# Statement on Monetary Policy AUGUST 2014

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## Overview

Growth of Australia's major trading partners over the past year has been a little above its historical average. In the June quarter, the pace of growth looks to have eased a little with a decline in Japan's output following the increase in the consumption tax in April. At the same time, however, growth of Chinese economic activity has picked up, driven by a rebound in exports and a pick-up in investment. This improvement in economic conditions reflects, in part, the modest stimulus provided by the Chinese authorities, which is designed to achieve their target of 7.5 per cent GDP growth in 2014. The US economy grew strongly in the June guarter (after adverse weather contributed to weakness earlier in the year) and the gradual recovery of economic activity in the euro area appears to be continuing. Inflation remains low in most countries, but has picked up in Japan and has shown some signs of lifting in the United States and in parts of Asia. Globally, financial conditions remain very accommodative.

Australia's trading partner growth is forecast to be a little above its long-run average in 2014 and 2015. The slight strengthening in growth compared with recent years reflects the expectation of stronger growth in the advanced economies as well as the growing share of Australian exports destined for China, an economy that is growing much faster than Australia's other trading partners. In China, GDP growth is expected to be close to the authorities' target in 2014 and then slow gradually thereafter. In Japan, abstracting from the volatility through the year induced by the consumption tax increase, growth is expected to be a bit above the average of

the past decade in 2014, but then ease a little next year. Growth in the rest of east Asia is expected to strengthen a little in 2015, aided by continued recovery in the advanced economies.

The prices of bulk commodities have declined in the past three months. The largest falls in prices have been for iron ore, for which supply has expanded following investment in global capacity, particularly in Australia. Declines in coal prices this year have also been accompanied by an increase in global supply from lower-cost mines. The global supply of bulk commodities is expected to increase further with the completion of mining investment projects already in train, although this will be offset to some extent by the closure of some higher-cost mines, including in Australia. The global supply of bulk commodities is expected to grow roughly in line with demand over the next couple of years, with little change in prices. As a result, after declining further over the past year, the terms of trade are expected to remain at a high level historically.

Conditions in financial markets have continued to be characterised by very low volatility, notwithstanding a number of recent events that in the past have given rise to volatility. Consistent with the low volatility in markets, most sovereign bond yields have moved in a narrow range and German yields have fallen to historic lows. Spreads on lower-rated sovereigns and corporations have remained low while market access remains very good. Global share prices have continued to increase in recent months, with the US market reaching fresh highs. The European Central Bank (ECB) announced a package of stimulatory measures aimed at addressing the risk of a prolonged period of low inflation, which included lowering the policy rate to close to zero and the rate paid on bank deposits at the ECB to below zero, as well as plans to provide low-cost long-term financing for banks to encourage them to expand their lending. The Federal Reserve has continued to reduce the rate of its asset purchases and is expected to conclude its asset purchase program in October.

Australian financial conditions remain very accommodative. Over recent months, there has been a decline in average lending rates paid, which are at historically low levels. The decline in part owes to the ongoing replacement of more expensive fixed and discount variable rate loans from previous vears, as well as a reduction in interest rates on offer for some borrowers. Meanwhile, the exchange rate remains high by historical standards, with the Australian dollar little changed on both a tradeweighted basis and against the US dollar since the previous Statement. The exchange rate is well above its level in late January, notwithstanding the decline in commodity prices and a narrowing in the interest rate differentials between Australia and most other advanced economies since then

Australian GDP growth picked up to an aboveaverage pace over the second half of 2013 and early 2014, with much of this increase accounted for by a surge in resource exports. Even so, there have been signs of improved economic conditions over the past year outside the resources sector. The pattern of output growth reflects the transition from the investment to the export phase of the mining boom, and the gradual pick-up in the growth of non-mining economic activity.

With the very significant expansion in mine capacity over recent years, resource exports have grown strongly. Growth was particularly rapid in the March quarter, buoyed also by favourable weather (in contrast to conditions that typically hamper production at that time of year). Rural exports also increased sharply in the March quarter, aided by earlier favourable weather in parts of the country as well as an increase in exports of meat partly in response to dry conditions in much of Queensland and northern New South Wales. More recently, exports appear to have declined in the June quarter from the high level reached in the March quarter.

Mining investment has declined noticeably from the peak almost two years ago, although it remains at a high level and has further to fall over the coming years as projects reach completion and few new projects commence.

The pick-up in non-mining economic activity is occurring, albeit gradually. Non-mining business investment is estimated to have increased in the March quarter and survey measures of business conditions and investment intentions are around average. At the same time, however, non-mining business investment remains low relative to its average share of economic activity over recent decades and the Bank's liaison continues to report that firms are reluctant to undertake significant investment projects until they see a sustained period of strong demand.

One area where there has been a marked improvement is dwelling investment, which grew strongly in the March quarter and is clearly in an upswing. The increase in dwelling investment is being underpinned by the ongoing strength in the established housing market. Housing price inflation over 2014 to date has not been as rapid as it was over the second half of 2013, but prices continue to rise. Loan approvals are higher than they were a year ago, but have been little changed since late last year. At this level, they are consistent with growth in housing credit stabilising at a rate that is a bit faster than income growth, although the growth of investor credit has continued to outpace that of owner-occupiers.

The high rate of housing price inflation has underpinned strong growth in standard measures

of household wealth. Along with the very low level of interest rates, this has seen consumption growing a little faster than household income, leading to a gradual decline in the saving rate over the past 18 months or so. Nevertheless, after picking up through 2013, consumption growth looks to have slowed in the first half of this year, with weaker retail sales growth and consumer sentiment falling to below-average levels. It remains to be seen whether this slower growth of consumption is temporary. Indeed, a timely measure of consumer sentiment has rebounded recently to be back above average.

Some labour market indicators have improved a little since the turn of the year, but overall conditions remain subdued. Employment growth has picked up following the improvement in economic activity since early 2013. The participation rate is little changed over the year to date, after a period of significant decline. Also, forward-looking indicators of labour demand have generally improved since late last year, pointing to modest employment growth over coming months. However, there remains a degree of spare capacity in the labour market. The measured unemployment rate has been guite volatile from month to month over the year to date. It is currently around its highest level in over a decade. Meanwhile, the participation rate is around its lowest level since the mid 2000s. Reflecting the spare capacity in the labour market, the growth of wages has been subdued. Over the year to the March quarter, growth in the wage price index was 1 percentage point lower than its decade average and unit labour costs were little changed.

The low growth of wages and domestic costs in general has helped to contain inflation for a range of goods and services. This is most evident in the prices of non-traded items, for which domestic costs represent a large share of their overall cost. Non-tradables inflation has slowed to be close to 3 per cent over the year to the June quarter, the lowest rate in over a decade; this has occurred notwithstanding still elevated inflation in the prices of 'administered' items and rising inflation in housing construction

costs. In contrast, inflation in the prices of tradable items has picked up, owing in large part to the gradual pass-through of the depreciation of the exchange rate since earlier last year. This increase in tradables inflation has to date more than offset the decline in non-tradables inflation and overall CPI inflation has therefore increased to 3 per cent over the year to the June quarter. Part of this increase also reflected the effect of the increase in the tobacco excise on the CPI.

Underlying inflation has also increased in year-ended terms. Over the year to the June quarter, the various measures indicate that underlying inflation was 2¾ per cent, about ½ percentage point higher than a year earlier. In the June quarter, underlying inflation was ¾ per cent, higher than the ½ per cent recorded in March, but similar to the rate in the preceding two quarters.

The outlook for domestic growth is not materially different from that presented in the May Statement. It continues to reflect the opposing forces of the decline in mining investment and ongoing fiscal consolidation on the one hand, and the strong growth in resource exports and the support from very low interest rates on the other. GDP growth is expected to be a little below average over 2014/15 and then pick up gradually to an above-average pace, with non-mining business investment and liquefied natural gas (LNG) exports forecast to add to growth. A pick-up in dwelling investment is already under way, supported by very low interest rates, and this is expected to continue given the state of various leading indicators and underlying determinants of housing demand. While consumption appears to have grown at a moderate rate over the year to date, it is expected to increase gradually to a pace a bit above average by later next year given further growth in household wealth, low interest rates and some improvement in labour market conditions. This improvement in domestic demand, along with accommodative monetary conditions and the relatively healthy state of business balance sheets, should see growth in non-mining investment pick up over time. While mining investment is expected to fall sharply from its current level, the expansion of the capital stock that this investment is delivering will see resource exports grow strongly for some time.

The expectation of a gradual strengthening of economic growth should, in time, lead to stronger demand for labour, but with growth expected to be below trend over the year ahead, the unemployment rate is likely to remain elevated before it gradually declines in 2016. With slack in the labour market likely to be evident for some time, wage growth is anticipated to remain low.

Inflation is projected to be consistent with the target over the forecast period. Overall, domestic inflationary pressures are likely to remain subdued, reflecting the ongoing spare capacity in labour and product markets. Working in the other direction, the depreciation of the exchange rate since early 2013 has pushed up import prices, which are still being passed through to prices facing consumers. The recent abolition of the carbon price has changed the forecast for inflation and lowered the profile of the CPI; inflation is now projected to be lower in 2014/15 than previously assumed, but a bit higher in 2015/16 than previously forecast.

For most of Australia's major trading partners, the uncertainty surrounding the forecasts appears to be broadly balanced. In China, a key uncertainty relates to the possibility that continued weakness in the property market will weigh on growth and may adversely affect financial stability. Working in the other direction, the authorities might adopt more stimulatory policies aimed at bolstering growth, at least in the near term, although this could counteract efforts to contain leverage and increase risks for the economy further out. In Japan, considerable uncertainty remains regarding the strength of growth once the temporary effects of the tax increase and related fiscal stimulus subside. It is possible that the US economy experiences a stronger recovery than expected, although this could lead to

a more rapid normalisation of US monetary policy with consequences for global financial markets that are difficult to predict.

The key uncertainties for the domestic economy continue to be centred on the timing and extent of the decline in mining investment and how this is balanced by the expansion of resource exports and the recovery in non-mining activity. Mining investment could decline more sharply than anticipated. On the other hand, it is possible that consumption and non-mining business investment could, in time, be stronger than expected. In particular, an extended period of low interest rates could lead to further strength in the housing market and stronger-than-expected growth in dwelling investment and consumption. Moreover, the fundamental forces are in place to support a pick-up in non-mining business investment, which could come sooner or be stronger than currently anticipated. Even if the transition of the economy proceeds as expected, the significant change in the composition of economic activity could result in either excess demand for, or supply of, particular labour skills or types of capital, and could also have implications for the exchange rate. With the terms of trade having declined, the exchange rate could depreciate over time, which would affect both output and inflation. The exchange rate could also be affected by the increase in income payments to domestic and foreign owners accruing from strong growth in resource exports, as well as the conduct of monetary policy in major countries and associated capital flows.

The cash rate has been unchanged at its current low level for a year. Over that time, rates paid by borrowers have declined somewhat and, for some borrowers, interest rates have edged lower still over recent months. These stimulatory financial conditions continue to have the expected effects on the economy. This is most evident in the strength in the housing market, which has contributed to a significant pick-up in dwelling investment but is also lending support to consumption growth. There has been some improvement in overall economic growth over the past year, even abstracting from the rapid growth of resource exports. While the non-mining economy is expected to improve a little further over the coming year, the decline in mining investment is expected to weigh more heavily than it has to date and the ramp-up in LNG exports is likely to build more significantly only towards the latter part of the forecast period. There has also been an improvement in some labour market indicators this year, although a fair degree of spare capacity remains and, given the outlook for economic activity, the unemployment rate is expected to remain elevated for some time yet. The restraint that this implies for domestic costs should offset upward pressure on prices owing to the gradual pass-through of the depreciation of the exchange rate since early 2013. With these forces roughly in balance over most of the forecast period, inflation is expected to remain consistent with the inflation target, even with lower levels of the exchange rate.

Given that assessment, the Board's judgement is that monetary policy is appropriately configured to foster sustainable growth in demand and inflation outcomes consistent with the target. On present indications, the most prudent course is likely to be a period of stability in interest rates.  $\checkmark$ 

# 1. International Economic Developments

While there are differences across countries, the pace of economic growth of Australia's major trading partners (MTPs) over the past year has been a little above its historical average (Graph 1.1). Despite this, growth of MTP GDP in the June quarter is likely to have been a little below average as a result of a contraction in Japanese output following the increase in its consumption tax rate in April. At the same time, economic growth in China has picked up, while in the rest of east Asia it has moderated a little from the strong pace seen in late 2013. The US economy is showing signs of returning to moderate growth after an unusually harsh winter, and activity in the euro area is picking up gradually.



## Asia-Pacific

In China, GDP grew by 2.0 per cent in the June quarter, following growth of 1.5 per cent in the March quarter, to be 7.5 per cent higher over the

year (Graph 1.2). The stronger growth looks to have been driven by a pick-up in the growth of investment and a rebound in exports, with available indicators suggesting that growth of household consumption has moderated a little. Monthly indicators including the PMIs have shown signs of improvement, while output growth of key industrial products has been mixed. The production of cement and plate glass (used extensively in construction) has declined, while crude steel production and electricity generation have picked up in recent months.





The improvement in economic conditions is consistent with efforts by policymakers to keep GDP growth in line with the target of 7.5 per cent for 2014. In recent months, fiscal spending has picked up at both the local and national levels of government, which has helped to support activity. The authorities have also continued a targeted easing of monetary policy for banks that lend to the rural sector and small businesses, although the effect of these measures on overall monetary conditions is likely to be moderate (see the 'International and Foreign Exchange Markets' chapter).

Merchandise exports rebounded in the June quarter, following a weak first quarter (Graph 1.3). The increase was broad based by destination, although exports to the United States, Europe and east Asia grew most strongly. Total imports in the June quarter were little changed, notwithstanding the pick-up in the growth of domestic investment. The value of imports from Australia was considerably lower, reflecting lower global iron ore prices; the volume of total iron ore imports has continued to trend higher in recent months, particularly from Australia.



The flow of new total social financing has increased in recent months, with stronger growth in both bank lending and various forms of non-bank financing (Graph 1.4). This pick-up is consistent with the targeted easing of monetary policy and recent signs of stronger economic growth. Prior to this recent increase in the flow of financing, the non-bank share of new total social financing had declined, coinciding with efforts by the authorities to limit the growth of banks' off-balance sheet business and the financing activities of non-bank financial institutions.



Conditions in the residential property market have continued to weaken in recent months (see 'Box A: The Chinese Residential Property Market'). Transaction volumes have moderated somewhat since late 2013 and, since May, prices have declined in larger cities, though they are still higher than a year ago on average (Graph 1.5). Some local governments have eased restrictions on property transactions, but many restrictions implemented over 2013 and earlier remain in place.



Inflationary pressures in China remain contained, with year-ended CPI inflation running at 2.3 per cent (Graph 1.6). Food price inflation has edged a



little higher in recent months, but non-food price inflation has remained low and stable. Producer prices have declined over the past year, though they have picked up a little in recent months.

In Japan, GDP grew strongly in the March quarter as consumption had been brought forward ahead of the increase in the consumption tax rate on 1 April.<sup>1</sup> Business investment also grew strongly in the quarter.

As expected, consumer demand fell sharply in April following the tax rate increase (Graph 1.7). Most consumption indicators rebounded a little in May and June, but notwithstanding the temporary fiscal stimulus, GDP looks to have contracted substantially in the June quarter. Moreover, machinery orders also fell sharply over the two months to May, suggesting that the strength in business investment seen earlier in the year has not continued. Given the recent volatility in economic activity more broadly, there is considerable uncertainty regarding the underlying pace of growth.

The consumption tax rise contributed around 2 percentage points to CPI inflation in April and May. Year-ended headline inflation is currently above 3½ per cent, although the Bank of Japan has indicated that it will look through the effects of the tax increase when assessing inflation against its 2 per cent target.



Most indicators suggest that the Japanese labour market has tightened considerably. The ratio of jobs to applicants has risen noticeably and the unemployment rate has fallen by 0.6 percentage points over the past 18 months, to be at 3.7 per cent in June, around the lowest level since mid 2007 (Graph 1.8). Labour shortages have been reported in construction, health and hospitality services. Notwithstanding tighter labour market conditions, wage growth remains modest. The Bank of Japan judges that supply and demand in the economy are roughly in balance following the strong growth in demand since late 2012, and that growth is likely to be above trend over the coming quarters.



See RBA (2014), 'Box A: Japan's Consumption Tax Increase', Statement on Monetary Policy, February, pp 12–13.

The Japanese Government released an update of its growth strategy in June. Key reforms that have been put forward to date include: policies to increase female labour market participation; lowering the corporate tax rate; improving corporate governance; and introducing National Strategic Zones – covering Tokyo, Osaka and other parts of the country – with each zone to trial specific measures of deregulation.

In the rest of east Asia, economic growth over the first half of 2014 has slowed from the strong pace seen in late 2013. Growth in consumption and retail sales has eased across the region and output has fallen in Thailand amid ongoing political tensions there (Graph 1.9). Abstracting from recent volatility, industrial production and export volumes across the region have continued to grow at a similar pace to that of the past couple of years.



Core inflation remains low in most economies, although it has picked up modestly in the region (Graph 1.10). Headline inflation has eased in the middle-income economies, as food price inflation has moderated and the effect of earlier reductions in fuel subsidies in Indonesia has dropped out of inflation in year-ended terms.

Monetary policy remains expansionary in the region. However, policy has been tightened recently in Malaysia and the Philippines owing to improved growth prospects and increasing inflationary pressures. In Indonesia, monetary policy was tightened in the second half of 2013 in response to high inflation, volatility in the rupiah and concerns about the current account deficit. Accommodative financial conditions have contributed to a period of rapid growth in debt and property prices in several east Asian economies. More recently, property price growth has moderated in some economies in line with the slower growth of economic activity and a tightening of macroprudential policies.



The Indian economy has grown at an annual rate of a little under 5 per cent over the past couple of years, well below the rates of 8 to 10 per cent prior to the global financial crisis (Graph 1.11). The weaker growth in recent years has reflected a range of interconnected factors, including slower growth of investment, supply constraints that have limited the productive capacity of the economy, and persistently high inflation that had prompted a tightening of monetary policy. In the March quarter, growth of consumption increased, although investment remained weak. More recent indicators suggest that economic conditions remain relatively subdued. Growth of industrial output has been weak, and imports and exports both increased at a moderate pace. The new government recently released the budget for 2014/15, announcing a target for the fiscal deficit of 4.1 per cent of GDP (compared with an outcome of 4.6 per cent in 2013/14), and flagging some initiatives aimed at raising investment, including in infrastructure.



Year-ended consumer price inflation has declined and was 7.3 per cent over the year to June, which was below the Reserve Bank of India's near-term goal of 8 per cent. The recent reduction in inflation has been relatively broad based. However, early indications suggest that rainfall in the current monsoon season has been below average, which may lead to higher food prices later this year.

In New Zealand, GDP has grown at an aboveaverage pace over the past year, buoyed by strong growth in exports and the reconstruction that has followed the Canterbury earthquakes (Graph 1.12). Consumption and residential investment have also been supported by a pick-up in net immigration.

Inflation has been relatively stable of late, with prices rising by 1.6 per cent over the year to the June guarter. Nevertheless, the Reserve Bank of New Zealand increased its policy rate to 3.5 per cent at its July meeting, citing considerable momentum in economic growth and increased capacity utilisation adding pressure to non-tradables inflation.



## United States

The US economy grew strongly in the June quarter, following a contraction in the March guarter that appears to have been mainly related to transitory factors, including unusually severe winter weather. Investment and consumption growth picked up, to be around the pace seen through 2013 (Graph 1.13). Indicators of consumer sentiment and business surveys have improved noticeably since the start of 2014.





The pace of recovery in the housing market appears to have slowed since the middle of 2013, even though dwelling investment (as a share of GDP) remains below previous cyclical lows. Permits and starts in the first half of 2014 were around their 2013 average and other forward-looking indicators of activity remain below their levels of a year ago. Housing prices have continued to grow, rising by around 9 per cent over the past year, although the pace of growth has slowed recently.

The labour market looks to have strengthened noticeably over the six months to July (Graph 1.14). Growth in non-farm payrolls has been a bit above its average pace of the past couple of years, with over 1.6 million jobs created since January this year. Over this period, the unemployment rate has continued to fall and the participation rate has stabilised after having declined substantially since the start of the global financial crisis. Other indicators also suggest that labour market conditions have improved; the number of part-time employees seeking full-time work and the rate of long-term unemployment have fallen over the year, although both indicators are still high relative to history. Wage growth has ticked up but remains moderate (Graph 1.15).

Inflation remains below the Federal Open Market Committee's long-run goal of 2 per cent, although a number of measures of inflation have picked up over the past few months. Core personal consumption expenditure inflation was 1.5 per cent over the year to June.







#### Europe

The gradual recovery of economic activity in the euro area continued in the March quarter. GDP expanded modestly for the fourth consecutive quarter, although growth was concentrated in Germany, with euro area GDP outside Germany generally little changed. Investment in the euro area has picked up in recent quarters, but it remains almost 20 per cent below its peak in 2008. More timely data suggest that the economic recovery continued into the June quarter.

The unemployment rate peaked in mid 2013, but it remains high and is declining only slowly (Graph 1.16). Substantial spare capacity in the economy has contributed to the decline in inflation over the past two years. Inflation is currently well below the European Central Bank's (ECB) target, which is for inflation to be below, but close to, 2 per cent (Graph 1.17). The ECB judges that inflation expectations remain anchored at the inflation target, although short- and medium-term market expectations have drifted below 2 per cent. In response to low inflation, at its June meeting the ECB announced a number of new policy measures to increase the degree of monetary stimulus (see the 'International and Foreign Exchange Markets' chapter). Some of these measures are aimed at supporting business credit, which has been declining since 2012.





In the United Kingdom, the pace of economic recovery has picked up since mid 2013, with GDP expanding by 3.1 per cent over the year to the June quarter. Both consumption and investment look to have contributed to the strengthening. Residential investment has been growing particularly strongly alongside a marked pick-up in house price growth. In response, the Bank of England's Financial Policy Committee introduced new prudential measures in June. The economic recovery has led to a steady decline in the unemployment rate, which was 6½ per cent in May. Inflation has declined, despite the recent pick-up in employment and output growth. Inflation is currently below the 2 per cent inflation target, after being well above it during the previous four years.

## **Commodity Prices**

The RBA index of commodity prices (in SDR terms) has moved a little lower on average in the past three months, as falls in iron ore and coal prices have been partially offset by increases in the prices of base metals and oil (Table 1.1; Graph 1.18). During this period, changes in commodity prices appear to have mainly reflected supply-side developments. The index, based on spot prices for iron ore and coal, is now 13 per cent lower in the past three months than a year ago and close to 40 per cent lower than its peak in 2011.

#### Table 1.1: Commodity Prices Growth<sup>(a)</sup> SDR, 3-month-average prices, per cent

	Since previous Statement	Over the past year
Bulk commodities	-12	-23
– Iron ore	-17	-25
– Coking coal	-3	-21
– Thermal coal	-4	-15
Rural	0	-1
Base metals	6	3
Gold	-1	-5
Brent oil <sup>(b)</sup>	1	4
RBA ICP	-5	-12
– Using spot prices for bulk commodities	-6	-13

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

Sources: Bloomberg; IHS Energy Publishing; RBA



The spot prices of iron ore and coking coal - the key commodities used in steel making - have fallen sharply since the start of the year. This has been associated with a slowing in the growth of Chinese steel production and, more importantly, significant additions to global supply of these commodities. There has been a significant increase in the supply of iron ore and coking coal in the internationally traded market over the past year, particularly from lower-cost producers, which has weighed on prices (see 'Box B: Iron Ore and Coal Cost Curves'). Growth in Chinese steel production (seasonally adjusted) has also slowed to an annualised pace of around 4 per cent over the first half of the year, compared with 11 per cent over the previous six months. The slowing reflects softer conditions in the real estate sector, as well as Chinese authorities' attempts to reduce output among the less efficient and more polluting steel producers. There is also some evidence that credit conditions have tightened in the steel sector since early 2014, with restrictions imposed on the availability of credit to firms that do not meet environmental standards.

More recently, the prices of both iron ore and coking coal have stabilised, in line with movements in Chinese steel prices (Graph 1.19). The contract price of premium hard coking coal is unchanged from the June quarter at US\$120 per tonne. However, the



Newcastle spot price for thermal coal has moved lower over recent months and is now at its lowest level since September 2009. At current spot prices for thermal and coking coal, it is widely estimated that a substantial share of internationally traded coal is unprofitable. As a result, there have been a number of announced closures of higher-cost mines around the world (including some smaller Australian operations) and delays to investment projects, while coal producers continue to focus their efforts on reducing costs.

The price of Brent oil increased a little over May and June in response to geopolitical concerns in the Middle East, but has since moved lower. Over the past year, the oil price has fluctuated around US\$110 per barrel. Base metals prices have also moved higher on average over the past three months. Nickel prices have increased sharply since Indonesia – previously the leading supplier of nickel ore - announced a ban on exports of unprocessed minerals from January 2014. Aluminium prices have started to rise as declines in production in countries other than China begin to take effect. Rural prices have been mixed; wheat prices have moved lower as an earlier weather-related increase in prices in the United States has unwound, while meat prices have increased over recent months.

## Box A The Chinese Residential Property Market

Conditions in the Chinese residential property market softened noticeably over the course of 2013 and the first half of 2014. Over this period, there has been a broad-based slowing in the growth of residential property prices, although it has been most pronounced in the very large eastern urban centres (Graph A1). The volume of property sales has declined since late 2013, and prices have fallen in most cities for which data are available in the past couple of months. These trends have coincided with widespread reports of elevated vacancy rates for residential property, especially in smaller cities.

The easing of property market conditions follows policy measures introduced in early 2013 to slow the rapid growth in housing prices. The growth in prices over that earlier period was also strongest in the very large eastern cities, such as Beijing and Shanghai, which recorded year-ended growth in new property prices of over 15 per cent.<sup>1</sup>

A number of price cycles have occurred in China's residential property market over the past decade. These cycles have coincided with changes in government policies, which have typically sought to constrain demand when prices have been rising rapidly and to promote demand when price growth has weakened. The Chinese Government has used a wide range of measures to influence residential property prices, such as tax policies, restrictions on the number of properties that households can purchase, and changes in the cost and availability of finance.<sup>2</sup> In times of rapid price growth, the government has also endeavoured to boost the



supply of social housing to help absorb pent-up demand in urban areas.

In early 2013, the State Council, China's central legislative body, directed local governments to implement housing market policies intended to moderate price growth and reduce speculative investment.<sup>3</sup> Provinces introduced a range of measures, including adjustments to property-related taxes in some areas and stricter checks on eligibility to purchase housing. In some locations, minimum interest rates for mortgages were increased, and existing restrictions on mortgage finance were tightened, including larger down payments for second home purchases and bans on additional mortgages for certain property owners. Across the country, efforts to increase the supply of subsidised housing were strengthened.

Comprehensive official data on housing market conditions are only available for China's larger cities, and activity in small cities and rural areas are only available as regional aggregates.

<sup>2</sup> See RBA (2012), 'Box A: China's Residential Property Market', *Statement on Monetary Policy*, February, pp 14–16.

<sup>3</sup> State Council (2013), 'Document No 17: Notice on Continuing to Follow Through with Property Market Controls'. Available at <a href="http://www.gov.cn/zwgk/2013-03/01/content\_2342885.htm">http://www.gov.cn/zwgk/2013-03/01/content\_2342885.htm</a>>.

Residential property investment represents a sizeable share of China's economic activity and hence weaker conditions in the housing market have the potential to weigh on overall growth.<sup>4</sup> In the medium to long term, however, demand for residential housing is likely to continue to be supported by rural-urban migration. Urban housing space per capita has grown steadily for more than 20 years, and China's urbanisation rate has risen from 42 per cent to 54 per cent in the past decade, a trend that is likely to continue given the government's commitment to facilitate further urbanisation.<sup>5</sup>

Housing market conditions also affect conditions in important segments of the financial sector. The direct exposure of the banking sector to the real estate market is moderate, with household mortgages and loans to property developers accounting for about 14 per cent and 7 per cent of banks' lending, respectively. Mortgages have generally been relatively safe assets for banks, as the central government requires maximum loan-to-valuation ratios of 70 per cent for first homes and 40 per cent for second homes, and the rate of non-performing loans is relatively low. In addition to accessing bank funding, property developers raise sizeable funds outside the banking sector, including through trust companies, entrusted lending (bank-intermediated intercompany finance), the bond market and informal lending channels.6 To the extent that regulatory supervision and internal risk assessment is weaker for some of these funding channels than for the formal banking sector, there is a greater chance of financial losses in the event of a sharp negative correction in the housing market. As the banks are ultimately funding much of this lending they are also exposed to this risk indirectly.

- 4 Real estate accounts for more than one-quarter of Chinese fixed asset investment.
- 5 For further discussion, see Berkelmans L and H Wang (2012), 'Chinese Urban Residential Construction', RBA *Bulletin*, September, pp 21–26.
- 6 For example, trust loans to developers amounted to about CNY 1 trillion in 2013, compared with CNY 4.6 trillion worth of bank loans to property developers.

A more general risk to the financial system relates to the correlation between property prices and land values. For many of the cities in which housing prices are now recording falls or declining growth, the growth of land prices for residential projects has also moderated. To the extent that land is an important source of collateral for financing in China, and a significant source of revenue for local governments, widespread and sustained declines in land prices could have broader implications for financial stability.

The financial reports of listed property developers are one source of information about the health of the sector, although listed firms account for only around 11 per cent of total sales, and are likely to have more stable access to a diverse range of funding sources than some unlisted developers. The aggregate gearing of Chinese listed developers, at less than 70 per cent, is not excessive by international standards, being lower than private non-financial corporations in the euro area but somewhat higher than in the United States and Australia. Nevertheless, it has increased rapidly over the past two years to its highest level in at least a decade, and is now significantly higher than the gearing ratio for listed firms outside the real estate sector (Graph A2). This



Sources: CSMAR; RBA

increase has largely been driven by rising long-term debt, which constitutes three-quarters of debt outstanding; the level of cash holdings remains high, but its growth has slowed. Other indicators of the financial health of listed companies, such as the ratio of current assets to current liabilities and the return on equity, appear relatively strong.

Consistent with reports of widespread vacancies and 'over-building' in Chinese cities, the value of listed developers' inventories has increased as a proportion of revenue over the past decade (Graph A3). Adjusting for pre-sales of residential property under construction (which account for a large share of new housing purchases), the ratio of 'unsold' inventories to sales has remained relatively stable since about 2008, although it has tended to rise during property downturns.



#### Graph A3 China – Property Developers' Inventories

Little information is available about the financial health of unlisted property developers, particularly the large number of smaller firms. However, restrictions on the quantity of bank lending to the real estate sector suggest that these firms are likely to be more reliant on non-bank sources of credit to finance operations. These sources of financing typically have much higher interest rates than bank loans, leaving developers more vulnerable to repayment risks. More broadly, a climate of slowing cash flows increases the likelihood of developers defaulting on their financial obligations, including credit provided by non-bank lenders. It is likely that the banking sector is indirectly exposed to this financing, in the sense that banks are the ultimate source of funding for many non-bank financial institutions.

The recent decline in residential property prices has led some cities to ease policies that have had the effect of restricting property transactions for both developers and buyers. These changes vary by locality and include tax breaks, less stringent requirements for access to local residence permits, and the removal of some purchase restrictions. Despite these changes, property market policies remain restrictive overall. With a few exceptions, such as efforts by the People's Bank of China to encourage bank lending to first home buyers, the central government has so far eschewed a nationwide response to weakening conditions. The restrictive stance of policy towards the property market leaves the authorities with further scope to support activity in the sector if required.  $\checkmark$ 

## Box B Iron Ore and Coal Cost Curves

Global 'cost' curves for iron ore and coal provide an indication of the profitability of production at different price levels, which has implications for the future supply of these bulk commodities. These curves are based on the average variable costs of production of different mines, and are constructed by ranking production at each mine according to its costs. Average variable costs of production of mines include wages, processing costs and, where available, the cost of transportation.1 The cost data, compiled by a private sector company using company reports and other public information, do not include a return on capital, debt-servicing costs or fixed costs associated with running a mine.<sup>2</sup> The data cover most of global iron ore production and around 80 per cent of the coal that is traded by sea. With the exception of coking coal, an attempt is made to adjust for differences in the quality of each tonne of output.

While the 'level' of cost curves may not provide an entirely accurate measure of all relevant costs, they can provide a good guide to the costs of particular mines relative to other global producers. For iron ore, Australian and Brazilian producers tend to be at the lower end of the global cost curve (Graph B1). In contrast, Chinese iron ore production tends to be at the higher end, which is likely to reflect higher processing costs due to the lower quality of iron ore mined as well as the high cost of transporting domestic ore to steel mills owing to the inland location of the iron ore mines.

US\$/t US\$/t 120 120 China\* 100 100 80 80 Other countries 60 60 Brazil 40 40 20 20 0 0 0 400 800 1200 1600 Cumulative annual production (Mt) Includes domestic China freight costs Sources: AME Group; RBA

A comparison of costs curves over time illustrates how the dynamics of the market have changed. The iron ore cost curve has shifted outward and flattened in recent years because of the significant increase in iron ore production capacity that has resulted from substantial new investment, particularly from lower-cost iron ore producers in Australia, and to a lesser extent Brazil (Graph B2). Over the next few years, the pace of expansion in iron ore production is expected to slow as existing investment projects reach completion and there are few plans to commit to new projects (at this stage). Indeed, the sharp fall in iron ore prices over the year to date may elicit a reduction in existing supply from higher-cost producers.

The thermal and coking coal cost curves only capture production that is traded by sea; they do not include coal that is produced and consumed domestically (including in China). China makes up around 50 per cent of total global coal production, and has been



Graph B1 **Global Iron Ore Production Costs** 

<sup>1</sup> For Australian producers, this will include take-or-pay contracts (where miners pay a fixed cost for access to port and rail facilities regardless of whether they use them or not). These contracts are regularly renegotiated, which is why they are often treated as variable costs

<sup>2</sup> The data used in this box are sourced from AME Group.



a net importer of coal since 2009. China's demand for, and production of, coal has a significant impact on prices in the global market. There have been substantial expansions in recent years to seaborne coal production, including in Australia (which accounts for a large share of the global seaborne market). This has led to an outward shift of the cost curves for thermal and coking coal. As with iron ore, the global supply of coal is expected to increase further over the next few years, although the pace of growth is expected to be slower than in the past few years. The net increase in supply will also depend on the response of higher-cost coal producers to the recent decline in prices.

As noted before, there is some error in the <sup>US\$/I</sup> measurement of the level of the cost curves, but even accounting for some omitted costs, at the current spot prices of around US\$88, the bulk of Australian <sup>100</sup> iron ore production is profitable. In contrast, at the current spot prices for coking and thermal coal of US\$114 and US\$69, respectively, given these cost curves, analysts suggest that a sizeable share of Australian and other coal mines producing for the seaborne market may not be profitable. Australian coking coal production spans a wide range of low-cost to high-cost mines (Graph B3). For thermal

coal, Australian production is, on average, highercost than many other producers that are active in the globally traded market (Graph B4). Over the past year, some producers (including in Australia) have announced plans to shut higher-cost coal mines, while coal producers have also reportedly been looking for ways to reduce costs in the short run. However, some miners may be willing to continue producing and incur losses for a time, given the costs involved in ceasing production and restarting later (assuming that prices recover).

> Graph B3 Coking Coal Production Costs 2014, free on board basis







# 2. International and Foreign Exchange Markets

Conditions in global financial markets have remained very accommodative over recent months, with global bond yields declining further, equity prices rising, most exchange rates relatively stable and volatility in a range of asset markets near historical lows (see 'Box C: Low Volatility in Financial Markets'). Foreign capital has also continued to flow to emerging markets, boosting asset prices in these economies. These outcomes have been supported in part by ongoing accommodative monetary policy settings, particularly in the major economies, notwithstanding expectations that the US Federal Reserve and central banks in some other advanced economies will raise rates over the coming year.

## **Central Bank Policy**

The European Central Bank (ECB) announced a package of monetary easing measures at its early June meeting. These measures were motivated by concerns about the possibility of a prolonged period of low inflation and persistent financial fragmentation within the euro area. The package consists of three main components: a reduction in policy rates; targeted term funding for banks to support lending to the non-financial private sector (excluding housing); and a commitment to continue providing unlimited liquidity to banks for the next few years. The ECB also repeated its commitment to engage in broad-based asset purchases if these measures fail to lift inflation.

The reduction in policy rates included a 10 basis point reduction in both the main policy rate (to 0.15 per cent) and the rate paid on deposits held at the ECB, taking the latter below zero to -0.10 per cent (Graph 2.1). The negative deposit

rate applies to banks' holdings of reserves (in excess of requirements), which increased as a result of the ECB's additional decision to cease sterilising its earlier purchases of sovereign bonds under the Securities Market Program. Around 90 per cent of these excess reserves are held by banks in core countries. The ECB has noted that the cost of holding these deposits could encourage such banks to lend to those in the periphery via the interbank market.



In a further attempt to improve the transmission of monetary policy across the euro area, the ECB also announced a program of 'targeted' long-term refinancing operations (TLTROs) that will provide banks with low-cost term funding. Under the first two operations, in September and December 2014, banks will be able to borrow up to 7 per cent of their outstanding lending to the non-financial private sector (excluding housing) as at 30 April 2014, amounting to almost €400 billion. In the subsequent six operations, conducted each guarter from March 2015 to June 2016, banks will be able to borrow up to three times the difference between their outstanding stock of eligible loans as at the date of the operation and an institution-specific benchmark (which is set equal to the value of their loans outstanding as at 30 April 2014 for institutions whose lending has been expanding and somewhat lower than this for those whose loan book has been contracting). The amounts available under these operations will therefore depend on developments in credit outstanding, though the ECB has suggested that a further €600 billion is likely to be available to banks. All loans extended under these operations will mature in September 2018, but banks that fail to expand eligible lending beyond their benchmark level by mid 2016 will be required to repay their borrowings two years earlier. The rate of interest on the TLTROs will be fixed at 10 basis points above the policy rate at the time of the allotment (currently implying a borrowing rate of 0.25 per cent).

In a commitment to assure money markets that liquidity will remain abundant for a considerable time, the ECB also extended its provision of liquidity under fixed-rate full allotment effectively until at least March 2017 (previously mid 2015). Under this facility, banks can borrow for a three month term at the prevailing policy rate (currently 0.15 per cent).

Interbank rates fell by almost 20 basis points in response to this package of measures, and have since generally traded at between 3 and 5 basis points (Graph 2.1). The expected path of interest rates has also flattened significantly since early May when the ECB first flagged its intentions to ease policy (Graph 2.2). With interbank rates again consistently trading below the rate at which banks can borrow short-term funds from the ECB, banks' use of the ECB as a funding source has declined rapidly since the end of May (Graph 2.3). As a result, outstanding lending by the ECB for monetary policy purposes is currently only a little higher than pre-crisis levels.

The Federal Reserve continued to reduce its asset purchases following its June and July meetings. The Fed has made it clear that it intends to reduce







purchases by a further US\$10 billion following its September meeting and then cease purchases after its meeting in October, assuming the economy evolves broadly in line with expectations. This would see the Fed's balance sheet peak at almost US\$4.5 trillion (Graph 2.4). The focus of the Federal Open Markets Committee's (FOMC) deliberations now centres on when to begin raising interest rates and how to normalise policy. FOMC members generally continue to expect the first rise to occur around the middle of next year, and be followed by around 200 basis points of additional tightening by the end of 2016, though the Fed continues to state that it expects rates to remain below longer-run norms for some time. This outlook for rates remains somewhat higher than that expected by markets (Graph 2.5).



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



The Bank of Japan (BoJ) continues to expand its balance sheet rapidly, in line with the policy announced in April last year. Over the first seven months of 2014, this has seen the Japanese money base rise by over ¥40 trillion (compared with a full year target of ¥70 trillion; Graph 2.6). The BoJ assesses economic activity to be evolving in line with its expectations following the sales tax rise in April, and continues to forecast that inflation will reach its 2 per cent target in 2015.



In China, short-term money market rates have continued to average well below the levels prevailing over the second half of last year. On average, the 7-day repo rate has been 80 basis points lower over the past six months than over the second half of 2013 (Graph 2.7). The Chinese authorities undertook a number of measures in recent months that effectively eased monetary conditions for certain segments of the economy - including lowering the reserve requirement ratios of certain banks and making technical adjustments to the calculation of banks' loan-to-deposit ratios, which are capped at 75 per cent. However, the impact of these on monetary conditions is assessed to be small, and the People's Bank of China (PBC) has emphasised that these measures do not signal a material change in its policy stance.



The Reserve Bank of New Zealand (RBNZ) raised its policy rate by a further 25 basis points in each of June and July, in response to strong economic growth and expectations of an increase in inflation (Table 2.1). In the United Kingdom, expectations for when the Bank of England (BoE) will first raise its rate have moved forward noticeably over recent months, following remarks by Governor Carney that rates could rise sooner than the markets had been expecting, and are now consistent with an increase to 0.75 per cent early next year. In contrast, the Swedish central bank cut its rate by 50 basis points to 0.25 per cent in July in response to persistently low inflation, while the central bank of Israel also cut its rate in response to a decline in the inflation outlook.

A number of central banks in developing economies have changed interest rates over recent months. The central banks of both Mexico and Chile lowered rates in response to weaker-than-expected economic activity. The central bank of Turkey also reversed

	Policy rate Per cent		Most recent change	Cumulative change in current phase Basis points
Euro area	0.15	$\downarrow$	Jun 14	-135
Japan <sup>(b)</sup>	na		na	
United States	0.125	$\downarrow$	Dec 08	-512.5
Australia	2.50	$\downarrow$	Aug 13	-225
Brazil	11.00	$\uparrow$	Apr 14	375
Canada	1.00	$\uparrow$	Sep 10	75
Chile	3.75	$\downarrow$	Jul 14	-150
China <sup>(b)</sup>	na		na	
India	8.00	$\uparrow$	Jan 14	75
Indonesia	7.50	$\uparrow$	Nov 13	175
Israel	0.50	$\downarrow$	Jul 14	-275
Malaysia	3.25	$\uparrow$	Jul 14	125
Mexico	3.00	$\downarrow$	Jun 14	-525
New Zealand	3.50	$\uparrow$	Jul 14	100
Norway	1.50	$\downarrow$	Mar 12	-75
Russia	8.00	$\uparrow$	Jul 14	250
South Africa	5.75	$\uparrow$	Jul 14	75
South Korea	2.50	$\downarrow$	May 13	-75
Sweden	0.25	$\downarrow$	Jul 14	-175
Switzerland	0.00	$\downarrow$	Aug 11	-275
Taiwan	1.875	$\uparrow$	Jun 11	62.5
Thailand	2.00	$\downarrow$	Mar 14	-150
Turkey	8.25	$\downarrow$	Jul 14	-175
United Kingdom	0.50	$\downarrow$	Mar 09	-525
	Current mo asset purc	•	Most recent change	Assets on balance sheet
Line in a Channe		- 111		Per cent of GDP
United States	1	oillion	Jul 14	25.5
Japan	¥61	rillion	Apr 13	55.2

#### **Table 2.1: Monetary Policy**

(a) Current rate relative to most recent trough or peak

(b) Since April 2013, the Bank of Japan's main operating target has been the money base; China does not have an official policy rate Sources: Central Banks; RBA; Thomson Reuters

175 of the 550 basis point tightening in January over recent months, citing a disinflationary outlook as depreciation pressure on the lira has abated and a narrowing in the current account deficit. In contrast, the South African Reserve Bank increased its rate by a further 25 basis points in July due to heightened inflation risk, notwithstanding a downgrade to its outlook for economic activity. The central bank of Malaysia also raised its rate in July, the first rise in three years, due to strong growth prospects and aboveaverage inflation. The Russian and Ukrainian central banks increased rates by a further 50 and 300 basis points, respectively, in July, following similar-sized moves in April, in an attempt to support their currencies and thereby contain inflation.

### Sovereign Debt Markets

Yields on 10-year US Treasury bonds have moved within a narrow range of 2.45 to 2.65 per cent in recent months, having fallen somewhat over May (Graph 2.8). Consistent with this, volatility remains around historic lows (see 'Box C: Low Volatility in Financial Markets' for further details). Yields on US Treasuries are now 55 basis points lower than at the start of the year, with yields on inflation-linked bonds falling by an equal amount. Part of this decline appears to reflect a reassessment by market participants of the longer-run level for the federal funds rate.



Yields on 10-year German Bunds have fallen by 80 basis points since the start of the year to reach their lowest level on record at 1.10 per cent. As in the United States, the decline can be largely explained by a reduction in expected real yields. Yields on Japanese government bonds (JGBs) have also continued to decline as a result of ongoing purchases by the BoJ. Yields on such securities are now at their lowest level on record, outside of two brief periods in 2003 and April last year. The decline in JGB yields has occurred despite residents increasing their holdings of foreign bonds since March, unwinding the selling that occurred in the first quarter of 2014 (Graph 2.9). Much of the recent purchases by Japanese residents have been of US, French, euro area periphery and Australian bonds, while residents have been large sellers of German bonds this year.



Spreads between yields on bonds issued by euro area periphery governments and Bunds narrowed moderately after the ECB's June meeting, in response to expectations that the imminent TLTRO funds would be used, at least partially, to purchase such bonds. As a result, by mid June spreads on Italian and Spanish bonds had unwound all but 50 basis points of their rise following the onset of the euro area debt crisis in 2010, while spreads on Irish bonds had fully reversed their increase (Graph 2.10). Yields on



10-year bonds issued by Italy, Spain and Ireland are now at their lowest levels in many decades. However, spreads on Portuguese and Greek government bonds widened in July as concerns about the health of periphery banking sectors (and hence the need for financial support from sovereigns) resurfaced following difficulties at Portugal's largest bank, Banco Espírito Santo (BES). In the event, Portuguese authorities announced a €4.9 billion resolution plan for BES following revelations of capital losses associated with exposures to its parent company. The resolution involves splitting BES into a 'good bank' and a 'bad bank'. The 'good bank' will be recapitalised with an injection of money from the country's industryfunded bank resolution scheme and includes all deposits and senior bondholders. The 'bad bank' will include shareholders and junior bondholders, and will be wound down

Yields on bonds issued by emerging market sovereigns have generally continued to fall over recent months, alongside a resumption of foreign capital inflows since February and a slowing growth outlook in many economies (Graph 2.11). Yields on Russian government bonds, however, have risen sharply over the past month following the shooting down of the Malaysian passenger airline over Ukraine and the subsequent tightening of sanctions against Russia.



Yields on Argentine government bonds have been highly volatile since mid June, reflecting the dispute between its government and 'holdout' creditors who refused to accept a restructuring of the bonds on which Argentina defaulted in 2001. In June, the Supreme Court of the United States affirmed the New York District Court ruling that Argentina is legally prohibited from paying interest to holders of restructured bonds without simultaneously meeting its obligations to these holdout creditors, which the government has refused to do. As a result, holders of restructured Argentine bonds did not receive payments due at the end of June, pending a resolution of this dispute, and the country defaulted on its obligations 30 days later. The outcome of this case may have implications for future debt restructuring arrangements by other sovereigns.

## **Credit Markets**

Borrowing costs for US and euro area corporations remain very favourable. Spreads between investment grade corporate bonds in these regions and equivalent government bonds have remained around their lowest levels since 2007, and with yields on government bonds declining, absolute borrowing costs have continued to fall (Graph 2.12). Spreads on non-investment grade bonds also remain very low, though have increased moderately over the past month.



Bond issuance by euro area corporations has picked up in 2014 (Graph 2.13). This has been driven by increased issuance from financials in both core and periphery countries, and occurred alongside reduced recourse to ECB lending. Issuance by US corporations has remained around the strong pace recorded last year. The average credit rating of new issuance in advanced economies has continued to decline; almost 30 per cent of bonds issued so far this year have been either non-investment grade or unrated, compared with just over 20 per cent in 2013.



Graph 2.13 Corporate Bond Issuance Bond issuance by corporations in emerging markets has increased considerably since late February (Graph 2.14). Much of this has been driven by a sharp increase in issuance by Chinese corporations. However, issuance by corporations in other countries, particularly from emerging Europe, has also increased.

Graph 2.14



The US Securities Exchange Commission has finalised rules to address money market funds' susceptibility to heavy redemptions in times of financial stress. Institutional prime money market funds will be required to sell and redeem shares at the current market-based value of the securities underlying their portfolios (i.e. adopt a floating net asset value), instead of transacting at a fixed price. Such funds will also be required to temporarily suspend or impose a liquidity fee on investor redemptions if a fund's weekly liquid assets fall below set thresholds relative to total assets, unless their board of directors determines that doing so would not be in the fund's best interests. In addition, government funds will have to hold 99.5 per cent of their assets in US Treasuries, compared with only 80 per cent currently, which will increase demand for Treasury bills. Funds have two years to comply with these new regulations.

## Equities

Global share prices continued to grow over recent months, to be moderately above the levels prevailing at the start of the year, notwithstanding falls over the past two weeks (Table 2.2). These gains have occurred alongside a further reduction in volatility (see 'Box C: Low Volatility in Financial Markets'), and despite a number of geopolitical and financial shocks (including escalating tensions in Ukraine and Gaza). Growth in advanced economies share prices has been underpinned by modest gains in the United States and strong increases in Japan, though the latter only unwinds part of the sharp fall recorded over January (Graph 2.15). In contrast, European share prices fell guite sharply over the past two weeks due to that economy's greater exposure to Russia and renewed concerns about the European banking sector.

#### Table 2.2: Changes in International Share Prices Per cent

	Over 2013	Year to date
United States – S&P 500	30	4
Euro area – STOXX	20	-2
United Kingdom – FTSE	14	-2
Japan – Nikkei	57	-7
Canada – TSE 300	10	12
Australia – ASX 200	15	3
China – A shares	-7	5
MSCI indices		
– Emerging Asia	3	7
– Latin America	-7	6
– Emerging Europe	-2	-6
– World	23	2
Course: Bloomborg		

Source: Bloomberg

Bank share prices have been relatively volatile over recent months, particularly in Europe as concerns about the stability of the Portuguese banking sector emerged. US bank share prices have largely tracked



their broader index over recent months, as second quarter profit results for the six largest US banks (abstracting from litigation expenses) increased strongly from that reported last guarter, to be slightly higher than a year earlier. This strong result reflected increased fees from investment banking activities and reduced loan-loss provision charges, which offset reduced income from fixed income and commodity trading activities as volatility in markets abated. In contrast, European banking shares have underperformed their broader index. Second quarter profit results for 12 of the larger European banks (abstracting from litigation expenses) were well below that reported last quarter, though only slightly lower than a year earlier. As in the United States, a decline in trading income weighed on profits. Litigation expenses continued to weigh on both US and European bank profit results in the guarter. US and European banks have agreed with regulators globally to fines totalling almost US\$25 billion since the start of the June guarter, taking the total paid out this year to almost US\$40 billion (Graph 2.16). The majority of the fines this year have continued to relate to the mis-selling of mortgage-backed securities and collateralised debt obligations prior to the financial crisis, though penalties for facilitating the evasion of either sanctions or tax have also figured prominently.



Merger and acquisition (M&A) activity has increased significantly in 2014, buoyed by rising business confidence and cheap financing conditions. The value of global M&A activity announced in 2014 has totalled more than US\$2.3 trillion in the year to date, the strongest level since 2007 and only slightly lower than the value announced throughout 2013. A sizeable portion of this activity has been in pharmaceuticals, finance and media, with much of it occurring across borders.

Share prices in emerging markets have continued to rise strongly since early February, outpacing the gains recorded in advanced economies for the first time in three years. Price indices have increased by at least 10 per cent since the start of the year across a large number of emerging markets, despite the sharp falls observed in January (Graph 2.17). Share prices in India, Indonesia, the Philippines, Thailand and Turkey have all risen by around 20 per cent since the start of the year, with markets in India and Indonesia buoyed by changes in government. These gains have occurred alongside a return of foreign capital to emerging equity markets since mid February, particularly in India and Indonesia. Chinese and Hong Kong share prices have also increased particularly strongly over the past month, following large falls earlier in the year, driven by better-than-expected Chinese data and increased confidence in its economy.



In contrast, share prices in eastern Europe have either been little changed or declined this year. Russian stocks have been especially weak, with the re-escalation of tensions surrounding eastern Ukraine in mid July driving stocks back down towards the lows observed immediately after the annexation of Crimea. Other markets in the region, such as Poland and Hungary, have also been affected by these tensions.

### Hedge Funds

Global hedge funds recorded an average return on investment of 9.1 per cent over the year to the June guarter, significantly underperforming the total return from a balanced portfolio of global bonds and equities over the past year. This continues a three-year period of underperformance, though this has occurred alongside a significant reduction in the volatility of hedge fund returns. This underperformance has been especially pronounced for macro funds, which trade in response to movements in economic variables; such funds have posted virtually no return over this period. Hedge funds continue to receive new inflows which, combined with positive investment returns, saw funds under management rise by almost US\$100 billion over the June guarter to US\$2.8 trillion (Graph 2.18).



## Foreign Exchange

Conditions in foreign exchange markets have remained subdued in recent months. Volatility in the main developed market currency pairs has declined further to reach new lows, while movements in most currencies against the US dollar have been relatively small since May (see 'Box C: Low Volatility in Financial Markets'). This follows a period between late January and early May, when most emerging market and other 'growth-sensitive' currencies had appreciated against the US dollar.

The US dollar has depreciated by around 1 per cent on a trade-weighted basis since its recent peak in early February (Table 2.3; Graph 2.19). This is notwithstanding market participants' expectations that the US Federal Reserve will soon end its asset purchase program and is moving closer to raising its key policy rate.

The euro has depreciated by around 3 per cent on a trade-weighted basis and against the US dollar since early May, when ECB President Draghi first signalled that further monetary easing measures would likely be implemented. The subsequent decision to deliver additional stimulus in June partly reflected the ECB's concerns about the strength of the euro in the context of low inflation and weak economic

### Table 2.3: Changes in the US Dollar against Selected Currencies

Per cent

	Since end	Since end January
	April 2013	2014
Swedish krona	6	5
Chinese renminbi	0	2
European euro	-2	1
Swiss franc	-2	0
Japanese yen	5	0
New Taiwan dollar	2	-1
Canadian dollar	8	-2
Singapore dollar	1	-2
Mexican peso	9	-2
Thai baht	10	-2
UK pound sterling	-8	-2
Indian rupee	14	-3
Philippine peso	6	-4
Indonesian rupiah	21	-4
Malaysian ringgit	5	-4
New Zealand dollar	1	-5
South Korean won	-6	-5
South African rand	19	-5
Brazilian real	14	-6
Australian dollar	11	-6
тwi	4	0
6 8 1 8	1.66	

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



activity. Notwithstanding the recent depreciation, and the growing divergence in the outlook for euro area and US monetary policy, the euro remains 11 per cent higher against the US dollar since mid 2012 (Graph 2.20). On a trade-weighted basis, the euro is currently around 2 per cent above its average since the introduction of the single currency in 1999.



The Japanese yen has been little changed over recent months, but remains around 3–4 per cent higher against the US dollar and on a trade-weighted basis over 2014 to date. In real effective terms, the yen is around 18 per cent below its average over the past 15 years.

The UK pound and New Zealand dollar have appreciated by 2-3 per cent against the US dollar over 2014 to date to be 10-13 per cent above their mid 2013 lows (Graph 2.21). In both cases, the appreciation reflects a change in market participants' views about the outlook for monetary policy, with expectations of the timing of the BoE's first interest rate increase being brought forward and the RBNZ increasing its policy rate by 100 basis points since March. The BoE has stated that the recent appreciation of the UK pound is a 'headwind' facing the economy, while the RBNZ has noted that the currency is 'overvalued' and 'unjustified and unsustainable' and that 'there is the potential for a significant fall'. The RBNZ has also suggested that if the New Zealand dollar remains high in the face of



worsening fundamentals, it would become 'more opportune' to intervene in foreign currency markets.

The Chinese renminbi (RMB) has appreciated by around 1 per cent against the US dollar since early May but remains around 2 per cent below its mid January peak (Graph 2.22). The recent appreciation has seen the RMB return to the centre of its +/-2 per cent daily trading band around the PBC's daily fixing rate for the first time since March.



The stock of Chinese foreign currency reserves increased by US\$45 billion (around 1 per cent) over the June quarter, largely reflecting net purchases of foreign currency by the PBC (Graph 2.23). The pace of reserve accumulation was noticeably slower than



that seen over the previous three quarters, but is consistent with capital outflows from China and, more generally, reduced appreciation pressure on the RMB in the June quarter.

The Chinese authorities have continued to take steps towards internationalising the RMB. In June and July, the PBC designated official RMB clearing banks in London, Frankfurt and Seoul. These clearing banks will have more direct access to onshore RMB liquidity, including approval to transact in China's onshore foreign exchange market. The PBC also signed Memorandums of Understanding with the central banks of France and Luxembourg to establish RMB clearing banks in these jurisdictions in the future. In addition, 'direct trading' between the UK pound and the RMB - that is, trading between these currencies without the use of the US dollar as an intermediate currency - commenced in Mainland China's interbank market. In July, the PBC signed a bilateral local currency swap agreement with the Swiss National Bank (SNB) of up to RMB150 billion (or the equivalent of US\$24 billion) and reopened a bilateral local currency swap line with Argentina of up to RMB70 billion (or the equivalent of US\$11 billion). Chinese authorities have also allocated a RMB80 billion investment quota to both Germany and South Korea under the RMB Qualified Foreign Institutional Investors (RQFII) scheme, and have granted the SNB a RMB15 billion quota to invest in the Chinese interbank bond market.

After having appreciated noticeably between late January and early May, most other Asian and Latin American currencies have since been little changed or depreciated slightly against the US dollar. While most of these currencies remain above their lows in early 2014, they are well below their end April 2013 levels (Graph 2.24).



Emerging European currencies have generally depreciated by more than other emerging market currencies since early May, amid heightened market concerns about geopolitical developments in Russia and Ukraine. The Russian rouble has depreciated by around 7 per cent since its peak in June, while the Ukrainian hryvnia has depreciated by around 4 per cent over the same period.

Most Asian and emerging market central banks' gross foreign currency reserves have continued to increase modestly since the end of March (Table 2.4). This is consistent with reports that authorities in some of these economies have been intervening in foreign exchange markets to curb appreciation pressure on their currencies and/or have been continuing to rebuild their reserves following declines in the latter part of 2013.

······································				
Percentage change since:			Level	
	End April 2013	End December 2013	End March 2014	US\$ equivalent (billions)
China	13	4	1	3 993
Taiwan <sup>(b)</sup>	5	2	1	424
Russia	-9	-8	-3	416
Brazil	0	5	4	367
South Korea	12	7	4	358
Hong Kong	4	2	1	308
India	12	10	6	294
Thailand	-6	0	0	159
Malaysia	-6	-2	2	120
Turkey	-2	1	6	110
Indonesia	1	9	5	101
South Africa	-3	-3	-2	41

#### Table 2.4: Gross Foreign Currency Reserves<sup>(a)</sup>

(a) Data to end June for China, Hong Kong, Indonesia, South Africa and Thailand; to 14 July for Malaysia; to 25 July for India, Russia and Turkey; to end July for Brazil, South Korea and Taiwan

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

Sources: Bloomberg; CEIC Data; Central Banks; IMF; RBA

## Australian Dollar

The Australian dollar has been little changed against the US dollar and on a trade-weighted basis since the previous *Statement*, notwithstanding further declines in key commodity prices (Table 2.5; Graph 2.25). Interest rate differentials between Australia and a number of other advanced economies have also narrowed somewhat over this period. The Australian dollar is still 7 per cent higher than its low in late January, but around 11 per cent below its recent peak in April 2013. By longer-term standards, the Australian dollar remains 16 per cent above its postfloat average in nominal trade-weighted terms and around 30 per cent above its post-float average in real trade-weighted terms.

Volatility in the Australian dollar has been little changed over recent months, with the average intraday trading range for the AUD/USD exchange rate remaining around multi-year lows (Graph 2.26).

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

	Since April 2013 peak in TWI <sup>(a)</sup>	Since January 2014 trough in TWI <sup>(b)</sup>
European euro	-13	10
Chinese renminbi	-12	10
Swiss franc	-14	9
US dollar	-11	8
Japanese yen	-9	7
Canadian dollar	-5	6
Thai baht	-2	6
UK pound sterling	-19	5
Singapore dollar	-11	5
Indian rupee	0	5
New Zealand dollar	-10	4
South African rand	7	4
Indonesian rupiah	8	4
South Korean won	-19	3
Malaysian ringgit	-б	3
TWI	-11	7
(a) 11 April 2013		

(b) 25 January 2014 Sources: Bloomberg; RBA





## **Capital Flows**

Net capital inflows to the Australian economy declined to 1.3 per cent of GDP in the March quarter, the lowest share of GDP since quarterly data commenced in 1988. The net inflow was directed primarily to the public sector, although there was also a net inflow to the private non-financial sector. In contrast, there was a continued net outflow from the private financial sector in the quarter (Graph 2.27).



The net inflow to the public sector in the March quarter largely reflected foreign purchases of Commonwealth Government securities (CGS), although there was also a net inflow to the state and local government sector. Net foreign purchases of CGS were again roughly proportional to net issuance in the quarter, leaving the foreign ownership share of CGS little changed at 67 per cent. The foreign ownership share of state government securities was also little changed at 31 per cent.

Net inflows to the private non-financial sector moderated in the March quarter, reflecting reduced net inflows to both the mining and non-mining sectors. In gross terms, the Australian non-mining sector received a larger share of foreign investment in Australia than the mining sector for the first time since 2010. The net outflow from the private financial sector reflected continued net outflows from 'other financial institutions' (which include superannuation and other types of investment funds).

Consistent with the reduction in net capital inflows, Australia's current account deficit also narrowed in the March quarter. This in turn partly reflected a
narrowing in the net income deficit to 2.3 per cent of GDP – its lowest share of GDP since 1987 (Graph 2.28). With Australia's net foreign liability position little changed over the quarter, the narrowing in the net income deficit was due to an increase in the yield received on Australia's overseas equity assets and a reduction in the yield paid to non-residents on Australia's equity liabilities.



## Box C Low Volatility in Financial Markets

A notable feature of global financial markets in 2014 has been the very low level of price volatility. Volatility has fallen since mid last year, measured both by realised returns and by that implied by option prices. The decline in volatility has been observed across a wide range of markets - including for sovereign and corporate bonds, equities and foreign exchange - and across most countries, including Australia (Graph C1). At a global level, volatility in each of these markets has recently been at levels that are around their lowest over the past 25 years. This is despite the presence of a number of factors that would normally be expected to cause volatility to increase, including geopolitical shocks and uncertainty about both the pace of economic recovery in advanced economies and the timing and pace of interest rate increases in the United States.

A number of factors seem to have contributed to this reduction in volatility, though none of them on their own is compelling. One of these has been a decline in macroeconomic volatility, which suggests that the size of economic data surprises that have the potential to affect financial markets has diminished over the past two years (Graph C2). Another factor cited is the greater focus on forward guidance by most advanced economy central banks over the past year, along with the increasing acceptance of this by investors. This could have created a greater sense of certainty about the outlook for policy over the year ahead than may be warranted. More generally, two-way volatility in interest rates has naturally been restricted as rates have moved towards the zero lower bound, though much of this effect has been present for some years now. A third possible explanation for the relatively low volatility is that it is a function of a 'search for yield' in a low interest rate



environment. One way that this has manifested itself is in the market for volatility protection, where there has been an increase in supply as more institutions enter this market seeking returns by selling volatility insurance (although if volatility were to increase before the protection expired, losses would be incurred).

Regardless of the causes, an expectation that a lowvolatility environment will persist could encourage investors to increase their exposure to risk. Indeed, low volatility will typically generate an increase in



risk-taking for investors that employ value-at-risk models. An important way in which this increase in risk-taking can occur is via greater leverage, since a persistent decline in volatility – all else equal – improves the risk-return trade-off associated with leveraged positions. This increase in leverage could occur either directly, via an increase in debt held against assets (such as margin loans to purchase equities), or indirectly, via an increase in investors' exposure to more highly leveraged borrowers. Lower volatility can also encourage investors to increase their exposure to markets that historically have higher risk, such as 'risk-sensitive' currencies or higher-yielding securities. There is some evidence that leverage held against assets has risen and that investors are increasing their exposure to riskier assets, but the increase in leverage to date has not been particularly large.

History suggests that the current low volatility environment will not persist indefinitely. When a shock eventually occurs that is sufficiently large to cause volatility to increase, investors that had responded to the earlier decline in volatility by increasing leverage or their exposure to riskier assets could face significant losses. The resulting unwinding of these positions in an environment where there are large numbers of investors seeking to exit the same positions increases the likelihood that some markets could become one-sided, thereby exacerbating the initial rise in volatility.

# 3. Domestic Economic Conditions

Growth of the Australian economy picked up over the second half of 2013 and early 2014, driven in part by a large increase in resource exports, although some timely indicators point to more moderate growth in recent months (Graph 3.1; Table 3.1).

GDP growth was particularly strong in the March quarter as a large amount of new mining capacity came on line and mining activity was less disrupted by weather conditions than typically occurs during Australia's summer months. Growth of GDP excluding resource exports has picked up over the course of the past year but remains subdued. In the March quarter, mining investment is estimated to have fallen sharply and public demand declined, consistent with fiscal consolidation at the state and federal levels of government. Growth of household consumption also slowed after having picked up steadily through 2013. Nonetheless, there were



further tentative signs of somewhat stronger growth of non-mining activity. The recovery in dwelling investment gathered pace and non-mining business investment is estimated to have increased a little.

	March quarter 2014	December quarter 2013	Year to March quarter 2014
GDP	1.1	0.8	3.5
Domestic final demand	0.3	0.2	1.6
– Private demand	0.5	0.0	1.8
– Public demand	-0.3	0.9	0.8
Change in inventories <sup>(a)</sup>	-0.6	0.3	-0.7
Gross national expenditure	-0.3	0.5	0.9
Exports	4.8	1.1	10.4
Imports	-1.4	-0.6	-2.2
Nominal GDP	1.1	1.6	4.9
Real gross domestic income	0.8	1.0	2.5
(a) Contribution to GDP growth			

# Table 3.1: Demand and Output Growth

(a) Contribution to GDP growth

Source: ABS

Some labour market indicators have improved a little this year, but overall conditions remain subdued. Subdued wage and general domestic cost pressures are consistent with a degree of spare capacity in labour and product markets.

Recent economic indicators and information obtained through the Bank's business liaison suggest that GDP growth moderated in the June guarter. Export volumes eased from the high level of the March guarter and indicators of household demand softened; retail sales volumes were little changed in the quarter, measures of consumer sentiment had fallen to below-average levels and growth of household wealth appears to have been a little less rapid than the pace recorded over 2013. Growth of business investment and public demand is likely to have remained subdued. Nonetheless, surveys suggest that business conditions and confidence remain around long-run average levels, supported in part by the recovery in dwelling construction, and more timely measures of consumer confidence have rebounded to be above average levels (Graph 3.2).



#### Household Sector

Growth of real household disposable income has slowed considerably in recent years. Over the year to the March quarter, it grew by 1½ per cent, compared with around 4 per cent over the past decade (Graph 3.3). The slow growth largely reflected weakness in labour income, consistent with subdued labour market conditions. There was a small boost to disposable income from lower interest payments as banks' average lending rates declined (for more detail, see the 'Domestic Financial Markets' chapter).



Graph 3.3 Real Household Disposable Income\*

After picking up steadily through 2013, the pace of household consumption growth slowed a little in the March quarter 2014. Still, consumption grew faster than income over the year, which was accompanied by increases in wealth driven by higher dwelling and equity prices (Graph 3.4). Accordingly, the household saving ratio has declined somewhat, but remains much higher than in recent decades.

More recent data suggest that consumption growth was moderate in the June quarter, with retail sales volumes declining by 0.2 per cent (Graph 3.5). The largest fall occurred in clothing retailing, where unseasonably mild weather conditions reportedly weighed on sales of winter apparel. Also, measures of consumer sentiment had fallen markedly in May to below-average levels. However, the weekly measure of consumer sentiment rebounded sharply in late July and is now above average levels (see Graph 3.2). In contrast to softer retail sales growth, motor vehicle sales to households have picked up in recent months after some weakness around the turn of the year.





Household wealth has grown strongly over the past 18 months or so, buoyed by higher housing and equity prices and ongoing saving by households, although more recently growth has eased a little (see Graph 3.4). In most of the capital cities, housing price inflation was less rapid over the first half of 2014 than it was over the latter part of 2013 (Graph 3.6; Table 3.2). While prices appear to have levelled out in Perth and Adelaide, growth has remained relatively strong in Sydney and Melbourne. Surveys indicate that, compared with earlier in the year, fewer households expect housing prices to rise over the next 12 months, and households view buying conditions for dwellings as less favourable than they did a year ago.



Other indicators of conditions in the established housing market remain strong overall. The time taken to sell properties and the average size of vendor discounts are at low levels, and auction clearance rates are above average, albeit not as high as late last year. Turnover appears to have increased a bit in the June quarter, though is still a little below average.

The nationwide rental vacancy rate has been little changed over recent quarters at a relatively low level, but conditions in the rental market appear to have generally eased (Graph 3.7). Rent inflation has declined to its slowest pace since the mid 2000s.

	3 months to June 2014	3 months to March 2014	Year to June 2014
Capital cities			
APM <sup>(a)</sup>	2.1	1.9	10.1
RP Data-Rismark	1.4	2.3	10.3
Regional areas			
APM <sup>(a)</sup>	0.6	1.2	4.6
RP Data-Rismark <sup>(b)</sup>	0.0	0.3	3.3

#### Table 3.2: Housing Price Growth Per cent

(a) Quarter-on-quarter growth rate (b) Detached houses only Sources: APM; RBA; RP Data-Rismark



Combined with strong growth of housing prices over the past year or so, rental yields have fallen to around their average of the past decade.

A strong recovery in dwelling investment is well under way, driven by low borrowing rates, growth of housing prices, significant population growth and a retargeting of government assistance for first home buyers to new homes. Dwelling construction increased by almost 5 per cent in the March quarter to be 8 per cent higher over the year, as the substantial pick-up in residential building approvals over 2013 continued to flow through to activity (Graph 3.8). The increase was driven by a rise in new dwelling construction, particularly for higherdensity dwellings. Alterations and additions activity also increased a little in the March quarter, after an extended period of weakness.

More recently, residential building approvals have declined a little in trend terms, but remain at a high level consistent with further growth of dwelling investment (Graph 3.9). The recent trend decline owes mostly to a decline in higher-density approvals from the very high levels seen in late 2013. Approvals for detached houses have trended higher in all mainland states over the past couple of years, notwithstanding a recent decline in South Australia.

Other timely indicators of housing construction also point to a sustained recovery in dwelling investment. Loan approvals for new dwellings remained at a high level in May and first home owner grants for new dwellings have increased by 22 per cent over the past year (Graph 3.10). Liaison reports indicate that demand for new dwellings remains firm, with ongoing strong demand by foreign buyers for innercity apartments, particularly in Melbourne.



Graph 3.10 Indicators of Dwelling Investment\*



#### **Business Sector**

Business investment has continued to decline from its late 2012 peak as the investment phase of the mining boom is unwinding (Graph 3.11). By component, engineering construction fell in the March quarter, while non-residential building and machinery and equipment investment both increased a little. Over the past year, machinery and equipment investment has fallen by 10 per cent. Non-mining investment is estimated to have increased in the March quarter, although the increase only partly offset the fall in mining investment.



Both the ABS capital expenditure (Capex) survey and the Bank's liaison indicate that mining investment has passed its peak and is expected to fall sharply over the next couple of years (Graph 3.12). Investment intentions in the mining industry for 2013/14 were revised lower in the March quarter Capex survey. More importantly, the survey points to a sizeable decline in mining investment in 2014/15, although the Capex survey's estimates of investment intentions are less precise this far out. The Bank's liaison suggests the potential for a sharper decline than indicated by the Capex survey.



For non-mining investment, the Capex survey is pointing to a small pick-up in investment in 2014/15, almost entirely in buildings and structures. Other data on the outlook for investment in non-mining buildings and structures have been mixed. Nonresidential building approvals have trended down since the start of the year, after growing over the past few years (Graph 3.13). The downward trend in approvals is consistent with underlying conditions in the commercial property market, where vacancy rates are above their decade averages and rental





yields are below their historical averages. Even so, the elevated stock of work yet to be done flowing from prior approvals suggests that non-residential building investment will rise in coming quarters.

After picking up from below-average levels last year, business sentiment has remained around its long-run average level over the past few months (Graph 3.14). Survey measures of capacity utilisation are around average levels, although the Bank's liaison suggests that firms are reluctant to invest until they see a sustained period of strong demand.



#### **Government Sector**

Recent federal and state budgets call for ongoing fiscal consolidation over coming years (Graph 3.15). The planned consolidation is similar in size to previous episodes of fiscal tightening and will restrain aggregate demand as in the past. In 2014/15, the consolidated deficit is expected to narrow to around 2½ per cent of GDP, and progressively lower deficits are planned for subsequent years. The consolidated budget is scheduled to return to a balanced position by 2017/18, though there remains a level of uncertainty around which new policy initiatives will be legislated.



Sources: Australian Treasury; State and Territory Treasuries

#### Farm Sector

Farm production is estimated to have risen by 6 per cent in 2013/14 according to the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES). This increase reflected a strong wheat crop in Western Australia and increased slaughtering of livestock as a result of a lack of rain in Queensland and northern New South Wales (Graph 3.16). ABARES expects farm production to fall in 2014/15 as livestock producers begin to rebuild stock numbers and as wheat yields return to more normal levels.

The Bureau of Meteorology currently estimates that there is a 50 per cent chance of El Niño conditions developing in 2014, which are associated with belowaverage rainfall over southern and eastern inland areas and above-average daytime temperatures

Graph 3.16 Australian Rainfall 1 July 2013 to 30 June 2014



over the southern part of Australia. The effect of El Niño conditions on crop production is not clear, as it depends on the intensity and timing of rainfall.

#### **External Sector**

Resource exports made a strong contribution to GDP growth over the year to the March guarter, led by expansions in production and export facilities for iron ore and, to a lesser extent, for coal (Graph 3.17). In the guarter, resource exports contributed 0.9 percentage points to GDP growth, although some of this reflected the temporary effect of favourable weather conditions. While ongoing expansions to capacity are expected to lead to increases in iron ore and coal exports over the next year, the pace of growth in these exports is expected to slow noticeably. The first of the liquefied natural gas (LNG) projects currently under construction is also expected to begin production around the turn of the year. Manufacturing exports were little changed over the past year, as the still high level of the exchange rate continues to weigh on the sector. At the same time, however, there has been a broad-based increase in services exports, including in tourism, education-related services and other services (such as financial services). Rural exports increased sharply in the March guarter, led by wheat exports from Western Australia.



Imports fell in the March quarter and over the year (Graph 3.18). This primarily reflected a decline in capital goods imports, with liaison suggesting that the import-intensive phase of LNG investment is now unwinding. Recent Bank estimates suggest that imports have accounted for somewhere between one-third and one-half of mining investment in recent years and the import intensity of the LNG investment projects under way is expected to decline over the next few years.



#### Labour Market

Some labour market indicators have improved a little this year, but overall conditions remain subdued. Employment has grown by around 1 per cent over 2014 to date, roughly keeping pace with population growth (Graph 3.19). The pick-up in employment growth since the beginning of the year is consistent with the improvement in economic activity since early last year. The strong growth in the extraction of resources is not likely to have added very much to the demand for labour, given that resource extraction is more capital intensive than production in the



non-resource economy and typically requires only around one-third of the labour input (Graph 3.20).<sup>1</sup>

The participation rate appears to have stabilised, fluctuating around its current level for the past few quarters, after declining from late 2010. Much of the earlier decline in the participation rate is likely to have reflected cyclical factors, although structural forces – including the ongoing effect of the ageing of the population – may have also had a significant effect.

Despite the improvement in some indicators, the unemployment rate has continued to rise since the start of the year. However, there has been significant monthly volatility of late. This may in part reflect a notable change to the definition of unemployment in the month of July, as well as unusually large effects from rotation of the survey sample.

More generally, there remains a degree of spare capacity in the labour market. The unemployment rate is around its highest level since the early 2000s and the participation rate is around its lowest level of the past eight years. Total hours worked are currently only a little higher than their level two years ago despite strong growth of the population. Broader



well as the provision of intermediate inputs used in the current production of resources Sources: ABS: RBA

measures of underemployment have also continued to rise in recent quarters, as there has been an increase in the prevalence of part-time workers that are seeking to work additional hours.

By industry, employment outcomes reflect the changing composition of economic activity. Employment in the household services sector has continued to exhibit a strong upward trend; gains in the health and education industries have accounted for the bulk of employment growth in this sector (Graph 3.21). Business services employment has retraced some of its recent decline; information from the Bank's liaison program suggests that strength in the residential and commercial property markets is stimulating demand for labour in the professional and real estate industries. Meanwhile construction employment has trended higher over the past year, consistent with growth in residential building activity. Mining employment has been relatively stable over the past two years, as the investment phase of the mining boom gives way to the production and export phase. Manufacturing employment has been little changed of late but remains on a gradual declining trend over the longer term.

<sup>1</sup> Differences in the labour input requirement, as measured here, will also capture the impact of differences in average hours worked across industries. See Rayner V and J Bishop (2013), 'Industry Dimensions of the Resource Boom: An Input-Output Analysis', RBA Research Discussion Paper No 2013-02.



Much of the increase in aggregate employment since the beginning of the year has been driven by New South Wales and Queensland. While the unemployment rate has increased in Queensland, this has been accompanied by a notable pick-up in the state's participation rate, perhaps suggesting that workers previously discouraged by poor job prospects may have resumed searching for work (Graph 3.22). The unemployment rate in Western Australia has also risen over the past two years, but remains low relative to other states. In Victoria, the unemployment rate remains relatively elevated. Labour market conditions remain generally subdued in South Australia and Tasmania, although the unemployment rate in Tasmania has declined somewhat from its peak around a year ago.

Nationally, the pace of population growth remains relatively strong by historical and international standards, notwithstanding a slight slowing in net overseas migration over the year to the December quarter. The composition of this growth across the states has shifted somewhat, possibly in response to changes in the pattern of demand across industries and regions. In particular, population growth has slowed in the mining-intensive states of Western Australia and Queensland, but has accelerated in New South Wales and Victoria (Graph 3.23). Much of this shift is due to changes in net overseas migration, while net interstate migration has exhibited a similar, but more muted, pattern. Overseas migration may be particularly helpful in adjusting to changing patterns of labour demand; just as migrants were drawn to the resource-related regions and occupations in Western Australia and Queensland during the mining investment boom, they are now being drawn to the relatively stronger performing states of New South Wales and Victoria.





Forward-looking indicators of labour demand have generally improved since last year. However, overall they remain at low levels, consistent with only moderate employment growth over the coming months. The ABS measure of job vacancies has increased over the past few quarters, while some measures of job advertisements have also trended higher despite some mixed outcomes of late (Graph 3.24). Business survey measures of hiring intentions have improved over recent months, to be slightly above their historical average. Reports from the Bank's liaison suggest that businesses' employment intentions have been little changed over recent months, but have improved since a year ago.



<sup>\*\*</sup> This survey was suspended between May 2008 and November 2009
\*\*\* Net balance of employment intentions for the following quarter; deviation from average since 1989

Sources: ABS; ANZ; Department of Employment; NAB; RBA

# 4. Domestic Financial Markets

In line with conditions globally, volatility in Australian financial markets has been at particularly low levels over recent months. Money market rates imply that the cash rate is expected to remain unchanged over the remainder of the year. Government bond yields have declined since the time of the previous Statement, and borrowing costs for state governments are near historic lows. Corporate bond spreads have declined to their lowest levels since 2007 and issuance by lower-rated corporations and at longer maturities has been readily absorbed by the market. Growth in intermediated lending has picked up, with both housing and business credit growth increasing over recent months. Australian equity prices have risen slightly over the period, underperforming those in other developed markets.

#### Money Markets and Bond Yields

The Reserve Bank has maintained the cash rate target at 2.50 per cent since August 2013. Rates on overnight indexed swaps (OIS) suggest that the cash rate is expected to remain unchanged over the remainder of the year (Graph 4.1).

Rates on bank bills and certificates of deposit (CDs) have declined by around 5 basis points since the previous *Statement* and the 3-month bank bill rate is currently around 2.65 per cent. Spreads between bank bill and OIS rates have declined somewhat recently, after having increased over the first half of the year in line with increased issuance of bank bills and CDs (Graph 4.2).





Yields on long-term Commonwealth Government securities (CGS) have declined by around 30 basis points since the previous *Statement* (Graph 4.3). Global developments, including tensions in the Middle East and Ukraine, have contributed to the decline in CGS yields over recent months, as have market expectations that the cash rate will stay at its current level for longer. Consistent with this, the spread between 10-year CGS and US Treasuries has narrowed by around 20 basis points since the previous *Statement*, to reach its lowest level since 2006 (Graph 4.4).





Following the release of the Australian Government Budget in May, the Australian Office of Financial Management (AOFM) announced its updated

financing requirement for 2014/15. The AOFM expects to issue around \$63 billion of nominal CGS and \$4 billion in Treasury Indexed Bonds, with total CGS on issue expected to reach around \$360 billion by June 2015. While buying of CGS by non-residents has picked up in recent quarters, it has only kept pace with new issuance. Accordingly, the share of CGS held by non-residents remains around two-thirds of the outstanding stock (Graph 4.5).



The states have announced their 2014/15 budgets and updated their borrowing programs. Gross longterm bond issuance (less pre-funding) by the states is expected to increase by about \$31 billion in the current financial year (Table 4.1). Taking into account scheduled maturities, the stock of state bonds on issue is expected to increase by around \$10 billion during the financial year, compared with an average increase of around \$20 billion in each of the previous three financial years. While a number of states have announced plans to privatise assets, these have not vet been legislated and therefore have not been reflected in the states' borrowing programs. Should these plans eventuate, issuance in the near term would be lower than currently projected. Spreads between securities issued by state governments ('semis') and CGS remain close to their historic lows (Graph 4.6).

	Outstanding as at June 2014	2013/14 issuance	2014/15 indicative target
lssuer	\$ billion	\$ billion	\$ billion
New South Wales	64	5	6
Queensland	81	6	8
South Australia	14	3	4
Tasmania	3	0	1
Victoria	36	6	3
Western Australia	30	6	9
Total	230	27	31

#### Table 4.1: Long-term Bond Issuance by State Treasury Corporations<sup>(a)</sup>

(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 less prior year surplus funding Sources: State Treasury Corporations; RBA



Bond issuance by the state borrowing authorities in recent years has featured increased issuance of floating-rate notes (FRNs) and a shortening of the issuance tenor (Graph 4.7). Since early 2013, around one-quarter of the issuance has been FRNs. The increased issuance of FRNs reflects, among other things, strong demand for such securities from banks, which have increased their holdings of state government securities to meet the soon to be implemented prudential liquidity requirements. Banks have a preference for holding FRNs and shorter-term fixed-income assets as they match the predominantly floating rate nature of their liabilities.

Graph 4.7 Bond Issuance by States and Territories



Domestic bond issuance by non-resident entities ('Kangaroo' issuance) has totalled \$12 billion since the previous *Statement*, about half of which was raised by supranationals largely refinancing previous issuance. Non-supranational issuance has largely been driven by European banks returning to the Kangaroo market, although there has been some small first-time issuance by Middle Eastern entities adding further to the issuance from this region earlier in the year.

Since the previous *Statement*, the cost of hedging Australian dollar issuance into major currencies has remained mostly unchanged. The general trend over the past year has been towards increased cost of hedging Australian dollar issuance into yen and euros as the cross-currency basis swap spreads of these currencies against the Australian dollar have declined. Despite the increased cost of hedging Australian dollar issuance, Kangaroo bond issuance has remained attractive owing to the general decline in credit spreads, particularly for European-based issuers.

#### **Financial Intermediaries**

Major banks' average funding costs have declined slightly since the previous Statement. Conditions for issuers in long-term wholesale debt markets have continued to improve, with the cost of new issuance remaining at low levels. At the same time, wholesale debt issued previously at higher spreads has continued to mature, reducing the cost of outstanding debt (Graph 4.8). To date, this has only had a modest effect on banks' average funding costs as long-term wholesale debt currently represents about 12 per cent of banks' total funding.



The favourable conditions in wholesale markets. together with some easing in competition for deposits, have led banks to reduce their term deposit rates (Graph 4.9). In addition, the spread between term deposit rates and wholesale market rates has narrowed over the past year. Consistent with these developments, the aggregate share of deposits in banks' funding has been broadly unchanged over the past few months at around 57 per cent (Graph 4.10).





Sources: CANSTAR; RBA

%

Graph 4.10 Funding Composition of Banks in Australia\*



Australian banks have issued around \$33 billion in senior unsecured and covered bonds since the previous Statement (Graph 4.11), with two-thirds of this issued offshore, primarily in the US market. Nonetheless, the stock of outstanding bank bonds continues to grow only modestly, increasing by



\$9 billion over the most recent quarter. Debt maturities have averaged around \$20 billion a quarter over the past three years, while the weighted average residual maturity of outstanding bank bonds is currently around 3½ years. The volume of hybrid issuance was lower than during the three month period before the previous *Statement*, with two bank issues of Basel III compliant securities raising \$2 billion.

Secondary market spreads to CGS on the major banks' bonds have been little changed since the previous *Statement*, with senior unsecured bond spreads remaining around their lowest levels since 2007 (Graph 4.12).

Australian securitised issuance has totalled around \$10 billion since the previous *Statement* (Graph 4.13). Around 85 per cent of the issuance has been in the form of residential mortgage-backed securities (RMBS). Most of the RMBS were originated by banks, although non-banks raised \$3 billion in RMBS. Primary market issuance spreads for banks and mortgage originators on senior RMBS tranches tightened further to their lowest levels since 2007. A small commercial mortgage-backed security and two securities backed by assets other than real estate were also issued since the previous *Statement*.







#### **Financial Aggregates**

Total annualised credit growth picked up to around 61/2 per cent over the June quarter. This reflected an increase in growth in both housing and business credit (Graph 4.14). Growth in credit remains below growth in broad money, which increased at an annualised rate of around 8 per cent over the quarter (Table 4.2).

#### Table 4.2: Financial Aggregates

Percentage change<sup>(a)</sup>

	Three months ended March 2014	Three months ended June 2014	Year ended June 2014
Total credit	1.2	1.6	5.1
- Owner-occupier housing	1.3	1.4	5.3
– Investor housing	2.1	2.5	8.7
– Personal	-0.2	0.4	0.7
– Business	0.8	1.5	3.5
Broad money	1.9	1.9	7.0

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



#### Household Financing

Housing credit growth steadied in the first half of 2014, after increasing in the second half of last year. This is consistent with growth in housing loan approvals, which have stabilised at a high level (Graph 4.15). Credit extended to investors has continued to grow at a faster pace than for owneroccupiers. Mortgage prepayments remain at a high level and continue to restrain credit growth.

There has been a reduction in advertised rates on fixed-rate loans, mainly reflecting a reduction in fixed-rate funding costs for banks (Table 4.3).



Lenders continue to advertise special offers to new customers, including fee waivers and additional discounts on rates for a limited time. Consistent with this, the average interest rate on outstanding housing loans has continued to gradually decline as borrowers have refinanced at lower rates (Graph 4.16). The average interest rate on housing loans is now around 15 basis points lower than it was after the reduction in the cash rate target in August 2013. Liaison with financial institutions indicates that competition for lending remains strong, with interest rate discounting and broker commissions increasing over the past year.

			_	
	Level at since end since		Change since end August 2013	Change since end October 2011
	Per cent	Basis points	Basis points	Basis points
Housing loans				
– Standard variable rate <sup>(a)</sup>	5.93	0	0	-186
– Package variable rate <sup>(b)</sup>	5.08	0	-2	-195
– Fixed rate <sup>(c)</sup>	5.12	-8	1	-140
– Average outstanding rate	5.30	-5	-16	-187
Personal loans				
– Standard variable rate	11.63	1	-7	-86
Small business (variable rates	5)			
– Term loans	7.10	0	0	-190
– Overdraft	7.97	0	0	-188
Average rate <sup>(d)</sup>	6.69	-2	-11	-194
Large business				
Average rate <sup>(d)</sup>				
(variable rate and bill funding)	4.50	-7	-29	-253

#### Table 4.3: Intermediaries' Fixed and Variable Lending Rates

(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) Rates on outstanding business lending (includes discounts)

Sources: ABS; APRA; RBA



#### Graph 4.16 Outstanding Housing Interest Rates

#### **Business Financing**

Growth in external business funding picked up in the June quarter to 5 per cent of GDP. Equity raisings and business credit both increased while non-intermediated debt was broadly unchanged (Graph 4.17).

Australian non-financial corporate bond issuance has totalled around \$3 billion since the previous *Statement.* Issuance has been relatively low over the past 9 months, as the large resource companies have been absent from the market (Graph 4.18). As is typical for Australian corporate issuance, most bonds were placed offshore, although the domestic market saw the first sub-investment grade (rated below BBB-) bond issuance with Qantas raising \$700 million through two bonds with relatively long maturities.





Secondary market spreads over CGS for Australian dollar corporate bonds have declined slightly since the previous *Statement* across all credit ratings. Spreads are at their lowest levels since 2007 (Graph 4.19).

Non-bank financial bond issuance has picked up since the previous *Statement*. Scentre Group, a newly formed company from the restructuring of Westfield, issued \$3 billion across four offshore bonds with maturities ranging from 4 to 12 years. Credit ratings for Australian issuers have remained stable since the previous *Statement*.



Business credit growth picked up in the June quarter, with part of the increase due to a number of banks providing bridging finance for the restructure of Westfield. The major banks and foreign-owned banks accounted for the bulk of the increase in business credit over the quarter. Lending to unincorporated (typically smaller) businesses has generally grown at a faster pace than lending to private non-financial corporations over recent months.

Asian-owned banks continue to increase their share of lending to large businesses (Graph 4.20). Over the past couple of years, these banks have



provided a significant share of intermediated lending to the mining sector and, more recently, to the manufacturing sector. This increase in market share reflects, among other things, very competitive pricing and terms, particularly in the syndicated loan market.

Overall activity in the syndicated loan market picked up in the June quarter, consistent with seasonal patterns, with stronger approvals for capital and corporate expenditures. Despite some merger and acquisition (M&A) activity by listed Australian entities, syndicated loan approvals for acquisitions remain at very low levels. The maturity of most syndicated loans at origination is around 3½ years, slightly below its long-term average.

The cost of intermediated business borrowing for both small and large businesses has declined over recent months and average rates on loans outstanding are at historic lows (Graph 4.21).



#### Graph 4.21 Australian Business Lending

Equity raisings by non-financial corporations (including real estate companies) increased in the June quarter to \$9 billion, with initial public offerings (IPOs) picking up to \$4½ billion (Graph 4.22). Equity raisings by corporations that are already listed increased to \$6 billion, driven by infrastructure sector rights issues. There were \$1½ billion in share buybacks during the quarter.



M&A activity has slowed since the previous *Statement*, with around \$8½ billion in deals announced by listed companies. Around \$3 billion in deals were announced in each of the materials and consumer discretionary sectors.

#### **Equity Markets**

Australian equity prices have increased slightly since the previous *Statement*, reaching a post-crisis high, amid continuing low volatility (Graph 4.23). Resource and financial sector share prices increased since the



previous Statement, with financial sector share prices supported by positive trading updates by the banks and diversified financials. Equity prices in other sectors have increased a little (Graph 4.24).



Valuations of Australian equities, as measured by forward price-earning (PE) ratios, have increased since the previous Statement, and are above their decade averages for all broad sectors (Graph 4.25). The PE ratio of the resources sector increased as equity prices rose and analysts' consensus earnings estimates declined. 🛪

Graph 4.25



# 5. Price and Wage Developments

#### **Recent Developments in Inflation**

Consumer price inflation was 3.0 per cent over the year to the June quarter, with seasonally adjusted inflation in the quarter at 0.6 per cent, the same rate as in the March quarter (Graph 5.1; Table 5.1). Some temporary factors have added to inflation over the year, so this rate slightly overstates the underlying inflationary pressures in the economy. Nevertheless, measures of underlying inflation have increased over the past year, with higher tradables inflation offset in part by lower domestic inflation pressures.

Declines in the prices of volatile items subtracted from headline inflation in the June quarter, mostly owing to a 2<sup>1</sup>/<sub>2</sub> per cent fall in automotive fuel



r ei cent						
	Qua	rterly <sup>(a)</sup>	Year-ended <sup>(b)</sup>			
	June quarter 2014	March quarter 2014	June quarter 2014	March quarter 2014		
Consumer Price Index	0.5	0.6	3.0	2.9		
Seasonally adjusted CPI	0.6	0.6	_	_		
– Tradables	0.4	0.7	2.9	2.6		
<ul> <li>Tradables (excl volatile items and tobacco)<sup>(c)</sup></li> </ul>	0.5	0.0	1.2	0.8		
– Non-tradables	0.7	0.5	3.1	3.1		
Selected underlying measures						
Trimmed mean	0.8	0.6	2.9	2.6		
Weighted median	0.6	0.6	2.7	2.7		
CPI excl volatile items <sup>(c)</sup>	0.7	0.5	2.8	2.7		

### Table 5.1: Measures of Consumer Price Inflation

(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

prices. However, over the past year volatile items and tobacco have added to headline inflation, largely reflecting the effects of the 12.5 per cent increase in the tobacco excise in December last year. The increase in excise contributed a little under ¼ percentage point to headline inflation over the year; most of this occurred in the December and March quarters.

The pace of underlying inflation increased in the June quarter, with the published measures around <sup>3</sup>/<sub>4</sub> per cent compared with around <sup>1</sup>/<sub>2</sub> per cent in the previous quarter (Graph 5.2). More generally, the pace of year-ended underlying inflation has increased, to around 2<sup>3</sup>/<sub>4</sub> per cent over the year to the June quarter, around <sup>1</sup>/<sub>2</sub> percentage point higher than over the previous year.



The increase in underlying inflation over the past year has reflected a pick-up in tradables inflation. Prices of tradable items (excluding volatile items and tobacco) increased by 0.5 per cent in the June quarter, to be around 1.2 per cent higher over the year (Graph 5.3). This is the highest rate of yearended tradables inflation in around four years, and contrasts with the declines in tradables prices seen over most of that period.

Tradable items are either imported or relatively exposed to international competition and, as a result, their prices tend to be heavily influenced by



movements in the exchange rate. The current level of tradables inflation appears to be broadly in line with what historical relationships would suggest following the depreciation of the exchange rate since early 2013. On average, a depreciation of the exchange rate affects tradables prices for a period of 2–3 years. However, the speed and size of passthrough varies between episodes, and quarterto-quarter volatility in tradables inflation can be expected because pass-through typically does not occur in a smooth fashion. In addition, it is difficult to gauge the extent of pass-through precisely, as other factors – such as labour costs, productivity and demand – also affect tradables prices and these effects may vary across items.

Indeed, recent movements in tradables prices have varied across different expenditure groups. In the June quarter, traded food and international travel & accommodation prices increased noticeably. In contrast, consumer durables prices declined modestly, although the rate of decline recently has been substantially less than it was a year or so ago. Typically, the prices of consumer durable items tend to move more closely with the exchange rate than do those of most other tradable items. This reflects a relatively high share of imported inputs, and the fact that durable goods are more readily transportable and are less subject to supply shocks than, say, food items, which are regularly affected by weather conditions (Graph 5.4). However, liaison suggests that retailers have been reluctant to pass on price increases due to weak consumer sentiment and the continued competitive environment. At the same time, firms in the domestic distribution and manufacturing sectors have been engaged in cost reduction efforts for some time, possibly tempering the pass-through of input cost increases to output prices. These factors may have moderated inflationary pressure on consumer durable items stemming from the depreciation of the exchange rate.



Sources: ABS; RBA

Inflation in the prices of non-tradables items has slowed over the past year, in contrast to tradables inflation. Non-tradables inflation was 0.7 per cent in the June quarter, although this was above the particularly low outcome seen in the March quarter. Over the past year, non-tradables inflation was 3.1 per cent, its lowest rate in over a decade. In part, the slowing in non-tradables inflation is likely to reflect the subdued conditions in the labour market. This is perhaps most evident in market services, which tend to have a larger labour cost component than many other non-tradable items (Graph 5.5).



\*\* Includes rents, dwelling maintenance and new dwelling purchases; excludes administered items

\*\*\* Includes utilities, education, child care, health services, property rates, urban transport fares, postal services and some motor vehicle services Sources: ABS: RBA

Housing cost inflation appears to be only weakly related to broad measures of labour costs, with changes in the demand and supply of new housing and rental properties more important determinants. Housing cost inflation rose in the June quarter, driven by a pick-up in inflation in the cost of new dwellings, consistent with the high level of building approvals for detached houses (Graph 5.6). Over the year, new dwelling cost inflation has been strongest in Sydney and Perth, in line with the larger pick-up in construction apparent in those states. Meanwhile, quarterly rent inflation declined to its slowest pace





since 2003, despite vacancy rates remaining fairly steady at a below-average level in recent quarters. Inflation in the prices of 'administered' items – those with regulated prices or for which the public sector is a significant provider – increased in the quarter, driven by changes to private health insurance premiums and rebates in April.

The divergent trends in tradables and non-tradables inflation have seen an adjustment in relative prices, which is expected to continue for some time. This is an important aspect of the rebalancing of demand and prices given the decline in the terms of trade and the ongoing transition from the investment to the production phase of the mining boom. Nontradables prices typically grow at a faster rate than tradables prices and so the ratio of non-tradables to tradables prices rises over time (Graph 5.7). Over the past decade, the difference between the average inflation rates of non-tradables and tradables prices was larger than in the past. In large part, this change in the trend of relative prices was in response to the substantial rise in the terms of trade over that period. The higher terms of trade acted to bolster demand for labour while the addition to incomes increased demand for non-tradable goods and services. In addition, the associated appreciation of the nominal exchange rate reduced demand for some domestically produced tradable items and also



lowered import prices and tradables inflation. Over the past year, however, these forces have partially reversed, as the terms of trade declined and the exchange rate depreciated somewhat. In response, tradables prices have increased, while weak growth in unit labour costs has contributed to a decline in nontradables inflation. As a result, the ratio of tradables to non-tradables prices has increased at a rate more in line with the trend prior to the resources boom.

#### Costs

Wage growth has remained low, with the wage price index increasing by 2.6 per cent over the year to March, which was around 1 percentage point below its decade average growth rate. In the quarter, private sector wage growth remained subdued, with reports from liaison continuing to suggest that labour is readily available and the rate of employee resignations is low (Graph 5.8). Although public sector wages grew at a slightly faster pace than expected in the December and March quarters, growth over the past year has been around the lowest in over a decade.



The increase in spare capacity in the labour market over the past two years or so, as indicated by the increase in the unemployment rate and various measures of underemployment, has contributed to the significant reduction in wage growth over this period (Graph 5.9). Concurrently, there has been



a decrease in workers' sense of job security, which may be contributing to lower wage demands, while employers have faced increased pressure to contain labour costs. In particular, in a number of private sector industries, subdued trading conditions and pressures to improve competitiveness may have limited firms' capacity to increase wages. In the public sector, the decline in wage growth over recent years is consistent with an environment of fiscal restraint. Business surveys indicate that wage growth remained subdued in the June guarter, while expectations for the September quarter suggest that wages will continue to grow at a relatively slow pace.

The pace of wage growth remains subdued across the economy, although it appears to be stabilising in many industries. Wage growth in the mining and business services industries slowed particularly sharply over the past two years (Graph 5.10). This was consistent with a larger increase in estimated unemployment for workers from these industries. However, more recently, wage growth appears to be stabilising in the business services sector, consistent with signs of an increase in employment in the industry this year.

Over the past year, wages grew at a similar pace in New South Wales, Victoria, Queensland and Western Australia (Graph 5.11). While wage growth in some







of these states looks to have stabilised in recent quarters, it has continued to slow in Western Australia, largely reflecting the downturn in mining investment and the spillovers to other parts of the state's economy. Year-ended wage growth remained weakest in Tasmania, consistent with its high unemployment rate, while wage growth in South Australia has been relatively strong and has not slowed in recent years, somewhat at odds with the continuing weak labour market conditions in the state

Low wage growth has contributed to an extended period of low growth of unit labour costs. The national accounts measure of unit labour costs has been little changed over the past two years, with average earnings and labour productivity having grown at around the same pace (Graph 5.12). Domestic labour costs have declined slightly relative to labour costs in many of Australia's major trading partners, suggesting some modest improvement in international competitiveness of late over and above the impact of the earlier depreciation of the nominal exchange rate.



Recent growth in labour productivity has actually been above its average of the past decade. In part, this has reflected the large contribution of resource exports to recent economic growth and the low labour intensity of resource production. However, measured labour productivity growth has improved over the past few years across a broad range of industries, following a period of quite weak growth in the latter half of the 2000s (Graph 5.13). Outside of the mining sector, the general improvement in productivity growth may have been in response to heightened competitive pressures, including from the high level of the exchange rate.



Producer price data suggest that over the past year, domestic inflation pressures have remained relatively moderate across all stages of production, while import price inflation has picked up. In broad terms, this is consistent with the increase in tradables inflation relative to non-tradables inflation in the CPI, though there are a number of differences between producer and consumer prices that complicate such a comparison.

ABS data indicate that the number of working days lost per employee as a result of industrial disputes fell in the March quarter to remain well below its decade average. This fall was driven by declines in the number of disputes and the average number of employees involved per dispute, which were partly offset by a rise in the average duration of each dispute.

#### Inflation Expectations

Indicators of inflation expectations remain consistent with the inflation target, and are generally around or a little below their long-term averages (Graph 5.14; Table 5.2). Since the May *Statement*, market economists lowered their forecasts for inflation over



\*\* Break-even 10-year inflation rate on indexed bonds; interpolation used to match exact maturity

\*\*\* Expectations of average annual inflation over the next 10 years Sources: Bloomberg; Melbourne Institute of Applied Economic and Social Research; RBA

2014, which is likely to reflect the effect of the repeal of the carbon price. Expectations for inflation over 2015 are little changed. Union officials' forecasts for inflation have risen slightly over the past two guarters, to be 3 per cent over both 2014 and 2015. Financial market measures of inflation expectations were little changed in the quarter and continue to be around their long-run averages. The Melbourne Institute has revised the history of the trimmed mean series of consumer inflation expectations. This revision has increased the mean of the series by 1.3 percentage points, although the profile of the series remains similar to the pre-revision data. The consumer measure of inflation expectations for the year ahead decreased modestly in the June quarter and remains low relative to its long-run average.

#### Table 5.2: Median Inflation Expectations

Per cent

	Year t	Year to December 2014			nber 2015
	February 2014	May 2014	August 2014	May 2014	August 2014
Market economists	2.5	2.4	2.2	2.7	2.6
Union officials	2.8	3.0	3.0	2.9	3.0

Sources: RBA; Workplace Research Centre

# 6. Economic Outlook

#### The International Economy

Overall, growth of Australia's major trading partners (MTPs) is expected to be a bit above its long-run average in 2014 and 2015 (Graph 6.1). Forecasts for most individual trading partners are not above their historical averages; rather, the forecast of aboveaverage MTP growth reflects the changing pattern in the destinations of Australian exports. In particular, an increased share of Australia's exports is going to China, which is growing much faster than elsewhere.

Chinese GDP growth in 2014 is expected to be close to the authorities' target of 7.5 per cent. Recent data suggest that growth has picked up following weakerthan-expected growth in the March quarter. This is consistent with relatively accommodative fiscal and monetary conditions, which have seen debt continue to grow as a share of GDP and which should continue to support activity in the second half of the year.

In Japan, for 2014 as a whole, growth is expected to be stronger than the average of the past decade, although the increase in the consumption tax in April resulted in very strong growth at the start of the year and a contraction in activity in the June quarter. Growth is expected to slow just a bit in 2015 to be close to its average pace. Aggregate growth in the rest of east Asia in 2014 is expected to be below its decade average, in large part reflecting very weak growth in Thailand, before picking up in 2015 to around average, aided by recovery in the advanced economies.



The forecast for US growth in 2014 has been revised down, as economic conditions in the first half of 2014 were weaker than anticipated. However, growth is expected to pick up in 2015, supported by stimulatory monetary policy and further improvements in the labour market. In the euro area, the gradual recovery in economic activity is projected to continue.

The outlook for the terms of trade over the rest of 2014 is a little lower than at the time of the May *Statement* (Graph 6.2). This predominantly reflects weaker-than-expected spot prices of bulk commodities in recent months, which is likely also to flow through to lower contract prices. Iron ore and coal prices are forecast to remain close to their current levels, as the growth of global steel demand is expected to be close to that of global supply.



Additions to supply from new and existing mines are expected to be partially offset by the further closures of higher-cost iron ore and coal mines.

#### **Domestic Activity**

In preparing the domestic forecasts, as usual a number of technical assumptions have been employed. The exchange rate is assumed to remain at its current level over the forecast period (TWI at 72 and A\$ at US\$0.93), which is a touch higher than the assumption in the May Statement. The forecasts are based on the price of Brent oil remaining at US\$106 per barrel, a little higher than the assumption in May. The cash rate is assumed to be unchanged over the forecast period at 2.5 per cent, which implies that borrowing rates remain at very low levels. The working-age population is assumed to grow by 1.8 per cent over 2014 and 1.7 per cent over 2015 and 2016 (drawing on forecasts by the Department of Immigration and Border Protection), a little below the previous Statement.

The starting point for the forecasts of the Australian economy is above-trend growth of GDP over the year to the March quarter, driven by very rapid growth of resource exports. GDP growth excluding resource exports also increased a little over the year to the March quarter, but remained below its longerterm average. This reflected the combination of stronger growth in dwelling investment, a pick-up in consumption growth over the year as a whole, subdued growth in public demand and non-mining business investment, and a substantial decline in mining investment.

The available indicators suggest that GDP growth slowed to a more moderate pace in the June quarter. Exports appear to have declined, partly reflecting some payback from weather-related strength in the March quarter, while indicators of consumption, including retail sales growth and consumer confidence, were weak. Nonetheless, indicators of business conditions remained at around average levels, a timely measure of consumer sentiment has rebounded more recently and conditions in the housing market are consistent with further strong growth of dwelling investment.

GDP growth is expected to be a little below trend over 2014/15, before picking up to around a trend pace over 2015/16 (Table 6.1). While the central forecast is slightly lower than at the time of the May *Statement*, the differences are well within the usual ranges of uncertainty for the forecasts.

The key forces that have been expected to influence GDP growth over the next few years remain largely as they were. Mining investment is expected to decline much further as large mining projects are completed. Consolidation of state and federal government budgets, if it proceeds as envisaged in the budgets, could weigh on growth in domestic demand. Notwithstanding the depreciation since the peak seen last year, the exchange rate remains elevated, particularly given the recent declines in commodity prices. These factors will be partly offset by the stimulus from low interest rates, which is supporting activity and prices in the housing market and also bolstering household consumption. In time, the growth of dwelling investment and consumption, combined with the direct effect of the low interest rates on borrowing costs and the generally good health of business balance sheets, is expected to spur a recovery in non-mining business investment.

Year-ended					
June 2014	Dec 2014	June 2015	Dec 2015	June 2016	Dec 2016
3	21/2	2–3	21/2-31/2	2¾-3¾	2¾-4¼
31⁄4	2¾	2–3	21/2-31/2	2¾-3¾	2¾-4¼
3	2	1¾-2¾	21/2-31/2	21/2-31/2	21⁄4-31⁄4
2¾	21⁄4	1¾-2¾	21⁄4-31⁄4	2-3	2-3
Year-average					
2013/14	2014	2014/15	2015	2015/16	2016
3	3	2–3	2-3	21/2-31/2	2¾-3¾
	2014 3 3¼ 3 2¾ 2013/14	2014         2014           3         2½           3¼         2¾           3         2           2¾         2¼           2¾         2¼           2¾         2¼           2¾         2¼           2¾         2¼           2013/14         2014	June 2014         Dec 2014         June 2015           3         2½         2–3           3¼         2¾         2–3           3¼         2¾         2–3           3¾         2¾         1¾–2¾           2¾         2¼         1¾–2¾           2¾         2¼         1¾–2¾           2¾         2¼         1¾–2¾           2¾         2¼         1¾–2¾           2¾         2¼         1¾–13¾           2¾         2014         1¾–14	June 2014         Dec 2014         June 2015         Dec 2015           3         2½         2-3         2½-3½           3¼         2¾         2-3         2½-3½           3¼         2¾         2-3         2½-3½           3         2         1¾-2¾         2½-3½           3         2         1¾-2¾         2¼-3¼           2¾         1¾-2¾         2¼-3¼           2¾         2¼         1¾-2¾         2¼-3¼           2¾         2¼         2¼-3¼         2¼-3¼           2¾         2¼         2¼         2¼-3¼           2¾         2¼         2¼         2¼-3¼           2¾         2¼         2¼         2¼-3¼           2¾         2↓         2¼         2¼           2¾         2↓         2¼         2¼           2¾         2↓         2↓         2↓	June 2014Dec 2015June 2015Dec 2015June 201632½2-32½-3½2¾-3¾3¼2¾2-32½-3½2¾-3¾3¼2¾2-32½-3½2¾-3¾321¾-2¾2½-3½2½-3½2¾1¾-2¾2¼-3¼2-32¾2¼1¾-2¾2¼-3½2¾2¼1¾-2¾2¼-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2¼-3½2¾2¼1¾-2¾2¼-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2½-3½2¾2¼1¾-2¾2½-3½2¾2222¾2222¾2222¾2222¾2222222222222222222222222222222222232223223422242

#### Table 6.1: Output Growth and Inflation Forecasts<sup>(a)</sup>

Per cent

(a) Technical assumptions include A\$ at US\$0.93, TWI at 72 and Brent crude oil price at US\$106 per barrel (b) Based on current legislation for the price of carbon

Sources: ABS; RBA

A significant increase in exports of liquefied natural gas (LNG), as the LNG plants currently under construction commence production, should also help to push GDP growth higher towards the latter part of the forecast period. GDP is expected to grow at a little above its trend pace over 2016.

Growth of household consumption appeared to have been a little lower than expected at the time of the May *Statement*, and this is reflected in the forecast for this year. Despite the modest downward revisions, consumption growth is anticipated to pick up to a slightly above-trend pace by 2016, supported by moderate income growth and increases in household wealth. Fiscal consolidation at all levels of government is expected to continue to restrain public demand growth over the forecast horizon.

Dwelling investment is expected to increase noticeably as a share of GDP. Forward-looking indicators of dwelling investment, such as approvals, commencements and work yet to be done remain at high levels and will support growth of dwelling investment in coming quarters. Dwelling construction is expected to continue to expand later in the forecast period in response to low interest rates, strong population growth and only limited construction over the past decade. The expected level of dwelling investment in 2015 and 2016 is similar to that forecast three months ago. Business investment overall is forecast to continue contracting, owing to sharp falls in mining investment. Surveys of investment intentions and information from the Bank's liaison imply that mining investment will decline more rapidly over the next couple of years than it has to date, as some large mining projects reach completion.

Non-mining business investment is expected to pick up modestly over the coming year or so. This is consistent with the ABS capital expenditure survey of investment intentions for 2014/15. Also, survey measures of business conditions and capacity utilisation are around their long-run average levels, although Bank liaison continues to report that firms are reluctant to invest until they see a sustained period of strong demand. The stock of work yet to be done (including a number of large healthcare and office building projects) will support nonresidential construction over the next few guarters. However, non-residential building approvals have declined in trend terms since the start of the year, suggesting that non-residential construction will not be as strong in the near term as previously assumed. Nevertheless, growth of non-mining business investment is still expected to pick up to around the average pace seen from the early 1990s up to the global financial crisis in response to the very low level of interest rates, strong population growth and

the very subdued growth of the capital stock outside the resources sector over recent years.

Resource exports will continue to provide an aboveaverage contribution to annual GDP growth of around 1 percentage point over 2015 and 2016. Much of this will come from LNG exports as five of the seven LNG projects that are currently under construction are expected to begin production during that time. There has been a small downward revision to the outlook for coal export volumes over the next few years as expansions to capacity from new and existing mines are partially offset by the closure of a number of older and higher-cost mines.

Some labour market indicators have improved a little this year, but overall conditions remain subdued. There remains a degree of spare capacity, as reflected in the elevated level of the unemployment rate and broader measures of underemployment. The unemployment rate is likely to remain elevated for a time and is not expected to decline in a sustained way until 2016.

This period of subdued labour market conditions is expected to restrain wage growth for some time. Over the past two years, the growth of wages, as measured by the wage price index, has declined to its slowest pace in at least 15 years. Wage growth is expected to pick up only slightly from its current pace over the forecast period, remaining significantly below its decade average of 3<sup>3</sup>/<sub>4</sub> per cent. At the same time, productivity growth is expected to remain a bit above its average of the past decade, helping to keep overall labour cost pressures well contained. This sustained period of slow growth in labour costs should assist in an improvement in the international competitiveness of Australian firms, which will lend more support to labour demand than would otherwise be the case.

#### Inflation

Inflation was a little higher in the June quarter than had been expected. Headline inflation was 0.6 per cent in the quarter in seasonally adjusted terms and 3.0 per cent over the year. The year-ended rate of CPI inflation was boosted by a little under ¼ percentage point from the increase in the tobacco excise late last year. The pace of underlying inflation increased to ¾ per cent in the quarter, and was around 2¾ per cent in year-ended terms, which was about ½ percentage point above that of a year earlier.

The rise in underlying inflation over the past year has in part owed to the earlier depreciation of the exchange rate. A rise in import prices is being passed on gradually by domestic wholesalers and retailers, resulting in an increase in the prices of tradable items. Over the past year or so, passthrough appears to have been broadly in line with historical experience. Further pass-through of the exchange rate is expected to contribute around ¼ to ½ percentage point to underlying inflation over each of the next two years. By late 2016, three and a half years on from the initial depreciation, these effects are likely to have largely run their course.

Meanwhile, spare capacity in labour and product markets is expected to see domestic inflationary pressures remain contained. Inflation in non-tradables items, which tends to be affected more by domestic demand and supply, and less by the exchange rate, has declined over the past year to around its slowest pace in 10 years. This slowing has been particularly marked in those components that are generally more sensitive to growth of labour costs.

Inflation is forecast to decline over the coming year to around 2¼ per cent before picking up, to be in the top half of the target range over 2016. This forecast continues to be based on below-trend growth in the economy in the near term and low growth of domestic costs but stronger inflation in tradables prices than in recent years given the assumption of an unchanged exchange rate. The abolition of the carbon price has lowered the forecast for the CPI; the outlook for inflation is lower than earlier expected in 2014/15 but higher in 2015/16 (given that the previous legislation entailed a move to a floating price in mid 2015). The Bank's forecasts use modelling by Treasury, which suggests that the removal of the carbon price would reduce CPI inflation by around <sup>3</sup>/<sub>4</sub> percentage point over 2014/15. This effect is similar in size to the upward influence on inflation that was expected to result from the introduction of the carbon price in 2012/13. A little more than half of the total effect is expected to reflect the direct effect from lower electricity and gas prices and so would not be expected to affect the statistical measures of underlying inflation. The remainder is expected to reflect the indirect effects on the prices of other goods and services in the CPI basket. This is expected to reduce underlying inflation by around <sup>1</sup>/<sub>4</sub> percentage point over 2014/15.

There is uncertainty regarding the timing of both the direct and indirect effects of the repeal of the carbon price. The timing of the direct effects will depend on the extent to which savings on utilities costs are passed on to customers by way of lower prices or subsequent rebates, particularly given the retrospective nature of the repeal. The timing of the indirect effects is even less certain, as the speed with which cost savings to businesses are passed on to final consumer prices is difficult to predict, owing to the inherent lags with which cost changes pass through the supply chain. Because of this, the Bank's forecasts assume that the total effects are realised over a period of two guarters rather than the full effect occurring in the September guarter. As was the case following the introduction of the carbon price, it will not be possible to identify the size and timing of the effects of the repeal of the carbon price amid the usual variation in consumer prices driven by other factors.

Other government policy measures are expected to affect inflation over the next few years. As was the case in May, the forecasts incorporate the staged increase in the tobacco excise over the next few years. This is expected to contribute around ¼ percentage point each year to the rate of headline inflation, but to have little effect on underlying inflation.

#### Uncertainties

Trading partner growth has been around average for a few years, and if the forecasts for the next two years of similar growth are borne out, it will have been quite a period of stability. Much of the uncertainty surrounding the external outlook pertains to country-specific factors, although there are some broader risks to the global economy such as a reversal of the current low pricing of risk.

In China, government policies are providing a measure of support to activity, thereby increasing the likelihood that economic growth will be close to target in 2014. However, if housing market conditions were to weaken more noticeably, this could weigh heavily on the economy overall and have adverse implications for financial stability. Although the direct exposure of the banking sector to housing appears relatively low, banks are involved indirectly in the funding of much property-related lending and could be exposed to financial losses in the event of a sharp correction. Efforts by the authorities to provide a measure of stimulus could boost growth in the near term but make it harder to facilitate the desired deleveraging and, in time, prove destabilising for the financial system.

The ongoing strength of growth in Japan is somewhat uncertain given the volatility in activity caused by the increase in the consumption tax in April. This should become clearer as data for the June quarter and beyond become available in the coming months.

In the United States, much of the unexpectedly weak first half of 2014 appeared to reflect temporary factors. Since then, there have been signs of slightly soft outcomes in the housing market but greater strength in the labour market, and there is some uncertainty about the extent to which inflation might rise over the period ahead. In the euro area, the European Central Bank announced a range of stimulatory policy measures aimed at addressing the risk of a prolonged period of low inflation and supporting small and medium-sized businesses. It is not clear how large an effect they will have. Accommodative financial conditions have contributed to a period of rapid growth in debt and property prices in several east Asian economies. A shift in market sentiment, triggered perhaps by a stronger-than-expected recovery in the United States and faster normalisation of US monetary policy, could lead to an outflow of capital and a disproportionate tightening of financial conditions in a number of emerging market economies, with adverse effects on economic activity.

The key uncertainties for the domestic economy continue to be centred on the timing and extent of the expected decline in mining investment, the associated rise in resource exports and the further strengthening in non-mining activity. While this 'transition' has been unfolding for some time, helped in part by the very low level of interest rates, there is no guarantee that the rebalancing of spending will be a smooth process. Even if it proceeds as expected, the significant change in the composition of economic activity could result in either excess demand for, or supply of, particular labour skills or types of capital, and could also have implications for the exchange rate. There is little doubt that mining investment has a lot further to fall, but it is unclear by just how much, and how guickly this will occur. In part, it depends on whether the remaining large mining projects stay on budget and on schedule.

Relative to three months ago, when near-term prospects for non-mining activity appeared to be improving, the recent softness in some indicators has increased the uncertainty around the strength and timing of the pick-up in consumption and non-mining investment. For some time now, nonmining investment has been forecast to pick up strongly beyond the next year or so, consistent with past behaviour following troughs in non-mining investment. With only tentative signs of improvement in near-term indicators, the timing of the pick-up has been pushed out a bit further. However, with generally favourable conditions for investment, such as healthy business balance sheets and low interest rates, non-mining business investment could pick up sooner and by more than is forecast.

There is some evidence that momentum in consumption growth has waned somewhat. although at this stage it is unclear whether this reflects temporary sentiment effects or a more lasting reassessment of economic conditions by households. In the latter case, the saving ratio could remain at its higher level for longer. The increase in dwelling investment is in part expected to result from house prices continuing to rise at a faster pace than household incomes because of low interest rates. Indeed, while house price growth slowed in the early part of 2014 from the rapid pace in the second half of last year, it has not slowed further and there are some tentative signs of a pick-up in conditions in the established housing market. If house price growth and turnover were to pick up strongly, this could boost dwelling investment and consumption more than currently expected. If accompanied by an increase in leverage, it could also increase future risks for the economy. However, it is possible that longerrun affordability considerations may restrain housing demand and so growth of dwelling investment.

The release of state and federal budgets has provided further information on the size and nature of planned fiscal consolidation. Nevertheless, there continues to be some uncertainty surrounding the extent and timing of fiscal consolidation. Different outcomes from those that have been assumed could result in consumption and public demand growth being either stronger or weaker than forecast.

The outlook for iron ore and coal prices is a source of uncertainty for the domestic economy. As is typical, there is a wide range of forecasts by market analysts for these commodity prices, with Bank estimates towards the lower end of the range. Iron ore and coal prices will depend on both China's steel demand as well as the response of higher-cost producers to the recent decline in prices. At current prices, there is a sizeable amount of coal and iron ore production that is unprofitable, and the outlook for prices will depend on what proportion of these mines is shut down. Given Australia's position on global iron ore and coal cost curves, it is more likely that there will be some impact on Australian coal production than on Australian iron ore production. An important source of uncertainty with respect to the lower commodity prices is the response of the exchange rate. Historically, a fall in commodity prices has, in time, led to a depreciation of the exchange rate. In the absence of such a response, a fall in commodity prices would lead to weaker GDP growth since softer incomes and government revenue would weigh on domestic demand. However, if the exchange rate were to move lower, this would provide some offset to the fall in commodity prices by helping to stimulate demand in trade-exposed sectors of the economy. A decline in the exchange rate would also add to prices over a period of time.

A further delay in the transition to non-mining generated economic growth would lead to greater slack in the labour market and weigh more heavily on wage and price inflation. Working in the other direction, an improvement in labour market conditions could lead to a period of strengthening demand and an earlier-than-expected decline in the unemployment rate. Such an outcome would be more likely if the changes that firms have made in recent years have left less slack within firms given existing staffing levels.

There are a number of countervailing factors affecting inflation, the net effect of which is difficult to predict. The recovery in the housing market has already seen an acceleration in new housing cost inflation, which may have further to run. While approvals for new dwellings have eased a little, there is still a risk that capacity constraints resulting from an extended period of rapid growth in activity may emerge, with implications for activity and wage and price pressures. Inflation in prices that are strongly influenced by state and federal governments' policies is also high relative to the case over much of the inflation-targeting period. While the removal of the carbon price will work to lower some of these prices, there may be a more persistent positive effect on inflation from other administered prices. With a number of these factors placing upward pressure on inflation, the forecasts for inflation are predicated on the subdued outlook for labour cost growth.

These identified, and other unknown, risks mean that there is significant uncertainty about the path for GDP and inflation. One way of demonstrating the uncertainty surrounding the GDP and inflation forecasts is to present confidence intervals based on historical forecast errors (Graph 6.3 and Graph 6.4).<sup>1</sup>







<sup>1</sup> This is based on Tulip P and S Wallace (2012), 'Estimates of Uncertainty around the RBA's Forecasts', RBA Research Discussion Paper No 2012-07 and RBA (2013), 'Box E: Forecast Confidence Intervals', Statement on Monetary Policy, February, p 68.