

# Statement on Monetary Policy

AUGUST 2012

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*Reserve Bank*

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*Statement on Monetary Policy* Enquiries

Information Department  
Tel: (612) 9551 9830  
Facsimile: (612) 9551 8033  
Email: [rbainfo@rba.gov.au](mailto:rbainfo@rba.gov.au)

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# Overview

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Global economic growth slowed a little in recent months after picking up in early 2012. Concerns about the fiscal and banking problems facing the euro area continue to weigh on the global economic outlook and have led to considerable volatility in financial markets. The flow of data over recent months suggests that economic activity contracted further in Europe. The US economy is expected to continue to experience only modest growth. Below-trend growth in Europe and the United States appears to be dampening growth in much of Asia, although in China there are signs that economic growth may have stabilised at a more sustainable pace of 7–8 per cent. Policymakers in a number of jurisdictions have responded to concerns about the outlook for economic growth and a moderation in inflation by easing monetary conditions further over recent months.

These developments, and the flow of data since the May Statement, have led to small downward revisions to forecasts of growth for most economies around the world, so that expectations are for global growth to be close to average in 2012, at around 3½ per cent, before picking up to about 4 per cent in 2013. The increasing importance of the faster-growing emerging market economies, particularly in Asia, is helping to drive global growth, while in the advanced economies, fiscal consolidation and the ongoing effects of deleveraging by the private sector are likely to be a drag on growth for some time.

Prices for most of Australia's key commodity exports have moved lower since the *May Statement*, as the softening in the outlook for global demand led

to falls in prices for crude oil, base metals, thermal coal and iron ore. The spot price for coking coal was supported for a time by disruptions to coal production in Queensland, but declined more recently as global steel prices fell. In contrast, prices for some grains have risen sharply owing to droughts in the major cropping regions of the United States and the Black Sea. The available data suggest that the terms of trade declined in the June quarter to be lower than the peak in the September quarter of last year by 10 per cent or more. Further declines are anticipated over coming years, in line with rising productive capacity for bulk commodities in Australia and elsewhere. Nevertheless, the terms of trade are likely to remain at an historically high level.

The Australian dollar has appreciated a little over the past three months. This is despite the deterioration in the global economic outlook, fragile global financial sentiment and declines in key commodity prices over this period, and may in part reflect increasing international demand for highly rated Australian dollar securities.

Financial market sentiment has been subject to large swings in response to developments in the euro area and the evolving outlook for global economic growth. The outcome of the Greek elections in June, and various announcements by European policymakers since then, helped to boost confidence, but only temporarily. This pattern has been evident in the volatile movements in spreads on government bonds for Spain, and other vulnerable euro area countries, which have trended higher in recent months. Notwithstanding volatility

in financial markets, capital markets continued to supply funding to corporations and highly rated banks. Australian banks accessed both onshore and offshore term funding in size in the past quarter and at spreads little changed from earlier in the year. The banking system's focus on increasing deposits to fund credit continues to underpin elevated spreads on deposits.

Information released over the past two months suggests that the Australian economy grew more rapidly over the past year than had previously been indicated by the available data. The national accounts now report that GDP growth was around trend over the second half of 2011, and was even stronger at 1.3 per cent in the March quarter of this year. More recent indicators suggest that in the June quarter the economy expanded at a somewhat slower pace than in the previous quarter.

Over the year to date, resource investment has continued to expand rapidly; work continued on the very large pipeline of committed projects, capital imports grew strongly and some additional resource projects commenced or gained approval in recent months. Exports of iron ore rebounded in the June quarter from earlier weather-related disruptions, but coal production was hampered in part by industrial disputes in Queensland. The high Australian dollar and weak conditions in the housing market have weighed on production and investment in a number of non-resource industries. Nevertheless, following a period of deleveraging, business credit is now growing at its fastest pace in three and a half years.

The available data suggest that household consumption also grew strongly over the first half of 2012. Retail sales growth picked up in the March and June quarters to around its strongest pace in over two years; liaison suggests that various government payments made to households through May and June had a noticeable effect on sales at some retailers. Motor vehicle sales to households also increased strongly in recent months.

There are tentative signs that housing market conditions and residential building activity may be starting to improve. Dwelling prices have increased modestly in recent months in most capital cities, but remain down a little over the year. Demand for housing finance is broadly unchanged from a year ago. With building approvals rising from low levels in recent months, there are signs that residential activity may start to pick up some time in the second half of 2012; lower interest rates, rising rental yields and population growth are likely to provide support for new housing construction.

In line with the growth in aggregate output, employment increased a little faster in the first half of 2012. Reflecting differences in demand conditions across industries, employment has been expanding strongly in resource and resource-related industries, while job shedding continued in the manufacturing, hospitality and building construction industries. The unemployment rate remains relatively low at around 5¼ per cent. Forward-looking indicators, such as surveys and job vacancies, have weakened to some extent over recent months, and are consistent with moderate employment growth and the unemployment rate edging up in the near term.

Private sector wage growth was little changed in the March quarter, to be around the average of the past decade in year-ended terms, but below the elevated rates seen over 2005–2008. Business surveys and liaison suggest that private sector wage pressures may have eased a little further in more recent months, consistent with the generally subdued demand for labour across many non-resource industries. Over the year to the March quarter, public sector wages grew at the slowest pace in around a decade.

Headline and underlying inflation have eased over the past year. The CPI increased by 0.6 per cent in the June quarter on a seasonally adjusted basis, to be 1.2 per cent higher over the year, with this low annual outcome heavily influenced by earlier large falls in the prices of fruit and vegetables from flood-affected levels a year ago. The various measures indicate that

underlying inflation was around ½ per cent in the quarter, and 2 per cent on a year-ended basis, the lowest rate since the late 1990s. The change over the year reflected a decline in the prices of tradables, following the earlier appreciation of the exchange rate, and more moderate inflation in a range of non-traded goods and services prices, in line with weak demand conditions affecting a number of industries.

Since 2011, inflation in non-tradable prices has moderated to a pace around the average of the inflation-targeting period. This moderation has been broad based across goods, such as food and new dwellings, and a range of market-based services.

In the June quarter, prices of tradables rose slightly, the first increase in around six quarters, with stronger outcomes for cars, clothing, footwear and some household goods. More generally, the outcome for tradable prices suggests that the significant downward pressure on inflation from the earlier exchange rate appreciation is lessening.

The outlook for the Australian economy is largely unchanged from the *May Statement*. Real GDP growth is forecast to slow somewhat over the second half of 2012 as the strong growth of domestic demand in the first half of the year moderates. While the forecast for growth in the second half of 2012 is similar to that in the *May Statement*, the stronger-than-expected growth in the first half of 2012 has boosted the forecast for GDP growth over 2012 to 3½ per cent. The economy is then expected to grow at around 3 per cent over 2013 and 2014.

In the near term, growth in domestic demand is expected to moderate from its recent strong pace, reflecting some easing in consumption growth and the impact of fiscal consolidation on public demand. Resource investment appears likely to evolve broadly in line with the Bank's earlier forecast profile. While some resource companies have adopted a more cautious approach to investment opportunities still under consideration (but to which they are not yet committed), some major projects have gained final approval over the past few months. As had long

been factored into the Bank's forecasts, resource investment is expected to decline gradually in the latter part of the forecast period. The effect of this on GDP growth is expected to be roughly offset by faster growth in resource exports and, in time, a gradual recovery in non-resource investment, though that seems unlikely to begin in the near term.

Forecasts for inflation are little changed from those presented in the *May Statement*. Given the outlook for economic activity and the expectation of a sustained improvement in productivity growth, non-tradables inflation is expected to remain around its average over the inflation-targeting period. Inflation in the prices of tradable items is forecast to increase as the lagged effect from the earlier appreciation of the exchange rate wanes. This, combined with the increase in the price level associated with the introduction of the carbon price in July, is forecast to result in underlying inflation being in the top half of the inflation target range over the year to mid 2013, easing back to be around the middle of the target range thereafter. CPI inflation is forecast to rise to 3 per cent over the coming year – reflecting the effects of earlier volatility in fruit and vegetable prices and the carbon price passing through to consumer prices – before also returning to the middle of the target range over the remainder of the forecast period.

The economic and financial problems in the euro area remain the most significant downside risk to the forecasts for global economic growth. The tasks ahead for authorities in the euro area remain substantial. As has been the case for some time, the forecasts assume that financial market volatility will remain high, but that a severe economic and financial disruption in the euro area will be avoided. Other risks to the global economy are also tilted to the downside, but much less so than those emanating from Europe. In China, the difficulty of calibrating policies in a rapidly changing economy means that there are risks to both sides associated with the authorities' attempts to help keep the economy on a sustainable path for growth.

An adverse shock to global demand would be expected to reduce commodity prices, and hence Australia's terms of trade, by more than is currently forecast. This would lead to lower growth in incomes and weaker domestic demand. Even so, Australia remains relatively well placed to respond to such shocks given the scope to adjust macroeconomic policies and a robust financial system; movements in the exchange rate would also be expected to play an important role in adjusting to such shocks.

In the domestic economy, important risks revolve around exchange rate developments. The exchange rate has been high for some time; indeed, this is a key part of the significant structural adjustment process that the economy is going through. However, it is possible that the persistently high level of the exchange rate may be more contractionary for the economy than historical relationships suggest.

The risks to economic activity, and movements in the exchange rate, would of course be reflected in inflation in time. The inflation forecasts are also subject to a number of other risks. One is that the improvement in productivity growth is not sustained as is assumed, which would tend to put upward pressure on inflation.

The Board reduced the cash rate in late 2011, and again in May 2012, taking rates for most borrowers back to a little below their medium-term averages. By early June, the global economic outlook had weakened (after earlier signs of a slight improvement) and financial sentiment had deteriorated on the back of heightened concerns about Europe's economic and financial problems. With the data to hand at that time suggesting that domestic growth had been modest, the outlook for inflation afforded scope for a further cut to the cash rate of 25 basis points at the Board's June meeting. The data subsequently released pointed to stronger growth domestically than had earlier been indicated but confirmed the decline in inflation. Over the same period, the global economy weakened further, financial market sentiment remained fragile and commodity prices

generally declined while the very early signs of the effects of the easing of monetary policy began to appear. The Board weighed up these developments at its July and August meetings. The Board judged that, with a more subdued international outlook, inflation expected to be consistent with the target and growth of the Australian economy close to trend, the stance of monetary policy – which had resulted in borrowing rates a little below average – remained appropriate.

The Board will continue to monitor information on economic and financial conditions and adjust the cash rate as necessary to foster sustainable growth and low inflation. ✦

# 1. International Economic Developments

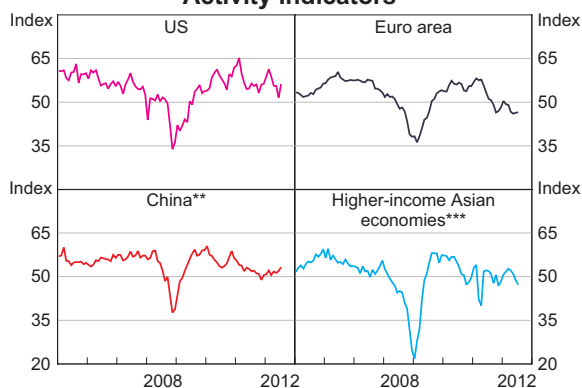
Growth in global economic activity slowed in recent months after having picked up in early 2012, as concerns about banking stability and fiscal sustainability in the euro area escalated. Indicators of economic activity deteriorated noticeably across the euro area itself in the June quarter. Growth in the United States and in Asia has also slowed in response to domestic and global factors, although in China it appears that growth has stabilised in recent months (Graph 1.1). The global outlook remains clouded by the underlying problems in Europe. Accordingly, volatility in financial markets and in economic conditions is expected to persist for some time yet, and large downside risks to the global economy remain.

Consistent with this renewed weakness in the June quarter, forecasters have generally revised down their outlook for global growth. The International Monetary Fund is now forecasting growth of 3.5 per cent in 2012

and 3.9 per cent in 2013, 0.1–0.2 percentage points lower than in April. Nonetheless, faster-growing Asian economies are helping to drive global growth. As a consequence, growth in Australia's major trading partners, which are predominantly in Asia, is forecast to be almost a percentage point above global growth in 2012 and 2013.

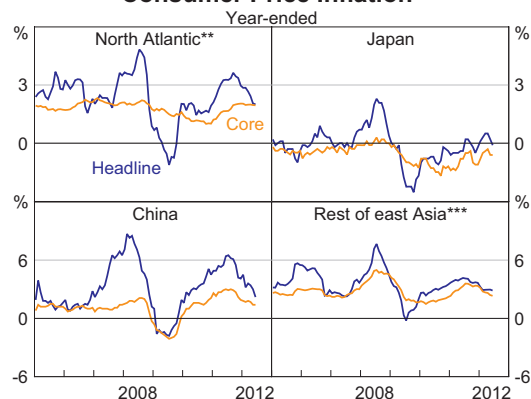
Weaker global growth has contributed to falls in many commodity prices, which have flowed through to lower CPI inflation. Weaker growth has also slowed core inflation outside the major advanced economies (Graph 1.2). The easing has been most pronounced in China, where slowing food price inflation was an important contributor. This lessening in inflation pressure has led to an easing of monetary policy in a number of economies. However, the downward trend in food prices may not continue given the recent increases in grains prices.

**Graph 1.1**  
**Activity Indicators\***



\* Manufacturing PMI output indices except for the euro area, Hong Kong and the US which are Composite PMI output indices  
 \*\* Average of HSBC and NBS measures; seasonally adjusted by RBA  
 \*\*\* Hong Kong, Japan, Singapore, South Korea and Taiwan; weighted by GDP at market exchange rates  
 Sources: CEIC; IMF; Markit Economics; RBA

**Graph 1.2**  
**Consumer Price Inflation\***

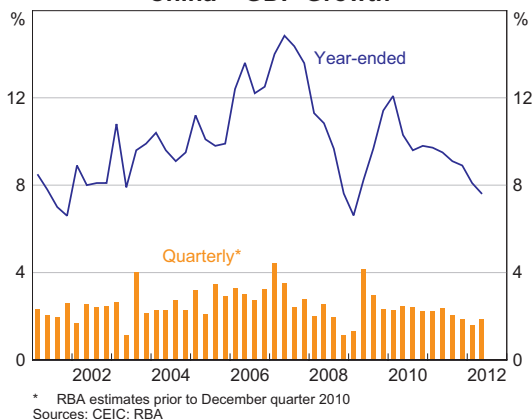


\* Data are up to June 2012  
 \*\* Canada, the euro area, UK and US; weighted by GDP at PPP exchange rates  
 \*\*\* Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan and Thailand; weighted by GDP at PPP exchange rates  
 Sources: CEIC; IMF; RBA; Thomson Reuters

## Asia

The Chinese economy has expanded at a more sustainable pace over recent quarters after slowing from the brisk growth experienced up to mid 2011. Earlier restrictive monetary policies, a normalisation of fiscal policies following the stimulus introduced during 2008 and 2009, and policies aimed at curbing speculative activity in the property market have all helped to generate a gradual slowing in the Chinese economy. In the June quarter, GDP grew by 1.8 per cent, to be 7.6 per cent higher over the year (Graph 1.3). Overall export growth has slowed somewhat, with exports to Europe notably weaker, although exports to the United States and emerging markets outside of Asia have continued to grow strongly.

**Graph 1.3**  
**China – GDP Growth**



Despite the recent slowing, domestic demand continues to grow at a reasonably fast pace. There has been fairly steady growth in household consumption, supported by strong income growth and a range of incentives that encourage the purchase of more energy-efficient vehicles and household appliances. There are signs that growth in aggregate investment has steadied in recent months, with the year-ended pace of growth remaining above 20 per cent. This follows a generalised slowing over the past year, although the trends have varied across the different types of investment (Graph 1.4). The moderation in manufacturing investment had

**Graph 1.4**

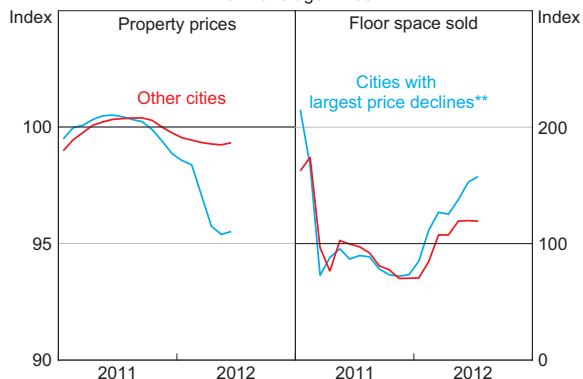


been concentrated in the more trade-exposed industries – including clothing & textiles and electrical, computers & telecommunications – while industries with a domestic focus have continued to increase investment at a rapid pace. As foreshadowed in the government's budget in March, growth in infrastructure investment has picked up in recent months, with particular strength in utilities and water & environmental management.

Annual growth in real estate investment has slowed from over 30 per cent in mid 2011 to a little above 20 per cent in recent months. A noticeable deceleration in residential building activity has been only partly offset by the construction of office buildings and public housing. The slowing in residential building largely reflects the tighter financing conditions facing Chinese developers since the imposition of credit and property market controls. Earlier falls in prices and sales volumes restricted developers' cash flows, while access to credit became more difficult for those not engaged in the construction of affordable housing. However, in recent months, conditions in the housing market have improved; prices rose slightly in June for the first time in a year, and sales volumes were 9 per cent above their recent trough. The strongest increases in sales volumes appear to have occurred in cities that experienced larger price falls over the past year (Graph 1.5). Furthermore, first home buyers have



**Graph 1.5**  
**China – Residential Property Market\***  
 2011 average = 100



\* RBA estimates; property price data are up to June 2012; floor space sold data are up to July 2012

\*\* Cities which recorded a price decline of at least 2 per cent over the year to June 2012

Sources: CEIC; RBA

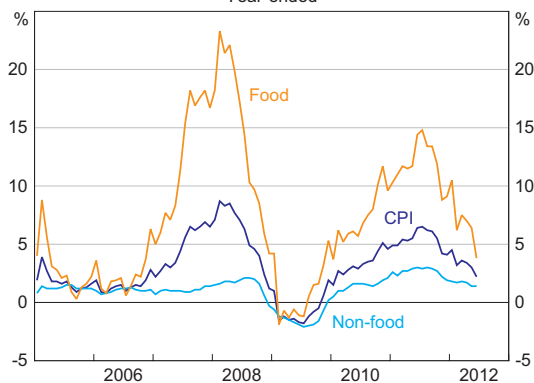
been attracted to the market with various incentives, including tax concessions and, more recently, lower mortgage rates. According to the Urban Depositor Survey conducted by the People's Bank of China (PBC), the increase in sales volumes partly reflects a shift in expectations about housing prices; compared with earlier in the year, more people expect housing prices to increase, while the share of respondents planning to buy an apartment in the next three months has risen from its recent lows.

Conditions in the industrial sector have remained broadly stable since the beginning of the year, notwithstanding recent falls in electricity generation. There has been a moderate slowing in the production of electrical machinery and equipment, consistent with softer external demand. Output of crude steel is little changed since January, with recent weakness in flat steel products broadly offsetting a pick-up in long steel products, which is partly owing to the recovery in infrastructure investment. However, falls in steel prices over recent months suggest that overall demand for steel has moderated.

Inflationary pressures have continued to ease in China. The slowing in domestic demand and lower global commodity prices have contributed to inflation falling from its peak of 6½ per cent in mid 2011 to just above 2 per cent in June (Graph 1.6).

Improved agricultural conditions, particularly in the south-east, have contributed to recent falls in vegetable prices, while pork prices have continued to trend lower. Lower commodity prices have contributed to easing inflation, including from cuts to retail diesel and petrol prices in China. Weaker housing market conditions have dampened inflation of housing costs. Although upstream price pressures generally remain very weak, the extent to which lower costs will be passed on to consumers is expected to be limited. This reflects earlier decisions not to pass on higher commodity prices in full to consumer prices.

**Graph 1.6**  
**China – Consumer Price Inflation\***  
 Year-ended



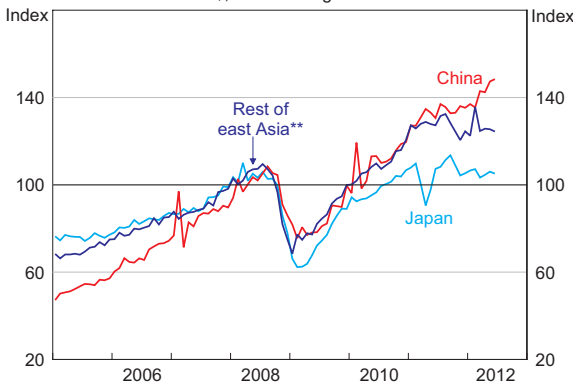
\* Data are up to June 2012  
 Source: CEIC

Monetary conditions have become more accommodative since the beginning of the year. Credit growth had been particularly weak in January and February, but since then policy adjustments aimed at increasing the supply of credit, including reductions in reserve requirements, have contributed to a rise in credit growth. With inflationary pressures having abated, the PBC cut benchmark interest rates in June and July, and reduced the floor on lending rates, which should support credit growth.

In the rest of east Asia, overall conditions are noticeably weaker. Industrial production has been broadly flat over the past year, and export growth has been quite weak, particularly in comparison with the rise of exports from China (Graph 1.7). The weakness

relative to China does not reflect differences in exposure to the slower growing advanced economies; in fact, exports to the United States and Europe account for a larger share of exports from China than they do for other economies in east Asia (see 'Box A: Trade Exposures to the Euro Area' for a discussion of trade linkages). Rather, this divergence may reflect a continuation of the longer-run trend for supply chains that used to be spread across much of the region to be increasingly concentrated in China and in the other lower-income economies in the region.

**Graph 1.7**  
**East Asia – Merchandise Export Values\***  
 US\$, 2008 average = 100



\* Data are up to June 2012  
 \*\* Excluding Hong Kong and the Philippines  
 Sources: CEIC; IMF; RBA; Thomson Reuters

The pace of domestic demand growth in the higher-income economies of Asia outside of Japan has softened over the past year. Retail sales growth has slowed, consumer confidence fell in June and employment growth has eased (Graph 1.8). Indicators of investment remain weak and growth of house prices and credit have generally slowed throughout the region.

In contrast, domestic demand growth has held up in Japan. Indicators of consumption have continued to rise, with motor vehicle sales staying at a high level helped by government subsidies for fuel-efficient cars (Graph 1.9). Construction growth is also increasing, largely reflecting reconstruction spending. Housing starts in the earthquake-affected areas have picked up noticeably and public

machinery orders have trended higher in recent months. In contrast, core domestic machinery orders were noticeably lower in May and June, although it is difficult to identify to what extent this was influenced by concerns about electricity supply in the summer months. Data received to date suggest that electricity supply constraints do not appear to have weighed too heavily on activity, partly owing to the restart of two nuclear reactors in July, the reopening of unused thermal power stations and voluntary reductions of electricity usage by both households and businesses.

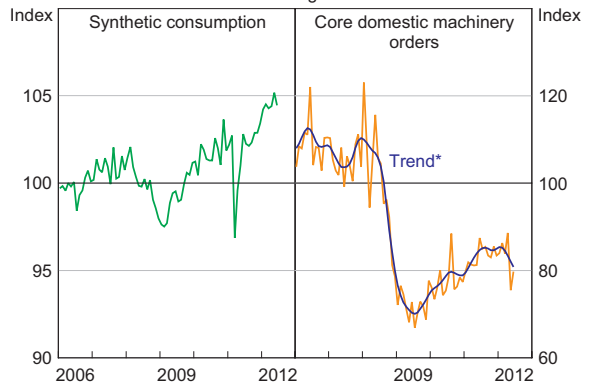
In India, GDP growth slowed to 5½ per cent over the year to the March quarter, to be well below

**Graph 1.8**  
**East Asia\* – Domestic Indicators**



\* Excluding China and Japan  
 \*\* Also excluding Indonesia, Malaysia, the Philippines and Thailand  
 Sources: CEIC; IMF; RBA

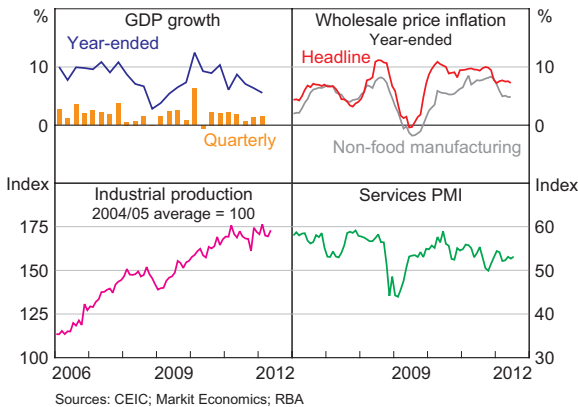
**Graph 1.9**  
**Japan – Consumption and Investment**  
 2008 average = 100



\* 13-period Henderson trend  
 Sources: RBA; Thomson Reuters

the average of the past decade, with investment continuing to shrink and household consumption growth easing (Graph 1.10). This slowdown has in part been induced by relatively tight monetary policy aimed at reducing inflation. Industrial production has been broadly flat since mid 2011, and a survey by the Reserve Bank of India (RBI) suggests that industrial conditions deteriorated significantly in the June quarter 2012. In contrast, exports have grown strongly, supported by the recent depreciation of the rupee.

**Graph 1.10**  
**India – Economic Indicators**



Notwithstanding the slowing in domestic demand, inflation has remained elevated. The depreciation of the rupee has added to cost pressures and low rainfall during the current monsoon is likely to put some upward pressure on food prices. However, lower global commodity prices, particularly for oil, are likely to work in the other direction. In recent statements, the RBI has revised down its estimate of trend growth in the Indian economy citing price distortions and supply-side constraints. It has also signalled its reluctance to reduce interest rates much further given the limited extent to which inflation has responded to softer domestic demand.

## Europe

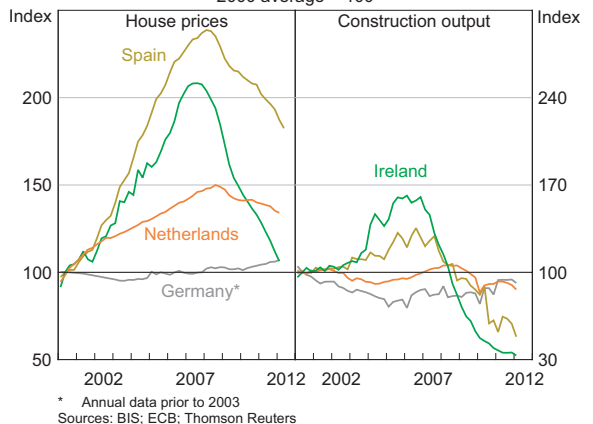
Economic conditions in the euro area worsened in the June quarter, with timely indicators of economic activity falling to levels consistent with a contraction

in GDP. The ongoing weakness in the balance sheets of banks and governments in some countries has continued to weigh on activity. Investment spending has been very weak since the onset of the global downturn in 2008, and there are no indications of a recovery in the near term.

Part of this weakness in investment reflects the ongoing adjustments in the housing market, following significant run-ups in house prices and construction in several euro area economies in the mid 2000s. Since house prices peaked in Ireland and Spain in late 2007 and early 2008, construction in these economies has more than halved, and house prices continue to decline (Graph 1.11). In contrast, house prices and construction in Germany – which did not experience a housing boom – have been rising gradually.

Consumption growth in the euro area also weakened further in recent months, as consumer confidence remained low, fiscal consolidation continued and household wealth declined (Graph 1.12). Labour markets also generally remain extremely weak. Unemployment rates have continued to increase in many economies, including in Greece and Spain where rates were already very high (Graph 1.13). In contrast, the unemployment rate in Germany is still falling, consistent with the better economic outcomes there. Outside of Germany, real wage growth is very weak. These adjustments have helped

**Graph 1.11**  
**Euro Area – Housing and Construction**  
2000 average = 100



**Graph 1.12**

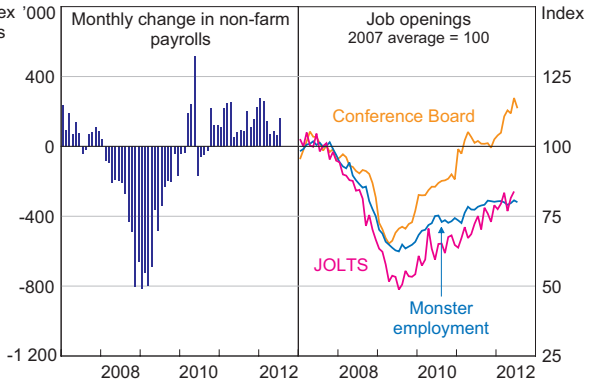
**Euro Area – Household Indicators**



Source: Thomson Reuters

**Graph 1.14**

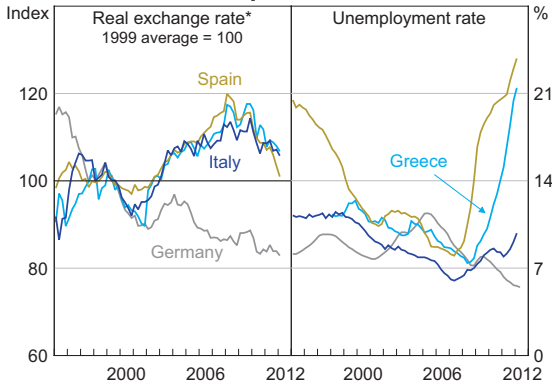
**United States – Labour Market**



Sources: Bureau of Labor Statistics; Conference Board; Thomson Reuters

**Graph 1.13**

**Euro Area – Competitiveness and Labour**



\* Trade-weighted; deflated by unit labour costs  
Sources: ECB; RBA; Thomson Reuters

to improve competitiveness over the past three years in many of the economies facing the greatest difficulties, with the euro depreciating and unit labour costs declining.

**United States**

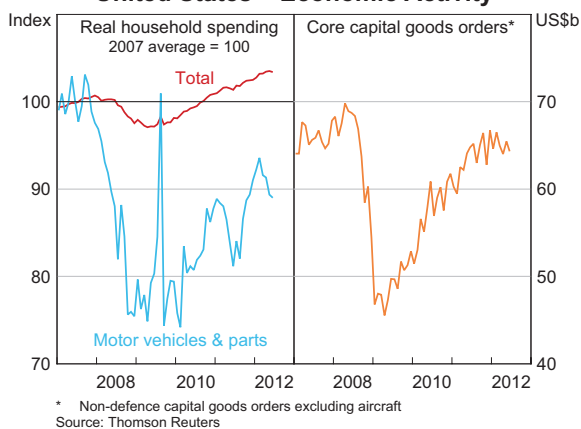
Growth in the United States slowed in the June quarter to an annualised pace of 1½ per cent, and most measures of business conditions and consumer confidence have remained at low levels in July. Employment growth has slowed noticeably, with average monthly payrolls growth of 96 000 since March, after growth of 226 000 per month in the first three months of the year (Graph 1.14). The unemployment rate has increased a little, although

the employment-to-population ratio has remained broadly flat. Other timely indicators of the labour market, such as survey measures of employment intentions, advertised job openings and initial jobless claims, have been mixed.

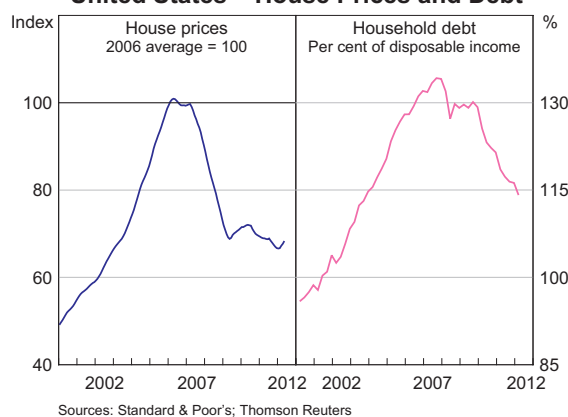
Alongside some softening in the labour market, consumption growth has slowed, largely reflecting weaker sales of motor vehicles (Graph 1.15). Consumption grew by 0.4 per cent in the June quarter, following growth of 0.6 per cent in the previous quarter. Growth in business investment also remained subdued, with core capital goods orders broadly flat since June last year, although the outlook for non-residential construction looks to have improved a little, with the Architecture Billings Index pointing to some construction growth in the remainder of 2012. Demand for commercial and industrial loans has also picked up.

The recent tentative signs of improvement in the housing market are encouraging for growth prospects in the United States. House prices have risen slightly after falling by more than 30 per cent from their peak in 2006. The debt-to-income ratio for the household sector has declined significantly in recent years, although this in part reflects the large number of mortgage foreclosures (Graph 1.16). New mortgage applications for house purchases remain at a low level despite mortgage interest rates being at their lowest level for at least 40 years, and many

**Graph 1.15**  
**United States – Economic Activity**



**Graph 1.16**  
**United States – House Prices and Debt**



households have negative equity in their homes (that is, their mortgages are larger than the current value of their homes). A sustained pick-up in house prices would go some way to reducing the influence of these constraining forces on household spending.

## Commodity Prices

Commodity price movements have been mixed over the past three months (Table 1.1). Iron ore and coal prices have declined, consistent with a softening in global demand and rising supply. However, food prices have increased due to drought conditions in some key grain producing regions.

Energy prices have fallen since the *May Statement*. The price for Brent oil – which is increasingly being used as a global benchmark for oil, including in Australia – has decreased by 5 per cent in US dollar terms since the *May Statement* (Graph 1.17). The fall in the oil price partly reflects weaker expectations for world economic growth, somewhat offset by supply constraints, including sanctions on Iranian oil commencing in July and disruptions related to an industrial dispute in Norway. Spot prices for thermal coal have also fallen considerably in recent months, with the Newcastle spot price now back at early 2010 levels, 20 per cent below the contract price for the Japanese fiscal year 2012. The fall in thermal coal spot prices is partly attributable to the low level of the

**Table 1.1 Commodity Price Growth<sup>(a)</sup>**  
SDR, per cent

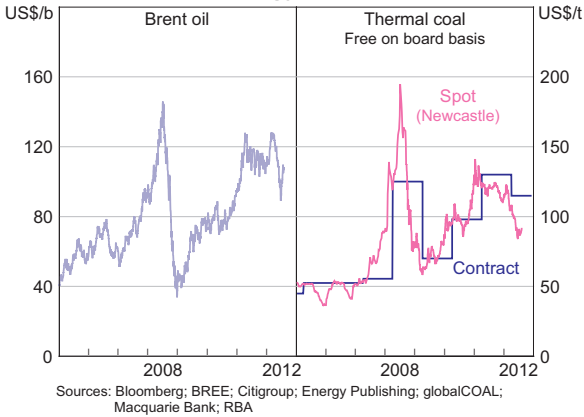
	Change since previous Statement	Change over the past year
Bulk commodities		
– Iron ore	–19	–33
– Coking coal	–8	–33
– Thermal coal	–5	–19
Rural	8	–1
– Beef	–1	9
– Cotton	–11	–20
– Wheat	45	21
– Wool	–10	–20
Base metals	–7	–12
– Aluminium	–6	–16
– Copper	–8	–9
– Lead	–8	–9
– Nickel	–7	–22
– Zinc	–5	–5
Gold	0	–1
Brent oil <sup>(b)</sup>	–5	9
RBA ICP	1	–9

(a) RBA Index of Commodity Prices (ICP) components except oil and bulk commodities prices, which are spot prices; latest available

(b) US dollar terms

Sources: Bloomberg; RBA

**Graph 1.17  
Energy Prices**

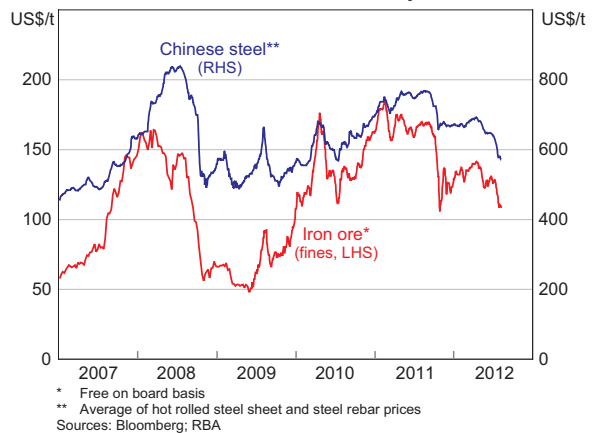


price of natural gas in the United States, the supply of which has increased significantly over recent years. As natural gas is a substitute for thermal coal in electricity generation, coal demand in the United States has declined, which has encouraged thermal coal producers in both North and South America to export to Asia, putting downward pressure on spot prices.

Global crude steel production, the major source of demand for iron ore, was broadly unchanged over the June quarter, though more timely data show Chinese steel prices and the spot price for iron ore have fallen by around 20 per cent since the *May Statement* (Graph 1.18). Over recent years, there has been a trend to shorter-term pricing arrangements in the iron ore market, so that short-term movements in iron ore prices flow through to average Australian export prices more quickly (see 'Box B: Iron Ore Pricing' for further details).

Consistent with the fall in steel prices in China, the spot price for hard coking coal has also fallen over the past month. Prior to this, prices for hard coking coal had been supported by supply disruptions in Australia, the world's largest exporter of coking coal, with industrial action at BHP Billiton Mitsubishi Alliance (BMA) mines in Queensland slowing production. In early July, BMA lifted *force majeure* on its Australian coking coal contracts as BMA and the

**Graph 1.18  
Chinese Steel and Iron Ore Spot Prices**



unions have agreed on a framework to guide their ongoing negotiations. The expected recovery in coal production at the BMA mines is likely to have contributed to the recent fall in the spot price for hard coking coal.

Base metal prices, which tend to follow cycles in global industrial production, have also declined. The RBA base metals index is 7 per cent lower in SDR terms than at the time of the *May Statement*. Aluminium prices continued to fall and are at low levels relative to history, which may prompt further cuts in global production. Copper prices have also fallen, despite a decrease in copper inventories held in London Metal Exchange warehouses (See 'Box C: Recent Developments in the Global Copper Market' for more details).

In contrast, prices for some rural commodities have risen significantly. In particular, the prices of certain food commodities have increased, largely reflecting supply disruptions from the droughts in the US and Black Sea cropping regions. Prices of corn and soybeans reached record highs during July. These regions also account for around 40–50 per cent of the world's wheat exports. Wheat prices have increased by around 45 per cent in SDR terms since the *May Statement*, but to date remain well below their peak in 2008. The RBA rural index has increased by 8 per cent in SDR terms since the *May Statement*.

## Box A

# Trade Exposures to the Euro Area

The ongoing turmoil in the euro area is affecting other economies around the world through its impact on financial markets, business and household confidence, and trade. While the effect through trade may not be the most significant linkage, it is perhaps the more predictable one since a decline in demand in the euro area economies at the centre of the crisis (that is, Greece, Ireland, Italy, Portugal and Spain – the ‘crisis economies’) feeds directly to a reduction in exports to these economies from the rest of the world.

The size of this direct trade effect depends in part on proximity to the crisis economies because distance is an important determinant of the intensity of trade. Graph A1 ranks economies according to their direct trade exposure to the crisis economies, as measured by the exports of goods to the crisis economies as a share of each source economy’s GDP. Not surprisingly, the exposure via trade to the crisis countries is greatest for their near neighbours, the other economies in the euro area. In 2010, around 20 per cent of merchandise exports from these economies went to the crisis economies, accounting for more than 4 per cent of euro area GDP (excluding the crisis economies). This share was lower (at around 3 per cent) for other countries in Europe, followed by Russia and the Middle East, then Asia. Exports to the crisis economies from Japan, the United States and Australia were only around 0.2 per cent of their GDP.

Another important determinant of the size of the trade effect is the nature of that trade. In particular, since the downturn in demand in the crisis economies is most evident for durable goods, countries with a larger share of durable goods in their exports tend to be more adversely affected.

**Graph A1**  
**Exports to the Crisis Economies\***  
Share of source economy GDP, 2010



For example, in 2009, GDP in the crisis economies contracted by 2½ per cent and, while the volume of machinery & transport equipment imports fell by 25 per cent, the volume of mineral fuels and lubricants imports actually increased by 17 per cent. So, even though Russia and the Middle East export a considerable share of their output to the crisis economies, the direct trade effect is likely to be considerably lessened by the fact that their exports of final durable goods are much lower. Instead, a higher share of exports from Russia and the Middle East to the crisis economies are in the form of energy commodities. When focusing on final durable goods, China’s exposure is similar to that of Europe (excluding the euro area), while the exposure of east Asia (excluding China and Japan) is also relatively significant.

Indirect trade links will also expose economies to the turmoil in the euro area. For example, an economy might be exposed to the decline in demand in

the crisis economies even if it does not export there directly, but rather supplies inputs to other economies that are direct exporters. However, while accounting for this indirect trade linkage implies a slightly larger effect of reduced demand in the crisis economies than that suggested by the direct trade linkages alone, it does not alter the ranking of the different regions' exposure to weak demand in the crisis economies described above.



## Box B

# Iron Ore Pricing

In recent years, the prices received by Australian iron ore producers have become more responsive to shorter-term developments affecting supply and demand. This reflects a move to shorter-term contracts and a larger share of iron ore being traded at spot prices. It has resulted in an increase in the variability of iron ore export prices, which feed into Australia's terms of trade.

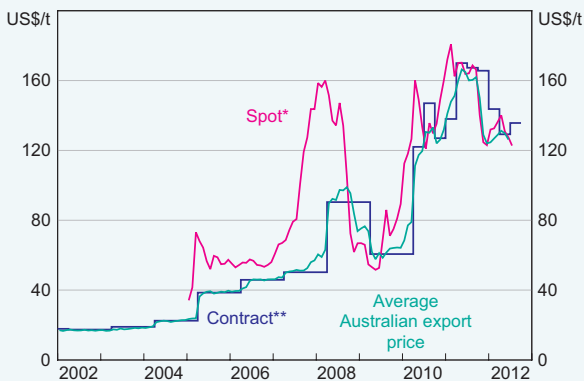
Until the mid 2000s, most trade in iron ore was based on longer-term contract prices. Hence, the average export price of Australian iron ore closely followed the annual fixed-term contract price (Graph B1). In 2007, an especially large gap opened up between the spot price and benchmark contract price as demand growth outstripped that of supply. This created an incentive for iron ore producers to sell additional supply into the spot market. Conversely, when the spot price fell below the contract price in mid 2008, there was an incentive for those buying iron ore to minimise their purchases of iron ore under contract and purchase instead on the spot market. The large

gaps between spot and contract prices also induced buyers and sellers to renegotiate existing contracts. Consequently, around this time an increasing share of iron ore began to be traded either on the basis of shorter-term contracts or in the spot market. The initial move was from annual to quarterly contracts, and over time to monthly contracts.

The gradual move from quarterly contracts towards monthly contracts, and from contracts to spot sales, has occurred for iron ore exports from Australia and other large producers such as Brazil. The move to spot sales appears to have accelerated since the end of 2011 as the sharp fall in the spot price for iron ore at that time encouraged buyers to push for contracts to be renegotiated to shorter terms.

Market reports suggest that, in aggregate, monthly contracts and spot sales now account for more than half of all Australian iron ore exports, although this share varies somewhat across producers. The remainder of Australian iron ore exports are based on longer-term contracts, many of which are quarterly, with some large Japanese steel mills reportedly preferring this pricing arrangement.

**Graph B1**  
**Iron Ore Prices**



\* Month average; iron ore fines; free on board basis  
 \*\* RBA estimate of quarterly contract from 2010 onward  
 Sources: ABARES; ABS; Bloomberg; RBA

All of these changes in pricing arrangements mean that the average Australian export price of iron ore moves more closely with prices in the iron ore spot market than in the past.

The increasing use of shorter-term price contracts has also encouraged more activity and liquidity in iron ore derivative markets as firms increase their use of hedging instruments. One example is over-the-counter iron ore swap contracts, which are derivative contracts in which one party agrees to pay the other party a fixed price in return for receiving the average iron ore spot price over the term of the swap.

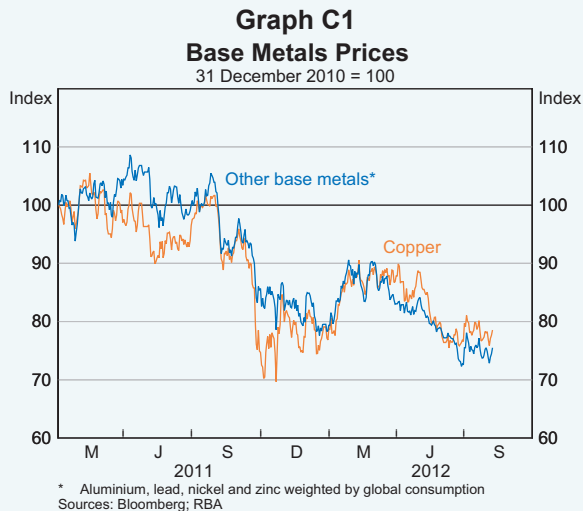
According to data from SGX AsiaClear, monthly open interest on iron ore swaps – the volume of iron ore covered by swap contracts that have yet to be settled – has more than doubled over the past year, although it remains relatively small compared with physical trade in iron ore.

With iron ore currently accounting for around one-fifth of Australia's exports, the greater use of shorter-term pricing has implications for the terms of trade. In general, the spot price for iron ore has tended to move in line with developments in Chinese industrial production and steel production, although disruptions to supply can also be important. Hence, changes in the outlook for Chinese growth and steel demand are likely to be reflected more quickly in the prices received by Australian iron ore producers than in the past.

## Box C

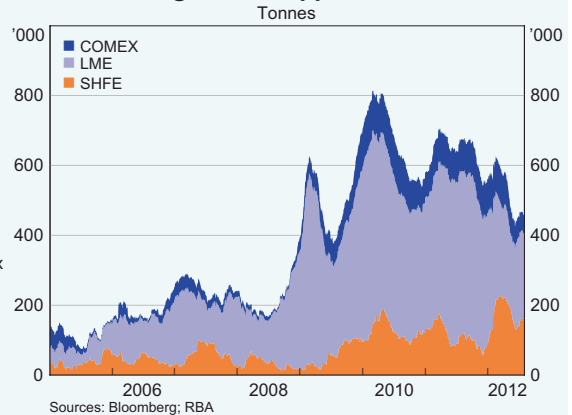
# Recent Developments in the Global Copper Market

The price of copper has declined by 13 per cent since its peak in February this year, broadly in line with declines in the prices of other base metals (Graph C1). These price falls occurred alongside expectations for a slowdown in the global economy, including in China.



On the face of it, the recent decline in the price of copper appears to be at odds with a sharp decline in the level of copper inventories held in London Metal Exchange (LME) warehouses from late last year, since the latter would seem to suggest that conditions in the global copper market remain relatively tight (Graph C2). Changes in LME inventories are usually interpreted as indicative of global developments, as the LME captures the largest share of global financial market trading of copper, and futures traded at the LME are widely accepted as the global benchmark. Furthermore, copper inventories that are deliverable under LME futures contracts are held in LME warehouses around the world.

**Graph C2**  
**Exchange-held Copper Inventories**



The explanation for this apparent discrepancy between declining copper prices and declining LME inventories to some extent lies in recognising the growing role of China in commodity markets. In particular, copper inventories at Shanghai Futures Exchange (SHFE) warehouses have increased significantly over recent years, to around 160 000 tonnes. Once these inventories are taken into account, the decline in global exchange-held inventories is not so marked.<sup>1</sup> Moreover, analysts' estimates suggest that non-SHFE warehouses in China hold an additional 550 000 to 1 million tonnes of copper, indicating that exchange-held inventories are still only a partial measure of global copper inventories.

Anecdotal evidence suggests that some of the increase in Chinese copper inventories has been related to the use of inventory financing schemes, though reports indicate that collateral for these

<sup>1</sup> In addition to the LME and the SHFE, the COMEX commodities exchange is a third major copper exchange, based in the United States. COMEX warehouses currently hold around 53 000 tonnes of copper.

schemes is not limited to copper. While firms that hold copper inventories (such as copper smelters and construction firms) might seek to borrow against these inventories as a normal part of their business, some firms in China have taken advantage of this source of finance by accumulating additional copper inventories for use in schemes designed to circumvent credit restrictions, particularly on investment in the Chinese property market during the recent boom. Under these inventory financing schemes, firms purchase copper on deferred payment terms (and on an unsecured basis) to use as collateral for obtaining renminbi-denominated loans from Chinese banks, with the proceeds of these loans either invested directly or on-lent in the unsupervised lending market. When copper prices were rising, firms taking advantage of these schemes could earn a return from holding copper in addition to the return on the investment that was financed by the loan.

The Chinese Government has sought to restrict the use of inventory financing schemes for speculative investment since at least the middle

of last year. Demand for these schemes has also fallen for a number of other reasons including, most particularly, weaker conditions in the Chinese property market which have dampened the attractiveness of speculative property investment. Returns on holding copper have also declined alongside the recent fall in copper prices. Moreover, the slope of the copper futures curve has become less positive at the short end – with the three-month futures price even falling below the spot price during the June quarter – suggesting that firms buying copper to use as collateral are less likely to earn a return when the copper is sold.

These developments suggest that copper inventories held only by LME warehouses can no longer be regarded as a reliable global indicator. Instead, the recent accumulation of Chinese copper inventories – and the potential now for a rundown as inventory financing schemes have become less attractive – underscores the importance of understanding Chinese developments and their implications for supply and demand in the global copper market. ❖

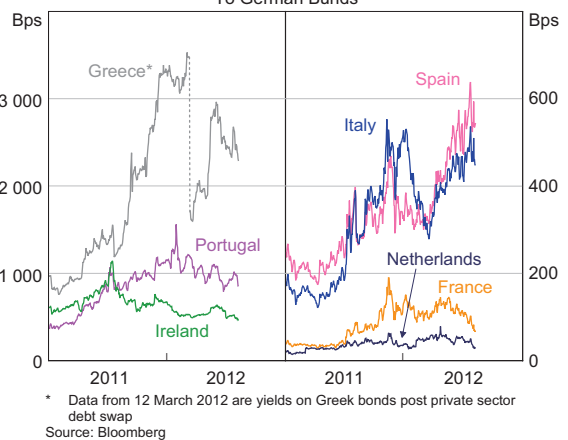
## 2. International and Foreign Exchange Markets

### Sovereign Debt Markets

Global market sentiment has been buffeted by concerns about the state of euro area public finances and the stability of the banking system in the euro area as well as the health of the global economy. The resolution of political uncertainties in Greece, the announcement of a financing package for Spanish banks and a number of broad policy initiatives in the euro area provided some support to markets around the middle of the year but did not have a lasting impact. The deterioration in confidence was most evident in a sharp widening of spreads, particularly at the short end, between yields on some euro area 'periphery' government bonds and German bunds (Graph 2.1). Recent statements by European Central Bank (ECB) President Draghi that the ECB would do 'whatever it takes to preserve the euro' and was considering purchasing short-term sovereign debt saw some of this widening retrace.

Developments in Spain have weighed heavily on market sentiment over recent months. The Spanish Government has been granted official assistance from the euro area to recapitalise its troubled banking sector. Spain's request for assistance followed the announcement of a significant capital shortfall at a large savings bank. The assistance package provides for up to €100 billion in financial support over 18 months, with the amounts required by individual banks to be determined by independent stress tests conducted by a consultant over coming months. A first tranche of €30 billion has been made available as a contingency in case of a need for immediate funding. Further funds will not be disbursed until

**Graph 2.1**  
**Euro Area Government 10-year Bond Spreads**  
To German Bunds



the European Commission (EC) has assessed banks' recapitalisation plans in October, following the stress tests.

Unlike the assistance packages for Greece, Ireland and Portugal, conditionality under the Spanish package focuses primarily on recapitalising and reforming the financial sector, rather than requiring the Spanish Government to implement additional fiscal and structural reforms. Nonetheless, the current reform agenda will be monitored regularly as part of the agreement and, relatedly, the EC has given Spain an extra year (to 2014) to meet the deficit target of 3 per cent of GDP. The government has committed to achieving a fiscal deficit of 6.3 per cent of GDP in 2012 (previously expected to be 5.3 per cent) and has announced €102 billion in additional budgetary measures over 2½ years to meet the targets. Another difference to the packages for other euro area

members is that the International Monetary Fund (IMF) will not contribute funds; Spain's package will be financed solely by the European Financial Stability Facility (EFSF) and then by the permanent European Stability Mechanism (ESM) once it becomes operational. Activation of the ESM had been scheduled for 1 July but has been delayed by a constitutional challenge in Germany, which is expected to be resolved in mid September.

The initial announcement of the package provided some support to confidence but this was quickly reversed as investors focused on the implications for Spanish central government finances – funding to banks will be channelled through Spain's bank restructuring agency and will therefore increase the central government's indebtedness. Yields on long-term Spanish government bonds reached a new euro era high of over 7½ per cent in July and shorter-term bond yields increased sharply (Graph 2.2). Concerns about the state of Spanish regional governments' finances and a deteriorating outlook for the Spanish economy also contributed to the rise in yields. Spanish bond yields have fallen from their recent highs following Draghi's comments, with shorter-term yields falling particularly sharply.

The Spanish central government had €600 billion of outstanding debt securities at the end of May 2012, with nearly 40 per cent of this held by Spanish banks

(Table 2.1). A further 30 per cent of debt securities are held by foreign investors who, in aggregate, have significantly reduced their holdings of Spanish, as well as Italian, sovereign debt over the past year or so (Graph 2.3). In addition to funding the budget deficit for the remainder of the year, Spain needs to fund €22 billion in maturing bonds by the end of 2012 – equivalent to around 2 per cent of GDP.

**Table 2.1: Spanish Central Government Debt Securities<sup>(a)</sup>**  
As at May 2012

	€ billions	Share of total Per cent
Securities	600	
Held by:		
Spanish banks	233	39
Government/Bank of Spain	65	11
Other domestic	116	19
Foreign holders <sup>(b)</sup>	186	31
– Foreign banks <sup>(c)</sup>	57	10

(a) Does not include unconsolidated autonomous regional debt of €145 billion and local government debt of €37 billion

(b) Includes ECB holdings

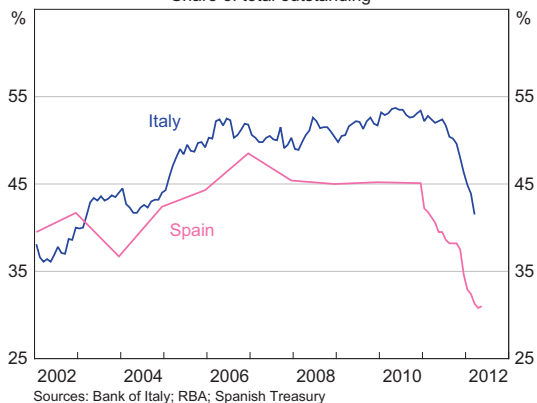
(c) As at March 2012

Sources: Bank of Spain; BIS; RBA; Spanish Treasury

**Graph 2.2**  
**Spanish Government Bond Yields**



**Graph 2.3**  
**Foreign Holdings of Central Government Debt Securities**  
Share of total outstanding



The situation in Greece has also contributed to the uncertainty in sovereign debt markets. Greek parliamentary elections in early May were inconclusive and speculation mounted that Greece may exit the euro area if a second election in June did not produce a government supportive of the EU/IMF assistance package and associated reforms. In the event, Greek voters elected a government that has stated its intention to continue with the reforms that are a condition for ongoing official financial support. Further disbursements of funding under the Greek assistance package are dependent on reviews of the program by 'the troika' of official agencies, and markets are concerned about how far off track the program may have become as a result of the recent political turmoil. The privatisation program is reportedly several months behind schedule. The next troika report is expected by September. In the meantime, a €3 billion bond held by the ECB is due to mature in August, and the Greek Government will reportedly issue short-term paper to facilitate that payment.

At a summit in late June, European leaders outlined further strategies for dealing with the debt crisis and strengthening the euro area over a longer horizon. Investors initially responded favourably to the broad policy announcements, but optimism quickly faded due to a lack of detail and uncertainty about the timelines for implementing the measures. The main proposals were:

- To establish a single European bank supervisory mechanism, involving the ECB. The EC is due to present proposals in September and euro area leaders are expected to consider these by the end of 2012.
- Once this mechanism is established, the ESM could possibly be given the authority to recapitalise banks directly, rather than channelling funds through the sovereign. This would avoid an ESM-funded bank recapitalisation increasing the sovereign's debt.
- A €120 billion growth package, primarily consisting of increasing the European Investment Bank's lending capacity and reallocating unused Structural Funds.

Following these announcements, Irish sovereign yields fell sharply on speculation that once a pan-European supervisor is established, sovereign debt previously used to fund bank recapitalisations could be retrospectively shifted to the ESM. Estimates suggest this could significantly reduce Ireland's debt-to-GDP ratio. The troika completed the seventh review of the Irish assistance package, noting that all fiscal targets are being met despite challenging macroeconomic conditions. In July, Ireland successfully returned to bond markets for the first time since late 2010, issuing 5- and 8-year bonds. Yields on long-term Irish sovereign debt have fallen to be at comparable levels to those in Spain and Italy.

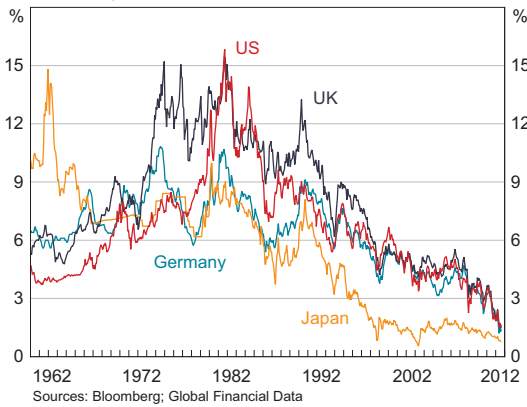
The troika completed their fourth review of Portugal, noting that the program is on track overall but risks remain. Portugal has indicated that it intends to issue medium-term bonds of 1–5 years duration to specific creditors by September 2013 (coinciding with the timing of a €9.7 billion bond maturity).

In June, Cyprus asked for EU/IMF assistance to recapitalise its banking sector and finance its budget deficit, becoming the fifth euro area member to request official financial assistance. Cyprus is also seeking to supplement this assistance with Russian aid; Russia lent Cyprus €2.5 billion in December 2011.

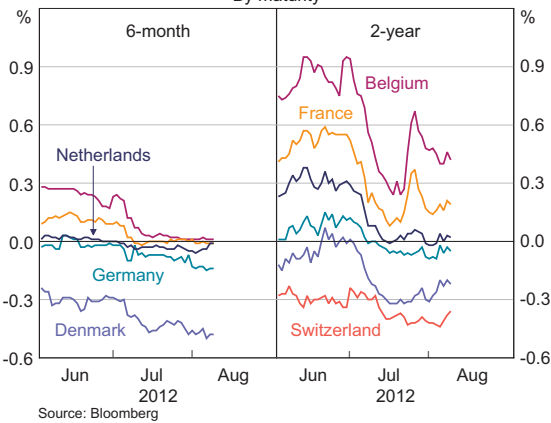
Government bond yields in the major advanced economies fell to new historical lows in July (Graph 2.4). Yields on 10-year German, US and UK government bonds are all around 1½ per cent as investors have sought assets perceived to be low risk. Yields on shorter-term government debt have fallen sharply in recent months across a range of markets and have turned negative in a number of cases (Graph 2.5). German 2-year yields fell below zero for the first time in July after the ECB cut its deposit facility rate to zero (see 'Central Bank Policy'), and short-term Swiss and Danish paper are also trading at negative yields. The Swiss yield curve is currently negative to a maturity of four years.

Spreads on US dollar-denominated debt issued by emerging market sovereigns are narrower than they were late last year (Graph 2.6).

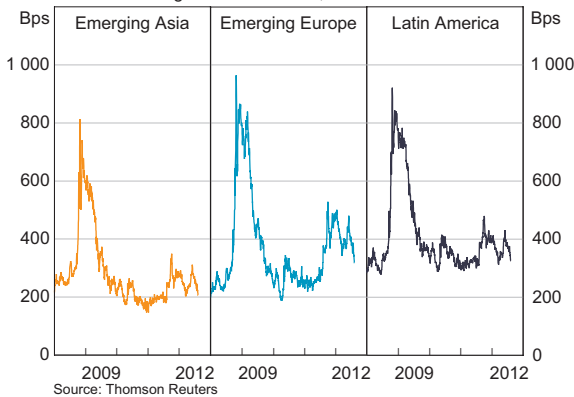
**Graph 2.4**  
**10-year Government Bond Yields**



**Graph 2.5**  
**European Sovereign Debt Yields**  
By maturity



**Graph 2.6**  
**US Dollar-denominated Sovereign Debt Spreads**  
To US government bonds, duration matched



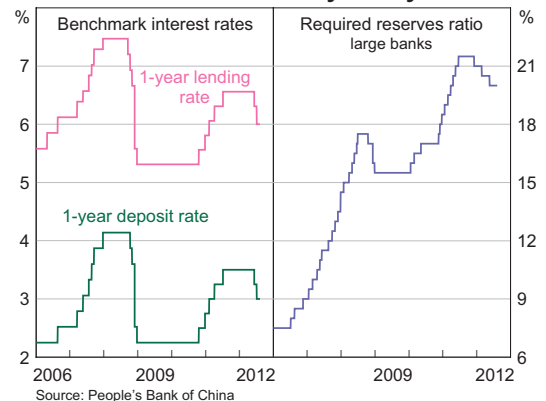
## Central Bank Policy

A number of central banks have eased policy in recent months (Table 2.2). The ECB cut its main refinancing rate by 25 basis points to 0.75 per cent. The ECB also reduced its deposit facility interest rate to zero, which had a significant effect on euro area money markets (see below). Following the ECB's decision, the National Bank of Denmark reduced its lending rate by 25 basis points, to 0.2 per cent, and cut its deposit rate to -0.2 per cent.

The People's Bank of China (PBC) cut its benchmark 1-year lending rate in June and July by a total of 56 basis points and reduced a range of the other benchmark deposit and lending rates by a similar amount (Graph 2.7). The 1-year benchmark lending rate is currently 6.0 per cent, and the 1-year benchmark deposit rate is 3.0 per cent. The PBC also increased the flexibility that financial institutions have to set lending rates; banks may now offer loans at 0.7 times the benchmark rate, compared with 0.9 times the benchmark at the beginning of June. In addition, the reserve requirement ratio was reduced in May, to 20 per cent for large banks, which was the third reduction since December 2011.

Elsewhere, the Central Bank of Brazil twice cut its policy rate by 50 basis points, bringing the cumulative reduction to 450 basis points since August last year. The South African Reserve Bank cut

**Graph 2.7**  
**Chinese Monetary Policy**





**Table 2.2: Policy Rates**

	Current level Per cent	Most recent change	Change from 2011 peak Basis points
Euro area	0.75	↓ Jul 12	-75
Japan	0.05	↓ Oct 10	-
United States	0.125	↓ Dec 08	-
Australia	3.50	↓ Jun 12	-125
Brazil	8.00	↓ Jul 12	-450
Canada	1.00	↑ Sep 10	-
China	6.00	↓ Jul 12	-56
India	8.00	↓ Apr 12	-50
Indonesia	5.75	↓ Feb 12	-100
Israel	2.25	↓ Jun 12	-100
Malaysia	3.00	↑ May 11	-
Mexico	4.50	↓ Jul 09	-
New Zealand	2.50	↓ Mar 11	-50
Norway	1.50	↓ Mar 12	-75
Russia	8.00	↓ Dec 11	-25
South Africa	5.00	↓ Jul 12	-50
South Korea	3.00	↓ Jul 12	-25
Sweden	1.50	↓ Feb 12	-50
Switzerland	0.00	↓ Aug 11	-25
Taiwan	1.875	↑ Jun 11	-
Thailand	3.00	↓ Jan 12	-50
United Kingdom	0.50	↓ Mar 09	-

Source: central banks

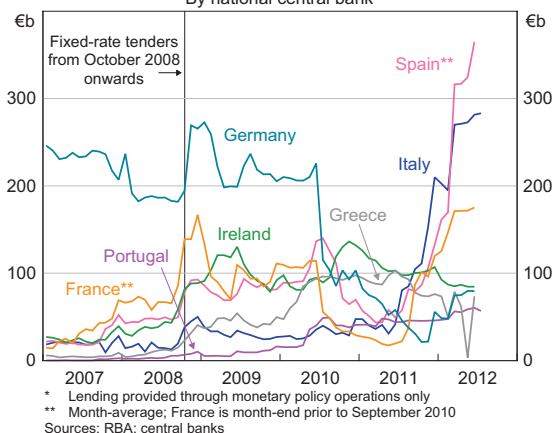
its policy rate target by 50 basis points, to 5 per cent, while the Bank of Korea lowered its policy rate by 25 basis points, to 3 per cent.

Central banks have also taken a number of other policy actions in recent months. The Bank of England increased the size of its Asset Purchase Facility by £50 billion, to £375 billion, with purchases expected to be completed by November. At the completion of the program, it is estimated that the Bank of England will hold around one-quarter of outstanding gilts. The Bank of Japan adjusted the composition of its Asset Purchase Program, increasing planned asset purchases by ¥5 trillion (to ¥45 trillion) while reducing the size of its fixed-rate liquidity program commensurately.

In total, ECB lending to banks for monetary policy purposes stood at around €1.2 trillion in July. Lending to banks has increased by around €80 billion since the second round of 3-year loans was provided in late February, with a significant share of this due to lending via the Bank of Spain and the Bank of Italy (Graph 2.8).

The ECB has made a number of changes to its range of eligible collateral. It will accept a wider range of asset-backed securities for monetary policy operations, including lower-rated residential mortgage-backed securities and securities backed by loans to small and medium-sized enterprises. However, Greek sovereign debt instruments will no longer be accepted. This decision reflects the expiry of €35 billion in

**Graph 2.8**  
**ECB Lending to Banks\***  
 By national central bank



guarantees provided by the EFSF at the time of the Greek debt swap earlier in the year, which had allowed banks to continue to use Greek government securities as collateral. Banks without alternative collateral (likely to be primarily Greek banks) will be able to access emergency liquidity assistance from their national central banks. The ECB noted that it would review its decision following the conclusion of the current troika review of Greece. The ECB also announced that it will not accept any additional self-issued, government-guaranteed securities from banks as collateral (though it will consider requests to accept such securities in 'exceptional cases').

As noted above, at its August meeting the ECB announced that it may undertake additional purchases of sovereign debt but would only do so if governments adhere to their fiscal and structural commitments and after governments request that the EFSF/ESM buy their debt. The ECB also suggested that it was considering other non-standard policy measures, with the details of any such measures to be designed over the coming weeks.

In the United States, the Federal Reserve announced a US\$267 billion extension of its Maturity Extension Program (MEP), increasing the size of the program to US\$667 billion. The MEP was due to conclude at the end of June but will now continue through to the end of the year.

## Government Financial Policy

In the United Kingdom, the Bank of England and HM Treasury announced the introduction of the Funding for Lending Scheme. Participating banks and building societies will be able to borrow UK Treasury bills from the Bank of England (in return for eligible collateral) worth up to 5 per cent of their stock of existing lending to the real economy via the scheme, plus any net expansion of lending that occurs between June 2012 and December 2013. The borrowings from the Bank of England will have a maximum term of four years, and the fee will be between 25 and 150 basis points, depending on whether banks expand, maintain or reduce their lending over the 18-month period.

The Fed announced that its loans to two investment vehicles – Maiden Lane I and Maiden Lane III – have been fully repaid. Maiden Lane I contained mortgage assets acquired as part of the wind-up of Bear Stearns, while Maiden Lane III contained CDOs that AIG had sold insurance on to investment banks. Furthermore, AIG has been repaid in full for the US\$5 billion equity (plus accrued interest) it contributed to Maiden Lane III. Net proceeds from asset sales also provided residual profits to the New York Fed, which will continue to receive two-thirds of any residual profits generated by asset sales.

In Canada, the government announced measures to tighten lending practices for mortgages eligible for government-backed insurance. To be eligible, mortgages with a loan-to-valuation ratio of greater than 80 per cent must have a maximum amortisation period of 25 years (down from 30), a gross debt-servicing ratio of no more than 39 per cent, be for a house bought for less than C\$1 million and may not be refinanced at a loan-to-valuation ratio of above 80 per cent (previously 85 per cent).

## Credit Markets

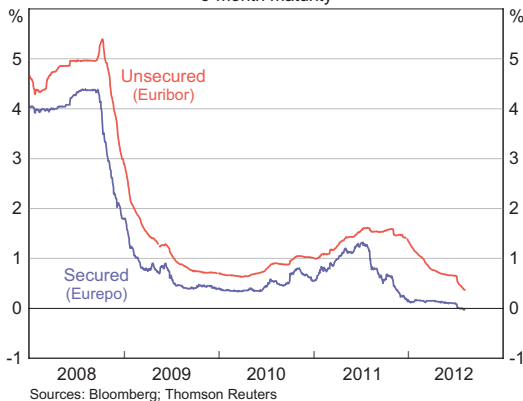
The cut in ECB policy rates has had a significant effect on euro area money markets. The deposit facility rate has become the key reference rate for

euro area money markets in recent years. Until the recent cut, the ECB's deposit facility could be used by a bank to earn a return on reserves held at the ECB in excess of regulatory requirements. Unsecured rates stepped lower following the ECB decision (with 3-month rates having now fallen by a total of around 100 basis points since the injection of liquidity from the ECB's 3-year loan operations) (Graph 2.9). Secured rates have also fallen, though some of these were already close to zero prior to the ECB's decision; interest rates on short-term secured lending using high-quality collateral are currently slightly negative. Activity in some euro area interbank markets has reportedly fallen to low levels as interest rates have approached zero or become negative, and several euro-denominated money market funds have announced their closure to new investments, citing an inability to invest additional funds profitably.

Corporate bond spreads in the euro area and the United States remain narrower than they were late last year, although spreads in the euro area are slightly wider than their recent lows reached in March 2012 (Graph 2.10). Euro area financials' bond spreads fell after the Euro Summit in June.

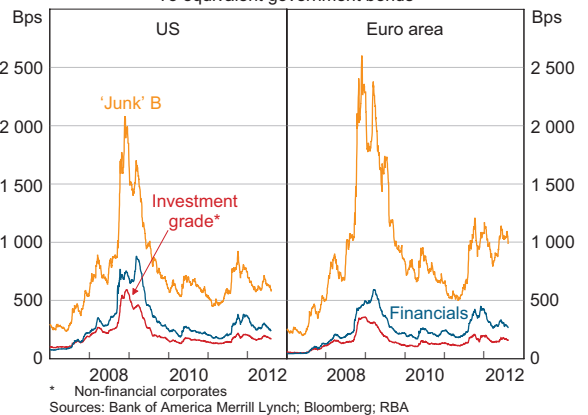
Corporate bond issuance in the euro area has been relatively subdued in recent months, after strong issuance in the first quarter as conditions improved following the ECB's 3-year lending operations

**Graph 2.9**  
Euro Interbank Interest Rates  
3-month maturity

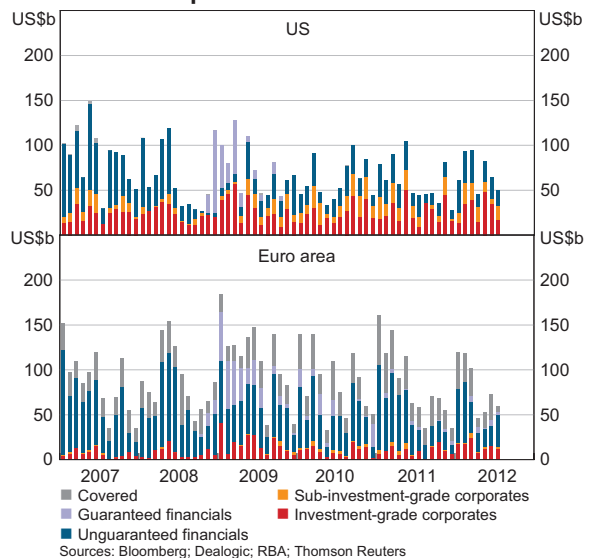


(Graph 2.11). Although covered bond issuance picked up in June, a large proportion was accounted for by Spanish banks' self-issuance. These bonds have been used to generate additional collateral for use at ECB monetary policy operations. Issuance in the United States has remained firm, with non-financial companies in particular continuing to raise funds in bond markets.

**Graph 2.10**  
Corporate Bond Spreads  
To equivalent government bonds



**Graph 2.11**  
Corporate Bond Issuance



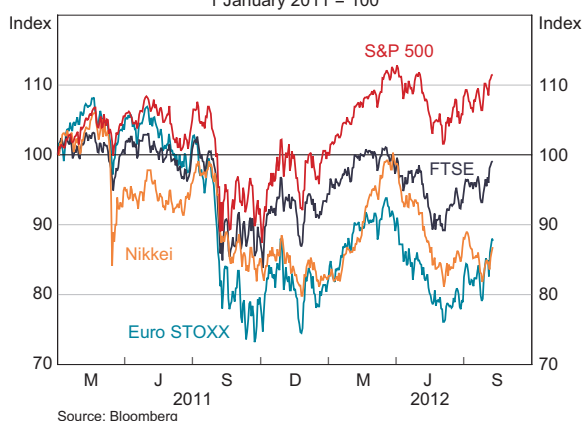
## Equities

Global equity prices have risen by around 8 per cent over the year to date, with gains in the early part of 2012 partly unwound as renewed concerns about European banks and sovereign debt as well as mixed economic data dampened sentiment (Graph 2.12, Table 2.3). While sentiment has recently been bolstered by expectations of policy action by the ECB, global equity prices remain below their 2012 peaks recorded around March.

Despite a recent rally, euro area equity prices have underperformed most major markets over recent months, as the June summit and announcement of measures to support the Spanish banking sector failed to have a lasting effect on confidence. Outside of Europe, the Japanese equity market has fallen notably, partly reflecting the appreciation of the yen.

Chinese equity prices have also been particularly weak of late, having fallen by 10 per cent since mid March, to be around 2 per cent lower over the year. Concerns about economic growth appear to have been only partly alleviated by recent policy actions. The weakness in Chinese equities has contributed to the underperformance of emerging equity markets as a whole relative to their developed counterparts in recent months.

**Graph 2.12**  
**Share Price Indices**  
1 January 2011 = 100



**Table 2.3: Changes in International Share Prices**  
Per cent

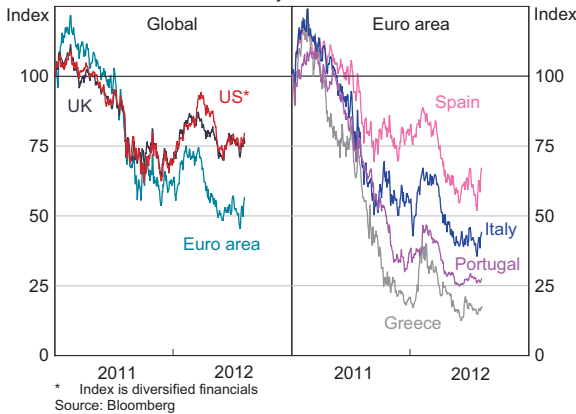
	Since end 2011	Since mid March 2012
United States		
– Dow Jones	8	0
– S&P 500	11	0
– NASDAQ	16	-1
Euro area		
– STOXX	7	-6
United Kingdom		
– FTSE	5	-2
Japan		
– Nikkei	5	-12
Canada		
– TSE 300	-1	-6
Australia		
– ASX 200	6	1
China		
– China A	-2	-10
MSCI indices		
– Emerging Asia	6	-6
– Latin America	5	-5
– Emerging Europe	7	-8
<b>– World</b>	<b>8</b>	<b>-3</b>

Source: Bloomberg

Banking sector shares have been influenced by a number of sector-specific factors over recent months and have generally underperformed the broader market in most of the major economies (Graph 2.13). Euro area bank share prices have fallen by 25 per cent since February despite rallying recently on expectations of ECB policy action. Weaker-than-expected earnings results reported by several large European banks have weighed on the sector.

In the United States, financials have underperformed in recent months despite most large US banks reporting stronger-than-expected earnings for the June quarter as an improvement in credit quality

**Graph 2.13**  
**Bank Share Price Indices**  
1 January 2011 = 100

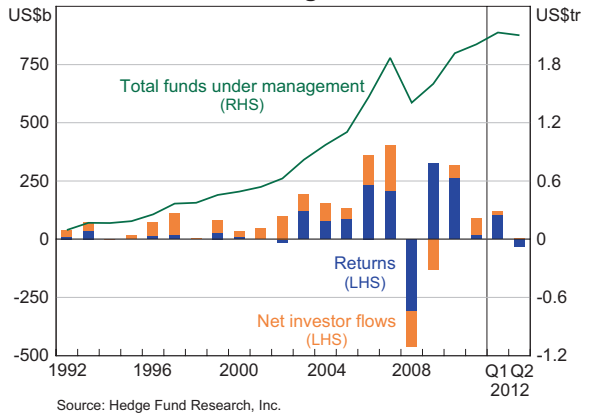


led to a decline in provisions. US banking shares have been affected by JPMorgan's disclosure of a large trading loss on a synthetic credit portfolio managed within its Chief Investment Office. In the United Kingdom, Barclays' share price fell sharply on news that the firm would pay a £290 million settlement for their role in manipulating the LIBOR (see 'Box D: Interbank Reference Rates'). The ongoing investigation of other banks for similar misconduct is weighing on the sector more broadly.

## Hedge Funds

Global hedge funds recorded an average loss on investments of 4 per cent over the year to June, which was slightly larger than the loss recorded by global equity markets on a total return basis (that is, including dividends) over the same period (Graph 2.14). Nevertheless, monthly returns from investment in hedge funds have continued to be less volatile than equity market returns. Valuation effects associated with recent losses largely explain the small decline in funds under management, to US\$2.1 trillion, with hedge funds receiving only a modest injection of new capital in the June quarter.

**Graph 2.14**  
**Global Hedge Funds**

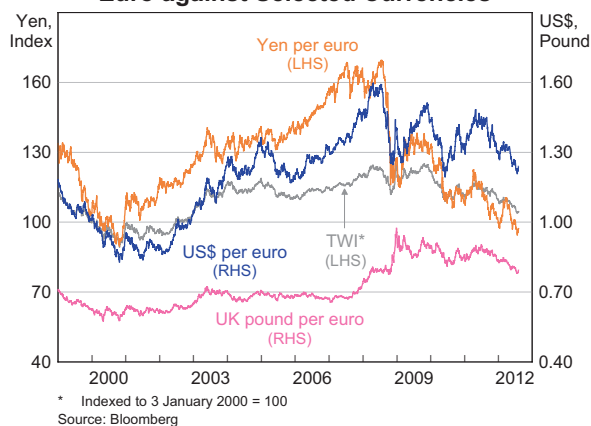


## Foreign Exchange

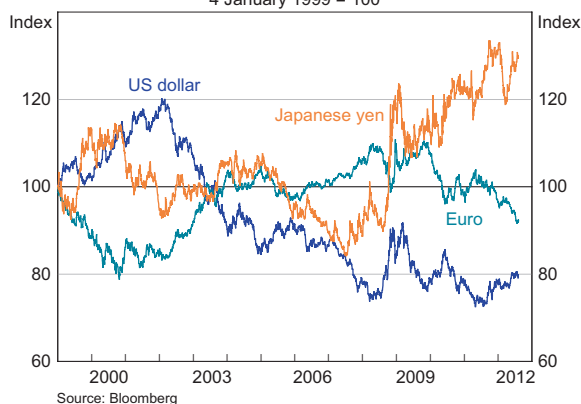
European developments have also continued to be the dominant influence on foreign exchange markets. This was particularly evident in May, when heightened uncertainty in the lead up to the second election in Greece and increasing concerns about Spain saw European, emerging market and commodity currencies all depreciate sharply against the US dollar. The euro faced renewed downward pressure in July as returns on some risk-free euro-denominated assets fell to zero; however, in contrast to May, other risk-sensitive currencies generally appreciated against the US dollar (Graph 2.15). This broad-based weakness in the euro resulted in it reaching a 10-year low on a trade-weighted basis and a 12-year low against the yen. The euro received some support in late July and early August from the prospect of further policy measures from the ECB, but nevertheless has depreciated by around 6 per cent against the US dollar since its late April peak.

The US dollar and Japanese yen, on the other hand, have been supported by safe haven and repatriation flows in recent months, particularly from around the time of the first (inconclusive) Greek election, with both currencies appreciating on a trade-weighted basis since early May (Graph 2.16, Table 2.4). Overall,

**Graph 2.15**  
Euro against Selected Currencies



**Graph 2.16**  
Major Currencies' Nominal TWI  
4 January 1999 = 100



the US dollar has appreciated by 1 per cent on a trade-weighted basis since the start of the year and remains at a relatively low level by historical standards. While slightly lower against the US dollar, the yen has appreciated against the euro since the start of the year. As a result, the trade-weighted yen exchange rate is currently only slightly below its 2011 peak – a multi-decade high – which was when the Japanese authorities last intervened in the foreign exchange market to depreciate the currency. The Japanese authorities have recently reiterated their willingness to intervene to curtail further appreciation if required. While high in nominal terms, the trade-weighted yen exchange rate is only slightly above its long-run average in real terms.

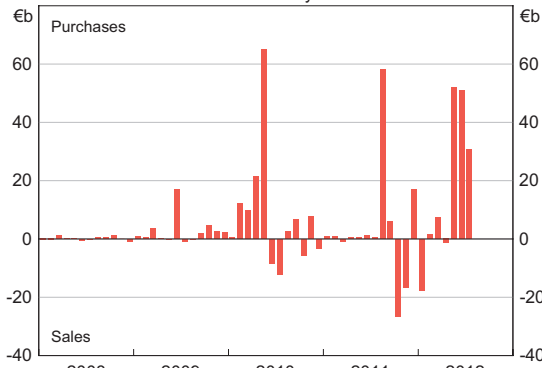
**Table 2.4: Changes in the US Dollar against Selected Currencies**  
Per cent

	Over 2011	Since end 2011
Brazilian real	12	9
European euro	3	5
Indonesian rupiah	1	4
Indian rupee	19	4
Swiss franc	0	4
Japanese yen	-5	2
Chinese renminbi	-5	1
South African rand	22	0
Thai baht	5	0
UK pound sterling	0	-1
New Taiwan dollar	4	-1
Malaysian ringgit	3	-2
Canadian dollar	2	-3
South Korean won	3	-3
Swedish krona	3	-3
Australian dollar	0	-3
Singapore dollar	1	-4
New Zealand dollar	0	-5
Philippine peso	1	-5
Mexican peso	13	-6
<b>Majors TWI</b>	<b>0</b>	<b>1</b>
<b>Broad TWI</b>	<b>2</b>	<b>0</b>

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

More generally, there has been strong demand for highly rated debt from a broad range of countries in 2012 to date as sovereign and private investors have sought alternatives to holding euro area assets. Within Europe, strong demand for Swiss assets is evident in the negative yields on Swiss short-term government debt and in recent increases in the Swiss National Bank's (SNB) foreign exchange holdings, which suggest that sizeable purchases of foreign exchange have been required to defend the Swiss franc ceiling against the euro (Table 2.5, Graph 2.17). Once exchange rate valuation effects are taken into account, the SNB is estimated to have purchased around €130 billion over the three

**Graph 2.17**  
**Swiss Foreign Exchange Reserves\***  
 Estimated net monthly transactions



\* Transactions estimated based on changes in gross reserves and the SNB's documented currency composition  
 Sources: Bloomberg; RBA; Swiss National Bank

months to July to defend the Swiss franc ceiling against the euro. The reserves data published by the SNB indicate that a significant amount of the euros purchased have since been exchanged for other currencies, particularly the US dollar, but also the Australian dollar.

In contrast to the trend seen since mid 2010, the Chinese renminbi (RMB) has depreciated against the US dollar since early May, by around 1½ per cent, consistent with a somewhat weaker economic outlook for China. The RMB has recently traded

around its lowest level against the US dollar in eight months (Graph 2.18). However, the RMB has appreciated modestly in trade-weighted terms since early May, largely reflecting the recent broad-based appreciation of the US dollar.

The depreciation of the RMB against the US dollar coincided with a rare decline in the stock of China's foreign exchange reserves over the June quarter (Graph 2.19). Official data indicate that the PBC undertook net sales of foreign exchange during the quarter, consistent with capital outflow. In line with ongoing downward pressure on the exchange rate, the RMB has generally traded towards the bottom of its daily trading band against the US dollar since around mid May.

Further gradual steps have been taken towards internationalising the RMB. These include: plans to establish the 'Pearl River Delta Financial Reform and Innovation Zone' to test measures aimed at liberalising the capital account in specified regions of three cities; some relaxation of rules related to investing in onshore markets through the Qualified Foreign Institutional Investor scheme; the announcement of further bilateral local currency swap agreements with Brazil and Ukraine; and the

**Table 2.5: Foreign Currency Reserves**  
 As at end July 2012

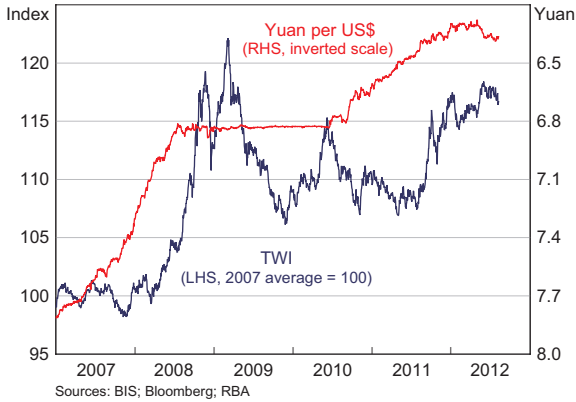
	Three-month-ended change		Level
	US\$ equivalent (billions)	Per cent	US\$ equivalent (billions)
China <sup>(a), (b)</sup>	-65	-2	3 240
Japan	-14	-1	1 197
Russia	-19	-4	440
Switzerland	155	59	416
Taiwan	-4	-1	391
Brazil	3	1	367
South Korea	-3	-1	306
India	-4	-2	256
Thailand <sup>(b)</sup>	-4	-2	164

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

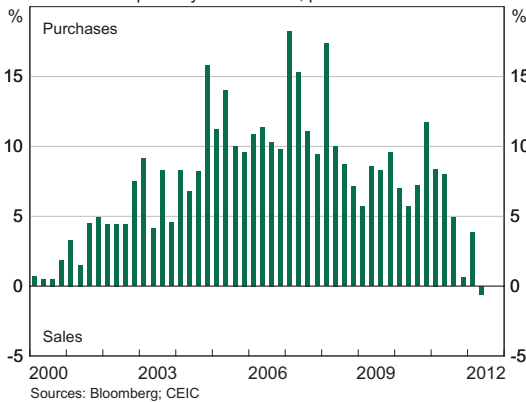
(b) End June

Sources: Bloomberg; CEIC; IMF; RBA

**Graph 2.18**  
**Chinese Renminbi**



**Graph 2.19**  
**Chinese Foreign Exchange Reserves**  
Net quarterly transactions, per cent of GDP



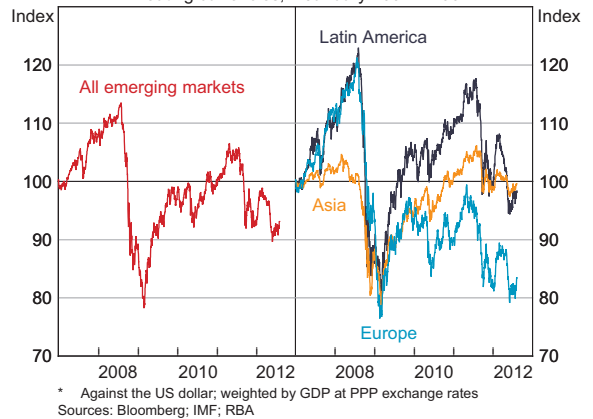
commencement of direct trading between the RMB and the Japanese yen in the Shanghai and Tokyo interbank markets. In offshore markets, the Hong Kong Monetary Authority (HKMA) launched an RMB liquidity facility, designed to ease potential short-term RMB liquidity pressures in Hong Kong's offshore market, and a Chinese bank is expected to be authorised as an RMB 'offshore clearing bank' in Singapore.

Australia and Hong Kong also commenced an ongoing RMB Trade and Investment Dialogue that will be facilitated by the RBA, the Australian Treasury, and the HKMA and will involve the private sector. The

Dialogue aims to broaden RMB trade settlement and support the development of new RMB-denominated financing and investment products.

Most other emerging market currencies depreciated markedly against the US dollar between late February and mid June, although these falls have been slightly retraced since (Graph 2.20). Reports that some central banks intervened in the foreign exchange market to support their currencies – particularly during May – are consistent with declines in foreign currency reserves (in US dollar terms) for most emerging market economies over the June quarter, although valuation effects related to the depreciation of the euro also contributed (Table 2.5).

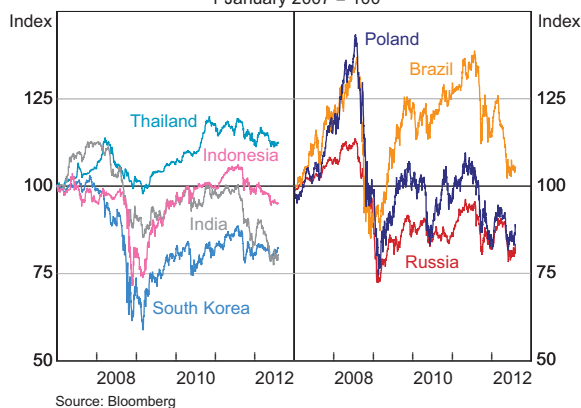
**Graph 2.20**  
**Emerging Market Currencies\***  
Floating currencies, 1 January 2007 = 100



The depreciations since February have generally been less pronounced for emerging Asian currencies. A key exception is the Indian rupee, which has depreciated by 12 per cent since early February, although the exchange rate appears to have recently stabilised (Graph 2.21). The rupee's rapid depreciation prompted the Indian authorities to introduce a range of policy measures designed to encourage foreign investment – including, for example, lowering the capital gains tax on long-term private equity investments – and to limit capital outflows.



**Graph 2.21**  
**Selected Currencies against the US Dollar**  
 1 January 2007 = 100



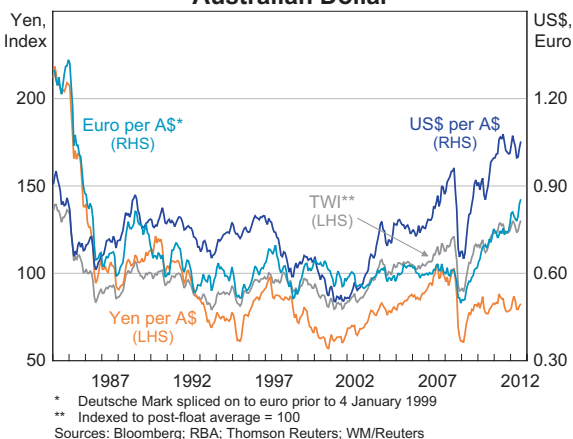
In Latin America, the Brazilian real is currently 16 per cent below its peak in late February, though it has appreciated modestly since late May. The currencies of emerging European economies have also generally experienced relatively pronounced depreciations against the US dollar since late February, reflecting ongoing concerns about their exposures to the euro area.

## Australian Dollar

The Australian dollar remains at a high level by historical standards, with the nominal trade-weighted index almost at the multi-decade high recorded in early March, despite a deterioration in the global economic outlook and a decline in the terms of trade (Graph 2.22). The Australian dollar appreciated to a new record high (since the launch of the euro in 1999) of just above 86 euro cents in early August.

The Australian dollar has appreciated by 4 per cent against the US dollar since the beginning of the year, but has traded in a relatively wide range (Table 2.6). After depreciating to just under 96 US cents in early June in the lead up to the second Greek election, the Australian dollar has subsequently appreciated by around 10 per cent against the US dollar and in trade-weighted terms. Ongoing strong foreign demand for Commonwealth Government securities (CGS) is likely to have been a supporting factor.

**Graph 2.22**  
**Australian Dollar**



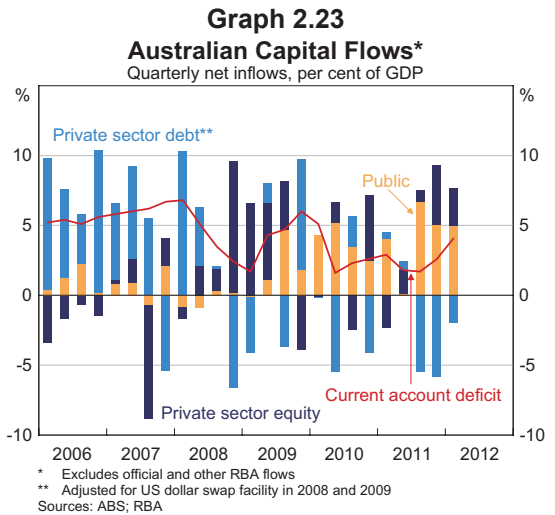
**Table 2.6: Changes in the Australian Dollar against Selected TWI Currencies**  
 Per cent

	Over 2011	Since end 2011
European euro	3	9
Indonesian rupiah	1	8
Indian rupee	18	8
Swiss franc	0	7
Japanese yen	-6	6
Chinese renminbi	-5	5
South African rand	22	4
US dollar	0	4
Thai baht	5	3
UK pound sterling	0	3
Malaysian ringgit	3	2
Canadian dollar	2	1
South Korean won	3	1
Singapore dollar	1	0
New Zealand dollar	0	-1
<b>TWI</b>	<b>0</b>	<b>4</b>

Sources: Bloomberg; Thomson Reuters; WM/Reuters

## Capital Flows

Net capital inflows in the March quarter were directed largely towards the public sector, consistent with the trend over the past few years (Graph 2.23). This reflects ongoing strong foreign demand for CGS, with the Australian Office of Financial Management reporting that 76.5 per cent of the stock of CGS on issue was held by non-residents at end March, up from around 60 per cent in late 2009. There was also a small net capital inflow to the private sector in the March quarter, which included ongoing foreign investment in Australian corporates – including in the mining sector – and an offsetting net outflow of debt from the Australian banking sector, due to both increased foreign lending and maturing portfolio debt.



## Box D

# Interbank Reference Rates

Many financial contracts, including those governing derivatives and debt securities, reference interbank interest rates. The process by which these reference rates are set has been called into question by the recent findings of authorities in the UK and US that Barclays Bank attempted to manipulate the rate fixings within the London and European markets. A number of other financial institutions are also being investigated for similar misconduct.

Reference rates for term borrowing and lending are usually compiled by industry associations and are not taken from actual market transactions. As such, the credibility of these surveys is largely dependent upon the liquidity and transparency of the market they are referencing. In contrast, overnight reference rates are usually compiled by the central bank as a weighted average of rates transacted within the interbank market. For example, to compile the Australian dollar cash rate, the Reserve Bank surveys 25 banks each day on the details of their overnight borrowing and lending.

In the London market, the British Bankers' Association (BBA) publishes interbank borrowing rates for 10 currencies, including the Australian dollar. These rates, which extend to 12-month maturities, are known as London Interbank Offered Rates (LIBOR).

For each currency, the BBA appoints a panel who submit the rates at which they could borrow unsecured funds in the interbank market. Specifically, the respondents are asked: 'At what rate could you borrow funds, were you to do so by asking for and then accepting interbank offers in a reasonable market size just prior to 11 am?' The integrity of the LIBOR fix therefore relies upon the respondents submitting accurate data about their own (actual

or potential) borrowings. The panellists' individual contributions are published by the BBA each day.

While LIBOR fixings are commonly used as reference rates in British pounds, Swiss francs and US dollars, they do not have a similar status in the other currencies for which LIBOR fixings are available. The comparable reference rates for euros are Euribor (Euro Interbank Offered Rates), as published by the European Banking Federation (EBF). The EBF's panel of contributors currently has 43 members, whose credit ratings range from AA to CCC. However, the EBF defines Euribor as the rate at which '... euro interbank term deposits are offered by one prime bank to another prime bank'. Consequently, unlike the BBA survey, the EBF is not asking respondent banks where they themselves could borrow, but are asking for an assessment of where a representative bank could borrow.

To mitigate the influence of an individual contributor, the survey responses for LIBOR and Euribor are both trimmed of a set number of top and bottom respondents before being averaged.

The findings of the UK and US authorities were that, on repeated occasions between 2005 and 2009, Barclays Bank submitted rates to the BBA and EBF that were false and that were designed to benefit the derivative positions held by Barclays. In some instances, Barclays also appeared to accommodate requests from traders at other firms when making its submissions, and traders employed by Barclays were found to have sought to influence the submissions made by other contributing banks.

The UK and US authorities also found that some of the LIBOR submissions made by Barclays were influenced by a desire to avoid negative perceptions

about the relative funding position of the bank. From mid 2007, term (unsecured) money market activity was curtailed in many currencies, making it difficult for LIBOR panellists to determine the correct rates to submit to the BBA. On various occasions, Barclays was found to have set its submissions so that its borrowing costs did not appear too high relative to other contributing banks.

Only a small number of financial contracts are referenced to Australian dollar LIBOR. Instead, the market convention is to reference Australian dollar derivatives and floating rate debt securities against the bank bill swap reference rates (BBSW) published by the Australian Financial Markets Association (AFMA).

To compile BBSW, AFMA surveys 14 banks operating in the domestic market. These banks report where prime bank bills were priced at 10 am for each monthly maturity out to six months. A trimmed mean is then calculated and published as BBSW, with the individual survey responses also published.

Hence, unlike the BBA's LIBOR survey, AFMA is not surveying the respondents about their own borrowing costs. AFMA's survey is more akin to the EBF's Euribor survey in that it is surveying respondents on prime banks' borrowing costs. However, unlike the EBF, AFMA specifically designates who the prime banks are.

In a process overseen by AFMA, money market participants select the prime banks each year, subject to minimum credit rating and issuance size criteria. The purpose is to ensure that buyers of prime bank bills and certificates of deposits (CDs) in the interbank market will be indifferent between receiving securities issued by any of the prime banks. This significantly enhances the liquidity of the market. At the present time, only the four major Australian banks are designated as prime banks. In earlier years, certain foreign banks active in the Australian market had been selected as prime; however, these banks no longer meet the minimum criteria.

Interbank trading in prime bank bills and CDs is concentrated around 10 am and is mostly conducted over broker screens, imparting a great deal of transparency to the market. The most actively traded bills and CDs are those with one, three and six months to maturity.<sup>1</sup> (Contributions for two, four and five months often need to be imputed by respondents, however. This is possible because of the close price points at one, three and six months.) ↘

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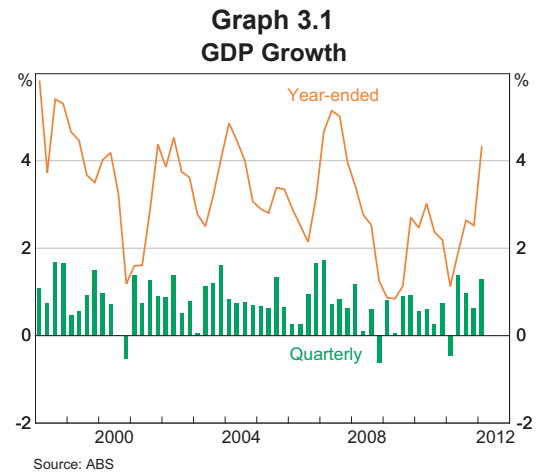
<sup>1</sup> To aid liquidity, bill and CD maturities are grouped into half-month periods ('early' and 'late' month). Consequently, a 3-month bill purchased on 1 August could mature on any date between 1 November and 15 November and could be sold as a 3-month bill up until 15 August.

### 3. Domestic Economic Conditions

The latest information suggests that, since mid 2011, the Australian economy had been expanding at a stronger pace than had previously been indicated by the available data. GDP growth in the second half of 2011 was revised higher to be around trend. In the March quarter, GDP increased by 1.3 per cent driven by strong growth in household consumption and the ongoing surge in mining investment. Over the year, GDP was 4.3 per cent higher, in part reflecting the recovery of coal production following the flood-related disruptions in early 2011 (Graph 3.1, Table 3.1). Growth in national income has been softer, owing to falls in commodity prices and the terms of trade, which peaked in the second half of 2011 (Graph 3.2). Conditions continue to vary across industries, with the buoyant mining sector spurring activity in some industries, while the high exchange rate and weak conditions in the housing market weigh on activity in some others. Nonetheless, business surveys suggest

that the variation in conditions across industries is not unusually large by historical standards.

Recent data suggest that the economy continued to expand in the June quarter, although at a more moderate rate than in the March quarter. Retail and



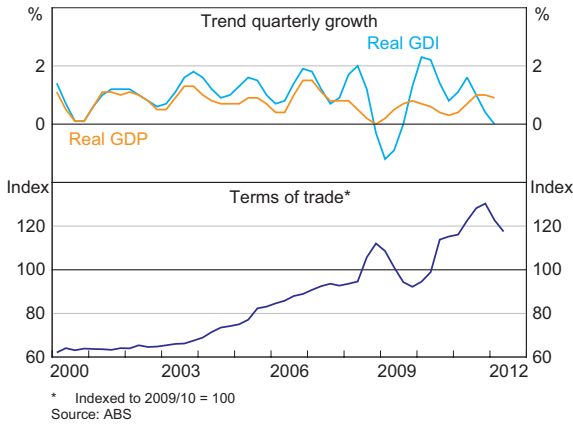
**Table 3.1: Demand and Output Growth**  
Per cent

	March quarter 2012	Year to March quarter 2012
Domestic final demand	1.8	5.0
– Private demand	2.2	6.7
– Public demand	0.3	–0.4
Change in inventories <sup>(a)</sup>	–0.1	0.5
Gross national expenditure	1.7	5.5
Net exports <sup>(a)</sup>	–0.5	–1.3
GDP	1.3	4.3
Nominal GDP	0.3	4.6
Real gross domestic income	0.2	3.5

(a) Contribution to GDP growth  
Source: ABS

**Graph 3.2**

**Gross Domestic Product and Income**



motor vehicle sales data indicate that household spending has continued to increase at an around average pace, while employment growth picked up in the June quarter. Growth in mining investment remains strong, with the commencement and approval of more projects in recent months sustaining the very large stock of work in the pipeline. Iron ore exports have recovered, following cyclone-related disruptions in the March quarter, although coal exports have fallen sharply. At the same time, slower global growth has contributed to continued falls in commodity prices. Surveys and liaison suggest that investment intentions in the non-mining sector have softened. Housing construction is likely to have fallen further in the June quarter, although the recent pick-up in building approvals points to some increase in residential construction activity in the second half of the year.

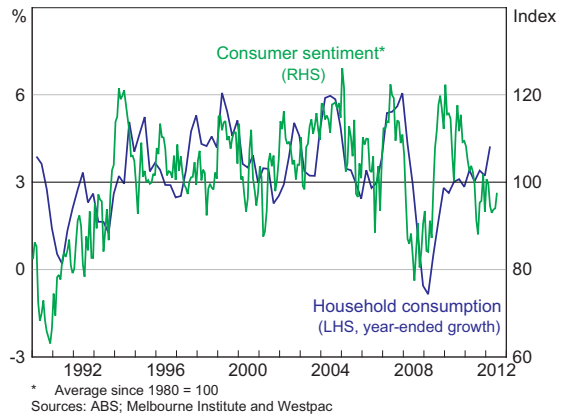
**Household Sector**

Household consumption increased by 1.6 per cent in the March quarter and by 4.2 per cent over the year, somewhat stronger than expected. In contrast, survey measures of consumer sentiment remained a little below their long-run average over this period (Graph 3.3). Recent growth has been broad based across both goods and services, following a period of relatively stronger growth in services consumption. The data indicate that the strong growth in

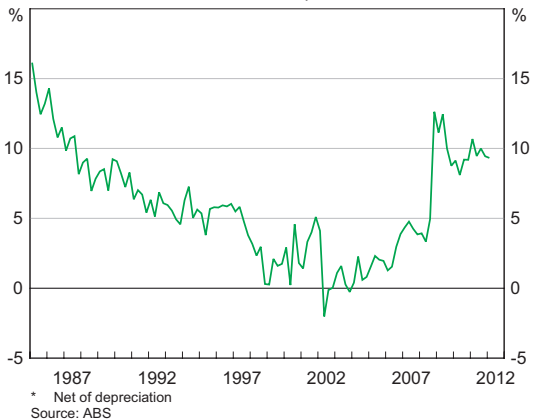
consumption volumes partly reflects falls in some retail prices. Discounting in many parts of the retail sector appears to have been driven by increased competition, including from overseas and domestic online sellers, and by consumers being more value conscious. Ongoing growth in household disposable income has allowed households to increase consumption while maintaining a saving ratio of around 10 per cent of income, well above the levels recorded in the 1990s and early 2000s (Graph 3.4).

Indicators suggest that consumer spending has retained considerable momentum in the June quarter. Growth in the volume of retail sales remained above its pace of late 2011, sales of motor vehicles

**Graph 3.3**  
**Consumer Sentiment and Consumption**



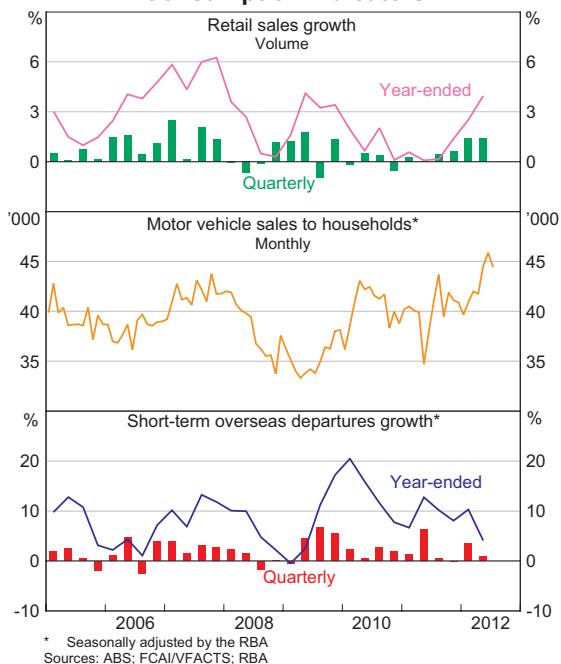
**Graph 3.4**  
**Household Saving Ratio\***  
Per cent of household disposable income



to households increased strongly and the number of Australians travelling overseas has continued to increase over recent months (Graph 3.5). The Bank's liaison suggests that various government payments made to households through May and June had a noticeable effect on sales at some retailers.

Over recent years, households have been saving at a higher rate and increasing their borrowing at a slower rate. Household debt grew at around the same pace as household income over the March quarter, leaving the ratio of debt to income at around 150 per cent; debt continued to grow at a moderate rate in the June quarter (Graph 3.6). Lower average interest rates over the March quarter resulted in a fall in household interest payments as a share of income, to around 11 per cent. Interest payments are estimated to have fallen further in the June quarter, broadly in line with the reductions in the cash rate in May and June. Interest receipts by the household sector have not fallen as much as payments due to a smaller fall in deposit rates than in borrowing rates as well as deposits growing faster than debt.

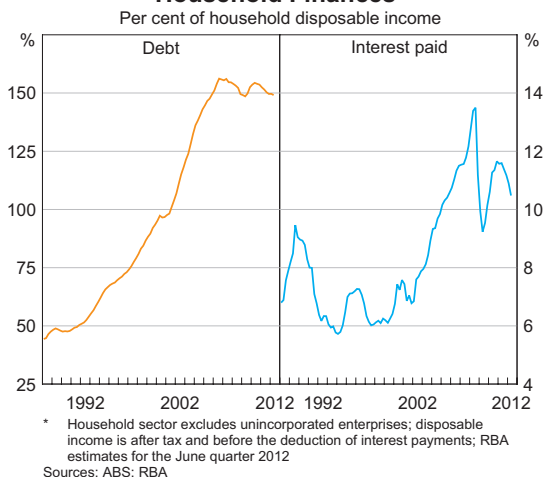
**Graph 3.5**  
**Consumption Indicators**



\* Seasonally adjusted by the RBA  
Sources: ABS; FCAI/VFACTS; RBA

**Graph 3.6**

**Household Finances\***



\* Household sector excludes unincorporated enterprises; disposable income is after tax and before the deduction of interest payments; RBA estimates for the June quarter 2012  
Sources: ABS; RBA

Household net worth was 2½ per cent lower over the year to the March quarter, driven by lower dwelling prices, offset somewhat by growth in household financial assets. Net worth is expected to have fallen slightly in the June quarter, as a result of small falls in asset prices.

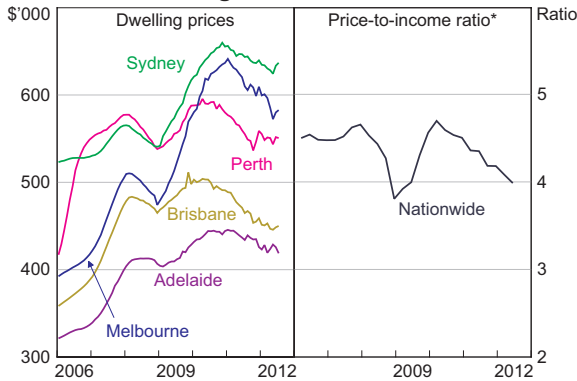
Australian capital city dwelling prices have fallen by around 6 per cent since their peak in early 2011 (Graph 3.7, Table 3.2); given continued growth in incomes, the ratio of dwelling prices to income has declined consistently over the past two years. In recent months, however, dwelling prices have picked up a little in most capital cities. Demand for housing finance has remained moderate, although there are differences across states, with the value of housing loan approvals growing strongly in Western Australia over the past year. Housing turnover has remained close to the low level of the early 1990s.

Growth in rents has continued to outpace overall inflation. This is consistent with vacancy rates, which nationwide remain low by historical standards at around 2 per cent (Graph 3.8).

Residential construction activity fell further in the March quarter, but there are signs from a number of indicators that activity may start to pick up in the second half of this year. Building approvals increased

**Graph 3.7**

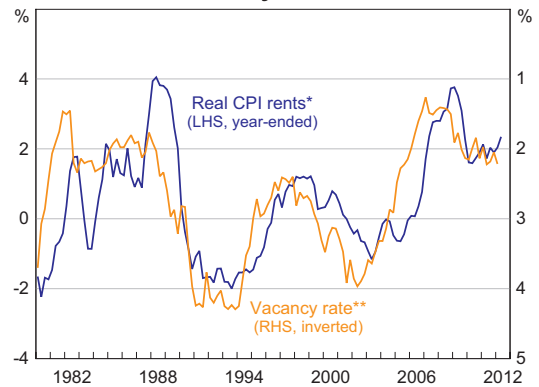
**Dwelling Prices and Income**



\* Average dwelling prices to average household disposable income (before the deduction of interest payments); RBA estimate for the June quarter 2012  
Sources: ABS; RBA; RP Data-Rismark

**Graph 3.8**

**National Vacancy Rates and Rents**



\* Calculated as the CPI measure of rents relative to underlying inflation  
\*\* Seasonally adjusted by the RBA  
Sources: ABS; RBA; REIA

in the June quarter, underpinned by a sharp rise in approvals for higher-density housing (Graph 3.9). Approvals for detached houses have been affected by temporary disruptions in Western Australia associated with the introduction of a new building approvals process.

Falls in mortgage interest rates and higher rental yields have increased the attractiveness of new housing investment, although falls in dwelling prices

appear to have been weighing on demand for new housing. Changes to state government housing initiatives are likely to have a mixed effect on national demand for new housing in coming quarters, with some initiatives having recently expired (such as the First Home Bonus scheme in Victoria) and other new policies taking effect (including the First Home Owner Grant (New Homes) scheme in New South Wales).

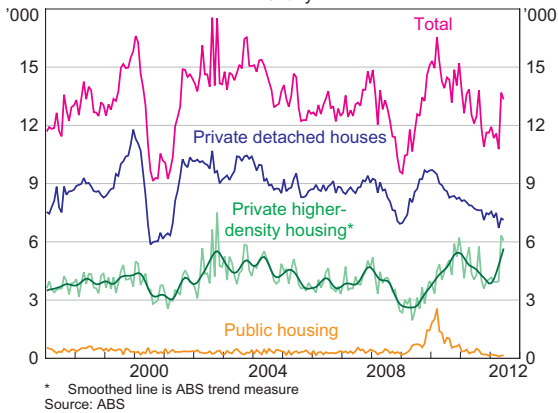
**Table 3.2: National Housing Price Growth**  
Per cent

	3 months to March 2012	3 months to June 2012	Year to June 2012
<b>Capital cities</b>			
ABS <sup>(a), (b)</sup>	-0.1	0.5	-2.1
APM <sup>(b)</sup>	0.9	0.0	-1.1
RP Data-Rismark	-1.6	-0.6	-3.6
<b>Regional areas</b>			
APM <sup>(b)</sup>	1.1	1.9	1.8
RP Data-Rismark <sup>(a)</sup>	-0.1	-1.6	-2.2

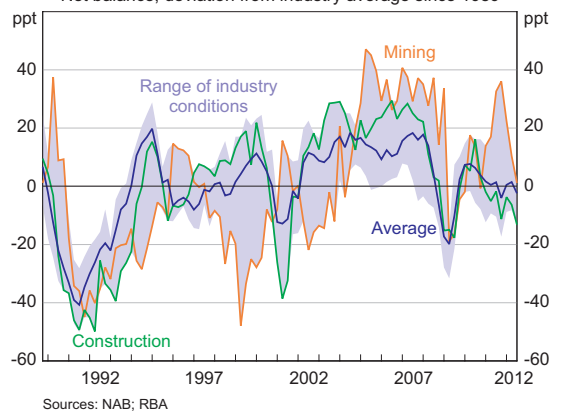
(a) Detached houses only  
(b) Quarterly measures  
Sources: ABS; APM; RBA; RP Data-Rismark



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



**Graph 3.10**  
**Business Conditions by Industry**  
Net balance, deviation from industry average since 1989

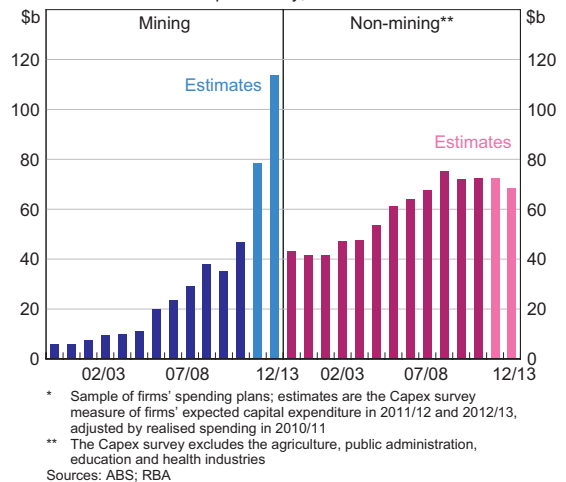


## Business Sector

Survey measures of business conditions softened a little over recent months, but are still around long-run average levels (Graph 3.10). Differences in conditions across industries continue to be broadly consistent with the ongoing structural changes affecting the Australian economy. The mining and transport industries report the strongest conditions, reflecting the continuing boom in mining investment, while conditions remain weak in large parts of the construction, manufacturing and retail industries. Nevertheless, the variation in business conditions across industries has been somewhat narrower over the first half of the year than historical norms.

In line with the above-average conditions reported by the mining industry, mining investment has grown strongly, by around 70 per cent over the past year. The outlook for mining investment remains strong, with the latest ABS survey of firms' capital expenditure plans (Capex) implying further rapid growth for 2012/13 (Graph 3.11). This is despite some mining companies adopting a more cautious approach recently to investment opportunities (to which they are not yet committed) given recent falls in commodity prices and the softer global economic outlook. Mining investment is expected to peak, however, over the next few years. Investment continues to be underpinned by construction on

**Graph 3.11**  
**Capital Expenditure\***  
Capex survey, nominal



a number of very large liquefied natural gas (LNG) projects, valued at around \$180 billion in total, including the second liquefaction train at the Australia Pacific LNG project in Gladstone, which was recently approved. Investment in mines and infrastructure for other commodities, such as iron ore and coal, also continues to grow rapidly. Given the import-intensive nature of mining investment, particularly for LNG projects that often involve large modular production plants built offshore, capital imports have also increased very strongly over recent years.

The outlook for non-mining investment remains quite weak, with investment intentions in a range of business surveys below long-run average levels. The ABS Capex survey also points to little growth in non-mining investment in 2012/13. In liaison, many firms indicate that they are slowing their investment spending in line with weaker cash flows and are becoming more selective about which projects to pursue, with many companies only prepared to spend on machinery and equipment investment to the extent necessary to offset depreciation.

Non-residential construction activity remains relatively subdued. Private building approvals have increased in the first half of the year but, generally, remain low relative to GDP. For offices, the national CBD office vacancy rate ticked up by about ¾ percentage point in the June quarter, to remain around its post-2000 average at just under 8 per cent. Capital city office vacancy rates generally remain around average, but have fallen over the past year in Perth to 3 per cent.

Company profits fell by 3 per cent in the March quarter, but were 6 per cent higher over the year. Non-mining profits rose by 9 per cent over the year, with considerable variation between industries. Mining profits slowed considerably over the December and March quarters but remained broadly unchanged over the year, and are well above their decade average as a share of GDP (Graph 3.12).

Following a period of deleveraging, business borrowing has picked up over the past few quarters. In conjunction with profits remaining at a high level, this leaves businesses well placed to increase investment when they see profitable opportunities.

## Farm Sector

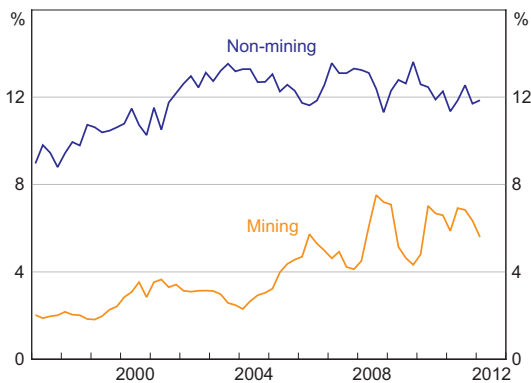
The outlook for the farm sector generally remains positive. The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) forecasts the 2012 winter crop to remain at a high level by historical standards, albeit 15 per cent lower than the record 2011 crop. While recent increases in wheat prices are likely to support income growth, dry conditions in Western Australia may lower crop yields. The Bureau of Meteorology has suggested that there is a risk of an El Niño event developing this year, which is typically associated with below-average rainfall over parts of Australia, although water storage levels remain high in most regions after two years of good rainfall.

## External Sector

Export volumes declined in the March quarter, as cyclone-related disruptions to iron ore exports and a fall in rural exports (from recent high levels) offset a recovery in coal exports. Following earlier changes to student visa policies and the ongoing high level of the exchange rate, service exports continued to decline, though there are tentative signs that the value of service exports has stabilised (Graph 3.13). The volume of manufactured exports grew by nearly 5 per cent over the year to the March quarter, as declines in exports of construction-related materials have been more than offset by increased exports of specialised manufacturing products such as mining-related equipment. Nevertheless, the level of manufactured exports remains well below its 2008 peak.

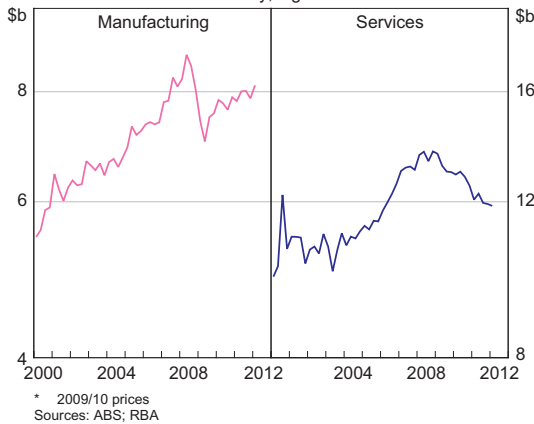
Iron ore exports rebounded in the June quarter, while coal exports declined (Graph 3.14). After returning to pre-flood levels earlier in the year, coal shipments from Queensland have fallen in part due to industrial

**Graph 3.12**  
**Private Non-financial Corporation Profits\***  
 Share of nominal GDP

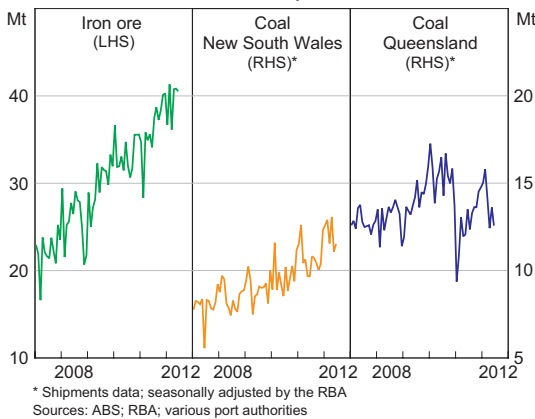


\* Gross operating profits; inventory valuation adjusted  
 Sources: ABS; RBA

**Graph 3.13**  
**Non-commodity Export Volumes\***  
 Quarterly, log scale



**Graph 3.14**  
**Bulk Commodity Exports**  
 Monthly



action at the BHP Billiton Mitsubishi Alliance mines. Coal shipments from New South Wales have also declined in recent months, in part due to the impact of wet weather and some planned maintenance. The first shipment from the Pluto LNG project occurred in the June quarter.

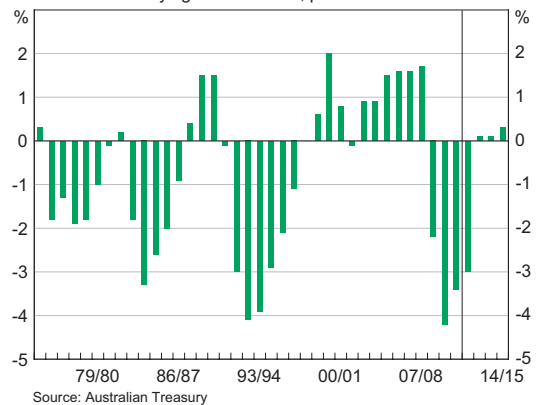
Growth in imports volumes over the first half of 2012 appears to have slowed from the rapid pace over 2011. The surge in mining investment to date has been accompanied by a sharp increase in the volume of capital equipment imports, with close to half of mining investment estimated to have been

imported. Growth in the volume of consumption imports has been less pronounced, and has been around its long-run average over the first half of the year.

## Government Sector

Australian Government and state budgets point to a significant overall fiscal consolidation over the coming two years. In the May Budget, the Australian Government budget balance was forecast to shift from a deficit of 3 per cent of GDP in 2011/12 to a surplus of 0.1 per cent of GDP in 2012/13 (Graph 3.15). At face value, this turnaround in the budget position would have a very large contractionary impact on the economy, but various publicly available estimates suggest that the impact on the economy is likely to be considerably less than this. In part, this reflects a shift in the timing of some payments from the 2012/13 fiscal year into 2011/12 and, to a lesser extent, the nature of the reductions in expenditure, including cuts in offshore spending. A range of estimates suggests that, in isolation, the Australian Government budget may subtract around  $\frac{3}{4}$ – $1\frac{1}{2}$  per cent from growth in real GDP in 2012/13. The consolidated state budgets also point to a tightening in fiscal policy in 2013/14.

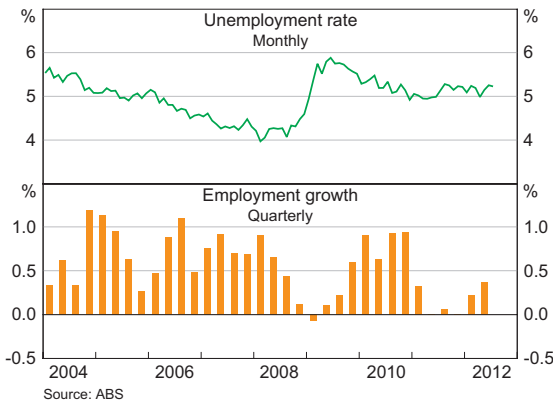
**Graph 3.15**  
**Australian Government Budget Balance**  
 Underlying cash balance, per cent of GDP



## Labour Market

While the monthly data are inherently volatile, since the start of the year there has been a modest recovery in the pace of employment growth, following little net growth in published employment over 2011 (Graph 3.16). Moreover, owing to problems with estimating population growth, it is likely that the employment data have understated recent growth (see 'Box E: Employment and Population Estimates' for more detail). Measures that are expressed relative to the size of the labour force, however, such as the participation rate and the unemployment rate, are relatively unaffected by these measurement issues. After falling in 2011, the participation rate and the ratio of employment to working-age population have tracked sideways in 2012 so far. Consequently there has been little change in the unemployment rate, which remains around 5¼ per cent. Despite the modest improvement in employment growth, aggregate labour demand remains affected by structural developments that are creating pressure for labour shedding in some industries, including retail trade and manufacturing.

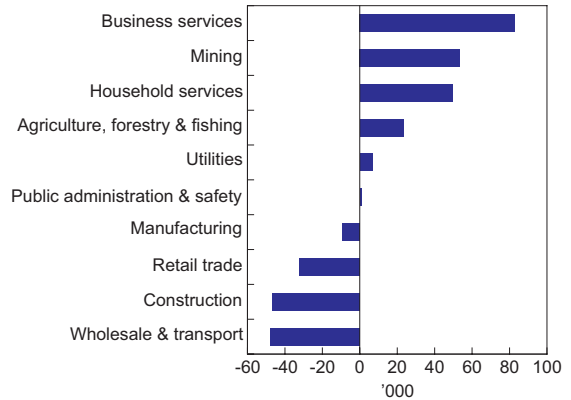
**Graph 3.16**  
**Labour Market**



Employment data by industry show that growth over the year has been underpinned by higher employment in a number of service industries and exceptionally strong growth in mining employment (Graph 3.17). Mining employment grew by more than 25 per cent over the year, and has expanded by

**Graph 3.17**

**Contributions to Employment Growth**  
Year to May 2012, trend



Source: ABS

over 50 per cent since late 2008. The momentum in employment growth across most service industries, including business services, has picked up over the first half of 2012.

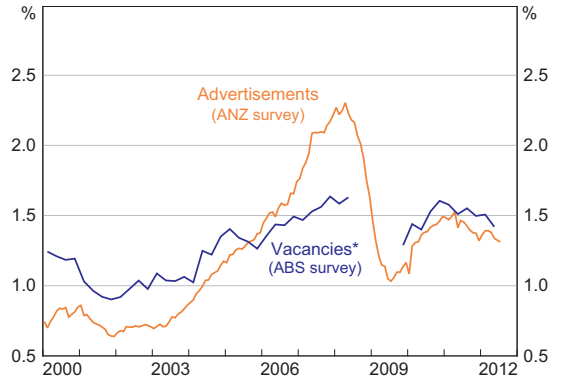
Employment outcomes remain relatively weak in a number of industries exposed to international competition that has been heightened by the strong Australian dollar, or facing patchy domestic demand. Even so, the pace of decline in manufacturing employment appears to have moderated in recent quarters. Weakness in residential and commercial construction activity has led to a fall in construction employment, despite the strength in mining-related construction. Employment has also declined in the retail sector over the past year, as the industry continues to adjust to slower sales growth since 2008. Consistent with this, in the Bank's business liaison program many firms in the parts of the economy most adversely affected by the forces of structural change report that they are reducing employment to contain costs and improve productivity.

Labour market conditions also vary across the states, consistent with differences in industry composition. Over the year to the June quarter, Western Australia experienced rapid employment growth, reflecting the importance of the mining industry in the state. Over recent months, employment growth has picked up in New South Wales and Victoria, in part driven by

strong increases in business services. Labour market conditions have weakened in the other states, with employment falling in Tasmania and South Australia over the past year. In Queensland, strong employment growth in mining has been offset by weaker outcomes in other industries, leaving the level of employment unchanged over the year.

Leading indicators continue to imply modest growth in employment in the period ahead. ABS job vacancies and the ANZ advertisements measure have declined over recent quarters but nevertheless remain at relatively high levels (Graph 3.18). Survey measures of hiring intentions have also softened of late.

**Graph 3.18**  
**Job Vacancies and Advertisements**  
 Per cent of labour force



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

## Box E

# Employment and Population Estimates

Over the past few years, changes in population growth associated with unanticipated swings in net migration flows have made the task of estimating employment growth more difficult than usual. As a result, employment growth was overstated in 2010 and understated over the past year. During this period, the employment-to-population ratio and unemployment rate have provided a more reliable picture of evolving labour market conditions.<sup>1</sup> This box outlines the methodology used to produce estimates of employment, and discusses how employment estimates have been affected by population estimates over recent years. The box also addresses the rebasing of population data to the results of the 2011 census. The treatment of the latest census data will have further implications for employment data when, in 2013, labour market data are re-benchmarked to the census.

## Population and Employment Growth Estimates

Estimates of employment published by the Australian Bureau of Statistics (ABS) in its Labour Force release are constructed using two sources of information: the monthly survey of individuals' employment characteristics (the labour force survey (LFS)) and population benchmarks (which are projections of the working-age population).

1. The LFS, which surveys around 30 000 households, provides information on the employment patterns of around 56 000 individuals by subgroup (defined by age, gender and region). To estimate total employment, the survey information needs

to be 'scaled up' using information on the number of people in each of these subgroups within the total Australian population (the shares of each subgroup in the survey of households may differ from the shares in the total population). This process is known as benchmarking the LFS to the population.

2. The projections of the working-age population (by subgroup) that form the population benchmarks for the LFS are derived from the ABS' official population estimates published in the Australian Demographic Statistics release. These official population estimates are obtained from data on births, deaths and net overseas migration, since a complete count of the population is only available every five years with the census. The estimate of net migration is especially important as it is the main determinant of the cyclical variation in Australia's population growth, but it is also hard to estimate because of the difficulty in distinguishing between permanent and temporary migration flows. The official estimates of population growth are published with a lag of two quarters, only after there has been sufficient time to obtain and process administrative data on births, deaths and migration. Nevertheless, these population estimates are preliminary and subject to revisions. They do not become final until census data spanning the given period are available.

In order to be able to publish employment data the month after the reference month (e.g. August employment data are published in September), the ABS projects the working-age population three quarters ahead of the official population estimates to provide the population benchmarks for the LFS.

<sup>1</sup> The Australian Bureau of Statistics discussed the process of creating population benchmarks for the labour force survey and the recent difficulties in detail in the April 2012 Labour Force release (ABS Cat No 6202.0).

These population benchmarks are typically only revised after new census data are available, and so employment data are normally based on the profile of population projections prepared at the time the employment data are first published, rather than the profile of official population estimates that are published subsequently when additional administrative data become available. However, if it becomes apparent that a large discrepancy has emerged the ABS may revise the benchmarks on an ad hoc basis.<sup>2</sup>

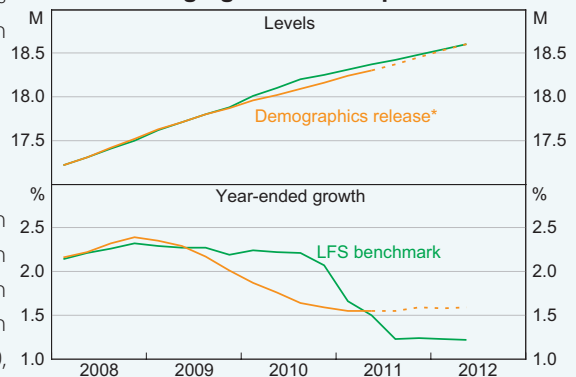
## Recent Population and Employment Growth

Discrepancies arise between the official population estimates and the population benchmarks used in the LFS when there is a change in population growth that was not anticipated when the population benchmark projections were prepared. In 2009/10, a discrepancy arose when net migration slowed unexpectedly. Because it was unexpected, the slowdown was not incorporated in the projected LFS population benchmarks for this period. As a result, the population benchmarks overstated population growth in 2010, and subsequently the level of the population was also overstated (Graph E1).

When a discrepancy between the official population estimate and the LFS population benchmark arises, the normal approach for constructing the population benchmarks removes the difference over time by forcing the projected population benchmark to gradually converge toward the expected official estimate of the population. As a result, over 2011, population growth according to the population benchmark has been biased downwards relative to the official population estimates in the

demographics release (and so the two lines gradually converge in the top panel of Graph E1). In the July Labour Force release, the ABS has advised that for the November 2012 issue it will revise the LFS population benchmarks so that they are consistent with growth in the official population data.

**Graph E1**  
**Working-age Civilian Population**



\* Quarterly data imputed by RBA; dashed lines are RBA estimates based on DIAC data on migration and other assumptions as explained in footnote 3  
Sources: ABS; DIAC; RBA

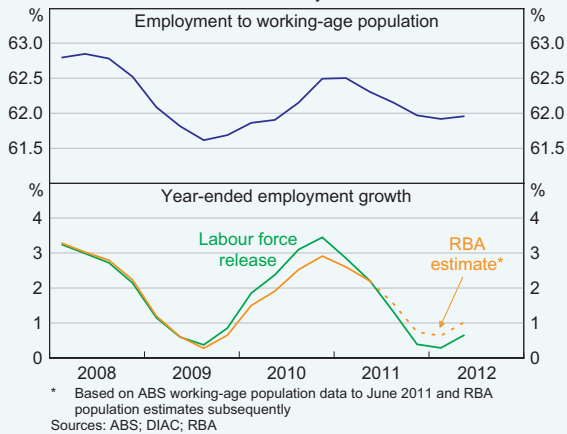
As a result of the discrepancy in the LFS population benchmarks over this period, employment growth as currently published is overestimated in 2010 and underestimated in 2011. It is possible to estimate what the revised profile for aggregate employment growth will look like by applying the employment-to-population ratio from the LFS to the population profile from the demographics release (Graph E2). The employment-to-population ratio from the LFS captures the employment propensities of persons in the survey, and so is not significantly affected by errors in aggregate population growth. However, this approach also requires a range of assumptions in order to estimate working-age population growth in the quarters since June 2011, as population

<sup>2</sup> This occurred after improvements were made to the methodology for estimating net migration in 2009. The official population estimates were revised following the change in methodology, which caused a discrepancy between the official population estimates and the population benchmarks. In August 2010, the ABS revised the population benchmarks to eliminate the discrepancy.

data by age are only published in June each year.<sup>3</sup> Therefore, there is greater uncertainty about the adjustment to the employment growth profile after mid 2011 than there is about the profile prior to that. Nevertheless, this approach provides an indication of the magnitude of the bias in the published employment data from late 2009 to the present.

This adjusted estimate suggests that employment growth was around ½ percentage point lower in 2010 than the published estimate and around ½ percentage point higher over the past year. By coincidence, this bias has exaggerated the recent cycle in employment growth. It is apparent from the profile of the employment-to-population ratio that employment conditions were strong in 2010, deteriorated in 2011, and have subsequently improved somewhat in 2012, but the overall cycle is slightly less pronounced than indicated by the published employment data (and more in line with the RBA estimate shown in Graph E2).

**Graph E2**  
**Employment**  
Quarterly



3 The alternative quarterly estimate of the working-age population (underlying Graph E1) is imputed by taking the June quarter level in each year from the ABS demographics release, adjusting it for defence force employment and adding estimates of natural increase and net overseas migration. The quarters following the latest available data use simple estimates of natural increase and Department of Immigration and Citizenship (DIAC) estimates of net overseas migration.

These problems with employment growth estimates also affect measures in the national accounts such as total hours worked, productivity growth and average earnings growth. The overestimation, then underestimation, of employment growth has resulted in productivity growth being underestimated over 2010 and then overestimated more recently.

## Rebasing Population Estimates to the 2011 Census

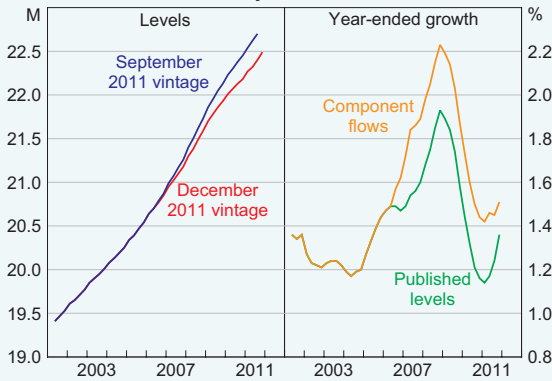
Following each census, the population data in the demographics release and the population benchmarks underpinning the employment data in the labour force release are updated to ensure they are consistent with the census data. The demographics release was rebased to the 2011 census in June 2012 and the population benchmarks in the LFS are scheduled to be re-benchmarked to the census in July 2013. The incorporation of the 2011 census data has resulted in a substantial downward revision to the level of the population in June 2011, of around 300 000 people or 1.3 per cent (Graph E3, left panel). This downward revision, called the ‘intercensal error’, is significantly larger than previous census revisions, in part reflecting improvements in the methodology used by the ABS for estimating the census net undercount.<sup>4</sup>

The intercensal error has implications for the estimated population levels all the way back to the previous census in mid 2006 because the ABS allocates the intercensal error evenly over the period between the censuses. This has the effect of not only changing the estimated levels throughout the period, but also growth rates calculated from these levels. One implication is that there is a larger-than-usual discrepancy between the change in the population between June 2006 and June 2011 implied by births, deaths and net migration data, and

4 Further detail on census net undercount, the changes implemented for the 2011 census and the intercensal error can be found in the December 2011 Australian Demographic Statistics release (ABS Cat No 3101.0).



**Graph E3  
Population**



Sources: ABS; RBA

the change implied by published estimates of the level of the population. The ABS has advised users of the data that the latest series in the demographics release is the best estimate of the population level in 2011 but not population growth. Population growth over this period is better approximated by

the component flows data, that is, the estimates of the natural increase in population and net overseas migration. While the component flows data imply population growth of 1.5 per cent over the year to June 2011, estimates calculated from the published levels are around ¼ percentage point lower (Graph E3, right panel).

The ABS has not yet announced how it will treat the intercensal error in final population estimates and benchmarks, and therefore the effect of these revisions on the published employment levels and growth rates. The treatment of the error will have implications for the correct interpretation of a number of series including employment and productivity growth. Again, measures expressed as ratios, such as the employment-to-population ratio or the unemployment rate, are less affected by these issues and so will remain important guides to interpreting labour market developments. ✎



# 4. Domestic Financial Markets

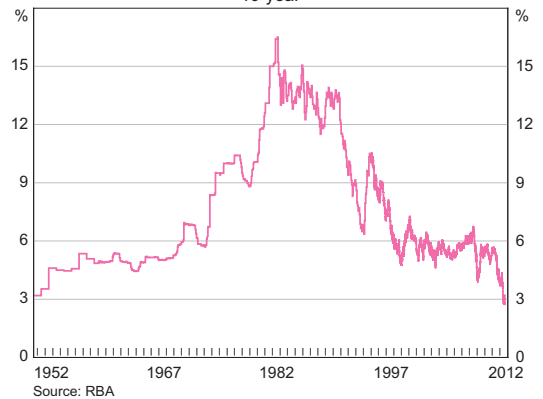
## Money Markets and Bond Yields

The Reserve Bank Board lowered the target for the cash rate by 25 basis points in June, to 3.50 per cent. Expectations for further easing in monetary policy over the next 12 months or so have moved in a wide range since the previous *Statement*, mainly reflecting changes in sentiment over European bank solvency and sovereign financing, as well as reduced expectations for global growth. Rates on overnight indexed swaps (OIS) currently imply a cash rate target close to 3 per cent by the end of 2012 (Graph 4.1). Interest rates on bank bills and certificates of deposit (CDs) have moved in line with OIS rates.

As in the major international markets, long-term government bond yields in Australia have reached historically low levels in recent months. The yield on 10-year Commonwealth Government securities (CGS) reached 2.68 per cent in mid July, its lowest level since Federation (Graph 4.2). The low yields

mostly reflect strong levels of risk aversion with the spreads between CGS and other debt securities generally much wider than their historic norms.

**Graph 4.2**  
Australian Government Bond Yield  
10-year



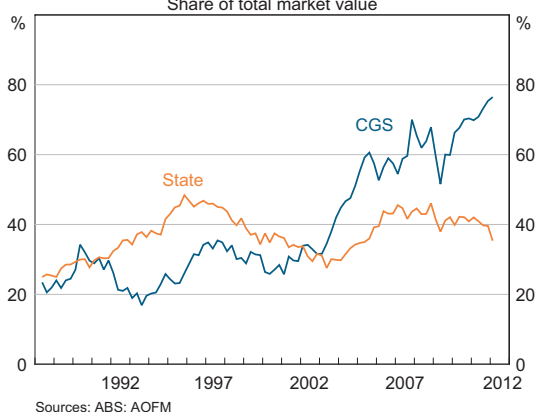
**Graph 4.1**  
Cash Rate Expectations  
Implied from OIS



The AAA rated status of Australia's sovereign debt has attracted significant foreign investor interest in recent years and, in March, the share of CGS held by non-residents reached a new high of 76 per cent (Graph 4.3). This ongoing shift in the investor base for CGS has not been mirrored to the same extent for other classes of Australian debt and has contributed to the wider yield differentials between CGS and other Australian dollar debt securities.

In June, as concerns about the European situation intensified, the spreads between CGS yields and those on state government debt ('semis') widened for a time, reaching levels comparable to those prevailing at the start of the year. Nevertheless, the state issuers were able to continue primary debt issuance throughout this period. While the spreads

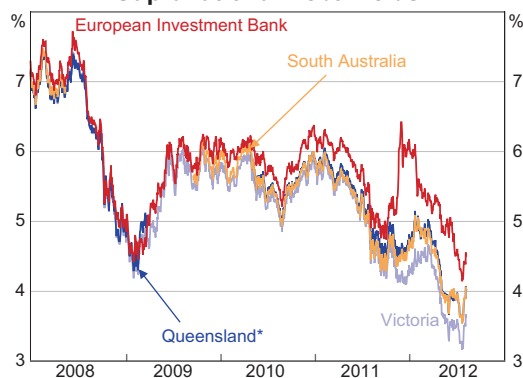
**Graph 4.3**  
**Non-resident Holdings of Australian Government Debt Securities**  
 Share of total market value



are wide, yields on semis are around their historic lows (Graph 4.4).

Primary issuance in the kangaroo bond market had been relatively light although it picked up strongly in July. With the rate at which issuers can swap their Australian dollar debt into a foreign currency being attractive, a number of regular issuers returned to the market, while Export-Import Bank of Korea (rated A) and the Canadian province of Manitoba (rated AA) priced inaugural deals. Most of the demand for kangaroo bonds continues to come from offshore investors.

**Graph 4.4**  
**5-year State Government and Supranational Debt Yields**



\* State guaranteed debt; from March 2009 to April 2010 all debt of this maturity was guaranteed by the Australian Government  
 Sources: RBA; Yieldbroker

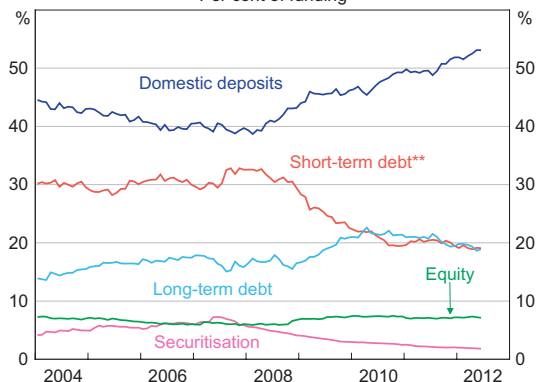
## Financial Intermediaries

Notwithstanding the narrowing in some wholesale debt market spreads, banks' outstanding funding costs relative to the cash rate are estimated to have increased further over the past quarter, driven primarily by developments in deposit funding. Spreads on newly issued bonds are around 10 to 20 basis points above the average cost of banks' outstanding stock of bonds.

Deposits remain the main source of new funding for banks' lending growth, continuing the shift away from wholesale liabilities. Deposits now account for 53 per cent of total bank funding liabilities (Graph 4.5). Although growth in term deposits has slowed slightly, they now account for almost half of total deposits, up from 30 per cent in mid 2007. Growth in deposits has generally exceeded growth in lending by about 4 percentage points over the past couple of years.

Competition for deposits remains strong. The average rate offered on the major banks' term deposit 'specials' fell by about 65 basis points over the quarter, largely reflecting a decline in benchmark rates. The spread of term deposits to wholesale benchmark rates remains at historically high levels (Graph 4.6). The average interest rate on the major banks' at-call deposits – including online savings,

**Graph 4.5**  
**Funding Composition of Banks in Australia\***  
 Per cent of funding

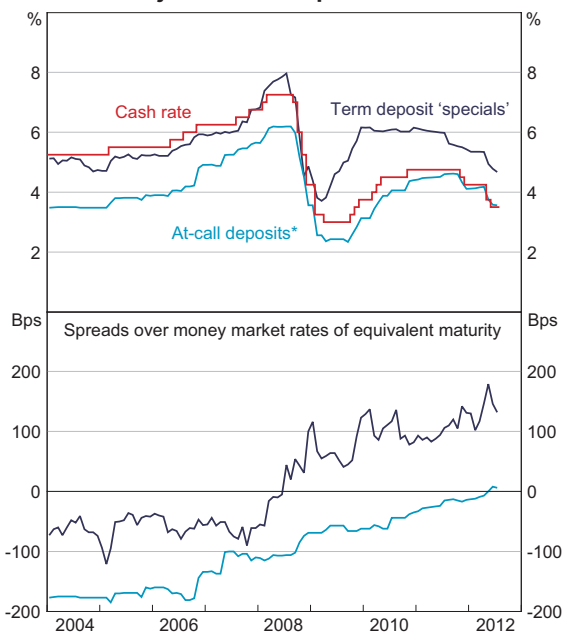


\* Adjusted for movements in foreign exchange rates  
 \*\* Includes deposits and intragroup funding from non-residents  
 Sources: APRA; RBA; Standard & Poor's

bonus saver and cash management accounts – has risen further, relative to the cash rate.

Australian banks have issued around \$29 billion worth of bonds since the previous *Statement* (Graph 4.7). Issuance was slow prior to the Greek election and Euro Summit in late June but has picked up since then.

**Graph 4.6**  
**Major Banks' Deposit Rates**



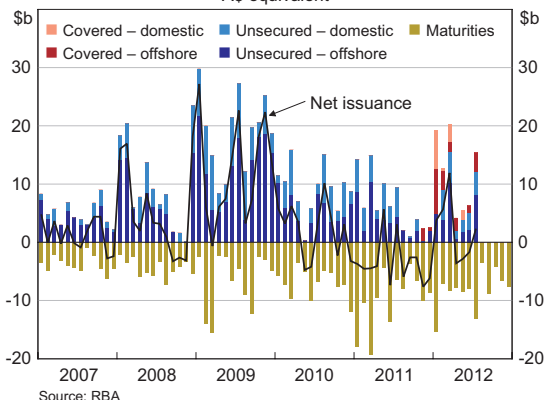
\* Average of online, bonus and cash management accounts at the major banks; existing customers only; spread to the cash rate  
Sources: Bloomberg; RBA

In tandem with modest credit growth overall, the strength in deposit funding has limited the need for banks to issue wholesale debt in large volumes. Net bond issuance for the year is now around \$17 billion. Notwithstanding the global turmoil, appetite for Australian bank paper has remained strong.

In May, Suncorp became the first non-major bank to issue a covered bond, raising \$1.6 billion in the domestic market, while ING Australia also signalled its interest in issuing this type of debt. CBA issued a small euro-denominated covered bond with a term to maturity of 19 years, the longest Australian covered bond issue to date. Major banks have, on average, utilised around a quarter of their legislated capacity for issuing covered bonds (Graph 4.8). Covered bond issuance has allowed banks to diversify their funding bases, with deal managers reporting that investors have generally been new buyers of Australian bank paper, particularly for offshore issues.

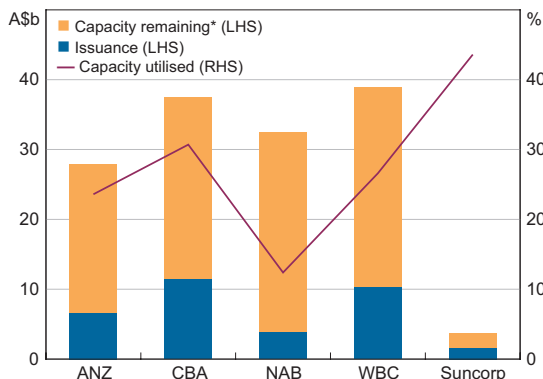
Yields on the major banks' unsecured bonds have fallen as market interest rates have declined. At the same time, spreads on this paper relative to the swap rate have also declined a little, while spreads on covered bonds to the swap rate have narrowed significantly. Secondary market covered bond spreads are around 60 basis points below senior unsecured debt of comparable maturity, the largest yield differential since covered bonds were

**Graph 4.7**  
**Banks' Bond Issuance and Maturities**  
A\$ equivalent



Source: RBA

**Graph 4.8**  
**Australian Covered Bond Issuance**

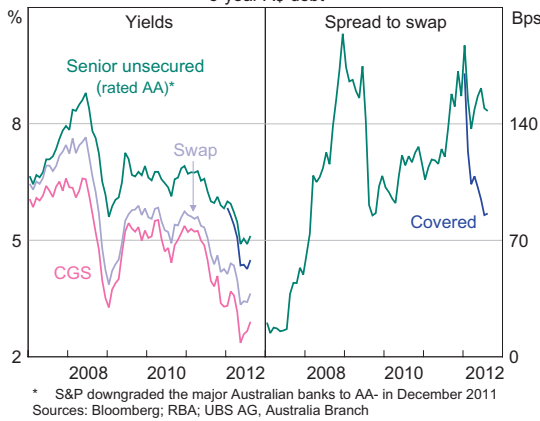


\* Issuance capacity based on the current size of bank resident assets and overcollateralisation levels  
Sources: APRA; RBA

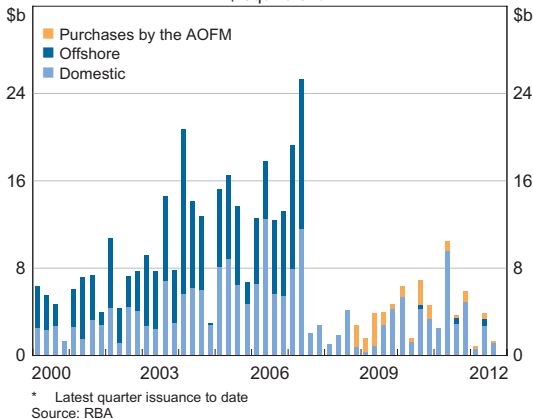
introduced late last year (Graph 4.9). CDS premia referencing Australian banks increased by around 50 basis points in May as European developments and large derivative trading losses reported by JP Morgan pushed these premia wider on banks globally. Most of this rise has subsequently been reversed.

There have been seven residential mortgage-backed securities (RMBS) transactions as well as four transactions backed by vehicle, equipment or consumer loans since the previous *Statement* (Graph 4.10). The RMBS issues amounted to \$4.2 billion in aggregate and included non-conforming deals by Pepper Homeloans and Liberty

**Graph 4.9**  
**Major Banks' Bonds**  
5-year A\$ debt



**Graph 4.10**  
**Australian RMBS Issuance\***  
A\$ equivalent



Financial. Pricing on the conforming deals was around 15–20 basis points wider than comparable issues late last year. The Australian Office of Financial Management participated in three of the issues, purchasing a total of \$500 million, as part of its effort to support competition in mortgage lending from a diverse range of lenders.

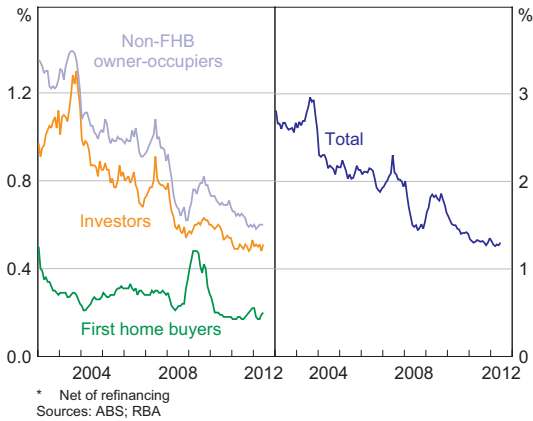
Several issuers, including major financial institutions, have been active in the retail bond market, with issuance totalling over \$3 billion in recent months. Retail bonds require a prospectus and are often hybrid instruments (combining debt and equity characteristics).

Standard & Poor's raised its rating on Bank of Queensland by one notch to BBB+, mainly reflecting the bank's equity raising of \$450 million in May, while Moody's downgraded the same institution by one notch to Baa1 (equivalent to BBB+), citing the relatively weak state of the economy in south-east Queensland and its potential to affect asset quality. Moody's also announced ratings downgrades of one to three notches for the local subsidiaries and branches of a range of global banks. Separately, Moody's placed 20 tranches from 18 RMBS transactions on review for downgrade, as part of its revised individual loan analysis model. The affected tranches have a combined value of less than \$1 billion, equivalent to only 1 per cent of total Australian outstanding RMBS.

## Household Financing

Growth in housing credit slowed to an annualised rate of about 4 per cent over the June quarter, largely on reduced growth in owner-occupier housing credit. Housing loan approvals were little changed over the three months to June with a fall in approvals to first home buyers offsetting a small rise in approvals to investors and repeat buyers (Graph 4.11). New South Wales accounted for much of the decline in approvals to first home buyers, following the expiry of some first home buyer stamp duty exemptions in December 2011. The level of approvals, together with increased prepayments (as

**Graph 4.11**  
**Value of Housing Loan Approvals\***  
 Per cent of housing credit outstanding



repayments are often held constant as mortgage interest rates fall), suggests that growth in housing credit is likely to remain around its current pace in the period ahead.

There was a small decline in the value of outstanding personal credit over the June quarter, mostly owing to a fall in revolving credit facilities. Margin lending activity has continued to decline, with volatility in global equity markets and investor risk aversion weighing on activity. This form of credit now

comprises only 1 per cent of household credit, down from around 4 per cent in late 2007.

Advertised interest rates on loans to households have fallen since the end of April. Most lenders reduced their variable housing loan indicator rates by between 55 and 60 basis points over this period, less than the 75 basis point reduction in the cash rate (Table 4.1). The average discount on housing loans was little changed over the three months to the end of July.

Rates on new fixed-rate mortgages have also fallen since the end of April, reflecting the decline in benchmark market rates. For terms of three years or less, fixed rates are about 20 to 25 basis points lower than discounted variable rates. The share of housing loans approved at fixed rates, at 10 per cent, is around its long-run average.

Overall, the average interest rate on outstanding fixed- and variable-rate housing loans has fallen by 50 basis points since the end of April, to be around 60 basis points below its post-1996 average (Graph 4.12).

Rates on personal loans – including home equity loans, unsecured personal loans and margin loans –

**Table 4.1: Intermediaries' Variable Lending Rates**  
 Per cent

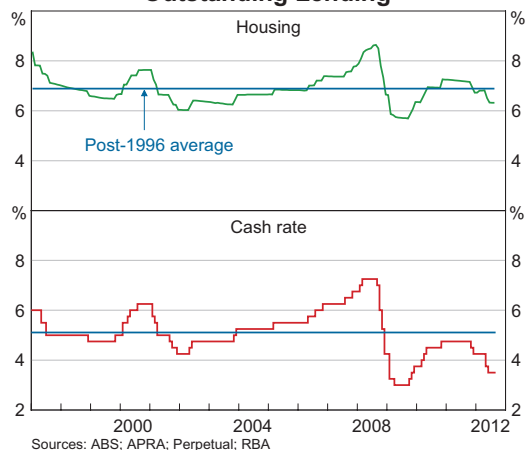
	Level at 8 August 2012	Change since:	
		End April 2012	End October 2011
<b>Housing loans<sup>(a)</sup></b>	6.14	-0.59	-0.89
<b>Personal loans</b>	12.92	-0.26	-0.30
<b>Small business</b>			
Residentially secured			
– Term loans	7.99	-0.63	-1.00
– Overdraft	8.87	-0.62	-0.99
Average rate <sup>(b)</sup>	7.68	-0.63	-1.05
<b>Large business</b>			
Average rate <sup>(b)</sup> (variable-rate and bill funding)	5.85	-0.72	-1.06

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

(b) Rates on outstanding, as opposed to new, business lending

Sources: ABS; APRA; RBA

**Graph 4.12**  
Average Interest Rates on Outstanding Lending

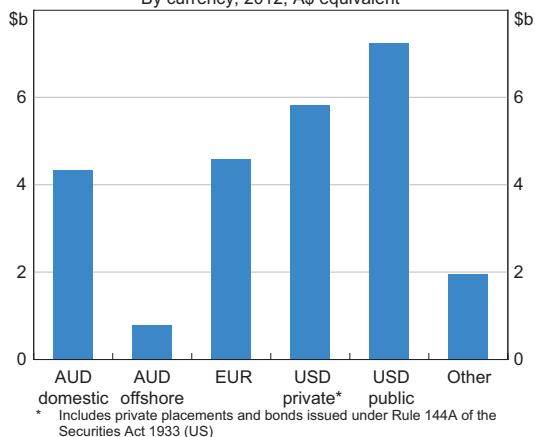


have decreased over the three months to the end of July. Rates on credit cards continue to be less sensitive to reductions in the cash rate. Since mid 2007, rates on credit cards have increased by around 4.5 percentage points, relative to the cash rate.

## Business Financing

Corporate bond issuance totalled \$8 billion since the time of the last *Statement*. The majority of corporate bonds were placed in offshore markets, including euro-denominated issues by BHP and Wesfarmers that raised over A\$3 billion collectively, and a sterling-denominated issue by Westfield that raised A\$680 million (Graph 4.13). Seven Australian corporates also issued a combined A\$2.1 billion in the US private placement market. Domestic issuance was subdued. The US public and private placement markets have a larger base of credit investors than the domestic market, and are also relatively more immune to periods of market volatility. The US markets also tend to accept longer tenors than the domestic market. Around 60 per cent of 2012 corporate issuance in the US market has been at tenors of 10 years or more, while most domestic issuance is for around 5 years. The preference to issue into offshore markets also reflects the fact that many of the largest Australian issuers, such as mining and property companies, have income streams in foreign

**Graph 4.13**  
Australian Corporate Bond Issuance  
By currency, 2012; A\$ equivalent



currencies that provide a natural hedge for offshore issuance. Such issuers have accounted for around half of total corporate issuance this year.

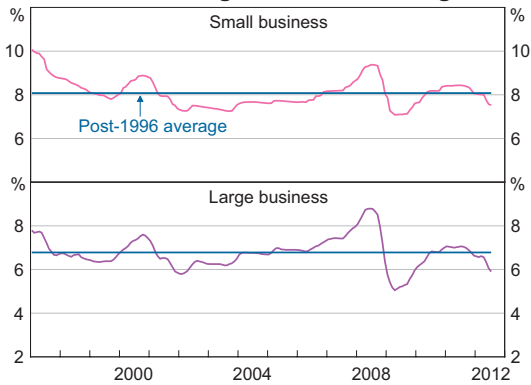
There has been a pick-up in the pace of intermediated business credit growth over the first half of this year. Lending by the major banks and Asian banks was stronger than the system average, with the latter now accounting for 6 per cent of business credit. In aggregate, lending by other bank and non-bank lenders was largely unchanged.

The cost of intermediated business borrowing declined over the three months to the end of July, with the average interest rates on outstanding small and large business lending declining by about 50 and 65 basis points (Graph 4.14). These reductions largely reflected movements in wholesale benchmark rates, although spreads did widen a little over the period. Rates on small and large business loans are now around 55 and 90 basis points below their post-1996 averages, respectively.

The value of domestic syndicated loan approvals increased in the June quarter, following subdued activity in March (Graph 4.15). The increase in activity was driven by a number of large deals, particularly in the energy sector. Similar to broader business credit, the value of outstanding syndicated lending by European banks continues to contract.

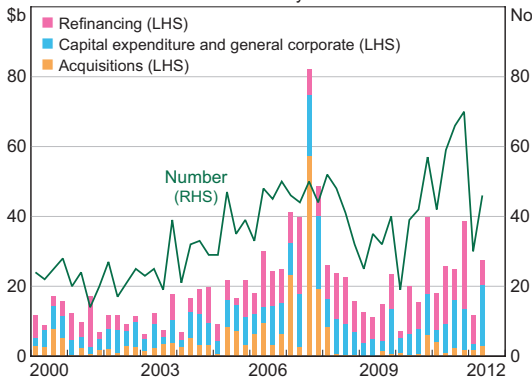


**Graph 4.14**  
Average Interest Rates on Outstanding Business Lending



Sources: APRA; RBA

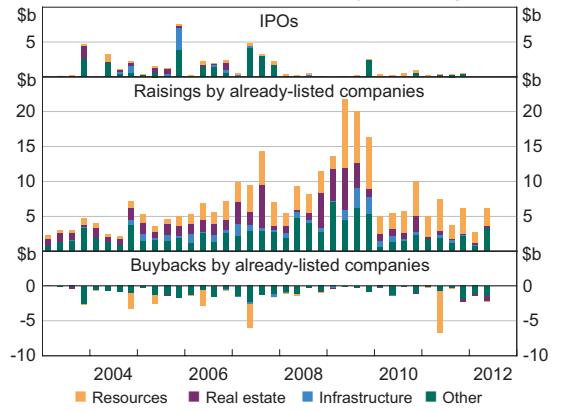
**Graph 4.15**  
Syndicated Loan Approvals  
Quarterly



Sources: RBA; Thomson Reuters

Equity raising activity in the first half of the year fell to its lowest level since 2003 as a combination of weak mergers and acquisition activity, low equity prices and generally conservative gearing combined to limit the appetite for new equity by listed companies (Graph 4.16). Initial public offerings (IPOs) were also limited, with the poor performance of recent floats and elevated uncertainty within markets causing firms to cancel or delay their IPOs. Issuance by listed companies totalled \$6 billion in the most recent quarter, most of which occurred in June. Resource companies and companies in sectors less influenced by the economic cycle, such as utilities, have generally raised funds for investment purposes.

**Graph 4.16**  
Listed Corporates' Equity Raisings\*



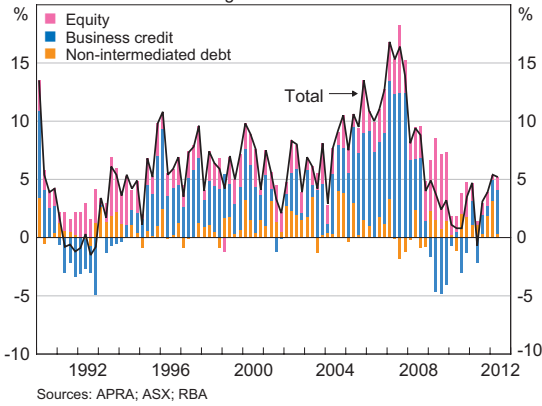
\* Excludes privatisations and hybrid conversions, which are very small  
Sources: ASX; RBA

In contrast, cyclically sensitive non-resource sectors, such as consumer discretionary and industrial firms, have raised equity to fund approaching debt maturities or to avoid breaching loan covenants. Loan covenants typically include metrics such as interest coverage, which are adversely affected by a deterioration in earnings. Ten, Seven West Media, Billabong and Echo Entertainment have all raised equity recently to pay down debt after downgrading their profit outlooks, while Brambles tapped equity markets to support its balance sheet after it cancelled plans to sell its data management subsidiary.

Mergers and acquisition activity has been around its long-run average over the past three months, with \$14 billion in deals announced since the previous *Statement*. Demand for corporate assets (outside of the resources sector) has eased over the past year as corporations limit strategic acquisitions and private equity buyers remain cautious.

Total business external funding was equivalent to 5 per cent of GDP in the June quarter and was largely sourced through credit from financial institutions (Graph 4.17). The contributions from equity and non-intermediated debt to overall external funding were marginal in recent months.

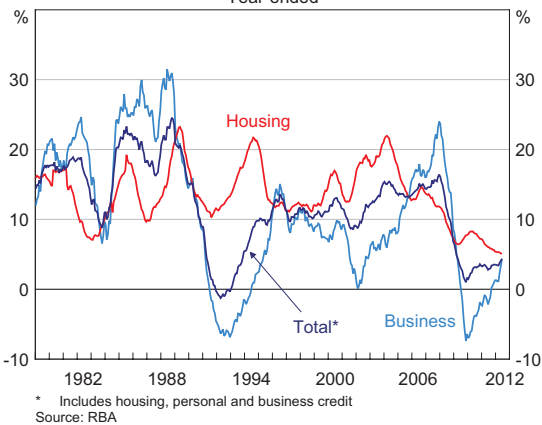
**Graph 4.17**  
**Business External Funding**  
Net change as a share of GDP



### Aggregate Credit

Total outstanding credit grew at an annualised rate of around 5 per cent over the June quarter, as the pick-up in business credit growth more than offset the small slowing in the growth rate of lending to households (Graph 4.18). Growth in broad money continues to outpace credit growth, reflecting changes not only in the composition of banks' assets and liabilities, but also the preferences of households and businesses to hold a greater share of their assets as deposits.

**Graph 4.18**  
**Credit Growth**  
Year-ended

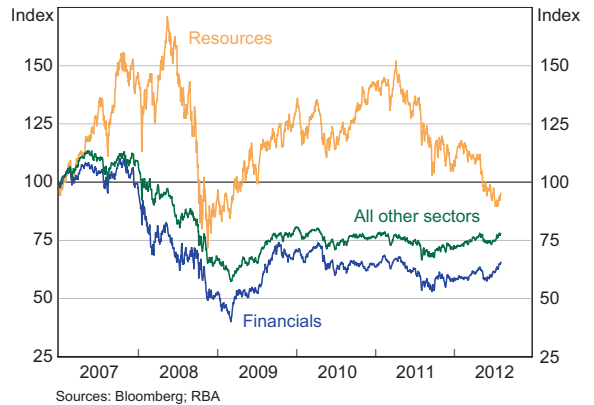


### Equity Markets

The ASX 200 has declined 3 per cent since the previous *Statement* as the situation in Europe and concerns over global growth prospects continue to weigh on sentiment. Losses on the Australian share market have generally been greater than on overseas markets due to the high domestic weighting of the resource sector. Resource stocks have declined 14 per cent over the period, with stock prices falling to their lowest level since March 2009 (Graph 4.19). Sectors such as telecommunications, utilities and consumer staples rose over the period, reflecting the general uncertainty in markets and investor demand for companies with high dividend yields (Graph 4.20). Banking stocks have also benefited from this preference for higher yielding shares, rising 5 per cent, with recent policy initiatives in Europe also providing some support. Share market volatility remains around its long-run average despite the continuing pessimism.

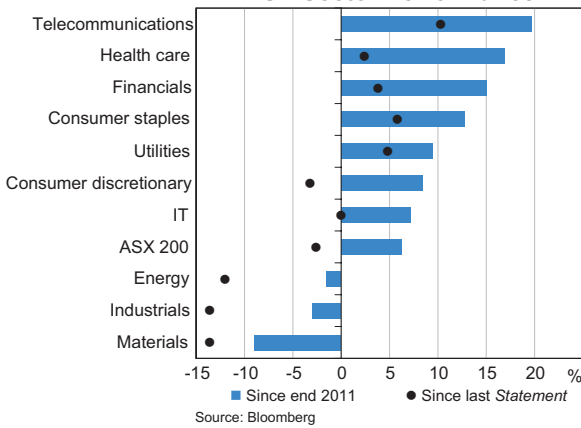
Private sector analysts have scaled back their earnings expectations significantly over the past year and now anticipate no profit growth for the upcoming reporting season in August. The deteriorating situation in Europe and weaker global economic data has driven the earnings downgrades,

**Graph 4.19**  
**Australian Share Price Indices**  
End December 2006 = 100

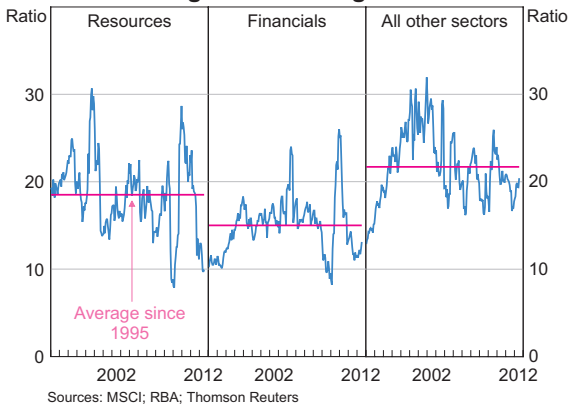


particularly for the resource sector. The trailing price-earnings ratio for Australian shares remains well below average and is largely unchanged since the previous *Statement* (Graph 4.21). Price-earnings ratios for the resource and financial sectors have exhibited considerable volatility over the past few years, mainly as a result of share price volatility rather than volatility in earnings. ↕

**Graph 4.20**  
**ASX Sector Performance**



**Graph 4.21**  
**Trailing Price-earnings Ratios**

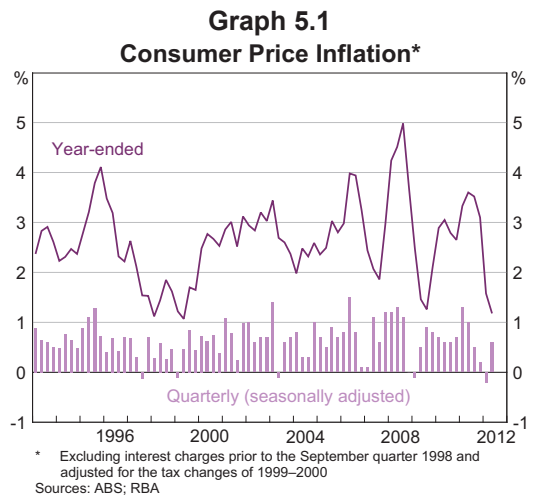




# 5. Price and Wage Developments

## Recent Developments in Inflation

Recent inflation data confirmed that the pace of headline and underlying inflation eased over the past year. In the June quarter, the consumer price index (CPI) rose by 0.6 per cent on a seasonally adjusted basis, to be 1.2 per cent higher over the year (Table 5.1, Graph 5.1). The quarterly inflation rate was higher than the unusually weak March quarter outcome owing to a pick-up in fruit and vegetable prices, which tend to be volatile, and higher inflation in a range of other goods and services. Over the year, headline inflation was held down by the earlier large falls in fruit and vegetable prices.



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

	Quarterly <sup>(a)</sup>		Year-ended <sup>(b)</sup>	
	March quarter 2012	June quarter 2012	March quarter 2012	June quarter 2012
CPI	0.1	0.5	1.6	1.2
Seasonally adjusted CPI	-0.2	0.6	1.6	1.2
- Tradables	-1.6	0.5	-1.5	-2.0
- Tradables (excl volatile items and tobacco) <sup>(c)</sup>	-0.8	0.1	-1.3	-1.3
- Non-tradables <sup>(d)</sup>	0.7	0.7	3.5	3.3
<i>Selected underlying measures</i>				
Trimmed mean	0.4	0.5	2.2	2.0
Weighted median	0.4	0.7	2.1	1.9
CPI excl volatile items <sup>(c), (d)</sup>	0.3	0.5	2.0	1.9

(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

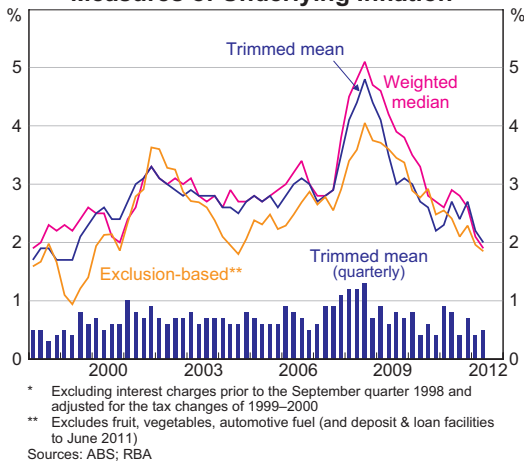
(c) Volatile items are fruit, vegetables and automotive fuel

(d) Excludes deposit and loan facilities to June 2011

Sources: ABS; RBA

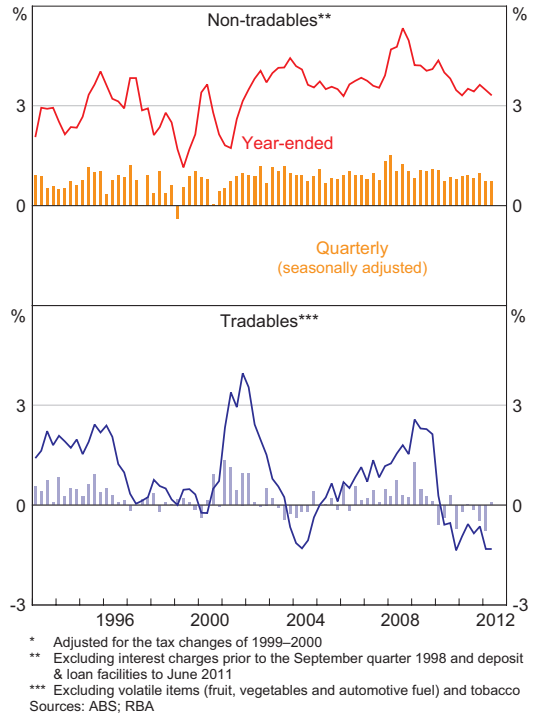
The various measures indicate that underlying inflation was around ½ per cent in the June quarter and 2 per cent over the year (Graph 5.2). Overall, they suggest that the pace of underlying inflation moderated by around ¾ percentage point over the past year, taking underlying inflation to its lowest level since the late 1990s. The decline over the year in underlying inflation has been driven by falls in tradables prices, associated with the earlier exchange rate appreciation, and some easing in non-tradables inflation in recent quarters. The moderation in inflation is consistent with broad-based competitive pressures, soft demand in some parts of the economy and an improvement in productivity.

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



The prices of non-tradable goods and services rose by 0.7 per cent for the second consecutive quarter, and the year-ended pace of inflation moderated further, to 3.3 per cent (Graph 5.3). This modest slowdown has been broad based across a range of goods, including food and new dwellings, and market-based services, notably domestic travel and accommodation. Inflation in new dwelling purchase costs has fallen to its lowest level since the 1990s, in line with weak demand for new homes. Nonetheless, inflation pressures remain firm for some non-tradables prices, such as rents, which rose by 4.4 per cent over the year. Overall, the pace of non-tradables inflation is now around its average over the inflation-targeting period.

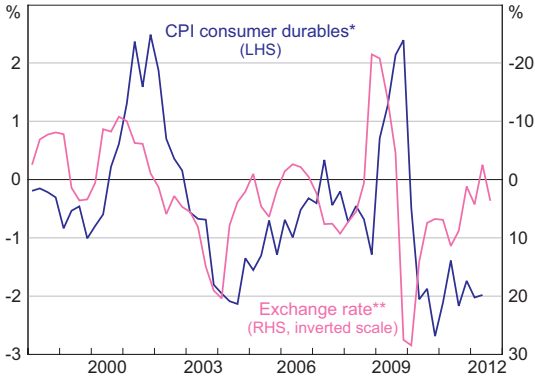
**Graph 5.3**  
**Tradables and Non-tradables Inflation\***



Tradables prices (excluding volatile items and tobacco) rose by 0.1 per cent in the June quarter, but were 1.3 per cent lower in year-ended terms, following significant falls over the previous year. Price increases for a range of consumer durables in the June quarter – including cars, clothing, footwear and some household goods – drove the first rise in tradables prices in a year and a half. More broadly, the outcome for tradables prices suggests that the disinflationary influence of the earlier exchange rate appreciation has lessened, with the exchange rate little changed over the past year (Graph 5.4). At the same time, however, world export price inflation has eased.

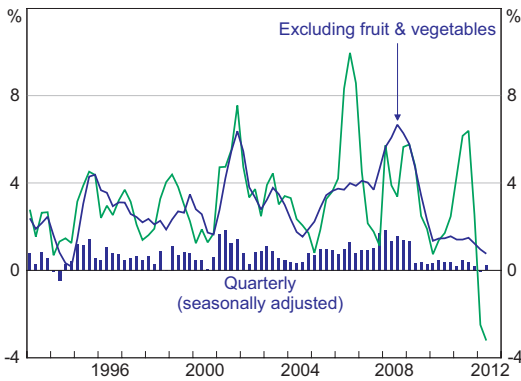
Excluding the fruit and vegetables component, food price inflation recorded another low quarterly outcome, with the pace of year-ended inflation now at its lowest rate since 1994 (Graph 5.5). The subdued outcome for grocery food items – with a particularly sharp fall in bread prices in the quarter – is consistent with strong competition among supermarket

**Graph 5.4**  
**Consumer Prices and the Exchange Rate**  
 Year-ended percentage change



\* Retail items (excluding food and alcohol) and motor vehicles and parts; adjusted for the tax changes of 1999–2000  
 \*\* Import-weighted index; includes an estimate for September quarter 2012  
 Sources: ABS; RBA

**Graph 5.5**  
**Food Price Inflation\***



\* Adjusted for the tax changes of 1999–2000  
 Sources: ABS; RBA

retailers putting downward pressure on prices in the supply chain. Inflation in meals out and takeaway food prices also moderated and remains low relative to its history.

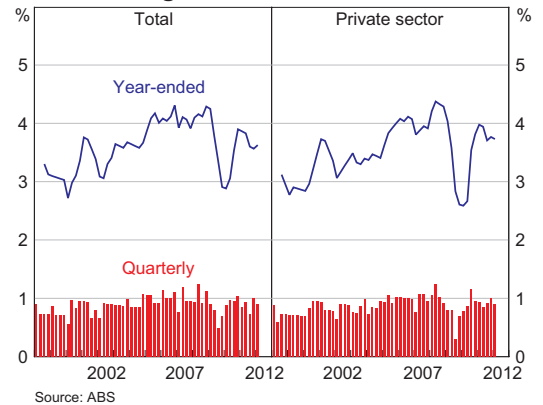
**Costs**

Overall, the pace of wage growth remains a little below that recorded prior to the financial crisis, but appears to have been broadly unchanged over recent quarters (Graph 5.6). According to the wage price index (WPI), over the year to the March quarter private sector wages grew by 3.7 per cent, around the average pace of the past decade. There has

been a more notable slowing in year-ended growth in public sector wages, with growth over the year to the March quarter the slowest pace in around a decade, although some of the slowing may be due to delays in finalising some enterprise bargaining agreements.

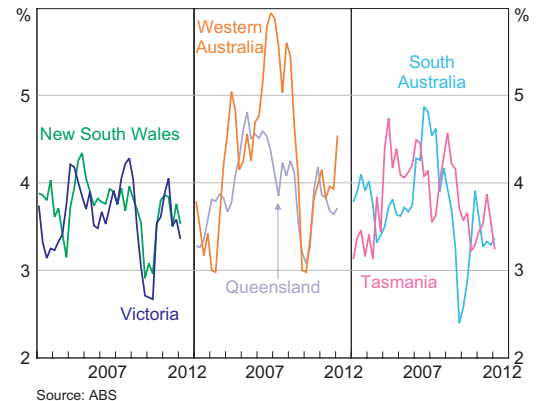
The disparity in labour market conditions across the states has been reflected in wage outcomes. Year-ended wage growth picked up in Western Australia, whereas wage growth was slower in the other states and has generally moderated over the past year (Graph 5.7). Consistent with the strength in Western Australia, the fastest wage growth was seen in the mining, construction and business services industries.

**Graph 5.6**  
**Wage Price Index Growth**



Source: ABS

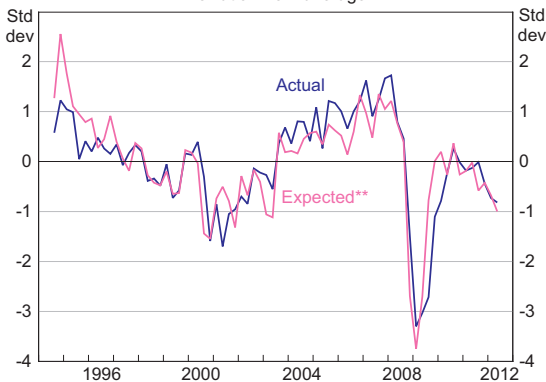
**Graph 5.7**  
**Wage Growth by State**  
 Year-ended



Source: ABS

Notwithstanding the around average wage growth as measured by the WPI, data from business surveys suggest that growth in labour costs has been below average and that firms expect this to continue in the near term (Graph 5.8). This sentiment is consistent with reports from liaison that firms have been controlling labour costs by economising on labour input. Firms are also generally reporting that they are not experiencing significant difficulty finding suitable labour, although there are some firms reporting difficulties finding skills that are used intensively in mining.

**Graph 5.8**  
**Surveys of Business Labour Costs\***  
 Deviation from average



\* Weighted average of data from various business surveys since 1994, with weights calculated by the RBA using the principal component method  
 \*\* Expectation for following quarter  
 Sources: ACCI; NAB; RBA; Sensis

Fair Work Australia (FWA) announced the outcome of its annual wage review in June, increasing award wages by 2.9 per cent from 1 July 2012. In line with its 2011 decision, FWA increased award wages by a fixed percentage to preserve wage relativities across awards. The increase in award wages this year is lower than in 2011, with FWA's decision taking into account evidence of structural change and different developments across industries, as well as the weaker labour market conditions in the second half of 2011.

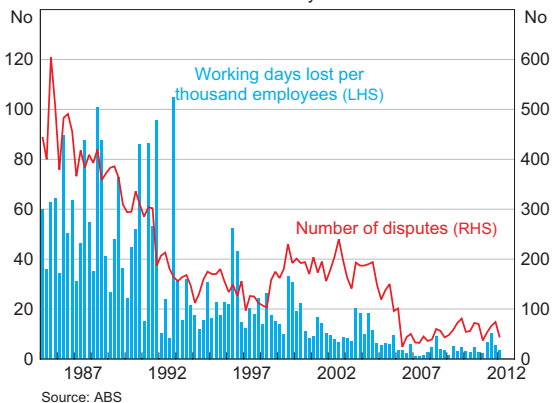
Data from the national accounts indicate that growth in unit labour costs – the average cost of labour per unit of output – slowed over the year

to the March quarter. Although growth in average labour costs rose, this was more than offset by a pick-up in productivity growth. Part of the strength in productivity growth over the past year reflects slower growth in employment; as discussed in the 'Domestic Economic Conditions' chapter, competitive pressures have pushed firms to seek productivity gains.

ABS data suggest that the number of industrial disputes and the number of working days lost fell in the March quarter (Graph 5.9). Disputes in coal mining accounted for almost half of all working days lost. In annual terms, working days lost per employed worker have picked up slightly over the year to be around the level in 2005, but remain at low levels relative to history.

Producer price data suggest that domestic inflation pressures remain contained, consistent with recent outcomes for consumer price inflation.

**Graph 5.9**  
**Industrial Disputes**  
 Quarterly



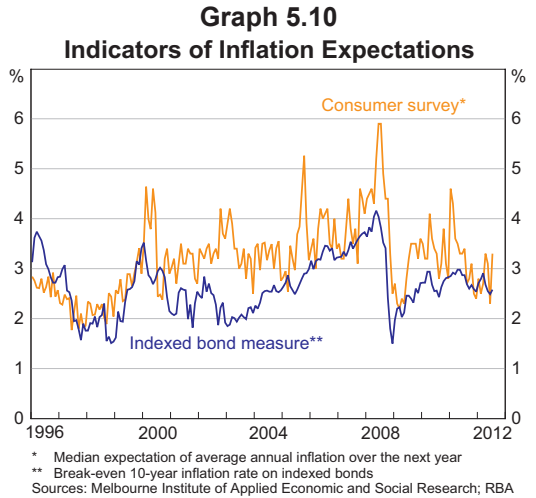
Source: ABS

## Inflation Expectations

Measures of inflation expectations remain consistent with the inflation target. Market economists and union officials surveyed by the Bank have revised down their near-term inflation expectations slightly since the time of the previous *Statement*, but still expect inflation to be within the target range over the year to the December quarter 2013 (Table 5.2).



Consumer inflation expectations – as measured by the Melbourne Institute – have been volatile but are currently around the same level as three months ago (Graph 5.10). Financial market indicators of longer-term expectations are also unchanged. Surveys of businesses, which include producers and retailers, suggest a somewhat more subdued outlook for inflation, with near-term expectations for inflation in their output prices remaining below the average of the inflation-targeting period. ✎



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

	Year to December 2012			Year to December 2013	
	February 2012	May 2012	August 2012	May 2012	August 2012
Market economists	3.2	2.8	2.6	2.6	2.7
Union officials <sup>(a)</sup>	3.0	2.3	2.0	2.5	2.2

(a) Excluding carbon price  
Sources: RBA; Workplace Research Centre

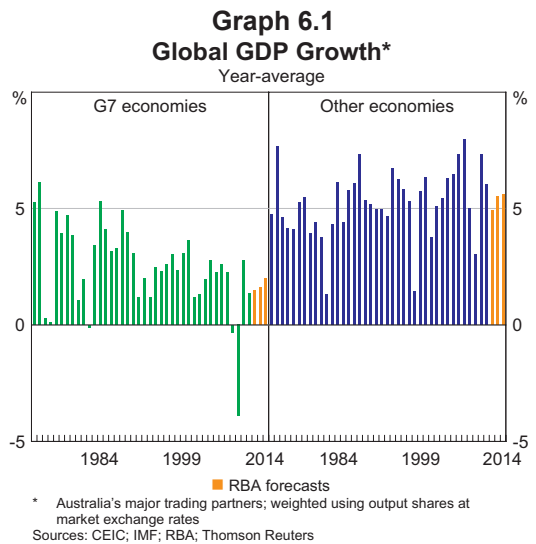


# 6. Economic Outlook

## The International Economy

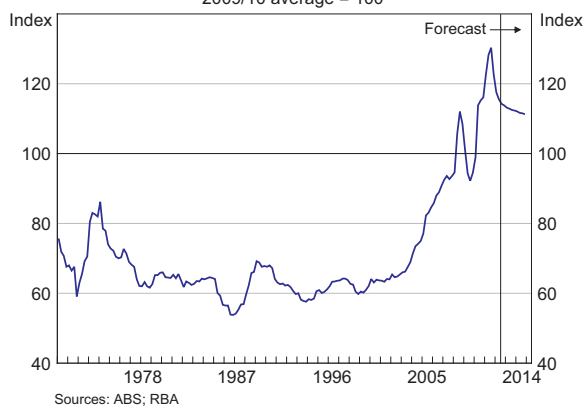
Concerns about the sustainability of sovereign debt and the solvency of the banking sector in some European countries, and the long-term viability of the euro area itself, continue to weigh heavily on perceptions of the global outlook. Conditions are expected to remain weak in the euro area for some time. The US economy is expected to continue to experience only modest growth, in part because of the uncertainty about fiscal consolidation in early 2013. As a result of the trade and confidence linkages from the below-trend growth in Europe and the United States, growth may be dampened in much of Asia. In China, much of the slowing to date reflects domestic policy actions and, accordingly, growth is expected to pick up slightly in the second half of the year as recent easings in fiscal and monetary policies start to take effect. Global growth is expected to be around 3½ per cent in 2012, which is close to its long-run average (Graph 6.1). Growth is then expected to pick up to be close to 4 per cent in 2013, broadly in line with the latest forecasts from the International Monetary Fund (IMF). These forecasts are marginally lower than at the time of the *May Statement*.

Commodity prices have been mixed over the past three months. The deterioration in sentiment in global financial markets and weaker outlook for the global economy led to falls in prices for crude oil, coal, base metals and iron ore. The spot price for coking coal was held up by disruptions to Queensland coal



production stemming from industrial disputes, but has fallen more recently. Some rural prices, notably corn and wheat, have risen sharply due to droughts in the United States and Black Sea region, both large grain producers. Overall, commodity prices have fallen more sharply than was expected at the time of the *May Statement*. The terms of trade are estimated to have declined in the June quarter, to be more than 10 per cent lower than the September quarter 2011 peak. They are expected to gradually decline over the forecast horizon, as the current resource investment boom expands global supply in bulk commodities and demand for commodities increases more slowly than in previous years (Graph 6.2).

**Graph 6.2**  
**Terms of Trade**  
 2009/10 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\$1.06, TWI at 79), which is a little higher than that assumed in the *May Statement*. The forecasts are based on a price assumption for Brent oil remaining at US\$108 per barrel over the forecast period, effectively US\$8 lower than the assumption in May. The cash rate is assumed to be unchanged over the forecast period at 3.50 per cent. This profile is higher than market pricing, which currently implies a 50 basis point reduction in the cash rate by the end of 2012. Finally, the forecasts assume that annual growth in the working-age population over 2013 and 2014 is 1.7 per cent, slightly higher than in the previous forecasts and in line with the pick-up in immigration of late.

The data released since the *May Statement* suggest that the domestic economy had been growing more strongly since mid 2011 than previously indicated. GDP growth over the second half of 2011 was revised higher to be around trend pace, and GDP grew by a strong 1.3 per cent in the March quarter. Recent data suggest that the economy probably grew less rapidly than this in the June quarter. Overall, and notwithstanding the possibility that some of the

strength in the March quarter GDP may be revised away, the data currently suggest that growth in activity may have been above trend over the first half of the year, led by continued strength in resource investment and, as measured, a strong pick-up in household consumption volumes.

The Bank's current assessment is that growth is likely to be at about trend pace in the second half of 2012, as the strong growth in domestic demand moderates (Table 6.1). Nonetheless, the firm pace in the first half of the year sees the forecast for GDP growth over 2012 rise to 3½ per cent (from 3 per cent in the *May Statement*). The economy is then expected to grow at around 3 per cent over 2013 and 2014, little changed from the *May Statement*.

The expected moderation in domestic demand in the near term reflects an easing in consumption growth from its recent pace, as well as the impact of the Australian Government's fiscal consolidation on public demand. Growth in household consumption is estimated as having been well above trend over the first half of 2012, driven in part by heavy discounting by retailers earlier in the year and supported more recently by various government payments to households in the June quarter. It is expected that consumption growth will ease in the second half of the year before gradually picking up over 2013 and 2014. The saving ratio is expected to remain around its current level over the forecast period.

The peak in resource investment is anticipated to occur during the forecast period, at about the same level that was expected in the *May Statement*. However, based on the latest available data and information from liaison regarding the progress of liquefied natural gas (LNG) projects, that peak is expected to occur somewhat earlier than previously thought. Some resource companies have adopted a more cautious approach to investment opportunities currently under consideration (but to which they are not yet committed) given the more uncertain global outlook. However, final investment decisions have been confirmed on a number of major resource investment projects over the past few months,

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

	Year-ended					
	June 2012	Dec 2012	June 2013	Dec 2013	June 2014	Dec 2014
GDP growth	3¾	3½	2½–3½	2½–3½	2½–3½	2½–3½
Non-farm GDP growth	3¾	3½	2½–3½	2½–3½	2½–3½	2½–3½
CPI inflation	1.2	2¼	2½–3½	2–3	2–3	2–3
Underlying inflation	2	2½	2–3	2–3	2–3	2–3

	Year-average					
	2011/12	2012	2012/13	2013	2013/14	2014
GDP growth	3¾	3¾	3–3½	2¾–3¼	2½–3½	2½–3½

(a) Technical assumptions include A\$ at US\$1.06, TWI at 79 and Brent crude oil price at US\$108 per barrel  
Sources: ABS; RBA

including the approval of the second liquefaction train for the Australia Pacific LNG project. In addition, recent announcements of cost overruns – which have tended to reflect both the need for additional work on projects as well as increases in the prices of inputs – are included in the investment profile.

The forecasts continue to embody reasonably conservative assessments of the likelihoods that large individual resource projects currently under consideration do proceed. These take into account global demand projections, cost comparisons of projects, and the foreshadowed expansion of global supply. Based on this, it is estimated that the peak in spending on resource investment will be sometime in 2013/14. However, despite the latest information, there remains considerable uncertainty around the timing of the peak and subsequent gradual decline in resource investment. Resource investment – once adjusted for its use of imports – is expected to subtract modestly from GDP growth over 2014 (after accounting for more than half of GDP growth over 2011).

It is expected that, as resource investment declines, growth in resource exports will increase given the ramp-up in productive capacity of the bulk commodities. Non-resource business investment

is expected to remain relatively subdued over the next year, in line with survey measures of firms' investment plans, but is likely to strengthen further out in the forecast period. Recent leading indicators of dwelling investment suggest it may have troughed in mid 2012, with a gradual upswing likely in response to lower mortgage rates, rising rental yields and stabilising house prices.

Employment growth has picked up in 2012 to date, with employment in the June quarter a little stronger than anticipated, following very subdued growth over 2011. Despite the recent improvement, employment growth in the near term is expected to remain relatively modest as structural adjustment and pressure to improve productivity in many parts of the economy constrain firms' ability and willingness to employ more staff. However, employment growth is expected to strengthen later in the forecast period, as growth picks up in more labour-intensive sectors.

With the unemployment rate expected to edge higher in the near term, growth in the wage price index is expected to remain contained, averaging 3½ per cent over the forecast period, around ½ percentage point below the elevated rates seen over 2005–2008 when the unemployment rate was declining.

## Inflation

The outlook for inflation is little changed from the May *Statement*. Data for the June quarter showed moderate underlying inflation, at around ½ per cent in the quarter and 2 per cent over the year. In the past two quarters, domestic non-tradables inflation has slowed to around the average of the inflation-targeting period. Given the outlook for the economy, and conditional on the assumption of a sustained improvement in productivity growth, non-tradables inflation is expected to remain contained. However, now that the exchange rate has been around its current level for over a year, tradables inflation is expected to pick up further as the lagged effect from the appreciation of the exchange rate continues to wane. This, together with the increase in prices from the introduction of the carbon price at the beginning of July, is expected to result in the published measures of underlying inflation picking up to be in the top half of the inflation target range by mid 2013. The carbon price effect on inflation will largely have passed by late 2013 and underlying inflation is forecast to be around the middle of the target range thereafter.

The Bank's forecasts rely on Treasury's modelling of the carbon price, which indicated that it would increase the CPI by 0.7 per cent in 2012/13. According to the Treasury modelling, increases in household electricity and gas prices will account for around half of the total increase in consumer prices attributable to the carbon price. Recent announcements by state regulatory authorities and energy retailers indicate that the increase in household energy prices as a result of the carbon price will be apparent in the September quarter CPI.

The other half of the carbon price impact is accounted for by 'indirect' price effects on other goods and services in the CPI basket. There is significant uncertainty about the timing of the indirect pass-through of the carbon price to final consumer prices. Based on liaison information suggesting that many firms' costs and prices are yet

to respond to the carbon price, the Bank's current forecast assumes that indirect pass-through occurs over three quarters, which is slightly slower than in the May *Statement* forecasts. How quickly these cost increases are passed through to consumer prices is likely to depend on a range of factors including the strength of aggregate demand and contractual arrangements. The ABS has indicated that it will be unable to distinguish between changes in prices that are due to the introduction of the carbon price and those reflecting the usual variation in prices driven by other factors. The extent to which the carbon price will be reflected in trimmed mean and weighted median measures of inflation will be influenced by the concentration of carbon price-induced price changes in specific quarters and the distribution of price changes. These factors will determine whether some of the effects are excluded by these statistical measures of underlying inflation. While the impact of the carbon price on underlying inflation is uncertain, the Bank's forecasts assume that it adds around ¼ percentage point over the year to June 2013.

## Risks

The economic and financial events in the euro area remain a significant downside risk to global economic growth. Policymakers seeking to remedy the underlying causes of the crisis have found it difficult to get member countries to agree to greater fiscal integration and the associated loss of national sovereignty. The sequence of policy responses to date, while often improving sentiment temporarily, has not been able to fix the underlying problems and so concerns have periodically intensified, and are likely to continue to do so. There are many possible scenarios in which growth in Europe could be substantially weaker than is forecast, including the exit of one or more economies from the euro area itself. Nonetheless, as has been the case for some time, the forecasts assume that a severe economic and financial disruption in the euro area is avoided, but that there is ongoing volatility in sentiment and

financial markets. Other risks to the global economy are slightly tilted to the downside, though much less so than is the case for Europe.

A key risk for Australia is the rate of growth in China, which currently appears to have stabilised, but could be higher or lower than expected given the challenges the authorities face in keeping growth at a more sustainable rate in a rapidly changing economy. The more benign inflation environment, with commodity prices having trended down, enables the Chinese authorities to ease policy more aggressively in any marked slowdown.

In the United States, the key issue is the very large fiscal contraction legislated to commence at the beginning of 2013. The forecasts assume that part of this fiscal consolidation occurs, but the magnitude of the fiscal consolidation remains highly uncertain. However, if there is early clarity on exactly how big the consolidation will be, and how it will affect households and businesses, the reduction in uncertainty could actually boost sentiment and activity towards the end of this year.

The terms of trade are forecast to decline gradually over the forecast period, but they could fall more quickly if global demand is weaker than expected. This would lead to lower growth in domestic incomes, including government revenue, weakening domestic demand.

In the domestic economy, the timing and magnitude of the expected peak and subsequent decline in resource investment is quite uncertain. The current forecasts anticipate that resource investment will peak sometime in 2013/14, but the timing is dependent on global demand, the extent of delays and cost overruns of projects already under way, as well as the size of increased supply outside of Australia. The gradual decline in resource investment

is expected to be roughly offset by a pick-up in resource exports and non-resource investment, including dwelling investment. However, the timing of these changes is clearly also uncertain.

The forecasts assume, as usual, that the exchange rate remains unchanged. Given that it has been at this high level for some time, it is possible that the lagged effect on the economy will be more contractionary than historical relationships might suggest.

As usual, there are risks around the inflation forecasts, relating to flow-on effects of stronger- or weaker-than-expected growth in activity or employment and movements in the exchange rate, as well as uncertainty surrounding the timing of price increases relating to the carbon price. The recent increase in global grain prices could also prove to be persistent, thereby increasing inflationary pressure on food prices. Conversely, the weakness in some economies, and potential downside risks to growth, could lead to softness in global prices and so in those of imported goods. Given the lags in the inflation process, the uncertainty regarding the timing of the peak in resource investment is, at this stage, not a material risk to the current inflation forecasts. The recent low outcomes are likely to reflect some combination of margin pressure and better productivity growth, although it is too early to be definitive about how enduring the pick-up in productivity will prove to be. These developments have been driven by heightened competitive pressure in some parts of the economy but, given the economy overall is still operating close to capacity, such restraints could lessen if there is a material pick-up in sentiment and demand. ✎

