

# Statement on Monetary Policy

AUGUST 2013

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*Reserve Bank*

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# Overview

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Overall, global economic growth appears to have been close to average in recent months, having been a bit below average earlier in the year. The Chinese economy has been growing at around the same pace as seen earlier in the year, which on an annualised basis is a bit below the authorities' stated target of 7.5 per cent. Growth of total financing in China, which was very strong earlier in the year, looks to have slowed amid authorities' concerns about the strength of non-bank financing. In Japan, the adoption of more expansionary monetary and fiscal policies has seen the exchange rate depreciate significantly since the end of last year and has supported strong growth of the economy this year. In the rest of east Asia, weaker external demand is weighing on growth but domestic demand has remained relatively resilient. The US economic recovery is proceeding at a moderate pace, notwithstanding the effects of fiscal consolidation. In contrast, economic activity remains weak in the euro area. Globally, inflation pressures have eased over the past year and monetary policy has remained highly accommodative in most economies.

The outlook for the global economy is a little softer than at the time of the *May Statement*. World GDP growth is expected to remain close to average over the rest of this year, but with annual average growth around 3 per cent for 2013 reflecting weaker growth around the turn of the year. Growth is then expected to pick up, to be slightly above average in 2014. Economic growth is expected to be stronger for Australia's major trading partners than for the world as a whole. The slightly weaker outlook than

a few months ago reflects, among other things, the assessment that growth in China is now unlikely to pick up much, if at all, in coming quarters. Rather, it is expected to remain at a pace that is close to the official target.

Prices of most commodities have declined over the past few months, although spot prices for iron ore remain little changed. While commodity prices overall remain at historically high levels, the prices of those commodities for which there has been significant investment in capacity in Australia and globally are projected to decline gradually over the coming years. Accordingly, the terms of trade are expected to decline over the medium term.

Movements in financial markets have been driven by a reassessment of the future path of US monetary policy. In late May, the Federal Reserve communicated that it may begin to wind down its asset purchase program later this year, leading to expectations being brought forward for when the central bank would begin to tighten monetary policy. As a result, yields for sovereigns and corporations moved markedly higher, although they still remain very low relative to historical norms. Yields on emerging market government bonds have also moved higher. A number of emerging market central banks have tightened policy and/or intervened in currency markets, owing to concerns about sharp reversals of capital inflows received over the past few years. Changes in expectations about US monetary policy have also led to a broad-based appreciation of the US dollar over recent months.

These changes have contributed to a significant depreciation of the Australian dollar. In trade-weighted terms it is around 15 per cent lower than the high reached in April. This follows a period when the currency had been relatively stable despite the decline in the terms of trade and a narrowing of interest differentials.

This depreciation of the exchange rate will be helpful in rebalancing growth given the transition that the Australian economy is facing. Business investment as a share of GDP has risen to record high levels, with mining investment rising substantially on the back of very high levels of the terms of trade. Though they remain high, the terms of trade have declined over the past two years and mining investment is expected to decline over the course of the next few years. Other sources of demand, which have been relatively subdued, including because of the high level of the exchange rate, are expected to contribute more to growth in time.

As the economy enters this period of transition, growth has been below trend over the first half of this year. Indicators of business conditions have remained below average levels and business investment, though still high as a share of economic activity, declined in the March quarter, with estimates of mining and non-mining investment lower. Capital imports have declined over the year to date and the Bank's liaison and business surveys indicate that firms are reluctant to take on new risks. Even so, the latest ABS capital expenditure survey implies a small increase in non-mining investment in 2013/14. These data also suggest that mining investment could increase over the same period, although this survey tends to be a less reliable guide for the mining sector. The Bank's liaison and public statements by mining companies suggest that mining investment is likely to decline noticeably over the next few years from its current very high level, although the exact profile of the decline remains difficult to predict.

Over the past year, household consumption growth has slowed, in line with softer growth of incomes. Retail sales data and the Bank's liaison point to

weak growth of consumption over recent months. Measures of consumer sentiment are around average levels after being above average earlier in the year.

In contrast, conditions in the housing market continue to improve. Dwelling prices increased further in recent months and auction clearance rates remain high. This has been accompanied by an increase in housing loan approvals in response to low interest rates. These factors, along with strong population growth and the relatively low level of dwelling investment for some years now, point to a continued rise in dwelling investment in the period ahead. Indeed, residential building approvals, especially for detached housing, increased in the June quarter and it seems likely that this will continue.

Exports also grew in the June quarter. Strong growth in resources exports is expected in coming quarters as more productive capacity comes on line on the back of the high level of investment in the mining sector. The depreciation of the Australian dollar is also expected, over time, to help export volumes more broadly.

Consistent with the below-trend growth in economic output over recent quarters, conditions in the labour market remain somewhat subdued. The unemployment rate has continued to drift higher this year as employment growth has been slower than the above-average growth in the population. Employment growth has eased in mining areas, but growth in employment has remained stronger in some service sectors and in the larger south-eastern states. Job vacancies and advertisements have declined of late and are consistent with modest growth of employment in the near term. The Bank's liaison also suggests that firms remain cautious about hiring staff.

Softer conditions in the labour market have seen the pace of growth in wages decline to around its lowest rate in a decade. Combined with relatively strong growth of productivity, this has contributed to low growth of unit labour costs.

Consumer price inflation has been moderate this year, with tradables prices lower and some easing in the inflation rate for non-tradable goods and services in line with the slower growth of wages over recent quarters. In the June quarter, the rate of inflation picked up slightly from the low rate in March. There was a small pick-up in the prices of tradable items following significant declines over previous quarters. While the exchange rate has depreciated in recent months, for most tradable items historically it takes some time for this to be reflected in the prices facing consumers; a notable exception is the price of petrol, which has increased over the past few months and is likely to make a noticeable contribution to inflation in the September quarter.

The various measures suggest that underlying inflation was a touch above ½ per cent in the June quarter. In year-ended terms, underlying inflation was a little under 2½ per cent. Year-ended rates of inflation continue to be affected by the introduction of the carbon price in July 2012. Abstracting from this effect, underlying inflation appears to be close to the lower end of the inflation target range.

The outlook for the domestic economy is a little weaker in the near term than it was in the *May Statement*. This reflects the recent run of data on domestic demand and a lowering of the forecast profile for mining investment over the next few years. At the same time, however, the recent exchange rate depreciation is expected to add to activity in trade-exposed sectors over the next two years or so. The combination of these different influences means that GDP growth is now expected to remain below trend through to around the middle of next year, before picking up to be above trend in 2015. Mining investment is expected to decline more noticeably towards the end of the forecast period as the large projects in liquefied natural gas reach completion. However, in time other sources of demand are likely to contribute more to growth. That expectation is based on the forecast pick-up of global growth, stimulatory effects of low interest rates, strong population growth and the need to

add to the capital stock after a long period of below-average investment outside the mining sector. These conditions are expected to lead businesses to become increasingly willing to pursue new investment opportunities in the latter part of the forecast period.

Employment growth is expected to be only modest over the next few quarters, consistent with the below-trend growth of the economy. This will see the unemployment rate increase gradually for a year or so. Subsequently, as growth moves closer to trend and eventually above trend, employment growth should pick up, and the unemployment rate should level out and then start to decline.

The forecast for inflation incorporates some opposing influences. A slightly weaker outlook for the labour market and the economy more generally is expected to put mild downward pressure on inflation. In contrast, the significant depreciation of the exchange rate is likely to boost the prices of tradable items over the next few years. In the near term, these effects are largely expected to balance one another. In year-ended terms, underlying inflation is expected to remain close to the lower end of the inflation target this year, before picking up to around the middle of the target range in the first half of 2014 and staying close to that level thereafter. Overall, the forecast for inflation is broadly unchanged from that in the *May Statement*.

With the global growth forecasts a little lower than those in the *May Statement*, the risks around the forecasts appear to be balanced for most economies. The notable exception is Europe, where the risks continue to be tilted somewhat to the downside. In the United States, growth could be stronger than forecast given the ongoing recovery in the housing market and very stimulatory monetary policy setting, although the scaling back of highly stimulatory monetary policy could lead to unsettled financial markets globally. In China, the authorities face challenges associated with the process of reform, which could well slow growth in the near term but also contribute to more sustainable growth

further out. In Japan, a credible package of structural reforms could see stronger growth than is currently forecast, but failure to implement such reforms could see growth disappoint.

On the domestic front, there are risks to both the downside and upside for economic activity and inflation. In particular, there remains considerable uncertainty about the process of economic growth rebalancing away from mining investment towards other sources of domestic demand and to exports. It is possible that mining investment could decline more rapidly than expected or that confidence will remain subdued and other domestic sources of demand pick up by less than expected. However, it may also be that the current aversion of both mining and non-mining businesses to take on new risks could dissipate, particularly if growth in the advanced economies picks up sooner or by more than expected. While an ongoing recovery in dwelling investment remains in prospect, the strength of that recovery remains uncertain.

Another factor that has an important bearing on the economy is the exchange rate. It has depreciated noticeably over recent months, although it remains at a high level. The depreciation seen to date is expected to add to economic activity and to prices of tradable items, although by how much and over what period cannot be precisely estimated. It may be that the effect could be slower than in the past if businesses wait to see if the exchange rate is sustained at a lower level for some time before responding. It is also possible that just as the high terms of trade and high level of investment led to a higher exchange rate over recent years, a lower terms of trade and lower investment could lead to a further depreciation of the exchange rate. If this were to occur, it could help with the rebalancing of the economy by bolstering activity in the trade-exposed sector and raising the profile for overall economic activity. It would also push up tradable prices further, temporarily adding to inflation.

In May, the Board reduced the cash rate by 25 basis points, taking the cumulative reduction since late 2011 to 200 basis points and bringing borrowing rates to around their previous lows. There are signs that the low level of interest rates is supporting interest-sensitive spending and asset values – particularly in the housing market – and further effects are expected over time. While the pace of borrowing overall has remained fairly subdued, there are recent indications of an increase in the demand for new loans by households.

Since the May decision, the Australian dollar has depreciated noticeably, though it remains at a high level. The depreciation should assist with the rebalancing of growth in the economy. It will also add a little to tradable prices and so raise inflation for a time. Nevertheless, at its recent meetings the Board had noted that the inflation outlook would afford some scope to ease policy further, if needed to support demand. The recent price and wage data do not suggest any lessening of that scope from an inflation point of view, and the expectation is for inflation to be consistent with the target even with the effect of the depreciation. At the same time, indicators of demand have generally been a little soft of late, and the outlook for activity has been lowered, with growth expected to remain below trend for a time. At its August meeting the Board judged that a further reduction in the cash rate was appropriate to help support growth in the economy, and would be consistent with achieving the inflation target.

The Board will continue to assess the outlook and adjust policy as needed to foster sustainable growth in demand and inflation outcomes consistent with the inflation target over time. ✎

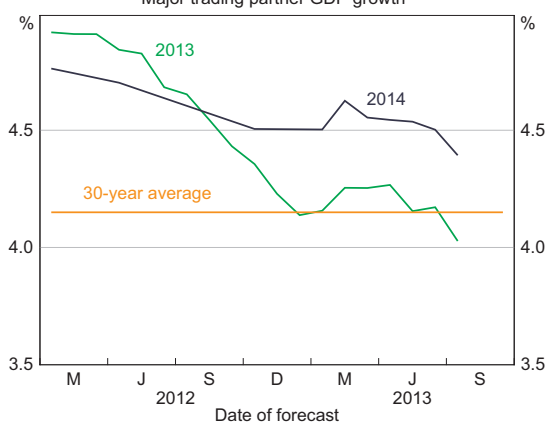
# 1. International Economic Developments

Growth in Australia's major trading partners around the middle of 2013 appears to be close to its average of the past decade. The rate of growth of the Chinese economy has been stable for some months now, at a bit below the authorities' target, and more recent indications are that growth is now likely to remain close to this target over the remainder of this year. The US economy has continued to grow at a moderate pace. Economic conditions in Japan have strengthened in recent months, while output growth in the rest of east Asia has been a little weaker than its recent average. The euro area remains in recession.

Many forecasters have revised down their outlook for global growth and that for Australia's trading partners (Graph 1.1). Previously it seemed likely that the pick-up in growth in the second half of the year would be stronger. Growth in Australia's trading partners is expected to be a little below average in 2013, in part reflecting weaker growth early in the year. Growth is then expected to pick up to a bit above average in 2014. The outlook for global growth is weaker than this, reflecting the greater weight of the slower growing advanced economies in that measure.

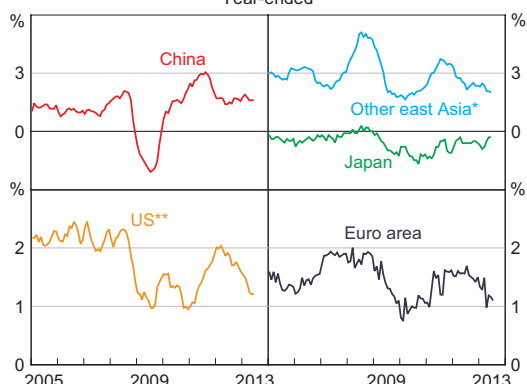
Inflation has eased in most economies over the past year and remains well contained in the advanced economies and east Asia (Graph 1.2). The recent absence of price pressures is consistent with substantial excess capacity, although this has been present for some time, especially in the advanced economies. In response, monetary policy has remained highly accommodative in much of the world.

**Graph 1.1**  
**Consensus Forecasts**  
Major trading partner GDP growth\*



\* Weighted using Australia's export shares  
Sources: ABS; Consensus Economics; RBA

**Graph 1.2**  
**Global Core Inflation**  
Year-ended

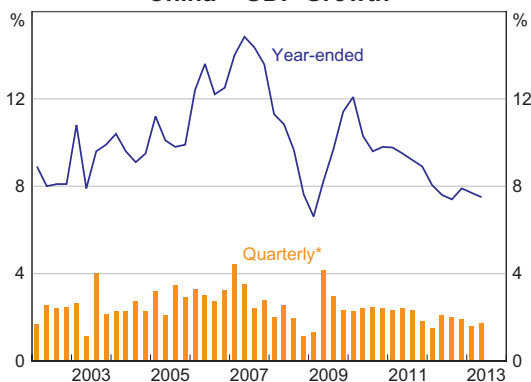


\* Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan and Thailand; weighted by GDP at PPP exchange rates  
\*\* Price index for personal consumption expenditures  
Sources: CEIC; IMF; RBA; Thomson Reuters

## Asia-Pacific

In China, GDP grew at a slower rate over the first half of 2013 than in much of 2012. GDP expanded by 1.7 per cent in the June quarter, to be 7.5 per cent higher over the year (Graph 1.3). A range of other indicators have been consistent with growth in 2013 being relatively stable. Subdued external demand weighed on growth in the quarter, while a number of indicators suggest that domestic demand remains strong, in large part reflecting still high rates of growth in investment, including infrastructure and real estate. There is evidence that consumption growth has recovered somewhat after temporary factors weighed on consumption earlier in the year. In particular, retail sales growth has increased a little in recent months. Meanwhile, industrial production continues to grow at a steady pace, although there has been a slowing in the growth of production in light industry, consistent with weaker external demand for manufactures.

**Graph 1.3**  
China – GDP Growth

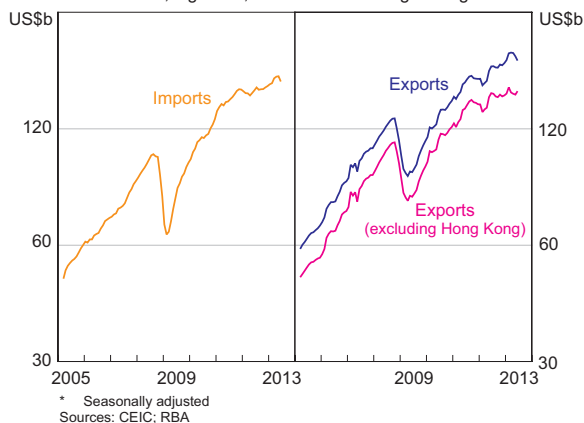


\* RBA estimates prior to December quarter 2010  
Sources: CEIC; RBA

Exports are reported to have contracted in the June quarter, though much of this is owing to a sharp decline in exports to Hong Kong (Graph 1.4). This decline unwound much of the exceptional growth recorded earlier in the year, when exports to Hong Kong grew very rapidly and much faster than implied by Hong Kong imports data. The contraction followed measures taken by Chinese authorities in response to indications that Chinese export

invoices had been inflated, reportedly to circumvent restrictions on capital inflows. Import values, which have also been volatile, are little changed from the start of the year. However, while the volume of coal imports contracted, the volume of imports of iron ore grew at around its average pace for much of the first half of this year.

**Graph 1.4**  
China – Merchandise Trade\*  
Values, log scale, three-month moving average



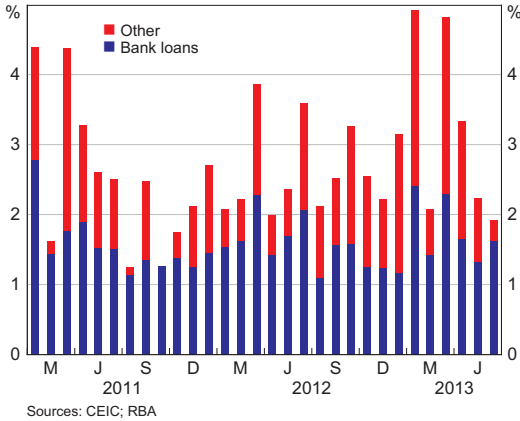
\* Seasonally adjusted  
Sources: CEIC; RBA

Chinese financial markets have been volatile in recent months, with liquidity conditions in Chinese money markets tightening considerably in June (see the 'International and Foreign Exchange Markets' chapter). This tightening appears to have had some effect on financing in June, with financing from sources other than bank loans contributing less to the flow of total social financing, which declined to be a little below 2 per cent as a share of annual GDP (Graph 1.5). This slowdown in financing activity is consistent with the authorities' aim of placing Chinese financing activity on a more sustainable footing. This would imply that financing for investment purposes will become harder to obtain, and may weigh somewhat on economic activity for a time.

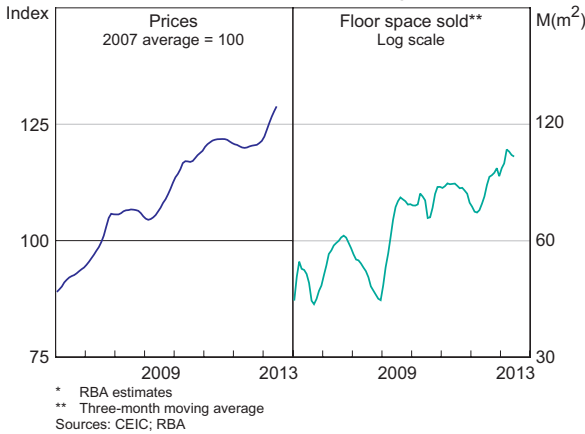
Within bank loans, there has been a substantial pick-up in the growth of loans to households over the past year. This has been in line with strong demand for residential property. Property sales have increased and property prices have risen by 2.9 per cent in the June quarter, to be 7.3 per cent higher over the year (Graph 1.6). While this is the



**Graph 1.5**  
**China – Total Social Financing**  
 Monthly flows, per cent of annual GDP



**Graph 1.6**  
**China – Residential Property Market\***

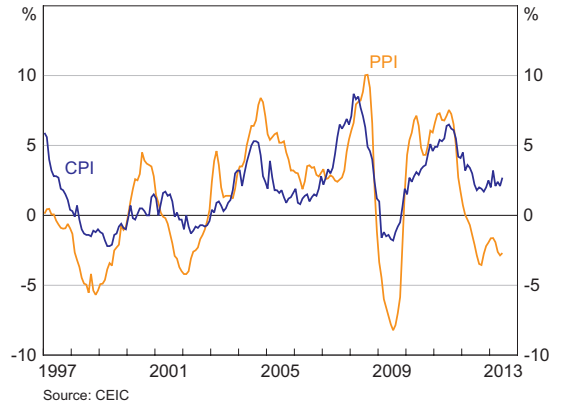


fastest annual growth in property prices for almost three years, property prices have grown more slowly than nominal GDP. Despite a slight moderation in property price growth in some cities of late, the restrictions on the purchase of property and other measures announced earlier in the year have not yet had a noticeable effect; indeed, it is not clear that these measures are being enforced outside of a few of the larger eastern cities.

Inflationary pressures in China remain contained (Graph 1.7). While food prices rose strongly in June, non-food inflation remained stable at a low level. Pork prices have begun to recover following several months of depressed prices owing to consumer

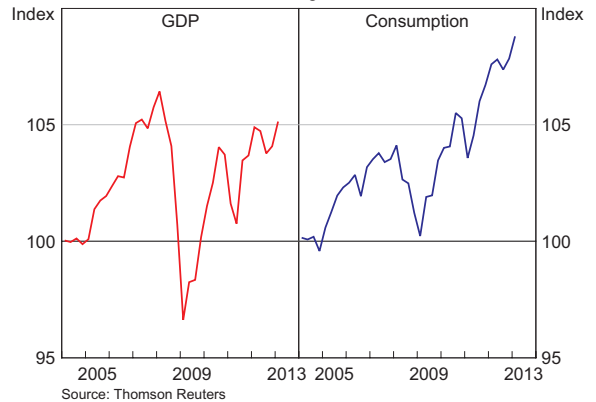
concerns about diseased pigs. Producer prices, which tend to be more cyclical than consumer prices, continued to decline, reflecting ongoing global weakness in commodity prices and pockets of overcapacity in Chinese industries.

**Graph 1.7**  
**China – Inflation**  
 Year-ended



The Japanese economy grew quite rapidly in the March quarter, owing to strong consumption and exports growth (Graph 1.8). This pick-up in growth followed the announcement of expansionary fiscal and monetary policies, and the sustained depreciation of the yen since late last year.

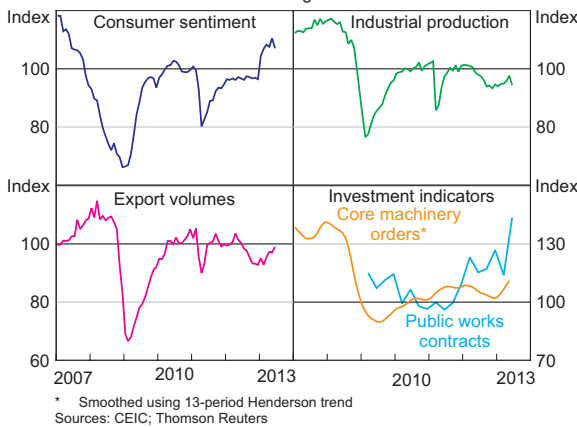
**Graph 1.8**  
**Japan – GDP and Consumption**  
 2004 average = 100



A range of indicators suggest that strong growth continued into the June quarter, notwithstanding a sharp fall in industrial production in the month

of June (Graph 1.9). Indicators of household consumption have generally increased and consumer sentiment remained higher than it has been in the past six years, despite a small decline in June. Export volumes also increased. Industrial production rose in April and May and, while it fell sharply in the month of June, this is widely expected to be only temporary. The fiscal expansion announced in April is also expected to make a substantial contribution to growth in the June quarter, with the value of public construction contracts already rising sharply. Higher core machinery orders suggest that private investment is recovering, albeit from a low level.

**Graph 1.9**  
**Japan – Economic Indicators**  
2010 average = 100



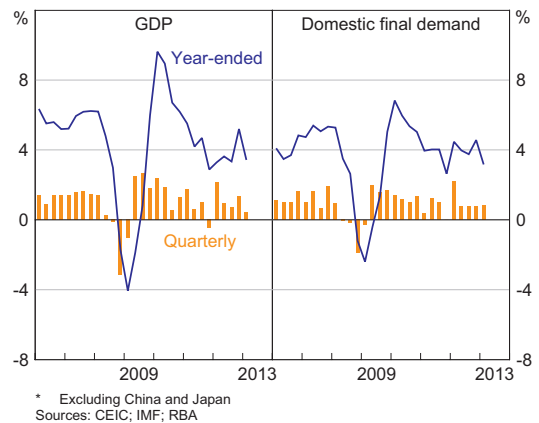
The consumer price index increased slightly over the three months to June. This mainly reflects a rise in import prices following the depreciation of the yen, with domestic prices little changed. Nevertheless, inflation expectations have risen noticeably since the end of 2012, in part owing to the combined effect of the depreciation and scheduled increases in the consumption tax in 2014 and 2015.

The Japanese Government unveiled a package of structural reforms in June, with the aim of lifting nominal annual GDP growth to around 3 per cent over the next decade. Although few specific details are available at this stage, proposed reforms include tax incentives to boost corporate capital expenditure, deregulation of the electricity sector, measures to

increase female participation in the labour market and a commitment to boost trade.

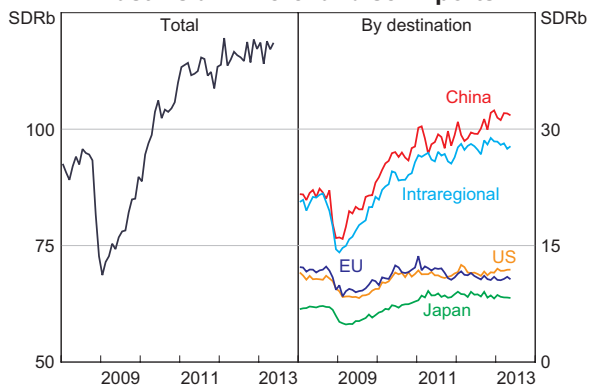
In the rest of east Asia, economic activity in the June quarter appears to have expanded at a pace above that in the March quarter. Private consumption has strengthened somewhat, with consumer confidence rising and retail sales expanding at around the pace of the past year. Indeed, quarterly growth in domestic final demand over the past year has been stable at an annualised rate of around 3 per cent, notwithstanding somewhat subdued investment growth in recent quarters (Graph 1.10). Domestic demand has been supported by accommodative monetary policy and a degree of fiscal stimulus. In Korea, an expansionary supplementary budget is supporting domestic demand this year; in Thailand and Indonesia significant infrastructure spending is planned, although the timing of the various projects is still unclear. In addition, minimum wage rises in a number of economies in the region are expected to support consumption.

**Graph 1.10**  
**East Asia\* – GDP and Demand Growth**



In contrast, the pace of overall export growth has declined over recent quarters (Graph 1.11). The value of intraregional trade has declined a little, largely owing to falling exports from Indonesia to high-income Asian economies. In part, this is likely to reflect lower prices of energy exports from Indonesia, although volumes of these exports have also moderated. Flat external demand has

**Graph 1.11**  
**East Asia\* – Merchandise Exports**

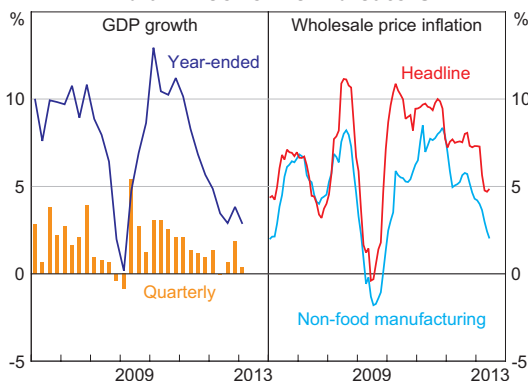


\* Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand; domestic non-oil exports for Singapore  
Sources: CEIC; IMF; RBA

been accompanied by a softening in production indicators; industrial production fell slightly in the June quarter and the manufacturing PMIs declined in recent months. Inflation is well contained in most economies in the region, although Indonesian inflation has been elevated since March this year, in part owing to the recent reduction in government fuel subsidies.

In India, GDP growth slowed markedly in the March quarter, following strong growth in the December quarter (Graph 1.12). Weaker investment growth and moderating household expenditure contributed to the slowing, with some of the weakness in investment due to cutbacks in government expenditure. Industrial production declined over the June quarter,

**Graph 1.12**  
**India – Economic Indicators**



Sources: CEIC; RBA

driven by the manufacturing sector. However, with this year's monsoon rainfall well above last year's poor season, agricultural production is expected to increase in the second half of this year.

Headline wholesale price inflation picked up slightly in June as food prices rose sharply. This followed significant declines in the inflation rate since the start of the year. The Reserve Bank of India (RBI) focuses on non-food manufacturing price inflation as a measure of core inflation, which has continued to moderate. However, the recent depreciation of the Indian rupee is likely to contribute to upward pressure on prices in coming quarters and the RBI has suggested that the volatility of the rupee has reduced the scope for further monetary easing.

In New Zealand, economic activity has increased at an above-average pace, with demand being supported by repairs and rebuilding in Canterbury following the earthquakes of 2010 and 2011. The terms of trade are at historically high levels largely owing to strong demand for commodity exports, with the recent rise primarily driven by increases in dairy export prices. Nevertheless, consumer price inflation has been very low over the past year, reflecting the high New Zealand dollar and strong domestic and international competition. Meanwhile, dwelling prices and housing credit have increased rapidly, in part reflecting stimulatory monetary policy settings (Graph 1.13).

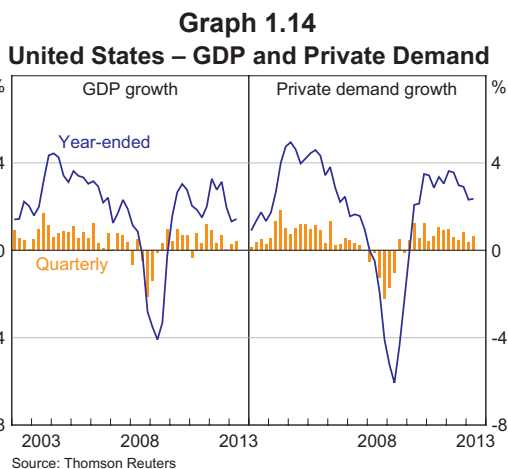
**Graph 1.13**  
**New Zealand – Inflation and Housing Prices**



Sources: REINZ; Thomson Reuters

## United States

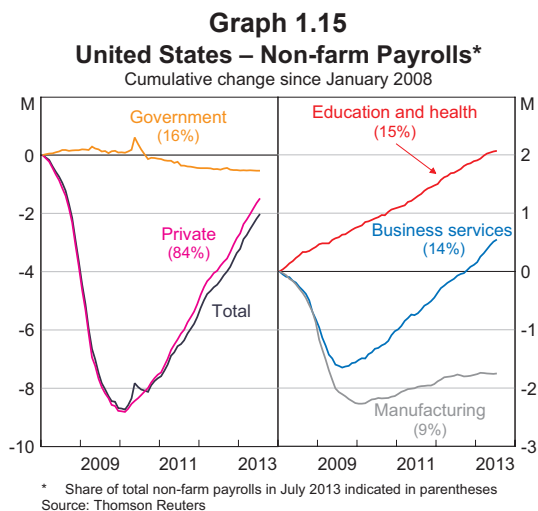
Economic activity in the United States has continued to expand at a moderate pace. Despite lower government spending and higher taxes, growth of private sector demand has held up over the first half of the year (Graph 1.14). Moderate consumption growth has been supported by the steadily improving labour market and a noticeable pick-up in house prices.



Conditions in the housing market have improved across a broad range of measures. In addition to house prices rising by about 14 per cent since early 2012, housing starts and construction activity have picked up. Sales have increased strongly, and both the average time taken to sell a property and the proportion of distressed sales have fallen significantly. The share of mortgages with negative equity has been declining as property valuations rise and debt is repaid. However, the recent rise in 30-year mortgage rates following the Federal Open Market Committee (FOMC) communications (see the 'International and Foreign Exchange Markets' chapter) may slow the improvement in the housing sector somewhat.

Labour market conditions continued to improve over the three months to July, with the pace of payrolls employment growth similar to that of the

preceding year. Nevertheless, the unemployment rate has declined only gradually over 2013 to date. At 7.4 per cent, the unemployment rate is still well above the threshold of 6½ per cent at which the FOMC has indicated that it would consider raising the Federal Funds rate. The participation rate has stabilised in recent months, but remains substantially below its pre-recession level. Service industries in the private sector have been leading the recovery in employment, while government payrolls have been contracting (Graph 1.15).



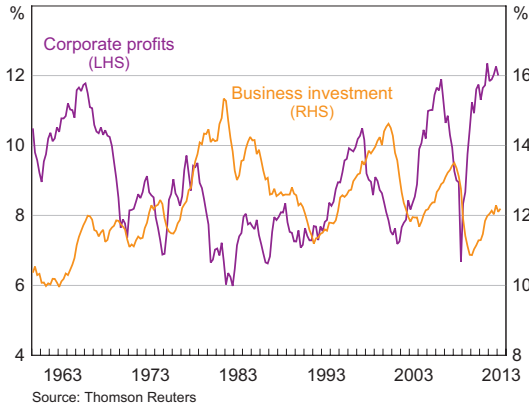
The manufacturing sector has been fairly subdued, with industrial production broadly flat in the June quarter. However, manufacturing employment has increased over the past 3½ years, in contrast to the trend decline in employment in this sector over several decades.

Business investment has been relatively weak in 2013 to date, although strong profitability and the corporate sector's high cash reserves suggest that funds are available to accommodate a pick-up in investment (Graph 1.16).

Monetary policy remains highly accommodative and lending standards have eased further over the three months to July, although total bank credit growth has slowed a little in recent months.

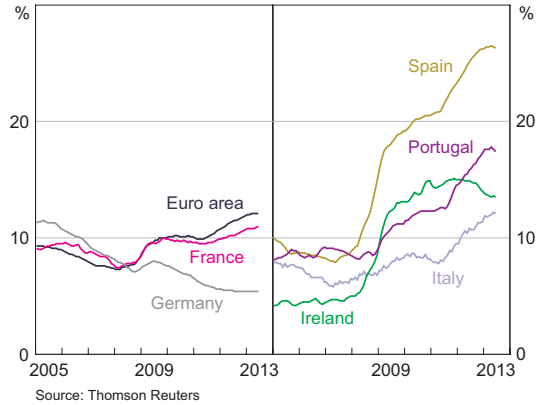
**Graph 1.16**

**United States – Business Investment and Profits**  
Share of nominal GDP



**Graph 1.17**

**Euro Area – Unemployment Rates**



**Europe**

Economic conditions remain weak in the euro area and inflation pressures continue to be subdued, consistent with the weakness in demand. GDP is expected to have declined in the June quarter, having contracted over the previous one and a half years. Although PMIs improved in recent months, they remain below their average levels. Exports, which had made a positive contribution to growth over much of 2012, slowed over the first half of 2013.

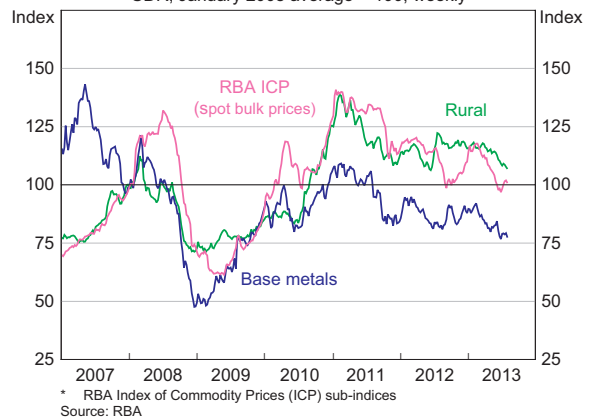
The German economy has shown some signs of resilience and it appears that its output has stabilised over the first half of 2013, but there have been few signs of stabilisation in other countries in the euro area. This difference is apparent in the labour market, with the unemployment rate low in Germany but high in most economies, particularly the crisis economies (Graph 1.17).

**Commodity Prices**

The RBA Index of Commodity Prices, based on spot prices for bulk commodities, has declined since the May *Statement*. Over the past three months, commodity prices have been, on average, around 10 per cent lower in SDR terms than in the preceding three months (Graph 1.18, Table 1.1). While iron ore and steel prices increased a little recently, coking coal prices remain subdued (Graph 1.19). The September quarter benchmark contract price for premium hard coking coal was settled at US\$145 per tonne, almost US\$30 lower than the June quarter contract price.

**Graph 1.18**  
**Commodity Prices\***

SDR, January 2008 average = 100, weekly

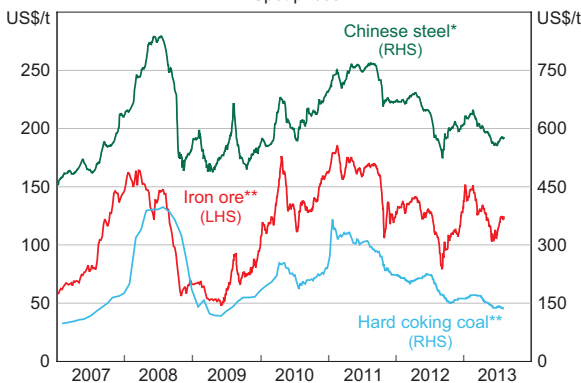


**Table 1.1: Commodity Prices Growth<sup>(a)</sup>**  
SDR, 3-month-average prices, per cent

	Since previous Statement	Over the past year
Bulk commodities	-14	-15
- Iron ore	-14	-6
- Coking coal	-14	-34
- Thermal coal	-9	-9
Rural	-5	-2
- Beef	-8	-4
- Cotton	0	11
- Wheat	0	3
- Wool	-12	-11
Base metals	-6	-4
- Aluminium	-6	-5
- Copper	-6	-6
- Lead	-3	10
- Nickel	-13	-13
- Zinc	-5	-1
Gold	-14	-16
Brent oil <sup>(b)</sup>	-3	2
RBA ICP	-6	-10
- using spot prices for bulk commodities	-10	-11

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

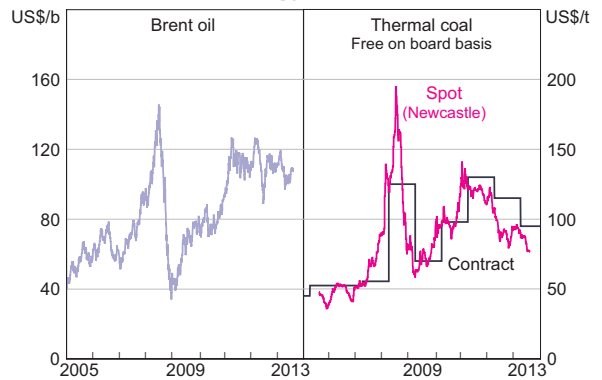
**Graph 1.19**  
**Steel, Iron Ore and Coking Coal Prices**  
Spot prices



\* Average of hot rolled steel sheet and steel rebar prices  
\*\* Free on board basis  
Sources: Bloomberg; Citigroup; Energy Publishing; Macquarie Bank; RBA

Energy prices declined over recent months. Spot prices for thermal coal declined further since the *May Statement*, weighed down by elevated levels of exports from the United States into the Pacific market (Graph 1.20). Over the past year, global thermal coal prices have declined significantly, but to date global production has been scaled back only a little. Average crude oil prices over the past three months have also been lower than at the *May Statement*.

**Graph 1.20**  
**Energy Prices**



Sources: Bloomberg; BREE; RBA; Thomson Reuters

Base metal prices declined on average by 6 per cent since the *May Statement*, accompanied by falling prices of precious metals, such as gold. Market commentary suggests that concerns regarding a possible withdrawal of monetary stimulus by the Federal Reserve and weaker-than-expected growth prospects for China have been affecting these markets.

Prices of rural commodities eased over the past three months. Wheat prices are unchanged, but they remain high by historical standards; beef and wool prices are also lower. ↘

## 2. International and Foreign Exchange Markets

The future path for monetary policy in the United States has been the focal point for markets since late May, when the Federal Reserve signalled that it may begin to wind down its asset purchase program later this year. Expectations that this would see the Federal Reserve tighten monetary policy earlier than previously anticipated saw bond yields rise sharply, equity prices decline and capital flow out of several emerging markets in late May and June, before conditions stabilised in July. These capital outflows from some emerging markets prompted their central banks to tighten monetary policy and/or intervene in foreign exchange markets in an attempt to counter the resulting depreciation pressures. The Australian dollar also depreciated significantly from its recent peak in early April.

### Central Bank Policy

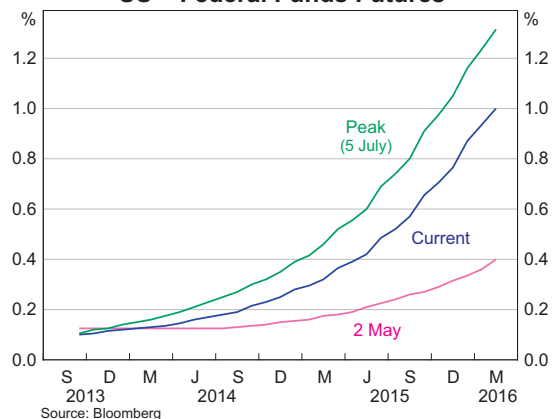
In a series of communications since late May, the US Federal Reserve has outlined its expectation for a gradual reduction in the pace at which it purchases assets, given the improvement in US economic conditions. The Federal Reserve anticipates reducing purchases, which currently amount to US\$85 billion per month, in 'measured steps' between late 2013 and mid 2014, at which point it expects the unemployment rate to be around 7 per cent. Chairman Bernanke has stressed that this policy path is dependent on economic conditions improving in line with current expectations, and that it could adjust the size of its asset purchase program higher or lower if conditions deviate from current projections.

While announcing its expectations for a reduced pace of asset purchases, the Federal Reserve reiterated that it does not expect to raise interest rates for a considerable

period thereafter. It repeated its commitment to retain the current policy rate for at least as long as the unemployment rate is above 6½ per cent, provided inflation is projected to be no more than 2½ per cent one to two years ahead and inflation expectations remain contained. Nonetheless, pricing in futures markets moved sharply in late May and June, before reversing somewhat as the Fed emphasised the distinction between the decision to moderate asset purchase from that related to raising rates. Markets now fully price in a 25 basis point rate rise by June 2015 – almost a year earlier than previously implied (Graph 2.1). This is similar to the expectations expressed by the majority of members of the Federal Open Markets Committee for the first rise to occur sometime in 2015.

Both the European Central Bank (ECB) and the Bank of England (BoE) noted that the resulting rise in euro area and UK bond yields was inconsistent with changes in their own economic fundamentals. In response, the ECB made an explicit statement at its July meeting

**Graph 2.1**  
**US – Federal Funds Futures**



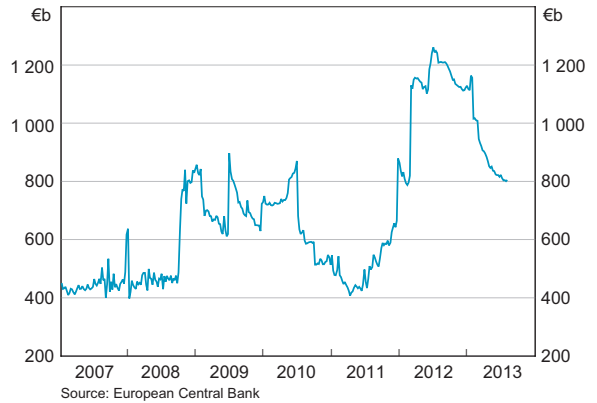
that it would keep interest rates at current or lower levels for an extended period. In addition to being prepared to lower rates further, the ECB reiterated that it remains open to supporting the economy in other ways if warranted. The Bank of England also introduced ‘forward guidance’ regarding the outlook for interest rates alongside its *August Inflation Report*. It stated its intention not to raise its policy interest rate or reduce its stock of asset purchases for at least as long as the unemployment rate remains above 7 per cent, unless it judges that inflation is more likely than not to exceed 2.5 per cent 18–24 months ahead, inflation expectations cease being ‘sufficiently well anchored’, or the stance of monetary policy poses a threat to financial stability.

ECB lending to banks for monetary policy purposes has continued to decline over recent months, falling by €42 billion since early May to be around €455 billion less than its mid 2012 peak (Graph 2.2). Greek and Italian banks have continued to repay funds borrowed under the ECB’s three-year lending operations in December 2011 and February 2012, though Italian banks still have a large amount outstanding, while repayments by Spanish banks have largely stopped in recent months.

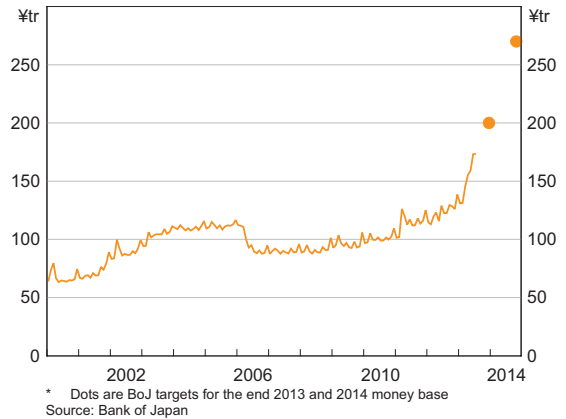
The money base in Japan has continued to grow rapidly in recent months, in line with the Bank of Japan’s (BoJ) target of a near doubling of the money base over the next two years (Graph 2.3). The BoJ has noted that the economy is starting to recover and that it has ‘taken enough measures’ to achieve its 2 per cent inflation target.

The People’s Bank of China (PBC) allowed liquidity conditions to tighten significantly in June, which saw interbank rates (such as the overnight SHIBOR) move sharply higher (Graph 2.4). The initial impulse for the tightening had come from some seasonal demand for additional cash, a reduction in capital inflows and concerns about some banks’ exposures to potentially risky lending funded via wealth management products. The PBC’s decision not to provide additional liquidity via open market operations reflected its concerns about some banks’ liquidity management practices and an excessive build-up of credit outside

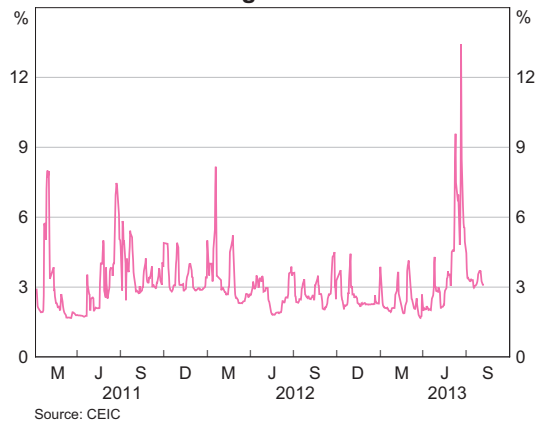
**Graph 2.2**  
**ECB Lending for Monetary Policy Operations**



**Graph 2.3**  
**Japanese Money Base\***



**Graph 2.4**  
**Overnight SHIBOR**





the formal banking sector. Interbank rates have subsequently returned towards their previous levels in July, as the PBC instructed large state-owned banks to supply more funds to the market.

The PBC removed some interest rate controls for financial institutions in China in mid July. This included, most notably, the floor on non-mortgage lending rates. While the changes have little near-term implication, given that the lending floor was rarely binding, they are being interpreted as a signal of the

authorities' willingness to liberalise lending markets. The authorities refrained from relaxing the cap on deposit rates, currently set at 1.1 times the benchmark deposit rate, which would have more significant implications for households' savings decisions and bank profitability.

A number of central banks lowered interest rates in May, generally citing subdued economic growth and a weaker outlook for inflation (Table 2.1). More recently, however, several central banks have raised

**Table 2.1: Monetary Policy**

	Policy Rate Per cent		Most recent change	Cumulative change in current cycle <sup>(a)</sup> Basis points
Euro area	0.5	↓	May 13	-100
Japan <sup>(b)</sup>	na		na	
United States	0.125	↓	Dec 08	-512.5
Australia	2.50	↓	Aug 13	-225
Brazil	8.50	↑	Jul 13	125
Canada	1.00	↑	Sep 10	75
China	6.00	↓	Jul 12	-56
India <sup>(c)</sup>	7.25	↓	May 13	-125
Indonesia	6.50	↑	Jul 13	75
Israel	1.25	↓	May 13	-200
Malaysia	3.00	↑	May 11	100
Mexico	4.00	↓	Mar 13	-425
New Zealand	2.50	↓	Mar 11	-50
Norway	1.50	↓	Mar 12	-75
Russia	8.25	↑	Sep 12	25
South Africa	5.00	↓	Jul 12	-700
South Korea	2.50	↓	May 13	-75
Sweden	1.00	↓	Dec 12	-100
Switzerland	0.00	↓	Aug 11	-275
Taiwan	1.875	↑	Jun 11	62.5
Thailand	2.50	↓	May 13	-100
United Kingdom	0.50	↓	Mar 09	-525

	Current monthly asset purchases	Most recent change	Assets on balance sheet Per cent of GDP
United States	\$85 billion	Sep 12	21.5
Japan	¥6 trillion	Apr 13	41.4
United Kingdom	0	Jul 12	25.4

(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

(c) The Reserve Bank of India cut its main policy rate in May, but raised the rate on its marginal lending facility in July

Sources: RBA; Thomson Reuters; central banks

rates in response to concerns about capital outflow, depreciating exchange rates and the implications of this for inflation, while simultaneously intervening in foreign exchange markets (as discussed below). Concerns about the inflationary impact of recent currency depreciations were cited as important factors in decisions by the central banks of Indonesia and Brazil to raise their main policy rates, and by the central banks of India and Turkey to increase other policy rates over the past two months. The South African Reserve Bank noted that its scope to ease policy had been diminished by the depreciation of the rand.

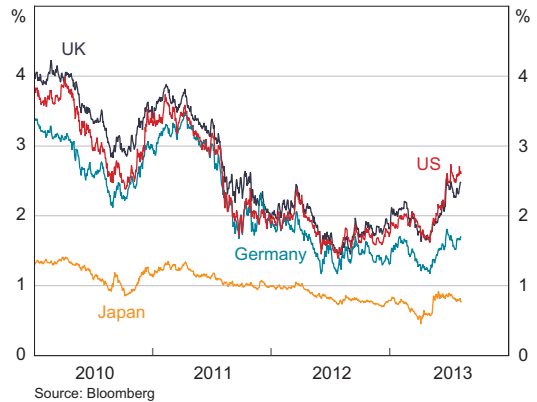
### Sovereign Debt Markets

Government bond yields in major markets have risen sharply since the previous *Statement*, following a reassessment of the likelihood that the US Federal Reserve will begin to scale back its asset purchases sometime later this year. Yields on 10-year US government bonds rose by 110 basis points over May and June, reaching their highest level in two years in early July, before subsequently retracing some of that rise (Graph 2.5). Real yields, as measured by 10-year Treasury inflation-protected securities, have risen in line with nominal Treasury yields over the past few months, to be positive for the first time since late 2011 (Graph 2.6). The recent rise in real and nominal yields brings them closer in line with what would be expected based on economic fundamentals, after an extended period of unusually low interest rates.

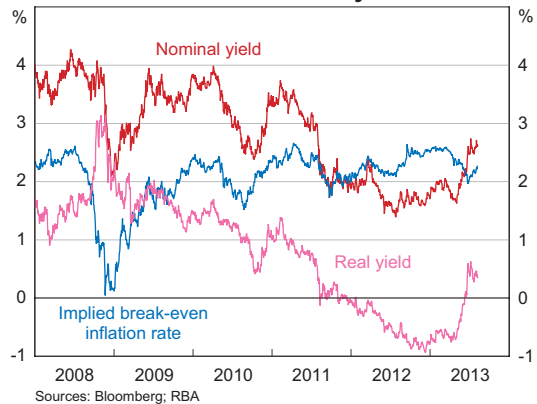
The increase in euro area and UK yields has been less marked due to statements by the ECB and BoE highlighting the different outlook for policy rates in each region. Yields on 10-year German government bonds have increased by 50 basis points since early May, while yields on 10-year UK government bonds have risen by 85 basis points. The smaller rise in German yields also partly reflected a rise in political tensions within the euro area in recent months.

Japanese 10-year government bond yields rose by 30 basis points in May, more than retracing the decline recorded in February and March. The rise came as investors focused on the possibility that the BoJ's monetary easing would result in higher inflation

**Graph 2.5**  
**10-year Government Bond Yields**



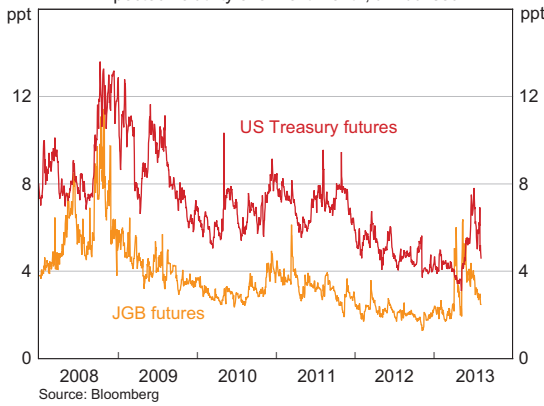
**Graph 2.6**  
**US Real and Nominal 10-year Yields**



that could offset the direct downward pressure on yields from BoJ purchases; market-implied measures of inflation expectations (at 1¼ per cent for five years) are currently around 0.8 percentage points higher than their 2012 average. More recently, yields on Japanese government bonds (JGBs) have been largely unaffected by moves in US yields, and have drifted down gradually. Japanese investors became net purchasers of foreign bonds in July, having reduced their holdings in prior months despite the announcement of the 'quantitative and qualitative' easing program.

Volatility in major market bond yields increased from April to June, as uncertainty about the future path of interest rates rose (Graph 2.7). This was most pronounced for JGBs, as investors weighed the

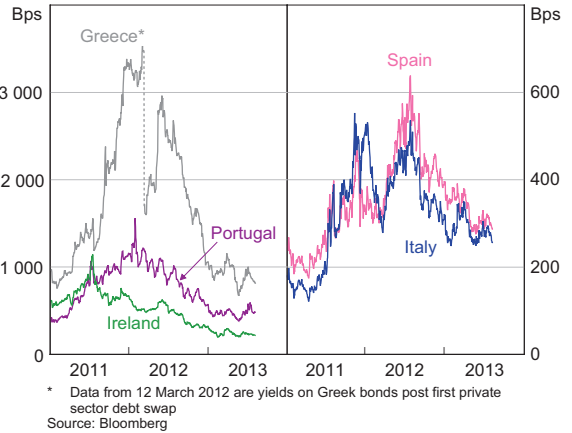
**Graph 2.7**  
**10-year Government Bond Volatility**  
 Expected volatility over next month, annualised



relative importance of increased BoJ demand with the competing influence of expectations for higher inflation, and for US Treasuries, reflecting uncertainty about the outlook for US monetary policy. However, volatility in bond market pricing has eased in the past month. For Japan, this partly owes to greater flexibility by the BoJ in implementing its open market operations, alongside increased communication with the market.

Spreads between yields on long-term bonds issued by euro area periphery governments and German Bunds widened modestly in June and early July, but have since retraced much of this and remain well below earlier levels (Graph 2.8). The recent increase had been most pronounced for Portugal and Greece. In Portugal, this reflected concerns about political commitment to the austerity program following the resignation of the leader of the minor coalition party as foreign minister, along with a growing realisation that it will need to raise €16 billion from bond markets next year when its European Union/International Monetary Fund (EU/IMF) assistance program ceases. In Greece, the widening of spreads followed concerns about progress on its privatisation program and adherence to public sector employment reduction commitments, along with speculation of gaps in its funding for next year. However, its near-term funding needs have been addressed following the Troika's agreement to disburse a further €6.8 billion between July and October.

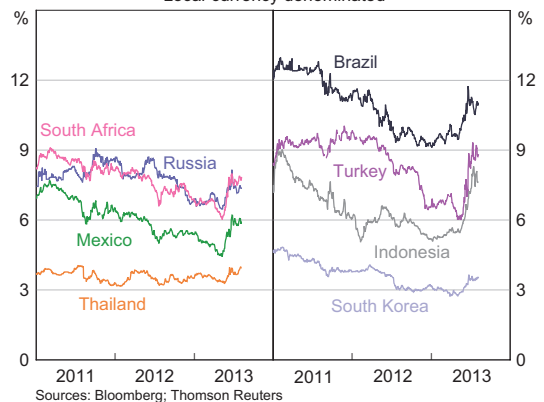
**Graph 2.8**  
**Euro Area Government 10-year Bond Spreads**  
 To German Bunds



More generally, there have been continued signs of improved market functioning in the euro area in recent months. Portugal issued its first new government bond in May since requesting an EU/IMF assistance package, while the Bank of Ireland also raised €500 million in May without the support of a government guarantee.

Discussion about an anticipated reduction in Federal Reserve asset purchases saw capital flow out of a number of emerging markets in May and June and yields on their sovereign debt rise significantly. The rise in yields was notably pronounced for Brazil, South Africa, Turkey and Indonesia (Graph 2.9). In response to these outflows, central banks in these countries have raised policy rates and/or intervened in foreign exchange markets.

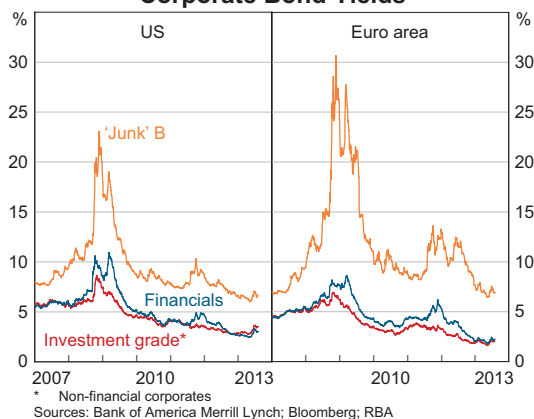
**Graph 2.9**  
**10-year Government Bond Yields**  
 Local-currency denominated



## Credit Markets

Conditions for non-financial corporate bond issuance were very favourable in late 2012 and early 2013, but have deteriorated a little in recent months as investors reassessed the outlook for US monetary policy. Yields on all types of corporate bonds have risen notably since late May, notwithstanding a decline in the past month, with those on sub-investment grade bonds most volatile over this period (Graph 2.10).

**Graph 2.10**  
**Corporate Bond Yields**

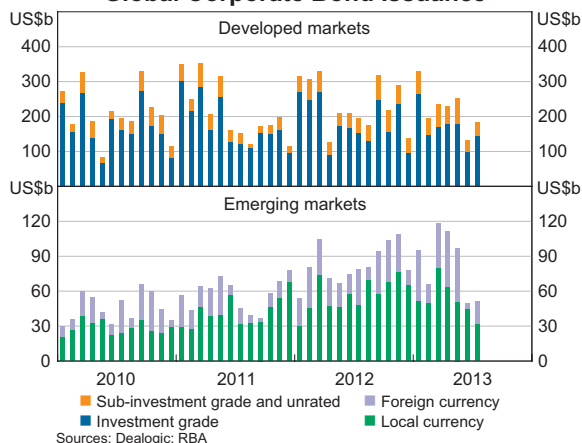


Corporate bonds in emerging markets sold off sharply in June, with particularly large rises in yields on bonds issued by Turkish, Indonesian and Brazilian corporations. Much of this rise reflected the general reassessment of risks associated with lending to these markets and the sharp rises in yields on their sovereign bonds.

Global issuance of corporate bonds declined somewhat in the past two months (Graph 2.11). The decline has been more pronounced for sub-investment grade and emerging market debt, consistent with greater volatility in the yields on these securities.

Yields on US mortgage-backed securities (MBS) have increased since the previous *Statement*, despite Chairman Bernanke noting that most members of the Federal Open Market Committee no longer anticipate selling the Federal Reserve's MBS holdings until well

**Graph 2.11**  
**Global Corporate Bond Issuance**



after policy rates have risen, if at all. Yields on 30-year MBS are now 110 basis points higher than their early May level. Mortgage interest rates have risen in tandem.

## Equities

Equity prices in major markets have fluctuated significantly since the previous *Statement*, falling by around 8½ per cent in late May and June before almost fully recouping this, to be back around their highest level since 2008 (Table 2.2). These movements have largely reflected changes in expectations about the outlook for US monetary policy.

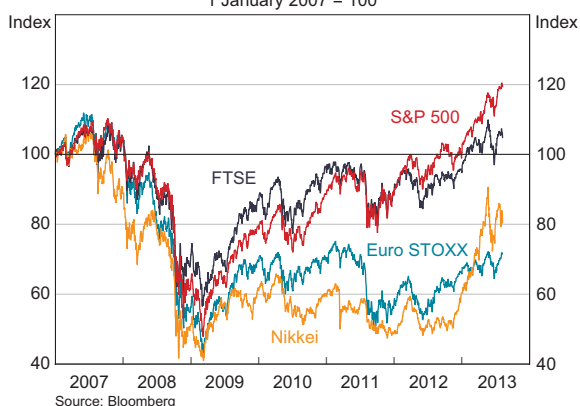
Equity prices have been most resilient in the United States, with the S&P 500 surpassing its previous historical peak as economic data improved and the outlook for corporate profits strengthened (Graph 2.12). Financial stocks have outperformed other shares over recent months, as second quarter profit results generally exceeded expectations on the back of strong growth in trading and investment banking income and reduced loan-loss provisions, notwithstanding weak income from mortgage lending. The announcement of stricter capital regulations on US financial institutions in July had minimal impact on bank share prices, with analysts noting that most institutions will be able to meet the new regulations (which will be phased in from 2014 to 2018) without needing to raise extra capital from investors.

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

	Since end 2012	Since last Statement
United States		
– S&P 500	19	4
Euro area		
– STOXX	8	1
United Kingdom		
– FTSE	10	–1
Japan		
– Nikkei	33	–3
Canada		
– TSE 300	0	–1
Australia		
– ASX 200	8	–4
China		
– China A	–10	–9
MSCI indices		
– Emerging Asia	–3	–5
– Latin America	–11	–8
– Emerging Europe	–6	–7
<b>– World</b>	<b>13</b>	<b>0</b>

Source: Bloomberg

**Graph 2.12**  
**Share Price Indices**  
1 January 2007 = 100

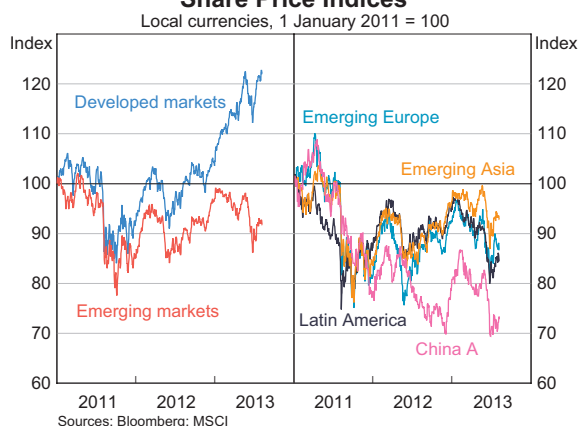


Japanese share prices fell by 20 per cent from late May to early June, following the 80 per cent run-up in equity prices from November 2012. Measures of volatility in Japanese share prices also increased significantly during this time. The sharp decline in equity prices occurred alongside falls in global share prices, though additionally reflected disappointment with the lack of detail in the government's structural reform plans. Nonetheless, Japanese share prices have since recovered over 40 per cent of this decline, to be one-third higher than at the start of the year. The recent rise has occurred alongside a continued upward revision to earnings expectations and a resumption of equity purchases by foreigners.

European equities have been little changed since the previous *Statement*, weighed down by continued weak economic data and ongoing concerns about peripheral euro area economies. Financials have performed in line with the broader index, with significant divergence in banks' second quarter profit results across institutions, in part reflecting the need for a number of banks to raise their provisions for litigation expenses. The share prices of some banks were also adversely affected by initiatives to decrease leverage through capital raisings and/or reduced risk-weighted asset holdings.

Emerging market equities have continued to underperform those in developed economies, falling by 7 per cent since the previous *Statement* (Graph 2.13). Falls have been broad based across

**Graph 2.13**  
**Share Price Indices**

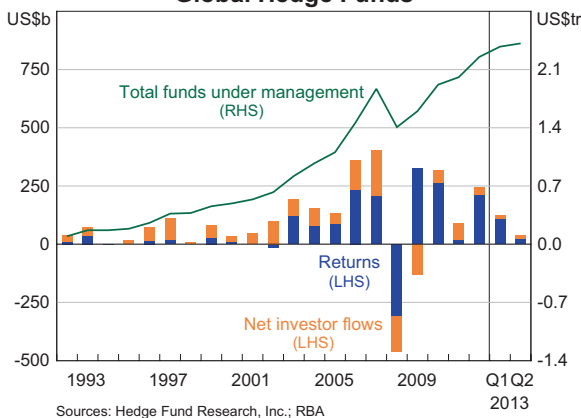


emerging markets, as investors withdrew capital on concerns about the possibility that reduced global liquidity would diminish demand for more risky assets. Nonetheless, the falls in share prices have been particularly sharp for Brazil, where economic growth appears to have softened, and China, where weaker-than-expected data and concerns about the PBC's initial reluctance to alleviate the liquidity shortage in interbank markets weighed on investor sentiment. Concerns about the outlook for Chinese growth also weighed on Asian markets more broadly.

## Hedge Funds

Global hedge funds recorded an average return on investments of 8.3 per cent over the year to June, which was moderately less than the total return from a balanced portfolio of global bonds and equities (including dividends) over the period. Funds under management increased by 1.7 per cent over the June quarter to US\$2.4 trillion, reflecting a modest injection of new capital and a small positive average investment return (Graph 2.14). Funds investing in emerging markets underperformed over the quarter.

**Graph 2.14**  
Global Hedge Funds

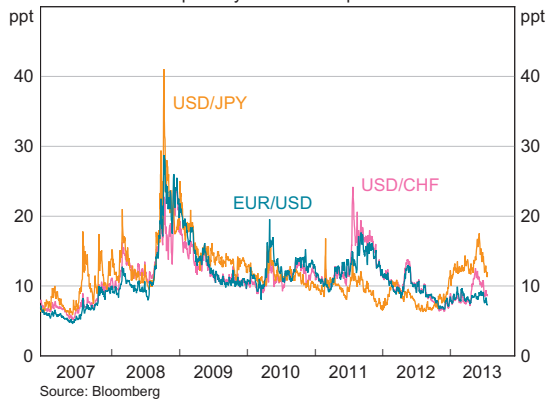


## Foreign Exchange

Foreign exchange markets have continued to be influenced by developments in central bank policy in the major advanced economies, although the focus has shifted from the easing of Japanese monetary

policy in April to the possible scaling back of US monetary policy measures later in the year. Similar to debt and equity markets, market participants' reassessments of the outlook for US monetary policy led to an increase in foreign exchange market volatility in May and June; however, conditions have since stabilised somewhat (Graph 2.15).

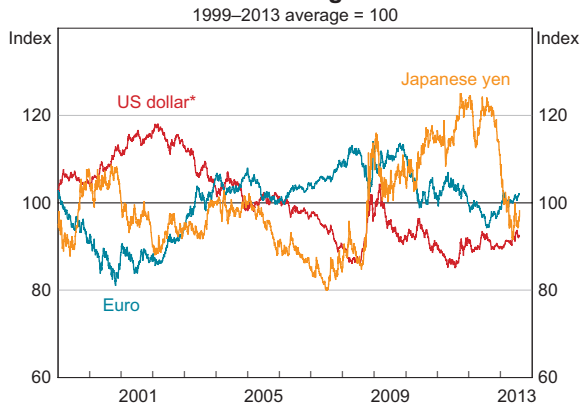
**Graph 2.15**  
Annualised Volatility in Major Currency Pairs  
Implied by one-month options



The US dollar has appreciated slightly on a trade-weighted basis since end April to be 6 per cent higher than its September 2012 low, but nevertheless remains at a historically low level (Graph 2.16, Table 2.3). Notwithstanding the continued political tensions in Europe and the ECB's commitment to keep interest rates low 'for an extended period' in response to ongoing economic weakness, the euro has appreciated by nearly 2 per cent on a trade-weighted basis since end April. It remains around its average since the introduction of the single currency in 1999. The Japanese yen has depreciated by around 3 per cent on a trade-weighted basis since the BoJ's policy announcement in early April to be 21 per cent below its June 2012 peak.

The Chinese renminbi (RMB) has been little changed against the US dollar since late May and is around 2 per cent higher since the beginning of the year (Graph 2.17). After trading close to the upper bound of its +/-1 per cent daily trading band against the US dollar since September 2012, the RMB has been below the upper limit in recent months. The

**Graph 2.16**  
Nominal Trade Weighted Indices



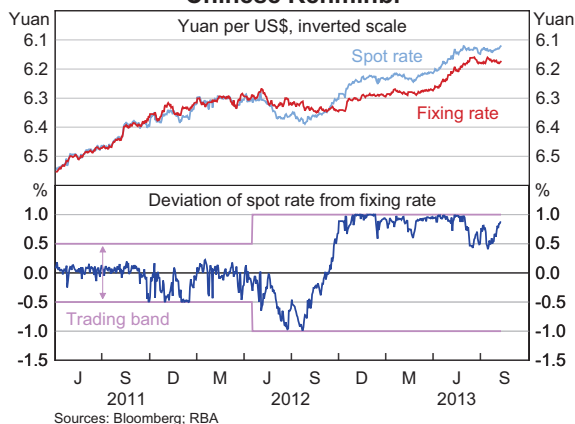
\* Against other major currencies  
Sources: BIS; Bloomberg; Board of Governors of the Federal Reserve System; RBA

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

	Over the past year	Since end April
Brazilian real	14	16
Australian dollar	17	15
Indian rupee	11	14
South African rand	22	11
New Zealand dollar	2	7
Thai baht	0	7
Malaysian ringgit	5	7
Philippine peso	5	6
Indonesian rupiah	9	6
Mexican peso	-4	5
Canadian dollar	5	3
Singapore dollar	2	3
New Taiwan dollar	0	2
South Korean won	-1	2
Swedish krona	-3	0
UK pound sterling	1	0
Chinese renminbi	-4	-1
Swiss franc	-5	-1
Japanese yen	23	-1
European euro	-7	-1
<b>Majors TWI</b>	<b>2</b>	<b>1</b>
<b>Broad TWI</b>	<b>1</b>	<b>2</b>

Source: Bloomberg

**Graph 2.17**  
Chinese Renminbi



Sources: Bloomberg; RBA

apparent easing in appreciation pressures on the RMB is consistent with uncertainty about the outlook for the Chinese economy and reduced capital inflows to China, but stands in contrast to the more pronounced depreciation pressures experienced by other Asian and emerging market currencies over recent months. Consistent with this, the RMB has continued to appreciate on both a nominal and real trade-weighted basis to be 8–9 per cent higher than its recent low point in September 2012.

Chinese foreign exchange reserves increased by US\$54 billion (around 2 per cent) over the June quarter, reflecting net purchases of foreign exchange reserves of US\$47 billion and relatively modest valuation effects (Graph 2.18). The pace of reserve

**Graph 2.18**  
Chinese Foreign Exchange Reserves



Sources: Bloomberg; CEIC; RBA

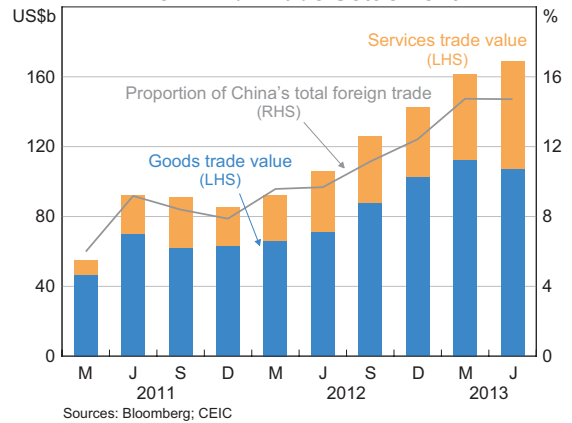
accumulation was noticeably slower than that seen over the March quarter, but consistent with reduced capital inflows. Reflecting the more pronounced downward pressures on exchange rates outside of China, most other Asian and emerging market central banks' foreign currency reserves have declined over recent months (Table 2.4, discussed below).

Chinese authorities have continued to take steps towards internationalising the RMB. These include expanding the Qualified Foreign Institutional Investor (QFII) and RMB QFII (RQFII) schemes – which allow approved foreign institutions to invest in Chinese financial markets – and allowing Chinese non-financial firms to lend RMB to their offshore affiliates. In addition, the PBC signed a bilateral local currency swap agreement with the BoE (worth up to RMB200 billion or the equivalent of around US\$33 billion). The official estimate of the value of China's RMB-denominated foreign trade continued to increase in the June quarter, but was unchanged as a proportion of total foreign trade at 15 per cent (Graph 2.19). The Chinese authorities have recently simplified the process for RMB cross-border trade settlement in an effort to further promote its use.

Most other Asian and emerging market currencies have depreciated against the US dollar since end April, with the pace of depreciation and degree of volatility typically picking up in late May and June as market participants began to reassess their views on the outlook for US monetary policy (Graph 2.20). Although foreign exchange markets have since stabilised somewhat, emerging market currency volatility generally remains above the low levels recorded at the beginning of the year and most of these currencies remain well below their 2013 peaks against the US dollar (Graph 2.21).

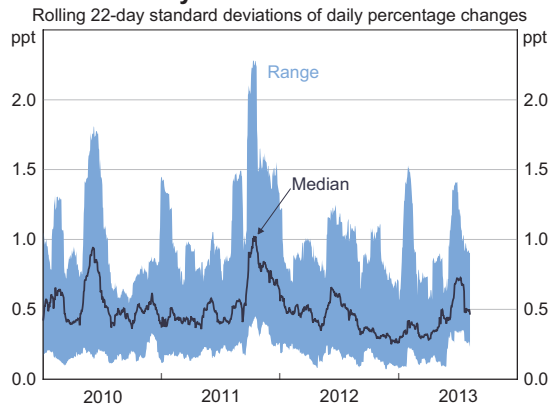
In contrast to the concerns expressed by some policymakers earlier in the year about appreciation pressures on their currencies, authorities in a number of countries have more recently taken steps to counter depreciation pressures and/or mitigate currency volatility. In addition to monetary policy tightening (discussed above), this includes reported

**Graph 2.19**  
**Renminbi Trade Settlement**



Sources: Bloomberg; CEIC

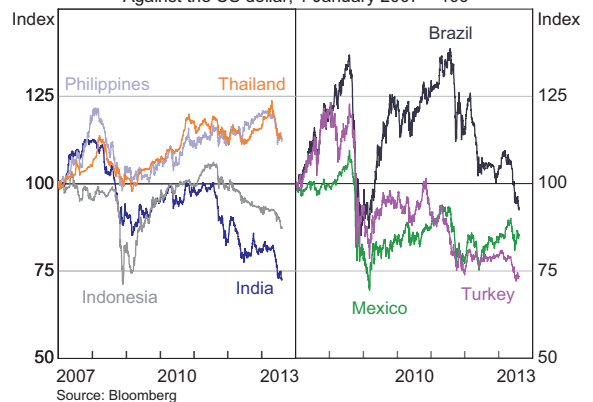
**Graph 2.20**  
**Volatility of Selected Currencies\***



\* Sample includes the currencies of Brazil, Chile, Colombia, India, Indonesia, Malaysia, Mexico, the Philippines, Russia, South Africa, South Korea, Taiwan, Thailand and Turkey against the US dollar  
Sources: Bloomberg; RBA

**Graph 2.21**  
**Emerging Market Currencies**

Against the US dollar, 1 January 2007 = 100



Source: Bloomberg



sales of foreign currency reserves, consistent with declines in a number of countries' reserves over recent months (Table 2.4). In addition, the authorities in Brazil and India – whose currencies have both

experienced relatively pronounced depreciations against the US dollar – announced policy measures designed to directly encourage capital inflows.

**Table 2.4: Foreign Currency Reserves**  
As at end July 2013

	Three-month-ended change		Level
	US\$ equivalent (billions)	Per cent	US\$ equivalent (billions)
China <sup>(a),(b)</sup>	54	2	3 497
Russia	-12	-3	447
Taiwan <sup>(a)</sup>	4	1	409
Brazil	-4	-1	364
South Korea	1	0	320
India <sup>(c)</sup>	-11	-4	252
Thailand <sup>(b)</sup>	-5	-3	162
Malaysia	-2	-1	126
Turkey <sup>(c)</sup>	-9	-8	103
Indonesia <sup>(b)</sup>	-6	-6	92
Philippines	0	0	70

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

(b) End June

(c) Based on data to 26 July

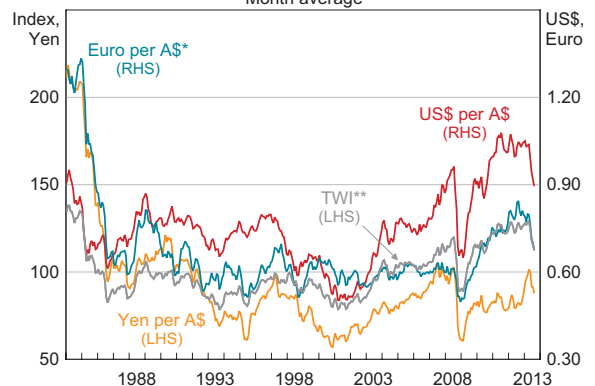
Sources: Bloomberg; CEIC; IMF; RBA

## Australian Dollar

After briefly reaching its highest level since 1985 on a trade-weighted basis in early April, the Australian dollar has depreciated against most currencies to be around 15 per cent below its April peak (Graph 2.22, Table 2.5). In trade-weighted terms, the Australian dollar is now around its lowest level since August 2010, though it remains at a high level by longer-term standards. In addition to the market's reassessment of the future path of US monetary policy – which has affected a range of other currencies – lower commodity prices and declines in domestic interest rates have also contributed to the depreciation of the Australian dollar.

Consistent with developments in other currency markets, intraday volatility in the Australian dollar has increased over recent months to be noticeably higher than the low levels seen at the beginning of the year (Graph 2.23).

**Graph 2.22**  
**Australian Dollar**  
Month average



\* Deutsche Mark spliced on to euro prior to 4 January 1999

\*\* Indexed to post-float average = 100

Sources: Bloomberg; RBA; Thomson Reuters; WM/Reuters

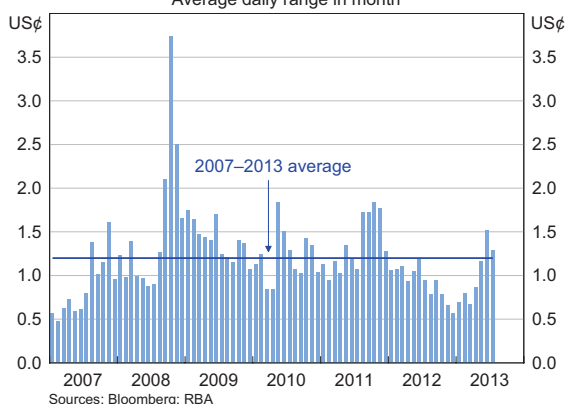
**Table 2.5: Changes in the Australian Dollar against Selected Currencies**  
Per cent

	Over the past year	Since April peak in TWI <sup>(a)</sup>
Indian rupee	-5	-4
South African rand	4	-4
Thai baht	-15	-8
New Zealand dollar	-13	-8
Malaysian ringgit	-11	-8
Indonesian rupiah	-7	-9
Canadian dollar	-11	-12
Singapore dollar	-13	-13
US dollar	-15	-15
UK pound sterling	-14	-15
Swiss franc	-19	-16
Chinese renminbi	-18	-16
South Korean won	-15	-16
European euro	-21	-16
Japanese yen	5	-18
<b>TWI</b>	<b>-13</b>	<b>-14</b>

(a) 11 April 2013

Sources: Bloomberg; Thomson Reuters; WM/Reuters

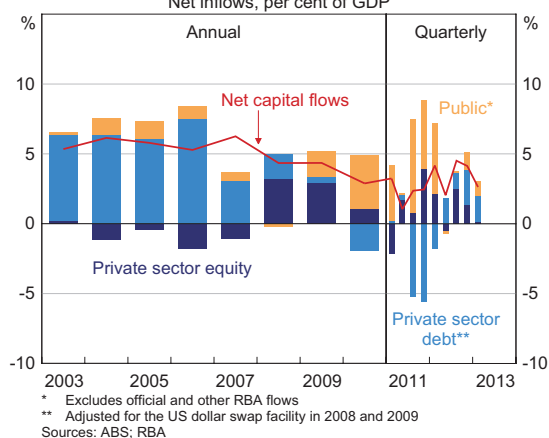
**Graph 2.23**  
**Intraday Range in AUD/USD**  
Average daily range in month



## Capital Flows

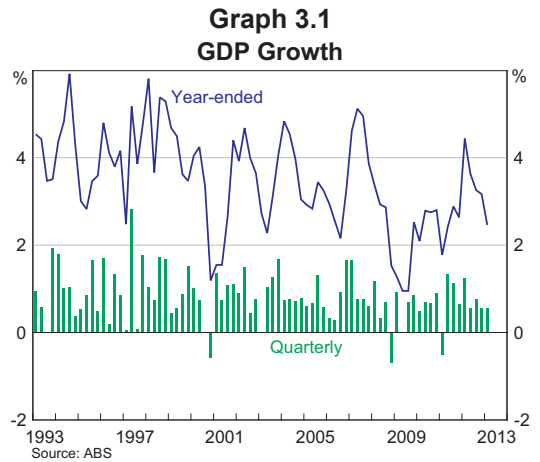
As occurred in the previous three quarters, net capital inflows to the Australian economy were largely directed to the private sector in the March quarter (Graph 2.24). The net private inflow primarily reflected net inflows of debt, with debt inflows to non-financial firms more than offsetting a small net debt outflow from the banking sector. There was a negligible net equity inflow to the private sector as a whole, with net foreign investment in non-financial firms and the banking sector offset by increased foreign investment by Australian superannuation funds. There was a small net inflow of capital to the public sector, though it remained well below the levels seen throughout most of 2009–2011 and was again less than new issuance. Accordingly, the foreign ownership share of Commonwealth Government securities declined slightly, to around 68 per cent in the March quarter from 70 per cent in the December quarter. ✕

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



### 3. Domestic Economic Conditions

Growth of the Australian economy was a little below trend over the year to the March quarter, while timely indicators suggest that economic activity continued to grow at a similar pace in the June quarter (Graph 3.1, Table 3.1). Measures of consumer sentiment have fallen back to around average levels after picking up earlier in the year, and retail sales and the Bank’s liaison provide little indication of a pick-up in consumption growth after weaker-than-expected growth in the March quarter. The labour market continues to be somewhat subdued, consistent with survey-based measures of business conditions, which remain below average. Indeed, non-mining business investment continues to be weak and while mining investment remains at a high level, it is expected to decline over the next few years. In contrast, residential building approvals have continued to pick up, consistent with a recovery in



dwelling investment. Available data also indicate that growth in export volumes was strong over the first half of the year.

**Table 3.1: Demand and Output Growth**  
Per cent

	March quarter 2013	Year to March quarter 2013
Domestic final demand	-0.3	1.1
– Private demand	-0.7	2.1
– Public demand	1.4	-1.9
Change in inventories <sup>(a)</sup>	-0.4	-0.9
Gross national expenditure	-0.6	0.3
Exports	1.1	8.1
Imports	-3.5	-3.2
GDP	0.6	2.5
Nominal GDP	1.3	3.0
Real gross domestic income	1.1	1.0

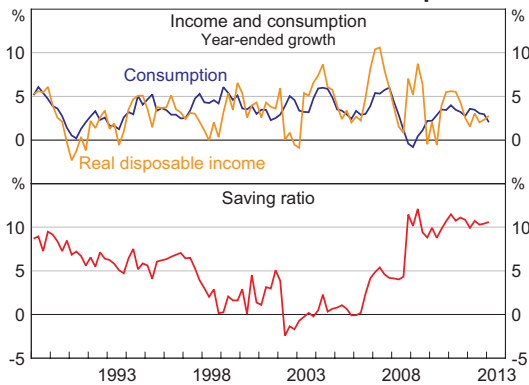
(a) Contribution to GDP growth  
Source: ABS

## Household Sector

Growth in household consumption has slowed over the past year, as below-average income growth and softer labour market conditions appear to have been weighing on households' willingness to spend. With consumption continuing to increase in line with incomes, the household saving ratio has remained steady at around 10 per cent of income (Graph 3.2). This is well above the levels seen in the 1990s and 2000s, but less than the rate of saving that prevailed up to the mid 1980s. Household net worth has continued to increase in recent quarters and is estimated to be almost 9 per cent higher over the year to June. This has been driven by increases in equity and dwelling prices, as well as ongoing saving by households (Graph 3.3).

**Graph 3.2**

### Household Income and Consumption\*



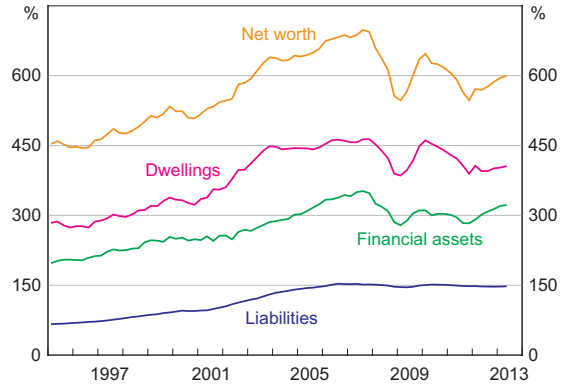
\* Household sector includes unincorporated enterprises; disposable income is after tax and interest payments; income level smoothed with a two-quarter moving average between March quarter 2000 and March quarter 2002; saving ratio is net of depreciation  
Sources: ABS; RBA

Retail sales volumes were unchanged in the June quarter, suggesting that growth in the consumption of goods remained below average (Graph 3.4). Clothing, footwear & accessories retailers and cafes, restaurants and takeaway stores posted modest sales growth, but this was offset by falls in sales at department stores and household goods retailers. Retail sales values were also broadly unchanged in the quarter, as were prices. Information from the Bank's liaison suggests that growth in retail sales remains relatively weak. Survey measures of

**Graph 3.3**

### Household Wealth and Liabilities\*

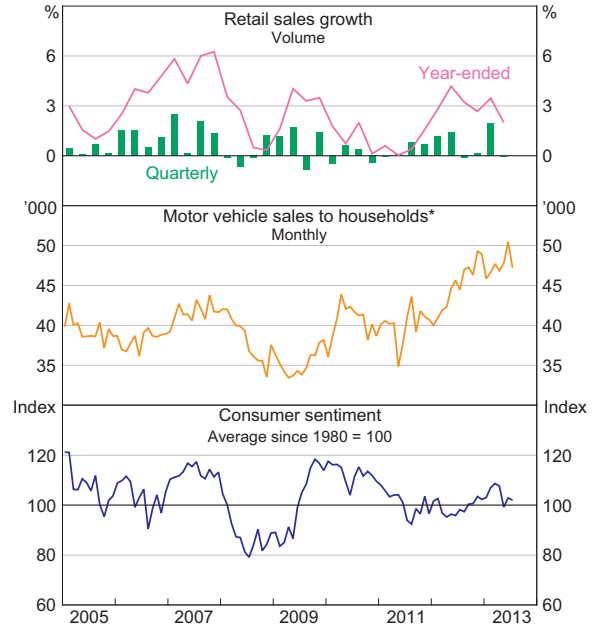
Per cent of annual household disposable income



\* Household liabilities exclude the liabilities of unincorporated enterprises; disposable income is after tax and before the deduction of interest payments; RBA estimates for June quarter 2013  
Sources: ABS; RBA; RP Data-Rismark

**Graph 3.4**

### Consumption Indicators



\* Seasonally adjusted by the RBA  
Sources: ABS; FCAI/FACTS; Melbourne Institute and Westpac; RBA; Roy Morgan Research

consumer sentiment declined from above average in the first quarter to around average, and consumers' concerns about future conditions in the labour market remain elevated. In contrast, sales of motor vehicles to households increased by 3½ per cent in the June quarter, supported by ongoing discounting,

although sales fell in July. Reported buying conditions for dwellings remain favourable, with measures of sentiment regarding the housing market supported by the low level of interest rates.

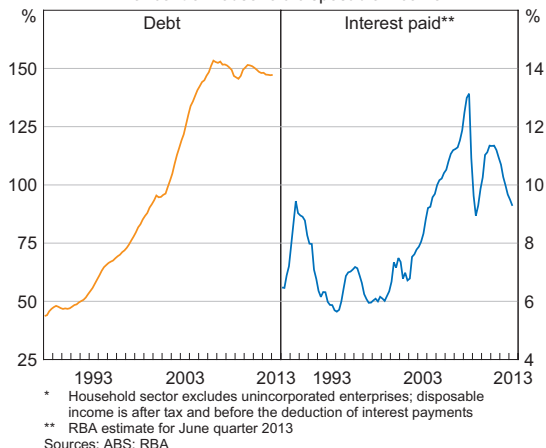
Real household disposable income (after interest payments) increased by 2¾ per cent over the year to the March quarter. Growth in labour income was weak (as wage growth slowed) and growth in income from household assets was subdued. Interest payments are estimated to have declined to 9¼ per cent of household disposable income in the June quarter from 11¼ per cent two years earlier as a result of lower average interest rates. Household debt has continued to grow in line with nominal incomes, with debt as a share of household disposable income steady at a little below 150 per cent (Graph 3.5).

The recovery in the established housing market has continued, with prices rising further (Graph 3.6, Table 3.2). Housing prices are now 6½ per cent above their 2012 trough. In recent months, prices in most state capitals have increased. Auction clearance rates also remain at high levels. The demand for housing finance has continued to strengthen, consistent with rising dwelling prices and lower interest rates, with the value of housing loan approvals rising at an annualised pace of 25 per cent over the past 6 months. This strong growth in loan approvals and the slow pace of growth in overall household debt implies that households with existing debt

**Graph 3.5**

**Household Finances\***

Per cent of household disposable income



**Graph 3.6**

**Housing Market**



**Table 3.2: National Housing Price Growth**

Per cent

	3 months to June 2013	3 months to March 2013	Year to June 2013
<b>Capital cities</b>			
ABS <sup>(a),(b)</sup>	2.4	0.8	5.1
APM <sup>(b)</sup>	2.6	0.5	4.9
RP Data-Rismark	1.0	1.1	3.8
<b>Regional areas</b>			
APM <sup>(b)</sup>	0.6	0.2	1.6
RP Data-Rismark <sup>(a)</sup>	-0.7	0.7	0.5

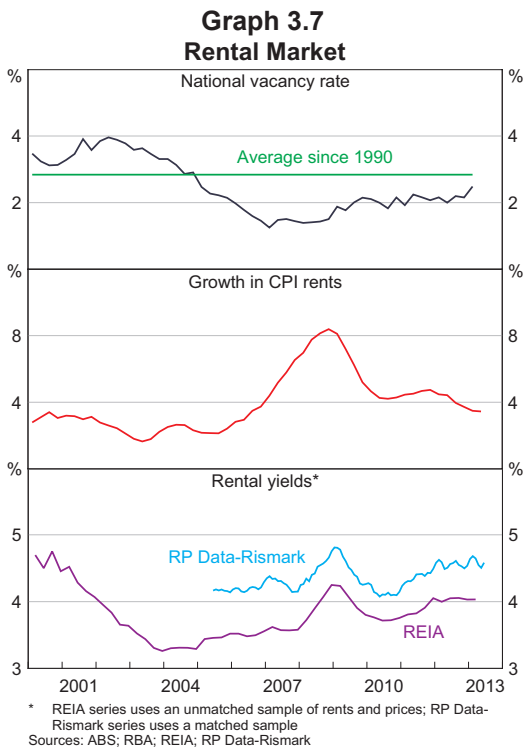
(a) Detached houses only

(b) Quarter-on-quarter growth rate

Sources: ABS; APM; RBA; RP Data-Rismark

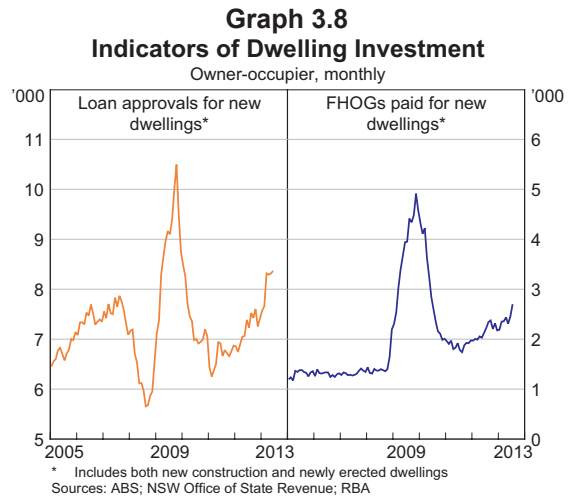
are paying down their debt more quickly (see the 'Domestic Financial Markets' chapter).

Nationwide, the rental vacancy rate increased in the March quarter to 2½ per cent, a little above the rate that has prevailed over recent years but still below its longer-run average (Graph 3.7). While the growth in rents has slowed, it continues to exceed general inflation and rental yields remain elevated relative to recent history. The growth of rents has been particularly strong in Perth over the past year and rental yields there are elevated. Given a more subdued economic outlook in Western Australia and a weakening labour market, conditions in the Perth market may soften in the period ahead.



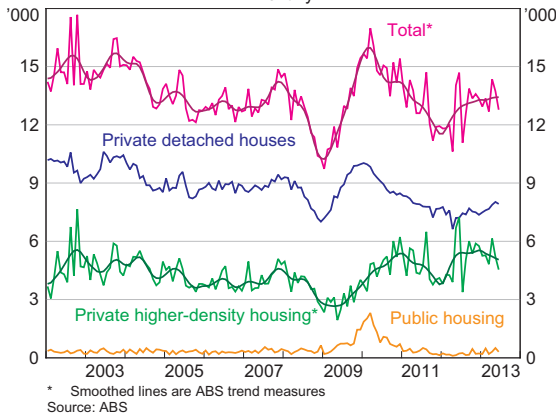
Residential construction activity was unchanged in the March quarter, with further strong growth in new building activity offset by a decline in activity for alterations and additions. Nonetheless, overall activity in the sector is more than 4 per cent higher than in mid 2012. The weakness in alterations and additions for much of the past year is a little unusual

given the pick-up in housing prices and new building activity. However, a continued recovery in the established housing market is expected to support an increase in alterations and additions activity. Moreover, forward-looking indicators point to an ongoing recovery in dwelling investment; loan approvals for new dwellings were almost 15 per cent higher over the year, while first home owner grants (FHOGs) for new dwellings also picked up, driven by particularly strong growth in New South Wales and Western Australia (Graph 3.8).



The number of private residential building approvals rose by 4 per cent in the June quarter and the trend measure is around 15 per cent higher than at the 2011 trough (Graph 3.9). Detached housing approvals have started to recover after a lengthy period of weakness, while approvals for higher-density housing have moderated somewhat from their recent high levels. The Bank's business liaison suggests that demand for new housing has improved over recent months, particularly in New South Wales. The increase in total building approvals is expected to continue, aided by an ongoing recovery in the established housing market, relatively high rental yields, low borrowing rates and government support to first home buyers (which in most states has now been directed towards purchases of newly built homes rather than existing dwellings).

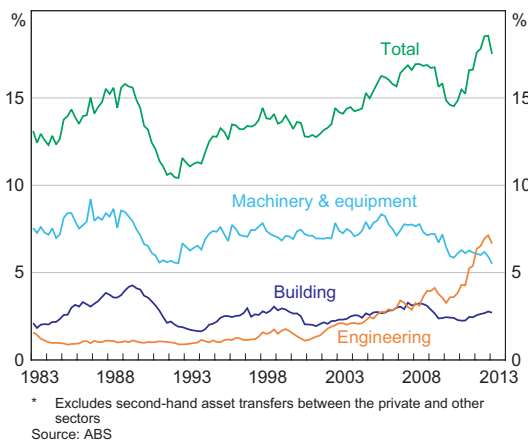
**Graph 3.9**  
**Residential Building Approvals**  
Monthly



## Business Sector

While business investment remains high as a share of the economy, it declined in the March quarter, with estimates of mining and non-mining investment lower. Both engineering construction and machinery & equipment investment decreased noticeably (Graph 3.10). These developments are consistent with the fall in capital imports as well as information from both public announcements by resource companies and the Bank's liaison signalling that the investment phase of a number of mining projects is beginning to wind down. While it is difficult to know for certain, it may well be that mining investment has peaked.

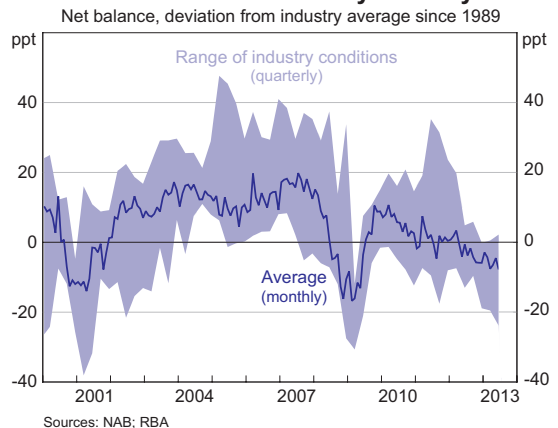
**Graph 3.10**  
**Business Investment\***  
Share of GDP



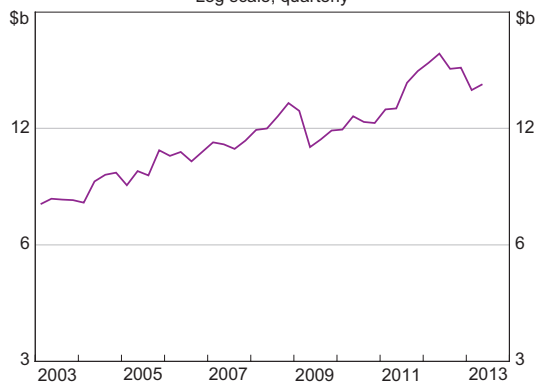
Business profits recovered somewhat in the March quarter after falling in 2012, in part reflecting a short-lived increase in the spot price of iron ore around the beginning of the year. The overall decline in prices for bulk commodities over the past year and a half has led to an increased focus on managing costs in the mining sector, particularly in the coal industry. Profit growth in the non-mining sector varied considerably across industries in the March quarter, but was positive overall. The recent depreciation of the exchange rate should provide some support to profits in the trade-exposed sectors, both resource and non-resource.

Indicators suggest that business conditions in the June quarter remained below their long-run average levels. Survey-based measures of business conditions have been mixed in recent months, but remain a little below long-run average levels across almost all industries (Graph 3.11). Surveys and the Bank's liaison suggest that weak domestic demand still remains a key concern for businesses, although the recent depreciation of the Australian dollar, along with the effects over time of stimulatory monetary policy settings, should work to support business conditions. In addition, the declines in bulk commodity prices over the past year are weighing on sentiment in the mining sector. Available data indicate that capital import values in the June quarter were around 17 per cent lower than their peak a year ago, consistent with weakness in investment (Graph 3.12).

**Graph 3.11**  
**Business Conditions by Industry**  
Net balance, deviation from industry average since 1989



**Graph 3.12**  
**Capital Import Values\***  
 Log scale, quarterly

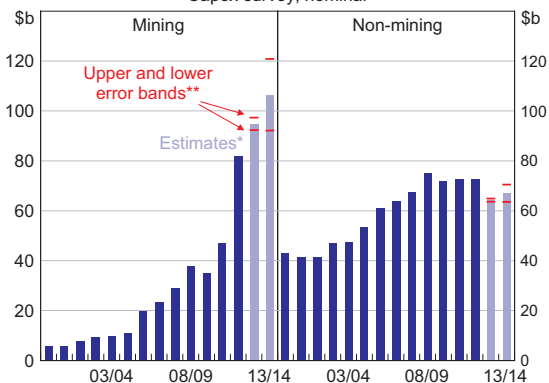


\* June quarter 2013 observation based on monthly data  
 Source: ABS

Despite the softness in some near-term indicators of business investment, the latest ABS capital expenditure (Capex) survey suggests that investment will grow in 2013/14 (Graph 3.13). However, care is needed in interpreting these estimates as the coverage of non-mining investment excludes some types of investment and important sectors such as agriculture, forestry & fishing and health care & social services (see 'Box A: Measuring Business Investment'). Moreover, intentions in the Capex survey tend to be subject to a degree of uncertainty, the more so for the mining sector. At odds with other information, these data imply that the increase in investment in 2013/14 is likely to be largest in the mining sector, with further growth in building and structures offsetting falls in machinery and equipment investment.

For the parts of the non-mining sector that the Capex survey covers, it also suggests an increase in investment spending in 2013/14. Meanwhile, some indicators of private non-residential building investment have strengthened. Building approvals have trended higher so far in 2013, after being boosted in early 2012 by two large healthcare projects (Graph 3.14). However, office vacancy rates have also risen over the past year, partly reflecting cost-cutting by companies providing services to the resources sector. The Bank's liaison also points to weak demand for office space, with this weighing on development activity in the sector.

**Graph 3.13**  
**Capital Expenditure Intentions**  
 Capex survey, nominal

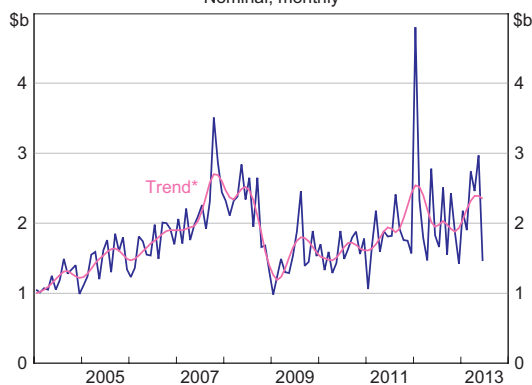


\* Estimates are firms' expected capital expenditure in 2012/13 and 2013/14, adjusted for the past average difference between expected and realised spending

\*\* Error bands are based on the mean absolute error of growth rate for each estimate of investment intentions compared with the final outcome for investment in each year

Sources: ABS; RBA

**Graph 3.14**  
**Private Non-residential Building Approvals**  
 Nominal, monthly



\* 13-period Henderson trend  
 Sources: ABS; RBA

## Government Sector

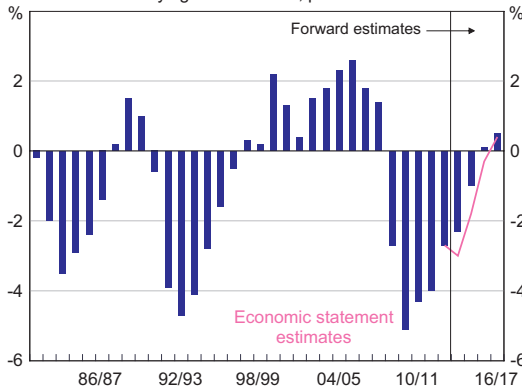
The Australian Government budget and recent state budgets pointed to ongoing fiscal consolidation at all levels of government (Graph 3.15). Taken together, the budgets had a relatively small reduction in the aggregate budget deficit in 2013/14, with most of the adjustment planned for 2014/15 and 2015/16.

The Australian Government's recent economic statement contained updated expenditure and revenue profiles, and proposed policy measures,



with the implication that the consolidated budget deficit would widen a little in 2013/14, with a greater reduction in the aggregate deficit over the following years.

**Graph 3.15**  
**Consolidated Budget Balance\***  
 Underlying cash balance, per cent to GDP



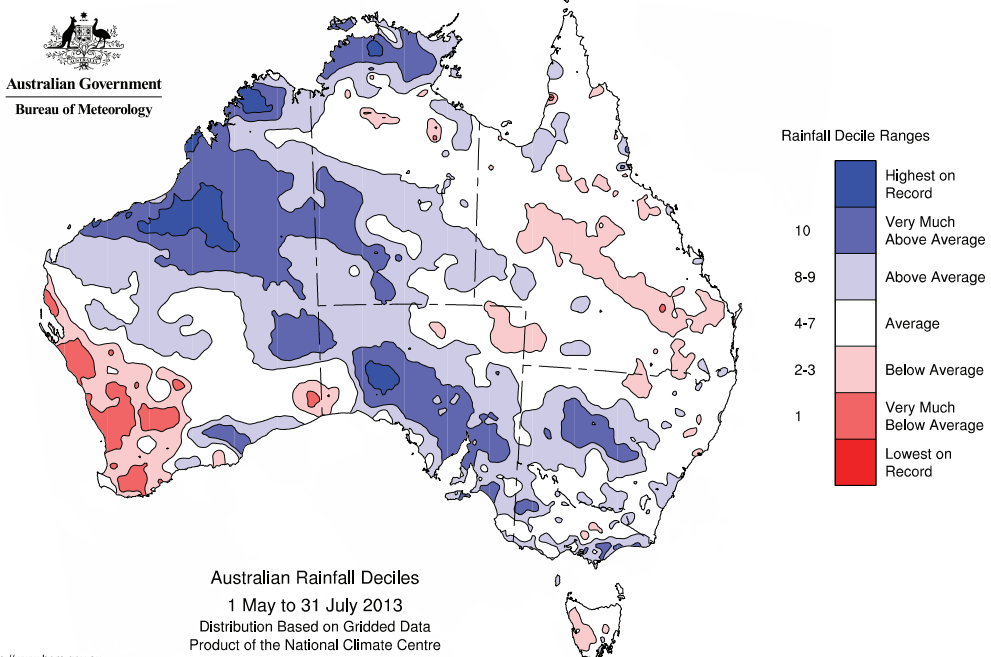
\* Combined Australian Government, state and territory budget balances based on 2013/14 budgets or mid-year reviews as available; 2012/13 remains an estimate  
 Sources: Australian Treasury; state and territory treasuries

## Farm Sector

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimates that farm production fell by 4¼ per cent in 2012/13, following the previous year's strong production. Farm production is forecast to pick up by 3 per cent in 2013/14, driven by the expectation of a larger wheat crop. Livestock production is also forecast to increase, with stronger demand for beef from emerging economies in the Middle East and Asian regions. Rural prices are forecast to ease in 2013/14 reflecting high levels of global crop production.

Recently, there has been above-average rainfall across much of South Australia, New South Wales and Victoria (Graph 3.16). This has boosted soil moisture for crops, many of which were planted when conditions were dry, and reports indicate that crops are germinating well. However, dryer than usual conditions continue across Queensland, forcing cattle producers to reduce stock levels as a result of inadequate feed.

**Graph 3.16**  
**Australian Rainfall**  
 1 May to 31 July 2013



<http://www.bom.gov.au>

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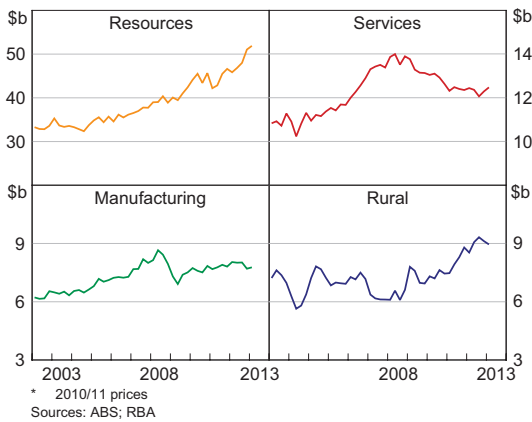
Source: Bureau of Meteorology

Issued: 01/08/2013

## External Sector

Exports rose in the March quarter, underpinned by further growth in resource exports and a pick-up in services exports (Graph 3.17). The strong growth in resource exports over the past year has been the result of additional supply coming online as investment projects in the sector reach completion. In contrast, imports fell, driven by lower capital imports.

**Graph 3.17**  
**Export Volumes\***  
Quarterly



Based on more recent monthly trade data, iron ore export volumes are estimated to have increased in the June quarter, and strong growth in resource exports is expected over the remainder of 2013. Growth in service exports volumes is expected to be moderate in the June quarter given some softening in overseas arrivals, although arrivals from China have grown rapidly over the past year.

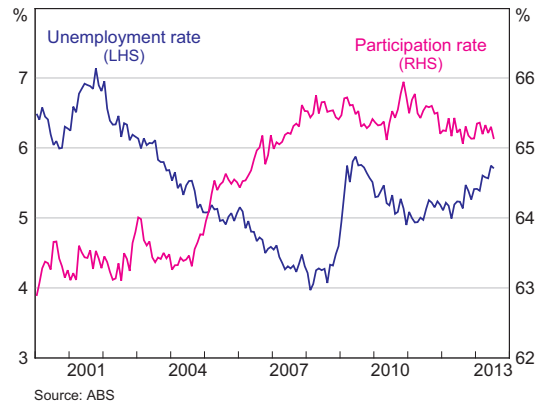
## Labour Market

Labour market conditions remain somewhat subdued. The unemployment rate has increased a little further, with employment growth remaining below the growth of the working-age population, while the participation rate has been little changed over the past year or so (Graph 3.18).

Labour market conditions in industries exposed to mining activity remain subdued, in line with reports that mining companies are seeking to contain

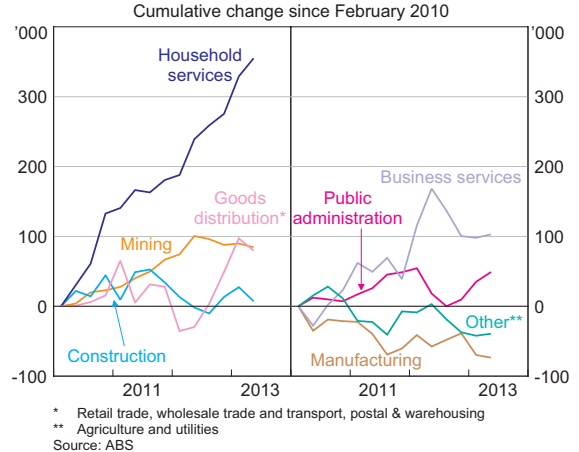
**Graph 3.18**

### Unemployment and Participation Rates



costs and as mining projects move towards the less labour-intensive operational phase. The level of employment in both mining and business services has been broadly unchanged over the first half of the year, and remains below the levels reached in mid 2012 (Graph 3.19). Most of the fall in business services employment has been in New South Wales. In contrast, over the same period the household services sector (which includes health care, education and accommodation & food services) made substantial contributions to aggregate employment growth. Despite continued fiscal consolidation by state and federal governments,

**Graph 3.19**  
**Employment by Industry**  
Cumulative change since February 2010

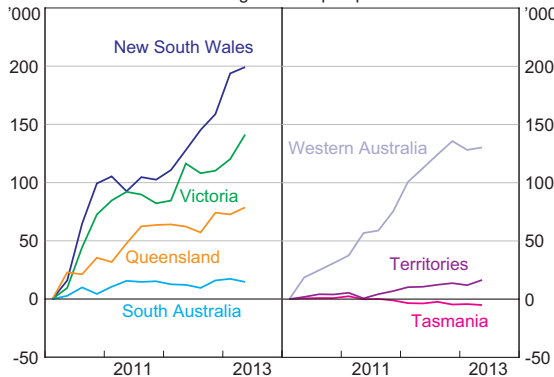


employment in public administration and safety is recorded as having increased over the past year, following declines in the first half of 2012. In contrast, employment in manufacturing has declined over the first half of the year, and is close to the levels of 18 months ago.

The pattern of employment growth across the states has shifted over recent months (Graph 3.20). Since the beginning of the year, employment growth has been stronger in Victoria and New South Wales, although it has slowed more recently in New South Wales. Consistent with the slowing growth in resource-related activity, employment in Western Australia has remained flat since the end of last year, and the unemployment rate has risen from a very low level. Labour market conditions are relatively subdued in Queensland and South Australia, while conditions remain weak in Tasmania.

**Graph 3.20**  
**Employment by State**

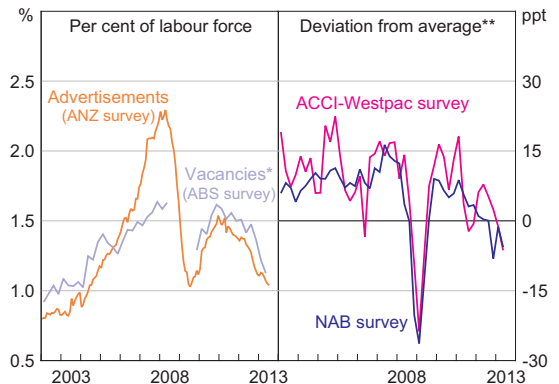
Cumulative change since April quarter 2010\*



\* Quarters end in October, January, April and July  
Source: ABS

Indicators of labour demand have softened further and suggest that employment growth is likely to remain modest in the near term (Graph 3.21). The ABS quarterly measure of job vacancies fell in the three months to May, to be around 19 per cent lower over the year. Measures of job advertisements have also declined in recent months. Survey-based measures of businesses' employment intentions fell to below-average levels in the June quarter, while reports from the Bank's liaison suggest that firms remain cautious about hiring staff.

**Graph 3.21**  
**Labour Market Indicators**



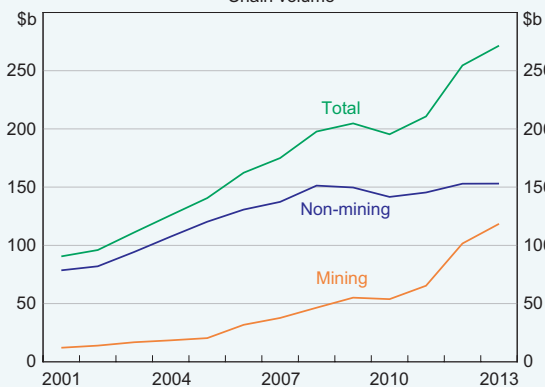
\* This survey was suspended between May 2008 and November 2009  
\*\* Net balance of surveyed employment intentions for the following quarter; deviation from average since 1989  
Sources: ABS; ACCI; ANZ; NAB; RBA; Westpac

## Box A

# Measuring Business Investment

Business investment has grown strongly over the past decade (Graph A1). Mining investment, in particular, expanded at an especially rapid pace, as resource companies added to capacity in response to higher commodity prices.

**Graph A1**  
**Business Investment\***  
Chain volume



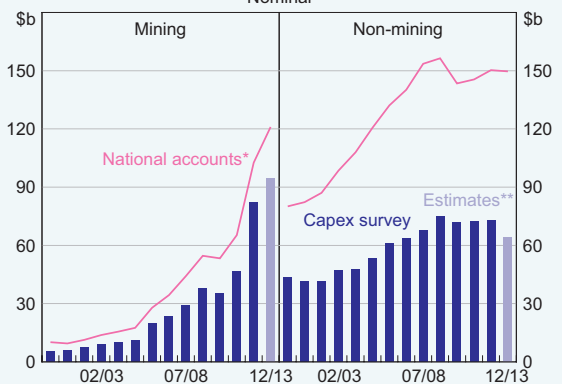
\* Based on national accounts data; RBA estimates for 2013  
Sources: ABS; RBA

The most complete picture of the sectoral breakdown of investment comes from the annual national accounts, which are available only with a significant lag. At a quarterly frequency, the national accounts provide an aggregate measure of business investment, but do not provide a breakdown by industry. The ABS capital expenditure (Capex) survey provides a timely update on investment activity across a range of industries, along with information about future investment intentions.

While the Capex survey is more timely – and indeed is an input into the national accounts – the survey does not provide a complete picture of developments in overall business investment. In

particular, the Capex survey does not include all types of investment expenditure; for example, it does not capture investment in intangible assets such as research and development. In addition, the Capex survey covers only a subset of non-mining industries. Notably, the Capex survey excludes agriculture, forestry & fishing, health care & social assistance and education, training and safety, which have collectively grown by 21 per cent over the past three years (Table A1). As a result, the nominal value of aggregate investment measured by the Capex survey is significantly below the aggregate value recorded in the national accounts (Graph A2). So while the Capex survey records a higher level of mining investment than non-mining investment in 2011/12, the national accounts data confirm that non-mining investment was in fact substantially larger than mining investment.

**Graph A2**  
**Measures of Business Investment**  
Nominal



\* RBA estimates for 2012/13  
\*\* Estimates are firms' expected expenditure in 2012/13, adjusted for the past average difference between expected and realised spending  
Sources: ABS; RBA

Consequently, while the Capex survey is helpful in assessing the state of mining and non-mining investment, it is important to supplement these data with analysis and information from a wide variety of other sources – such as the Bank's business

liaison program, project-based databases, building approvals data and business surveys – in order to obtain a full picture of investment activity underway in the economy. ✕

**Table A1: Investment by Industry**  
2011/12, per cent

Industry	Share of total	3-year-ended growth
Mining	41.6	87.7
Non-mining	58.4	-4.1
– Included in Capex	48.4	-8.0
Manufacturing and construction	10.7	-14.4
Electricity, gas, water & waste services	4.1	-8.3
Wholesale and retail trade	5.3	-2.7
Transport, postal & warehousing	6.6	-6.0
Information, media & telecommunications	4.0	-23.9
Business services (finance and rental) <sup>(a)</sup>	11.0	-1.5
Other services	6.9	-1.2
– Not included in Capex	10.0	21.1
Agriculture, forestry & fishing	6.6	29.2
Education, training and safety	1.8	72.1
Health care & social assistance	1.6	-24.4

(a) The Capex survey excludes the superannuation funds sub-component of this series which is included here  
Source: ABS

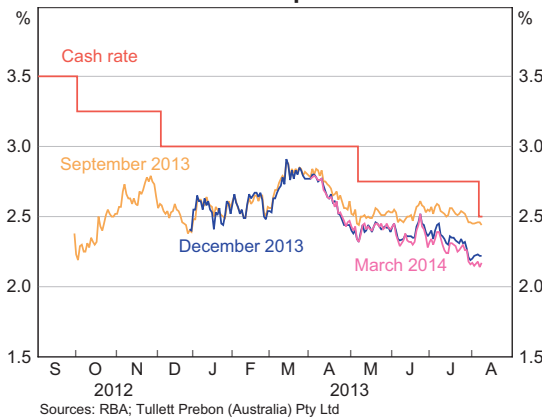


# 4. Domestic Financial Markets

## Money Markets and Bond Yields

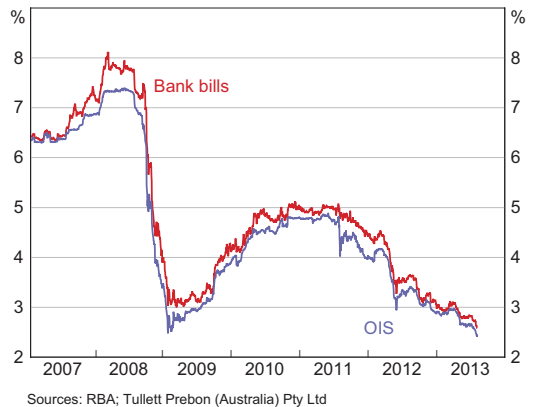
The Reserve Bank Board reduced the target for the cash rate from 2.75 per cent to 2.50 per cent at its August meeting. Prior to this, the pricing of money market instruments had pointed to some expectation within financial markets of a further easing in monetary policy during 2013, although the depreciation of the Australian dollar, at times, acted to temper these expectations. Rates on overnight indexed swaps (OIS) currently imply an expectation that the cash rate will be lowered to 2.25 per cent early in 2014 (Graph 4.1).

**Graph 4.1**  
Cash Rate Expectations



Rates on bank bills and certificates of deposit (CDs) are lower than at the time of the previous *Statement*, with the yield on 3-month bills reaching a historical low of 2.59 per cent in early August. The spread between 3-month bills and OIS rates has remained broadly stable at around 15 basis points in recent months (Graph 4.2).

**Graph 4.2**  
Yields of 3-month Bank Bills and OIS



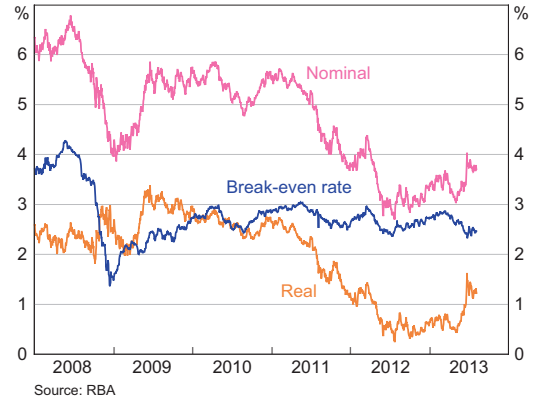
In contrast, yields on long-term Commonwealth Government securities (CGS) have increased significantly since the previous *Statement*, reflecting the rise in bond yields observed globally (Graph 4.3). In more volatile trading conditions, 10-year CGS yields briefly reached an 18-month high of 4.04 per cent in late June as speculation grew that the US Federal Reserve may taper its asset purchase program earlier than anticipated. Yields subsequently declined as this speculation abated and following the release of weaker-than-expected Chinese and domestic economic data. Reflecting the reassessment of the economic outlooks in Australia and the United States, the spread to 10-year US Treasuries has declined to around 100 basis points, its narrowest level since 2007 (Graph 4.4).

With the 10-year CGS yield 60 basis points above its levels of three months ago and the prices of shorter-term CGS supported by expectations of further monetary policy easing, the spread between 3-year

**Graph 4.3**  
**Australian Government Bond Yields**



**Graph 4.5**  
**Australian 10-year Government Bond Yields**



**Graph 4.4**  
**Australia/US 10-year Bond Differential**



and 10-year CGS is now around 120 basis points, its widest level in around four years.

Consistent with trends observed in offshore bond markets during recent months, yields on Treasury Indexed Bonds (TIBs) have increased by more than yields on nominal CGS of comparable maturity. The implied break-even inflation rate on 10-year CGS is now around 2.4 per cent, down around 50 basis points from its recent peak at the beginning of the year (Graph 4.5).

In August, the Australian Office of Financial Management (AOFM) outlined its planned issuance of CGS for the 2013/14 financial year following the release of the Australian Government's Economic Statement. The AOFM expects to issue around

\$4 billion of TIBs and around \$60 billion of nominal CGS during 2013/14, with the total CGS on issue expected to peak at around \$300 billion.

Trading of Australian Government bonds commenced on the Australian Securities Exchange (ASX) on 21 May with both nominal bonds and TIBs becoming available as exchange-traded Australian Government bonds. These instruments represent investments in CGS, but will be held as depositary interests within CHESS, a securities settlement system operated by the ASX. With the launch of exchange trading, the Reserve Bank has discontinued its facility for selling CGS to retail investors; for the time being, however, investors may continue to sell small parcels of CGS to the Bank.

The amount of state government bonds ('semis') outstanding has declined a little since the previous *Statement*, as new issuance has been less than maturities. The size of the semi-government bond market is expected to increase only modestly during the 2013/14 financial year. Although Western Australia's funding plan was not available at the time of writing, the states' overall funding requirements in the coming year are likely to be much lower than in the previous year, with gross bond issuance expected to decline significantly from \$42 billion in 2012/13 (Table 4.1). The prospect of reduced issuance contributed to spreads between semi-government debt and CGS remaining stable during the recent periods of market volatility.



**Table 4.1: Long-term Debt Issuance by State Borrowing Authorities<sup>(a)</sup>**

	Outstanding as at end May 2013 \$ billion	2013/14		2012/13
		Budget position \$ billion	Gross issuance \$ billion	Gross issuance \$ billion
New South Wales	62	-1.9	5.3	6.9
Queensland	84	-7.7	7.1	13.7
South Australia	15	-0.9	3.0	4.4
Tasmania	4	-0.4	0.4	1.0
Victoria	33	0.2	6.7	7.2
Western Australia <sup>(b)</sup>	26	na	na	8.6

(a) Securities with an original term to maturity of greater than one year

(b) The Western Australian 2013/14 budget was not available at the time of writing

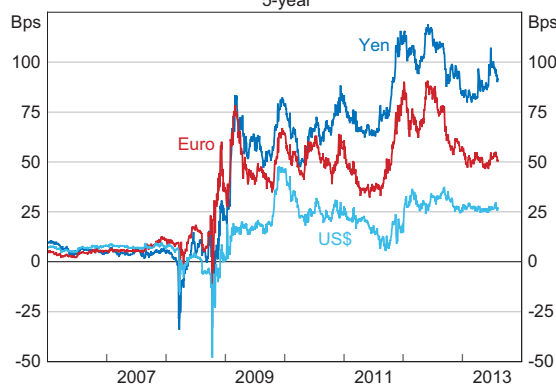
Sources: RBA; state treasury corporations

Issuance of domestic bonds by non-resident entities ('Kangaroos') has been around \$6 billion since the previous *Statement*. The difference in yields between Kangaroo bonds and CGS has widened in recent months, particularly for European issuers. Nonetheless, these spreads remain around their post-2007 lows. The cost of hedging Australian dollar issuance into US dollars and euros, the main currencies for foreign issuance, has increased only marginally since the previous *Statement*, with cross-currency basis swap spreads for these currencies remaining around their lowest level since late 2011 (Graph 4.6).

## Financial Intermediaries

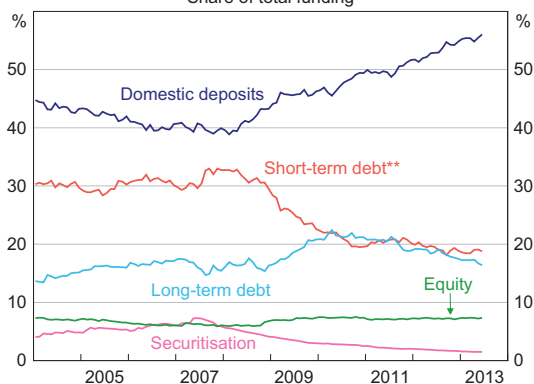
Competition for deposits remains vigorous, with deposits now accounting for 56 per cent of total bank funding (Graph 4.7). The relatively attractive pricing of at-call savings accounts has continued to drive a reallocation of deposits away from term deposits towards at-call deposits. Spreads on term deposit 'specials' have eased from their 2012 highs, although they still remain at elevated levels (Graph 4.8). At-call deposits are yet to be repriced following the latest reduction in the cash rate.

**Graph 4.6**  
**A\$ Cross-currency Basis Swap Spreads**  
5-year



Source: Bloomberg

**Graph 4.7**  
**Funding Composition of Banks in Australia\***  
Share of total funding



\* Adjusted for movements in foreign exchange rates

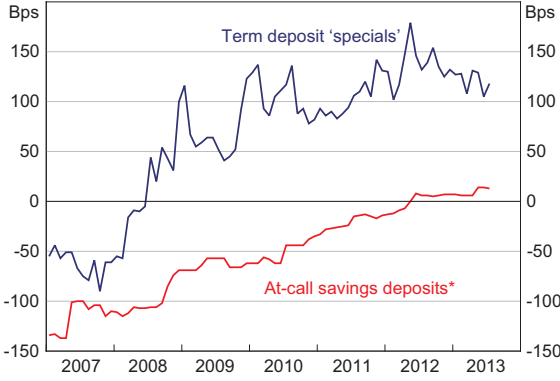
\*\* Includes deposits and intragroup funding from non-residents

Sources: APRA; RBA; Standard & Poor's

**Graph 4.8**

**Major Banks' Deposit Rates**

Spreads over money market rates of equivalent maturity



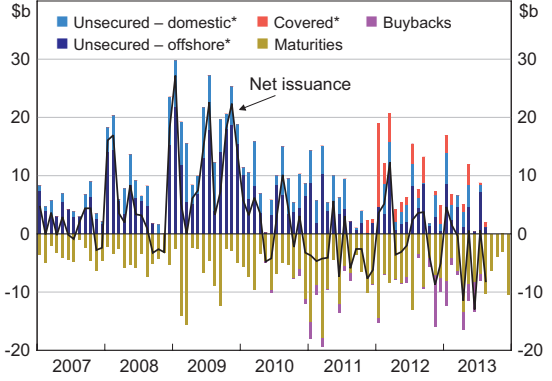
\* Spread to cash rate; existing customers only; excludes temporary bonus rates

Sources: Bloomberg; RBA

**Graph 4.9**

**Banks' Bond Issuance and Maturities**

A\$ equivalent



\* Latest month issuance to date

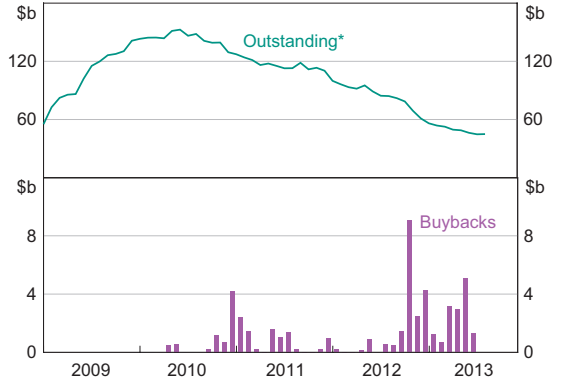
Source: RBA

Bond issuance by Australian banks of around \$17 billion since the *May Statement* has been somewhat less than maturities. Almost no long-term debt was issued during June as speculation surrounding the future course of US monetary policy created volatility within global debt markets (Graph 4.9). Banks have continued to buy back their government-guaranteed debt. A total of \$9 billion has been repurchased over the past three months, with the stock of guaranteed debt declining to \$45 billion (Graph 4.10). The lower level of issuance together with sizable maturities and buybacks has meant that the stock of outstanding bank bonds has fallen by around \$20 billion over the past three months.

**Graph 4.10**

**Australian Government-guaranteed Debt**

Long-term wholesale debt issued by ADIs



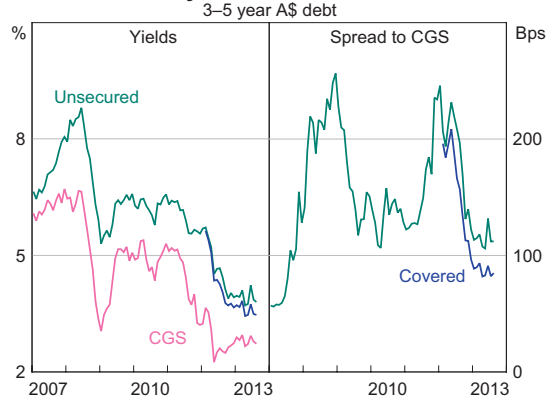
\* Adjusted for monthly exchange rate movements

Source: RBA

Secondary market spreads to CGS on the major banks' unsecured bonds widened in June as bond yields rose globally. Much of this widening of spreads was subsequently reversed, with spreads on unsecured bank bonds now only around 6 basis points wider than at the time of the previous *Statement* and broadly unchanged since the start of the year (Graph 4.11). Spreads on covered bonds have been less volatile.

Overall, the average cost of banks' outstanding unsecured long-term wholesale funding has been little changed over the past three months. This reflects both the low level of new bond issuance

**Graph 4.11**  
**Major Banks' Bonds**  
3-5 year A\$ debt



Sources: Bloomberg; RBA; UBS AG, Australia Branch

and the slower repricing of outstanding long-term wholesale debt compared with other funding liabilities of banks.

Since the previous *Statement*, \$2.5 billion of hybrid notes have been issued by banks. Of this issuance, nearly two-thirds will qualify as additional Tier I capital, and the remainder as Tier II capital. Following Moody's revision to its global rating methodology for banks, the subordinated debt ratings of eight Australian banks have been placed on review for possible downgrade. This was in response to government policy in many national jurisdictions, which now requires junior debt holders to suffer a loss before any public support is provided to banks' senior debt holders. The total value of outstanding Australian bank debt under review is around \$20 billion.

In contrast to other forms of long-term wholesale funding, securitisation activity has been relatively strong since the previous *Statement* with just under \$4 billion of residential mortgage-backed securities (RMBS) issued (Graph 4.12). RMBS pricing has also been steady, with spreads around their lowest level since the beginning of the financial crisis in 2007. Following an absence of issuance between February and mid May, \$2.6 billion has subsequently been issued in other asset-backed securities, including the first commercial mortgage-backed security

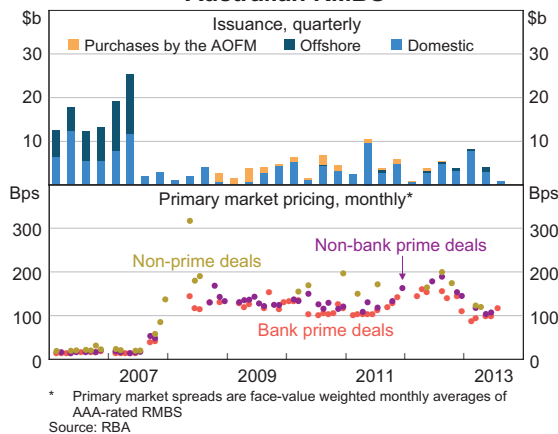
(CMBS) issue since 2011. The CMBS deal is backed by commercial loans and self-managed super fund mortgages secured by a mix of residential and commercial properties.

Moody's has finalised a new methodology for assessing tail risk for some Australian RMBS. (This is the risk of a disproportionately large loss emerging on the securitised pool at the end of a transaction's term.) As a result, 41 senior and mezzanine tranches of Australian RMBS from five issuers with an outstanding value of \$4.2 billion (equivalent to around 4 per cent of outstanding RMBS in the market) have been put on review for a possible downgrade. The tranches that are affected relate to RMBS issued before the global financial crisis, which provide less protection to senior note holders and have smaller liquidity reserves.

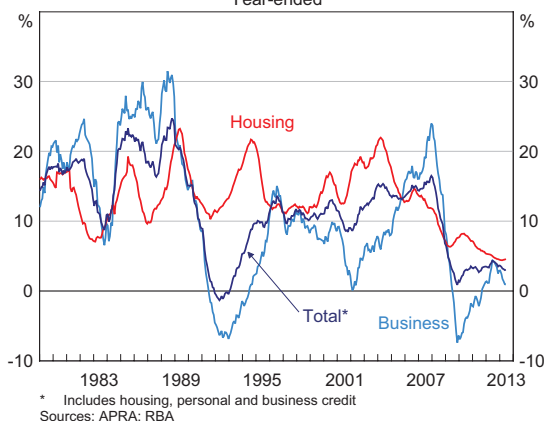
## Financial Aggregates

Total credit grew modestly over the June quarter, reflecting small increases in both household and business credit (Graph 4.13, Table 4.2). Growth in broad money has remained strong, largely reflecting ongoing inflows into saving and transaction deposit accounts.

**Graph 4.12**  
**Australian RMBS**



**Graph 4.13**  
**Credit Growth**  
Year-ended



**Table 4.2: Financial Aggregates**  
Percentage change<sup>(a)</sup>

	Three-month-ended		Year-ended
	March 2013	June 2013	June 2013
Total credit	0.6	1.0	3.1
– Owner-occupier housing	1.1	1.0	4.1
– Investor housing	1.4	1.6	5.7
– Personal	0.2	–0.1	0.2
– Business	–0.2	0.9	0.9
Broad money	1.2	1.8	5.4

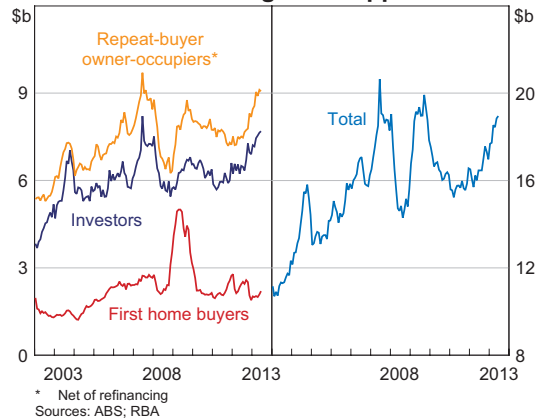
(a) Growth rates are break adjusted and seasonally adjusted  
Sources: APRA; RBA

## Household Financing

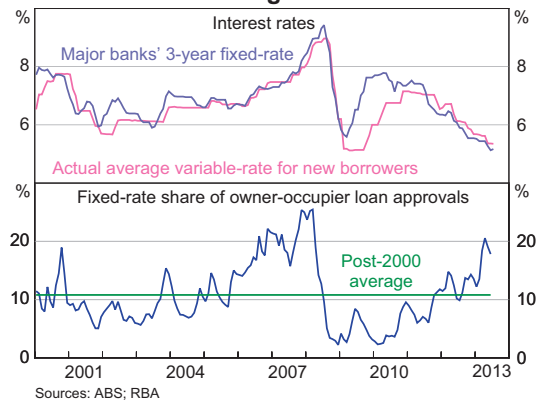
Growth in housing credit continued at a measured pace over the June quarter. Investor credit, the smaller component of housing credit, has continued to grow at a slightly faster rate than owner-occupier credit. The value of total housing loan approvals has increased in recent months to be around 15 per cent higher over the year (Graph 4.14). The increase in approvals has been underpinned by loans to repeat-buyer owner-occupiers and investors. In contrast, first home buyer approvals remain subdued following a number of changes to first home buyer incentives offered by state governments last year, which have refocused government assistance towards purchases of newly built homes. With households maintaining their higher pace of mortgage prepayments, and much of the growth in loan approvals being to repeat buyers and investors, growth in the level of housing credit has been relatively modest.

Competitive pressures in the fixed-rate mortgage market have intensified. The low level of interest rates and the favourable pricing differential between many advertised fixed-rates and discounted variable-rates have increased the number of existing borrowers choosing to fix some portion of their loan. These factors have also contributed to the increase in the proportion of owner-occupier loans approved at fixed-rates, which has remained around its highest level since early 2008 (Graph 4.15).

**Graph 4.14**  
Value of Housing Loan Approvals



**Graph 4.15**  
Housing Loans



In contrast to fixed-rate loans, most lenders have not adjusted their standard variable rate discounts offered to new customers in recent months. However, competition remains strong with most lenders reducing their standard variable housing loan rates by an amount equal to the 25 basis point reduction in the cash rate in May (Table 4.3). At the time this *Statement* was finalised, a number of lenders had also announced that they will reduce their standard variable housing loan rates by at least a further 25 basis points.

Personal credit, which is a small component of total credit, was little changed over the June quarter. Decreases in the total value of credit card balances outstanding and other revolving credit facilities were largely offset by an increase in the value of personal fixed-term loans. A large portion of these fixed-term loans were extended by car finance companies, with personal motor vehicle sales remaining elevated in the June quarter. Preliminary data suggest that the

value of outstanding margin lending fell over the June quarter. Although there was an increase in equity market volatility during the quarter, the overall number of margin calls remained at a very low level.

While advertised rates on most credit cards and unsecured personal loans are little changed, average variable rates on home equity loans and margin loans have fallen broadly in line with the change in the cash rate since the end of April.

## Business Financing

Australian corporate bond issuance has remained relatively subdued since the previous *Statement*, with around \$6 billion issued (Graph 4.16). Most of this issuance was in offshore markets, with Rio Tinto accounting for more than half of the total.

Secondary market spreads to CGS on corporate bonds have widened since the previous *Statement*, although they remain near their lowest levels since the onset of the financial crisis in 2007 (Graph 4.17).

**Table 4.3: Intermediaries' Variable and Fixed Lending Rates**  
Prior to the August cash rate reduction

	Level at 30 July 2013 Per cent	Change since 30 April 2013 Basis points	Change since end October 2011 Basis points
<b>Housing loans</b>			
– Standard variable rate <sup>(a)</sup>	6.18	–25	–161
– Package variable rate <sup>(b)</sup>	5.35	–26	–168
– Fixed rate <sup>(c)</sup>	5.17	–27	–134
<b>Personal loans</b>			
– Variable rate	11.75	–6	–81
<b>Small business (variable rates)</b>			
Residentially secured, advertised			
– Term loans	7.35	–25	–165
– Overdraft	8.22	–25	–163
Average rate <sup>(d)</sup>	6.95	–25	–168
<b>Large business</b>			
Average rate <sup>(d)</sup> (variable rate and bill funding)	4.92	–24	–211

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

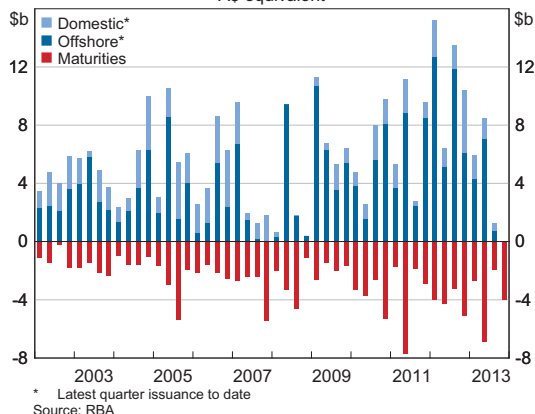
(b) Average of the major banks' discounted package variable rates on new, \$250 000 full-doc loans

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

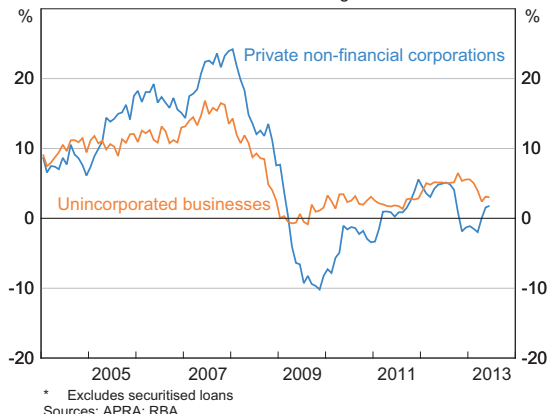
(d) Rates on outstanding business lending (includes discount)

Sources: ABS; APRA; RBA

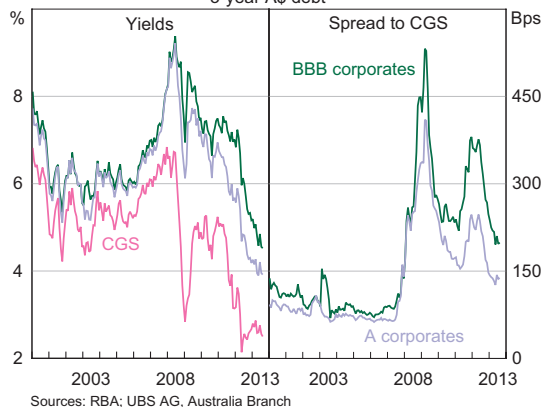
**Graph 4.16**  
**Australian Corporates' Bond Issuance**  
A\$ equivalent



**Graph 4.18**  
**Business Credit\***  
Six-month annualised growth



**Graph 4.17**  
**Australian Corporates' Bond Pricing**  
3-year A\$ debt

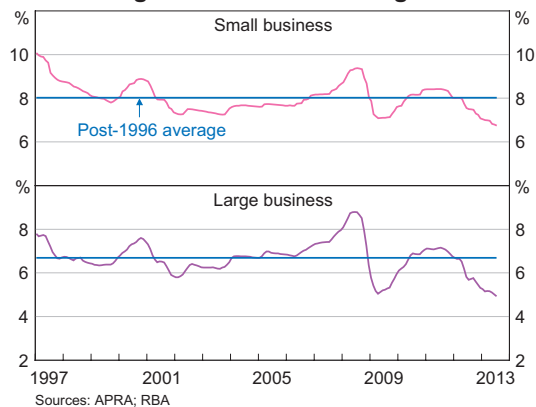


As with bank bonds, the widening of spreads was consistent with global trends and was largely prompted by market speculation surrounding the US Federal Reserve's future asset purchases.

Intermediated business credit increased by 0.9 per cent over the June quarter, with lending to both private trading corporations and unincorporated businesses increasing modestly (Graph 4.18). A sizeable share of the growth in business credit over the period was a result of foreign currency valuation effects stemming from the depreciation of the Australian dollar. Overall, growth in business credit has remained subdued during the past year, consistent with the slow pace of business investment outside the mining sector.

The cost of intermediated business borrowing has continued to decline since the previous *Statement*, with average interest rates on outstanding small and large business lending below their previous troughs in April 2009 (Graph 4.19). These reductions largely reflected movements in wholesale benchmark rates and the reduction in the cash rate.

**Graph 4.19**  
**Average Business Borrowing Rates**



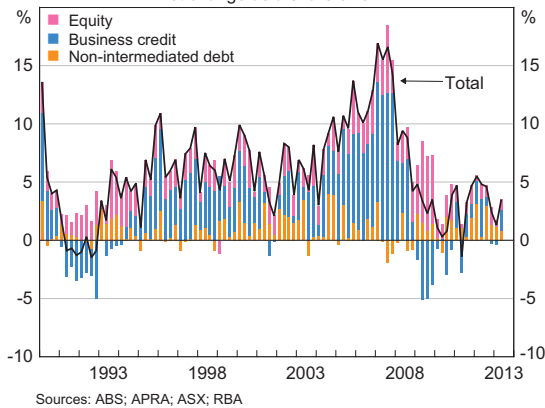
In line with seasonal patterns, the value of domestic syndicated loan approvals – of which around two-thirds are included in domestic business credit – picked up in the June quarter. The increase in activity was broad based and driven by a large number of refinancing loan approvals, although capital expenditure by the mining sector has continued

to decline. Similar to the general trend in business credit, the value of outstanding syndicated lending by Asian banks has continued to expand.

Equity raisings by listed corporations remain moderate, with just under \$4 billion in net equity raised during the June quarter. Merger and acquisition activity was subdued, with \$8 billion in transactions announced by listed corporations since the May *Statement*. Consolidation in the utilities sector accounted for much of the activity.

Overall, external funding of businesses rose by the equivalent of 3.5 per cent of GDP in the June quarter (Graph 4.20). The pick-up in growth was mainly driven by the increase in credit provided by financial institutions, which, as discussed above, was boosted by the valuation effects of a lower Australian dollar on the stock of foreign currency loans.

**Graph 4.20**  
**Business External Funding**  
Net change as a share of GDP

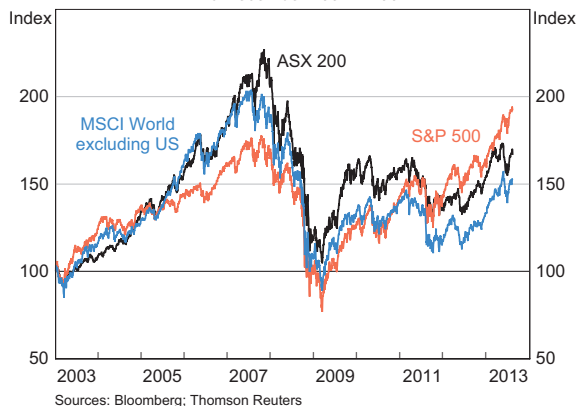


## Equity Markets

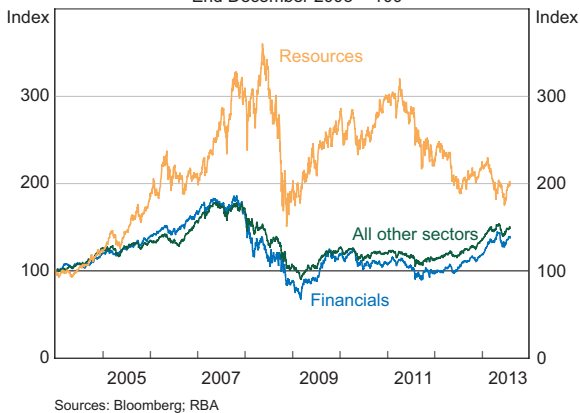
Australian equity prices have declined by 4 per cent since the previous *Statement*, weighed by uncertainty about the outlook for economic growth in China and uncertainty over the path of monetary policy in the US (Graph 4.21).

Resources sector share prices fell by 3 per cent since the previous *Statement*, despite declining almost 14 per cent at one stage (Graph 4.22). Movements

**Graph 4.21**  
**Share Price Indices**  
End December 2002 = 100



**Graph 4.22**  
**Australian Share Price Indices**  
End December 2003 = 100



in mining company share prices have tended to track movements in iron ore, coal and other base metal prices. The decline in the gold price prompted Australia's largest listed gold mining company, Newcrest, to announce asset writedowns of up to \$6 billion. In contrast, share prices of energy companies have been broadly unchanged since the previous *Statement* due to support from higher oil prices.

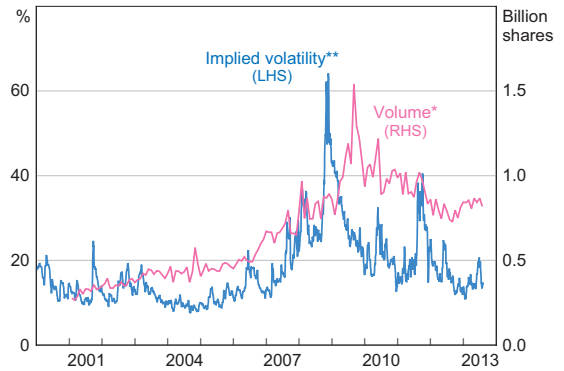
Financial sector share prices declined by 5 per cent, largely due to declines in the prices of high-yielding bank stocks. Notwithstanding this decline, financial sector share prices remain 16 per cent higher over

the year to date. Equities in other sectors have been mixed, with the utilities and consumer staples sectors falling by 5 per cent since the previous *Statement*. The depreciation of the Australian dollar has generally supported sectors with large foreign revenue streams.

Measures of volatility, such as those derived from options, are little changed from the previous *Statement*, despite briefly rising in June as prices in international markets declined (Graph 4.23). Trading volumes have remained broadly stable over 2013.

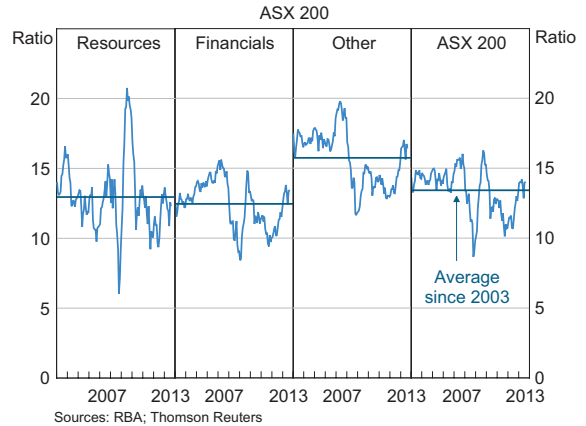
Forward price earnings (PE) ratios for Australian equities are slightly above their long-run averages in aggregate (Graph 4.24). With earnings expectations only slightly higher, PE ratios have largely tracked movements in prices. ↗

**Graph 4.23**  
**Equity Volatility and Trading Activity**



\* ASX 200 average daily volume per month traded on the ASX and Chi-X exchanges, seasonally adjusted  
 \*\* 5-day moving average, ASX VIX from 2008, implied volatility from ASX SPI options prior to 2008  
 Sources: ASX; Bloomberg; RBA; Thomson Reuters

**Graph 4.24**  
**Australian Forward Price Earnings Ratios**



Sources: RBA; Thomson Reuters



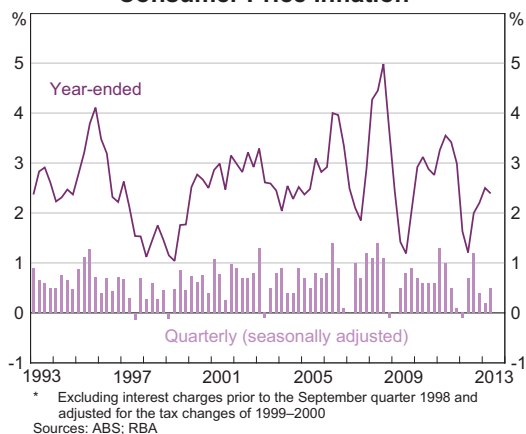
# 5. Price and Wage Developments

## Recent Developments in Inflation

Consumer price inflation has been moderate in recent quarters, notwithstanding a slight pick-up in the quarterly pace of inflation in the June quarter. The consumer price index (CPI) rose by 0.5 per cent on a seasonally adjusted basis in the June quarter, following an increase of 0.2 per cent in the March quarter, to be 2.4 per cent higher over the year (Graph 5.1, Table 5.1). The increase in inflation in the quarter was mainly attributable to a broad-based turnaround in tradables inflation, while non-tradables inflation eased slightly.

Taken together, the various measures suggest that underlying inflation was a touch above ½ per cent in the quarter, which was a small increase from the March quarter. In year-ended terms, underlying

**Graph 5.1  
Consumer Price Inflation\***



**Table 5.1: Measures of Consumer Price Inflation**  
Per cent

	Quarterly <sup>(a)</sup>		Year-ended <sup>(b)</sup>	
	March quarter 2013	June quarter 2013	March quarter 2013	June quarter 2013
Consumer Price Index	0.4	0.4	2.5	2.4
Seasonally adjusted CPI	0.2	0.5	–	–
– Tradables	–1.1	0.1	–0.2	–0.7
– Tradables (excl volatile items and tobacco) <sup>(c)</sup>	–1.1	0.1	–1.4	–1.3
– Non-tradables	0.9	0.8	4.2	4.3
<i>Selected underlying measures</i>				
Trimmed mean	0.4	0.5	2.3	2.2
Weighted median	0.5	0.6	2.6	2.6
CPI excl volatile items <sup>(c)</sup>	0.3	0.6	2.4	2.6

(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

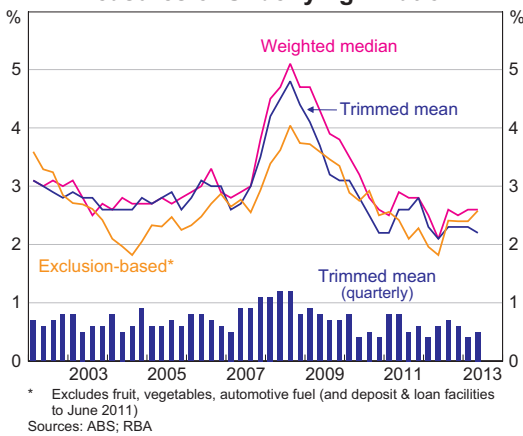
inflation was a little under 2½ per cent, where it has remained since the middle of last year (Graph 5.2). The year-ended rate continues to be affected by the introduction of the carbon price in July 2012. While it is not possible to identify the effects precisely, outcomes in recent quarters have been consistent with the earlier expectation of only a modest effect on underlying inflation. The Bank’s forecasts assumed this effect to be around ¼ percentage point over the year to June 2013 (see August 2012 *Statement*).

Tradables prices (excluding volatile items and tobacco) rose by 0.1 per cent in the June quarter (Graph 5.3). Much of the turnaround in tradables price inflation in the quarter was attributable to

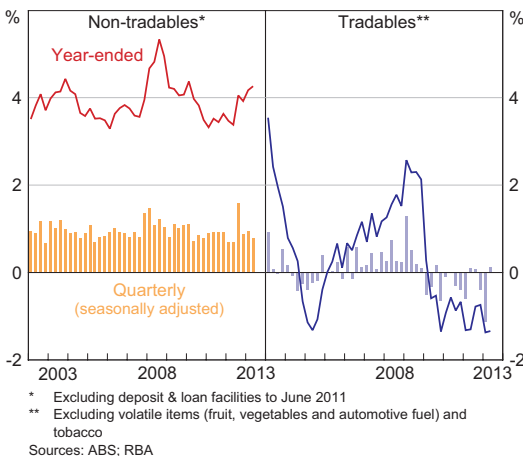
consumer durables prices, which were unchanged following recent pronounced declines. Clothing and footwear prices rose strongly in the quarter while the pace of deflation in the prices of motor vehicles and household electrical items eased. Given the sizeable falls in tradables prices in preceding quarters, however, tradables prices remain noticeably lower than a year ago. Indeed, tradables prices have declined steadily since 2010, reflecting the appreciation of the Australian dollar since 2009 as well as pronounced competitive pressures that have constrained firms’ margins and driven increased efforts to contain costs. The recent depreciation of the exchange rate is unlikely to have had much of an effect on tradables prices as yet, with higher import costs typically taking some time to pass through to final retail prices for most items.

Inflation in non-tradables prices eased in the June quarter to be below the pace of the previous three quarters. Much of the easing in the quarter was driven by a softening in inflation in market services prices, for which labour costs tend to be a significant determinant (Graph 5.4). Inflation in new dwelling costs also declined in the quarter, though it has increased over the past year, consistent with reports of increased demand and rising costs of building materials. Inflation in rents increased in the quarter, and continues to outpace overall inflation, consistent with the vacancy rate being below its historical average.

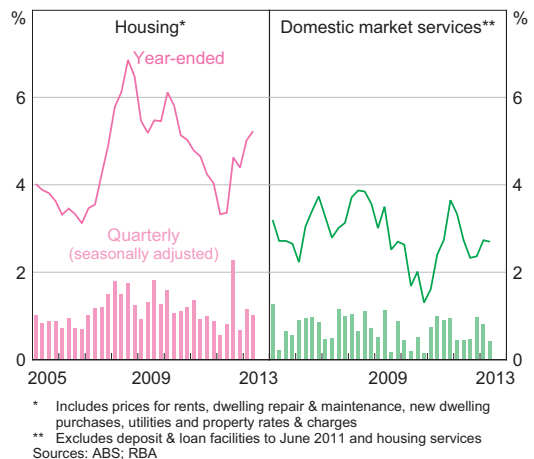
**Graph 5.2**  
**Measures of Underlying Inflation**



**Graph 5.3**  
**Non-tradables and Tradables Inflation**



**Graph 5.4**  
**Non-tradables Inflation**



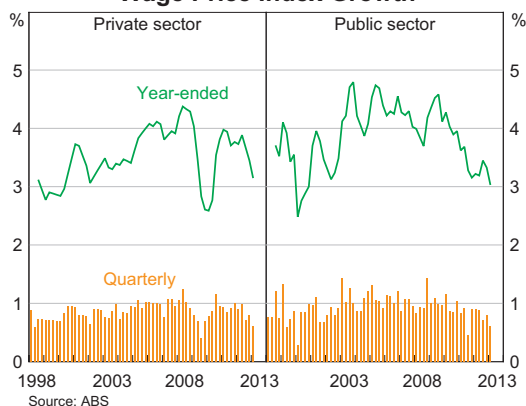
Food prices (excluding fruit and vegetables) increased by 0.2 per cent in the quarter, in line with the relatively subdued outcomes for food price inflation observed since 2009. This is consistent with continued reports from liaison that competition among supermarkets is placing downward pressure on prices. Apart from meals out and takeaway items, the small pick-up in food price inflation in the quarter was broad based across a range of items.

## Costs

The pace of wage growth slowed further in the March quarter, consistent with the softening in labour market conditions observed since the middle of last year (see 'Box B: The Slowing in Wage Growth'). The wage price index rose by 0.7 per cent in the March quarter, to be 3.2 per cent higher over the year, which is ½ percentage point below the average of the past decade. In recent quarters there has been a pronounced slowing in wage growth in the private sector (Graph 5.5). Public sector wage growth has also moderated, in line with ongoing fiscal restraint at both the state and federal levels. Business surveys and liaison suggest that wage growth remained subdued in the June quarter and firms have tended to report that they expect a moderation in wage growth over the period ahead.

The slowing in private sector wage growth has been broad based across industries, including mining, construction, wholesale trade, transport

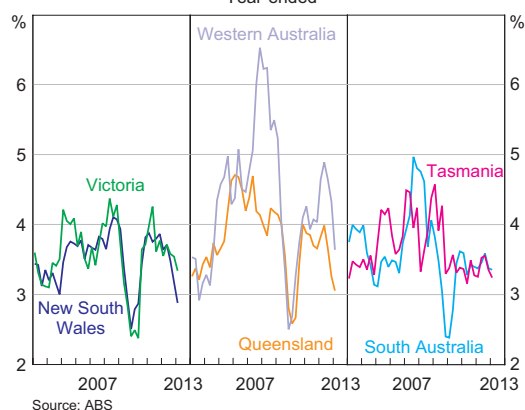
**Graph 5.5**  
Wage Price Index Growth



and professional services. Aggregate wage growth in industries more directly exposed to consumer demand has remained subdued, at levels well below historical averages.

Private sector wage growth slowed in all states over the year to the March quarter (Graph 5.6). In New South Wales, wage growth in the private sector looks to have been softer than the national average across a range of industries. While wage growth in Western Australia remains higher than in the other states, it has declined noticeably since the middle of last year, in line with an easing in labour demand associated with the softening in the resources sector. The pace of wage growth in Queensland has also fallen sharply over this period, consistent with the higher unemployment rate in that state.

**Graph 5.6**  
Private Wage Price Index Growth by State



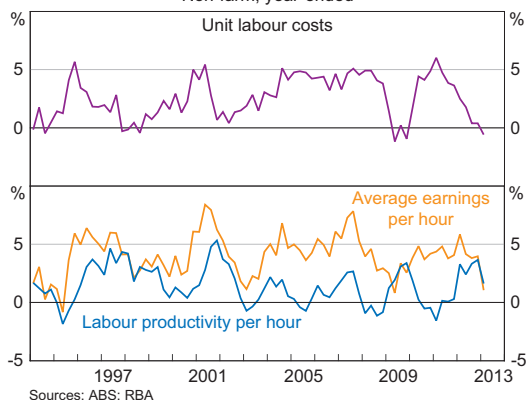
The slowing in wage growth has contributed to a moderation in measures of unit labour cost growth. Unit labour costs, as measured, declined over the year, with the sharp slowing in the growth of average earnings more than offsetting an easing in labour productivity growth from its recent fast pace (Graph 5.7).

Producer price data suggest that domestic inflation pressures were modest across all stages of production over the year to the June quarter.

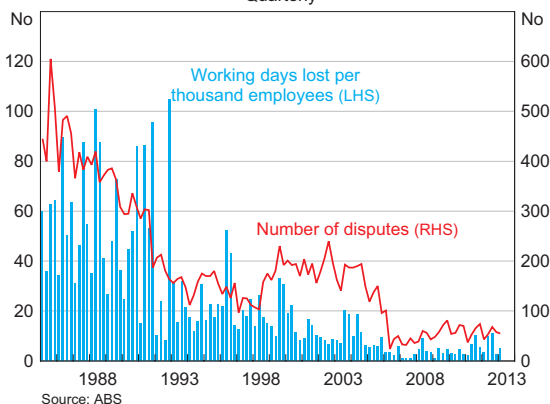
ABS data indicate that the number of working days lost as a result of industrial disputes increased slightly

in the March quarter from a low level, but remained below the decade average (Graph 5.8). This quarterly increase reflected a pick-up in the average number of employees per dispute and the average duration of disputes, while the number of disputes fell slightly.

**Graph 5.7**  
**Unit Labour Costs Growth**  
Non-farm, year-ended



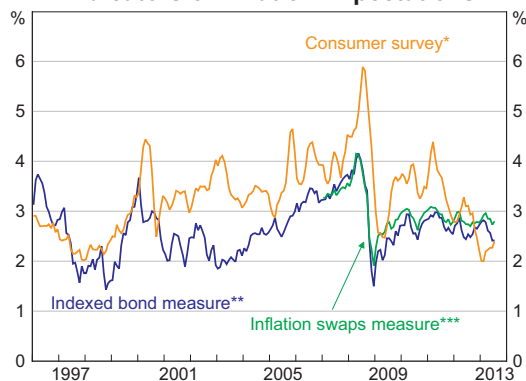
**Graph 5.8**  
**Industrial Disputes**  
Quarterly



## Inflation Expectations

Measures of inflation expectations generally remain below their historical average levels (Graph 5.9, Table 5.2). Since the *May Statement*, market economists have revised down their expectations for inflation over 2013 and 2014, while union officials' forecasts for inflation over 2014 have also been revised down. Financial market measures of inflation expectations declined a little over the past few months, and remain below their historical average levels. The Melbourne Institute's measure of consumer inflation expectations has increased, but also remains low compared with its history.

**Graph 5.9**  
**Indicators of Inflation Expectations**



\* Three-month moving average of the trimmed mean expectation of inflation over the next year  
 \*\* Break-even 10-year inflation rate on indexed bonds  
 \*\*\* Expectations of average annual inflation over the next 10 years  
 Sources: Bloomberg; Melbourne Institute of Applied Economic and Social Research; RBA

**Table 5.2: Median Inflation Expectations**  
Per cent

	Year to December 2013			Year to December 2014	
	February 2013	May 2013	August 2013	May 2013	August 2013
Market economists	2.6	2.3	2.2	2.7	2.6
Union officials <sup>(a)</sup>	2.5	2.5	2.5	2.8	2.6

(a) Excluding carbon price

Sources: RBA; Workplace Research Centre

## Box B

# The Slowing in Wage Growth

Over the past year, a range of measures of wages have displayed a decline in the pace of growth (Graph B1). The wage price index (WPI) measures wages and salaries for a constant quantity and quality of work performed. In the year to March, the WPI grew at its slowest pace since the early 2000s, other than for a short period of weak growth following the global financial crisis. Growth in the measure of average earnings from the national accounts (AENA) per hour has also slowed. This measure covers wages across the economy but also captures other labour costs, such as payments-in-kind and bonuses, and it tends to be more volatile. The moderation in growth has also been evident across wages set by enterprise bargaining agreements (EBAs) as well as awards and

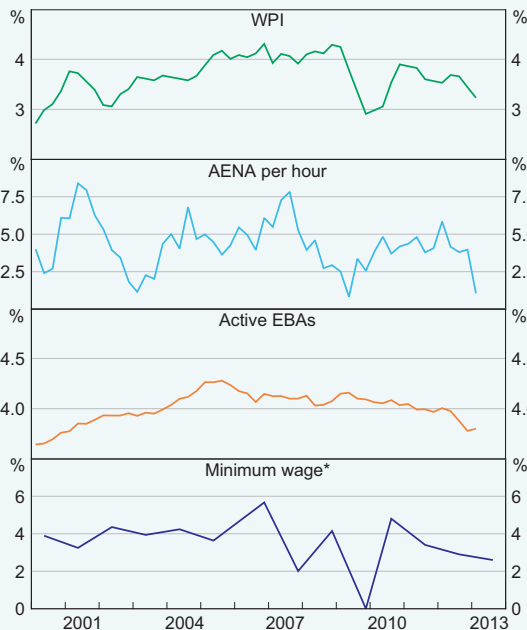
the minimum wage, which are determined centrally. Real wage growth has declined by less than nominal wage growth over recent quarters (depending on the measure chosen) given that both inflation and inflation expectations have declined over that period.

The greater volatility apparent in growth in AENA per hour than in the WPI in part reflects compositional change, such as shifts in the industry and occupational composition of employment, as well as changes in the share of ordinary versus overtime hours worked. In particular, over the past year increases in employment have tended to be greater in lower-paying industries while employment has increased by less and even declined in some higher-paying industries (such as mining). This change in the composition of employment lowers the average level of wages, and so may partly explain the weakness of the growth in AENA per hour relative to the WPI. The extent of overtime, the use of promotions and the payment of bonuses is also likely to have declined somewhat in response to more subdued labour market conditions, depressing the growth in AENA per hour.

A number of factors are likely to have contributed to the overall softer wage outcomes observed recently. In the public sector, wage growth has been constrained by fiscal restraint. More broadly, the gradual increase in the unemployment rate over the past year or so indicates that there are more people actively looking for work, placing downward pressure on wages (Graph B2).

However, the unemployment rate may not fully capture the extent to which conditions in the labour market have softened. For example, firms may have responded to weaker demand by reducing the

**Graph B1**  
**Wage Growth**  
Year-ended



\* The time period over which each increase applies varies  
Sources: ABS; DEEWR; Fair Work Commission

**Graph B2**  
**Wage Growth and Unemployment\***  
 2005–2013, quarterly



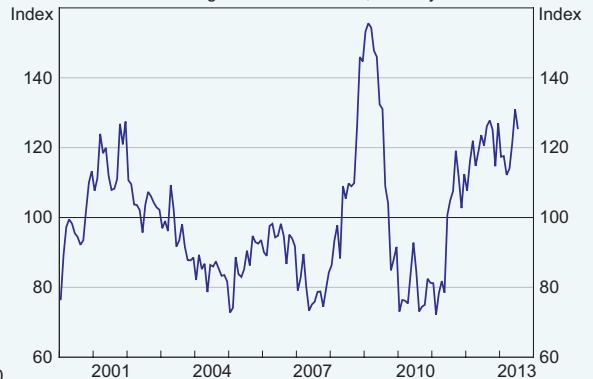
\* Wage price index growth (year-ended) and unemployment rate (year-average) from March quarter 2005 to March quarter 2013  
 Sources: ABS; RBA

hours worked by their staff rather than by reducing the number of employees. Indeed, ABS data on average hours worked have trended lower since late 2011, consistent with labour demand being weaker than implied by the rate of aggregate employment growth. Lower average hours worked are also consistent with firms facing greater pressure to increase productivity in recent years.

Workers' sense of job security appears to be relatively low, which may also be contributing to lower wage demands. In particular, household survey data indicate that there has been a rise in the proportion of respondents expecting higher unemployment in a year's time and this proportion is now at a relatively high level (Graph B3).

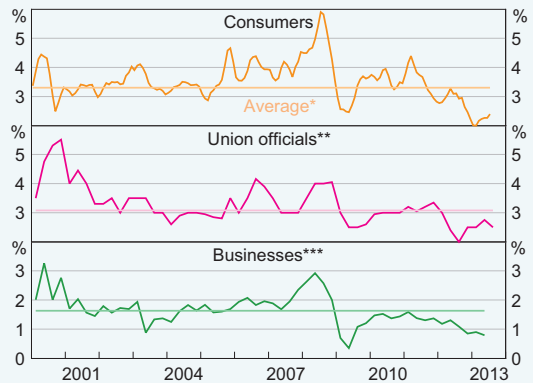
Inflation and inflation expectations also influence wage-bargaining outcomes. Employees generally look for higher nominal wage growth when inflation is higher, in order to maintain the purchasing power of their earnings. Consumers' and unions' inflation expectations have been relatively subdued over the past year or so, implying that employees may have been more willing to accept lower nominal wage increases than they would have otherwise (Graph B4). Since inflation expectations are often affected by recent inflation, the moderate pace of

**Graph B3**  
**Unemployment Expectations\***  
 Average since 1980 = 100, monthly



\* Index based on proportion of respondents expecting higher unemployment in the next year  
 Source: Melbourne Institute and Westpac

**Graph B4**  
**Inflation Expectations**



\* Post-1996 average  
 \*\* Median inflation expectation of union officials over the year ahead (excluding carbon price)  
 \*\*\* Annualised measure of expected inflation in selling prices over the quarter ahead  
 Sources: Melbourne Institute of Applied Economic and Social Research; NAB; RBA; Workplace Research Centre

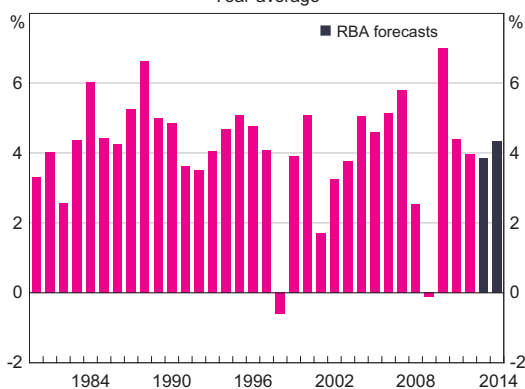
inflation in recent quarters may have also influenced employees' wage demands. Moreover, firms will be less willing to offer high growth of wages if the prices of the goods and services they sell are rising at a slower pace. Over recent years, growth in firms' domestic output prices has been subdued and the prices received for exports have declined. The resulting push to contain costs in some industries is likely to have contributed to the downward pressure on wage growth. ✖

## 6. Economic Outlook

### The International Economy

Growth of Australia's major trading partners in 2013 is expected to be a bit below its decade average of around 4 per cent, before picking up to 4¼ per cent in 2014 (Graph 6.1). For both 2013 and 2014, this outlook is a little weaker than that in the *May Statement*, although there are differences across countries in the forecast revisions. These forecasts are broadly similar to those published by other forecasters.

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



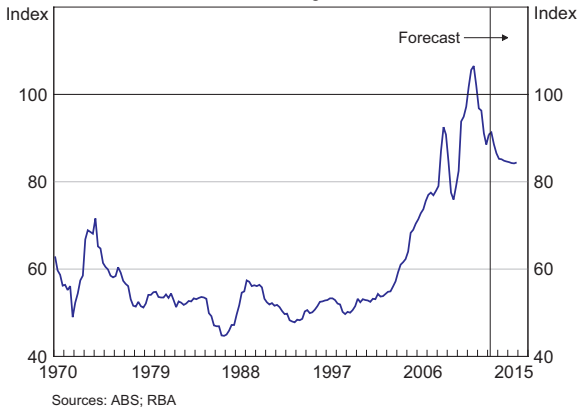
\* Aggregated using total export shares  
Sources: ABS; CEIC; RBA; Thomson Reuters

For most countries, the outlook for growth has been revised down, with the exception of Japan where growth is now expected to be stronger in 2013 as a result of policy actions. Growth in China

is anticipated to continue at around recent rates, having slowed over the past year. This is somewhat less than previously expected, reflecting a weaker contribution from external demand and diminished prospects for an upswing in domestic demand. This assessment reflects recent statements and actions taken by the Chinese authorities indicating that they are increasingly focused on achieving a more sustainable pace of growth that could be close to, or even slightly below, the official growth target of 7.5 per cent. In the rest of east Asia, growth forecasts for 2013 have been revised down a little, owing to weaker-than-expected data for the March quarter and more subdued prospects for external demand. Growth is still expected to pick up gradually in the United States, supported by improvements in the labour market, an easing in the pace of fiscal tightening and rising household wealth. Conditions in the euro area are expected to remain weak throughout 2013.

The terms of trade are estimated to have been little changed in the June quarter, after an increase in the March quarter owing to an earlier rise in the price of iron ore (Graph 6.2). The terms of trade are forecast to decline gradually over the next couple of years as the global supply of bulk commodities increases. The profile for the terms of trade is a little lower than in the *May Statement*. In the near term, subdued coking coal and gold prices weigh on the forecast for the terms of trade.

**Graph 6.2**  
**Terms of Trade**  
 2010/11 average = 100



## Domestic Activity

In preparing the domestic forecasts, a number of technical assumptions have been employed, as usual. The exchange rate is assumed to remain at its current level over the forecast period (A\$ at US\$0.90 and the TWI at 69, which is around 10 per cent lower than was assumed in the *May Statement*). The forecasts are based on the price for Brent oil remaining at US\$104 per barrel, similar to the assumption in May. The cash rate is assumed to be unchanged over the forecast period at 2.50 per cent. This profile is slightly higher than market expectations, which currently imply a further 25 basis point reduction in the cash rate by the end of the year. Given the low level of the cash rate, variable borrowing rates are currently around their 2009 lows. The forecasts assume that annual growth in the working-age population will be 1.8 per cent over the forecast horizon, reflecting forecasts by the Department of Immigration and Citizenship. Finally, the forecasts are based on the most recent federal and state budgets, and do not take into account proposed government policy changes since then, which as noted in the 'Domestic Economic Conditions' chapter, would have a somewhat sharper fiscal consolidation at the end of the forecast horizon.

The Australian economy expanded at a little below-trend pace over the year to the March quarter,

with strong growth in exports offset by subdued demand in the domestic economy. The available indicators point to growth remaining below trend in the June quarter. Retail sales data and the Bank's business liaison suggest that consumption growth has remained weak over recent months and measures of consumer sentiment have fallen back towards average levels. Labour market indicators also point to ongoing softness in activity, while business surveys suggest that conditions remain below average. Consistent with this, non-mining investment is expected to grow only modestly in the near term, while the completion of a number of mining investment projects is expected to see mining investment decline.

In contrast, residential building approvals increased in the June quarter, suggesting that the recovery in dwelling investment will persist. Recent imports data have been weaker than expected, while export growth has remained strong. Given the depreciation of the exchange rate since the *May Statement*, this trend of export strength and below-average growth in imports is expected to continue.

GDP growth is expected to remain a little below trend at close to 2½ per cent through to mid 2014, before picking up to above-trend growth by the end of the forecast horizon as the global economy experiences above-trend growth and the stimulatory effects of the recent exchange rate depreciation and current low level of interest rates lead to an improvement in business conditions and so investment (Table 6.1). In the near term, the outlook is a little weaker than that presented in the *May Statement*, but at the aggregate level it is little changed over 2014. The softer outlook over the next few quarters reflects the somewhat weaker data received since May, for household consumption and business investment in particular. The depreciation since May is expected to bolster growth, working to boost activity in the trade-exposed sector. At the same time though, the profile for mining investment has been revised down. Overall, the change in the forecasts reflects the balance of the boost to activity from the recent



**Table 6.1: Output Growth and Inflation Forecasts<sup>(a)</sup>**  
Per cent

	Year-ended					
	June 2013	Dec 2013	June 2014	Dec 2014	Jun 2015	Dec 2015
GDP growth	2½	2¼	2½	2½–3½	2¾–3¾	2¾–4¼
Non-farm GDP growth	2½	2¼	2½	2½–3½	2¾–3¾	2¾–4¼
CPI inflation	2.4	2	2½	2–3	2–3	1¾–2¾
Underlying inflation	2½	2¼	2¼	2–3	2–3	2–3
	Year-average					
	2012/13	2013	2013/14	2014	2014/15	2015
GDP growth	2¾	2¼	2½	2¼–3¼	2½–3½	2¾–3¾

(a) Technical assumptions include A\$ at US\$0.90, TWI at 69 and Brent crude oil price at US\$104 per barrel  
Sources: ABS; RBA

depreciation, the recent run of data, and a downward revision to the forecast path of mining investment.

The forecast for consumption spending has been revised lower since the *May Statement*, with the available partial data pointing to near-term weakness. Retail sales were unchanged in the June quarter, while consumer sentiment has fallen back towards average levels after rising earlier in the year. Slower growth of wages and somewhat subdued employment growth are also expected to continue to restrain growth in labour income. In contrast, conditions and confidence in the established housing market have improved, helping to support growth in household wealth. Overall, growth of consumption spending is expected to be below trend over 2013, before gradually rising to around trend by 2015. The forecasts embody the household saving ratio remaining around the 10–11 per cent range where it has now been for several years.

The forecast for dwelling investment is little changed in the near term and has been increased slightly in 2015. The environment for investment remains favourable with low interest rates, high rental yields, support for first home buyers that favours new dwellings, and the improvement in conditions in the established housing market. Forward-looking indicators such as building approvals, loan approvals and first home owner grants for new construction

also remain consistent with a modest recovery in dwelling activity.

The outlook for mining investment has been revised lower reflecting several considerations. The ABS' March quarter capital expenditure (Capex) survey recorded a significant decline in mining investment and growth of capital imports remained weak through the June quarter. While the expectations component of the Capex survey remains strong, this is inconsistent with information from the Bank's liaison, few new commitments to mining projects and a lack of current expenditure on the development and planning work that would typically precede new projects. This is especially noticeable in the coal industry where lower prices of late have led to a significant curtailment of this type of expenditure. Given this, the expectation is that mining investment will decline somewhat over the next year or so before falling away more noticeably thereafter. The impact on GDP will be smaller in magnitude than the decline in mining investment suggests because around half of this investment spending is estimated to be on imported capital goods.

Overall, non-mining investment is expected to remain subdued in the near term. Surveys of firms' investment intentions and the Bank's liaison with firms suggest that there will be only modest growth

over the next year or so. Also, office vacancy rates have increased and measures of capacity utilisation remain a little below average. Non-residential construction is, however, expected to be supported by the large stock of work to be done, predominantly in the healthcare sector. Further out in the forecast horizon, non-mining investment is expected to experience a stronger pick-up. This reflects the recent depreciation, low interest rates and strong population growth and the fact that for some time investment has been adding to the capital stock at well below the historical norm.

The outlook for export volumes remains strong with exports expected to make a significant contribution to GDP growth in the coming years. Given the significant investment that has occurred to date, and is currently underway, bulk commodity exports are expected to increase strongly over the next few years. More broadly, activity in the traded sector is expected to be a little stronger in light of the recent depreciation of the Australian dollar.

In aggregate, federal and state governments are planning to undertake fiscal consolidation over the next few years, and so growth in public demand is expected to be low relative to its historical average. The forecasts are based on the state and federal budgets, with a small reduction in the consolidated budget deficit in 2013/14 and larger reductions in the following two years.

Labour market conditions have remained somewhat subdued in recent months, with modest employment growth. Indicators of labour demand have declined and reports from liaison indicate that firms remain cautious about hiring staff. Reflecting the revision to GDP growth forecasts, the outlook for employment growth is slightly lower than at the time of the *May Statement*. The unemployment rate is expected to continue its recent upward trend over the next few quarters, but stabilise and then start to decline toward the end of the forecast horizon as GDP growth picks up to above-trend rates.

The somewhat subdued labour market conditions are expected to keep labour costs well contained

over the forecast horizon. Growth in wages has moderated recently in line with increased spare capacity in the labour market, a sense of job insecurity among workers, lower inflation expectations, efforts to contain costs by firms in some industries and fiscal restraint. Overall, growth in wages is expected to remain at around 3 per cent over most of the forecast horizon.

## Inflation

The inflation forecast is broadly unchanged from the *May Statement* reflecting the net effect of two offsetting influences. The slower outlook for wages growth, and the economy in general, will tend to push down inflation. Working in the other direction is the recent depreciation of the exchange rate, which is expected to lead to higher prices for tradable items. In the near term, these effects are expected to largely balance one another and year-ended underlying inflation is likely to remain close to the low end of the inflation target before moving back toward the centre of the target range around the middle of next year. The higher price of automotive fuel since the *May Statement* will contribute to somewhat higher CPI inflation in the near term.

Largely as expected, the quarterly pace of inflation picked up slightly in the June quarter. The various measures suggest that underlying inflation was a touch above ½ per cent in the quarter and remained a bit below 2½ per cent over the year. The pick-up in underlying inflation in the quarter reflected a small increase in the prices of tradable items following significant declines in recent quarters, while non-tradables inflation eased somewhat.

The recent depreciation of the exchange rate is unlikely to have affected underlying inflation in the June quarter, but it is expected to exert upward pressure on the prices of tradable items over the next few years. While some consumer prices, such as automotive fuel, tend to respond quickly to higher import prices, in general it usually takes some time before the effect of the depreciation on underlying inflation becomes apparent. In part, this is because

importers have a significant degree of exchange rate hedging and some prices are subject to pre-existing contracts. The forecasts anticipate that the recent depreciation will begin to exert an upward influence on underlying inflation from around the end of this year.

Meanwhile, the ongoing subdued conditions in the labour market and continued productivity growth are expected to exert some downward pressure on inflation. Unit labour cost growth has slowed significantly over the past year or so, and growth is expected to remain contained over the forecast horizon. Accordingly, domestically generated inflationary pressures are likely to remain moderate, contributing to lower inflation in non-tradable items in particular.

Inflation will also depend on the price of carbon. The forecasts incorporate a move from a fixed to floating price for carbon on 1 July 2015 as per current legislation. The move to a floating scheme is widely expected to see the carbon price fall, to be similar to the price of European permits, which has been at low levels for several years. The Bank's forecasts for the floating carbon price and its effects on inflation use earlier modelling by Treasury. In line with projections in the Australian Government's budget, the forecasts encompass a floating price of around \$12 in 2015/16, down from the fixed price of around \$25 in 2014/15. This change is expected to subtract under ½ per cent from CPI inflation in 2015. Around half of this effect is expected to directly reflect lower energy prices. The rest reflects the indirect effects of lower energy costs as an input to other goods and services, and so would subtract from underlying inflation. The government has recently proposed bringing forward the move to a floating carbon price to 1 July 2014. This change could be expected to reduce the forecasts of CPI inflation by around ½ percentage point over the year to June 2015, with inflation in the subsequent period being correspondingly higher than the current forecast. Underlying inflation would again respond by less than this, with the forecasts less than ¼ percentage

point lower in the corresponding period. The government has also proposed staged increases in tobacco excise over the next four years. These would be expected to add a little less than ¼ percentage point to the forecasts for headline inflation over each year and leave underlying inflation unchanged.

## Risks

While the forecasts for global growth have been downgraded since the *May Statement*, the risks surrounding the forecasts appear to remain balanced for most economies. The notable exception is Europe, where the risks continue to be tilted to the downside given the weak economy and ongoing need for balance sheet repair.

It is possible that the continuing recovery in the US economy could accelerate given the improvement in the housing sector as well as the potential for greater confidence and the strong state of corporate balance sheets to lead to increased risk-taking and investment by businesses. As a result of the improvement in the US economy, more attention is now being paid to the timing and nature of the pullback from exceptionally expansionary monetary policy. As has already been seen to an extent, expectations for changes in US monetary policy have the potential to unsettle financial markets. That could hamper the ongoing economic recovery, though longer-term rates remain unusually low in the United States. The challenge for authorities in the United States will, as usual, be to time the shift in policy so as to not impede the recovery, but equally to avoid the risks inherent in policy remaining too stimulatory for too long.

In China, policymakers face challenges in progressing economic reform. While reforms may well slow growth in the near term, if successful they should reduce the risks of financial instability and improve the growth prospects for the economy over the longer term. Notably, the authorities' recent efforts to slow the pace of borrowing have demonstrated a resolve to contain the build-up of risk in the financial system, although these reform efforts will need to be

carefully calibrated to ensure that they do not lead to financial instability. In any event, the financial reform efforts will be likely to reduce access to financing in the near term and could slow the expansion of sectors that have been strong drivers of growth, such as property development. Working in the other direction, while in this episode the recent strength of housing demand has not led to stronger growth in other parts of the economy, ongoing strength in housing demand could well lead to stronger growth in aggregate activity, as it has done in the past.

The outlook for the Japanese economy has improved markedly since late last year as a result of monetary and fiscal policy initiatives. The depreciation of the yen has been a key factor in promoting external demand and increasing prices. However, if these developments are not accompanied by an increase in domestic demand and higher inflation expectations, a stabilisation of the yen could see the incipient recovery stall. Few details are available about the proposed structural reforms in Japan and so it remains uncertain as to whether they will be able to boost the potential growth rate of the economy. With significant monetary expansion currently underway in large developed economies, and the potential for that to be wound back in the United States, exchange rate developments in east Asia, and the possible policy responses to those movements, will be important in influencing the growth outlook in that region.

The forecast for Australian GDP continues to embody a transition in the drivers of growth from mining investment to other parts of domestic demand, and to exports. There remains considerable uncertainty about how this transition will proceed. In particular, the forecast for mining investment remains uncertain reflecting the timing of investment work on large projects and the possibility of cost overruns. Also, there are still several proposed large projects slated for later in the forecast horizon and there is considerable uncertainty about their prospects. With little planning and development for other new projects underway, mining investment

could fall away faster than anticipated. However, with commodity prices projected to only decline modestly, lower domestic costs in foreign currency terms (as a result of exchange rate depreciation and reduced demand for labour inputs from the current big projects) could lead to new projects being slated beyond the next few years.

The forecasts of non-mining business investment have a more muted recovery, at least initially, than in past cyclical upturns. In the near term, this seems likely given current conditions and leading indicators. However, the freeing up of labour from mining investment projects and the depreciation of the exchange rate could see a faster pick-up in non-mining investment in later years than is forecast. An additional consideration here is that investment has been at a low level in recent years and so spare capacity is lower than otherwise.

In the household sector, a key risk is that households become more cautious in the face of the anticipated slower wage growth, resulting in weaker consumption growth; this risk would be accentuated were the labour market to soften by more than currently expected. On the other hand, if established housing prices rise more quickly than expected, spurred in part by low interest rates, then the associated boost to wealth and sentiment may generate stronger-than-expected consumption growth. If this were accompanied by a return to increasing household leverage, it would raise concerns from a financial stability perspective.

The path of the exchange rate is an important source of uncertainty for the forecasts. As the terms of trade decline and mining investment falls back from its high level, the exchange rate could depreciate further. This would help to assist with the required rebalancing of growth in the domestic economy, a role the exchange rate has frequently played over the past three decades and in particular during the boom in mining investment over recent years. A significant depreciation can have a substantial impact on aggregate economic activity. There is a wide range of empirical estimates of such effects,

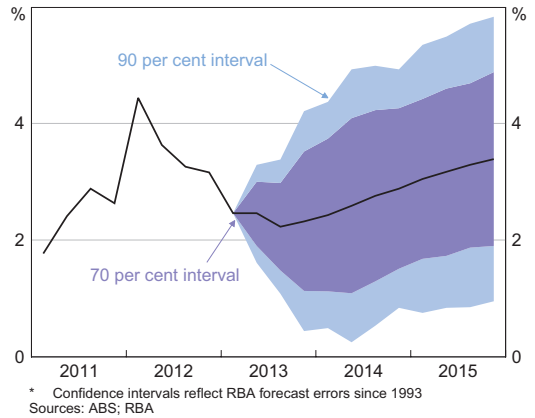
which in part depend on whether the depreciation is accompanied by a decline in the terms of trade. Central estimates from this range suggest that a 10 per cent depreciation of the exchange rate stimulates GDP growth by ½–1 percentage point over a period of two years or so. Further depreciation of a similar magnitude to that already experienced to date could, for example, deliver above-trend growth sooner than currently forecast.

The current forecasts, incorporating the impact of the depreciation to date, have inflation returning to around the middle of the target range by mid next year. A further depreciation could see inflation around the top of the target. A range of estimates suggest that, other things equal, a 10 per cent depreciation might be expected to increase the year-ended rate of inflation by around ¼–½ percentage point over each of the following two years or so.

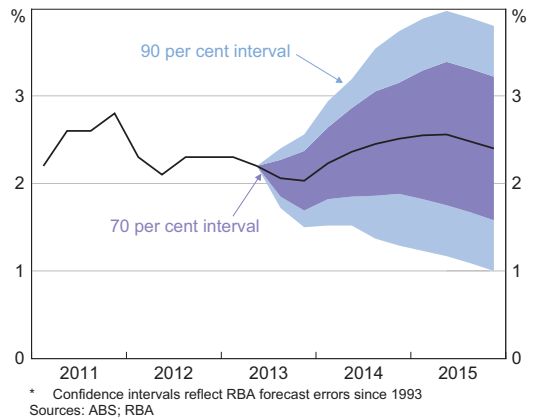
If the transition to non-mining led growth were to progress less smoothly than anticipated, then the labour market could weaken by more than is anticipated, leading to lower inflation outcomes. Weaker domestic demand might also see less pass-through of the exchange rate depreciation to inflation than expected.

These identified risks, and other potential shocks, mean that the path for GDP and inflation may well differ from the forecasts presented. 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>

**Graph 6.3**  
**GDP Growth Forecast\***  
Year-ended



**Graph 6.4**  
**Trimmed Mean Inflation Forecast\***  
Year-ended



<sup>1</sup> This is based on Bank research; see 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, for further details.

