the banking sector were partly due to an increase in short-term loans by Australian banks to foreign entities.

Graph 2.24
Australian Capital Flows
Net inflows, per cent of GDP



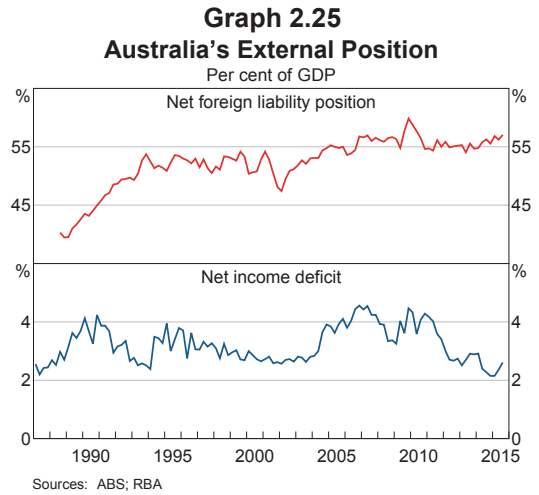
* Excludes official reserves and other RBA flows

** Adjusted for US dollar swap facility in 2008 and 2009

Sources: ABS; RBA

There were modest net inflows to the public sector in the September quarter, which were primarily directed to the general government sector. However, the net inflow to the general government sector was smaller than the net issuance of Australian Government securities (AGS) in the quarter and the foreign ownership share of AGS decreased by 2 percentage points to 63 per cent.

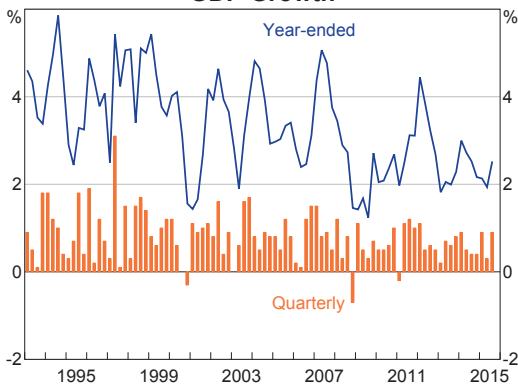
Consistent with the net capital inflows in the September quarter, Australia's net foreign liability position increased to 57 per cent of GDP (Graph 2.25). The net income deficit, which largely comprises payments made on Australia's net foreign liability position, widened to 2.6 per cent of GDP in the September quarter reflecting an increase in the stock of debt liabilities and the yield paid on portfolio equity liabilities. ❖



3. Domestic Economic Conditions

Growth in the Australian economy appears to have remained a bit below average over 2015 (Graph 3.1). Strong growth in the September quarter was driven by a rebound in resource exports, after weather-related disruptions in the June quarter. Indications are that the pace of growth in the December quarter was below average.

**Graph 3.1
GDP Growth**



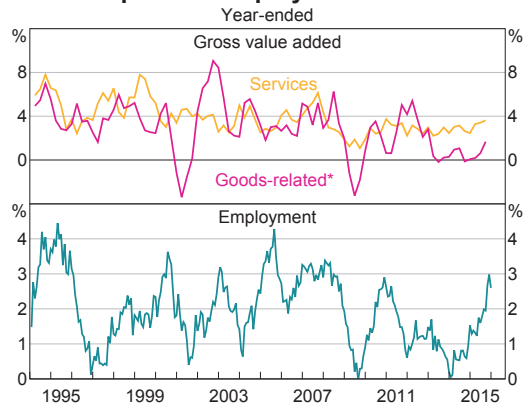
Source: ABS

The economy continues to be affected by a range of different forces. Low interest rates are supporting growth in household consumption and dwelling investment, and the depreciation of the exchange rate has helped to improve the competitiveness of Australian producers. This is particularly apparent in the services sector, where Australia's exports of services have grown, while imports of services have fallen noticeably over the past couple of years. At the same time, non-mining investment has remained subdued and mining investment has been declining sharply, as the significant

expansion in Australian mining production capacity – prompted by the earlier strength in commodity prices – reaches completion (Table 3.1). This has facilitated a significant increase in resource exports, although resource companies' earnings are being adversely affected by the large decline in commodity prices.

Economic activity has generally strengthened in non-resource sectors. Growth in output has been strongest in the services sector (Graph 3.2). An increase in the provision of services, particularly household services, generally requires less investment and more labour than an increase in the output of goods-related industries, which are generally more capital intensive. Hence, the relatively strong growth in the production of services may help to explain why employment growth has been strong even though GDP growth overall has been below average.

**Graph 3.2
Output and Employment Growth**



* Excluding mining

Sources: ABS; RBA

Table 3.1: Demand and Output Growth
Per cent

	September quarter 2015	June quarter 2015	Year to September quarter 2015
GDP	0.9	0.3	2.5
Consumption	0.7	0.6	2.7
Dwelling investment	0.9	0.4	10.3
Mining investment ^(a)	-9.7	-12.4	-28.9
Non-mining investment ^(a)	-2.2	3.5	-0.1
Public demand	-1.0	2.3	2.2
Exports	4.6	-3.3	6.5
Imports	-2.4	0.1	-1.2
Nominal GDP	0.8	0.2	2.2
Real gross domestic income	0.3	-0.5	0.2

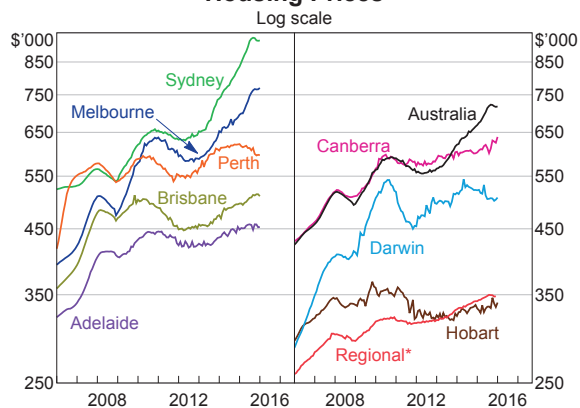
(a) RBA estimates
Sources: ABS; RBA

Strong employment growth has also been supported by a protracted period of low wage growth which, along with the exchange rate depreciation, may have encouraged firms to employ more people than otherwise. At the same time, growth in the supply of labour has increased through a rise in the participation rate, notwithstanding lower population growth. The unemployment rate declined to around 5¾ per cent in late 2015, having been within a range between 6 and 6¼ per cent since mid 2014. Nevertheless, there is evidence of spare capacity in the labour market, as the unemployment rate is still above recent lows, the participation rate remains below its previous peak and wage growth continues to be low.

Household Sector

Conditions in the established housing market have eased in recent months. National housing prices have declined slightly from their September 2015 peak, following strong growth earlier in 2015 (Graph 3.3). Auction clearance rates, which are another timely gauge of housing market conditions, have also declined from very high levels to be around their long-run averages (Graph 3.4).

Graph 3.3
Housing Prices



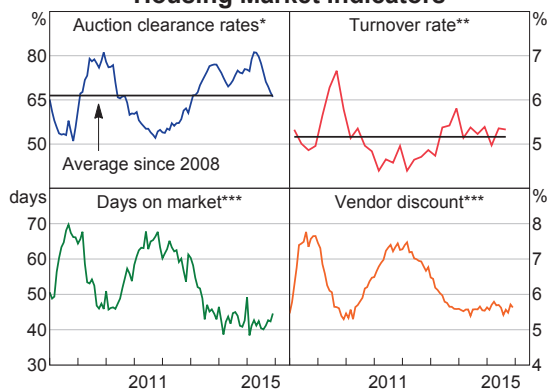
* Excluding apartments; measured as areas outside of capital cities in mainland states

Sources: CoreLogic RP Data; RBA

However, some other indicators – including turnover rates, days on market and the eventual discount on vendor asking prices – have been little changed.

The easing in housing market conditions has been most pronounced for detached houses in Sydney and Melbourne, where earlier price growth had been strongest, and in Perth, where prices have been declining since early 2015. Until recently,

Graph 3.4
Housing Market Indicators



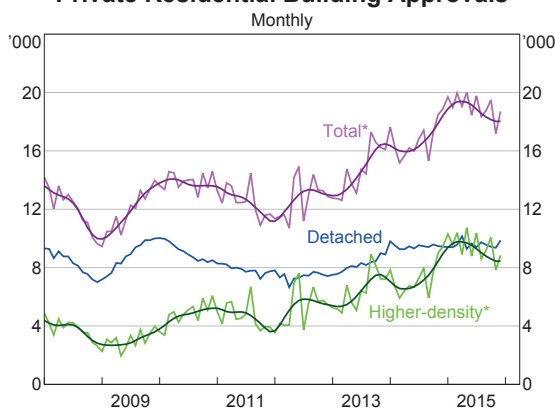
* Average of Melbourne and Sydney
 ** Share of dwelling stock, annualised
 *** Capital city dwelling stock weighted median for private treaty sales only; vendor discounts reflect average difference between the original listing price and the final selling price
 Sources: Australian Property Monitors; CoreLogic RP Data; RBA; Real Estate Institute of Victoria

growth of national apartment prices had been noticeably slower than that of detached housing prices, reflecting large increases in higher-density housing supply over recent years, especially in Melbourne. The increase in supply over recent years, partly in response to strong investor demand, has been associated with a gradual increase in the nationwide rental vacancy rate. Rental yields remain low by historical standards.

Dwelling investment grew strongly over the year to the September quarter, supported by low interest rates and the significant increase in housing prices over the past several years. Building approvals have been on a downward trend over the course of the past year, driven by fewer higher-density approvals, but remain at a high level (Graph 3.5). Some other forward-looking indicators of dwelling investment, such as new construction loan approvals, have picked up a little in recent months.

Lending data suggest that investor loan approvals and credit growth have moderated since the first half of 2015. This is consistent with lenders' actions in 2015 to increase interest rates and introduce measures to strengthen their non-price lending terms, particularly for investors, in response to

Graph 3.5
Private Residential Building Approvals



* Smoothed lines are ABS trend measures
 Source: ABS

actions undertaken by the Australian Prudential Regulation Authority (APRA) and the Australian Securities and Investments Commission (ASIC).¹ Growth in lending to owner-occupiers has increased such that aggregate housing credit growth has stabilised at around 7½ per cent (see the 'Domestic Financial Markets' chapter for further details on the developments in housing finance).

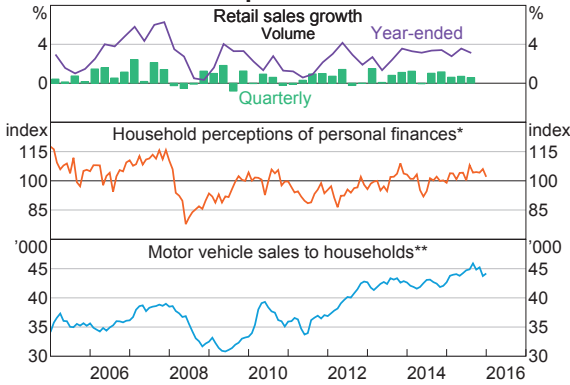
Consumption growth increased in the September quarter, to be close to its decade average in year-ended terms. Timely indicators of consumption suggest that this pace of growth has been sustained more recently. Growth in the value of retail sales was around average in late 2015 and the Bank's liaison with retailers suggests that sales conditions have improved more recently. Also, motor vehicle sales to households were strong in 2015 and households' perceptions of their own finances remain a little above average (Graph 3.6).

Household consumption growth has been supported by low interest rates, increasing employment and, to some extent, increased household wealth. However, growth in labour income has remained relatively subdued (Graph 3.7). The household saving rate has declined

¹ For further details on actions undertaken by APRA and ASIC, see RBA (2015), 'Box B: Responses to Risks in the Housing and Mortgage Markets', *Financial Stability Review*, March, pp 45–47.

Graph 3.6

Consumption Indicators



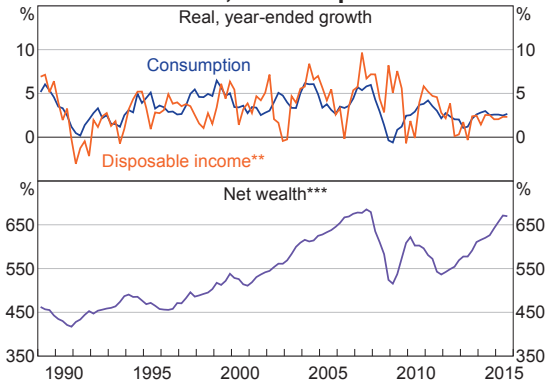
* Average of the ANZ-Roy Morgan and Westpac-Melbourne Institute consumer sentiment measure of respondents' perceptions of their personal finances relative to the previous year; average since 1980 = 100

** Three-month moving average

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

Graph 3.7

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

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

Sources: ABS; RBA

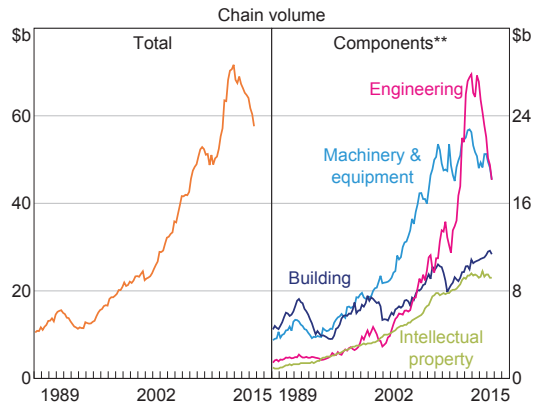
gradually over the past few years, and it remains at a relatively high level (see 'Box B: The Household Saving Ratio').

Business Sector

Private business investment fell by 5 per cent in the September quarter and by 11 per cent over the year (Graph 3.8). In year-ended terms, the decline

Graph 3.8

Private Business Investment*



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

** Excluding cultivated biological resources

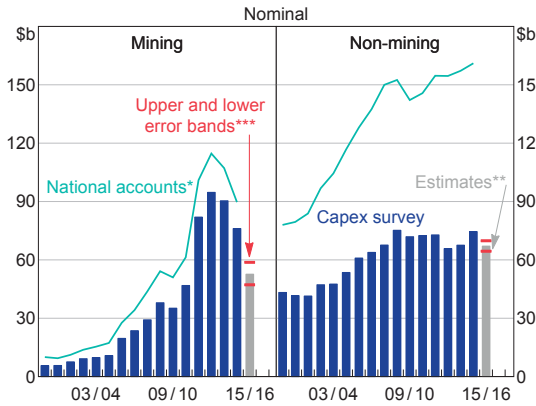
Sources: ABS; RBA

was led by a sharp fall in mining investment, while non-mining investment is estimated to have been little changed.

The large decline in mining investment since its peak in mid 2012 reflects the completion of several large-scale resource projects. Mining investment is still expected to decline further over coming years, as few new projects are likely to commence. The fall in commodity prices over recent years has reduced profits and the incentive to invest in the mining sector. The ABS capital expenditure (Capex) survey of investment intentions and the Bank's liaison point to a sharp fall in mining investment in 2015/16 (Graph 3.9). The subtraction from GDP from lower mining investment is expected to peak this financial year.

Non-mining investment has been weak for some time and indicators of investment intentions suggest that it will remain subdued in the near term. The latest Capex survey continues to imply that non-mining investment will fall in 2015/16, while non-residential building approvals remain at relatively low levels, consistent with weak underlying conditions in the commercial property market. The Capex survey, however, does not cover a large share of non-mining investment that is included in the

Graph 3.9
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

national accounts, such as investment in agriculture, education, health care and intellectual property. Although the Bank's liaison suggests that investment intentions in these sectors are generally more positive than elsewhere, non-mining investment is still expected to be subdued in aggregate in the near term.

Nevertheless, a number of factors supportive of non-mining investment remain in place. Interest rates are very low, the Australian dollar has depreciated over the past few years and non-mining company profits increased over 2015. Consistent with this, survey measures of business conditions in non-mining sectors are clearly above average, particularly in the services sectors, but also in the goods-related sectors more recently (Graph 3.10). Business credit growth has also picked up over the past year.

Graph 3.10
Non-mining Business Conditions*

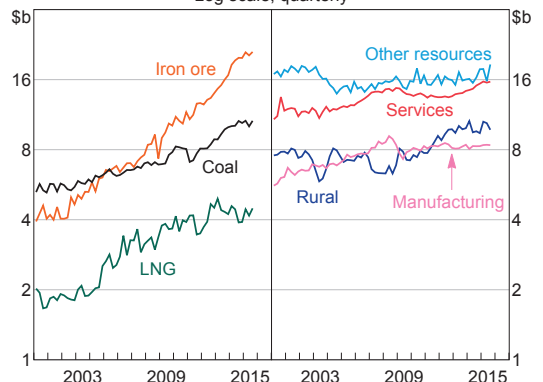


* Gross value added weighted; deviation from average since 1989; six-month moving average
 Sources: ABS; NAB; RBA

External Sector

Export volumes rose by 6 per cent over the year to the September quarter, led by strong growth in resource exports, particularly iron ore (Graph 3.11). Exports of iron ore are expected to continue to grow over the next couple of years, albeit at a slower pace than over the past few years, as production from the larger, low-cost producers continues to expand. Liquefied natural gas (LNG) exports are expected to increase substantially over the next few years as a number of LNG projects currently under construction begin production.

Graph 3.11
Export Volumes*
Log scale, quarterly



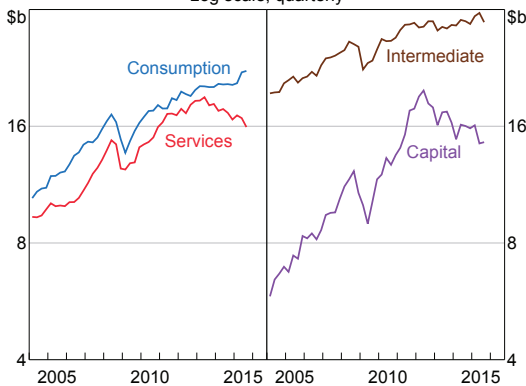
* Reference year is 2013/14
 Sources: ABS; Department of Industry, Innovation and Science; RBA

In contrast, significant falls in coal prices and the relatively high cost of some Australian production suggest that further substantial growth in coal exports is unlikely.

Service exports have also grown over recent years, aided by improved competitiveness associated with the depreciation of the Australian dollar. Tourism, education and business service exports have all expanded. In contrast, manufactured exports have been subdued.

Import volumes declined modestly over the year to the September quarter (Graph 3.12). Service imports have declined noticeably over the past couple of years, in particular tourism and business services. This decline is consistent with the depreciation of the exchange rate, which has encouraged Australians to switch some of their expenditure to domestic producers for such services. Capital imports have also fallen as construction of many of the import-intensive, large-scale mining projects has approached completion. Consumption imports, which tend to be less sensitive to exchange rate movements than service imports, have increased over the past year.

Graph 3.12
Import Volumes*
Log scale, quarterly

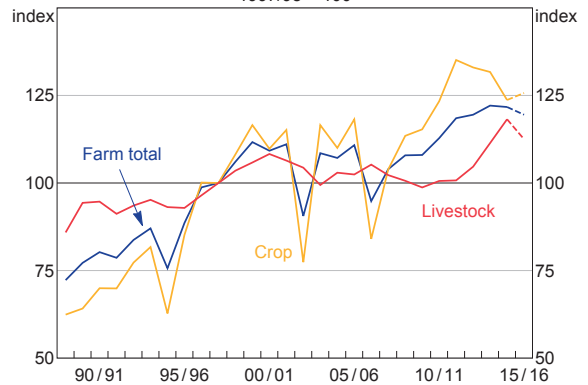


* Reference year is 2013/14
Source: ABS

Farm Sector

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) expects the volume of farm production to decline modestly in 2015/16 (Graph 3.13). A decline in livestock production due to herd rebuilding is expected to more than offset a small increase in crop production. El Niño conditions, which are typically associated with lower rainfall, are expected to ease in the first half of 2016.

Graph 3.13
Farm Production Volumes*
1997/98 = 100

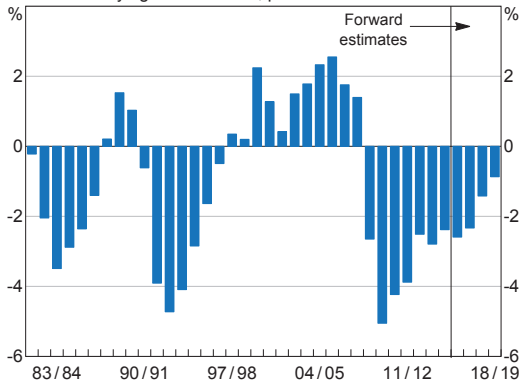


* Dashed lines represent 2015/16 forecasts; 2014/15 data are estimates
Source: ABARES

Government Sector

The Australian Government's Mid-Year Economic and Fiscal Outlook, together with recent state budget updates, continues to imply fiscal consolidation over coming years, albeit at a slower pace than previously expected (Graph 3.14). The consolidated budget deficit in 2015/16 is expected to be around 2.6 per cent of GDP. The decline in commodity prices has lowered federal and state revenues while transfer duty receipts are higher in New South Wales and Victoria.

Graph 3.14
Consolidated Budget Balance*
Underlying cash balance, per cent of nominal GDP



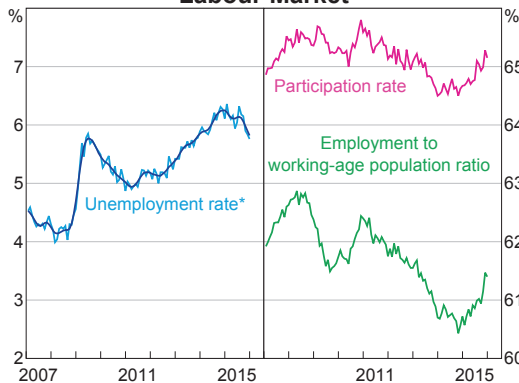
* Federal, state and territory governments, based on 2015/16 budgets and mid-year updates; excludes the effect of the federal grant to the RBA in 2013/14.

Sources: ABS; Australian Treasury; State and Territory Treasuries

Labour Market

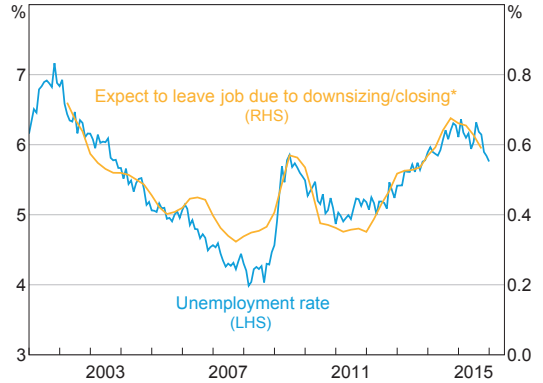
A range of indicators suggest that labour market conditions have improved over the past year. After little change since mid 2014, the unemployment rate declined to around 5¾ per cent in late 2015 (Graph 3.15). The number of unemployment benefit recipients as a share of the labour force, which tends to be less volatile than the unemployment rate, has also declined a little since the middle of 2015. In addition, the number of workers who expect to lose their jobs because their employer is likely to close or downsize in the year ahead has declined (Graph 3.16).

Graph 3.15
Labour Market



* Smoothed line is ABS trend measure
Source: ABS

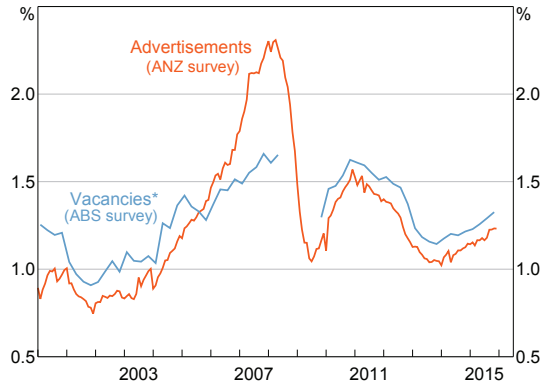
Graph 3.16
Unemployment and Expectations
Per cent of labour force



* Four-quarter moving average; non-seasonally adjusted
Sources: ABS; RBA

Employment growth strengthened over 2015 to be above its long-run average – even after taking into account changes in the labour force survey sample – consistent with the increase in measures of job vacancies and advertisements (Graph 3.17). The participation rate has also been increasing. This could be a response to higher labour demand, whereby individuals may have commenced work or are searching for work in response to improvements in employment prospects (the ‘encouraged worker’ effect). The Australian Government’s new employment services model, ‘jobactive’, introduced on 1 July 2015, may have also boosted the

Graph 3.17
Job Vacancies and Advertisements
Per cent of labour force



* This survey was suspended between May 2008 and November 2009
Sources: ABS; ANZ

participation rate by requiring more unemployment benefit recipients to search actively for work than in the past.

The recent improvement in labour market conditions has been broad based across age groups and genders. The youth unemployment rate fell noticeably over 2015, although it remains relatively high. The improvement in conditions has been concentrated in the eastern states and in service industries. Unemployment rates in New South Wales, Victoria and Queensland declined over the year, while Western Australia's unemployment rate rose, reflecting Western Australia's greater exposure to the resources sector.

Strong growth in household services employment was underpinned by a large increase in health & social assistance employment (Graph 3.18). The Bank's liaison suggests that this partly reflects increased demand for aged and home-based care services as the population ages, as well as hiring by early childhood centres ahead of the increase in required staff-to-child ratios that came into effect on 1 January 2016.

Business services employment growth has been relatively broadly based. Employment in a range of business services industries has been assisted by the depreciation of the Australian dollar and subsequent increase in net exports of business services.

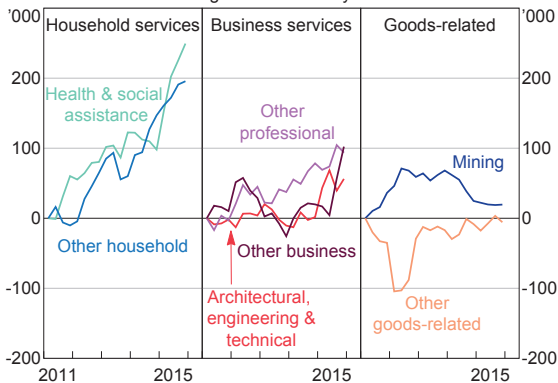
Employment in architecture, engineering & technical services has also been supported by government infrastructure projects and the strength in residential building activity. In other professional services, such as legal & accounting and computer system design, employment has also increased. According to the Bank's liaison, this may reflect broader demand from firms for IT-related investment to improve productivity and reduce costs.

In contrast, goods-related employment overall remained weak. Mining employment declined slightly over 2015, after a sharp fall in 2014. Employment in manufacturing declined further over the year, while retail employment increased. Employment was little changed in a number of other goods-related industries.

As discussed earlier, the concentration of employment growth in labour-intensive service sectors, such as household services, may help to explain why employment growth over 2015 was above average even though GDP growth was not. The changing composition of employment towards services over the past year does not appear to have been associated with a substantial change in job characteristics, such as hours of work or entitlements. Average hours worked have been little changed for the past three years (Graph 3.19). Even though the household services sector

Graph 3.18
Employment by Industry and Sector

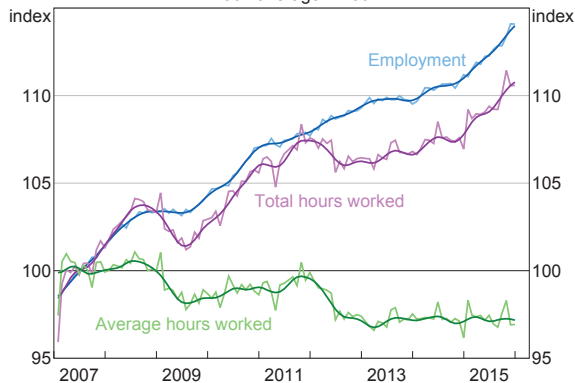
Change since February 2011



Sources: ABS; RBA

Graph 3.19
Employment and Hours Worked*

2007 average = 100



* Smoothed lines are ABS trend measures

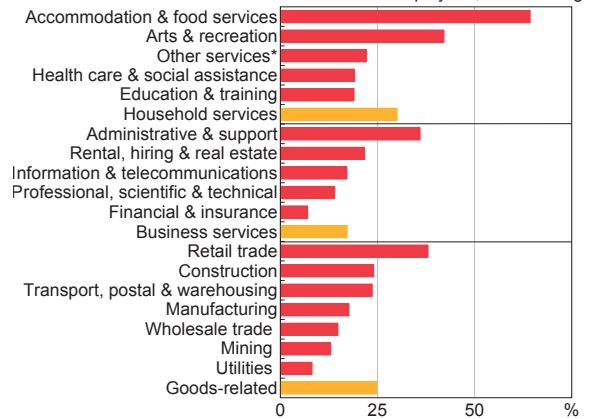
Sources: ABS; RBA

has historically had a higher share of part-time and casual employees, much of the increase in employment over 2015 has been concentrated in full-time work and in industries that do not have a particularly high proportion of casual employees. For example, employment has grown strongly in health and professional services; the share of employees without leave entitlements in these industries is relatively low and broadly similar to manufacturing and wholesale trade, where employment outcomes have been weaker (Graph 3.20).

Notwithstanding the improvements in the labour market over the past year, there is still evidence of spare capacity. The unemployment rate remains above lows of recent years, as does the rate of underemployment. Wage growth continues to be low (see 'Price and Wage Developments' chapter). While the participation rate has risen of late, it remains below its previous peak in late 2010. ❖

**Graph 3.20
Casual Employees**

Employees without leave entitlements
as share of total employees, 2015 average



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

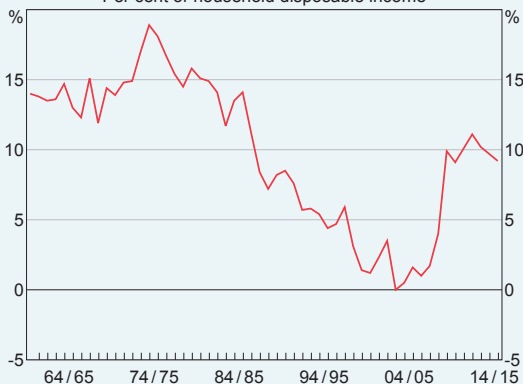
Sources: ABS; RBA

Box B

The Household Saving Ratio

After falling for more than two decades, the aggregate household saving ratio in Australia increased sharply in the latter half of the 2000s (Graph B1). While it has since remained close to 10 per cent – which implies that, collectively, households have been saving about 10 per cent of their incomes – the saving ratio has declined modestly over the past three years or so. Understanding developments in the saving ratio is important because changes in household saving behaviour can have implications for the outlook for aggregate consumption.

Graph B1
Household Saving*
Per cent of household disposable income



* Household sector includes unincorporated enterprises; net of depreciation

Source: ABS

Households save for a number of purposes: to fund their retirement; to make sizeable purchases (such as buying a house); or to insure against an unexpected loss of income. Central to these purposes is the notion that households typically prefer to smooth consumption over their lifetime. This means that households tend to save more when their income is high relative to the average

income they expect over their lifetime. For example, households tend to save more during their working years than in retirement. They also tend to save more of any increase in income if they believe it to be temporary – for instance, due to bonus payments or extra hours of work. However, households with restricted access to credit or on especially low incomes may find it difficult to smooth their consumption.

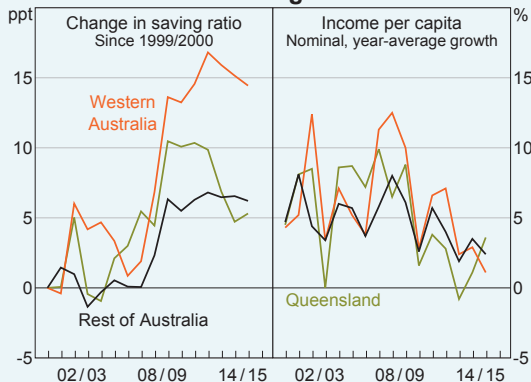
Trends in the household saving ratio in Australia over recent years are likely to reflect a range of factors, including the effect of the boom in commodity prices and mining investment on household incomes, behavioural changes stemming from the global financial crisis, and the current low level of interest rates. Longer-term factors such as financial deregulation and population ageing have also played a role.

The boost to household incomes associated with the resources boom is one factor that might have contributed to the rise in the saving ratio over the 2000s.¹ The substantial rise in commodity prices and the expansion of resource production capacity was accompanied by very strong growth of household incomes, particularly wage and salary income for households in the resource-rich states of Western Australia and Queensland (Graph B2). The rise in the saving ratio over this period was also most pronounced in these states. This suggests that households could have perceived some of the boost to their incomes to be temporary and responded by raising their rate of saving. As commodity prices have fallen and

¹ The channels through which commodity price changes have affected household incomes are described in Gorajek A and D Rees (2015), 'Lower Bulk Commodity Prices and Their Effect on Economic Activity', *RBA Bulletin*, September, pp 31–38.

the mining investment boom has transitioned to the production phase (which requires relatively less labour), household saving ratios in Western Australia and Queensland have declined, allowing households to maintain higher consumption than otherwise.

Graph B2
Household Saving and Income*



* Household saving and disposable income are measured gross of depreciation, owing to data limitations at the state level

Sources: ABS; RBA

The global financial crisis may have contributed to the increase in the saving ratio in the latter half of the 2000s partly because it resulted in a sharp fall in the prices of equities and other assets. Since households typically rely on their accumulated stock of wealth to fund consumption in retirement, they may have increased their saving ratio during and after the financial crisis to rebuild their wealth. This motivation would have been especially relevant for retired and soon-to-retire households, which usually have more assets and fewer remaining years of labour income with which to rebuild lost wealth. The financial crisis may also have reminded households about risks associated with a low saving ratio and rising indebtedness that had characterised the period up to the mid 2000s.

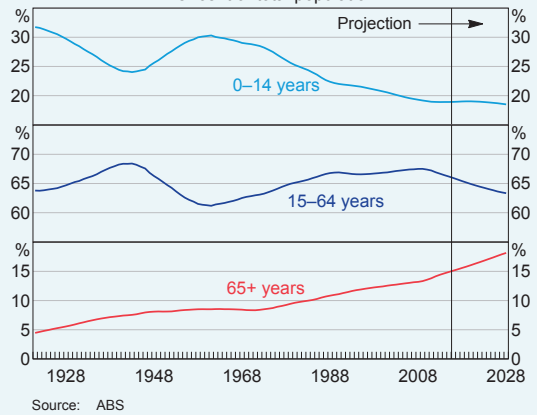
Households' expectations about future income growth and asset valuations, and the uncertainty around those expectations, are also relevant to their saving decisions. Many households accumulate precautionary savings to insure against an unanticipated loss of future income or unexpected expenditure (such as on a medical procedure). At the macroeconomic level, precautionary saving is likely to be particularly important if households are very risk averse or constrained in their ability to borrow to fund consumption when their incomes are temporarily low. For example, the financial crisis is likely to have made households more uncertain about their future employment or income growth and/or led them to reassess their tolerance for risk, which would have encouraged them to increase their rate of saving. Surveys at that time showed an increase in the share of households nominating bank deposits or paying down debt as the 'wisest place for saving', although this may have also reflected lower expected rates of return on other financial assets following the financial crisis.

The level of interest rates can also influence the saving ratio. On the one hand, the current low level of interest rates reduces both the return to saving and the cost of borrowing, which encourages households to bring forward consumption; this might explain some of the recent decline in the aggregate household saving ratio. Low interest rates also support the value of household assets, which increases the amount of collateral households can borrow against, and potentially reduces the incentives for households to save. On the other hand, the household sector in aggregate holds more debt than interest-earning assets, so cyclically low interest rates provide a temporary boost to disposable income through a reduction in net interest payments, some of which may be saved. Households also need to save more to achieve a given target level of savings when interest rates are low.

Structural changes to the Australian financial system have been important longer-term drivers of changes in household saving behaviour. Financial deregulation in the 1980s and a structural shift to low inflation and low interest rates in the 1990s allowed households that were previously credit constrained to accumulate higher levels of debt for a given level of income. This rise in indebtedness was accompanied by strong growth in housing prices and a reduction in the household saving ratio to unusually low levels. In this way households were able to support consumption via the withdrawal of housing equity.² Innovation in financial products – such as credit cards and home-equity loans – also gave households much better access to finance. The adjustment to these structural changes in the financial system appears to have largely run its course by the mid 2000s.³

The ageing of the population is another longer-term influence on the saving ratio. If shares of younger and older households in the population were constant over time, the different saving behaviours of these households would not affect the aggregate saving ratio. However, Australia's baby-boomer generation is a larger share of the population now and has been entering the retirement phase since around 2010 (Graph B3).⁴ Because households save less in their later years, this is expected to have a gradual but long-lasting downward influence on the aggregate household saving ratio. However, a potentially offsetting influence is rising longevity, which may lead households to save more during their working years to finance a longer period of retirement.

Graph B3
Population Shares by Age
Per cent of total population



The amount that each of these drivers have contributed to recent trends in the aggregate household saving ratio is unclear. It is also uncertain how they will evolve over the next few years, although the Bank's central forecast embodies a further modest decline in the saving ratio, that reflects, in part, the unwinding of the impact on saving from the earlier boom in commodity prices and mining investment. ↗

2 See Schwartz C, T Hampton, C Lewis and D Norman (2006), 'A Survey of Housing Equity Withdrawal and Injection in Australia', RBA Research Discussion Paper No 2006-08.
3 See Ellis L (2013), 'Housing and Mortgage Markets: The Long Run, the Short Run and the Uncertainty in Between', Address to the Citibank Property Conference, Sydney, 23 April.
4 See Kent C (2014), 'Ageing and Australia's Economic Outlook', Address to the Leading Age Services Australia (LASA) National Congress, Adelaide, 20 October.

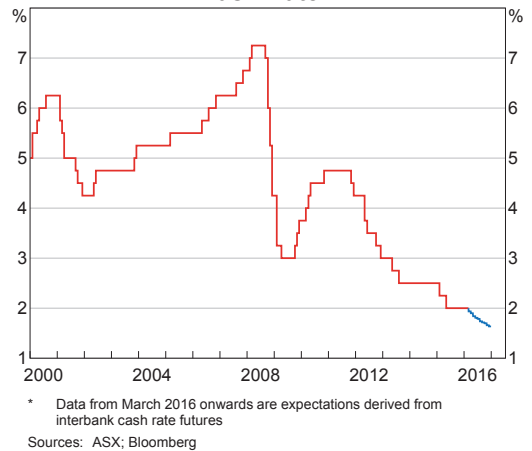
4. Domestic Financial Markets

The cost of wholesale funding has increased in recent months with yields on paper issued by banks and non-financial corporations having risen relative to benchmark rates; nonetheless, they remain low compared to history. In the second half of 2015, most housing lenders increased their standard variable lending rates. Overall, housing loan rates for owner-occupiers have risen to their levels prior to the easing of monetary policy in May, while those for investors have risen by more, to be back to their levels of around a year ago. Partly in response to this, growth in lending to housing investors has slowed, while growth in lending to owner-occupiers has picked up. Business lending rates remain close to historic lows for both small and large businesses, consistent with strong competition in the banking sector. Business lending has grown strongly in recent months, although there has been relatively little corporate bond issuance. Australian equity prices have fallen recently in response to further declines in commodity prices and concerns about the global economic outlook.

Money Markets and Bond Yields

After lowering the cash rate target in two 25 basis point steps in the first half of 2015, the Reserve Bank has maintained the cash rate target at 2 per cent since May 2015. Rates on overnight indexed swaps (OIS) imply an expectation of a further reduction in the cash rate to 1.75 per cent in the second half of this year (Graph 4.1). Interest rates on bank bills and negotiable certificates of deposit increased at the end of last year, with the three-month spread to OIS reaching its highest level in four years, although

Graph 4.1
Cash Rate*

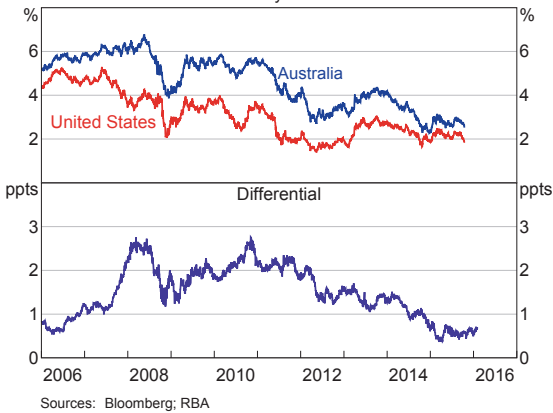


it remains well below the levels reached in 2008. This is consistent with a generalised increase in the cost of wholesale funding in offshore markets, and the higher cost of Australian dollar funding in the forward foreign exchange market. Secured funding rates in the repurchase agreement (repo) market have also risen relative to OIS rates in recent months.

Yields on long-term Australian Government securities (AGS) have traded in relatively narrow ranges in recent months. AGS yields have continued to follow offshore bond markets, as evidenced by the spread between AGS and US Treasuries remaining broadly steady over the past year or so (Graph 4.2).

The Australian Office of Financial Management (AOFM) revised its planned issuance of AGS in the 2015/16 financial year in response to updated economic and budget forecasts in the Mid-Year Economic and Fiscal Outlook (MYEFO). Net issuance

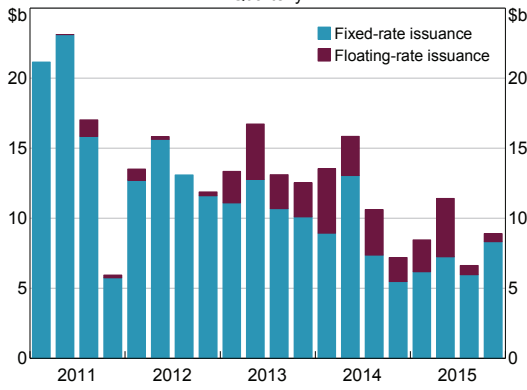
Graph 4.2
Government Bond Yields
10-year



during 2015/16 is expected to be around \$56 billion, \$15 billion higher than at the time of the 2015/16 budget, taking total AGS on issue to around \$430 billion at the end of the financial year.

State and territory governments ('semis') have raised around \$17 billion since the beginning of the 2015/16 financial year, which is lower than in preceding years (Graph 4.3). After taking account of maturities, the total stock of bonds outstanding increased only slightly to \$243 billion. Planned issuance under long-term borrowing programs was revised down by a number of states (particularly by New South Wales) in their recent mid-year updates. This has resulted in an aggregate indicative

Graph 4.3
Bond Issuance by States and Territories
Quarterly



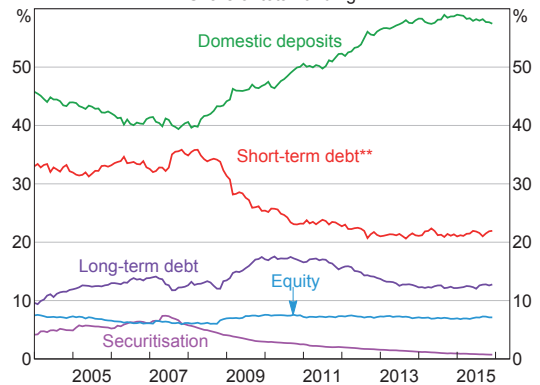
funding requirement of \$22 billion for the 2015/16 financial year. Abstracting from refinancing needs, net issuance for the financial year is expected to be subdued, at around \$3 billion; this primarily reflects the funding requirement of Western Australia. The states have issued around 75 per cent of their gross funding target for the financial year thus far.

Bond issuance by non-residents into the domestic market ('Kangaroo' issuance) was \$32 billion in 2015, which was around the average of recent years. A comparatively higher proportion of Kangaroo issuance in late 2015 was by non AAA rated issuers, which is consistent with a higher level of Kangaroo issuance by corporate issuers (see 'Business Financing' section for further details). Around \$4 billion in Kangaroo bonds have been issued since the start of this year. Secondary market spreads to AGS on AAA rated Kangaroo bonds are broadly unchanged since November, remaining around historically low levels.

Financial Intermediaries

The funding composition of bank balance sheets was little changed over 2015, with the deposit share of funding edging lower as the wholesale debt and equity shares increased slightly (Graph 4.4).

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

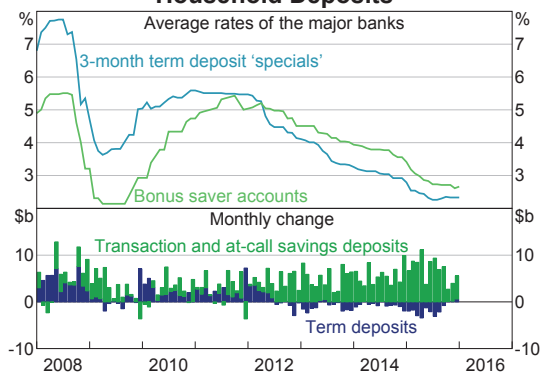
** Includes deposits and intragroup funding from non-residents

Sources: APRA; RBA; Standard & Poor's

Conditions in wholesale funding markets remain accommodative, although spreads on bank paper have widened relative to benchmark rates. The major banks also raised equity in the second half of the year to meet upcoming changes to prudential regulation.

Over 2015, debt funding costs declined by around 20 basis points more than the cash rate, reflecting lower wholesale funding costs and reduced deposit rates. Deposit rates have been little changed in recent months; households have continued to invest more in 'at-call' deposit savings products, such as bonus saver accounts, consistent with the higher rates for these products relative to term deposits (Graph 4.5).

Graph 4.5
Household Deposits

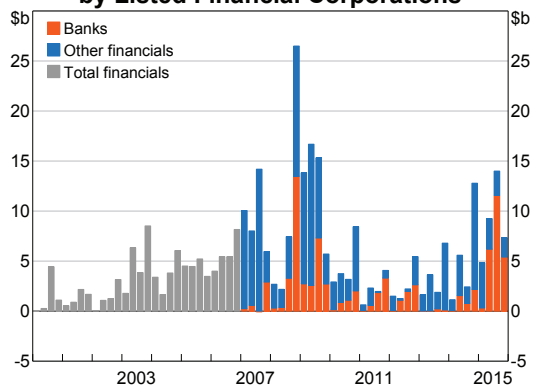


Sources: APRA; Canstar Cannex; RBA

Net equity raisings by financial corporations was around \$35 billion in 2015, which is the largest amount raised since 2009, with the bulk of this raised by the major banks to increase their common equity in preparation for changes to prudential regulation (Graph 4.6). In the December quarter, Westpac raised \$3.9 billion and total financial corporations' net equity raisings was \$7.3 billion. Westpac's issuance followed sizeable raisings by each of the other major banks in earlier quarters.

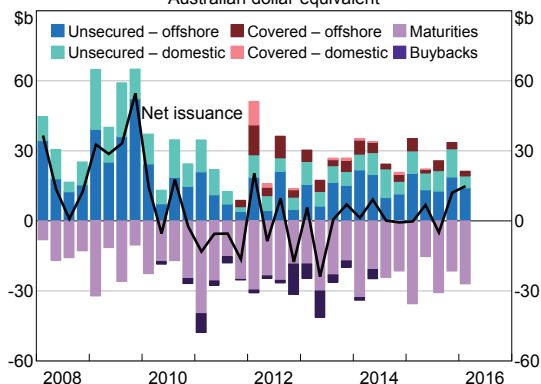
Bond issuance by Australian banks in 2015 was strong relative to the post-crisis period (Graph 4.7). Australian banks have raised around \$41 billion

Graph 4.6
Net Equity Raisings
by Listed Financial Corporations



Sources: ASX; RBA

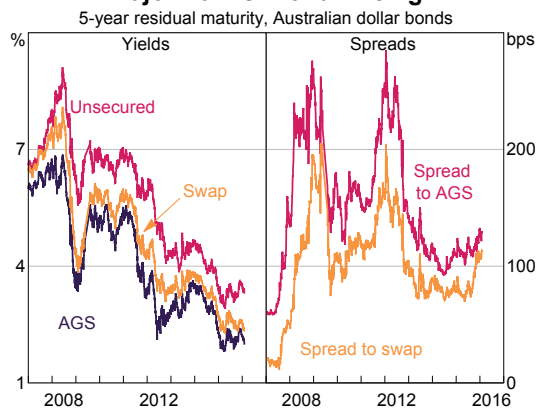
Graph 4.7
Australian Banks' Bond Issuance*
Australian dollar equivalent



* Latest quarter gross issuance and net issuance are quarter to date
Source: RBA

since the start of November, predominantly in offshore markets; after accounting for maturities, the stock of bank bonds has increased by \$19 billion to \$508 billion. Secondary market yields on the major banks' bonds have increased over recent months while spreads to AGS and interest rate swap rates have generally widened (Graph 4.8). The increased spread between yields on bank bonds and interest rate swaps suggests higher costs for new issuance. The widening in spreads on bank paper, which is evident elsewhere, reflects an increase in the cost of liquidity as well as some widening in credit premia.

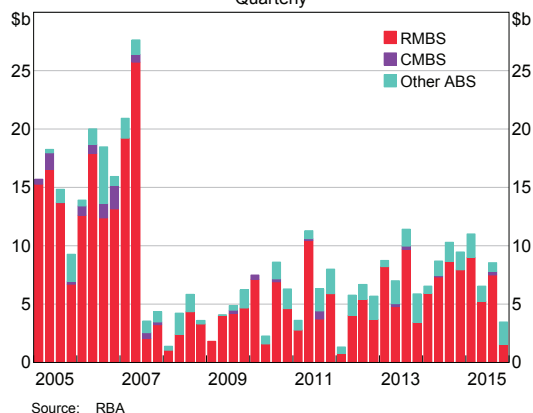
Graph 4.8
Major Banks' Bond Pricing



Hybrid issuance by Australian financials continued at a moderate pace, with around \$3.5 billion issued since October, primarily in the form of Tier 2 securities issued by the major banks and insurers. Primary market spreads on recently issued hybrid securities were generally wider than on securities issued earlier in 2015.

Australian asset-backed issuance totalled \$30 billion in 2015, which was around the average since 2009. As in previous years, this was mainly RMBS issuance. The pace of issuance has slowed in recent months, with just three deals totalling \$1.6 billion issued since November, two of which were backed by assets other than residential mortgages (Graph 4.9).

Graph 4.9
Issuance of Australian ABS
Quarterly

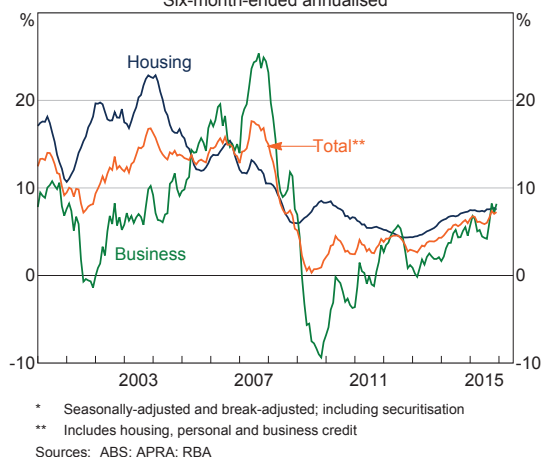


Primary issuance spreads on senior RMBS tranches were wider than those issued earlier in 2015, though they remain at relatively low levels.

Financial Aggregates

Total credit has grown by around 7 per cent in six-month annualised terms (Graph 4.10). Housing credit growth has been steady at around 7½ per cent, although the composition of this growth has shifted markedly away from investor lending and towards owner-occupier lending. Business credit growth picked up over the year. Growth in credit has been a little faster than that in broad money, which grew by around 6 per cent over the year (Table 4.1).

Graph 4.10
Credit Growth by Sector*
Six-month-ended annualised



Household Financing

The pace of housing credit growth has been steady over the past year. Net housing debt has continued to grow around 1 percentage point slower than housing credit due to ongoing rapid growth in deposits in mortgage offset accounts (Graph 4.11). Housing loan approvals are consistent with housing credit continuing to grow at about its current pace.

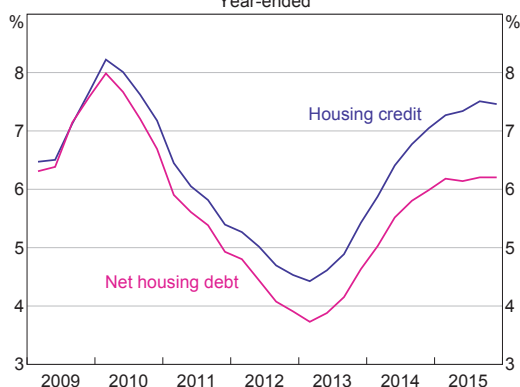
In the second half of 2015, most lenders increased their standard variable housing interest rates by 15–20 basis points, after raising rates for housing

Table 4.1: Financial Aggregates
Percentage change^(a)

	Three-month ended		Year-ended
	September 2015	December 2015	December 2015
Total credit	1.9	1.6	6.6
– Housing	1.9	1.8	7.5
– Owner-occupier	1.8	2.2	6.8
– Investor	2.0	1.0	8.5
– Personal	0.2	-0.4	0.0
– Business	2.4	1.6	6.3
Broad money	1.5	1.3	6.1

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

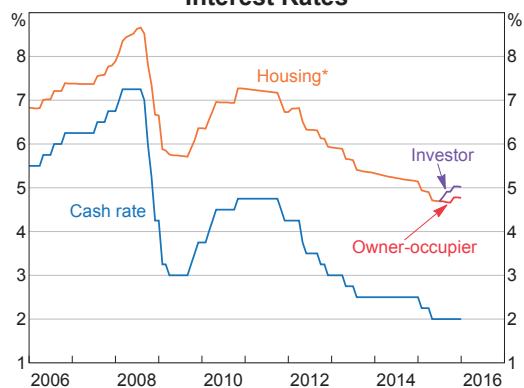
Graph 4.11
Housing Credit Growth*
Year-ended



* Seasonally and break adjusted
Sources: ABS; APRA; RBA

investors in the middle of the year. These increases lifted average outstanding housing interest rates by nearly 20 basis points (Graph 4.12). Taking into account the reductions in interest rates in the first half of 2015, advertised standard variable housing interest rates are around 30 basis points lower for owner-occupiers compared to a year ago and are little changed for investors (Table 4.2). Lenders have not raised their advertised fixed rates to the same extent as standard variable housing rates, with fixed rates around 40 and 60 basis points lower over the year for investors and owner-occupiers respectively. Consistent with this, a higher share of mortgages has been taken out with fixed interest rates.

Graph 4.12
Interest Rates



* Estimated outstanding rate
Sources: ABS; APRA; Perpetual; RBA

There has been an increase in the dispersion of housing interest rates across lenders over recent months, with the major banks raising housing interest rates by more than the mid-size lenders and smaller lenders.

Following the introduction of differential pricing for owner-occupier and investor loans in mid 2015, the composition of housing credit growth has shifted towards owner-occupier lending and away from investor lending (Graph 4.13). Six-month annualised owner-occupier credit growth increased from around 5 per cent in June 2015 to around 8½ per cent in December. Conversely, investor credit growth decreased from around

Table 4.2: Intermediaries' Fixed and Variable Lending Rates

	Interest rate Per cent	Change over 2015 Basis points	Change since July 2015 Basis points
Housing loans			
– Standard variable rate ^{(a)(d)}			
– Owner-occupier	5.63	–30	17
– Investor	5.90	–3	44
– Package variable rate ^{(b)(d)}			
– Owner-occupier	4.83	–25	16
– Investor	5.11	3	44
– Fixed rate ^{(c)(d)}			
– Owner-occupier	4.43	–65	–23
– Investor	4.70	–38	4
– Average outstanding rate ^(d)	4.86	–29	17
Personal loans			
– Variable rate ^(e)	11.35	10	11
Small business			
– Term loans variable rate ^(f)	6.60	–50	0
– Overdraft variable rate ^(f)	7.47	–50	0
– Fixed rate ^{(c)(f)}	5.43	–35	5
– Average outstanding rate ^(d)	5.62	–63	–10
Large business			
Average outstanding rate ^(d)	3.92	–69	–4

(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

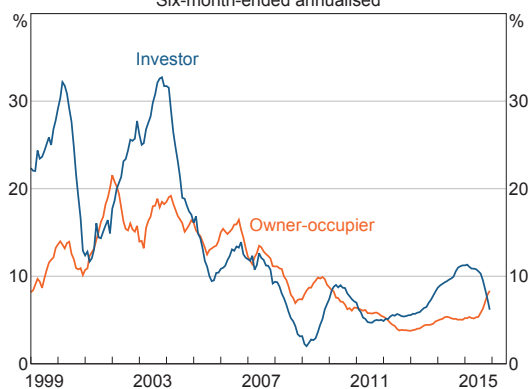
(d) RBA estimates

(e) Weighted average of variable rate products

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

Sources: ABS; APRA; Canstar Cannex; RBA

Graph 4.13
Housing Credit Growth*
Six-month-ended annualised



* Seasonally and break adjusted

Sources: ABS; APRA; RBA

11 per cent in June 2015 to around 6 per cent in December. The introduction of differential pricing also resulted in borrowers and lenders updating the reported purpose of a large number of loans to owner-occupier from investor; the RBA adjusts for this when measuring investor and owner-occupier credit growth. The net value of loan purpose switching has amounted to \$34 billion since July.

In response to lower housing interest rates over recent years, borrowers have had the opportunity to either reduce the principal on their loan by making additional payments above what is required, or to reduce their loan repayments in line with reductions in the required repayment and

use the cash for other purposes. Household survey data indicate that the share of households ahead on their mortgage repayments has increased over recent years for both owner-occupiers and investors to its highest level since the early 2000s. These excess repayments form a buffer for households in the event that housing interest rates increase, as they did in the second half of 2015.

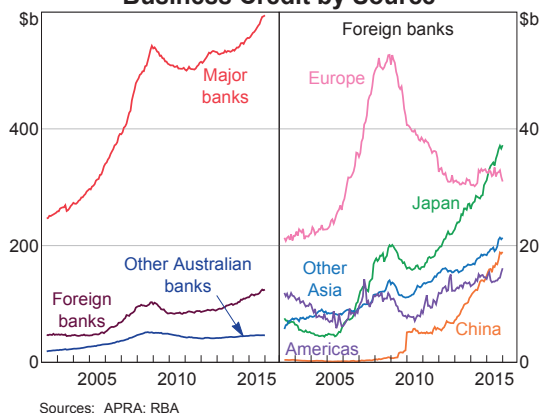
Business Financing

Growth in external funding for businesses picked up over recent months, driven by a faster pace of growth in business credit and an increase in equity raisings, while non-intermediated debt issuance has been subdued.

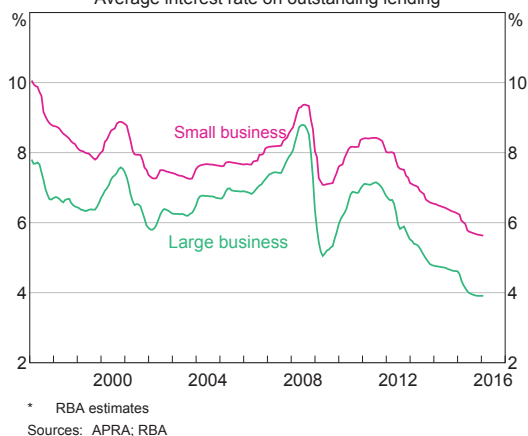
Business credit growth has accelerated over recent months, with growth over 2015 at its highest rate since 2009. Part of the growth in 2015 is due to the depreciation of the currency, which has increased the Australian dollar value of foreign-currency denominated business credit. Nevertheless, growth has been robust even abstracting from valuation effects. Part of the recent increase reflects greater use of intermediated credit by businesses rather than non-intermediated debt issuance. Business credit growth continues to be driven by the major banks and the foreign banks. In particular, the local operations of Japanese and Chinese institutions have significantly increased their business lending over 2015 (Graph 4.14). Lending to private non-financial corporations has been responsible for the majority of growth in business credit, while growth in lending to unincorporated (typically smaller) businesses has remained relatively steady. Business loan approvals have increased over 2015 and remain at a relatively high level, consistent with the faster pace of business credit growth seen in recent months.

The average outstanding interest rate on intermediated business borrowing has been little changed over recent months (Graph 4.15). Since the start of 2015, average rates on outstanding small and large business loans have declined by

Graph 4.14
Business Credit by Source



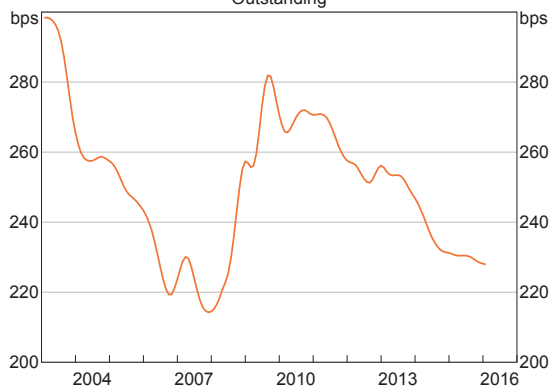
Graph 4.15
Australian Business Lending Rates*
Average interest rate on outstanding lending



over 60 basis points. Strong competition among lenders has returned interest margins for lending to large businesses back to the levels of the mid 2000s (Graph 4.16). However, the recent increase in bank bill rates is expected to flow through to a modest increase in business borrowing rates, particularly for those businesses with loans directly priced off bank bill rates.

Gross bond issuance by Australian non-financial corporations in 2015 totalled \$27 billion, which was well above 2014 levels, as a number of large issuers returned to debt markets in the first half of the year. However, issuance by Australian corporations was modest in recent months, with seven issuers raising

Graph 4.16
Implied Spread on Business Lending*
 Outstanding



* Weighted-average interest rates on lending less funding costs; 13-term Henderson trend

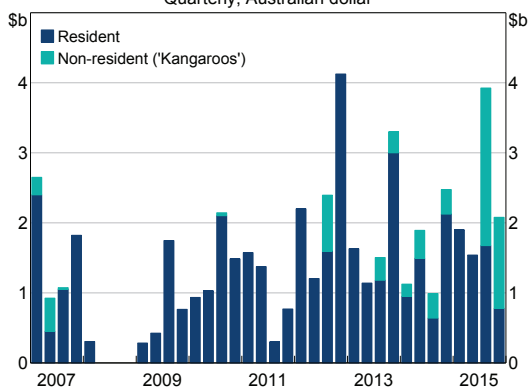
Sources: APRA; Bloomberg; Financial Reports; RBA; UBS AG, Australian Branch

around \$1 billion. Kangaroo issuance by (non-resident) non-financial companies made a sizeable contribution to domestic corporate bond market activity with two issuers raising around \$1 billion (Graph 4.17).

Australian corporate bond yields have risen in recent months, leading to a significant widening in corporate bond spreads relative to benchmark rates; this widening has been more pronounced for bonds issued by resource-related corporations and for bonds issued offshore (Graph 4.18). While resource companies' bond spreads have typically been marginally narrower than spreads for non-resource companies in recent years, they are currently around 75 basis points wider, as these companies face weaker conditions in commodities markets.

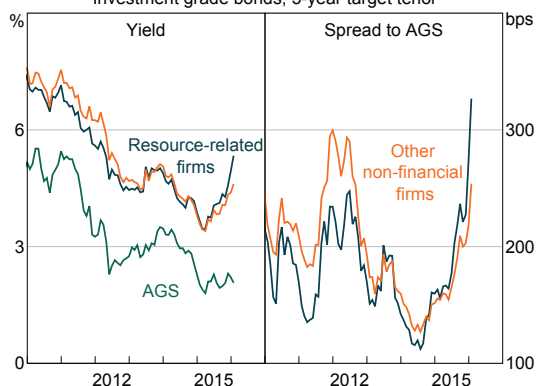
The credit ratings agencies have made downward revisions to their price assumptions on a number of commodities for the next couple of years, which has affected the credit ratings of some Australian non-financial corporations. Since the start of November, 23 (mostly resource-related) companies have experienced downgrades to their credit ratings or outlooks, or been placed on review for a downgrade.

Graph 4.17
Domestic Market Corporate Bond Issuance
 Quarterly, Australian dollar



Source: RBA

Graph 4.18
Australian Corporate Bond Pricing
 Investment grade bonds, 5-year target tenor

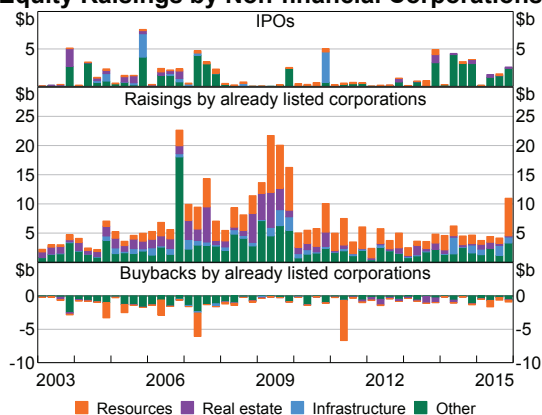


Sources: Bloomberg; RBA; S&P Capital IQ

Non-financial corporations (including real estate companies) raised \$26 billion in net equity in 2015, which was slightly lower than in 2014 (Graph 4.19). IPO activity proceeded at a moderate pace in 2015 following a large number of new listings in 2014. There was a strong pick-up in equity raisings in the December quarter, with \$13 billion raised predominantly by already listed corporations; this included capital raisings by energy companies seeking to pay down debt and strengthen their balance sheets following falls in oil prices.

Graph 4.19

Equity Raisings by Non-financial Corporations*



* Excludes financial corporations other than real estate; excludes hybrid conversions
Sources: ASX; RBA

Merger and acquisition (M&A) activity increased in 2015 with \$85 billion in deals announced by listed companies. Activity was supported by the lower Australian dollar and interest from foreign buyers. M&A activity picked up in the December quarter with around \$39 billion announced. This was concentrated in the financials and industrials sectors, and partly reflected takeover interest in Asciano, including a restructured offer from Brookfield Infrastructure Partners and rival interest from a consortium led by Qube.

Equity Markets

Australian equity prices fell by 2 per cent over 2015, with sharp falls in commodity prices weighing on the resources sector (Graph 4.20; Table 4.3). Since the start of 2016, equity prices have fallen by 8 per cent alongside an increase in global share market volatility and further falls in oil prices. The Australian market generally underperformed global equity markets over 2015; however, this underperformance can be partly attributed to the higher dividends that are paid by Australian companies. On a total return basis, Australian equities rose by 3 per cent over 2015, outperforming the US but underperforming European markets.

Graph 4.20

Share Price Indices

End December 2008 = 100



Sources: Bloomberg; Thomson Reuters

Table 4.3: Equity Markets

Percentage change

	2014	2015	2016 to date
Australia (ASX 200)	1.1	-2.1	-7.9
– Resources	-19.0	-28.8	-14.2
– Financials	6.5	0.7	-10.3
– Other	6.1	6.5	-3.7
Europe (Eurostoxx)	1.7	8.0	-10.3
United States (S&P 500)	11.4	-0.7	-6.8
World (MSCI)	7.2	-0.7	-7.5

Source: Bloomberg

Resources sector share prices fell by 29 per cent over 2015, and have fallen a further 14 per cent since the start of this year (Graph 4.21). Share prices for this sector are now at their lowest level in over 10 years; at the end of 2015, the sector accounted for 16 per cent of the ASX 200 by market capitalisation, down from 24 per cent around two years ago.

The materials sector has declined by around 28 per cent since mid October alongside the fall in the iron ore price (Graph 4.22). Energy sector share prices have declined by 20 per cent, with oil prices falling by roughly 30 per cent over this period. Partially offsetting the negative effect of lower commodity prices has been continued cost cutting, particularly by the major diversified miners.

After being little changed over 2015, financial sector share prices have fallen by around 10 per cent since the start of this year driven by banks and diversified financials, and has occurred alongside falls in financial share prices globally.

Equity prices for companies outside the resources and financial sectors rose by 7 per cent over 2015. These companies have continued to outperform the broader index in aggregate since the start of this year, with a number reporting an improved outlook for earnings.

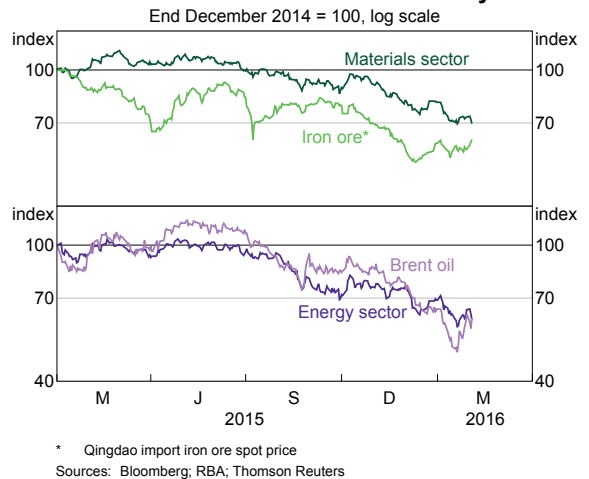
Analyst earnings expectations for 2015/16 and 2016/17 have been revised lower in recent months, with resources sector earnings expectations having fallen alongside further commodity price declines.

Valuations of Australian equities, as measured by forward price-earnings ratios, have declined in recent months reflecting lower share prices. Valuations remain above or around their long-term averages across all the broad sectors (Graph 4.23). ↗

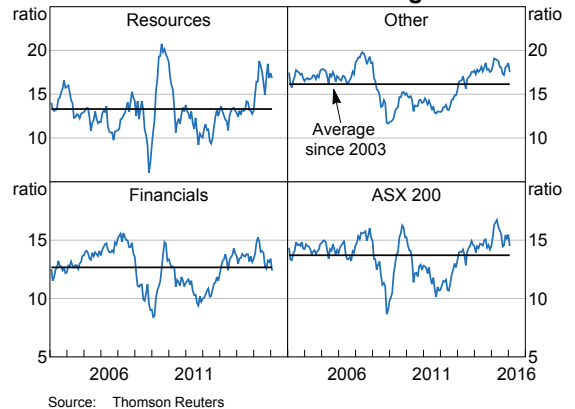
Graph 4.21
Australian Share Price Indices



Graph 4.22
Resources Share Prices and Commodity Prices



Graph 4.23
ASX 200 Forward Price-earnings Ratios



5. Price and Wage Developments

Recent Developments in Inflation

Inflation rose in the December quarter, following a low September quarter outcome (Table 5.1; Graph 5.1). Indicators of underlying inflation increased to be around ½ per cent in the quarter. Over the year, various measures suggest that underlying inflation was about 2 per cent and in line with the forecast in the November *Statement* (Graph 5.2). Underlying inflation continues to be affected by a range of different forces. The depreciation of the Australian dollar is putting upward pressure on the prices of tradable items. At the same time, a period of spare capacity in the

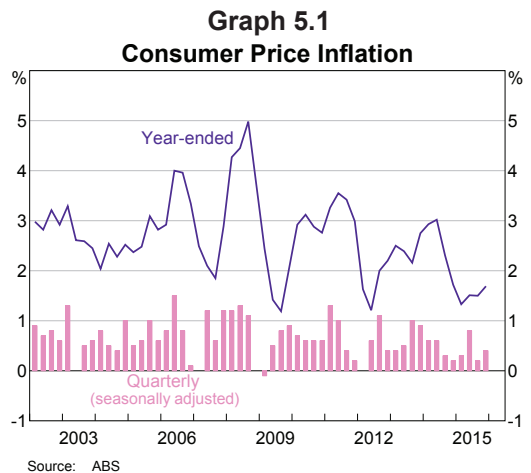


Table 5.1: Measures of Consumer Price Inflation
Per cent

	Quarterly ^(a)		Year-ended ^(b)	
	December quarter 2015	September quarter 2015	December quarter 2015	September quarter 2015
Consumer Price Index	0.4	0.5	1.7	1.5
Seasonally adjusted CPI	0.4	0.2	–	–
– Tradables	0.2	–0.1	0.8	–0.3
– Tradables (excl. volatile items and tobacco) ^(c)	0.5	–0.1	0.8	0.2
– Non-tradables	0.4	0.4	2.3	2.6
– Non-tradables (excl. utilities)	0.4	0.5	2.4	2.7
<i>Selected underlying measures</i>				
Trimmed mean	0.6	0.3	2.1	2.1
Weighted median	0.5	0.4	1.9	2.1
CPI excl. volatile items ^(c)	0.6	0.3	2.1	2.1

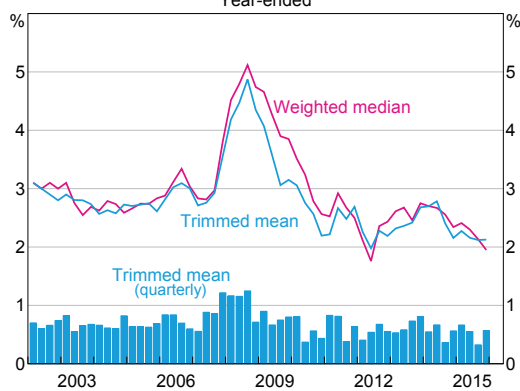
(a) Except for the headline CPI, quarterly changes are based on seasonally adjusted data; those not published by the ABS are calculated by the RBA using seasonal factors published by the ABS

(b) Year-ended changes are based on non-seasonally adjusted data, except for the trimmed mean and weighted median

(c) Volatile items are fruit, vegetables and automotive fuel

Sources: ABS; RBA

Graph 5.2
Measures of Underlying Inflation
Year-ended



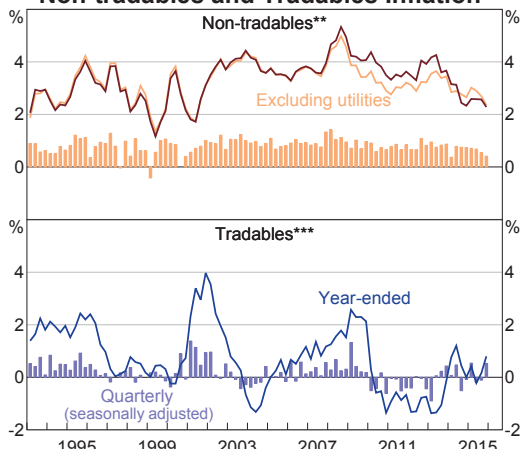
Source: ABS

labour market and a number of domestic product markets, as well as declines in the cost of business inputs such as fuel and utilities, have put downward pressure on tradables and non-tradables inflation.

Headline inflation rose in the December quarter to 0.4 per cent (in seasonally adjusted terms) and remains low over the year at 1.7 per cent, partly reflecting temporary factors including lower fuel prices following a further decline in oil prices and a decline in utility prices in the September quarter.

Non-tradables inflation (excluding utility prices) edged down further in the December quarter and remains below its inflation-targeting average in year-ended terms (Graph 5.3). Market services inflation remains low, reflecting spare capacity in the labour market and the associated low growth in labour costs (Graph 5.4). Also, residential rent inflation has declined to low levels across capital cities, consistent with the general upward trend in rental vacancies (Graph 5.5). In Perth, the level of rents has actually declined over the year, reflecting weaker demand due to lower population growth, combined with an increase in the supply of rental properties over recent years. Inflation in new dwelling costs has declined from its very strong pace in early 2015, particularly in Sydney.

Graph 5.3
Non-tradables and Tradables Inflation*



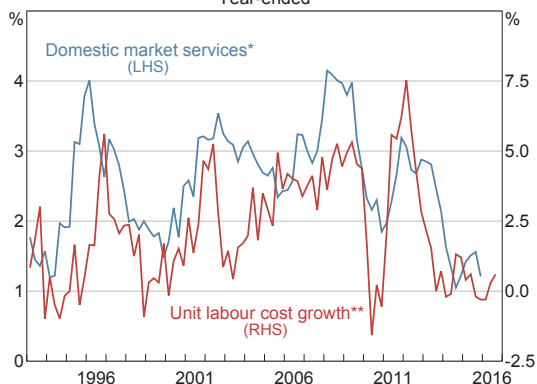
* Adjusted for the tax changes of 1999–2000

** 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

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

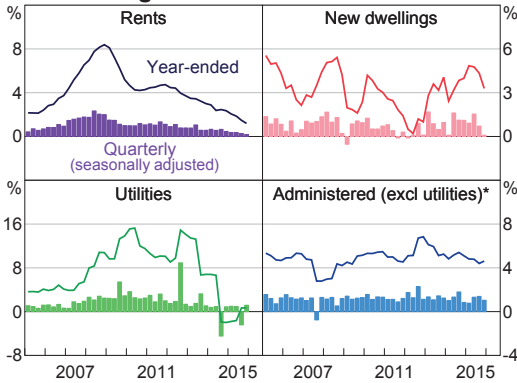
** Moved forward by four quarters, non-farm

Sources: ABS; RBA

The prices of administered items are less affected by spare capacity in the labour market than other non-tradable items. Overall, inflation in administered prices increased in the December quarter to be around its inflation-targeting average. This followed a low outcome in the previous quarter driven by regulatory decisions that resulted in lower utility prices.

Graph 5.5

Housing and Administered Inflation



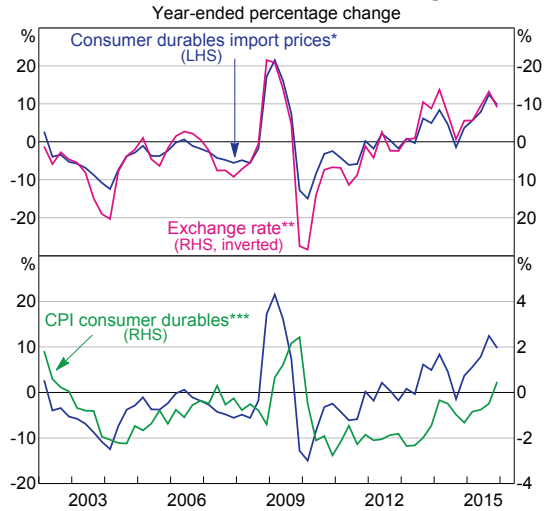
* Includes education, child care, health services, property rates, urban transport fares, postal services, some motor vehicle services and pharmaceutical products

Sources: ABS; RBA

The prices of tradable items (excluding volatile items and tobacco) increased in the December quarter. These prices tend to be heavily influenced by movements in the exchange rate, as these items are either imported or more exposed to international competition than prices for non-tradable items. The import prices for retail items (such as consumer durables or food and alcohol) have risen in line with the depreciation of the exchange rate over recent years (Graph 5.6). This increase in the cost of imported goods is putting upward pressure on final retail prices, although inflation in retail items is often volatile from quarter-to-quarter and other factors may play a role. In the December quarter, there was a relatively broad-based pick-up in consumer durables prices, after a decline in the September quarter, while the prices of food and alcohol were little changed (Graph 5.7). The Bank's liaison suggests that heightened competitive pressures, including from new entrants, may have limited the extent to which higher import costs have been evident in final retail prices over the past few years. Retailers are expected to pass these higher costs on gradually, though ongoing competition may temper the rise in final consumer prices for some time.

Graph 5.6

Consumer Prices and the Exchange Rate



* Consumption goods (excluding food and beverages), reweighted using CPI weights

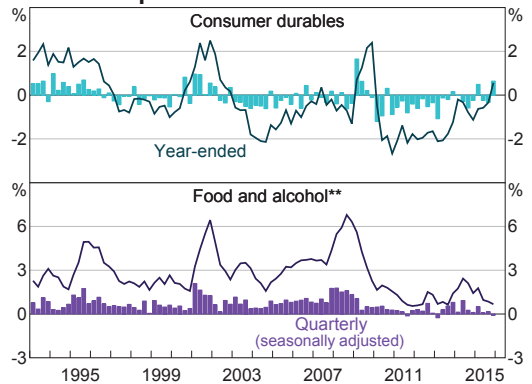
** Import-weighted index, quarter average

*** Retail items (excluding food and alcohol)

Sources: ABS; RBA

Graph 5.7

Components of Retail Inflation*



* Adjusted for the tax changes of 1999–2000

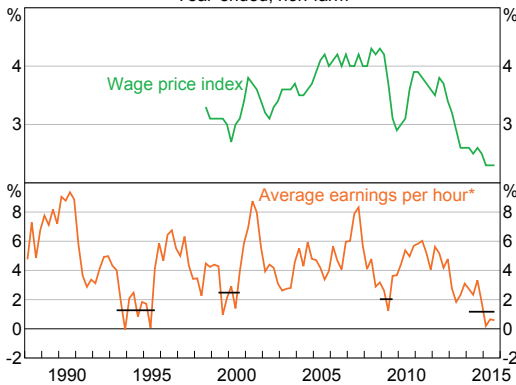
** Excluding fruit, vegetables, and meals out and take away foods

Sources: ABS; RBA

Labour Costs

Labour cost pressures remain weak. The wage price index (WPI) increased by 0.6 per cent in the September quarter and by 2.3 per cent over the year (Graph 5.8). Growth in measures of labour income that capture changes in the composition of employment and incorporate a wider range

Graph 5.8
Wage Growth
Year-ended, non-farm



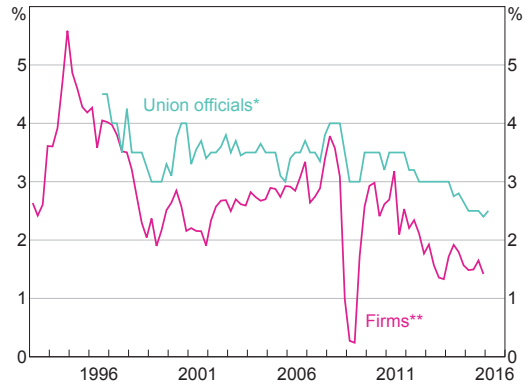
* The black lines represent the average over the period
Sources: ABS; RBA

of payments has been lower than growth in the WPI. For example, average earnings per hour (from the national accounts) grew by only 0.6 per cent over the past year. The recent period has been comparable to the episode of low earnings growth in the early 1990s. Unions and firms expect wage growth to remain low for some time (Graph 5.9).

Low wage growth has been broad based across the public and private sectors, industries and states over the past few years. Wage growth has continued to decline in many goods-related industries where employment growth has been weakest (Graph 5.10). In contrast, wage growth has been little changed in household service industries where employment has increased substantially. Business services wage growth has continued to decline, driven by the industries that appear to be more exposed to the fall in mining investment, such as rental, hiring & real estate and administrative & support services. Wage growth has been broadly unchanged in some other business service industries, for example professional, scientific & technical services and financial & insurance services, where employment has increased of late.

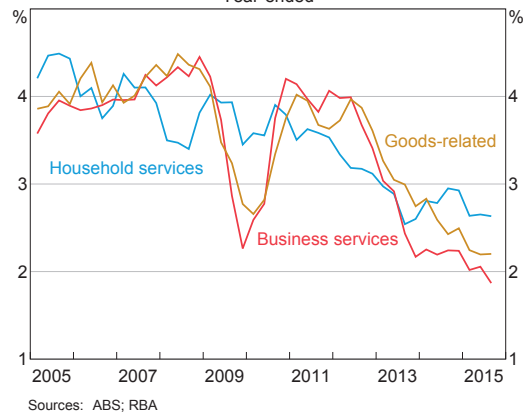
Aggregate labour income growth has been weak not only because of low wage growth within industries, but also because there has been a shift in

Graph 5.9
Wage Growth Expectations
Year-ahead



* RBA survey; median expectation
** NAB survey; next three months; annualised
Sources: Australian Council of Trade Unions; NAB; RBA; Workplace Research Centre

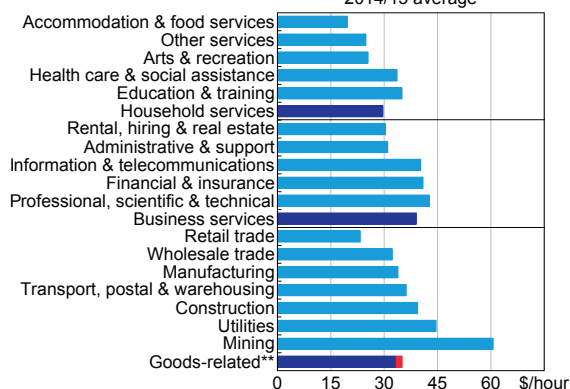
Graph 5.10
Wage Price Index Growth
Year-ended



Sources: ABS; RBA

the composition of employment away from mining-related activities towards household services. The mining industry has the highest earnings per hour of all industries and, on average, the household services sector has lower earnings per hour than the business services and goods-related sectors (Graph 5.11). It is also likely that some workers have moved from high-paying jobs in mining-related activities to similar types of work but in lower-paying positions in the non-mining economy. For example, liaison suggests that many of the construction workers employed in the investment

Graph 5.11
Average Hourly Earnings*
2014/15 average



* Average weekly earnings divided by average weekly hours worked
 ** Red bar shows effect of mining
 Sources: ABS; RBA

phase of the mining boom had previous experience in civil and residential construction and have been able to return to jobs in these industries (often at lower wage rates).¹

Overall, some decline in wage growth would be expected given a period of spare capacity in the labour market. However, the decline has been more pronounced than that implied by the historical relationship with the unemployment rate. Several factors may help to explain this, including the lower level of inflation expectations and what appears to have been an increase in labour market flexibility that may have provided firms with greater scope to adjust wages in response to a given change in demand for their goods and services.²

Unit labour costs have been little changed for around four years because labour productivity (output per hour worked) and average earnings have grown at broadly the same pace. This is likely to have encouraged firms to employ more people than they would have otherwise. Together with

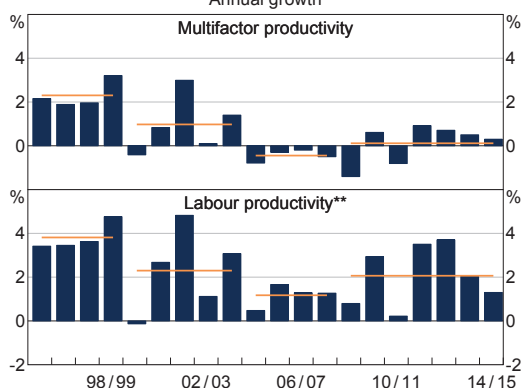
1 For a more detailed discussion see Doyle, M-A (2014), 'Labour Movements during the Resources Boom', RBA *Bulletin*, December 2014, pp 7–16 and Heath, A (2015), 'The Role of the RBA's Business Liaison Program' Address to the Urban Development Institute of Australia (WA Division Incorporated) Luncheon, Perth, 24 September.
 2 For a more detailed discussion see Jacobs D and A Rush (2015), 'Why is Wage Growth So Low?', RBA *Bulletin*, June Quarter, pp 10–18.

the depreciation of the exchange rate over recent years, low unit labour cost growth is also helping to restore the international competitiveness of Australia's labour, following a period of relatively strong growth in unit labour costs.

Average labour productivity and multifactor productivity growth have picked up somewhat, after slowing through the mid 2000s (Graph 5.12).³ This improvement in productivity growth has been broad based across industries, just as the slowdown in the mid 2000s was broad based (Graph 5.13).

While the pick-up in labour productivity growth has helped to improve national income growth and living standards, it has largely been offset by the effect of falls in the terms of trade and labour force participation. Indeed, growth of net national disposable income (NNDI) per hour worked was high through the mid 2000s, even though labour productivity growth was low, due to the boost to incomes associated with the rapid rise in the

Graph 5.12
Market Sector Productivity*
Annual growth

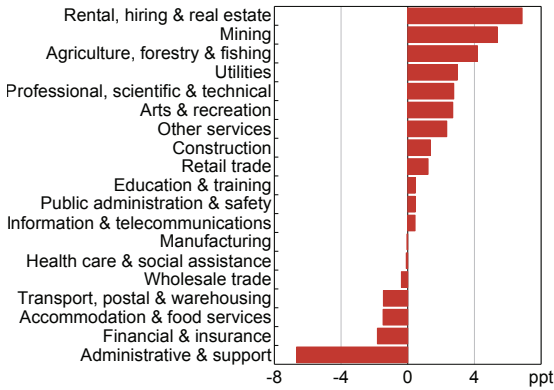


* Lines represent the averages over ABS productivity cycles
 ** GDP per hour worked
 Sources: ABS; RBA

3 The ABS only publishes multifactor productivity growth for the market sector, which excludes: health care & social assistance, public administration & safety, and education & training. The trends in labour productivity for the market sector are consistent with those for all industries.

Graph 5.13
Labour Productivity Improvement

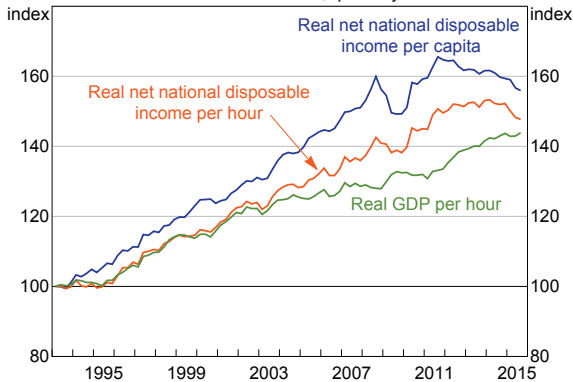
Change in average annual growth,
03/04–07/08 to 07/08–14/15



Sources: ABS; RBA

terms of trade (Graph 5.14).⁴ During this period, growth of income was even higher on a per capita basis because employment rose by more than the population. More recently, the terms of trade have declined and the labour force participation rate remains below its peak of a few years ago. This has offset the improvement in productivity growth and so NNDI per capita has declined somewhat.

Graph 5.14
Productivity and Income
March 1993 = 100, quarterly



Sources: ABS; RBA

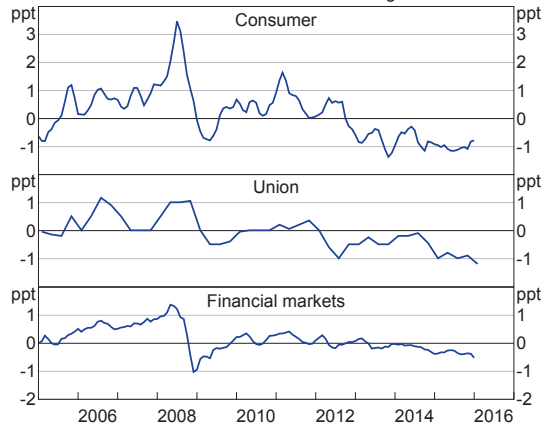
4 NNDI per hour worked adjusts GDP per hour worked for the purchasing power effects of changes in the terms of trade, the depreciation of the capital stock and net income transfers to the rest of the world. See RBA (2015), 'Box A: The Effects of Changes in Iron Ore Prices', *Statement on Monetary Policy*, February, pp 13–16.

Inflation Expectations

Near-term measures of inflation expectations – for consumers, market economists and union officials – remain below average (Graph 5.15).⁵ Longer-run inflation expectations based on financial market pricing remain consistent with the inflation target. ↗

Graph 5.15
Measures of Inflation Expectations

Deviations from historical average*



* Since July 1996

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

5 The series for consumer expectations is the three-month moving average of the trimmed mean of inflation expectations over the next year; union expectations are the median of union officials' expectations of inflation over the next year; financial market expectations are the break-even 10-year inflation rate on indexed bonds (with interpolation used to match exact maturity).

6. Economic Outlook

The International Economy

The outlook for GDP growth of Australia’s major trading partners (MTPs) is unchanged from the November *Statement*. Over the next few years, growth is expected to remain around its current rate, which is slightly below its decade average (Graph 6.1). Accommodative monetary policies and low oil prices are likely to support growth in Australia’s MTPs which, for the most part, are net oil importers. Globally, core inflation has been stable at low rates, reflecting spare capacity in many labour, product and commodity markets. This, together with the decline in oil prices over the past three months, suggests that headline inflation rates will remain below central bank targets for some time yet.

Growth in China is expected to moderate over the next few years, largely as forecast previously. In the near term, weakness in investment growth and

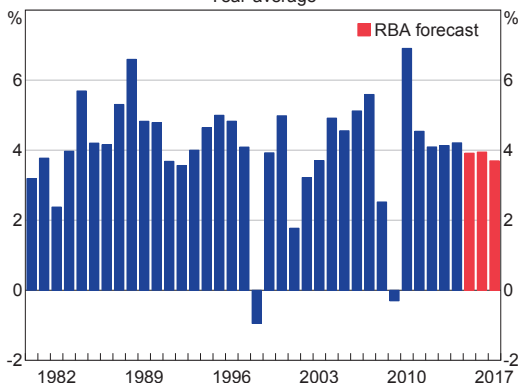
industrial production is expected to be partly offset by the effects of more accommodative monetary and fiscal policies of late. The Chinese economy is expected to continue to slow over the medium term, partly for structural reasons, including the moderation in the growth of both productivity and the urban workforce.

Over the next two years, Japanese GDP is expected to grow at around its trend rate. In other east Asian economies, the ongoing weakness in external demand conditions is likely to continue to dampen export growth despite recent exchange rate depreciations, and investment growth is likely to be lower as a result. Although growth in the region is expected to pick up, it is likely to remain below its decade average over the next two years.

The US and euro area economies are expected to grow at above-trend rates over the next two years. In the United States, monetary policy is likely to remain very accommodative, notwithstanding expected increases in the US Federal Reserve’s policy rate. Conditions in the US labour market remain strong and should support consumption growth and above-trend growth more generally, despite weakness in the manufacturing sector, which is likely to endure for some time. In the euro area, growth is expected to remain above trend, supported by accommodative monetary policy, low oil prices and a gradually improving labour market.

A further decline in commodity prices over the past three months has contributed to downward revisions to the outlook for Australia’s terms of trade of around 4 per cent since the previous *Statement*

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

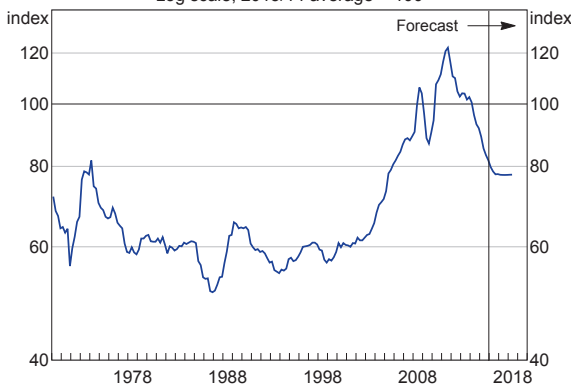


* Aggregated using total export shares
Sources: ABS; CEIC Data; RBA; Thomson Reuters

(Graph 6.2). The forecasts for iron ore and coal prices are lower, reflecting a weaker outlook for Chinese steel demand and an expectation that there will be only a limited reduction in global supply from high-cost miners, particularly those in China. The sharp fall in the oil price has also affected the terms of trade and its outlook. In the near term, lower oil prices imply an increase in the terms of trade because Australia is currently a net importer of oil and gas. However, because the price of liquefied natural gas (LNG) is linked to the price of oil, this effect will be increasingly mitigated as exports of LNG ramp up in the years ahead.

Graph 6.2
Terms of Trade

Log scale, 2013/14 average = 100



Sources: ABS; RBA

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 (TWI at 62 and A\$ at US\$0.72). This is close to the exchange rate assumptions underlying the forecasts in the November *Statement*. The forecasts assume the price of Brent oil will be US\$35 per barrel over the forecast period, which is around 30 per cent lower

than the assumption used in November and in line with near-term futures pricing. Similar to the previous *Statement*, the working-age population is assumed to grow by 1.5 per cent over 2016 and 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, as expected, at a below-average pace over the year to September 2015. Activity continued to shift from mining to non-mining sectors of the economy. Services sector output grew by around 3½ per cent over the year to September, while goods-related output grew only modestly. Mining investment continued to decline sharply, although this was partly offset by contributions from resource exports. Net service exports also made a significant contribution to growth, partly reflecting the effects of the exchange rate depreciation. Non-mining business investment was little changed over the year. Dwelling investment continued to grow strongly and consumption growth picked up to be close to its decade average. Public demand grew at a below-average pace over the year.

Forecasts for GDP growth are little changed from those presented in the November *Statement*. Year-ended GDP 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 (Table 6.1).

Low interest rates and ongoing growth in employment are expected to lead to a further pick-up in household incomes and demand. Forecasts for growth in household income have been revised up in line with a slightly stronger forecast of employment in the near term. Meanwhile, consumption growth is projected to increase to be a little above its longer-term average over the forecast period, consistent with the forecasts in the November *Statement*. Together, the forecasts for household consumption and income growth imply a more modest decline in the household saving ratio than previously expected. The high

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

(a) Technical assumptions include A\$ at US\$0.72, TWI at 62 and Brent crude oil price at US\$35 per barrel; shaded regions are historical data
Sources: ABS; RBA

level of residential building approvals is likely to translate into continued strong growth in dwelling investment in the near term. However, the decline in higher-density dwelling approvals and the easing in housing market conditions are likely to see growth in dwelling investment moderate gradually.

The outlook for resource exports has been lowered somewhat over the forecast period. In part, this reflects an assessment that some large LNG projects will start production a bit later than previously thought, although the anticipated magnitude of the eventual ramp-up in production has not changed. Despite the decline in iron ore prices, low-cost producers in Australia are continuing to expand supply much as previously anticipated. The scope for additional growth in coal exports appears limited, however, given weak global demand for coal and the relatively high cost of some Australian production; the profile for coal exports has been lowered accordingly. Meanwhile, the depreciation of the exchange rate is assisting domestic producers of tradable items. Net service exports are forecast to continue growing strongly.

As earlier expected, mining investment is likely to fall further over the forecast period, as large resource-related projects are completed and few new projects are likely to commence. The lack of a pipeline of new projects has been factored into the outlook for some time and, given this, the recent declines in commodity prices are not expected to result in a significant additional reduction in mining investment.

The outlook is for non-mining business investment to remain subdued in the near term. The ABS capital expenditure survey of firms' investment intentions and the low level of non-residential building approvals suggest that the profile of non-mining investment will be a bit weaker than earlier anticipated. However, some of the preconditions for a pick-up in investment are in place. In addition, survey measures of business conditions remain above average, including now for the goods-related sector, parts of which are relatively capital intensive compared with much of the services sector. The depreciation of the Australian dollar has added support to demand and investment in industries producing tradable goods and services.

Labour market conditions have improved by more than expected at the time of the November *Statement*. Employment growth was above average over 2015 and the unemployment rate was around ½ percentage point lower in the December quarter than earlier anticipated. The participation rate has grown broadly in line with expectations at the time of the November *Statement*. A concentration of economic activity in labour-intensive service sectors, such as household services, may help to explain the strength in employment growth over 2015 despite below-average GDP growth. The low growth of wages also appears to be consistent with more employment growth than there would have been otherwise. These factors are likely to continue to support employment growth for a time. In

addition, leading indicators of labour demand, such as job advertisements and vacancies, remain on an upward trend and point to further employment growth over coming months. While employment growth is expected to slow somewhat from the rapid pace seen in the December quarter, it is forecast to remain strong enough to reduce the unemployment rate further. The participation rate is likely to rise further over coming years as individuals are encouraged to enter the labour market as employment opportunities improve.

Inflation

Wage growth has been broadly in line with expectations at the time of the November *Statement*. It is not expected to increase much over the next couple of years, given continued spare capacity in the labour market and information from the Bank's liaison with businesses that suggests employers remain under pressure to contain costs. Further, survey data suggest that firms and unions anticipate that wage growth will remain low.

The December quarter inflation outcome was broadly in line with expectations in the previous *Statement*. The forecast for underlying inflation is little changed. Underlying inflation is expected to remain low over the forecast period.

Domestic inflationary pressures are expected to remain subdued. Inflation in the prices of non-tradable items is forecast to pick up gradually but remain below its inflation-targeting average during the forecast period. This is consistent with the expectation that there will still be spare capacity in the labour market over the next couple of years, albeit less than earlier forecast, and growth of labour costs will remain low. Also, spare capacity in a number of product markets is likely to constrain the ability of many firms to expand their margins.

The prices of tradable items are expected to rise over the next few years, as the exchange rate depreciation since early 2013 has led to increases in import prices, which are expected to be gradually passed on to the prices paid by consumers. Based

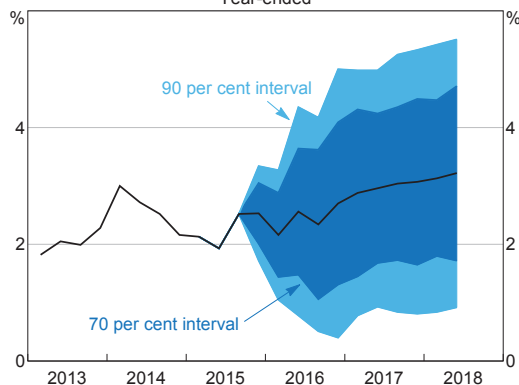
on historical relationships, the direct effects of the exchange rate depreciation since early 2013 are expected to add around ½ percentage point to underlying inflation over each year of the forecast period. However, assessments of the size and timing of exchange rate pass-through are inevitably imprecise and other influences are also at work. Heightened competitive pressures, including from new entrants into the Australian retail market, and greater efforts by retailers to reduce their costs and improve efficiency, are expected to continue to limit the extent to which higher import prices are evident in final retail prices for some time.

Headline inflation has been low over the past year or so, partly as a result of factors that are likely to have a temporary effect. Most notable are lower fuel prices and earlier changes to utility prices stemming from regulatory decisions. As the direct effects of these factors pass, headline inflation is expected to pick up. Lower fuel and utility prices have reduced input costs for a range of businesses, and these lower costs could be expected to be passed on gradually to the prices 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 a bit less than ¼ percentage point to headline inflation, but to have little effect on underlying inflation.

Uncertainties

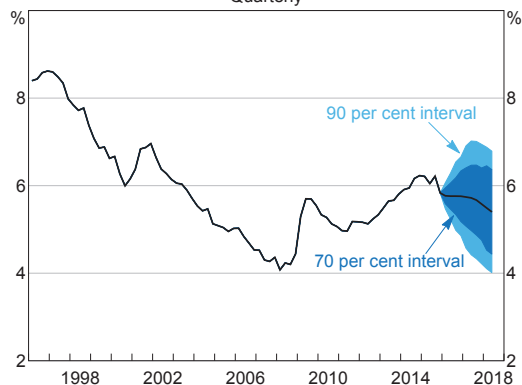
The forecasts are based on a range of assumptions about the evolution of some variables, such as the exchange rate, and judgements about how developments in one part of the economy will affect others. These assumptions and judgements may not hold true, and other unforeseen events may occur, so the economy is likely to evolve differently to what has been forecast. The significant amount of uncertainty these factors generate can be demonstrated by the width of the confidence intervals around the forecasts based on historical forecast errors (Graph 6.3; Graph 6.4 and Graph 6.5).

Graph 6.3
GDP Growth Forecast*
 Year-ended



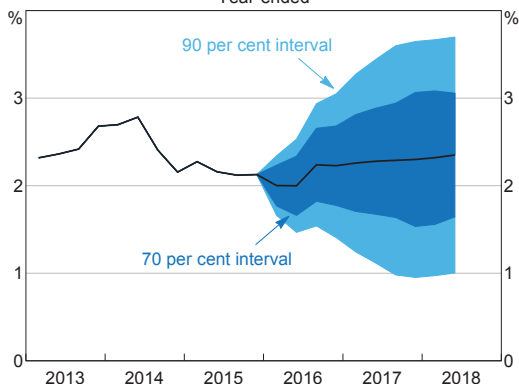
* Confidence intervals reflect RBA forecast errors since 1993
 Sources: ABS; RBA

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

One of the key sources of uncertainty for the forecasts continues to be the outlook for growth in China and the implications of high levels of debt there. Ultimately, this has implications for commodity demand and commodity prices, and hence for our forecasts for the terms of trade. The outlook for commodities also depends on the responsiveness of supply to the decline in prices seen to date. Domestically, the outlook for the labour market and the response of households to developments in income growth and wealth effects from the housing market are important sources of uncertainty.

Chinese growth and debt

The outlook for China's growth is a significant uncertainty for the outlook for the Australian economy. Conditions in the Chinese construction and industrial sectors remain subdued and are unlikely to improve quickly given the large stock of unsold housing and substantial excess capacity in the manufacturing and mining industries. Policymakers have responded with a wide range of measures, including easing fiscal and monetary policies, encouraging infrastructure project approvals and increasing the extent of directed lending by 'policy' banks. Although monetary policy has scope to ease further, the authorities' efforts to maintain currency stability in the face of capital outflows and intensified depreciation pressures could limit their appetite to undertake a more sizeable easing in monetary policy. Moreover, the response of investment growth to the easing in financial conditions to date has been relatively muted, and there is uncertainty about how effective current measures will be in supporting activity in the next few quarters. While consumption growth has been resilient so far, there is a risk that continued weakness in a sizeable part of the economy will eventually weigh on growth in household incomes and consumption.

Another uncertainty relating to the Chinese economy concerns the substantial stock of debt, particularly in light of weak profitability in some parts of the economy. Excess capacity in much of the industrial sector has contributed to disinflationary pressures, which have raised the real (inflation-adjusted) interest rates faced by firms and thereby increased the burden of servicing debts. Although recent cuts to interest rates by the People's Bank of China have helped to mitigate this effect, it has the potential to cause financial distress, especially in parts of the economy where leverage is already high, and to exacerbate the slowing in economic activity. This poses risks for financial institutions with sizeable on- and off-balance sheet exposures to these firms and to China's growth trajectory more generally.

Any sharp slowing in China is likely to have significant implications for economic conditions in the Asian region and for commodity exporters, including Australia. It is likely that economies with well-established and credible policy frameworks will be more resilient in the face of such shocks. The willingness and ability of policymakers globally to employ monetary and fiscal policy will also affect economic outcomes. A depreciation of the Australian dollar in response to negative developments in external conditions would help to buffer domestic economic conditions.

Commodity prices and trade

The outlook for commodity prices is sensitive to demand, particularly from the Chinese industrial sector, and the responsiveness of supply to the decline in prices seen to date. For oil, the current forecasts assume that prices remain around current levels and that there is only a limited reduction in supply from higher-cost producers. However, it is possible that there is a more substantial response of supply to the sharp fall in prices. Alternatively, additional supply from countries such as Iran could result in even lower prices.

There is some uncertainty about how lower oil prices will affect LNG production in Australia. Most of Australia's LNG producers have long-term contracts to sell particular quantities of LNG to buyers and the forecasts assume that LNG export volumes will not be affected by lower prices over the forecast period. However, lower oil prices will affect the value of LNG sales.

Producers of bulk commodities have generally been reducing their costs of production, aided in part by the low price of oil, which is an important input for extraction and transport of many commodities. However, the ability of firms to keep reducing costs appears relatively limited and this could, in time, lead some firms to exit. While the possibility of significant cuts to global production represents an upside risk to commodity prices, the possibility of unexpected cuts to Australian production represents a downside risk to the forecast for export growth.

The labour market

There is uncertainty about the extent to which the recent pace of improvement in labour market conditions will be sustained. Employment growth is forecast to ease somewhat from the above-trend pace experienced over 2015. It could decline by more than is forecast, but it is also possible that the recent strong growth of employment contains information about the economy not apparent in the national accounts data. Were such strength to be sustained, the unemployment rate could decline more quickly than forecast.

Some indicators do suggest that employment growth may turn out to be stronger than currently forecast. Survey measures of business conditions in the goods-related sector have improved of late, following earlier increases in the services sectors. The depreciation of the exchange rate and low wage growth are helping to restore the international competitiveness of Australia's labour. While temporary factors may have supported household services employment in 2015, particularly in health & social assistance, hiring

related to long-run trends, such as the ageing of the population and the related increase in demand for home-based care services, are likely to continue to support the growth of household services employment over the forecast period.

The extent to which the labour supply will increase over the forecast period is also uncertain. In particular, the participation rate is forecast to increase as more people enter the labour market in response to a perceived improvement in their employment prospects. However, the extent to which the participation rate can rise is uncertain. The ageing of the population is likely to limit the increase, but this may be offset for some time by the fact that each generation has tended to have a higher participation rate than the one preceding it. If the participation rate does not rise to the extent expected over the forecast period, the unemployment rate may fall more quickly than currently anticipated. As always, there is uncertainty about the rate of population growth, which also affects labour supply.

Households' expenditure and housing markets

If employment growth does turn out to be stronger than currently anticipated, then labour income growth could pick up more quickly than expected, or vice versa. Household income has grown at a below-average pace in recent years and a sustained period of stronger growth would be likely to support stronger growth of consumption. Consumption growth will also depend on how households respond to the change of momentum in housing prices and associated wealth effects. Relatively few households appear to have used the earlier increase in the value of their dwellings to trade up or increase their leverage for the purposes of consumption, so a levelling out in housing prices may have only a muted effect on consumption growth.

The impact of slowing housing price growth on future growth in dwelling investment is unclear.

In the period ahead, dwelling investment seems likely to be supported by continued strong demand from foreign buyers. Information from the Bank's liaison suggests that foreign buyers tend to have long-term motivations for investment and may be relatively unconcerned about temporary fluctuations in housing price growth. Population growth, employment prospects and expectations for future housing price growth are likely to be important considerations for domestic buyers. Some geographic areas appear to be at risk of reaching a point of oversupply, particularly the inner-city areas of Melbourne and Brisbane. ✖

