Statement on Monetary Policy

AUGUST 2015

Contents

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The graphs in this publication were generated using Mathematica.

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Overview

As has been the case for some years now, growth of Australia's major trading partners remains close to its long-run average, notwithstanding a slight easing in the June quarter. Growth of global industrial production has moderated over the past year or so, which has contributed to lower commodity prices, although the strength of commodity supply has also been a significant factor. In most of Australia's trading partners, core inflation has been stable in year-ended terms over recent months at rates below central bank targets. Globally, monetary conditions remain very accommodative and finance remains readily available to creditworthy borrowers.

In China, GDP growth picked up in the June quarter, remaining at 7 per cent in year-ended terms, which is the government's target for this year. However, a range of indicators suggest that growth of consumption and industrial production, including steel production, moderated in the first half of 2015. Low inflation has given the authorities scope to adopt more accommodative monetary and fiscal policy settings. Conditions in residential property markets have improved in some respects, although this has yet to translate into a pick-up in residential property investment outside the largest cities. The recent volatility in Chinese equity markets is unlikely to have a significant direct effect on consumption, given the relatively limited exposure of households to equities. Growth in the rest of east Asia (excluding Japan) was a little below average in the first half of 2015, owing to some weakness in domestic and external demand. Meanwhile, output in advanced economies has generally been increasing at a moderate pace and labour market conditions have been improving, supported by expansionary monetary policy. In Japan, the relatively tight labour market conditions have resulted in wage growth being higher than it was a year ago. The US economy returned to moderate growth in the June quarter, following temporary weakness earlier in the year. Although the Federal Reserve is widely expected to start raising interest rates later this year, monetary conditions will remain very accommodative for some time.

The growth of Australia's major trading partners is expected to remain around its long-run average over the next two years, although there has been a slight downward revision to growth in 2015 since the previous *Statement*, reflecting weaker-than-expected growth for east Asia in the first half of 2015. The forecast for Australia's terms of trade has been revised down by 4 per cent since May. This follows the recent declines in a number of commodity prices and the expected effects of a more subdued outlook for Chinese steel demand on iron ore prices.

Domestically, financial conditions have generally eased since May. Interest rates for borrowers were reduced broadly in line with the reduction in the cash rate in May. More recently, this reduction has been partially offset by lenders raising mortgage rates for investor housing loans. Over recent months, the Australian dollar has depreciated noticeably against the US dollar and on a trade-weighted basis, although it has generally moved in line with the currencies of other commodity-exporting countries. Over the past year the Australian dollar has depreciated by about 15 per cent on a trade-weighted basis.

In the face of significant structural change, the Australian economy has continued to grow at a moderate pace over the past year. Following strong growth in the March quarter, the available data indicate that output growth slowed in the June quarter, largely reflecting some reversal of the substantial rise in exports earlier in the year. At the same time, however, a number of indicators of economic conditions have been more positive over recent months. In particular, labour force data have shown signs of improvement and measures of business conditions in the non-mining sector are clearly above average.

Consumption growth has picked up since 2013 – supported by low interest rates and accompanied by a fall in the household saving ratio. Low interest rates are also providing support to housing market conditions, which remain strong overall. However, there is a noticeable divergence in conditions across the country. House price inflation has been high in Sydney and Melbourne, whereas housing price growth has been weak in the rest of the country and prices in some cases have declined. Housing credit growth has been little changed over recent months. The Australian Prudential Regulation Authority has implemented a suite of measures to address risks related to lending in the housing market and a number of banks have announced tighter lending conditions and increased mortgage rates for investor housing loans.

Survey measures of business conditions have increased over recent months to be clearly above their long-run average levels and profits in the non-mining business sector have grown noticeably. Notwithstanding those improvements, non-mining business investment has continued to fall and the available data on investment intentions do not indicate that there is likely to be a significant pick-up in non-mining business investment over the next year or so. Liaison suggests that businesses are waiting to see a sustained increase in demand before committing to major new investment projects. Mining investment continues to decline, as more projects reach completion, but few new projects commence. Newly completed projects are underpinning further strong growth in resource exports. Net service exports are also making a strong contribution to GDP growth, supported by the depreciation of the exchange rate.

Labour market conditions are generally better than had been expected a few months ago, although spare capacity still remains. The unemployment rate over recent months was around the levels that have been recorded over much of the past year. There has been a pick-up in labour demand, which has led to a noticeable rise in the employment-to-population ratio. The signs of improvement in labour market conditions have occurred despite GDP growth remaining below average. Some factors that can help explain this include very low wage growth and lower-than-expected population growth. The ABS measure of firms' job vacancies is consistent with the unemployment rate remaining around levels of recent months or even declining a little in the months ahead. Other indicators point to modest employment growth in coming months.

Inflation in the June quarter was broadly as expected and inflationary pressures remain contained. Consumer price inflation has been affected by movements in fuel prices, which are around 10 per cent lower than they were a year earlier. Looking through the effects of such temporary factors, various measures suggest that underlying inflation was around ½ per cent in the quarter and 2¼ per cent over the year. Domestic inflationary pressures remain well contained, consistent with spare capacity in the labour market and the low growth of labour costs. In contrast, inflation in the cost of new dwellings has been elevated, driven by strength in Sydney. Although the prices of tradable items (excluding volatile items and tobacco) declined modestly over the year to June, further gradual pass-through of higher import prices as a result of the depreciation of the exchange rate is expected to place upward pressure on the final prices of tradable items over the next few years.

Growth in the Australian economy is expected to pick up gradually to be over 3 per cent by 2017. The key forces shaping the outlook for growth are much as they have been for some time. Further large falls in mining investment are expected to be offset by strong growth of resource exports. Growth of household consumption is expected to be supported by very low interest rates, and leading indicators suggest that dwelling investment is likely to remain strong for some time. Rising household expenditure and the response of net exports to the exchange rate depreciation are expected, in time, to support a rise in non-mining business investment. Fiscal consolidation at state and federal levels is anticipated to weigh on output growth over the next few years.

The unemployment rate is forecast to be lower than previously anticipated. In part, this reflects the generally better-than-expected labour market conditions of late. Moreover, the unemployment rate is expected to remain little changed from the levels of recent months. This is despite the change to the forecast for aggregate demand, which is likely to be broadly matched by lower growth of the economy's productive capacity, owing to lower population growth. Accordingly, the unemployment rate is now forecast to remain little changed over the next 18 months or so from a level that is a bit lower than had earlier been forecast, before declining over 2017 as demand growth picks up.

The inflation forecast has been revised up a little since the previous *Statement*, primarily because the Australian dollar has depreciated further, implying additional growth in the prices of tradable items over the next few years. Domestic cost pressures are likely to remain well contained and underlying inflation is expected to be around 2½ per cent over the forecast period.

The risks to the outlook for global growth appear broadly balanced. The risks in China, however, remain somewhat tilted to the downside. There continues to be uncertainty surrounding the trajectory for growth and macroeconomic policy in China, and the implications for commodity demand. The recent volatility in the Chinese equity market and the government's policy response have both increased the general level of uncertainty regarding the economic outlook. Downside risks stemming from the weak property market and constraints on local government funding for infrastructure investment persist but have receded at the margin, partly in response to policy measures designed to address these risks. As always, there are also uncertainties associated with how global financial markets will respond to significant economic events. Concerns about spillovers from developments in Greece have abated and the focus has shifted more towards how financial markets will react when the Federal Reserve starts raising its policy rate. This is expected to occur before the end of the year and is likely to be associated with an increase in global financial market volatility. There is also a reasonable chance that the Australian dollar will depreciate further once that tightening commences.

Domestically, as always, there are uncertainties around the balance between the growth of demand and supply. Recently, labour market developments have suggested that there is a little less spare capacity in the labour market than had been expected, although measures of demand and supply are subject to error and revision.

As has been the case for some time, there is uncertainty about the outlook for consumption growth. Given the low growth of wages, the anticipated increase in consumption growth is likely to be associated with a further gradual decline in the household saving ratio. However, households may behave differently from what is assumed and it is possible that consumption growth could be stronger and the saving ratio lower than forecast, or vice versa.

There is significant uncertainty around the forecast for business investment. Indicators of non-mining business investment intentions provide little evidence of a pick-up in non-mining business investment in the near term, and actually suggest that it could fall over 2015/16. However, these indicators cover only part of the non-mining business sector's investment and measures of business conditions paint a much more positive picture. Moreover, there are increasing signs that the depreciation of the exchange rate is providing additional support to demand for domestically produced goods and services, which should in time lead to more investment.

The Reserve Bank Board reduced the cash rate by 25 basis points at its February meeting and then again at its May meeting. The effects of these reductions are still working their way through the economy. Data on the domestic economy over the past few months have generally been positive. Survey measures of business conditions are clearly above average, businesses have been hiring more labour and the unemployment rate is slightly lower than had earlier been expected. The further depreciation of the exchange rate will provide some assistance with the adjustment of the economy to the lower terms of trade. Nevertheless, the economy is still facing some headwinds and it is likely to be operating with a degree of spare capacity for some time yet. Recent information confirms that domestic inflationary pressures have been contained. Given that this is likely to be the case for some time, inflation is forecast to remain consistent with the target, even with a lower exchange rate. Meanwhile, conditions in housing markets remain somewhat divergent across the country, with Sydney and Melbourne house prices rising rapidly, but housing price inflation declining across much of the rest of the country. Growth of housing credit is little changed. The Bank is continuing to work with other regulators to assess and contain risks that may arise from the housing market.

Since the May *Statement*, the Board has judged that an accommodative stance of monetary policy remains appropriate. The Board will continue to assess the outlook and adjust policy as needed to foster sustainable growth in demand and inflation outcomes consistent with the inflation target over time.

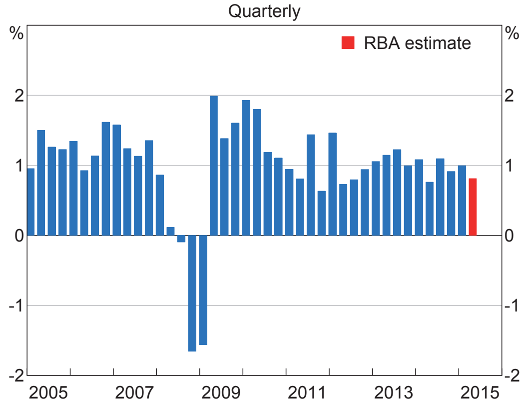
1. International Economic Developments

Economic growth in Australia's major trading partners (MTPs) remained around its long-run average in the first half of 2015 (Graph 1.1). Advanced economies have, in general, continued to recover, while growth in emerging economies has tended to ease over recent quarters. In China, economic activity, particularly in resource-intensive sectors, continued to moderate in the first half of this year and, in response, various policy settings have been adjusted to provide more support to growth. The Japanese economy has recovered since late last year, while growth in economies in the rest of the Asia-Pacific region has slowed to a little below its decade-average pace. The euro area economy has continued to recover gradually, while economic growth in the United States returned to the pace recorded at the end of 2014 following some weakness in the March quarter.

Growth in global trade looks to have eased over the first half of 2015, as has growth of global industrial production. Weakness in Chinese demand, in particular, contributed to a further decline in commodity prices in recent months.

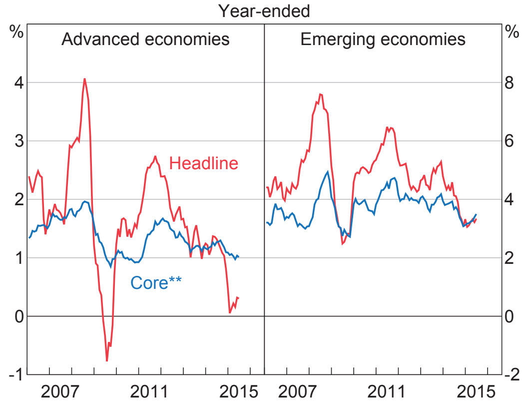
Following their sharp decline over the second half of 2014, oil prices are at a relatively low level. This is likely to continue to support growth in most of Australia's MTPs given that they are net energy importers. Much of the downward pressure on global headline inflation from lower oil prices has now passed, although it is still evident in year-ended inflation rates (Graph 1.2). Core inflation in advanced economies has remained relatively stable in year-ended terms and remains below the targets set by central banks in most economies.

Graph 1.1
Australia's Trading Partner Growth*
Quarterly



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

Graph 1.2
Global Inflation*
Year-ended



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

Asia-Pacific

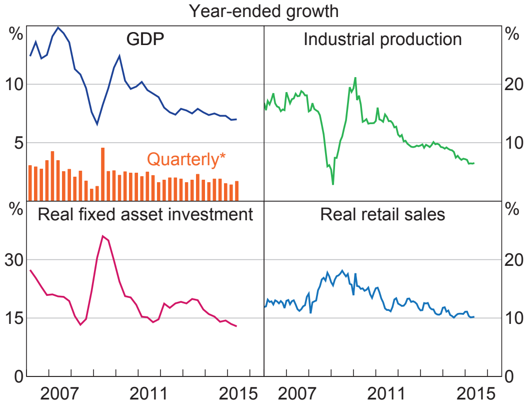
In China, GDP growth increased in the June quarter, while year-ended growth remained at 7 per cent (Graph 1.3). However, there has been continued weakness in the industrial sector, slowing residential construction activity and lower growth of infrastructure investment. Consumption growth also looks to have been a bit weaker in the first half of 2015; growth rates for surveyed urban household consumption and real retail sales have eased, while automobile sales have declined. More accommodative monetary policy, including reductions of benchmark interest rates and reserve requirement ratios, together with the announcement of further approvals for infrastructure investment, should provide some support to growth in coming quarters.

Growth of industrial production has fallen further over the past six months, especially for construction-related products. Conditions in the steel industry have been subdued and are likely to remain so in the near term (Graph 1.4). Production of crude steel has been below earlier trends and domestic steel consumption appears to have moderated. Reflecting weak demand and subdued prices, domestic iron ore production has trended lower, and imports of iron ore, including those from Australia, have also declined over recent months.

While infrastructure spending has slowed, it is growing faster than the other components of fixed asset investment. The authorities have announced several large-scale rail projects and have released a list of proposed infrastructure projects for funding via public–private partnerships. Most infrastructure investment is conducted and financed by local governments. In recent months, the Chinese Government has begun to implement a debt restructuring plan for local governments to lower their interest burden and control the overall stock of debt. The plan, which allows debt of local government financing vehicles to be exchanged for local government bonds at a significantly lower yield, has resulted in a sharp increase in local government bond issuance. In June, the Chinese authorities announced that the value of debt that can be restructured under the plan had been doubled to ensure that local governments continue to have access to funding for infrastructure projects, particularly in an environment of falling land sales. The authorities have also urged banks to continue to lend to existing infrastructure projects.

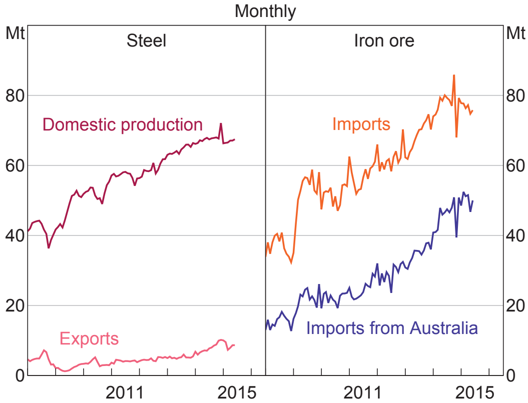
Conditions in the Chinese residential property market have improved somewhat since the start of the year (Graph 1.5). On average, Chinese housing prices have been rising in recent months, although the increases have been concentrated in the larger

Graph 1.3
China – Activity Indicators
Year-ended growth



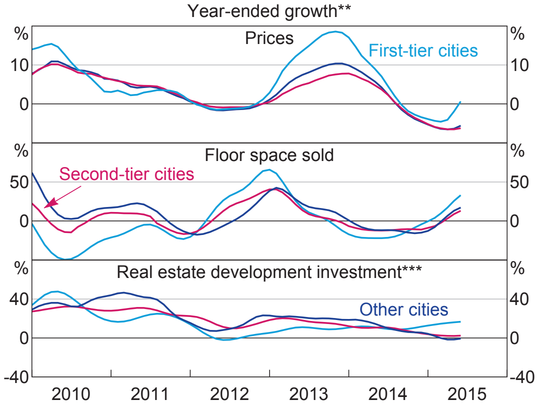
* RBA estimates prior to December quarter 2010
Sources: CEIC Data; RBA

Graph 1.4
China – Steel and Iron Ore
Monthly



Sources: CEIC Data; RBA

Graph 1.5
China – Residential Property Market*
Year-ended growth**



* The share of investment and floor space sold for first-tier cities is less than 10 per cent; second-tier cities' share is less than 30 per cent

** The trend series for floor space sold and investment is used to calculate growth

*** Investment by developers and other construction companies in the development of residential property; includes land purchases

Sources: CEIC Data; RBA

Graph 1.6
China – Merchandise Trade Volumes*
2005 average = 100

* Seasonally adjusted by RBA

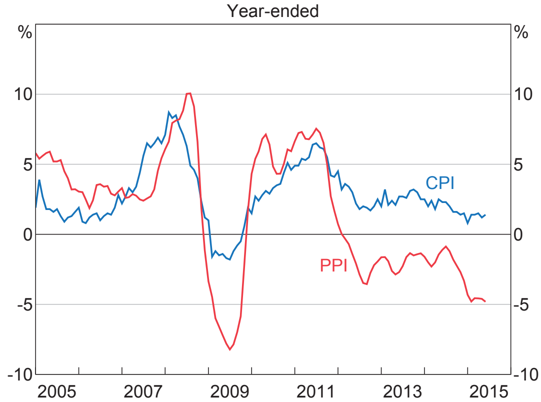
Sources: CEIC Data; RBA

cities and conditions in smaller cities remain weak. In response to the decline in property prices since mid 2014 and more accommodative policy settings, the volume of floor space sold has expanded strongly over the past few months and inventory-to-sales ratios have eased in many cities. However, stronger growth of sales is yet to translate into a noticeable pick-up in residential construction. While real estate investment growth has strengthened in the first-tier cities, they accounted for only around 8 per cent of total residential real estate investment in 2014.

Imports have been weak in value and volume terms, which is in line with the moderation in growth of domestic investment and consumption (Graph 1.6). Exports, particularly to east Asia and the European Union, have edged lower since late last year. This is consistent with the broader decline in trade in the Asia-Pacific region.

Inflationary pressures in China remain subdued; CPI inflation has been well below the authorities' target of 3 per cent in 2015 (Graph 1.7). Producer prices have continued to decline, which in part is due to lower commodity prices.

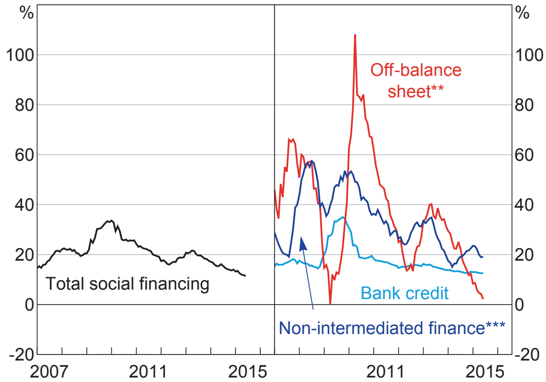
Graph 1.7
China – Inflation
Year-ended



Sources: CEIC Data; RBA

Growth of total social financing (TSF) has moderated further, largely owing to a slowing in off-balance sheet financing activity (Graph 1.8). This slowing reflects weaker growth in demand for funding, the tightening of regulations on non-bank and off-balance sheet funding last year, and greater awareness among financial institutions of credit risks associated with more subdued economic growth. In contrast, growth of non-intermediated financing activity remained firm, partly supported by an increase in equity financing associated with the earlier boom in Chinese share prices. Despite the pick-up in new equity and secondary issuance,

Graph 1.8
China – Total Social Financing*
Year-ended growth in stock



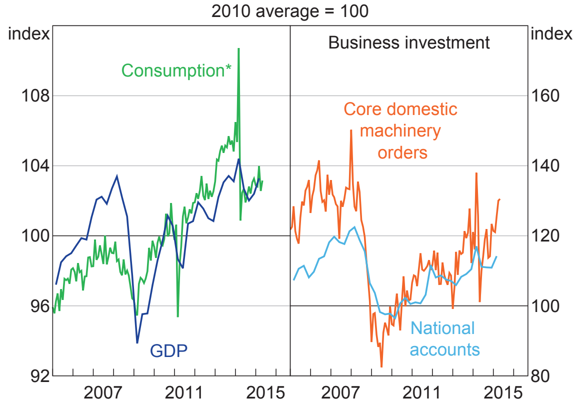
* RBA estimates
** Entrusted loans, trust loans and undiscounted bank acceptance bill issuance
*** Corporate bond and equity issuance
Sources: CEIC Data; People's Bank of China; RBA

equity finance remains small as a share of TSF (see the 'International and Foreign Exchange Markets' chapter and 'Box A: The Recent Decline in Chinese Equity Prices' for a discussion of developments in Chinese equity markets).

In Japan, economic activity has grown since late last year after having contracted following the consumption tax increase in the June quarter 2014 (Graph 1.9). Growth of business investment has increased this year, while growth of consumption has been more modest. Available data suggest that export volumes declined in the June quarter, having grown steadily since the middle of last year.

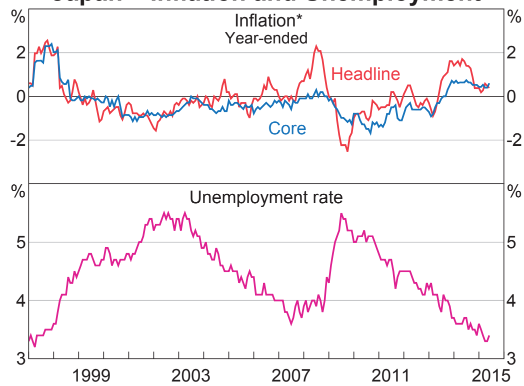
The Japanese labour market remains tight. The unemployment rate has declined further this year and is around its lowest level in almost two decades (Graph 1.10). Meanwhile, the ratio of job-offers-to-applicants has reached its highest level over the same period. These conditions have placed upward pressure on base wages, which are rising at a faster rate than they were a year ago. Although these developments point to some increase in domestic inflationary pressures, year-ended inflation remains lower than a year ago reflecting the fall in oil prices and the fading effects of the earlier depreciation of the yen. In recent months, both core and headline

Graph 1.9
Japan – Economic Indicators
2010 average = 100



* The Cabinet Office's monthly measure of real private consumption
Sources: CEIC Data; Thomson Reuters

Graph 1.10
Japan – Inflation and Unemployment

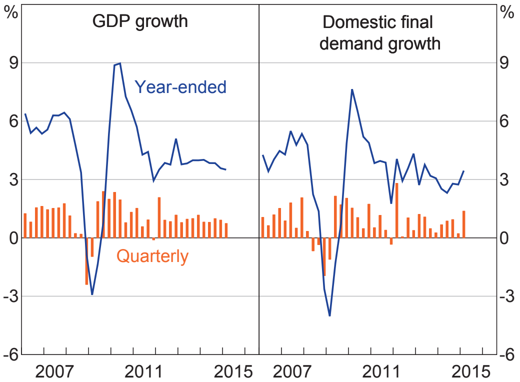


* Excluding the effects of the consumption tax increase in April 2014
Sources: Bank of Japan; RBA; Thomson Reuters

inflation have stabilised but remain well below the inflation target of the Bank of Japan (BoJ). The BoJ has indicated that it expects to achieve its 2 per cent inflation target around the middle of 2016, which is a little later than it had previously expected.

In the rest of east Asia, growth has declined to be slightly below average in the first half of 2015. Early in the year, much of the slowing reflected weaker growth in exports within the region, while domestic demand growth remained robust (Graph 1.11). More recently, there have been indications that the growth of domestic demand has declined a little. Although the slowing in activity has been broad-based

Graph 1.11
East Asia* – GDP and Domestic Demand



* Excluding China and Japan
Sources: CEIC Data; IMF; RBA

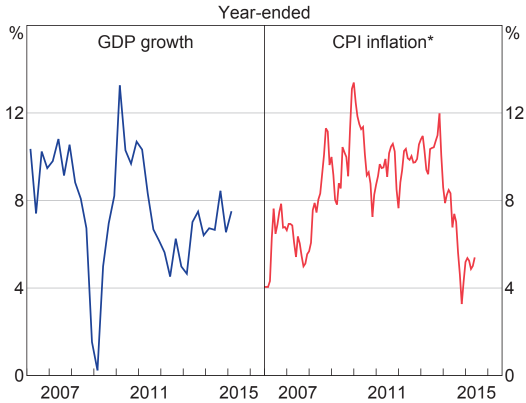
across the region, some country-specific factors, such as public health concerns in Korea, have also contributed.

Headline inflation is low across most of the region due to the decline in global oil prices. Core inflation has been more stable than headline inflation, but is also at a low level. Several central banks in the region have eased monetary policy this year in response to the moderation in growth and subdued inflationary pressures.

GDP growth in India has been around 7 per cent over the past year, which is stronger than the growth rates recorded in 2012 and 2013 (Graph 1.12). Over the past year, growth of industrial production appears to have strengthened, while the agricultural sector has continued to contract. A range of other indicators, including project approvals, point to a further increase in the growth of investment in coming quarters. Meanwhile, consumer price inflation remains below the target set by the Reserve Bank of India (RBI) of 6 per cent for January 2016. The RBI eased policy in early June and referred to weakness in domestic consumption growth, weaker corporate sales and falling capacity utilisation.

In New Zealand, economic growth has moderated this year as rebuilding activity following the Canterbury earthquakes appears to have peaked and commodity prices have fallen sharply. The

Graph 1.12
India – GDP Growth and Inflation



* Reserve Bank of India estimates prior to January 2012
Sources: CEIC Data; RBA; Reserve Bank of India

economy had expanded at an above-average pace over 2014, which was supported by the rebuilding activity, record-high net immigration and continued strength in the housing market. Employment growth has also been strong, while the participation rate and net migration have increased (Graph 1.13). Aided by the expansion in the supply of labour, wage and price pressures have remained subdued, and the Reserve Bank of New Zealand eased monetary policy in June and July.

Graph 1.13
New Zealand – Labour Market

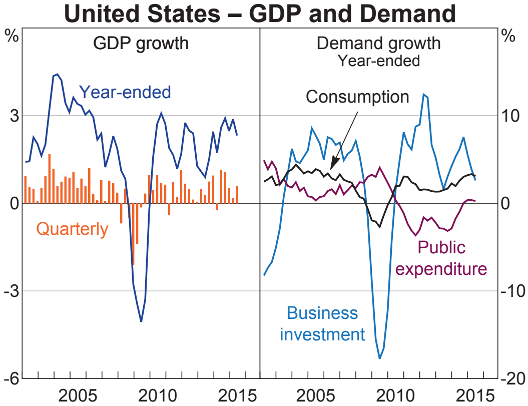
Source: Thomson Reuters

United States

The US economy grew at a moderate pace in the June quarter following temporary weakness recorded early in the year (Graph 1.14). Household consumption continues to underpin growth in activity, although survey measures indicate that around half the boost to real incomes from lower oil prices has been saved rather than spent. In contrast, growth rates for industrial activity and investment have declined since last year; weaker activity in the energy sector accounts for much of this, although the appreciation of the US dollar since the middle of last year may also be having some effect.

Graph 1.14

United States – GDP and Demand



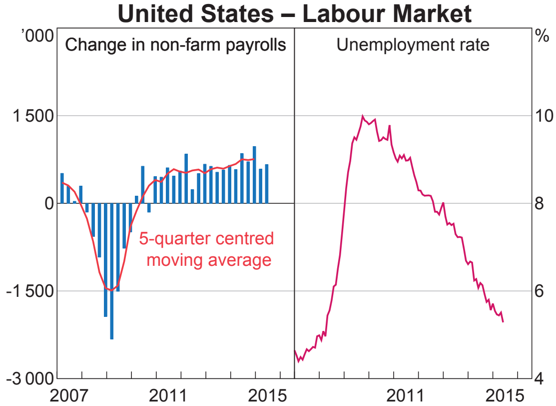
Source: Thomson Reuters

The ongoing expansion in economic activity has contributed to a further improvement in labour market conditions. The pace of employment growth rose in the June quarter following a moderation earlier in the year, and the unemployment rate has declined further (Graph 1.15). Other indicators of labour market slack have recovered more slowly.

Tightening conditions in the labour market appear to have led to some upward pressure on wage inflation. The employment cost index, a broad measure of wage growth, grew only slightly in the June quarter, after growth of wages had picked up over the previous year (Graph 1.16). Meanwhile, core inflation has remained relatively stable at around 1¼ per cent, and headline inflation has stabilised at a low level, reflecting the decline in oil prices and the appreciation of the US dollar. The Federal Open Market Committee reiterated that it is likely to begin

Graph 1.15

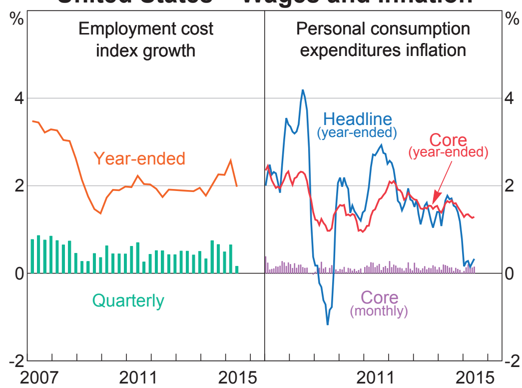
United States – Labour Market



Source: Thomson Reuters

Graph 1.16

United States – Wages and Inflation



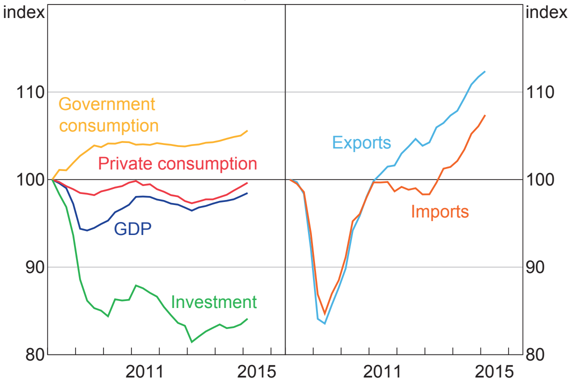
Source: Thomson Reuters

the process of raising interest rates before the end of the year.

Europe

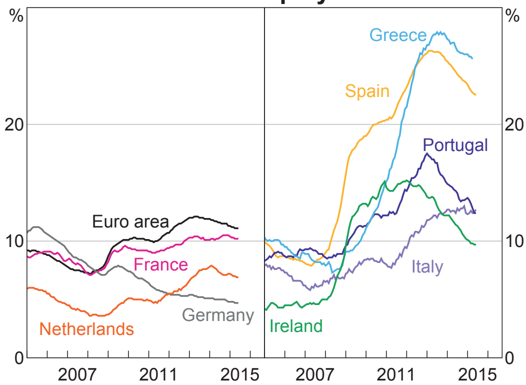
In the euro area, economic activity continues to recover gradually. Over the past year, there has been a pick-up in the growth of consumption and investment. Private consumption has almost recovered to its pre-crisis level (Graph 1.17). Investment has increased of late, but it is not far above its low point of two years ago and is well below its pre-crisis peak. The depreciation of the euro since mid 2014 has supported the gradual increase in the rate of growth of exports; imports have grown with domestic demand.

Graph 1.17
Euro Area – GDP
March quarter 2008 = 100



Source: Thomson Reuters

Graph 1.18
Euro Area – Unemployment Rates



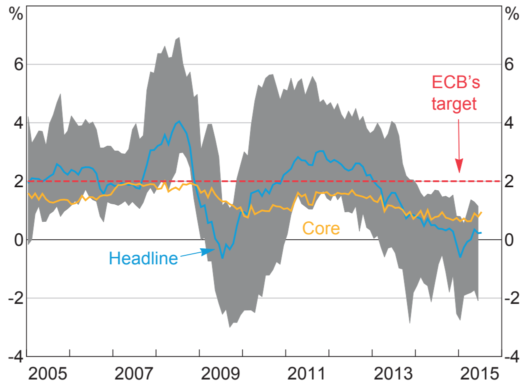
Source: Thomson Reuters

There has been little sign to date that developments in Greece have had a significant effect on economic conditions or confidence elsewhere in the euro area. Indeed, measures of consumer and business confidence are at above-average levels, and credit growth has picked up this year. However, in Greece itself, recent developments have no doubt led to a sharp contraction in economic activity, which in early 2015 was already more than 25 per cent below its level prior to the global financial crisis.

The euro area unemployment rate has continued to decline to be around a percentage point below its peak in mid 2013 (Graph 1.18). Much of the decline has been driven by falls in unemployment in Spain, Portugal and Ireland, where output growth has been above trend recently; in Greece, the decline in the unemployment rate can in part be explained by outward migration. However, unemployment rates generally remain very high, although the unemployment rate is relatively low in Germany.

Inflation has increased since earlier in the year, although it remains well below the target of the European Central Bank (Graph 1.19). Longer-term inflation expectations have also increased but remain historically low.

Graph 1.19
Euro Area – Consumer Price Inflation*
Year-ended



* Harmonised Index of Consumer Prices (HICP); shaded area represents range of individual euro area economies

Sources: RBA; Thomson Reuters

Commodity Prices

The RBA Index of Commodity Prices (ICP) has declined further in recent months. The decrease since the previous *Statement* was driven by declines in the prices of coal and base metals (Table 1.1; Graph 1.20). In SDR terms, commodity prices are around 20 per cent lower than a year earlier. The decline in bulk commodity prices contributed to a fall in the terms of trade of 3 per cent in the March quarter and of 11 per cent over the year to March.

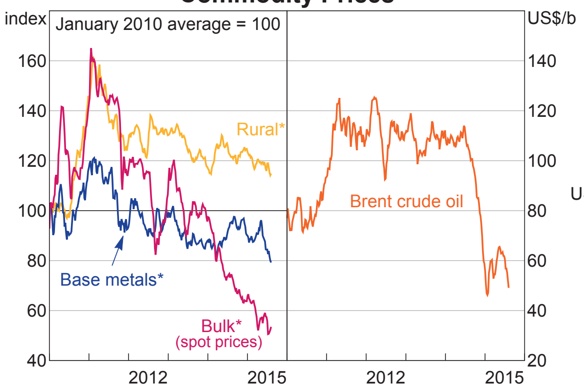
There has been considerable volatility in the spot price of iron ore in recent months (Graph 1.21).

Table 1.1: Commodity Price Growth[(a)]
SDR, 3-month-average prices, per cent

	Since previous *Statement*	Over the past year
Bulk commodities	–6	–26
– Iron ore	0	–34
– Coking coal	–18	–17
– Thermal coal	–5	–9
Rural	–1	–6
Base metals	–5	–6
Gold	–3	–1
Brent oil[(b)]	3	–45
RBA ICP	–5	–19
– using spot prices for bulk commodities	–5	–20

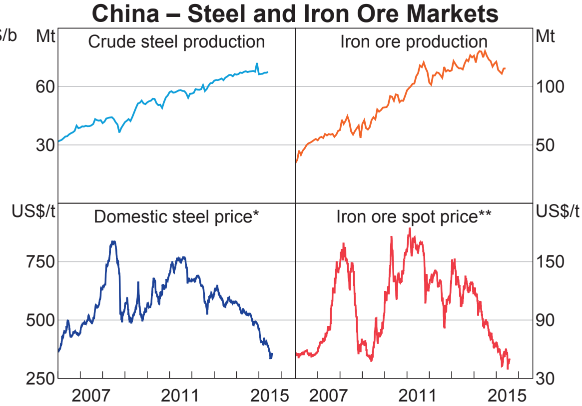
(a) Prices from the RBA Index of Commodity Prices (ICP); bulk commodities prices are spot prices
(b) In US dollars
Sources: Bloomberg; IHS; RBA

Graph 1.20
Commodity Prices



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

Graph 1.21
China – Steel and Iron Ore Markets

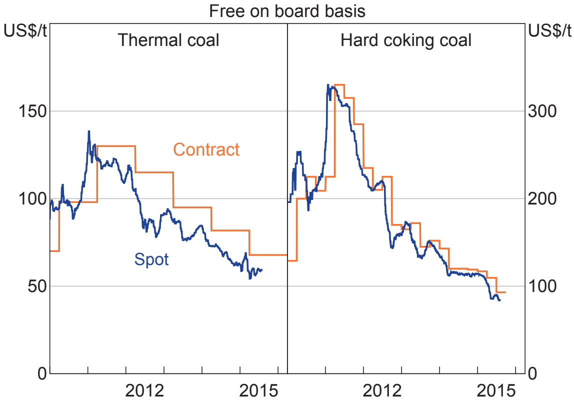


* Average of hot rolled steel sheet and steel rebar prices
** Free on board basis
Sources: Bloomberg; CEIC Data; RBA

Optimism about further policy stimulus from Chinese authorities and a reduction in Chinese iron ore production led to a noticeable increase in the spot price of iron ore early in the June quarter. Concerns about the strength of the Chinese economy and, consequently, the demand for steel and iron ore have re-emerged, while global production of iron ore is expected to expand further over the next year or so. This contributed to a sharp fall in the spot price of iron ore to its lowest level in around 10 years in early July. The price has since picked up somewhat. Given reductions in production costs over recent years, together with the depreciation of the Australian dollar, most Australian production appears to have remained profitable at current prices, although some smaller, higher-cost Australian producers remain under pressure.

Both the spot and contract prices of coking coal have fallen sharply in recent months, reflecting subdued growth in Chinese demand for steel. The spot price of thermal coal remains around 10 per cent below the levels prevailing in the second half of 2014 (Graph 1.22). At current prices, a substantial share of global coal production is estimated to be unprofitable. Liaison suggests that some Australian producers have been considering whether to maintain production in light of lower profitability, although the recent depreciation of the Australian dollar has offset some of the weakness in US dollar prices.

Graph 1.22
Coal Prices
Free on board basis



Sources: Department of Industry and Science; IHS; RBA

The Brent crude oil price has fallen since the previous *Statement*, to be around 50 per cent below its average level of recent years (see Graph 1.20). Oil prices had risen early in the June quarter on the news of an easing of production and a decline in inventories, although prices have declined more recently in response to OPEC's decision to maintain its production quota, expectations that Iran will gradually increase its oil exports later this year, and concerns about Chinese economic growth. The decline in oil prices since mid 2014 is gradually being reflected in regional LNG prices, as LNG contracts are linked to the price of oil with a lag.

Base metal prices have, on average, fallen to their lowest level since 2009, which is consistent with the easing in the growth of global industrial production. The prices of nickel and aluminium have fallen particularly sharply since the previous *Statement*. ✠

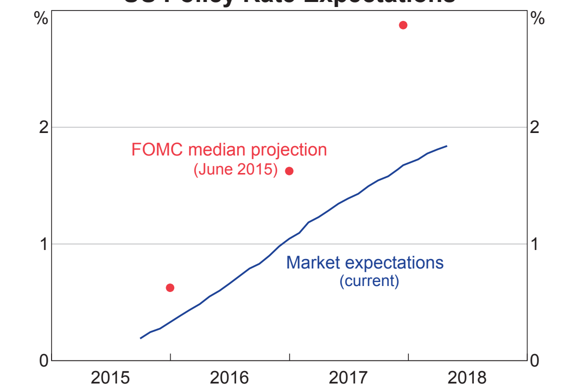
2. International and Foreign Exchange Markets

The major developments in global financial markets over recent months have been an escalation of concerns that Greece may exit the euro area, a correction in bond yields from the extremely low levels reached in mid April, a sharp but partial unwinding of the past year's rapid increase in Chinese share prices and a depreciation of the exchange rates of commodity-exporting nations (including Australia). The US Federal Reserve has continued to signal that it is nearing the point where it will raise the federal funds rate.

Central Bank Policy

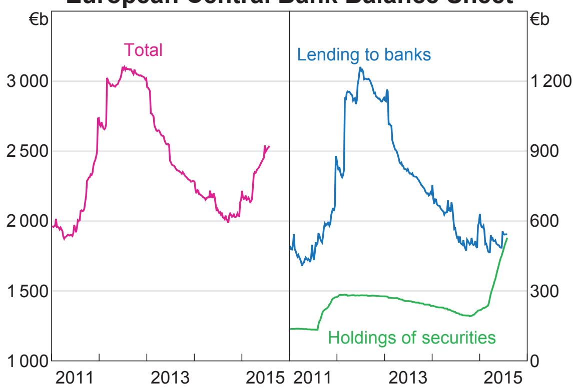
The US Federal Reserve left its policy stance unchanged over recent months, but statements by members of the Federal Open Market Committee (FOMC) have increasingly signalled that they believe the conditions necessary to increase the policy rate may be met by the time of their September meeting. FOMC members' projections following their June meeting are consistent with this, with the median projection being for two rate increases this year (Graph 2.1). Beyond this, the FOMC expects the pace of increase in the federal funds rate to be gradual, with the median FOMC projection being for 100 basis points of tightening in 2016 and 125 basis points in 2017. This path remains higher than market-implied expectations, which only fully price in the first increase in December and a total of 125 basis points of tightening over the following two years.

Graph 2.1
US Policy Rate Expectations



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

Graph 2.2
European Central Bank Balance Sheet



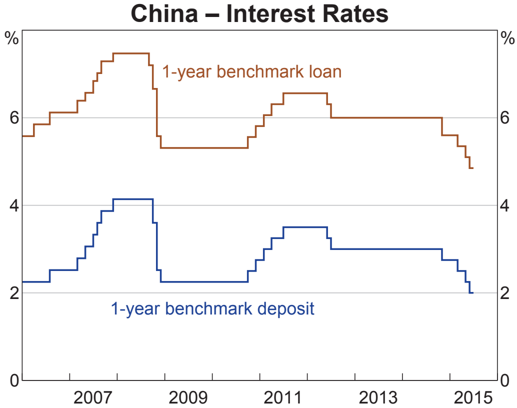
Source: ECB

The European Central Bank (ECB) continued to expand its balance sheet rapidly over recent months (Graph 2.2). This expansion has been underpinned by holdings of securities resulting from its asset purchase programs, which have increased by €300 billion since the start of the year. Lending to banks has been broadly stable over the past year as banks offset repayments of 3-year long-term refinancing operation (LTRO) loans by borrowing under targeted LTROs; loans extended under this facility (which commenced last September) now amount to almost €400 billion, with Italian, French and Spanish banks the largest users.

The Bank of Japan's (BoJ) balance sheet is also expanding rapidly as a result of its quantitative easing program, under which it aims to increase the money base by about ¥80 trillion this year. The BoJ continues to forecast that it will reach its 2 per cent target for inflation by around the middle of next year.

The People's Bank of China (PBC) eased monetary policy further in response to low inflation, the impact of that on real interest rates and softening economic growth. The PBC cut most benchmark lending and deposit rates by 25 basis points in both May and June, bringing the cumulative decline in 1-year benchmark rates to 115 and 100 basis points, respectively, since November last year (Graph 2.3). The PBC has also ensured that liquidity in the money market remains ample; reductions in reserve requirement ratios and targeted extensions of loans to certain banks have more than offset a reduction in liquidity from foreign exchange reserve sales over the course of 2015, leaving money market rates below average levels of recent years. Moreover, the PBC has provided support to the equity market. Beyond this, the State Council has announced its intention to make the loan-to-deposit ratio (LDR) non-binding, which would relax the current restrictions that the LDR imposes on

Graph 2.3
China – Interest Rates



Source: CEIC Data

banks' funding mix and asset composition and may thereby contribute to a further easing of monetary conditions.

Central banks in a number of other countries eased monetary policy further in June or July, including those of Canada, New Zealand and Norway (Table 2.1). In each case, the decision was motivated by, among other things, slower growth in commodity-related investment and/or reduced incomes due to lower terms of trade. The Reserve Bank of New Zealand (RBNZ) also adjusted its macroprudential policy settings to tighten restrictions on investor borrowing for housing purchases in Auckland, while relaxing those for borrowing elsewhere.

Table 2.1: Monetary Policy

	Policy rate Per cent		Most recent change
Euro area	0.05	↓	Sep 14
Japan[(a)]	na		na
United States[(b)]	0.125	↓	Dec 08
Australia	2.00	↓	May 15
Brazil	14.25	↑	Jul 15
Canada	0.50	↓	Jul 15
Chile	3.00	↓	Oct 14
China[(a)]	na		na
India	7.25	↓	Jun 15
Indonesia	7.50	↓	Feb 15
Israel	0.10	↓	Feb 15
Malaysia	3.25	↑	Jul 14
Mexico	3.00	↓	Jun 14
New Zealand	3.00	↓	Jul 15
Norway	1.00	↓	Jun 15
Russia	11.00	↓	Jul 15
South Africa	6.00	↑	Jul 15
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) The Bank of Japan's main operating target is currently the money base; China does not have an official policy rate
(b) Midpoint of target range
Sources: Central banks; RBA; Thomson Reuters;

The Swedish central bank also eased policy further in July, announcing both a reduction in its policy rate and a further expansion of its sovereign bond purchase program. The expansion will see it purchase over 20 per cent of the stock of outstanding government bonds during the course of 2015, a higher proportion than any other central bank has previously purchased in a single year.

The central banks of both India and South Korea lowered interest rates by a further 25 basis points over recent months, due to concerns about softening economies, while the Russian central bank unwound part of its 2014 monetary tightening. In contrast, the central banks of Brazil and South Africa continued to tighten policy in response to inflation concerns.

Greece

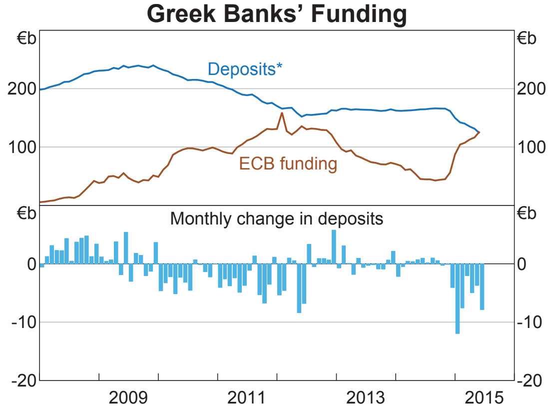
Greece and its official sector creditors reached agreement on the broad parameters of a third financial assistance program in mid July and are negotiating the details with an aim of completing this by mid August. A final decision on the program will require approval by European governments, with some requiring parliamentary authorisation for this (most notably, Greece and Germany). The agreement followed the closure of Greek banks for an extended period, after previous talks broke down when the Greek Government called a referendum in late June on whether to accept the terms then on offer by its official sector creditors, and a no vote in this referendum.

The terms of the proposed agreement include a 3-year program offering financial assistance of between €82 and €86 billion. Of this, €10–25 billion is allocated to potential bank recapitalisation needs, with €10 billion to be made available immediately after an agreement is finalised. The remainder of the financial assistance program would cover the Greek Government's debt obligations over the next three years. In return, the Government agreed to: restore the primary budget to a sustained surplus of 3½ per cent of GDP by 2018; raise and streamline a range of taxes; reduce pension payments; privatise additional assets; and commit to reforms of the labour market. Many of these terms are more onerous than those made available before the referendum, and Greece's creditors required many to be legislated before the start of negotiations to 'restore trust'. This legislation has since been passed.

In response to Greece's legislative action, the European Union provided a €7 billion bridge loan that enabled Greece to clear its arrears at the International Monetary Fund (IMF) and repay a maturing bond held by the ECB.

A key near-term challenge facing Greek authorities is how to restore the banking sector to normal functioning. Greek banks closed following the calling of the referendum, and various restrictions were placed on bank withdrawals (most notably a deposit withdrawal limit of €60 per day and the prohibition of bank transfers overseas without approval). This followed an acceleration of deposit outflows over June (Graph 2.4). The ECB decided not to raise the cap on liquidity assistance as the prospect of Greece defaulting on its obligations increased, but has raised it twice since the agreement. While Greek banks have reopened, there has been very little relaxation of the restrictions on bank withdrawals and most controls on international transfers remain in place.

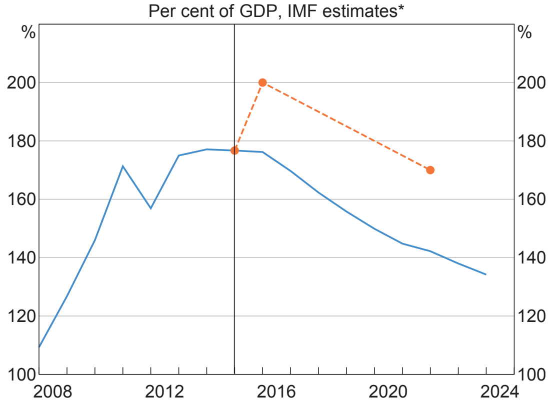
Graph 2.4
Greek Banks' Funding



* Non-financial, non-government
Sources: Bank of Greece; ECB; RBA

In the longer term, the main challenge for the Greek Government is to reduce its debt to a sustainable level. The IMF now estimates that Greece's debt would peak at close to 200 per cent of GDP over the next two years, accounting for the new loan but not for the full economic impact of the closure of the Greek banking system (Graph 2.5).

Graph 2.5
Greek Government Debt
Per cent of GDP, IMF estimates*



* Preliminary, from the June (solid line) and July (dotted line) debt sustainability analyses

Sources: European Commission; IMF

European leaders have agreed to discuss debt relief to make Greece's debt sustainable following the first disbursement of funds under the proposed program, but explicitly ruled out nominal haircuts on debt. The IMF has stated that maturity extensions could make Greece's debt sustainable, but only if they are 'very dramatic' and accompanied by a large grace period during which no interest or principal is paid to European governments (which account for the majority of its obligations; Table 2.2). The IMF will not be involved in a new program until it is satisfied that the Eurogroup has made sufficient concessions to ensure Greece's debt is sustainable.

Table 2.2: Greek Government Debt
As at March 2015

	€b	Per cent of total
Owed to official sector	233	77
Joint loans by EU governments	131	43
Bilateral loans by EU governments	53	18
ECB bond holdings[(a)]	27	9
IMF	22	7
Owed to private sector	69	23
Securities	40	13
Other	29	10
Total	**302**	**100**

(a) Mainly bonds acquired outright through the Securities Market Program; includes holdings by national central banks

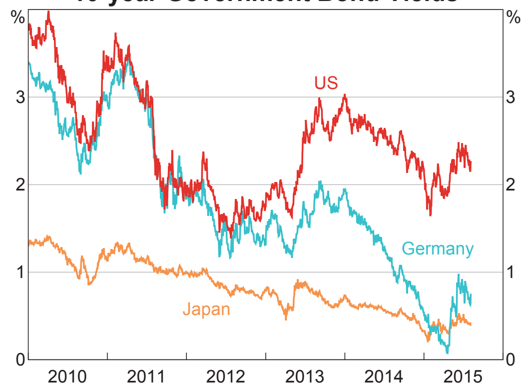
Sources: Bloomberg; ECB; European Commission; Eurostat; IMF

Sovereign Debt Markets

Yields on 10-year US and German government bonds have risen notably since mid April, with those on German Bunds around 70 basis points higher and those on US Treasuries having risen by 40 basis points (Graph 2.6). Yields are now back around the levels observed in early December 2014. This rise largely reflected a correction from the extremely low levels they had reached in early April (with a low of 8 basis points for the 10-year Bund yield). These moves have been more than matched by a rise in real yields, with inflation compensation embedded in nominal bonds falling alongside lower commodity prices over recent months. Japanese government bond (JGB) yields have also risen modestly since mid April.

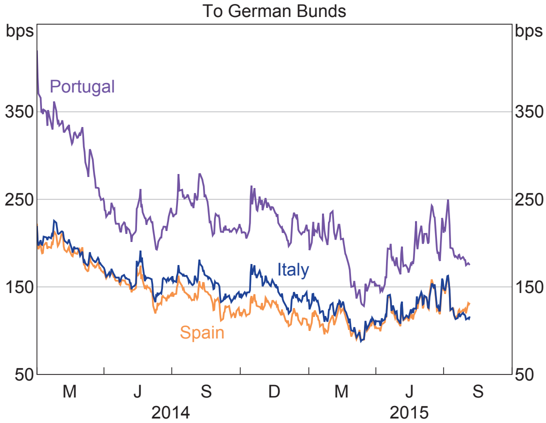
The spreads between yields on bonds issued by governments of the euro area periphery and German Bunds became more sensitive to developments in Greece as concerns about a possible breakdown of negotiations grew, but the increases in June and early July have been largely unwound since (Graph 2.7). The size of the moves in periphery sovereign bond spreads remained much smaller than in 2011 and 2012.

Graph 2.6
10-year Government Bond Yields



Source: Bloomberg

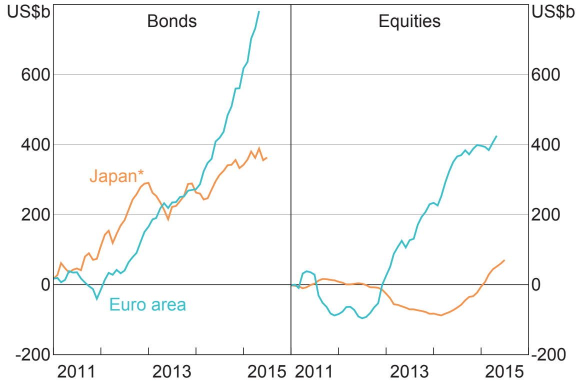
Graph 2.7
Euro Area 10-year Government Bond Spreads
To German Bunds



Source: Bloomberg

The asset reallocation by the Japanese Government Pension Investment Fund (GPIF), brought about by a reduction in its target allocation to JGBs from 60 to 35 per cent (with a corresponding increase in the allocation to domestic equities and international securities), looks now to be largely completed. At the end of March, the GPIF was within its target allocation range for both domestic equities and international securities. Consistent with this, Japanese residents' purchases of foreign assets have slowed over recent months (Graph 2.8). In contrast, European investors have been large purchasers of foreign bonds in the

Graph 2.8
Purchases of Foreign Portfolio Assets
By country of residence, cumulative since January 2011



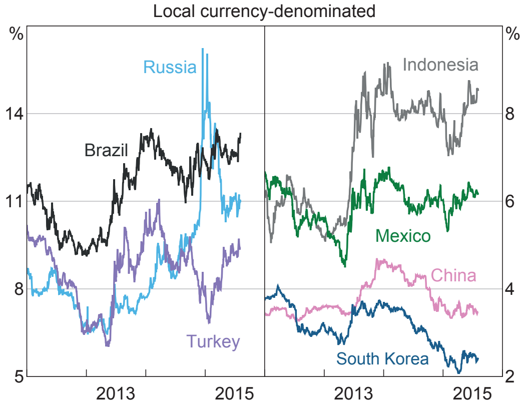
* Provisional data after May 2015

Sources: ECB; Japanese Ministry of Finance; RBA

first five months of the year. In combination with continued net sales by foreign investors, including those from Japan, this has resulted in large net bond capital outflows from Europe.

Yields on local currency bonds issued by emerging market sovereigns have risen since mid April but the magnitude of these moves was notably smaller than in Germany and the United States (Graph 2.9). There continued to be few signs of a reallocation away from emerging market bonds despite the US Federal Reserve moving closer to tightening policy.

Graph 2.9
10-year Government Bond Yields
Local currency-denominated



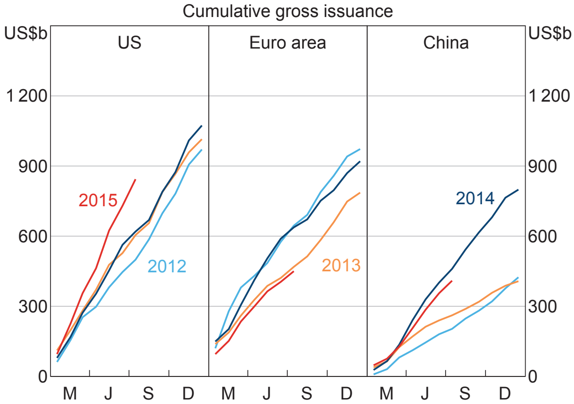
Sources: Bloomberg; Thomson Reuters

Credit Markets

Spreads on bonds issued by US and euro area corporations have risen moderately over recent months, alongside the evolving situation in Greece and developments in oil prices. The recent rise has seen US corporate bond spreads return close to their recent peaks in January, while euro area financial and investment-grade spreads are also above their levels of a year ago. Nonetheless, spreads remain low by historical standards.

Bond issuance by US corporations in 2015 to date has been well ahead of prior years (Graph 2.10). The increase in issuance partly owes to acquisition-related fund raising, with a third of issuance this year used in part for that purpose (compared with one fifth in 2014), and to efforts to raise funds ahead of an expected tightening in monetary policy later this year. In contrast, corporate bond issuance in Europe has been weak this year, with uncertainty surrounding Greece weighing of late. Chinese corporations have issued sizeable quantities of debt in 2015, though at a slightly slower pace than in 2014.

Graph 2.10
Global Corporate Bond Issuance
Cumulative gross issuance



Sources: Dealogic; RBA

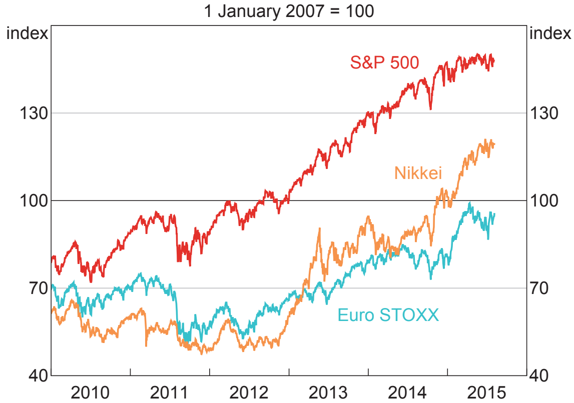
In China, issuance of infrastructure-linked bonds that are commonly used by local government financing vehicles (LGFVs) has slowed in 2015. However, the impact of this on local governments' ability to fund infrastructure via LGFVs has been mitigated somewhat by progress of the program under which local governments can swap high-cost LGFV debt into lower-yielding municipal bonds. This has seen bond issuance by local governments treble to around CNY1.3 trillion this year. Accordingly, combined LGFV and local government bond issuance has been well ahead of that issued at the same time last year, alleviating earlier concerns about a funding shortfall. Issuance is likely to remain sizeable over the remainder of the year, given that the total quota available for local government issuance is currently CNY2.6 trillion.

Equities

US and euro area equity prices have been broadly unchanged over recent months, despite fluctuating in response to the evolving situation in Greece and falls in Chinese equity prices (Graph 2.11; Table 2.3). These developments had a greater impact on euro area share prices, which at one stage were more than 10 per cent below their mid-April peak. In Japan, share prices have continued to increase, to be almost 20 per cent higher than at the start of the year.

US banks posted strong profits in the June quarter, although the sizeable increase compared with the same period in 2014 partly reflected lower legal expenses. Beyond this, the increase in profits owed to a rise in client activity on both the trading and

Graph 2.11
Major Share Price Indices
1 January 2007 = 100



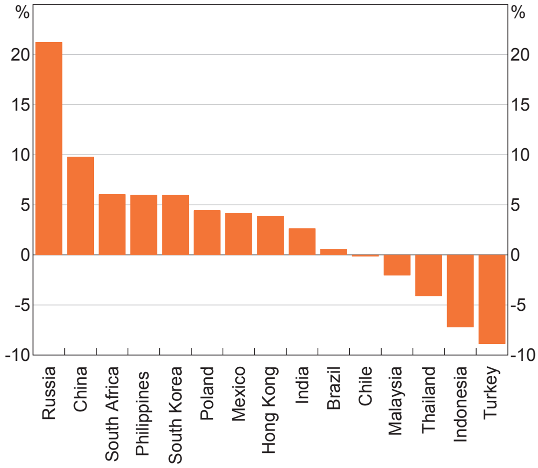
Source: Bloomberg

Table 2.3: Changes in International Share Prices
Per cent

	Over 2014	2015 to date
United States – S&P 500	11	2
Euro area – STOXX	2	18
United Kingdom – FTSE	–3	3
Japan – Nikkei	7	18
Canada – TSE 300	7	–1
Australia – ASX 200	1	5
China – MSCI All China	28	10
MSCI indices		
– Emerging Asia	5	–2
– Latin America	–4	0
– Emerging Europe	–8	3
– World	**7**	**5**

Source: Bloomberg

Graph 2.12
Changes in Emerging Market Share Price Indices
Since the start of 2015



Source: Bloomberg

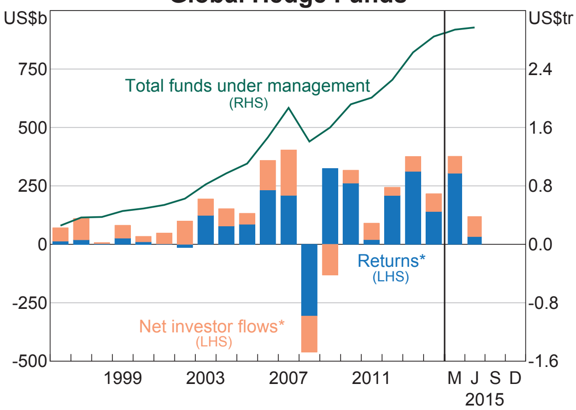
advisory side, as well as a pick-up in mortgage origination. European banks have generally increased their profitability over the quarter and strengthened their capital ratios. Profits from retail banking, wealth management and equities trading tended to increase, while loan loss provisions continued to decline and a number of banks made further progress in reducing their cost bases.

While provisions for legal expenses have declined, six US and European banks agreed in June to pay almost US$6 billion in fines to various US and UK authorities for misconduct and manipulation of foreign exchange markets. A number of these banks also pleaded guilty to criminal charges of market manipulation. The fines bring the amount paid by banks to global regulators since the end of 2008 to US$200 billion.

Equity prices in emerging market economies have drifted down since late April or early May, but are mostly still higher than at the start of the year (Graph 2.12). Chinese equity prices have declined by 30 per cent since mid June to be back around end-March levels. As discussed in 'Box A: The Recent Decline in Chinese Equity Prices', this decline largely reflects some correction from excessively high levels and has been associated with a partial reversal of the sharp run-up in margin debt over the prior year. Equity prices stabilised for a time following aggressive policy intervention, but subsequently fell again as investors questioned the continuation of this support. Hong Kong equity price indices have been weighed down by these declines, owing to the large number of Chinese companies listed in Hong Kong, but the decline in other Hong-Kong listed companies' share prices has been modest. Brazilian share prices have also fallen by around 15 per cent from their peak three months ago, reflecting concerns about deteriorating fiscal and economic conditions (amid lower commodity prices).

Hedge Funds

Global hedge funds recorded an asset-weighted return on investments of 3.9 per cent over the year to the June quarter 2015, outperforming a balanced portfolio of global bonds and equities. The strongest performance came from funds investing in emerging Asia and macro funds, which trade according to views on broad economic developments. Hedge funds continue to receive net inflows which, combined with positive investment returns, saw funds under management rise by 1 per cent over the quarter to almost US$3 trillion (Graph 2.13).



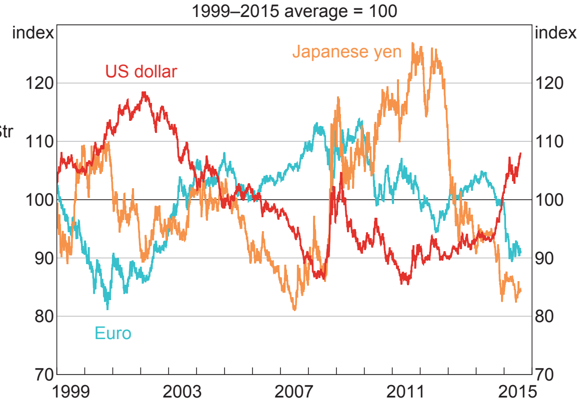
* Annualised for 2015 data
Sources: Hedge Fund Research, Inc.; RBA

Foreign Exchange

Foreign exchange markets have continued to be influenced by the divergent outlooks for monetary policy in the United States and other major advanced economies. A renewed decline in global commodity prices has also contributed to some larger movements in exchange rates over recent months, although volatility in the main developed market currency pairs has been little changed at around its 20-year average.

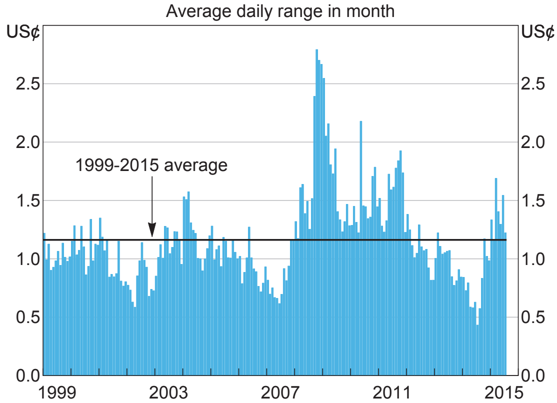
The US dollar has appreciated against most other currencies since mid May to be around 5 per cent higher on a trade-weighted basis, and is around 17 per cent higher than its mid 2014 level (Graph 2.14; Table 2.4). The sustained appreciation reflects market participants' ongoing expectations that the FOMC will increase the federal funds rate later this year and that other major economies will maintain current monetary policy settings or ease further.

The euro has appreciated by 2 per cent on a trade-weighted basis and by 3 per cent against the US dollar since mid April, alongside a marked increase in German Bund yields. The appreciation has occurred notwithstanding the developments



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

in Greece, although in recent months the intraday range for the EUR/USD exchange rate has been above its average since the introduction of the euro (Graph 2.15). Despite its recent appreciation, the euro has depreciated by around 8 per cent over 2015 to date, and is 13 per cent lower than its peak in March 2014 on a trade-weighted basis.



Sources: Bloomberg; RBA

The Swiss franc has depreciated by around 4 per cent against the euro since mid April, but remains 12 per cent above its level immediately prior to the Swiss National Bank (SNB) abandoning its minimum exchange rate policy in January. The evolving situation in Greece contributed to increased

Table 2.4: Changes in the US Dollar against Selected Currencies
Per cent

	Over 2014	2015 to date
Brazilian real	12	32
New Zealand dollar	5	20
Canadian dollar	9	13
Swedish krona	21	11
Australian dollar	9	11
Mexican peso	13	11
European euro	14	11
Malaysian ringgit	7	11
South African rand	10	11
Russian rouble	76	9
Indonesian rupiah	2	9
South Korean won	4	8
Thai baht	1	7
Singapore dollar	5	4
Japanese yen	14	4
Philippine peso	1	2
Indian rupee	2	1
Chinese renminbi	2	0
UK pound sterling	6	0
Swiss franc	11	–2
TWI	**9**	**7**

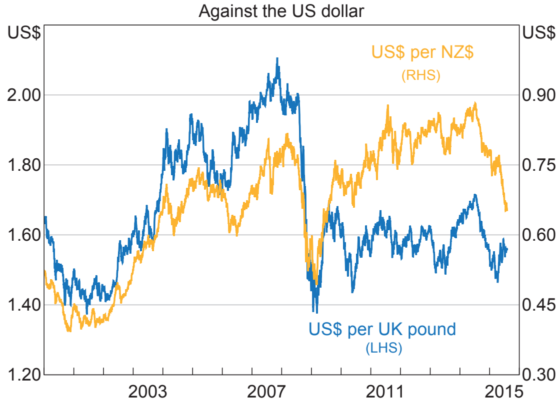
Sources: Bloomberg; Board of Governors of the Federal Reserve System

demand for the franc and the SNB confirmed it had intervened in the foreign exchange market in late June to offset appreciation pressure on the franc following the decision by Greek authorities to hold a referendum and introduce capital controls.

The Japanese yen has depreciated by 5 per cent against the US dollar and by 2 per cent on a trade-weighted basis since mid May, and in June the yen reached its lowest level against the US dollar since 2002. In real trade-weighted terms, the yen remains around 30 per cent lower than its multi-decade average.

The New Zealand dollar has depreciated by around 15 per cent against the US dollar since late April when the RBNZ moved to an easing bias and subsequently reduced its policy rate in June and July (Graph 2.16). The Canadian dollar and Norwegian krone have depreciated by around 9 per cent and 11 per cent respectively against the US dollar since mid May alongside both central

Graph 2.16
New Zealand Dollar and UK Pound
Against the US dollar



Source: Bloomberg

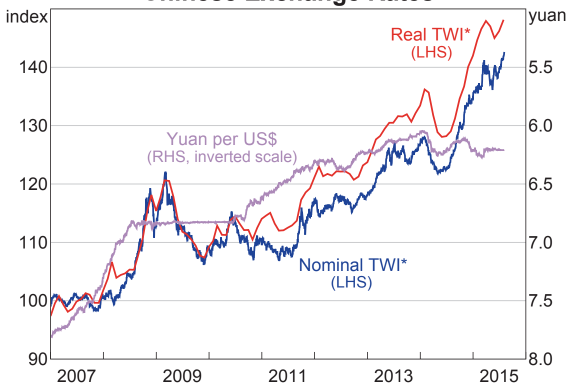
banks easing monetary policy and a decline in oil prices. In contrast, the UK pound has appreciated by 7 per cent against the US dollar since mid April, in part due to market participants' expectations of the timing of the Bank of England's first rate increase being brought forward.

The Chinese renminbi (RMB) has been little changed against the US dollar since mid March and volatility has declined to low levels. The PBC's daily fixing rate for the RMB against the US dollar has also been little changed over this period and the RMB remains in the bottom half of its +/-2 per cent trading band against the US dollar. Consistent with the broad-based appreciation of the US dollar, the RMB has appreciated by around 6 per cent on a trade-weighted basis over 2015 to date, to be 16 per cent higher than its mid 2014 level (Graph 2.17). This primarily reflects an appreciation of the RMB against the euro and the yen. In late July China's State Council called for the PBC and State Administration of Foreign Exchange to widen the RMB exchange rate trading band against the US dollar, although this is yet to be implemented. The trading band was previously widened to +/-2 per cent in March 2014 (from +/-1 per cent).

The stock of Chinese foreign currency reserves decreased by US$36 billion (around 1 per cent) over the June quarter, to be around US$300 billion lower than its peak at the end of June 2014 (Graph 2.18). The decline in reserves since mid 2014 has reflected both capital outflows from the private sector and exchange rate valuation effects from a broadly stronger US dollar.

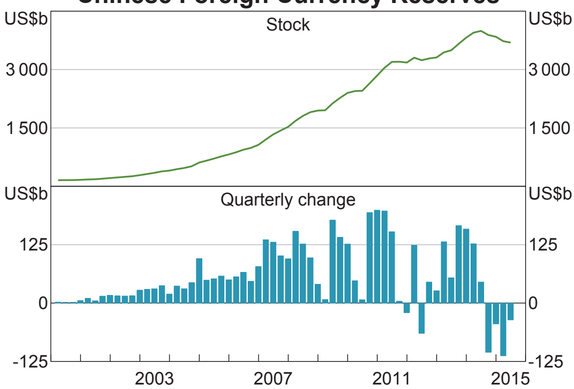
Most other Asian and emerging market currencies have depreciated against the US dollar since mid May and over 2015 to date (Graph 2.19). The depreciations have tended to be more pronounced for the currencies of commodity exporters. However, volatility in most emerging market currencies has declined over recent months and is currently around its post-2009 average.

Graph 2.17
Chinese Exchange Rates



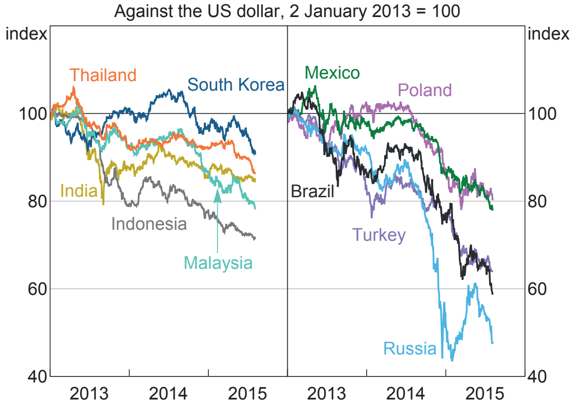
* Indexed to 2007 average = 100
Sources: BIS; Bloomberg; RBA

Graph 2.18
Chinese Foreign Currency Reserves



Source: CEIC Data

Graph 2.19
Asian and Emerging Market Currencies
Against the US dollar, 2 January 2013 = 100



Source: Bloomberg

After having appreciated by a little more than 40 per cent against the US dollar between late January and mid May, the Russian rouble has since depreciated by around 23 per cent. The depreciation has coincided with declines in global oil prices, the Russian central bank's daily purchases of foreign currency between mid May and late July to replenish its foreign currency reserves, and further monetary policy easing. Russia's gross foreign currency reserves had declined by US$125 billion between mid 2014 and April 2015 but have since increased moderately.

In Asia, the South Korean won has depreciated by around 9 per cent against the US dollar since its peak in late April, alongside a softening in economic conditions and the Bank of Korea's decision to reduce its policy rate in June. In South America, the Brazilian real has depreciated by around 16 per cent against the US dollar since late April and is 24 per cent lower over 2015 to date. Declining commodity prices and deteriorating economic and fiscal conditions have contributed to the depreciation of the currency.

The gross foreign currency reserves of most Asian and other emerging market economies have been little changed or have increased modestly since the end of March (Table 2.5). Two exceptions are Malaysia and Indonesia, whose foreign currency reserves have declined by 4 per cent and 3 per cent respectively since the end of March. Bank Indonesia reported that the decline in its reserves was partly attributable to the sale of foreign exchange to stabilise the rupiah.

Australian Dollar

Since the previous *Statement*, the Australian dollar has depreciated by 5 per cent on a trade-weighted basis and by 8 per cent against the US dollar, to be around its lowest level since 2009 (Graph 2.20; Table 2.6). The depreciation was similar to that of other commodity exporters. A number of factors have contributed to the depreciation, including declines in key commodity prices, uncertainty about the outlook for China and market participants' ongoing assessment of the outlook for US monetary

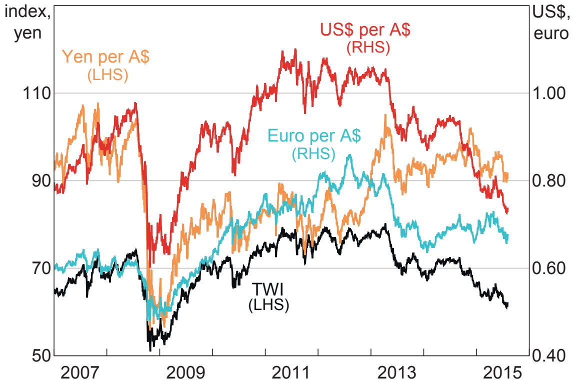
Table 2.5: Gross Foreign Currency Reserves[a]

	Percentage change since:		Level
	End June 2014	End March 2015	US$ equivalent (billions)
China	–7	–1	3694
Taiwan[b]	0	2	422
South Korea	2	2	362
Brazil	–1	2	360
India	14	4	329
Hong Kong	4	1	324
Russia	–28	1	302
Singapore	–9	2	251
Mexico	2	–1	184
Thailand	–4	3	152
Indonesia	1	–3	102
Turkey	–10	–1	99
Malaysia	–23	–4	92
Ukraine	–39	3	9

(a) Data to end June for China, Hong Kong, Singapore, Mexico, Thailand, Indonesia, and Ukraine; to 15 July for Malaysia; to 24 July for India, Russia and Turkey; to end July for Taiwan, South Korea and Brazil
(b) Foreign exchange reserves (includes foreign currency and other reserve assets)
Sources: Bloomberg; CEIC Data; IMF; RBA

policy. Since mid 2014, the Australian dollar has declined by 14 per cent on a trade-weighted basis and by 23 per cent against the US dollar.

Graph 2.20
Australian Dollar



Sources: Bloomberg; RBA

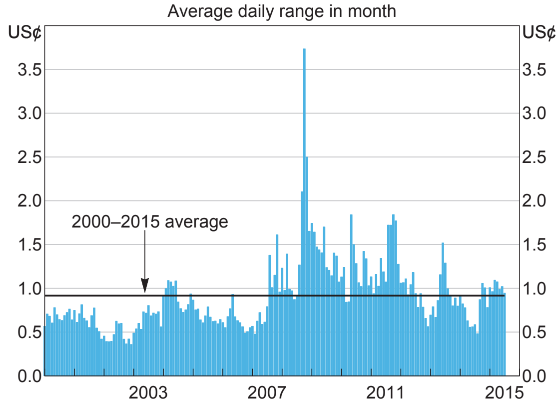
Table 2.6: Changes in the Australian Dollar against Selected Currencies
Per cent

	Over 2014	2015 to date
New Zealand dollar	–4	8
Canadian dollar	0	2
European euro	4	0
Malaysian ringgit	–2	0
South African rand	1	0
Indonesian rupiah	–7	–2
South Korean won	–5	–3
Thai baht	–8	–4
Singapore dollar	–4	–6
Japanese yen	4	–6
Indian rupee	–6	–9
Chinese renminbi	–6	–10
US dollar	–8	–10
UK pound sterling	–3	–10
Swiss franc	2	–11
TWI	**–3**	**–7**

Sources: Bloomberg; RBA

Volatility in the Australian dollar has been little changed over 2015 to date, with the average intraday trading range for the AUD/USD exchange rate remaining slightly higher than its post-2000 average (Graph 2.21).

Graph 2.21
Intraday Range in AUD/USD
Average daily range in month



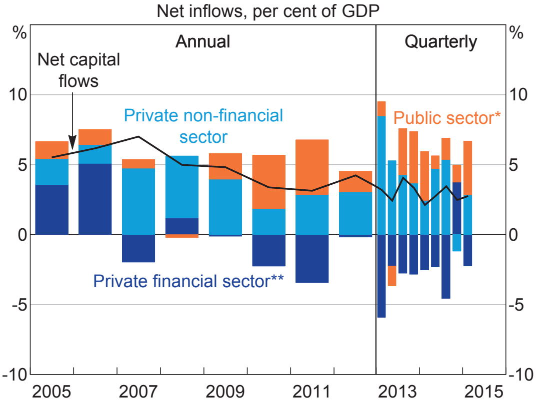
Sources: Bloomberg; RBA

Capital Flows

Net capital inflows to the Australian economy were equivalent to 2.8 per cent of GDP in the March quarter, and were primarily directed to the public sector. There was also a small net inflow to the private sector as a whole, with net inflows to the private non-financial sector more than offsetting net outflows from the private financial sector (Graph 2.22).

Within the public sector, the net inflow to the general government sector continued to largely reflect foreign purchases of Australian Government securities (AGS). In contrast to the previous three quarters, the state and local government sectors also received a net inflow, albeit relatively modest. However, with net inflows largely proportional to net issuance of AGS and state and local government debt, the foreign ownership shares were little changed at 66 and 25 per cent respectively.

Graph 2.22
Australian Capital Flows
Net inflows, per cent of GDP

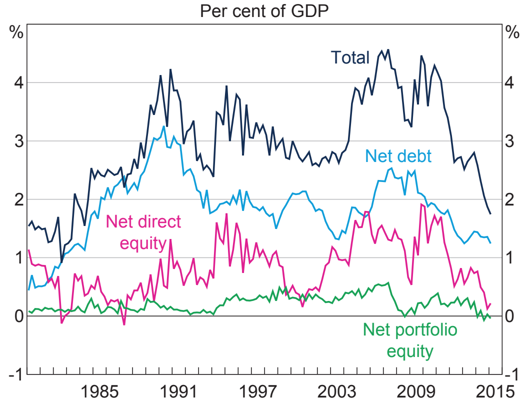


* Excludes official reserves and other RBA flows
** Adjusted for US dollar swap facility in 2008-09
Sources: ABS; RBA

The net inflow to the private non-financial sector in the March quarter was entirely due to a sharp increase in foreign investment in the mining sector, following negligible net flows in the December quarter. In contrast, there was a net outflow from the private financial sector, largely reflecting net debt outflows from the banking sector. This more than offset a net inflow to the 'other financials' sector (which includes superannuation and other types of investment funds), which reflected a repatriation of Australian investments in foreign bonds. This quarter was the first time the 'other financials' sector had not recorded a net equity outflow since the June quarter 2013.

Notwithstanding the increase in net capital inflows, Australia's (seasonally adjusted) net income deficit narrowed further in the March quarter to 1.7 per cent of GDP – its lowest share of GDP since June 1984 (Graph 2.23). The narrowing of the net income deficit was driven by a decline in the value of payments on Australia's debt liabilities.

Graph 2.23
Net Income Deficit
Per cent of GDP



Sources: ABS; RBA

Box A

The Recent Decline in Chinese Equity Prices

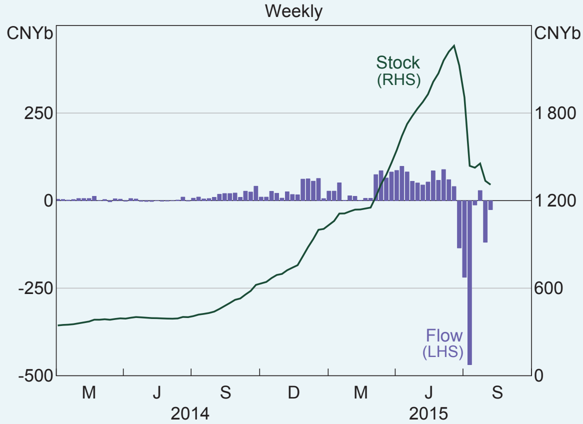
After rising by 150 per cent over the year to mid June, equity prices in China have since fallen by 30 per cent (Graph A1). The fall was broad based across sectors, but was larger for small- to medium-sized companies and for technology stocks, which are more commonly listed on the Shenzhen Stock Exchange than on the Shanghai exchange. As with the preceding rapid increase, the decline was driven by retail investors and did not seem to be associated with a marked change in the outlook for the economy or the fundamental value of stocks.[1]

Leverage, that is share purchases partly financed by borrowing, has played a notable role in the share market movements over the past year, unlike previous episodes when leveraged purchases were prohibited. Outstanding margin lending through brokers, the largest providers of funds, has declined by 40 per cent since its peak in mid June to around CNY1.3 trillion, with much of this fall concentrated in the first week of July (Graph A2). It appears more likely that this decline in broker margin financing was the result of voluntary deleveraging than of widespread forced selling to meet margin calls. One indication of this is that brokers would have only been compelled to issue a margin call to investors who had bought an entire portfolio of shares at the peak of the market (that then fell in line with the broad indices) if the initial loan-to-value ratio (LVR) was close to the 50 per cent maximum available from brokers. This is well above the average LVR of 36 per cent across all investors prior to the sell-off.

Graph A1
Chinese Share Prices
1 January 2014 = 100

Source: Bloomberg

Graph A2
Chinese Margin Financing
Weekly



Source: WIND Information

It is likely, however, that there has been greater stress for investors who sourced finance from institutions other than brokers, as leverage financed through these channels can be considerably higher. Such lending is extended by a wide variety of entities and through a number of different structures, but

1 For a discussion of the rapid increase, see RBA (2015), 'Box B: Recent Developments in Chinese Equity Prices', *Statement on Monetary Policy*, May, pp 32–33.

the largest providers appear to be banks (including via off-balance sheet entities) and trust companies.[2] Margin loans from such providers reportedly have LVRs as high as 90 per cent, although they seem to be more commonly between 50 and 67 per cent. At these LVRs, investors who bought shares at close to the peak using non-broker margin financing would have little to no equity left. The aggregate size of such leveraged equity trading is unknown, but market analysts' estimates suggest it could be as large as formal margin financing.

The Chinese authorities responded to the decline in share prices by announcing a number of different policies. The government appears to have been a very significant buyer of stocks, largely via China Securities Finance – a state-owned financial institution that previously specialised in margin financing loans. Demand for shares was also supported by the announcement in early July that 21 brokers would contribute CNY130 billion to a market stabilisation fund to purchase stocks, among a number of other measures.

In addition, the authorities prohibited a range of investors from selling, including major shareholders, company directors and managed funds, while also relaxing margin call requirements and placing tighter limits on short selling. The authorities also agreed to a large number of companies being suspended from trading, with around half of listed companies suspended on 9 July (compared with a usual proportion of around 20 per cent). A large proportion of many Chinese companies' shares are not typically available to trade at normal times due to state ownership (i.e. they are not part of the 'free-float' market capitalisation) and the suspensions further lowered the proportion that is tradeable to around 25 per cent of total market capitalisation on 9 July. Considerably less than this could be sold during the day as most stocks hit their 10 per cent daily price change limit.[3]

The combination of these actions supported a partial recovery in share prices, but there have been some more large price falls subsequently as investors questioned the continuation of this government support. Share valuations remain stretched and brokered margin financing as a share of free-float market capitalisation remains well above that in other countries, at 6½ per cent (down from a peak of 10 per cent).

It is unlikely that the decline in equity prices will have a large impact on economic activity through its effect on consumer wealth. While the value of shares held by households has fallen sharply in recent weeks, household wealth in equities is still higher than it was at the beginning of the year and shares are a relatively small share of households' assets in China. ✠

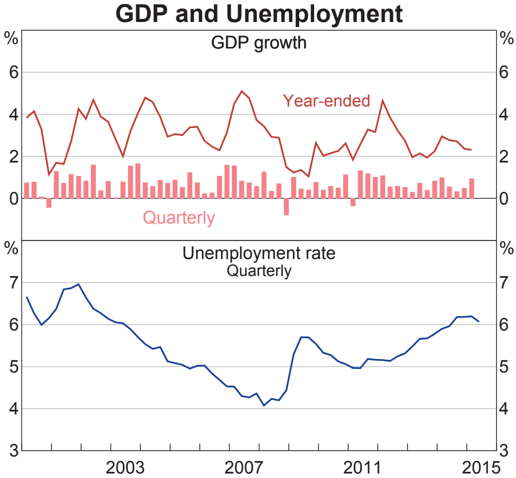
2 Internet brokers and peer-to-peer platforms have also been rapidly growing and high-profile sources of funds, but the total extended via such entities appears to still be small.

3 Share prices in China must trade within a daily range of plus or minus 10 per cent, except those issued on that day.

3. Domestic Economic Conditions

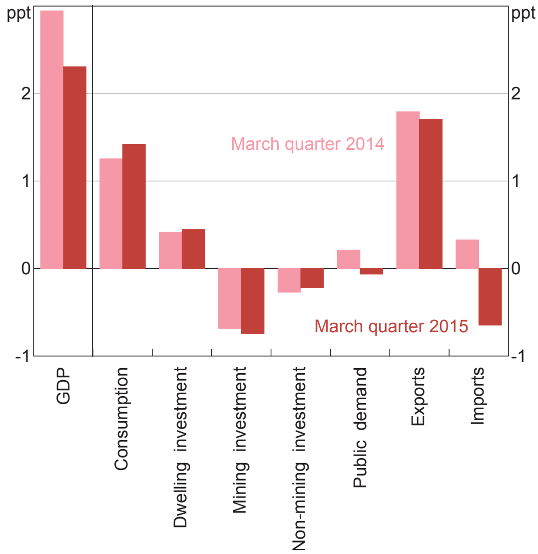
Growth of the Australian economy picked up in the March quarter, although it has remained below average over the past year and early indications are that the strength in the March quarter was not repeated in the June quarter (Graph 3.1). The key forces shaping the economy have remained much as they have been for some time. Business investment continued to decline over the year to the March quarter, particularly in the mining sector; non-mining business investment remains subdued. Resource exports made a substantial contribution to growth, as new capacity continued to come on line (Graph 3.2; Table 3.1). The depreciation of the exchange rate has supported exports of services, such as tourism, while service imports have declined. Very low interest rates are working to lift growth in other parts of the economy. Dwelling investment has grown strongly over the past year, housing prices are growing strongly in some parts of the country, and consumption growth has picked up from its lows in 2013. Income growth has been weaker than the growth of real activity, however, as the terms of trade have declined further. Public demand has not grown.

Graph 3.1
GDP and Unemployment



Source: ABS

Graph 3.2
GDP Growth
Year-ended contribution



Sources: ABS; RBA

Labour market conditions have generally improved over the course of this year. The protracted period of low wage growth may be encouraging firms to increase employment by more than otherwise and the decline in population growth can help to explain the relatively stable unemployment rate during a period of below-average growth in output. Despite the improvement, there remains evidence of spare capacity in the labour market.

Table 3.1: Demand and Output Growth
Per cent

	March quarter 2015	December quarter 2014	Year to March quarter 2015
GDP	0.9	0.5	2.3
Consumption	0.5	0.8	2.6
Dwelling investment	4.7	3.9	9.2
Mining investment(a)	–3.7	–4.2	–11.5
Non-mining investment(a)	–3.5	1.1	–2.3
Public demand	0.1	0.0	–0.3
Exports	5.0	1.6	8.1
Imports	3.1	–1.6	3.3
Nominal GDP	0.4	0.6	1.2
Real gross domestic income	0.2	0.1	–0.2

(a) RBA estimates
Sources: ABS; RBA

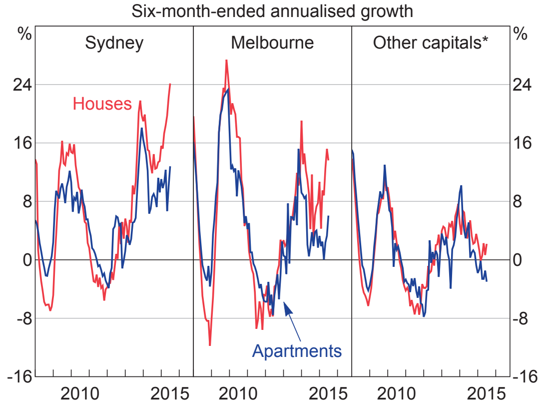
Household Sector

Conditions in the new and established housing markets have remained strong overall, consistent with low interest rates. However, conditions have varied widely across market segments. Consumption growth looks to have picked up over the past couple of years, but remains below its average pace.

There is considerable variation in growth rates of housing prices across the country. Large price increases have been recorded for detached houses in Sydney and Melbourne, where market conditions remain strong (Graph 3.3). Growth of apartment prices in these cities has been noticeably slower, reflecting the large increases in higher-density housing supply over recent years, especially in Melbourne. Conditions in established housing markets outside of Sydney and Melbourne have been subdued, and prices have declined in a number of market segments.

In the rental market, there has been an increase in supply relative to demand over recent years. Loan approvals data suggest that the level of investor demand for housing remains very strong, and more so in the regions where housing price growth has been strongest. Meanwhile, the nationwide rental vacancy rate has continued to drift higher and, accordingly, rental price inflation has eased (Graph 3.4). This trend appears to be common across all capital cities, including in Perth where investor demand is relatively weak. Combined with strong national housing price growth, this has led to further declines in rental yields.

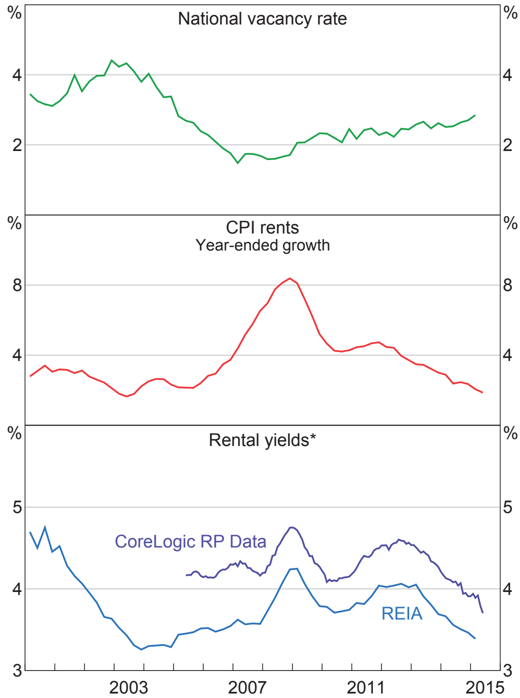
Graph 3.3
Capital City Housing Price Growth
Six-month-ended annualised growth



* Weighted average of Adelaide; Brisbane; Canberra; Darwin and Perth
Sources: ABS; CoreLogic RP Data; RBA

Reflecting low interest rates and associated strength in housing prices, dwelling investment rose by 9 per cent over the year to March and forward-looking indicators point to further strength in construction in the near term. Building approvals remain at high

Graph 3.4
Rental Market



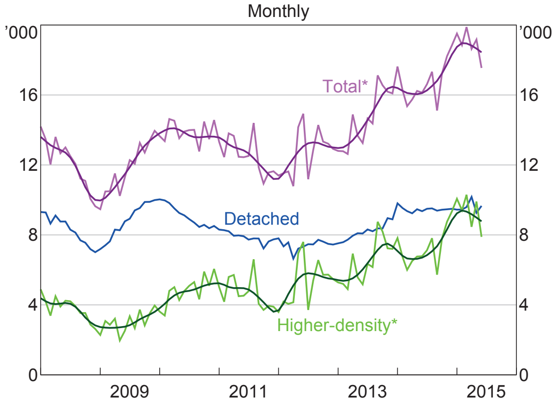
* REIA series uses an unmatched sample of rents and prices; CoreLogic RP Data series uses a matched sample and has been seasonally adjusted by the RBA

Sources: ABS; CoreLogic RP Data; RBA; REIA

levels, as do loan approvals for new dwellings, notwithstanding some recent declines (Graph 3.5). First-home owner grants have continued to trend higher.

Graph 3.5
Private Residential Building Approvals

Monthly



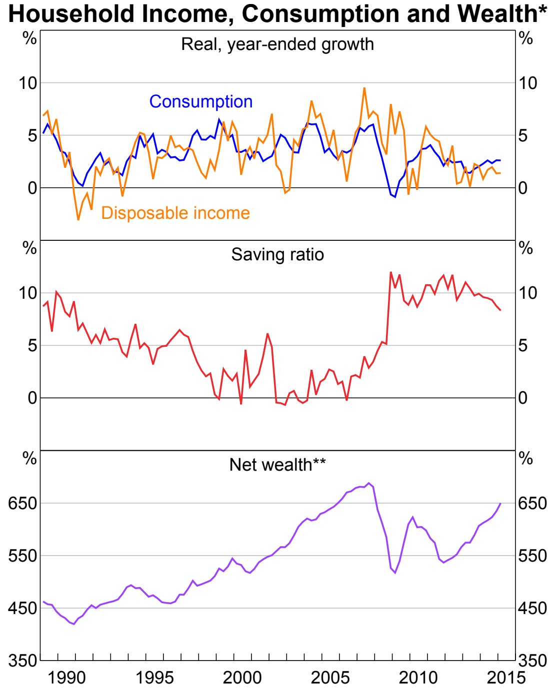
* Smoothed lines are ABS trend measures

Source: ABS

While new higher-density dwellings have accounted for much of the growth in dwelling investment over the past year, renovation activity has also picked up recently. Construction of new detached houses has grown more slowly over the past year, consistent with liaison reports that it is difficult to obtain suitable land ready for development in some parts of the country.

Consumption growth has picked up since its recent trough in 2013 (Graph 3.6). Consumption growth in per capita terms now appears to have been a bit stronger than it had earlier appeared given there have been downward revisions to population growth. Low interest rates and strong increases in wealth are supporting a rate of consumption growth that is higher than that of household disposable income. As a result, there has been a decline in the household saving ratio over the past couple of

Graph 3.6
Household Income, Consumption and Wealth*



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

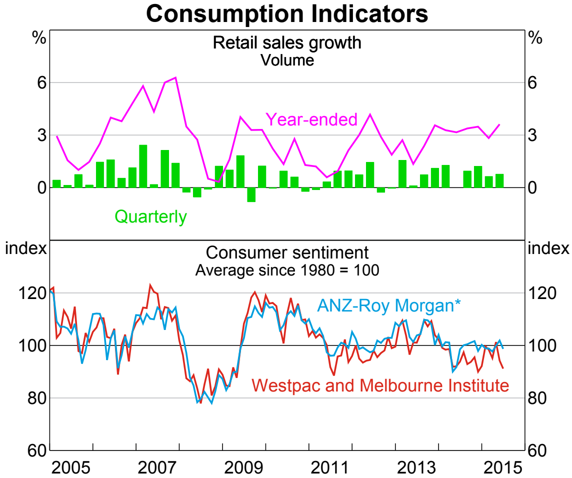
** Per cent of annual household disposable income, before the deduction of interest payments

Sources: ABS; RBA

years. Nonetheless, it remains higher than it was over most of the 1990s and early 2000s. Consumption growth has been higher in New South Wales, which has had less direct exposure to the contraction in mining investment and the easing in population growth, as well as the strongest housing market. Household debt has increased moderately as a share of household income over the past few years (see 'Box B: Measuring Household Debt' for more information).

More recently, retail sales volumes increased by 0.8 per cent in the June quarter (Graph 3.7). Motor vehicle sales to households remain at high levels. Overall measures of consumer sentiment are a little below their long-run averages, although sentiment regarding households' own finances is more positive. Consumers' unemployment expectations remain elevated.

Graph 3.7
Consumption Indicators



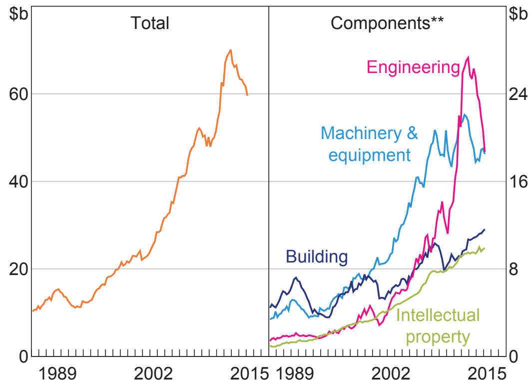
* Rescaled to have the same average as the W-MI index since 1996

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

Business Sector

Private business investment fell in the March quarter and was 6 per cent lower over the year (Graph 3.8). Much of the decline was attributed to weaker investment in engineering construction.

Graph 3.8
Private Business Investment*
Chain volume



* Adjusted for second-hand asset transfers between the private and other sectors; reference year is 2012/13

** Excluding cultivated biological resources

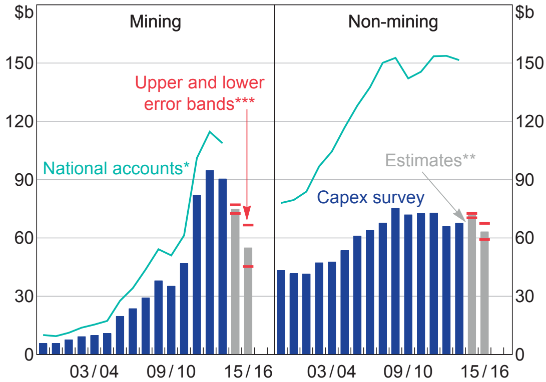
Sources: ABS; RBA

Mining investment has fallen substantially over the past three years, as large iron ore, coal and liquefied natural gas (LNG) projects have been completed, and few new projects have commenced. The ABS capital expenditure (Capex) survey implies that this trend will continue, and estimates for nominal mining investment derived from this survey were revised lower in the most recent release, particularly for 2015/16 (Graph 3.9). Bank liaison also continues to point to substantial declines in capital expenditure in the resource sector. In addition, mining sector profitability remains under pressure; mining sector profits fell by 22 per cent over the year to the March quarter, reflecting the decline in bulk commodity prices.

Non-mining business investment has been little changed for the past four years and surveys of investment intentions, as well as relatively low levels of non-residential building approvals, suggest that it will remain subdued over the coming year.[1] Indeed, the latest Capex survey implies non-mining investment will fall in 2015/16, consistent with weak underlying conditions in the commercial property

1 There is some uncertainty in the way activity is attributed to the mining and non-mining sectors, suggesting some caution when interpreting the Bank's estimate of the split between mining and non-mining business investment over recent quarters.

Graph 3.9
Measures of Private Business Investment
Nominal



* 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

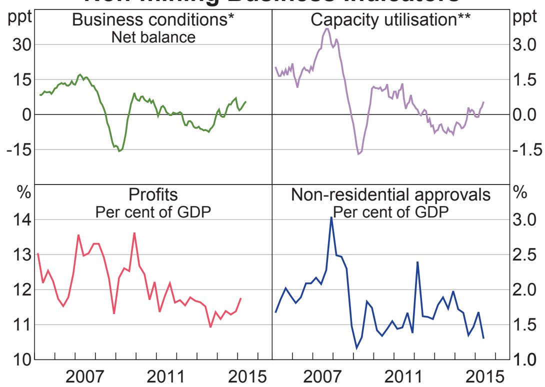
*** Error bands are based on the root mean square error of each adjusted estimate compared with the final outcome for investment in each year

Sources: ABS; RBA

market. However, the Capex survey does not cover a large share of non-mining business investment that is included in the national accounts, such as in agriculture, education and health care. Nor does it capture investment in intangible items (which tends to grow at a steady pace). Also, a number of factors are supportive of non-mining investment. Non-mining company profits have increased by 6 per cent over the past year, employment growth has picked up and survey measures of business sentiment and capacity utilisation are around or above average levels (Graph 3.10).

The exchange rate depreciation is also providing more support to demand and investment in export-oriented industries, such as education and tourism and, in time, to domestic demand more broadly.

Graph 3.10
Non-mining Business Indicators



* Gross value added weighted; deviation from average since 1989; three-month moving average

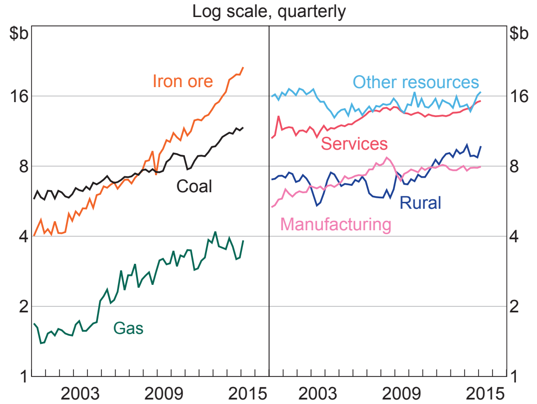
** Investment share weighted; deviation from average since 1989; three-month moving average

Sources: ABS; NAB; RBA

External Sector

Export volumes rose by 8 per cent over the year to the March quarter, driven by strong growth in resource exports, particularly iron ore and coal (Graph 3.11). In the March quarter, resource exports contributed 0.8 percentage points to GDP growth, although some of this reflected the temporary effect of favourable weather conditions. Exports of bulk commodities are expected to continue to grow over the next couple of years. However, the pace of growth is expected to moderate, and a sustained

Graph 3.11
Export Volumes*
Log scale, quarterly



* Reference year is 2012/13

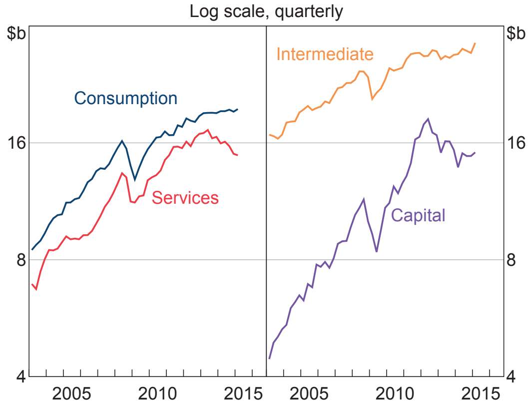
Sources: ABS; RBA

period of low commodity prices could prompt some curtailment of supply by higher-cost producers, particularly of coal. In contrast, LNG exports are expected to increase substantially over the next couple of years, as a number of projects currently under construction begin production.

Service exports have grown over the past couple of years, driven by strength in tourism, education and business service exports. The depreciation of the exchange rate has supported this trend; since early 2013 the Australian dollar has depreciated by around 20 per cent on a trade-weighted basis and service exports have risen by 12 per cent. In contrast, manufactured exports have been subdued for some time and have not responded to the exchange rate depreciation by as much as historical relationships would suggest.

Import volumes increased in the March quarter, largely reflecting an increase in intermediate imports (Graph 3.12). Notwithstanding the increase, imports have been subdued in recent years. Capital imports have fallen as construction of many of the import-intensive, large-scale mining projects have approached completion and service imports have declined noticeably, as the depreciation of the exchange rate has discouraged expenditure on overseas travel and business service imports. Overall,

Graph 3.12
Import Volumes*
Log scale, quarterly



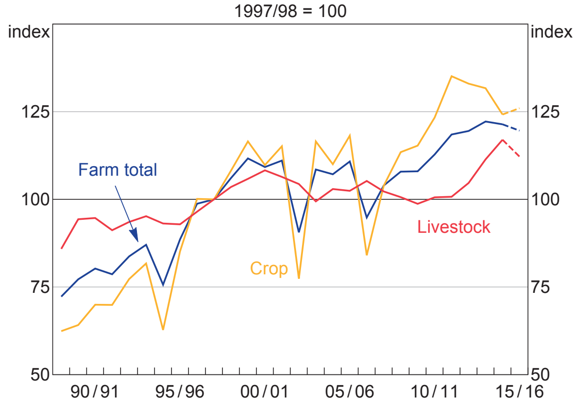
* Reference year is 2012/13
Source: ABS

net exports of services have contributed almost as much to GDP growth as iron ore exports over the past year.

Farm Sector

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) expects farm production volumes to have fallen slightly in 2014/15 (Graph 3.13). This reflects a reduction in winter crop yields owing to dry conditions, partly offset by an expected increase in livestock production. Farm production volumes are forecast by ABARES to fall further in 2015/16; herd rebuilding is expected to lead to a decline in livestock production, and reduced rainfall and above-average temperatures associated with El Niño are expected to depress yields of winter crops.

Graph 3.13
Farm Production Volumes*
1997/98 = 100



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

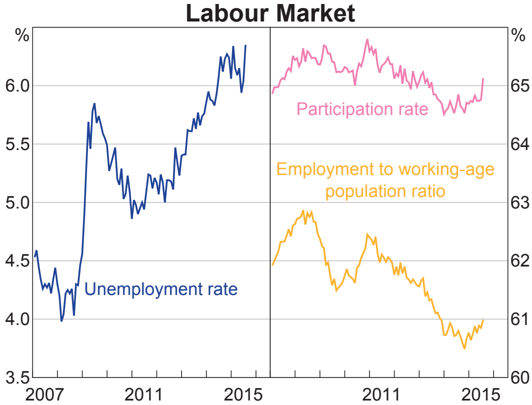
Government Sector

Recent federal and state government budgets suggest there will be ongoing fiscal consolidation over coming years (see 'Box C: Fiscal Policy and Economic Activity'). Further falls in commodity prices and lower-than-expected growth of labour income have led to downward revisions to revenue growth (offset in some states by higher-than-expected growth in stamp duty revenue). As a result the consolidated deficit is expected to be a bit wider than originally forecast. In 2015/16, the consolidated deficit is expected to narrow to around 2½ per cent of GDP, and progressively lower deficits are expected for subsequent years. The fiscal consolidation is expected to continue to weigh on growth of domestic demand. The consolidated budget is expected to return to a balanced position by around 2019/20, although there remains a degree of uncertainty around which new policy initiatives will be legislated.

Labour Market

Labour market conditions have generally improved over the course of this year. The unemployment rate has been relatively stable since the second half of last year, as have measures of underemployment, and the employment-to-population ratio has increased (Graph 3.14). The participation rate has been higher of late than the low points reached in recent years.

Graph 3.14
Labour Market



Source: ABS

The general improvement in labour market conditions has occurred despite below-average growth in GDP over the past year. This may be partly explained by a decline in the rate of population growth, which means that less GDP growth was required to generate enough jobs to absorb the growth in the labour supply (see 'Box D: Implications of Lower Population Growth for the Australian Economy').[2] The increase in labour demand, as implied by the rise in the employment-to-population ratio, may also have been supported by the protracted period of very low wage growth encouraging firms to retain or take on new employees. Unit labour costs have been little changed for nearly four years, which, along with the depreciation of the nominal exchange rate, has contributed to some improvement in the international cost competitiveness of Australian labour. Business liaison suggests that, while firms remain focussed on containing costs, rates of staff retrenchment may have eased.

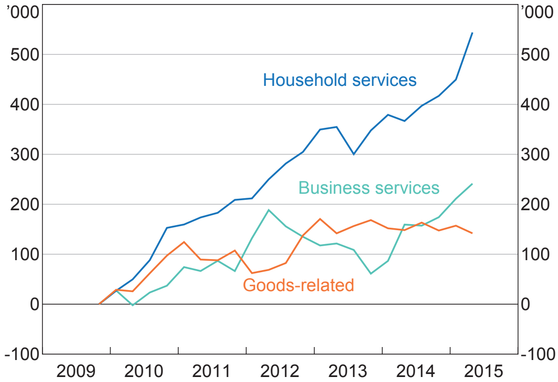
While conditions have generally improved, there is still evidence of spare capacity in the labour market. The unemployment rate and the rate of unemployment benefit recipients both remain elevated, and the participation rate is still below its peak in 2010. Also, although average hours worked have been steady for most of the past year, they are below the levels seen a few years ago, and the incidence of employees working fewer hours than they desire is elevated.

Since late last year, employment growth has been driven by the service sector and has been strongest in New South Wales and Victoria (Graph 3.15). This pattern is consistent with a rebalancing of demand away from resource investment towards consumption and dwelling investment. Household service employment has continued to make a large contribution to employment growth, with recent strength in health care & social assistance. Arts & recreation and accommodation & food services also made sizeable contributions to employment growth over the year, consistent with liaison reports of recent strength in the tourism industry following the exchange rate depreciation. Business service employment has increased notably over the past

2 While the labour force series do not yet reflect recently released data showing lower rates of population growth – and the number of people in each labour force category and their growth rates are overstated – measures expressed relative to the size of the labour force or population (such as the unemployment rate) are likely to be largely unaffected by revisions that will flow from the new population data.

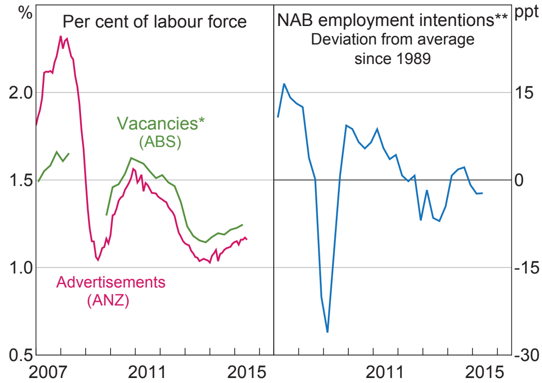
Graph 3.15
Employment Growth by Industry

Change in employment since 2009



Sources: ABS; RBA

Graph 3.16
Labour Market Indicators



* This survey was suspended between May 2008 and November 2009

** Net balance of employment intentions for the following quarter

Sources: ABS; ANZ; NAB; RBA

couple of quarters, in part driven by professions that are likely to be engaged in work related to residential building. In contrast, employment in sectors related to the production of goods has been little changed for several years. Mining and manufacturing employment have trended down for some time, although LNG-related employment looks to have lifted more recently. Construction employment has been relatively stable in recent quarters; declines in resource-related construction employment are likely to have been offset by growth in employment related to residential construction.

Leading indicators of labour demand have been mixed over recent months, although they are generally higher than a year ago. The ANZ measure of job advertisements and the ABS survey of job vacancies have trended higher (Graph 3.16). In line with trends in employment, growth in vacancies has been strongest in New South Wales and Victoria, and has been driven by the service industries. However, the NAB survey of businesses' hiring intentions has declined this year to be a bit below its long-run average. Also, reports from liaison suggest that hiring intentions have improved a little in recent months, but remain below average. The implications of these leading indicators for future labour market outcomes are somewhat complicated by the ongoing structural change in the economy. For example, some workers previously employed in resource-related jobs may not have the skills required for, or be located near, the advertised vacancies. While liaison suggests that many resource-related construction workers should be able to find work in other industries, the level of wages on offer is likely to be significantly lower. ✠

Box B

Measuring Household Debt

The existing level of household debt has a significant bearing on how the household sector responds to changes in interest rates and other factors that affect their disposable incomes. In particular, the existing level of household debt affects both the proportion of income that households must devote to interest payments and households' willingness or ability to take on additional debt. Household debt (and its distribution) is also one important consideration in assessing risks to financial stability. Other things equal, more indebted households are more likely to experience financial stress when facing adverse shocks to their incomes and to reduce their expenditure accordingly.

There are various measures of household debt. It has been common to focus on the debt owed to the financial sector by households excluding unincorporated enterprises. However, unincorporated enterprises, which are primarily small businesses and farms that are wholly owned by households, are likely to be an important input into household decisions about expenditure, saving and borrowing. Moreover, for unincorporated enterprises, liabilities are incurred personally by the owners, their expenditure is included in the national accounts measure of consumption and the sensitivity of their debt to changes in interest rates is close to that of debt held directly by private households.[1] Unincorporated enterprises are less indebted than private households on average.

Households' decisions about consumption, saving and borrowing are also likely to be influenced by debt they owe to non-financial entities. The national accounts measure of household debt includes debt owed to: the financial sector, which includes Authorised Deposit-taking Institutions and mortgage securitisers; the state and federal governments, which is primarily HECS-HELP debt[2]; and overseas banks and governments, which is mostly owed by recent migrants. It also includes other accounts payable to these sectors and a range of smaller entities, including to pension funds. These other components of debt tend to be less responsive to domestic interest rate changes than debt owed to the financial sector. Debts to the non-financial sector and other accounts payable currently comprise 14 per cent of the household sector's overall debt (Table B1).

Table B1: Household Debt
March quarter 2015

Debt owed to	Share Per cent[a]	Year-ended growth
Financial sector	86	6.9
Australian government sector[b]	2	15.1
Rest of the world	3	10.8
Other accounts payable	9	7.5

(a) Of total household liabilities
(b) State and federal governments
Source: ABS

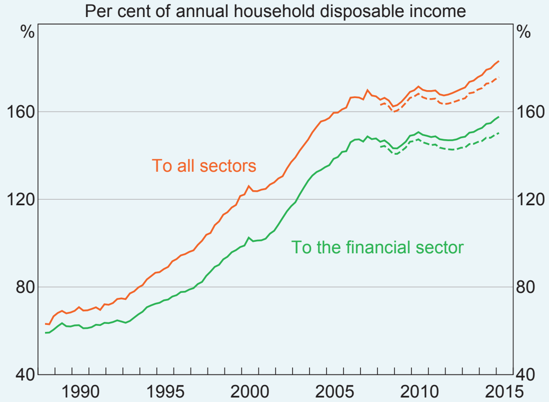
Household debts to the financial and non-financial sectors, measured as a share of household disposable income, have moved roughly in line over recent decades. Over the past few years, however, household debt to the non-financial sector has grown more rapidly (Graph B1). This has largely been caused by debt owed to the government sector and the rest of the world growing at a faster

1 Enterprises that have become a corporation under the *Corporations Act (2001)* are legally separate to their owners.

2 The Higher Education Loan Program (HELP) replaced the Higher Education Contribution Scheme (HECS) in 2005.

rate than debt to the financial sector. These trends have been driven by an increase in the number of government-funded university places for Australian students and a high level of net overseas migration in recent years.[3]

Graph B1
Household Debt*
Per cent of annual household disposable income



* Includes unincorporated enterprises; dashed lines exclude offset balances; disposable income is after tax and before the deduction of interest payments

Sources: ABS; RBA

A comprehensive measure of household debt should also be net of balances in offset accounts because they effectively reduce the household sector's net debt position (see 'Box E: Offset Account Balances and Housing Credit'). Since offset account balances have been growing faster than housing debt, this netting reduces the increase in the household debt-to-income ratio somewhat, but not by enough to offset the growth in debt to the government and to the rest of the world. Overall, all measures point to a moderate increase in household debt relative to income in recent years.

3 Since migrants' incomes have always been included in the household income measures, including overseas debt held by migrants necessarily increases the debt-to-income ratio.

Box C

Fiscal Policy and Economic Activity

Changes in the fiscal positions of the state and federal governments can have an important bearing on the outlook for economic activity. A key issue, however, is whether those changes reflect other shocks affecting economic activity or changes in governments' policies. This box addresses this issue by focusing on the Australian Government budget.[1]

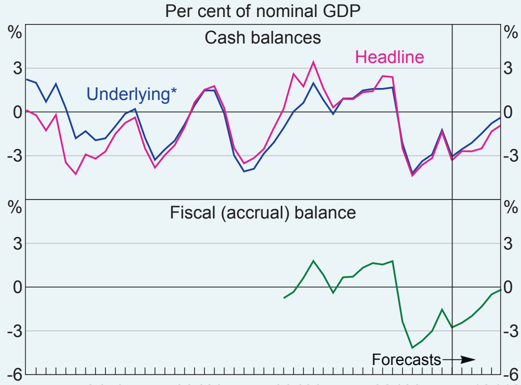
Budget Aggregates

In its latest budget, the Australian Government projected several years of deficits, meaning that operating revenues would be insufficient to cover operating expenses and investments in operational assets, such as national defence equipment. These deficits will be financed by an increase in government debt.

The deficit is projected to be a bit wider than 2 per cent of GDP in 2015/16 and to narrow progressively over the forecast period (Graph C1).[2]

The projected deficits are a little wider than those in the earlier Mid-year Economic and Fiscal Outlook (MYEFO) update. This largely reflects the operation of so-called 'automatic stabilisers', which respond to changes in economic conditions (Graph C2). In particular, the forecasts for bulk commodity prices and labour market conditions were revised down in the latest budget, which implies lower growth

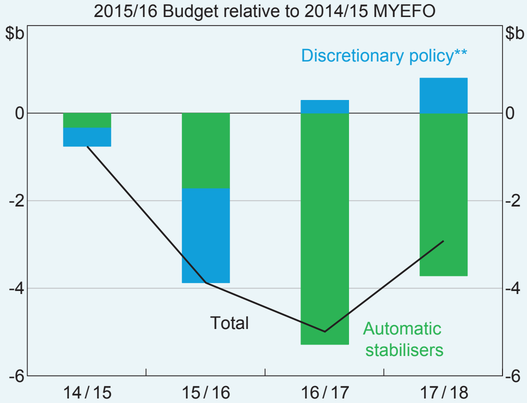
Graph C1
Australian Government Budget Balances
Per cent of nominal GDP



* Headline cash balance adjusted for cash flows from investments in financial assets for operational (or policy) purposes and net Future Fund earnings

Sources: Australian Treasury; RBA

Graph C2
Change to Australian Government Budget Balance*
2015/16 Budget relative to 2014/15 MYEFO



* Changes to the underlying cash balance

** Includes provisions made for changes to Paid Parental Leave Scheme

Sources: Australian Treasury; RBA

1 The Australian Government accounts for around 55 per cent of total federal and state government spending, excluding grants from the Australian Government to the states. If the grants are included in spending of the Australian Government (and stripped out of state government spending), the Australian Government accounts for 70 per cent of total spending.

2 The size of the deficit will depend on the accounting approach taken, although the main approaches yield similar results in this case. The key difference between the headline and underlying cash balance is that the headline balance treats investments in student loans and the National Broadband Network Corporation as operational, whereas both are excluded from the underlying balance. The projections also depend on whether the flows are measured using cash or accrual accounting principles. Broadly speaking, accrual measures record when commitments between two parties are created, whereas cash measures record when payments are actually made.

of tax revenues and somewhat higher growth of expenditures, such as unemployment benefits. The effect of changes in government policy is also apparent in the revisions, but is relatively minor. The 'structural budget balance', which abstracts from the effects of the automatic stabilisers, has changed by less than the outlook for the overall budget balance since the MYEFO.[3]

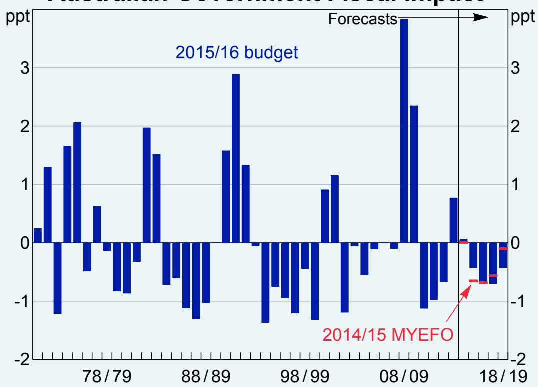
Summary Measures of Fiscal Impact

There is no single 'correct' measure of a budget's effect on economic activity – commonly termed its fiscal impact. The measures proposed in the literature vary widely in complexity, and are all approximations for the relative size and direction of the true impact. The Bank uses a combination of measures and a degree of judgement to assess the fiscal impact.

The simplest measure is based on the change in the underlying cash balance between years, expressed as a share of nominal GDP (the slope of the underlying cash balance line in Graph C1). A narrowing in the cash deficit entails a mix of lower payments and/or higher receipts, both of which can act to reduce aggregate spending across the private and public sectors. This measure implies that the direct effect of the plan outlined in the Australian Government budget would be to dampen economic activity by around ½ percentage point of GDP growth per year over the next four years (Graph C3).

One of the problems with this measure is that, being based on changes in the underlying cash balance, it mixes the effects of changes in government policy with the effects of automatic stabilisers, which are generated by other aggregate economic outcomes rather than causing them. This can complicate interpretation, particularly when forecasting. The

Graph C3
Australian Government Fiscal Impact*



* Negative change in the underlying cash balance as a per cent of nominal GDP, adjusted for the RBA grant, excess RBA dividend payments and timing changes for some large payments

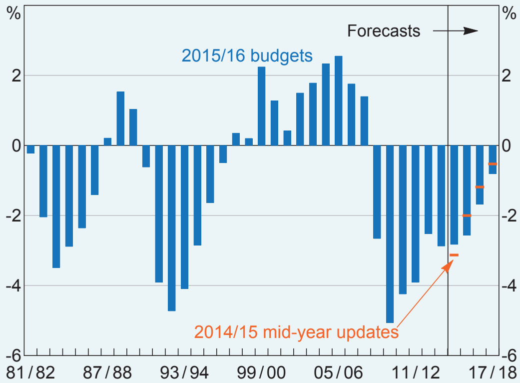
Sources: ABS; Australian Treasury; RBA

structural fiscal impact measure, which explicitly abstracts from the effect of automatic stabilisers, can provide a useful alternative measure of the fiscal impact. The structural fiscal impact measure suggests that the direct effect of the federal budget projections would be to reduce the growth of economic activity over the next few years by a similar amount to the simple fiscal impact measure.

Over the next few years, changes to the consolidated fiscal balance (which combines the state and federal fiscal balances) largely reflect developments at the federal level (Graph C4). Although there has also been some increase in the combined deficits of the state governments, due mainly to the effect of the lower-than-expected terms of trade on royalty revenues in Queensland and Western Australia, this is small relative to the recent revisions to the federal deficit.

3 The structural budget balance is an estimate of what the budget balance would have been if economic activity had been operating at its long-run or potential level.

Graph C4
Consolidated Budget Balance*
Per cent of nominal GDP



* Federal, state and territory governments; underlying cash balance adjusted for the RBA grant, excess RBA dividend payments and timing changes for some large payments

Sources: ABS; Australian Treasury; RBA; State and Territory Treasuries

Implications for the Bank's Forecasts

When considering the implications of any individual budget for forecasts of economic activity, the Bank assesses how the various fiscal impact measures have changed from previous estimates. The estimates above suggest that the overall fiscal impact of the recent federal budget over the projection period is little changed since the MYEFO and mid-year reviews from the state governments.

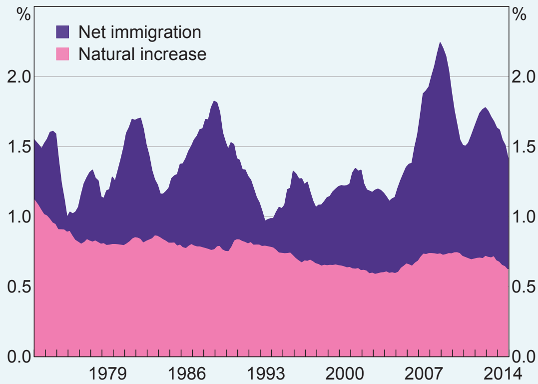
The Bank also incorporates budget information into its forecasts for some of the main expenditure components of GDP, the labour market and prices where appropriate. Incorporating the effects of policy changes requires some judgement. One obvious and direct effect is via public demand, although public demand only captures the component of expenditure that contributes directly to economic activity, such as spending on work done by public servants and on public infrastructure projects. The budget can also affect economic activity through transfer payments to households and businesses, and the revenue the government receives from taxes and royalties. Some of the fiscal consolidation over the next few years is expected to operate through these transfer channels, and policies announced in the recent federal budget have not changed the assessment of the strength of these channels noticeably. To date, there seems to have been some response by businesses to the small business tax cuts and accelerated depreciation allowances announced in the latest Australian Government budget. At the same time, real household disposable income is expected to be marginally lower than was forecast at the time of the May *Statement*, partly due to reductions in transfer payments and increases in tax receipts.

Box D

Implications of Lower Population Growth for the Australian Economy

Australia experienced rapid population growth over much of the past decade, both by the standards of recent decades and in comparison with other advanced economies. Recently, however, population growth has declined to be well below the rates experienced over most of the preceding five years. The estimated resident population grew by 1.4 per cent over 2014, down from the recent peak in growth of 1.8 per cent over 2012 and average annual growth of 1.7 per cent since 2006 (Graph D1).[1] The recent pace of population growth is still high by international standards.

Graph D1
Population Growth*
Year-ended contributions



* Total population growth is the sum of the components
Sources: ABS; RBA

Most of the variation in Australia's population growth over recent decades has reflected changes in net immigration, and this is also true of late. Recent immigration outcomes have been lower than was earlier projected by the Department of Immigration and Border Protection (DIBP). As a result, population growth over 2014 was around ¼ percentage point less than had been assumed in the Bank's economic forecasts a year ago.

Lower population growth has important implications for the economy. It lowers the growth in demand for goods and services, as well as the economy's capacity to supply those goods and services. On the demand side, lower population growth would, all else being equal, be associated with less growth in consumption. Over time, it may also reduce the need to expand the capital stock through investment in residential housing, non-residential buildings, machinery & equipment and so forth. At the same time, lower population growth implies that there are fewer individuals available to be employed in producing goods and providing services.

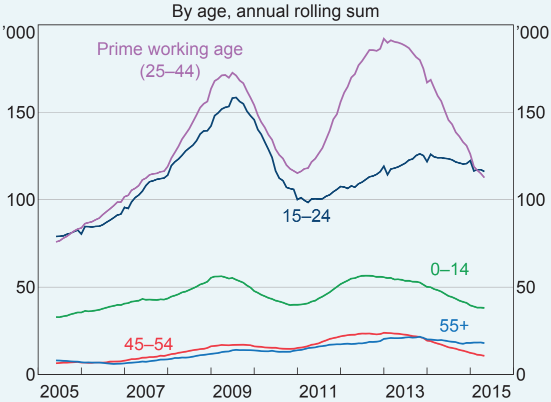
While growth in aggregate economic activity would be expected to be lower, the implications for variables such as per capita spending and the unemployment rate depend on the relative strength of the demand and supply effects. For example, over the past year or so, lower population growth may help to explain why the unemployment rate has stabilised despite below-average growth in GDP. That is, the observed growth in demand occurred alongside less growth in labour supply than was previously thought to be the case. This also implies less spare capacity in the labour market than otherwise.

The composition of immigration can have implications for its net effect on supply and demand. Data for long-term and permanent arrivals since 2006 suggest that individuals of prime working age have recently made the biggest contribution to

1 Measured population growth over 2014 was around its long-run average. However, comparisons over time are complicated by changes in definitions. See Australian Bureau of Statistics (2007), 'Statistical Implications of Improved Methods of Estimating Net Overseas Migration', ABS *Information Paper*, 25 May.

changes in net immigration (Graph D2).[2] However, there was also a large cycle in long-term and permanent arrivals for those aged 15–24 years between 2008 and 2010, in part associated with changes in migration policy related to international students. International students may add less to labour supply than other visa categories as they can only work part-time during study terms.

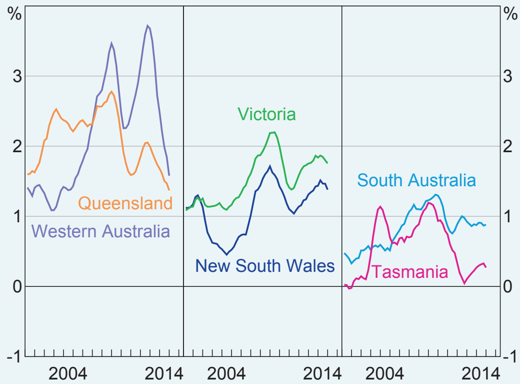
Graph D2
Net Long-term and Permanent Arrivals
By age, annual rolling sum



Sources: Department of Immigration and Border Protection; RBA

Strong net immigration between 2006 and 2012 took place alongside rising commodity prices and strong mining investment. From 2010 to 2012, immigration was most pronounced in states where demand for labour from the resource boom was most concentrated. In particular, immigration contributed substantially to strong population growth in Western Australia and Queensland; net inflows of people from interstate also increased (Graph D3). These flows were recognised as an important means of addressing skill shortages. More recently, the decline in immigration has been most marked in Western Australia and Queensland as they face the direct effects of the downturn in mining investment and commodity prices (and interstate flows have also

Graph D3
Population Growth by State
Year-ended



Source: ABS

adjusted). This has assisted adjustment in the labour supply to changing demand conditions across the country.

There has been a large decline in net immigration from New Zealand over the past few years. New Zealand citizens are able to move freely to Australia for employment, so may be more sensitive to relative labour market conditions than other migrants. Over the past three years, labour market conditions in New Zealand have tightened at the same time that spare capacity in the Australian labour market has increased. This is likely to have been particularly pronounced in the construction industry, owing to the fall in mining investment in Australia and reconstruction activity in Christchurch. However, a decline in immigrants from New Zealand was at least partly expected, so this may not have driven the difference between recent outcomes and earlier forecasts.[3]

2 Note that these data are not directly comparable to the net overseas migration data. In particular, long-term and permanent arrivals measure movements in and out of the country, while immigration measures addition to the resident population.

3 Based on data from Statistics New Zealand. In addition, data from the Department of Education and Training suggest that the surprisingly low outcomes compared with the earlier population growth assumptions may have been driven by international student numbers increasing by less than was previously expected. More detail on net immigration by visa category will be released by the DIBP in due course.

There is considerable uncertainty about the ongoing level of immigration. The Bank's forecasts assume that population growth will remain around its recent lower level for some time. The implications of this assumption for demand, supply and hence inflationary pressures in the economy are discussed in the 'Outlook' chapter.

4. Domestic Financial Markets

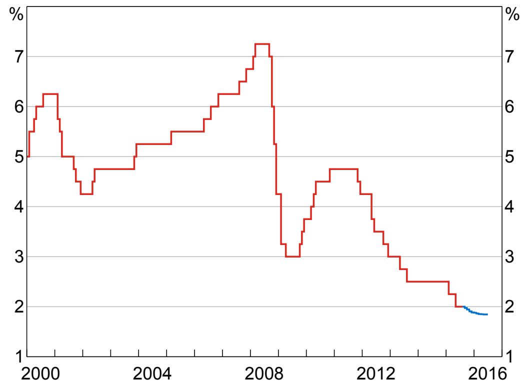
Conditions in Australian financial markets continue to support the financing of the business and household sectors. While yields on bonds issued by governments, banks and non-financial corporations are above their levels in early April, they remain close to historic lows. Reflecting the easing of monetary policy earlier in the year, interest rates on owner-occupier housing and business loans have declined notably, though by less for investor loans, which continue to drive the growth in housing lending. Growth in business lending has slowed over recent months, although corporate bond issuance has picked up over the year to date. Australian equity prices have been little changed over recent months, with volatility increasing in response to international developments.

Money Markets and Bond Yields

After lowering the cash rate target from 2½ per cent to 2 per cent in two steps earlier in the year, the Reserve Bank has maintained the cash rate target at 2 per cent since May 2015. Rates on overnight indexed swaps (OIS) suggest some chance of a reduction in the cash rate by the end of the year (Graph 4.1). Rates on bank bills and certificates of deposit (CDs) remain low and are little changed over recent months. Spreads between bank bill and OIS rates remain below their peak late last year.

Yields on long-term Australian Government securities (AGS) have experienced some volatility, largely reflecting movements in sovereign yields internationally. Overall, yields on AGS have declined over recent months with the spread between AGS and US Treasuries narrowing, while the yield curve has been little changed (Graph 4.2).

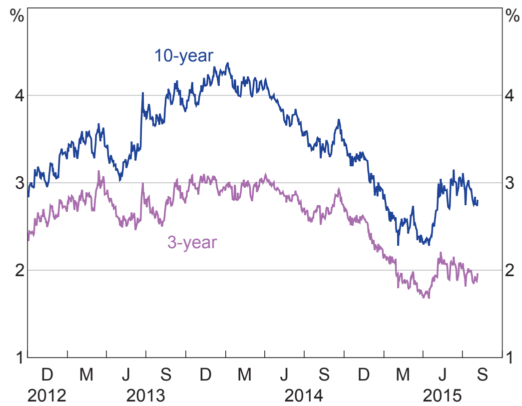
Graph 4.1
Cash Rate*



* Data from September 2015 onwards are expectations derived from interbank cash rate futures

Sources: ASX; Bloomberg

Graph 4.2
Australian Government Bond Yields



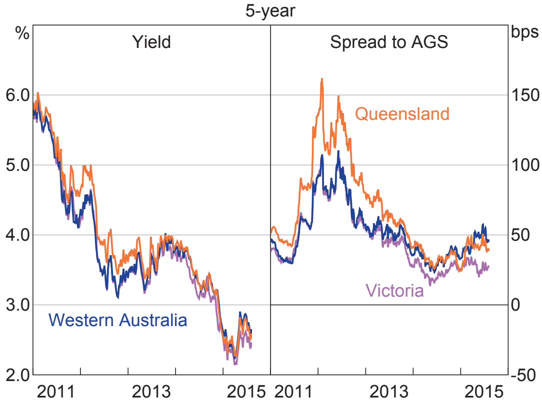
Source: RBA

Following the release of the Australian Government Budget in May, the Australian Office of Financial Management (AOFM) announced its updated financing requirement for 2015/16. The AOFM expects net issuance of around $40 billion, with total AGS on issue expected to reach around $430 billion by June 2016. The face value of AGS on issue is expected to reach a peak of around $540 billion during 2018/19. The ASX plans to introduce a 20-year AGS bond futures contract in the September quarter 2015. The initial basket of securities on which the contract would be based would comprise bonds maturing in April 2033, June 2035 and April 2037, representing total outstanding issuance of $22 billion.

The stock of bonds issued by the state and territory governments ('semis') increased by $4 billion over the 2014/15 financial year, to be $242 billion at the end of June. This is the smallest annual increase since 2005/06. Gross issuance by states was $38 billion, with New South Wales, Queensland and Western Australia accounting for the bulk of issuance in recent months. However, a large portion of this was used to roll over existing debt. Yields on semis remain at very low levels; spreads between semis and AGS have picked up since mid last year, though they remain relatively low (Graph 4.3).

The states have announced their 2015/16 budgets and updated their long-term borrowing programs (Table 4.1). In the current financial year, gross long-term issuance by states is forecast to be $28 billion. The stock of outstanding state government debt is expected to increase by $8 billion after accounting for scheduled maturities; however, the proceeds from some planned asset privatisations have not been included in forecasts of net borrowing requirements, which may result in lower net issuance.

Graph 4.3
State Government Debt



Sources: RBA; Yieldbroker

Bond issuance by non-residents into the domestic market ('Kangaroo' issuance) over the year to date has been similar to the average of recent years. Most of this issuance has been by banks and supranational issuers. A European bank became the first to issue a Basel-III compliant Tier 2 hybrid Kangaroo bond, raising $700 million. Secondary market spreads on Kangaroo bonds have widened by around 10 basis points for AAA rated issuers over recent months.

Table 4.1: Long-term Bond Issuance by State Treasury Corporations(a)

Issuer	Outstanding as at end June 2015 $billion	2014/15 issuance $billion	2015/16 indicative target $billion
New South Wales	62	10	7
Queensland	87	11	7
South Australia	15	4	2
Tasmania	3	1	1
Victoria	34	2	2
Western Australia	34	10	10
All States	**235**	**38**	**28**

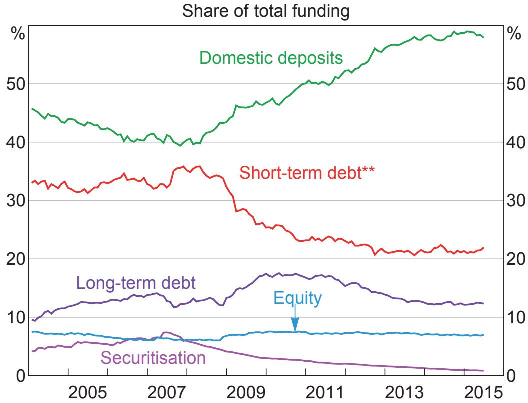
(a) Securities with an original term to maturity of greater than one year; figures are rounded to the nearest whole number; projections are based on the latest funding program forecasts for gross term issuance

Sources: RBA; State Treasury Corporations

Financial Intermediaries

Bank balance sheets have continued to grow moderately. The funding composition of bank balance sheets has remained broadly unchanged over the past year with deposits as a share of funding remaining a little under 60 per cent (Graph 4.4).

Graph 4.4
Funding Composition of Banks in Australia*



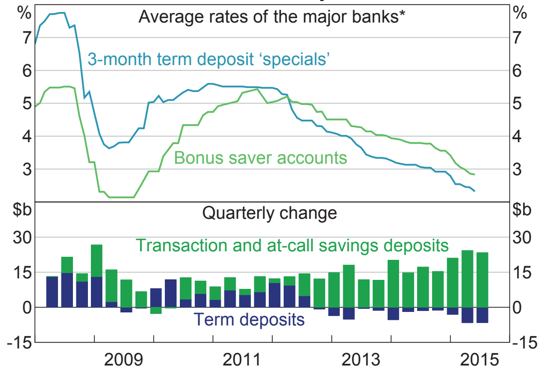
* Adjusted for movements in foreign exchange rates; tenor of debt is estimated on a residual maturity basis

** Includes deposits and intragroup funding from non-residents

Sources: APRA; RBA; Standard & Poor's

Banks' average funding costs have continued to decline. Since the beginning of the year, funding costs have fallen by a little more than the cash rate, mainly reflecting lower wholesale funding costs, although deposit rates have also fallen. Since the May cash rate reduction, both average outstanding deposit funding and wholesale funding costs have fallen by around 20 basis points. Households have generally continued to invest more in 'at-call' deposit products, such as bonus saver accounts, which offer higher interest rates than term deposits (Graph 4.5).

Graph 4.5
Household Deposits

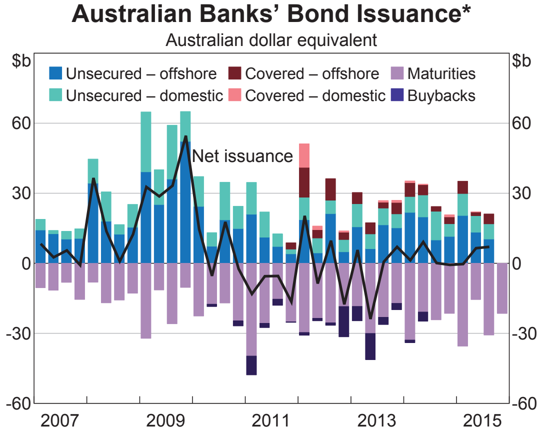


* Prior to the May cash rate reduction

Sources: APRA; CANSTAR; RBA

Australian banks have issued around $78 billion in bonds since the start of the year; after accounting for maturities, the stock of outstanding bonds has increased by around $13 billion over this period (Graph 4.6). Similar to recent years, a little over half of banks' offshore issuance in the June quarter was denominated in US dollars. The share of euro-denominated bond issuance fell in the June quarter, consistent with the cost of hedging euro-denominated issuance back into Australian dollars being elevated, while the share of sterling-denominated issuance has picked up recently. Australian banks' presence in the offshore renminbi bond issuance market has continued to develop,

Graph 4.6
Australian Banks' Bond Issuance*

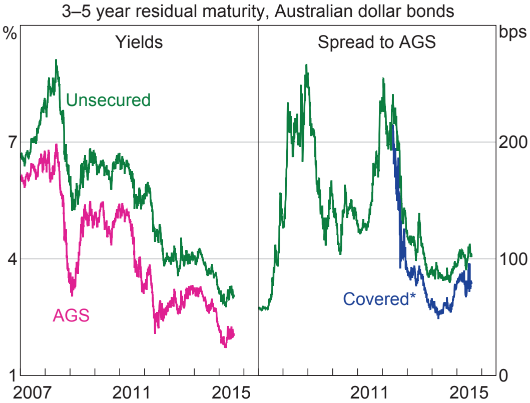


* Latest quarter gross issuance and net issuance are quarter to date

Source: RBA

with deal sizes increasing; nevertheless, the stock of renminbi-denominated bonds remains very small relative to total bank issuance. Secondary market spreads over AGS on the major banks' bonds have widened over the past year, but they remain at relatively low levels compared to the period since 2007 (Graph 4.7).

Graph 4.7
Major Banks' Bond Pricing
3–5 year residual maturity, Australian dollar bonds



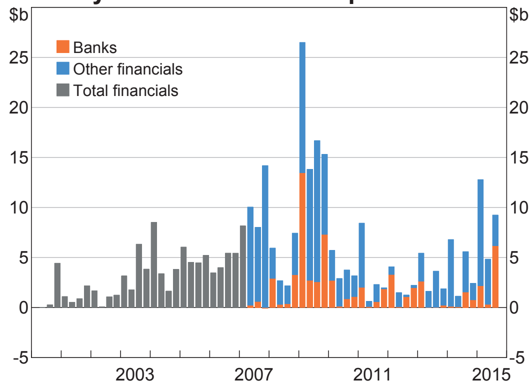
* Covered bond pricing interpolated to a target tenor of 4 years using bonds with a residual maturity between 2 and 10 years

Sources: Bloomberg; UBS AG, Australia Branch

Issuance of hybrid securities by Australian banks has been relatively high over the past year. In recent months, institutions other than major banks have issued around $2 billion in hybrids. Issuance has consisted mainly of Basel III-compliant Tier 2 hybrids (which count towards banks' regulatory capital); a large share of these hybrids were issued offshore and denominated in foreign currencies. In addition, a major bank has announced its intention to raise around $1.25 billion through the issuance of a Tier 1 hybrid. Primary market spreads on recent hybrid issuance have generally been wider than those seen in late 2014, particularly for Tier 1 securities.

Net equity raisings by listed financial corporations increased in the June quarter, driven by a $5.5 billion capital raising by National Australia Bank (Graph 4.8). The June quarter was the strongest quarter for equity raisings by banks since 2009, with major banks seeking to increase their common equity Tier 1 ratios, partly in anticipation of regulatory changes (see 'Household Financing' section). ANZ recently announced an equity raising of $3 billion.

Graph 4.8
Net Equity Raisings by Listed Financial Corporations



Sources: ASX; RBA

The pace of issuance of Australian asset-backed securities (ABS) slowed over recent months, following robust issuance in the first quarter. Issuance of residential mortgage-backed securities (RMBS) was fairly evenly split between major banks, other banks and non-banks. Two securitisations backed by assets other than residential mortgages have been issued in recent months, raising a total of $1 billion. Primary issuance spreads on senior RMBS tranches have widened slightly since the start of the year, but have remained fairly stable over the past two years at low levels relative to the period since 2008.

The AOFM announced in May that it would commence divestment of its $4.6 billion RMBS portfolio. The AOFM, which is selling these securities through monthly auctions, has raised around $260 million in total in the first two auctions.

Mandatory reporting of details of ABS eligible to be used as collateral in the Reserve Bank's domestic market operations commenced on 30 June 2015. In addition to the information being made available to the RBA, some of the required information will also be made available to permitted users, thereby promoting greater transparency in the market.[1]

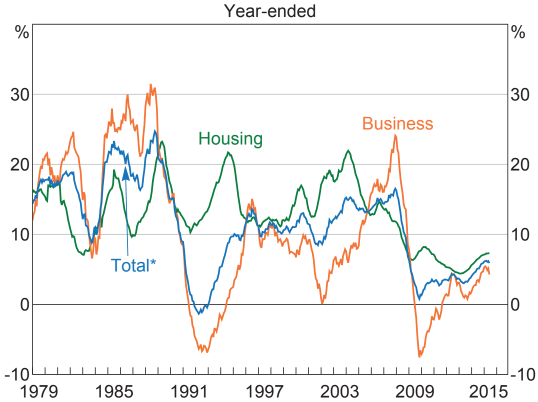
1 For further details, see www.rba.gov.au/securitisations/system/

Around 400 ABS, mainly RMBS, are currently eligible to be used as collateral in the Bank's domestic market operations.

Financial Aggregates

Total credit growth has been steady at around 6 per cent over the past year (Graph 4.9). Housing credit growth has remained around 7 per cent, while business credit growth has slowed to around 4 per cent. Growth in credit has been a little below that in broad money, which grew by around 7 per cent over the year (Table 4.2).

Graph 4.9
Credit Growth by Sector
Year-ended



* Includes housing, personal and business credit
Sources: ABS; APRA; RBA

Household Financing

Annual growth in housing credit has been around 7 per cent. Some of this growth has been driven by loan products that provide borrowers with access to offset accounts (see 'Box E: Offset Account Balances and Housing Credit'). Since offset account balances have been growing much more rapidly than housing credit, annual growth in net housing debt is about 1 percentage point below growth in housing credit.

Housing credit growth has continued to be driven by investors, with the pace of investor credit growth around double that of owner-occupiers. In addition, investor credit growth has been revised slightly higher, and owner-occupier credit growth revised slightly lower, as a result of data revisions by a bank. The level of total housing loan approvals is consistent with housing credit growth remaining around its recent pace (Graph 4.10). Loans to owner-occupier first home buyers remain a small share of total approvals relative to their historical average.

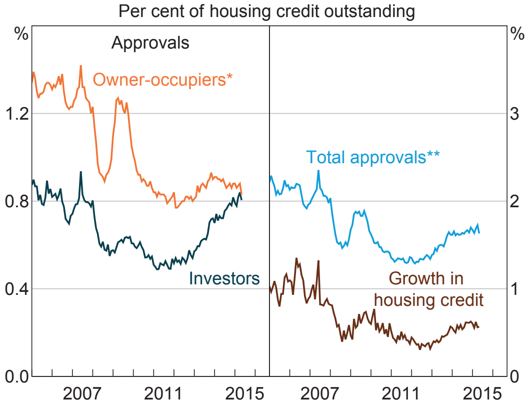
Standard variable housing rates for owner-occupiers are around 50 basis points lower following the two cash rate reductions earlier this year (Graph 4.11; Table 4.3). The aggregate decline in outstanding rates has been similar. Many lenders have increased interest rates on loans offered to investors relative to owner-occupiers. This has been achieved by raising advertised rates for investors, as well as reducing

Table 4.2: Financial Aggregates
Percentage change(a)

	Three-month-ended		Year-ended
	March 2015	June 2015	June 2015
Total credit	1.6	1.2	5.9
– Housing	1.8	1.8	7.3
– Owner-occupier	1.4	1.3	5.5
– Investor	2.5	2.7	10.7
– Personal	0.0	–0.2	0.4
– Business	1.5	0.3	4.3
Broad money	1.8	1.1	6.6

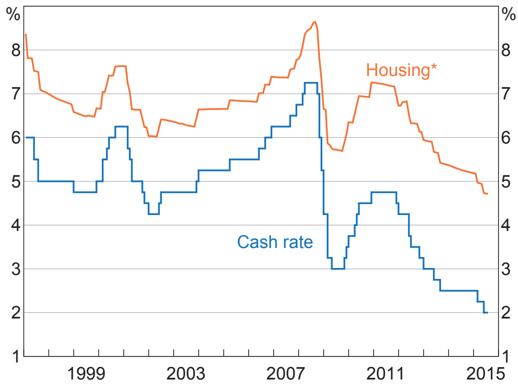
(a) Growth rates are break adjusted and seasonally adjusted
Sources: ABS; APRA; RBA

Graph 4.10
Housing Loans



* Net of refinancing
** Excluding refinancing of repeat-buyer owner-occupiers
Sources: ABS; RBA

Graph 4.11
Interest Rates



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

Table 4.3: Intermediaries' Fixed and Variable Lending Rates

	Level at 4 August 2015	Change since end January 2015
	Per cent	Basis points
Housing loans		
– Standard variable rate[(a) (d)]		
– Owner-occupier	5.46	–47
– Investor	5.73	–20
– Package variable rate[(b) (d)]		
– Owner-occupier	4.67	–41
– Investor	4.94	–14
– Fixed rate[(c) (d)]		
– Owner-occupier	4.56	–52
– Investor	5.02	–6
– Average outstanding rate[(d)]	4.71	–46
Personal loans		
– Variable rate[(e)]	11.23	–9
Small business		
– Term loans variable rate[(f)]	6.60	–50
– Overdraft variable rate[(f)]	7.47	–50
– Fixed rate[(c), (f)]	5.38	–36
– Average outstanding rate[(d)]	5.69	–50
Large business		
Average outstanding rate[(d)]	3.79	–48

(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; housing investor rates include all recently announced changes
(e) Weighted average of variable rate products
(f) Residentially secured, average of the major banks' advertised rates
Sources: ABS; APRA; CANSTAR; RBA

discretionary or advertised discounts that can be offered to some borrowers. Meanwhile, several lenders have introduced special lending offers with lower interest rates for owner-occupiers. Most of the changes will apply from August. A number of banks are reported to have tightened conditions on new loans, particularly to property investors. The tightening of conditions follows APRA's decision to increase supervisory oversight of mortgage lending, and its recently announced decision to increase the risk weights applying to residential mortgages (other than lending to small businesses) for banks using the internal ratings-based (IRB) approach to assessing credit risk.

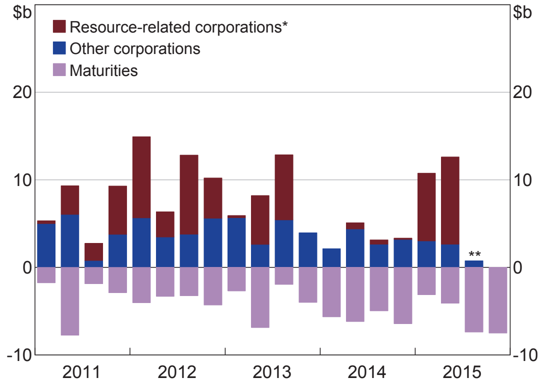
Business Financing

Growth in external business funding slowed in the June quarter, and was equivalent to around 3 per cent of GDP (Graph 4.12). This reflected a softening in the pace of growth in business credit, while non-intermediated debt issuance continued to be relatively strong.

Bond issuance by Australian non-financial corporations has been driven by resource-related corporations (Graph 4.13). Several major transactions were undertaken to refinance existing debt, rather than to fund new investment. Corporate bond yields remain at very low levels, while spreads to AGS have tended to widen over the past year (Graph 4.14). This is broadly consistent with movements seen in other advanced markets.

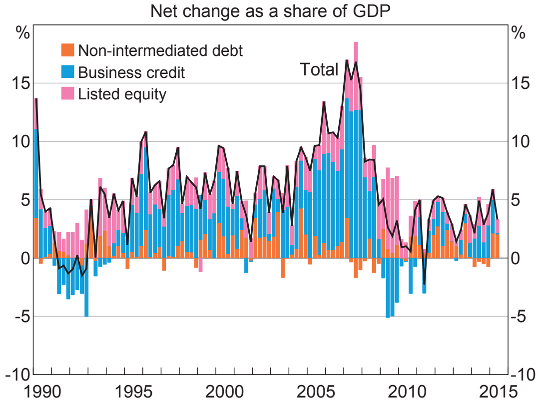
Business credit growth has moderated over the June quarter, following stronger growth in the previous few quarters. Lending to both private non-financial corporations and unincorporated (typically smaller) businesses has slowed. Part of the growth in business credit over the year-to-date reflects the depreciation of the Australian dollar, which increases

Graph 4.13
Australian Corporate Bond Issuance
Quarterly, Australian dollar equivalent



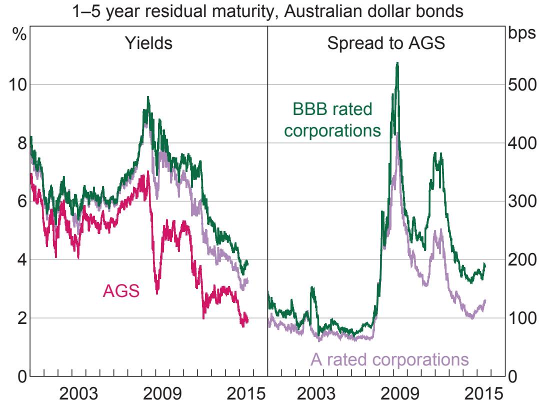
* Energy sector and mining-related materials sector corporations
** Latest quarter issuance is quarter to date
Source: RBA

Graph 4.12
Business External Funding
Net change as a share of GDP



Sources: ABS; APRA; ASX; RBA

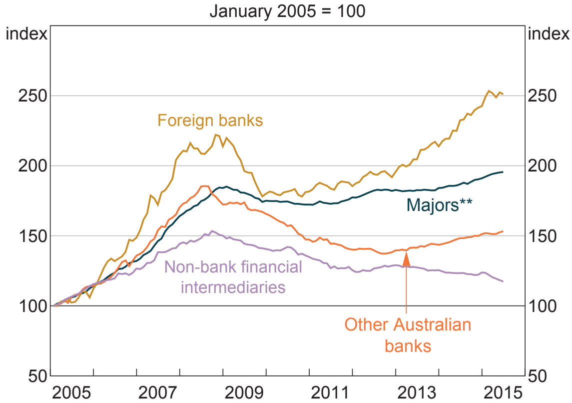
Graph 4.14
Australian Corporate Bond Pricing
1–5 year residual maturity, Australian dollar bonds



Sources: RBA; UBS AG, Australia Branch

the Australian dollar value of foreign-currency denominated business credit. By lender, the major and foreign banks have continued to drive business credit growth, with Asian banks making a notable contribution (Graph 4.15).

Graph 4.15
Business Credit by Source*
January 2005 = 100



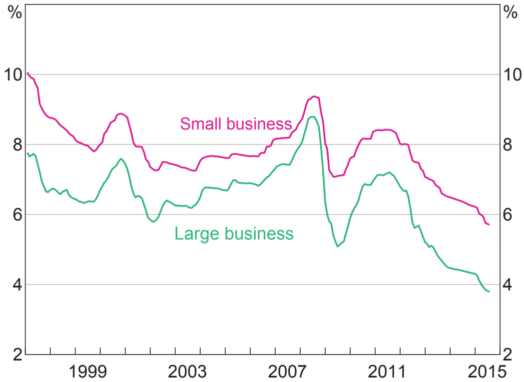
* Break and seasonally adjusted; includes securitisation
** Majors include St. George and Bankwest
Sources: ABS; APRA; RBA

The cost of intermediated business borrowing for both small and large businesses has declined following the two cash rate reductions earlier this year (Graph 4.16). Banks' advertised variable rates on small business loans have fallen by around 50 basis points, fully reflecting the cash rate reductions. Average rates on outstanding small and large business loans have also fallen by around 50 basis points since the end of January.

Listed equity raisings by non-financial corporations moderated over the first half of 2015 from their robust pace in 2014. Initial public offerings (IPOs) picked up in the June quarter, but were below the pace of activity seen in 2014. Net equity raisings by already-listed companies fell slightly in the quarter, as an increase in buyback activity more than offset a slight increase in raisings.

Mergers and acquisitions (M&A) activity declined in the June quarter, but remains well above 2012 levels as measured by the value of deals announced.

Graph 4.16
Australian Business Lending Rates*
Average interest rate on outstanding lending



* RBA estimates
Sources: APRA; RBA

Around $18 billion in deals have been announced by listed companies in the past few months. Activity has been concentrated in the industrials sector, and includes Brookfield Infrastructure Partners' recently announced $8.8 billion proposed acquisition of Asciano.

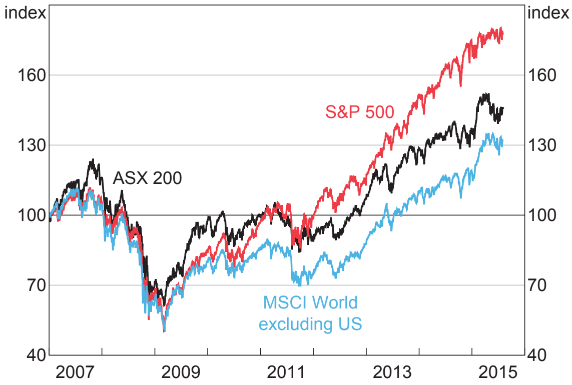
Equity Markets

Australian equity prices have been broadly unchanged over recent months, but are around 5 per cent higher than at the beginning of the year. The Australian market has performed similarly to other advanced equity markets over the more recent period (Graph 4.17). The Australian market continued to be weighed down in recent months by lower resource sector share prices, while share prices rose slightly in the financial sector and most other sectors (Graph 4.18). Volatility in equity prices increased following developments in Greece and the Chinese equity market, though it remains well below the levels experienced in 2008/09.

Within the resource sector, share prices of the larger miners – which have lower costs of production – have tended to outperform those of smaller miners. Energy sector share prices have also declined over the past few months, alongside lower oil prices. Financial sector equity prices have risen slightly over the past few months. Outside the financial and resource sectors, share prices in other sectors were mixed: consumer sector share prices underperformed after a number of companies issued earnings downgrades, while industrials share prices increased alongside increased M&A activity in the sector.

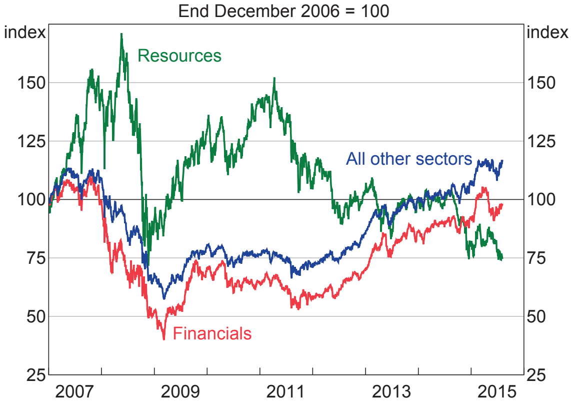
Forward price-earnings (PE) ratios for Australian equities have decreased in recent months as earnings expectations have risen slightly (Graph 4.19). Similarly to other advanced equity markets, forward PE ratios remain above their historical averages. ✠

Graph 4.17
Share Price Accumulation Indices
End December 2006 = 100



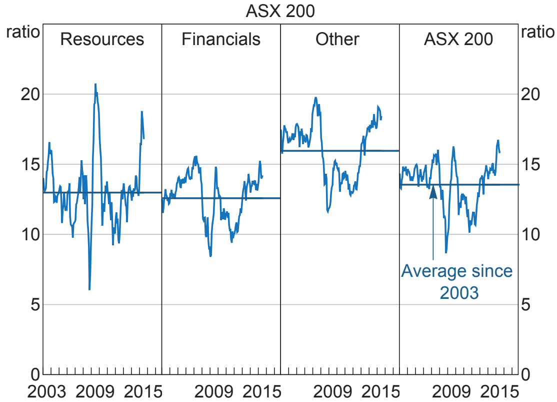
Sources: Bloomberg; Thomson Reuters

Graph 4.18
Australian Share Price Indices
End December 2006 = 100



Source: Bloomberg

Graph 4.19
Australian Forward Price-earnings Ratios
ASX 200



Sources: RBA; Thomson Reuters

Box E
Offset Account Balances and Housing Credit

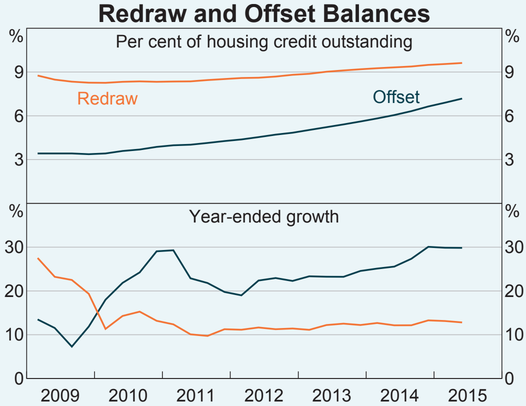
The increase in housing credit growth over recent years has been accompanied by rapid growth in loan products that provide borrowers with access to offset accounts. Offset accounts are a type of deposit account that are directly linked to a loan, such as a mortgage. Funds deposited into offset accounts effectively reduce the borrower's net debt position and the interest payable on the loan. Offset account balances currently amount to around $90 billion, equivalent to over 6 per cent of housing loans outstanding. Since offset account balances have been growing by around 30 per cent annually over recent years, annual growth in net housing debt, which takes into account offset accounts, is about 6 per cent. This compares with annual growth in housing credit of around 7 per cent.

The RBA compiles monthly statistics that measure the stock of outstanding credit. Changes in the stock of credit reflect various flows during the month. In the case of housing credit, for example, borrowers are required to make scheduled repayments and often also have the option of making additional repayments, which are referred to here as mortgage prepayments. Mortgage prepayments include those for loans with redraw facilities, which give the borrower the option of withdrawing accumulated prepaid funds in the future.[1] All mortgage payments, whether scheduled or prepaid, reduce the stock of outstanding credit, thereby reducing the rate of growth of credit. When households choose to pay back their mortgage faster than scheduled by making prepayments, this lowers credit growth.

Offset accounts are an alternative form of mortgage prepayment that are not treated as such when measuring housing credit. An offset account typically acts like an at-call deposit account, with funds in the account netted against the borrower's outstanding mortgage balance for the purposes of calculating interest on the loan. Because it acts like an at-call deposit account, any accumulated funds are easily available for withdrawal or for purchasing goods and services.

As mentioned above, balances in offset accounts have been increasing rapidly, with growth over recent years around 30 per cent (Graph E1). This growth has the potential to continue as older loans that are less likely to have offset accounts are replaced with new loans, where it is more common to have an offset account. Available redraw balances, at around $120 billion, are larger than offset account balances, but have grown at a pace closer to 10 per cent over recent years.

Graph E1
Redraw and Offset Balances



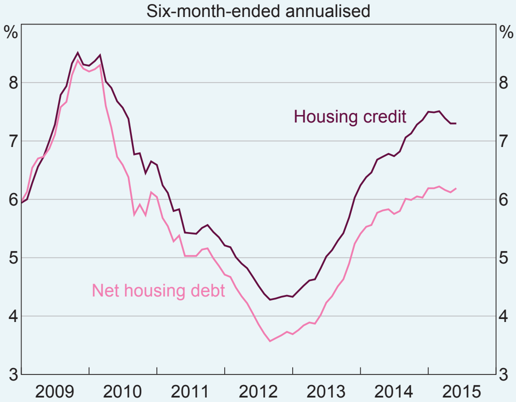
Sources: APRA; RBA

1 If a borrower decides to redraw any funds accumulated in a redraw facility, this would be recorded as new loan flow for the month and added to credit growth.

For a household with a mortgage, mortgage prepayments made using a redraw facility or a deposit into an offset account have a similar economic effect. In both cases, a household's net housing debt and interest payable are reduced. Thus, while the effect on household balance sheets differs – loans and deposits are higher than they otherwise would be if offset accounts are used – net housing debt is the same.

Since offset account balances have been growing much more rapidly than housing credit, net housing debt is growing more slowly than housing credit; over the six months to June, annualised net housing debt growth was around 6 per cent, compared to 7 per cent for housing credit growth (Graph E2). The effect is slightly larger for credit extended to investors than to owner-occupiers, reflecting the fact that investor offset account balances have grown more quickly than balances for owner-occupiers. Offset account balances have also been making a significant contribution to household deposit growth; excluding offset account balances reduces growth in household deposits by around 1 percentage point to 7½ per cent.

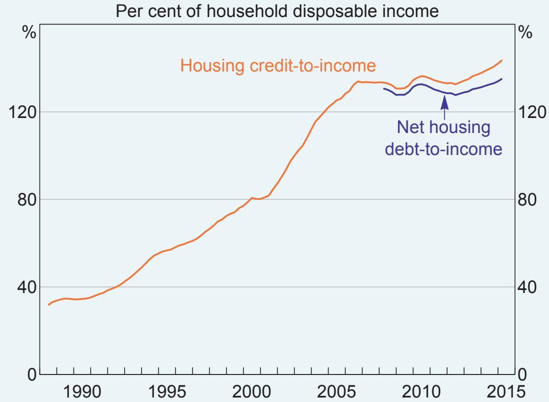
Graph E2
Housing Credit Growth*
Six-month-ended annualised



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

The treatment of offset account balances also has implications for measuring the household debt-to-income ratio (for more details on household debt measurement, see Box 'B: Measuring Household Debt'). Housing credit is the major component of household debt. Without adjusting the stock of outstanding housing credit for offset account balances, housing debt as a share of household disposable income has been increasing since mid 2012 to be at a historical high of 144 per cent (Graph E3). Adjusting for offset account balances suggests that this ratio has been rising at a slower pace, and has only just surpassed its most recent peak in late 2010. ✠

Graph E3
Housing Credit*
Per cent of household disposable income

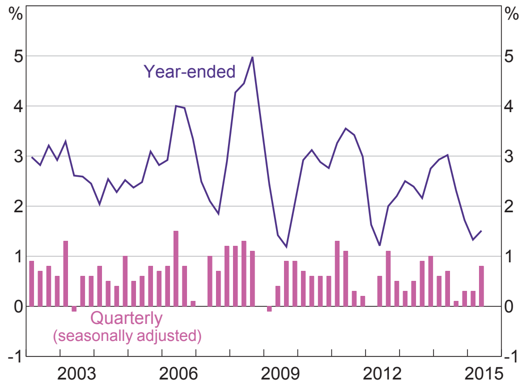


* Household sector excludes unincorporated enterprises; disposable income is after tax and before the deduction of interest payments
Sources: ABS; APRA; RBA

5. Price and Wage Developments

Headline inflation has been low over the past year due to temporary factors, although it has picked up of late. Underlying inflation has been little changed for the past few quarters. Domestic inflationary pressures are well contained, in line with spare capacity in the labour market. Wage growth has declined further in recent quarters, and remains especially low. A key exception to the moderate domestic inflationary pressures is the cost of new dwellings, which has experienced higher inflation associated with strong building activity. Inflationary pressures from imported items are increasing in response to the depreciation of the Australian dollar since 2013.

Graph 5.1
Consumer Price Inflation



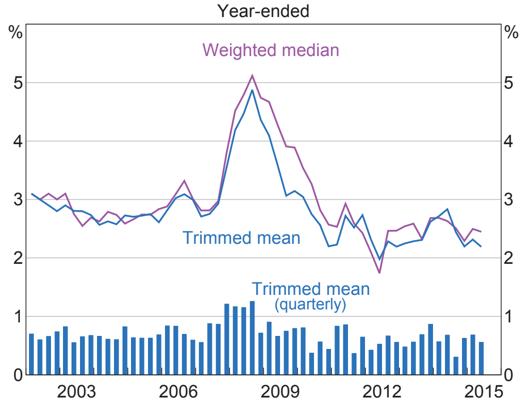
Source: ABS

Recent Developments in Inflation

Consumer price inflation picked up in the June quarter to 0.8 per cent (in seasonally adjusted terms) (Graph 5.1; Table 5.1). Much of this increase was a result of higher prices for automotive fuel. Nevertheless, CPI inflation over the year has been low at 1.5 per cent. Fuel prices remain about 10 per cent lower than a year ago, while the removal of the carbon price in the September quarter 2014 has lowered utility prices over the year.

Indicators of underlying inflation were around ½ per cent in the June quarter (Graph 5.2). Over the year, various measures suggest that underlying inflation was about 2¼ per cent, in line with the forecast in the May *Statement*. Interpreting the year-ended pace of underlying inflation continues to be affected by the indirect effects of the repeal of the carbon price last year on a wide range of prices. While the repeal has lowered costs for many businesses, the size of the effect on final consumer prices is difficult to ascertain.

Graph 5.2
Measures of Underlying Inflation
Year-ended



Source: ABS

Recent movements in automotive fuel prices have had a noticeable influence upon the CPI. Retail prices for fuel have increased since their low point earlier

Table 5.1: Measures of Consumer Price Inflation
Per cent

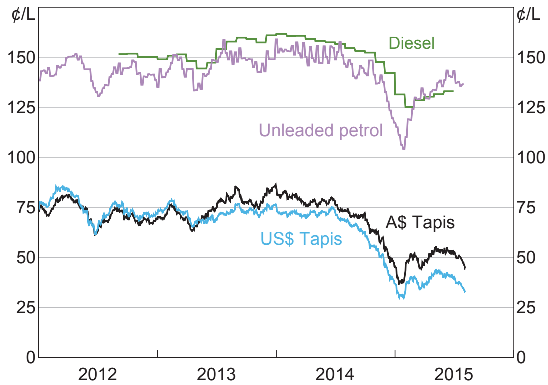
	Quarterly(a)		Year-ended(b)	
	June quarter 2015	March quarter 2015	June quarter 2015	March quarter 2015
Consumer Price Index	0.7	0.2	1.5	1.3
Seasonally adjusted CPI	0.8	0.3	–	–
– Tradables	1.1	-0.6	–0.3	–0.9
– Tradables (excl volatile items and tobacco)(c)	–0.2	0.5	–0.2	0.4
– Non-tradables	0.6	0.8	2.6	2.6
– Non-tradables (excl utilities)	0.6	0.7	2.9	3.0
Selected underlying measures				
Trimmed mean	0.6	0.7	2.2	2.3
Weighted median	0.5	0.8	2.4	2.5
CPI excl volatile items(c)	0.5	0.7	2.0	2.3

(a) Except for the headline CPI, quarterly changes are based on seasonally adjusted data; those not published by the ABS are calculated by the RBA using seasonal factors published by the ABS
(b) Year-ended changes are based on non-seasonally adjusted data, except for the trimmed mean and weighted median
(c) Volatile items are fruit, vegetables and automotive fuel
Sources: ABS; RBA

in the year, rising by nearly 12 per cent in the June quarter and contributing 0.3 percentage points to headline inflation. Since its trough in January, the average price of unleaded petrol has increased by around 30 cents per litre. The recent increase is only partly explained by higher international prices for crude oil and the depreciation of the Australian dollar over that period (Graph 5.3). Refining margins have also increased and there has been an increase in retail margins, which had been compressed with the earlier decline in petrol prices.

Despite the recent increase, fuel and oil prices remain lower than a year ago, and will exert some downward pressure on business costs and prices for a time. The price of diesel – which tends to be more important for freight costs than petrol – has been little changed of late and remains around 15 per cent lower than a year ago. Nevertheless, any downward influence on underlying inflation is likely to take some time to work its way through the supply chain, and the size of the effect is difficult to assess.

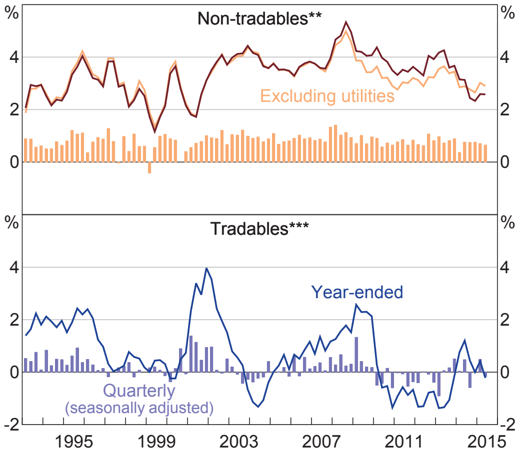
Graph 5.3
Oil and Fuel Prices



Sources: ABS; Australian Institute of Petroleum; Bloomberg; Fueltrac; RBA

Domestic inflationary pressures remain well contained. Non-tradables inflation was around 2½ per cent over the year to June, below its average over the inflation targeting period (Graph 5.4). Market services inflation remains very low (Graph 5.5). These services contain a relatively high labour content and have few administered components. Therefore, they have been particularly responsive to spare capacity

Graph 5.4
Non-tradables and Tradables Inflation*



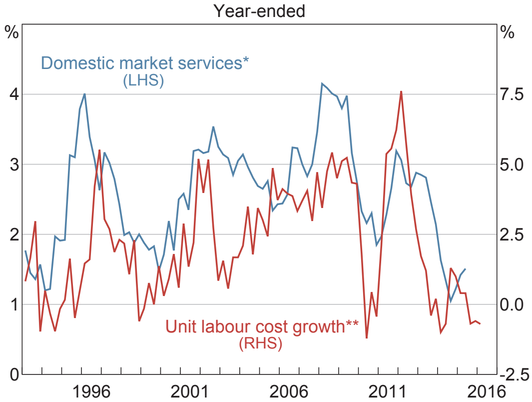
* Adjusted for the tax changes of 1999–2000

** Excluding interest charges prior to September quarter 1998 and deposit & loan facilities to June quarter 2011

*** Excluding volatile items (fruit, vegetables & automotive fuel) and tobacco

Sources: ABS; RBA

Graph 5.5
Market Services Inflation
Year-ended

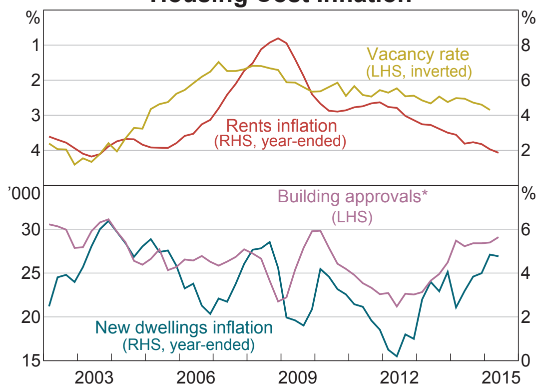


* Excludes deposit & loan facilities to June quarter 2011, housing services and domestic travel

** Moved forward by four quarters, non-farm

Sources: ABS; RBA

Graph 5.6
Housing Cost Inflation



* Private detached houses

Sources: ABS; RBA; REIA

in the labour market and low growth in unit labour costs.[1] Rent inflation has decreased to its lowest pace in around 12 years (Graph 5.6). This decline can be broadly explained by the trend increase in rental vacancy rates over recent years, although it has been a bit weaker than would be expected based on historical relationships. The weakness in rent inflation has been broad based across capital cities, but has been particularly pronounced in Perth and Canberra over the past year, where vacancy rates are the highest.

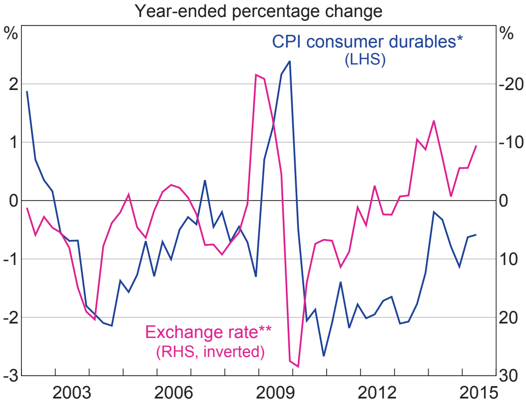
However, several factors have continued to hold up non-tradables inflation, notably inflation in new housing costs and the prices of some administered items. Inflation in new dwelling costs remained relatively high at 1.5 per cent in the June quarter and 4.8 per cent over the year. The largest price increases have been in Sydney, consistent with high levels of building activity and reports of diminishing spare productive capacity in the local construction industry. Price setting for administered items is less affected by spare capacity in the economy than other non-tradable items. Inflation in administered items picked up in the quarter, largely driven by an increase in private health insurance premiums. Overall though, year-ended inflation in a range of administered items is around its historical average. While utilities inflation remains low in year-ended terms due to the removal of the carbon price, it has returned to be around its historical average level in recent quarters.

Inflationary pressures from the prices of tradable items remain stronger than a few years ago, although they look to have moderated a little over

1 Jacobs D and T Williams (2014), 'The Determinants of Non-tradables Inflation', RBA *Bulletin*, September Quarter, pp 27–38.

the past year. The prices of tradable items (excluding volatile items and tobacco) declined modestly in the June quarter and over the year. The prices of many consumer durable items, including clothing & footwear and motor vehicle prices, fell modestly (Graph 5.7). In contrast, the prices of household appliances increased in the quarter, possibly related to strong activity in the housing market.

Graph 5.7
Consumer Prices and the Exchange Rate
Year-ended percentage change



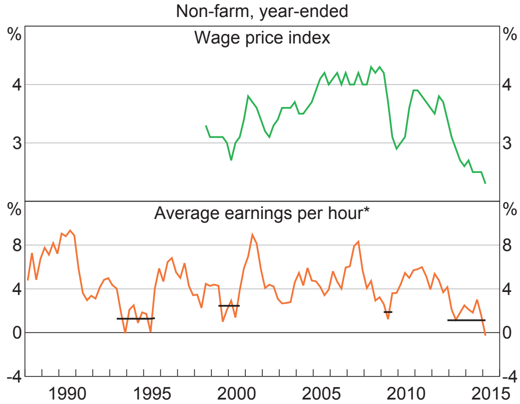
* Retail items (excluding food and alcohol) and motor vehicles and parts
** Import-weighted index, quarter average
Sources: ABS; RBA

The prices of tradable items tend to be heavily influenced by movements in the exchange rate, as they are either imported or more exposed to international competition than prices for non-tradable items. The exchange rate depreciation in early 2013 and again since late 2014 has led to an increase in the prices of imported items when measured 'across the docks'. The generally low outcomes for final prices over the past year could suggest that exchange rate pass-through has been tempered by heightened competitive pressures and a subdued retail environment. However, tradables inflation is volatile and remains higher than in 2010–13. The lower exchange rate is expected to continue to place upward pressure on the prices of tradable items over the next few years. Indeed, liaison suggests that some firms may now be starting to pass on their higher costs to rebuild or retain margins.

Labour Costs

Labour cost pressures are weak and most indicators of wage growth have declined further in recent quarters. The Wage Price Index (WPI) increased by 0.5 per cent in the March quarter and by 2.3 per cent over the year – the lowest annual pace since the index was first published in the late 1990s (Graph 5.8). Other wage measures, such as average earnings per hour, suggest that the recent period has been the most protracted episode of low wage growth since the early 1990s.

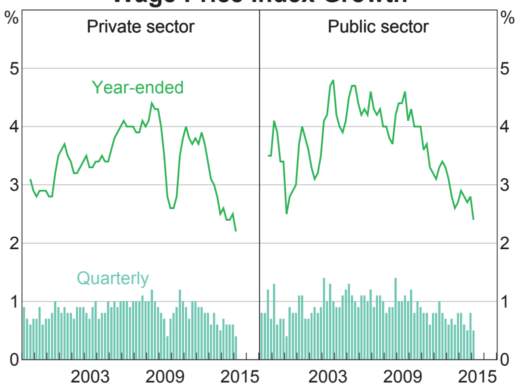
Graph 5.8
Wage Growth
Non-farm, year-ended



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

Low wage growth continues to be broad based across sectors, industries and states. In the March quarter, the private sector WPI recorded its lowest quarterly pace of growth since the global financial crisis, to be 2.2 per cent higher in year-ended terms (Graph 5.9). Public sector wage growth was also low at 2.4 per cent over the year. Public sector wage growth has been particularly low in the Australian Capital Territory, although this is partly temporary as many federal public sector workers have not had wage increases since their enterprise bargaining agreements expired last year. New agreements are now being reached in some cases, although negotiations are ongoing for others. Nationally, wage growth has continued to decline in a range of

Graph 5.9
Wage Price Index Growth

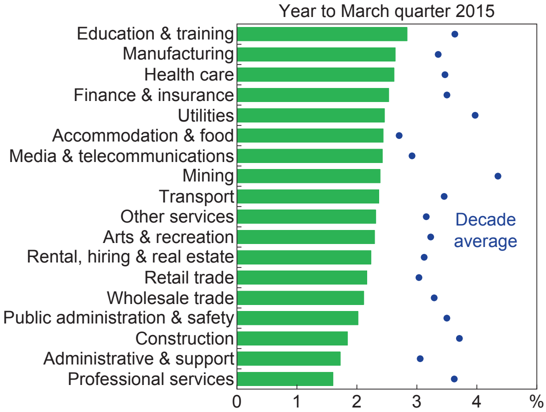


Source: ABS

industries, and all industries have experienced wage growth below their decade averages (Graph 5.10). According to business liaison and surveys of firms and union officials, growth in wages is widely expected to remain low over the year ahead.

Graph 5.10
Wage Price Index Growth by Industry

Year to March quarter 2015



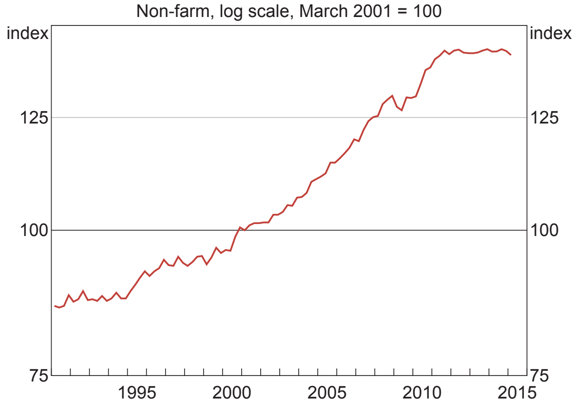
Sources: ABS; RBA

Several factors explain the decline in wage growth, including an increase in spare capacity in the labour market, low inflation expectations, the substantial decline in the terms of trade over the past couple of years and the need for the real exchange rate to adjust to improve international competitiveness. Nevertheless, the extent of the decline in wage growth has been unusually large relative to changes in measures of spare capacity in the labour market, such as the unemployment rate. Compared with previous episodes, increased labour market flexibility may have provided firms with more scope to adjust wages in response to a given change in demand for their goods and services.[2] In any case, very low wage growth appears to have contributed to more employment than would otherwise have been the case.

Unit labour costs, which adjust wage growth for changes in labour productivity, have been little changed for almost four years, as productivity growth has broadly matched earnings growth (Graph 5.11). The fact that unit labour costs have not changed significantly is assisting with the process of the economy adjusting to the lower terms of trade. There was little growth in measured labour productivity over the year to the March quarter, although average productivity growth has been higher since the start of 2011 than it was over much of the previous decade. Information from liaison suggests that firms continue to focus on cutting costs and improving productivity.

Graph 5.11
Unit Labour Costs

Non-farm, log scale, March 2001 = 100



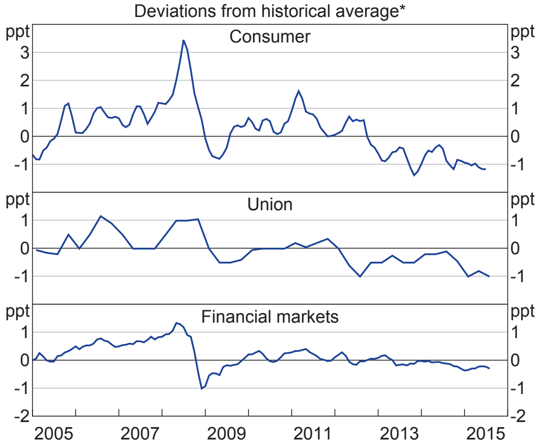
Sources: ABS; RBA

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.

Inflation Expectations

Measures of inflation expectations remain around or below average (Graph 5.12).[3] Both short-run and long-run financial market measures remain a little lower than mid last year. In recent quarters, market economists and union officials have revised down their expectations of inflation for the year ahead. The Melbourne Institute measure of consumer inflation expectations remains around 1 percentage point below its historical average. Longer-run expectations remain well anchored. ✠

Graph 5.12
Measures of Inflation Expectations
Deviations from historical average*



* Since July 1996; see footnote 3 for details

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

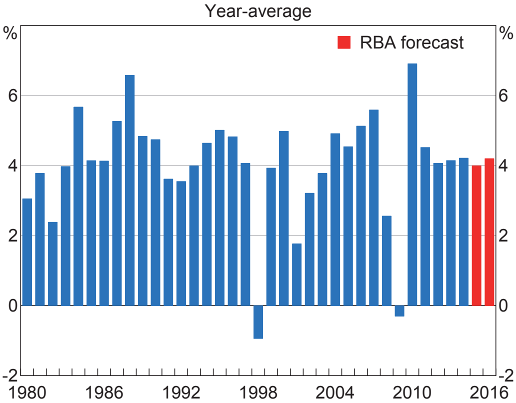
3 Consumer expectations are the three-month moving average of the trimmed mean of inflation expectations over the next year; union expectations are the median of union officials' expectations of inflation over the next year; financial market expectations are the break-even 10-year inflation rate on indexed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

6. Economic Outlook

The International Economy

Growth of Australia's major trading partners is expected to be around its long-run average in 2015 and 2016 (Graph 6.1). Forecasts for 2015 have been revised down slightly since the May *Statement*, largely reflecting somewhat weaker-than-expected growth in east Asia in the first half of 2015. Growth will continue to be supported by generally accommodative monetary policies around the globe and oil prices that remain well below their level of a year ago.

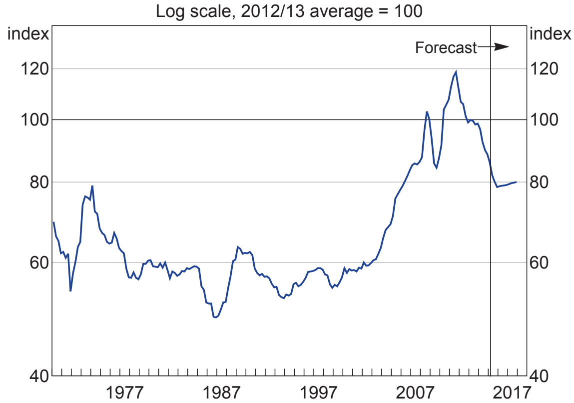
Graph 6.1
Australia's Trading Partner Growth*
Year-average



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

The outlook for Australia's terms of trade has been revised down by 4 per cent since the previous *Statement* as a result of further falls in commodity prices (Graph 6.2). This is consistent with a slightly weaker demand outlook for a range of commodities, including a more subdued outlook for Chinese steel demand. Also, expectations are that there will only be a limited reduction in global supply from high-cost producers of iron ore, including from China.

Graph 6.2
Terms of Trade
Log scale, 2012/13 average = 100



Sources: ABS; RBA

Growth in China is expected to moderate gradually over the forecast period, largely as forecast previously. Weaker growth of investment and manufacturing production is expected to be offset, in part, by the effects of more accommodative monetary and fiscal policy settings. The Japanese economy is expected to grow in 2015 and 2016 at a rate that is above its decade average, supported by accommodative monetary policy and the depreciation of the yen over the past 2½ years. In the rest of east Asia, growth in 2015 is expected to be slightly below its long-term average, reflecting weaker exports in the first half of 2015 and a more recent slowing in domestic demand growth; growth in the region is expected to return to its long-run average by 2016, aided by low interest rates and the low price of oil.

Growth in the United States is expected to continue at an above-trend rate over the forecast period, notwithstanding the moderation in growth in the first half of 2015 that was largely due to temporary factors. US growth is expected to be supported by ongoing improvements in the labour market and the stance of monetary policy, which is expected to remain accommodative for some time after the first increase in the federal funds rate. In the euro area, the gradual recovery in economic activity is expected to continue, consistent with above-average consumer and business confidence and supported by easy monetary conditions and the depreciation of the euro.

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 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$0.74). The TWI is around 5 per cent lower than the assumption underlying the forecasts in the May *Statement*. The forecasts are based on the price of Brent oil remaining at US$53 per barrel, which is around 25 per cent lower than the assumption used in May, and in line with near-term futures pricing.

The forecasts assume a lower rate of population growth than in the previous *Statement*. Recent data indicate that population growth has been declining for some time because net immigration has been lower than expected. This is discussed in greater detail in 'Box D: Implications of Lower Population Growth for the Australian Economy'. The forecasts assume that the lower level of net immigration will persist for the next two years, in part because labour market conditions in Australia are expected to remain weaker than those in countries that have traditionally been a source of skilled, prime-age immigrants, such as New Zealand. Accordingly, the working-age population is assumed to grow at an annual rate of about 1½ per cent over the next two and a half years, which is around ¼ percentage point lower each year than assumed in the previous *Statement*.[1]

The key forces shaping the forecasts remain much as they have been for some time. Below-average growth in the near term reflects the large falls in mining investment, which are offset by continued growth in resource exports. Consumption growth is expected to rise and dwelling investment is forecast to remain strong. This increase in household demand, as well as the response of net exports to the exchange rate depreciation, is expected to support a pick-up in non-mining business investment from 2016/17.

The net result of these forces is that GDP growth is expected to be between 2 and 3 per cent over the year to June 2016 and to pick up to above 3 per cent over the year to June 2017 (Table 6.1). Revisions since the previous *Statement* are relatively minor compared with the usual range of uncertainty.

The assumption of lower population growth leads to lower growth for some elements of expenditure, most notably consumption and non-mining business investment. Growth of public demand and of non-mining business investment have also been revised lower in light of other new data. These effects have been partly offset by the stimulatory impact of the recent exchange rate depreciation.

The unemployment rate is anticipated to be lower than previously forecast. In part, this reflects the generally better-than-expected labour market conditions of late. Moreover, the unemployment rate is expected to remain little changed from recent levels for some time. This is despite the change to the forecast for aggregate demand, which is likely to be broadly matched by lower growth of the economy's productive capacity, owing to lower population growth. Accordingly, the unemployment

1 These assumptions have been developed by the Bank. Updated projections from the Department of Immigration and Border Protection have not yet been released.

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

	Year-ended					
	June 2015	Dec 2015	June 2016	Dec 2016	June 2017	Dec 2017
GDP growth	2	2½	2–3	2½–3½	3–4	3–4½
CPI inflation[(b)]	1.5	2½	2–3	2–3	2–3	2–3
Underlying inflation[(b)]	2¼	2½	2–3	2–3	2–3	2–3
	Year-average					
	2014/15	2015	2015/16	2016	2016/17	2017
GDP growth	2¼	2¼	2–3	2–3	2½–3½	2½–4

(a) Technical assumptions include A$ at US$0.74, TWI at 62 and Brent crude oil price at US$53 per barrel
(b) Based on current legislation
Sources: ABS; RBA

rate is now forecast to remain little changed over the next 18 months or so from recent levels, before declining over 2017.

As has been the case for some time, low interest rates are expected to support a pick-up in consumption growth over the forecast period, despite expectations that income growth will remain low. Accordingly, the household saving ratio is expected to decline further. Household credit growth has also been stronger than income growth, although it remains relatively moderate by historical standards, and the debt-to-income ratio is expected to increase gradually. Low interest rates and rising housing prices are expected to continue to support dwelling investment over the next couple of years.

Forecasts for non-mining investment have been revised lower, consistent with weaker indications from both the ABS capital expenditure survey of investment intentions for 2015/16 and the low level of non-residential building approvals. The revisions to the population projections also imply somewhat lower growth in non-mining business investment because the investment in capital required for employees to be productive is growing by less, as is household demand. The downward revision in non-mining business investment in the near term is also consistent with information from the Bank's liaison, which suggests that firms are still waiting to see a sustained pick-up in demand before increasing their capital expenditure. The depreciation of the Australian dollar is supporting demand and investment in service sectors with an export focus, such as tourism, although these sectors account for a relatively small share of non-mining investment.

Mining investment is expected to continue to fall over the next two and a half years as large iron ore, coal and liquefied natural gas (LNG) projects are completed, and few new projects commence. The lack of a pipeline of new projects has been factored into the outlook for some time and, given this, declines in commodity prices since the beginning of this year have not resulted in a significant further reduction in planned investment.

Export growth is expected to continue to make a sizeable contribution to GDP growth over the forecast period. LNG exports are expected to grow strongly as a number of projects currently under construction begin production, and exports of services are expected to benefit further from the lower exchange rate. Despite falling commodity prices, the majority of Australian production of iron ore is estimated to be profitable and low-cost producers are expected to continue to expand supply. Import volumes are estimated to be lower than previously forecast, reflecting the slight downward revision to domestic demand as well as the depreciation of the Australian dollar.

The forecast for public demand growth has been revised a little lower. This largely reflects a reassessment of the momentum in public demand, which was flat over the year to the March quarter and has grown at a below-average pace for some time.

Inflation

Recent wage growth has been a little lower than expected. Wage growth is not expected to decline further, but neither is it expected to increase much over the next couple of years, given broad-based evidence of spare capacity in the labour market and employers in both the private and public sectors remaining under pressure to contain costs. Unit labour costs are expected to increase only gradually, having been little changed for nearly four years. This low growth of labour costs is expected to help improve the competitiveness of Australian producers and assist with a recovery in labour demand.

The inflation forecast has been revised up a little since the previous *Statement*, primarily because the Australian dollar has depreciated further. Nevertheless, domestic cost pressures are expected to remain well contained and underlying inflation is expected to be around 2½ per cent over the forecast period. Inflation expectations remain around or a little below average.

Inflation in the prices of non-tradable items is forecast to remain below its inflation-targeting average, in line with spare capacity in the labour market and low growth of labour costs. Strong demand for residential construction is likely to see inflation in new dwelling costs remain above average, although competitive pressures are likely to constrain the ability of firms more broadly to expand their margins.

The prices of tradable items are expected to rise over the next few years, given further pass-through of the exchange rate deprecation. The cumulative depreciation of the exchange rate since early 2013 has already led to an increase in import prices, which is gradually being passed through into prices for final goods. The exchange rate has depreciated further since the May *Statement* and therefore tradables inflation is expected to be somewhat higher than was forecast at that time. 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.

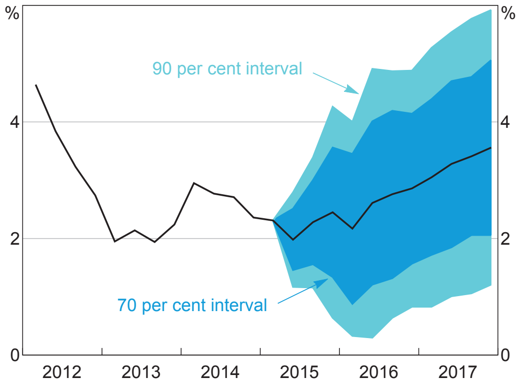
Headline inflation has declined over the past year or so in response to factors that are likely to have a temporary effect, most notably lower automotive fuel prices and the repeal of the carbon price. As the direct effects of these factors pass, headline inflation is expected to pick up. Lower fuel and oil prices have reduced input costs for a range of businesses, and these lower costs may gradually be passed on to the prices these businesses charge for their goods and services. The magnitude and timing of this indirect effect is difficult to gauge. Further increases in the tobacco excise in 2015 and 2016 are expected to contribute around ¼ percentage point in each of those years to the rate of headline inflation, but to have little effect on underlying inflation. Accordingly, headline inflation is expected to be consistent with the inflation target over the forecast period.

Uncertainties

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

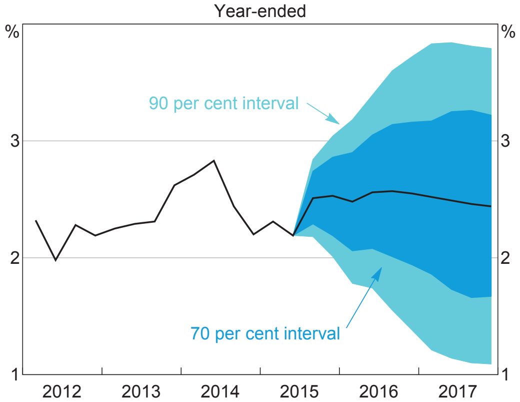
It is also worth considering the consequences that different assumptions and judgements might have on the forecasts and to consider the possible effects of events that are not part of the central forecast. There are always uncertainties about how events offshore will unfold, and how policymakers and financial markets will respond.

Graph 6.3
GDP Growth Forecast*
Year-ended



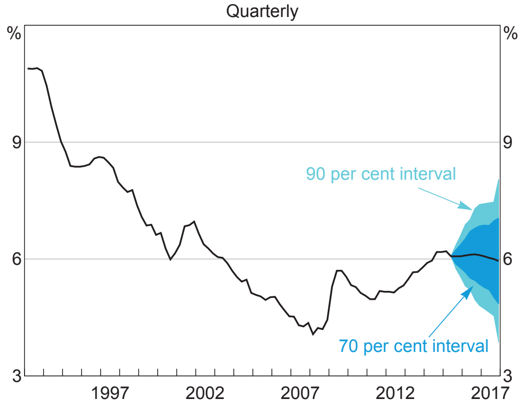
* Confidence intervals reflect RBA forecast errors since 1993
Sources: ABS; RBA

Graph 6.4
Trimmed Mean Inflation Forecast*
Year-ended



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

Graph 6.5
Unemployment Rate Forecast*
Quarterly



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

One of the key sources of uncertainty for the forecasts is how policymakers in China will respond to economic and financial market developments, and how any policy actions will affect the Chinese economy. These developments will have implications for commodity prices, particularly prices for iron ore and coal, which affect Australia's terms of trade. Another key uncertainty is the way financial markets will react when the US federal funds rate starts to increase, which is expected to occur later this year.

Domestically, as always, there are uncertainties that could influence the balance between the growth of demand and supply, which, in turn, affects conditions in the labour market and the outlook for inflation. One such uncertainty relates to the effect of lower population growth. There is also uncertainty about how households will respond to the combined effects of low growth in incomes and rising wealth from the housing market, and about the outlook for business investment.

The Chinese economy

There continues to be uncertainty surrounding the outlook for China's growth and macroeconomic policies, and the implications for commodity demand. Downside risks stemming from weakness in the property market persist but have receded somewhat, partly as a result of policy measures designed to support this part of the economy. Strong growth in property sales has reduced some of the inventory overhang, and has been associated with a rise in prices in the medium-sized and larger cities. This could boost investment growth in those cities over the coming year. However, construction activity in smaller cities, which has constituted a large share of residential investment, is likely to remain weak for some time. Policymakers have also responded to broader concerns about the momentum in activity. In particular, new infrastructure projects have been announced.

Moreover, progress is being made on the program to restructure local government debt, which is a key source of funding for infrastructure investment. Even so, the spending plans of some local governments are likely to remain under pressure from subdued proceeds from land sales.

Recent volatility in the Chinese equity market and the government's forceful policy responses may also be relevant to the economic outlook. The relatively low exposure of households to equity markets suggests that the immediate impact on domestic consumption is likely to be small and, to date, the effects on the broader financial system have been modest. However, potential confidence effects on consumption and investment are difficult to assess, and any wider implications for the reform agenda that may arise from the government's decision to intervene directly in capital markets are as yet unclear.

Market reaction to an increase in the federal funds rate

Recent commentary from Federal Open Market Committee members and market pricing suggest that there is likely to be a policy tightening in the United States some time this year. This would see the policy rate rise from near zero for the first time in nine years. Although the prospect of this tightening has been well telegraphed for some time, there is a possibility of considerable volatility in global financial markets when it eventuates. It is also possible that there will be a further appreciation of the US dollar, including against the Australian dollar and other currencies in Asia.

A depreciation of the Australian dollar would be expected to support demand for Australian production and add to inflationary pressures for a time through higher import prices. Historical relationships suggest that a 10 per cent depreciation in the Australian dollar (that is not associated with a decline in commodity prices) would be expected to increase output by ½–1 per cent over a period of two years or so. Year-ended inflation would be higher by a little less than ½ percentage point over each of the two years or so following such a depreciation.

The balance between demand and supply

The degree of spare capacity in the economy is not directly observable and relies on estimates of aggregate demand and the productive capacity of the economy, both of which are subject to measurement error and revision. The assumed profile for population growth affects both aggregate demand and the productive capacity of the economy. The recent revisions to population growth have increased the uncertainty about the degree of spare capacity in the economy, in part because complete information about which components of population growth have been revised is not yet available.

The downward revision to population growth to the end of 2014 is assumed to imply lower growth in the economy's productive capacity. The stabilisation of the unemployment rate over the course of the past year is consistent with this interpretation. However, it is possible that there has been an offsetting pick-up in productivity growth over this period that will persist into the future, or that the output and labour market data, on which this interpretation is based, will be revised.

Business investment

Total business investment is expected to fall over the next two and a half years as mining investment continues to decline sharply and non-mining investment remains subdued. However, the size of the fall in overall mining investment and the impact of the declines in commodity prices remain uncertain. Given the size of the falls in mining investment already factored into the forecasts, the decline in commodity prices since the begining of the year is not expected to lead to a significant additional fall in mining investment, although there have been indications that some capital expenditure may have been deferred, especially in the coal sector.

The forecast for non-mining business investment in 2015/16 has been lowered, partly on the basis that new data on business investment intentions and non-residential building approvals over the past three months have been weaker. More generally, the revisions to population growth and consumption reduce the need for additional investment, and much of the growth in the economy is being generated by service sectors that are relatively labour intensive. However, some of the preconditions for a stronger recovery in non-mining business investment are in place, including low borrowing rates and survey measures of business conditions that are at an above-average level. In addition, the Australian dollar has depreciated significantly over the past couple of years, which has stimulated demand for domestically produced goods and services. This would be expected to continue should the dollar depreciate further. As a result, there is significant uncertainty around the timing and strength of the expected pick-up in non-mining business investment growth. The downward revisions to the non-mining business investment forecasts are assessed to have resulted in the risks to these forecasts being more balanced.

Household sector

The forecast for a further gradual pick-up in consumption growth is associated with a further gradual decline in the saving ratio, given the low growth of household disposable income that is expected. The decline in the saving ratio is consistent with low interest rates and a forecast for continued increases in household wealth.

It is also consistent with the decline in the terms of trade, insofar as some of the increase in the saving ratio over the 2000s was a response to the temporary effect on income from the boom in the terms of trade. This possibility is supported by data that show saving ratios increasing by more for households in states that have been most directly affected by the terms of trade.

There is also uncertainty about the path of wealth and its effect on household consumption decisions. Housing prices have an important bearing on household wealth. Supply constraints, particularly in Sydney, may limit the extent to which new dwelling investment can satisfy growing demand, which raises the possibility that housing prices will grow more quickly than forecast. Also, housing prices outside Sydney and Melbourne are little changed over the past year or so and may not yet have responded fully to the very low levels of interest rates.

While higher housing prices would pose upside risk to the consumption forecasts, there is also a downside risk arising from the possibility that consumption will be less responsive to rising wealth than has been the case in the past. In recent years, fewer households appear to have been utilising the increase in the value of their dwellings to trade up or increase their leverage for the purposes of consumption or alterations and additions to housing. There is also evidence that households have revised down their expectations of their income growth, and therefore may be less willing to carry as much debt as in the past. These possibilities suggest that growth of household expenditure could be somewhat lower, and the saving ratio higher, than forecast.