# Statement on Monetary Policy

MAY 2014

Reserve Bank

## Contents


| | | |
|---|---|---|
| | Overview | 1 |
| 1. | International Economic Developments | 5 |
| | Box A: Growth of Australia's Major Trading Partners | 13 |
| 2. | International and Foreign Exchange Markets | 15 |
| 3. | Domestic Economic Conditions | 29 |
| | Box B: Lags from Activity to the Labour Market | 39 |
| 4. | Domestic Financial Markets | 43 |
| 5. | Price and Wage Developments | 53 |
| 6. | Economic Outlook | 61 |

The material in this *Statement on Monetary Policy* was finalised on 8 May 2014. The next *Statement* is due for release on 8 August 2014.

The *Statement on Monetary Policy* is published quarterly in February, May, August and November each year. All the *Statements* are available at www.rba.gov.au when released. Expected release dates are advised ahead of time on the website. For copyright and disclaimer notices relating to data in the *Statement*, see the Bank's website.

Some graphs in this publication were generated using Mathematica.

*Statement on Monetary Policy* Enquiries

Information Department
Tel: +61 2 9551 9830
Fax: +61 2 9551 8033
Email: rbainfo@rba.gov.au

ISSN 1448–5133 (Print)
ISSN 1448–5141 (Online)

# Overview

Growth of Australia's major trading partners looks to have moderated a little in the March quarter, but indicators are consistent with the pace of growth remaining around average this year. There are some signs that the recent slowing in China may be temporary and the Chinese authorities have indicated a willingness to support investment growth, if needed, to achieve their target for output growth. In Japan, economic activity appears to have picked up as expected in the March quarter, ahead of the increase in the consumption tax in April, and this has been followed by a decline in some measures of activity. It remains to be seen whether the planned fiscal stimulus measures will be sufficient to offset the anticipated decline in household expenditure. Other east Asian economies appear to have been growing at around their decade-average pace. The US economy is showing signs of moderate growth, notwithstanding a slowdown in the early part of the year attributable, in large part, to adverse weather. Global inflation remains low, particularly in the advanced economies, while monetary policy is highly accommodative in most economies.

The outlook for Australia's trading partner growth is little changed since the February *Statement*. With the moderation in trading partner growth in the first quarter expected to be temporary, growth of Australia's trading partners in year-average terms is forecast to be around its long-run average in 2014 and 2015.

Commodity prices overall have declined over the past three months. Notable falls in the prices of iron ore and coal reflect a moderation in the demand for steel in China, some tightening of credit affecting the steel sector there, and continued expansion of the global supply of bulk commodities. Commodity prices, and hence the terms of trade, are expected to be a bit lower over coming years owing to the increased supply of bulk commodities following the significant investment in capacity. However, the demand for bulk commodities is expected to remain strong and bulk commodity prices are generally expected to remain well above their levels of recent decades.

Conditions in financial markets have been remarkably stable in the past few months, with historically low volatility evident in many asset classes. The US Federal Reserve has further pared back its program of asset purchases. The Bank of Japan has continued its pace of asset purchases, while the European Central Bank has expressed a preparedness to use additional measures if the medium-term outlook for inflation softens or financial conditions tighten. There has been an increase in investors' appetite for risk with global equity prices reversing the falls recorded in January, demand for corporate bonds remaining strong and yields on sovereign bonds of several euro area periphery economies declining to multi-year lows. Conditions in many emerging markets have also improved, with their bond yields generally declining, equity markets rising and their currencies appreciating, reversing much of the movements seen in the second half of last year. Australian financial markets have followed the lead of international markets over recent months. Equity prices have increased, while bond yields and

spreads have declined or remained at relatively low levels. Domestic financing conditions remain very accommodative, with ongoing expansion in market-based financing, while growth in business credit has picked up and housing credit growth has stabilised at a rate that is a little faster than income growth.

The Australian dollar has appreciated by around 4 per cent since the February *Statement*, supported in part by domestic economic data being a little stronger than markets had expected. This has taken the exchange rate back to levels seen late last year, though it is still about 10 per cent lower than the peak seen earlier in 2013.

In Australia, overall economic activity picked up over the past six months with the economy looking like it grew at close to its long-run average pace over this period. Much of this improvement was accounted for by a surge in resource exports, although there are also some signs of better conditions in parts of the non-mining economy. Still, non-mining investment remains subdued, as businesses are reluctant to take on significant new projects. Also, mining investment will decline substantially over the coming years, and growth in public demand is expected to be subdued owing to planned fiscal consolidation at state and federal levels.

The still high level of mining investment has added to capacity in the resources sector and helped to underpin the particularly strong growth of resource exports over the past two quarters. Further capacity for bulk commodities is still coming on line, although this will likely be at a slower rate than of late. Meanwhile, mining investment will decline substantially over the coming years as more resource projects reach completion and few new projects commence construction in the near term. This decline will subtract significantly from economic activity, although it will also see a substantial reduction in capital imports.

Non-mining investment is estimated to have declined in the December quarter and remains low as a share of GDP. While this was consistent with survey measures of business conditions being below average through much of 2013, a number of those surveys suggest that conditions have lifted to around their average levels since mid last year. Nevertheless, firms continue to report through the Bank's liaison program that they are waiting to see a sustained pick-up in demand before committing to increasing capital expenditure.

Household consumption growth picked up through 2013 as households became more optimistic about their finances, helped by low interest rates and the strength in the housing market. Over the past year, income growth was slower than that of consumption, with the saving rate declining a little. A moderate pace of growth in consumption appears to have been sustained into early 2014.

The strength in the established housing market, with rapid price growth over 2013 and rising housing turnover, not only provided an impetus to consumption but has also provided the backdrop for a much anticipated pick-up in dwelling investment. Dwelling approvals remain at high levels, and recent data on commencements point to strong growth in dwelling construction in the first half of 2014. Nationwide housing price inflation has moderated a little in recent months from the earlier rapid pace, auction clearance rates have also declined from recent high rates and loan approvals have been stable for a few months. It remains to be seen whether these signs of a tempering of conditions represent a shift to a more sustainable growth rate for housing prices. At the same time, indicators of demand for new housing remain strong, including first home owner grants and loan approvals for new dwellings.

Labour market conditions have shown some signs of improvement over recent months, consistent with the earlier improvement in economic activity. Employment growth picked up in the early months of 2014, following subdued growth over 2013. The unemployment rate has not increased over the past few months in contrast to the gradual upward trend of the previous year and a half. The participation rate also appears to have stabilised. Despite the

improvement in conditions, there remains a fair degree of spare capacity in the labour market. This has seen the growth of wages remain low, with most measures of wages recording their slowest pace of growth for a decade or more. The combination of slow wage growth and productivity growth a little above the average of the past decade resulted in very little growth in unit labour costs over 2013.

The slow growth of wages is now more clearly evident in lower rates of inflation for a range of consumer prices. This is especially so in the prices of market services, which tend to be relatively responsive to changes in labour costs. Inflation in the prices of those non-tradable items for which prices are regulated or the government is a significant provider have been running at a faster pace. Historically the prices of these items have been less sensitive to changes in domestic labour costs. Overall though, non-tradables inflation has slowed over the past year to around 3 per cent, well below the average rate of nearly 4 per cent over the past decade. Inflation in the prices of tradable items, in contrast, has been running at a faster pace over the past year than in the preceding few years, consistent with the depreciation of the exchange rate since early 2013.

The various measures suggest that underlying inflation was ½ per cent in the March quarter, noticeably lower than the December quarter's reading. These data appear to overstate the change in inflationary pressures in recent quarters and in this regard it is likely that the past two quarters of inflation data have reflected an element of noise. Abstracting from this volatility by looking at the various measures in year-ended terms suggests that underlying inflation is running at a pace of around 2½ to 2¾ per cent. CPI inflation was a little higher than this, in part reflecting the rise in the tobacco excise in December.

The outlook for the domestic economy is little changed from that presented in the February *Statement*. Growth is expected to be a bit below trend pace over the next year or so, reflecting the decline in mining investment and weak public demand, offset to some extent by the support being provided to domestic demand by very low interest rates. This support is already evident in the recent strength in indicators of dwelling investment, as well as some pick-up in the pace of consumption growth. As household demand picks up, businesses are expected to increase their investment given growth in the non-mining capital stock in recent years has been well below average. The depreciation of the exchange rate over the past year is also expected to make a contribution to a pick-up in activity in the traded sector, albeit to a slightly lesser extent than was anticipated in February given the appreciation of the exchange rate since then. The combination of these forces is expected to see growth increase gradually to an above-trend pace over 2015/16.

The unemployment rate is unlikely to decline consistently for some time. Forward-looking indicators of labour demand have improved recently, but they are still at low levels, consistent with relatively moderate growth of employment in coming months. With GDP growth forecast to be at a below-trend pace for the next year or so, the unemployment rate is not expected to begin to decline in a sustained fashion until after this, and then only slowly.

Inflation is forecast to remain consistent with the inflation target. The outlook for inflation reflects the influence of two opposing forces. There is expected to continue to be a fair degree of spare capacity in both product and labour markets, which is likely to contain profit margins and lead to moderate growth of labour costs. Working in the other direction is the impetus to tradables prices coming from the depreciation of the exchange rate since early 2013. Overall, the forecast for inflation is little changed from the previous *Statement*.

For most of Australia's major trading partners, the uncertainty surrounding the forecasts for growth appears broadly balanced. Notably, Chinese growth

slowed in the first quarter of 2014, as it did in each of the past two years. But in both of those years growth picked up later in the year, in part because of government actions but potentially also reflecting a changing seasonal pattern. Chinese officials have recently announced an unchanged growth target for this year and emphasised the importance of stable growth to achieve job creation. In Japan, it is uncertain how the disruption to growth from the increase in the consumption tax rate will be balanced by the fiscal stimulus and the current stimulatory stance of monetary policy.

For the domestic economy, the key uncertainties surrounding the outlook relate to the balance of two key forces: the decline in mining investment and the pick-up in activity in the non-mining economy (which is being helped in large part by stimulatory monetary policy). The timing and strength of these remain subject to considerable uncertainty. Consequently, it could be that aggregate demand will be weaker or stronger than expected over the next couple of years, with resulting implications for inflation. The path of the exchange rate also presents a significant source of uncertainty for the forecasts of both economic activity and inflation. With resource prices and therefore the terms of trade expected to decline further, historical relationships suggest that the exchange rate could move lower over time. The decline in capital inflows that have helped to fund mining investment, the increase in income payments to domestic and foreign owners accruing from strong growth in resource exports, as well as the conduct of monetary policy in major countries and associated capital flows, could also affect the exchange rate.

The cash rate has been at its current low level for some time now, resulting in very low levels of household and business borrowing rates. This stimulatory setting of monetary policy is having the expected effect. The housing market has been strong and a significant pick-up in dwelling investment is in prospect. Household consumption has also strengthened as have some measures of business conditions. While there have been signs of improvement in the labour market over recent months, a fair degree of spare capacity remains. Over the next couple of years, growth in activity is expected to pick up gradually but it is likely to be some time before unemployment declines consistently. This should see domestic costs remaining contained, which will be necessary to help offset the ongoing effect on prices of the depreciation of the exchange rate over the past year. The balance of these forces on consumer prices is expected to see inflation remain consistent with the inflation target through the forecast period.

Since last August, when the cash rate reached its current low level of 2.5 per cent, evidence of the effects of the substantial degree of stimulus already imparted has continued to accumulate. At the same time, the economy continues to face some significant headwinds, with the large decline in resources sector capital spending getting underway and fiscal consolidation in prospect. Also, while the exchange rate is noticeably lower than a year ago, it remains high and commodity prices have declined further over recent months. The outlook is uncertain but as currently assessed suggests that a degree of spare capacity will be present for much of the forecast period. Given that assessment, the Board's view is that the current accommodative monetary policy setting is likely to be appropriate for some time yet. ✠

# 1. International Economic Developments

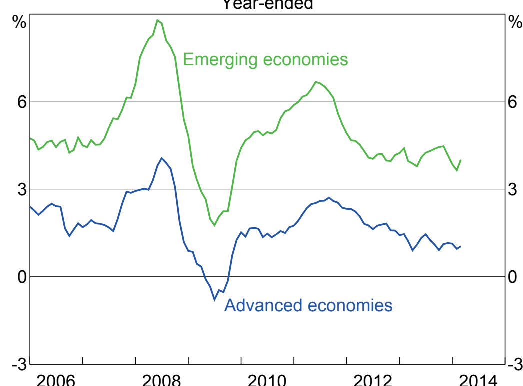
Growth of Australia's major trading partners (MTPs) was close to its long-run average in 2013 (see 'Box A: Growth of Australia's Major Trading Partners'). The Global Manufacturing PMI and other timely indicators are consistent with growth remaining close to average in early 2014 (Graph 1.1). In China, growth in the first quarter was a little slower than it had been, although growth this year is still expected to be consistent with the government's target. The US economy is showing signs of moderate growth and activity in the euro area is picking up gradually. Japan's recovery has progressed, but demand is expected to weaken following the increase in the consumption tax in April. Other east Asian economies have continued to grow at around their decade-average pace.

**Graph 1.1**
**Global Economic Activity**

* Aggregated using Australia's export shares
** Level of PMI rescaled to match MTP GDP growth
Sources: ABS; CEIC Data; Markit Economics; RBA; Thomson Reuters

Global inflation remains low, particularly in the advanced economies and notwithstanding the recent increase in Japan (Graph 1.2). Inflation in advanced economies has remained low over the past two years, suggesting that there is considerable spare capacity in these economies despite the recent increase in growth. In emerging economies, inflation developments are more mixed but, overall, price pressures remain contained.

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

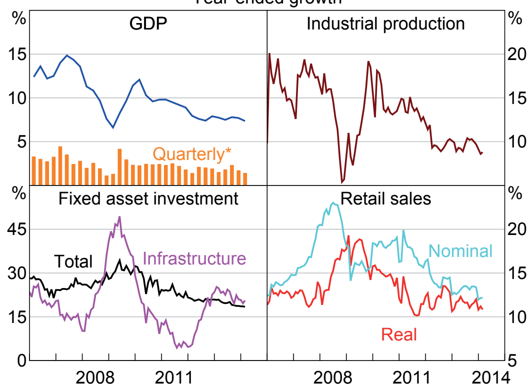



* PPP-weighted; accounts for over 80 per cent of world GDP
Sources: CEIC Data; IMF; RBA; Thomson Reuters

## Asia-Pacific

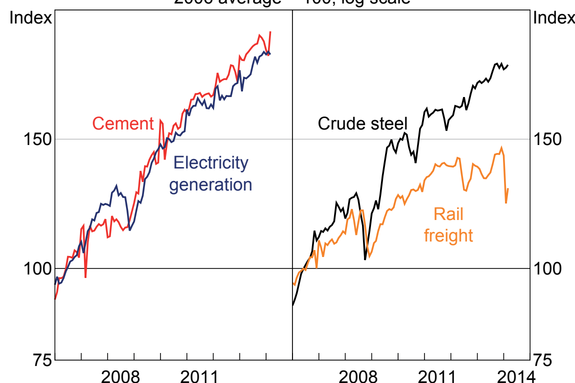
In China, economic growth moderated a little in early 2014, although this was similar to the pattern of weaker growth at the beginning of the previous two years. GDP grew by 1.4 per cent in the March quarter, to be 7.4 per cent higher over the year (Graph 1.3). A range of indicators suggest that the moderation in industrial activity that was evident in late 2013 continued into early 2014. Growth of crude steel production and electricity generation have slowed and rail freight volumes have fallen (Graph 1.4), although since February a number of indicators

## Graph 1.3
## China – Activity Indicators
Year-ended growth




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

## Graph 1.4
## China – Industrial Products
2006 average = 100, log scale




Sources: CEIC Data; RBA

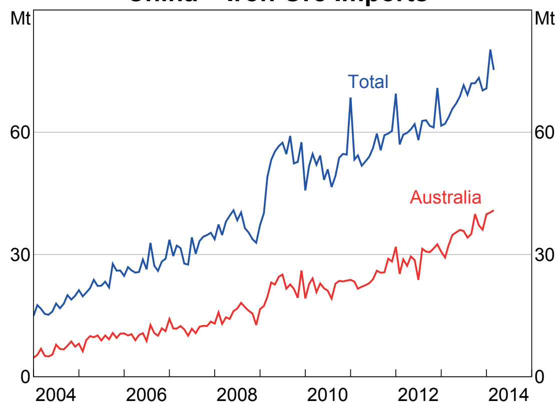
have shown tentative signs of improvement. Growth of real fixed asset investment picked up in the March quarter, but has moderated a little over the past year, owing largely to slower growth of infrastructure investment. Real household consumption growth looks to have remained strong, although growth of household disposable income showed signs of slowing in the March quarter.

In March, the Chinese Government announced growth targets for 2014 for a range of economic variables. These were largely unchanged from last year, with the target for GDP growth remaining at 7.5 per cent. The government's target of 2.1 per cent of GDP for the fiscal deficit was also little changed.

More recently, the government has flagged tax concessions for small businesses and made a public commitment to expand the construction of social housing and extend rail networks in central and western regions. The authorities also took measures to boost rural credit, including cuts to required reserve ratios for county-level rural banks and rural cooperative banks. These measures represent an extension of existing policies, and their impact is likely to be relatively minor, but they will provide some support for economic activity and confidence in the period ahead. Ongoing investment in social housing and the rail sector is consistent with the continuing process of urbanisation; the Chinese authorities have pledged to facilitate a rise in the national urbanisation rate from 54 per cent currently to 60 per cent by 2020.

Chinese exports declined in the March quarter, to be 3.8 per cent lower over the year. In the quarter, declines were recorded across most destinations. The weakness in measured exports at least in part reflects efforts by the authorities in late 2013 to reduce false trade invoicing, with the Chinese data on exports to Hong Kong moving into line with Hong Kong's imports data in recent months. Chinese imports softened recently, consistent with some moderation in indicators of domestic activity, although iron ore imports remain high, after rapid growth through last year (Graph 1.5).

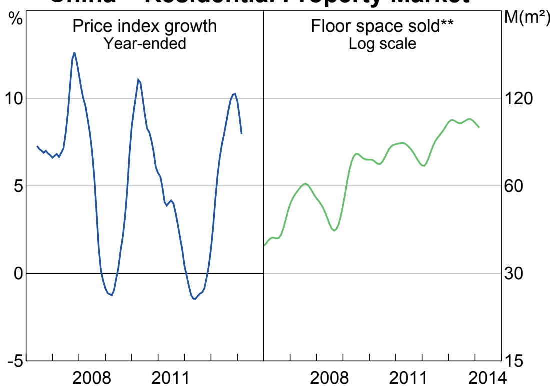
## Graph 1.5
## China – Iron Ore Imports*



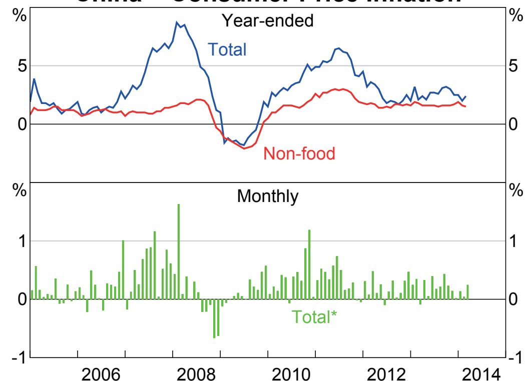

* Seasonally adjusted by RBA
Sources: CEIC Data; RBA

Growth of total social financing has continued to ease, reflecting a more modest expansion of non-bank financing. In line with the usual seasonal pattern, the flow of financing rebounded in March following weakness in February (reflecting the Chinese New Year holiday period). Adjusting for seasonality, the pace of growth has been slowing since the first half of 2013, reflecting the authorities' efforts to place the growth of banks' off-balance sheet business and the financing activities of non-bank financial institutions on a more sustainable footing.

Conditions in the property market in China continue to moderate, following the tightening of controls on property transactions and borrowing over 2013. Residential property price inflation has eased further in recent months, reflecting a broad-based moderation in property price inflation across Chinese cities (Graph 1.6). Recent data suggest slight declines in property prices in some smaller cities and are consistent with reports of an increase in discounts offered for new property purchases. The volume of property sales has eased in recent months, but remains at a high level.

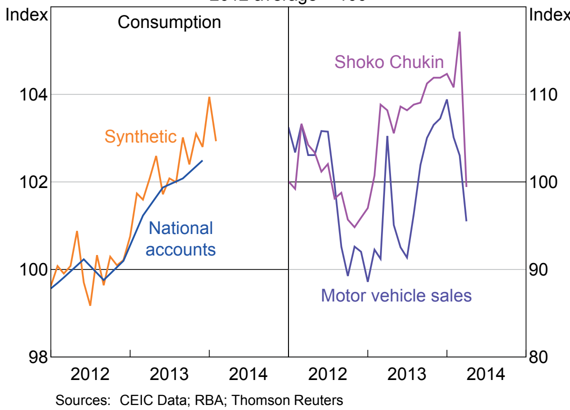


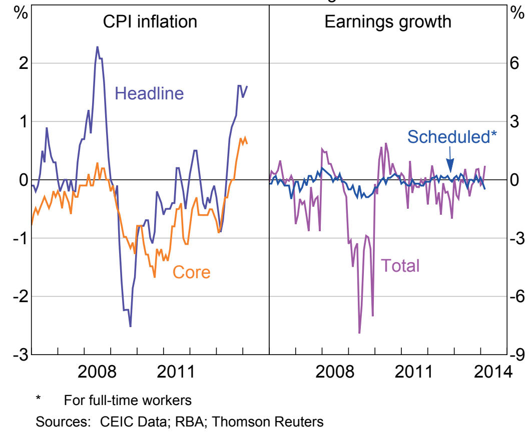

Inflationary pressures in China remain contained. At 2.4 per cent, year-ended CPI inflation in March was well below the government's 3.5 per cent target (Graph 1.7). Food price inflation has edged higher in recent months, but non-food price inflation remains low, and there is little evidence of upstream price pressures, with producer prices continuing to decline.



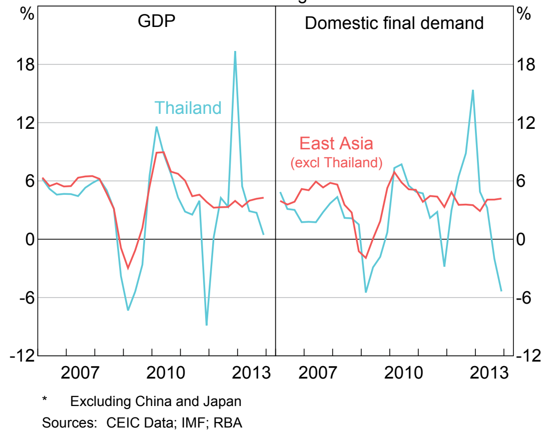

In Japan, year-average GDP growth in 2013, at 1.5 per cent, was well above its decade average, supported by strong domestic demand on the back of more stimulatory fiscal and monetary policies since late 2012. Growth appears to have continued at a strong pace in the March quarter 2014, as spending and production were brought forward ahead of the increase in the consumption tax rate implemented on 1 April (Graph 1.8; see also RBA (2014), 'Box A: Japan's Consumption Tax Increase', *Statement on Monetary Policy*, February, pp 12–13). Data available for April suggest that, as expected, economic conditions have softened following the consumption tax rise, with motor vehicle sales, consumer sentiment and the Shoko Chukin survey of small business sentiment all falling sharply.

Export volumes declined slightly in the March quarter, but are little changed since mid 2013, suggesting that any boost to external demand from the depreciation of the yen has been smaller than might have been expected. In part this may reflect the fact that many Japanese exports are intermediate inputs into regionally integrated supply chains, and demand for intermediate inputs tends to be more responsive to economic conditions in trading partner countries than changes in exchange rates.




Both headline and core CPI inflation rose sharply over much of 2013, as the depreciation of the yen fed through to higher prices of imported goods, particularly to energy prices (Graph 1.9). More recently, inflation appears to have stabilised as the effects of the depreciation have faded. The consumption tax increase in April will increase consumer price inflation significantly, but temporarily; the CPI for Tokyo, which is released earlier than the economy-wide measure, increased in April by nearly 2 per cent, which was in line with the expected effect of the consumption tax increase. To date, domestic consumer prices have not increased noticeably although they are no longer declining, as they had in previous years. Similarly, nominal wages are little changed over the past year, although in the recently concluded spring wage negotiations large Japanese companies have announced small increases in base wages for the first time since the onset of the global financial crisis.




In the rest of east Asia, most economies appear to have grown at around their decade-average pace over the past six months (Graph 1.10). Thailand is a notable exception to this, with economic growth remaining weak amid ongoing political turmoil.

Across the region, growth of domestic demand over 2013 was supported by generally accommodative fiscal and monetary policies, credit growth and strong labour markets. Consumption growth was broad based across economies, while investment growth was strong in the higher-income economies but fairly subdued in the middle-income economies after an earlier period of strong growth.

In late 2013 and early 2014, there have been tentative signs of a pick-up in external demand (Graph 1.11). Industrial production data and the PMIs are consistent with continued steady growth of output over recent months.

**Graph 1.11**
**East Asia – Production and Exports**
2006 average = 100

* Excludes China, Hong Kong, Indonesia and Japan
** Excludes China and Japan; domestic exports for Hong Kong and Singapore (non-oil); non-oil and gas exports for Indonesia
Sources: CEIC Data; IMF; RBA; United Nations

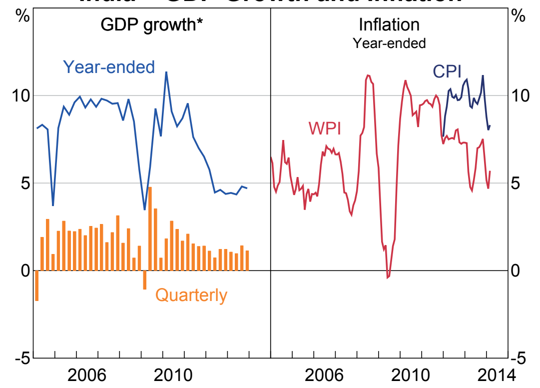
Inflationary pressures have been subdued in the region, although year-ended inflation rates remain elevated in some economies, partly owing to reductions in energy subsidies in 2013. Moreover, the exchange rates of a number of economies in the region have depreciated since mid 2013 when markets started anticipating the unwinding of the Federal Reserve's asset purchases, adding to inflationary pressures in these economies. Exchange rates have stabilised somewhat more recently.

In India, economic growth has been relatively subdued at slightly below 5 per cent for the past two years (Graph 1.12). Over the second half of 2013, growth of consumption and investment eased. However, exports have grown faster than imports, partly reflecting the earlier depreciation of the rupee and gold import restrictions. Growth of agricultural production also increased following a good harvest, while recent indicators suggest that services sector activity has improved. The good harvest has contributed to a moderation of food price inflation, with consumer price inflation falling from a peak of 11.2 per cent to 8.3 per cent in March. Following on from a period of monetary policy tightening beginning in the second half of 2013, in March the Reserve Bank of India committed to reducing consumer price inflation to 8 per cent by the start of 2015, and to 6 per cent by the start of 2016.

Economic growth in New Zealand picked up over the second half of 2013, led by strong growth of both domestic demand and exports. The labour market has strengthened considerably in recent quarters, with employment growth and the participation rate rising and the unemployment rate edging down (Graph 1.13).

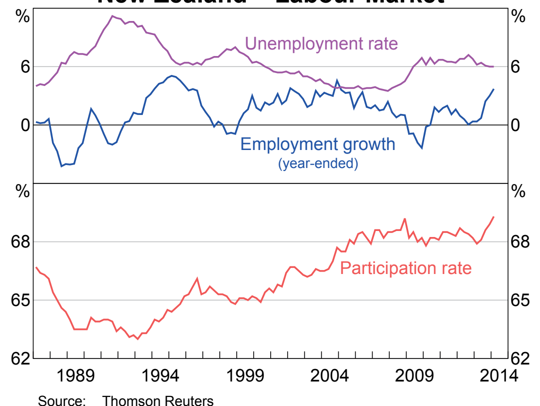
Housing prices have continued to rise rapidly, especially in Auckland and Christchurch. However, in early 2014 there have been signs of a decline in turnover. This follows the Reserve Bank of New Zealand's implementation of restrictions on mortgage lending to borrowers with high loan-to-valuation ratios, and increases in mortgage rates associated with the recent tightening of monetary policy.

**Graph 1.12**
**India – GDP Growth and Inflation**




* Measured at factor cost
Sources: CEIC Data; RBA

**Graph 1.13**
**New Zealand – Labour Market**



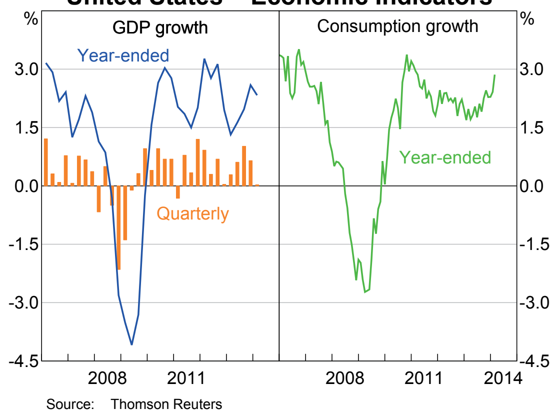

Source: Thomson Reuters

## United States

In the United States, very stimulatory monetary policy continues to support the economic recovery. Real GDP recorded negligible growth in the March quarter, although this in part reflected unusually severe weather conditions that weighed on activity early in the year (Graph 1.14). More timely indicators, including retail sales, motor vehicle sales and manufacturing production, suggest that economic activity picked up as the weather improved.

**Graph 1.14**

**United States – Economic Indicators**

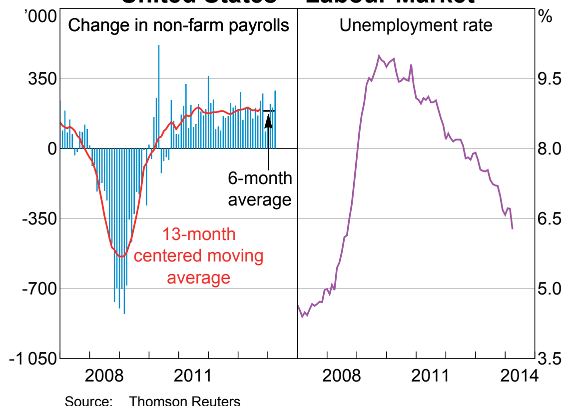



The pace of recovery in the housing market looks to have moderated a little from the rapid rates seen over 2012 and the first half of 2013. Residential construction activity declined in early 2014, at least in part because of the unusually severe weather in some parts of the country. While prices for established houses have continued to increase at an annualised rate of around 10 per cent, sales volumes have fallen considerably since the middle of last year. This reflects both a limited stock of houses for sale and some softening in demand, in part reflecting higher mortgage interest rates.

Labour market conditions improved further in early 2014. Non-farm payrolls increased strongly in April, and over the past six months they increased at around the average pace of the previous two years. The unemployment rate has declined further (Graph 1.15). The participation rate has been steady in recent months, remaining around its lowest level since the late 1970s. Low labour force participation, coupled with high rates of both longer-duration unemployment and part-time workers who would prefer full-time employment, all suggest that there is still considerable spare capacity in the labour market. The Federal Open Market Committee took this into account when it revised its forward interest rate guidance, to include a range of measures of labour market conditions, inflation pressures and inflation expectations, and financial conditions (see the 'International and Foreign Exchange Markets' chapter).

**Graph 1.15**

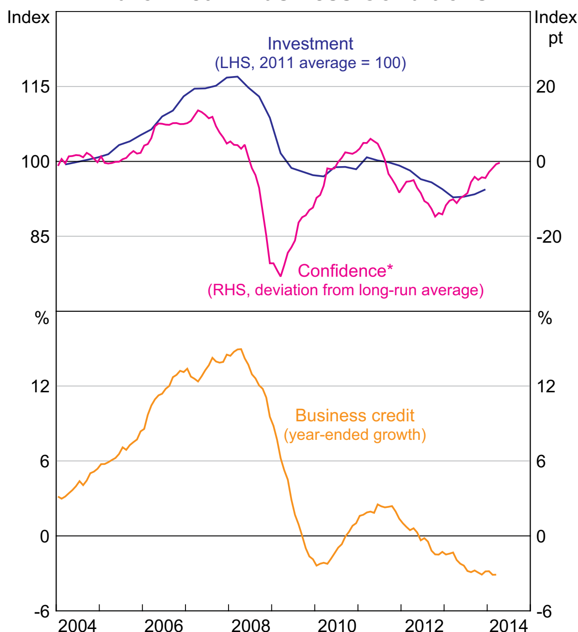
**United States – Labour Market**




## Europe

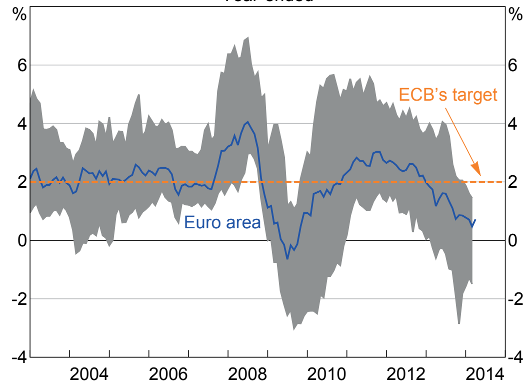
The gradual recovery of economic activity in the euro area continued in the December quarter, with GDP expanding modestly for the third consecutive quarter and growth over the year positive for the first time since 2011. Growth in the quarter was driven by investment and exports, with private consumption increasing only slightly. The recent pick-up in export growth follows an improvement in competitiveness in some of the more fragile economies in the region, which has occurred as a result of weak growth (or even declines) in prices and wages.

The recovery appears to have continued into the March quarter. Retail sales grew strongly in the quarter, and consumer confidence continued to improve. Various indicators suggest that investment has continued to grow, albeit very modestly. Surveys suggest that business confidence has improved over recent months and is now close to its long-run average, although business credit has continued to decline reflecting weakness in both demand and supply (Graph 1.16).




* Aggregated from industry-level confidence indicators
Sources: European Central Bank; Thomson Reuters

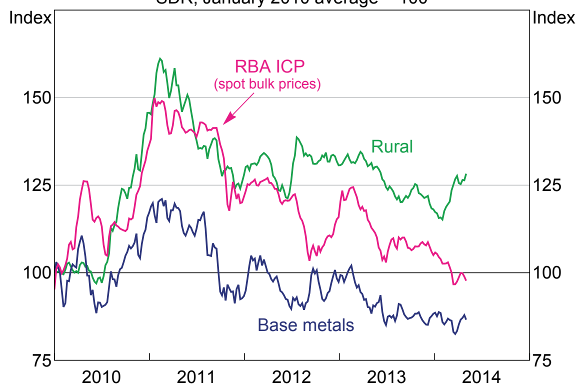
The unemployment rate in the euro area has stabilised but it remains high, and spare capacity in the economy more generally has led to a decline in core inflation over 2013; the higher exchange rate is also likely to have contributed. Falling fuel prices and slowing food price inflation have contributed to a more noticeable decline in headline inflation. Low inflation is broad based, with all euro area economies experiencing inflation below the European Central Bank's (ECB) target, which is for inflation to be below but close to 2 per cent (Graph 1.17). Indeed, consumer prices in a few of the more fragile economies have declined. The ECB has stated on a number of occasions that it will do whatever it deems necessary to address the risk of deflation in the euro area as a whole.




* Shaded area represents range of individual economies
Source: Thomson Reuters

## Commodity Prices

Commodity prices have declined over the past few months, with particularly large falls in the prices of iron ore and coal associated with a weakening in Chinese steel demand. Base metals prices have also declined, while prices of rural commodities and gold have increased (Graph 1.18; Table 1.1).



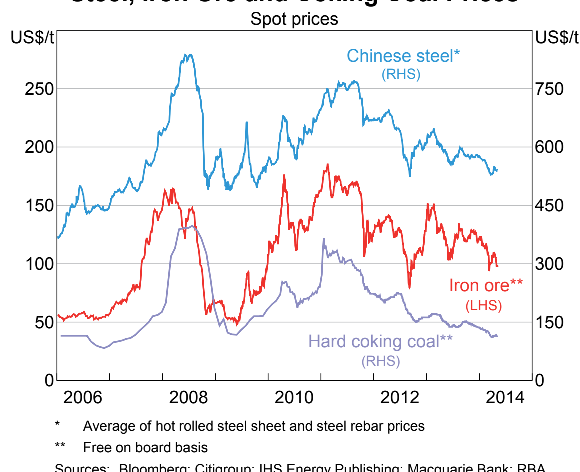

* RBA Index of Commodity Prices (ICP) sub-indices
Source: RBA

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

| | Since previous *Statement* | Over the past year |
|---|---|---|
| Bulk commodities | –14 | –24 |
| – Iron ore | –14 | –23 |
| – Coking coal | –14 | –30 |
| – Thermal coal | –11 | –19 |
| Rural | 5 | –6 |
| Base metals | –1 | –9 |
| Gold | 5 | –17 |
| Brent oil[(b)] | –1 | 0 |
| RBA ICP | –3 | –12 |
| – Using spot prices for bulk commodities | –6 | –16 |

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

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




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

Following a gradual decline in January and February, the spot price for iron ore fell sharply in early March and remains more than 20 per cent lower than a year ago (Graph 1.19). The recent decline appears to reflect weaker demand for Chinese steel, a tightening in credit conditions in the Chinese steel industry and, reportedly, increased scrutiny by Chinese authorities over the use of iron ore as collateral for loans. Significant expansions to the supply of iron ore, particularly from Australia, have also weighed on prices over the year.

Consistent with weaker demand for steel, the spot price for premium hard coking coal has also declined in recent months. The June quarter contract price for premium hard coking coal is US$120 per tonne, which is 16 per cent lower than it was in the March quarter. Global spot prices for thermal coal remain at low levels, with the spot price for Newcastle thermal coal now around 10 per cent below the 2014 Japanese Fiscal Year contract price of about US$82 per tonne. It appears that some higher-cost Australian coal mines are unprofitable at current spot prices, although take-or-pay contracts with port and rail operators (where miners pay a fixed cost for access to port and rail facilities regardless of whether they use them or not) may mean that ceasing production would incur higher losses than continuing to produce.

Rural prices have, on average, increased over the past three months. This partly reflects higher wheat prices, as drier-than-normal conditions have affected the outlook for wheat production in the United States. The prices of base metals are, on average, slightly lower over the past three months, although the price of nickel has risen steadily over this period, following Indonesia's ban on mineral ore exports in January. ✠

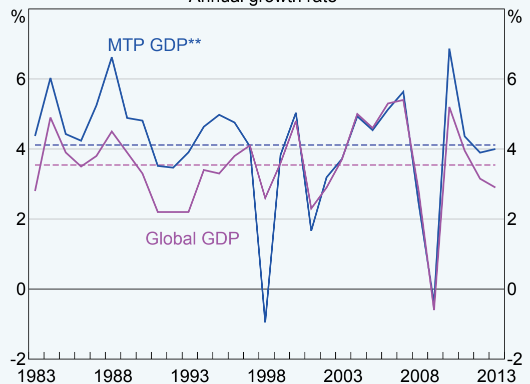
## Box A

# Growth of Australia's Major Trading Partners

Over the past 30 years, annual growth in the GDP of Australia's major trading partners (MTPs) has averaged a little over 4 per cent (weighted by exports) (Graph A1).[1] This is higher than the average growth in global GDP because a large share of Australia's exports is to fast-growing economies in Asia. While MTP growth has experienced relatively short-lived cycles, the average rate of growth has not really changed over time. This stability has occurred despite declines in the trend rate of growth of some large trading partners, notably Japan from the early 1990s and China more recently.

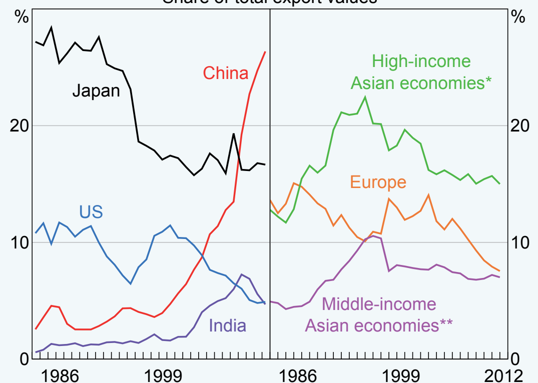
Prior to the early 1990s, Japan had experienced a long period of relatively rapid GDP growth, averaging over 4½ per cent a year through the 1980s. At that time, Japan was Australia's largest trading partner, accounting for over one-quarter of Australia's exports (Graph A2). The majority of exports to Japan were raw material inputs for its rapidly growing industrial sector and for its rising energy needs. Japan's growth slowed sharply in the early 1990s, following a crash in Japanese asset prices and related banking problems, and Japan's demand for Australian exports moderated. The sharp decline in the share of Australian exports destined for Japan was offset by a pick-up in demand for Australia's exports from other fast-growing Asian economies, including Korea. As a result, Australia's MTP growth remained strong despite the slowdown in Japan.

**Graph A1**
**Trading Partner and Global GDP**
Annual growth rate*




* 30-year averages shown as dashed lines
** Aggregated using Australia's export shares
Sources: ABS; CEIC Data; IMF; RBA; Thomson Reuters

**Graph A2**
**Australian Exports by Destination**
Share of total export values




* Hong Kong, Singapore, South Korea and Taiwan
** Indonesia, Malaysia, Philippines and Thailand
Sources: ABS; RBA

1 MTP GDP weights together the growth of Australia's 23 largest trading partners according to their share of the total value of goods and services exports. Global GDP, on the other hand, weights together growth of a larger set of countries according to their share of global GDP at PPP exchange rates.

Since China became a member of the World Trade Organization in 2001, it has become deeply integrated in global trade. China's continuing rapid growth since then, in particular its sharp increase in demand for resources to build its capital stock as well as inputs for use in its expanding industrial sector, has seen the share of Australian exports destined for China increase dramatically. In the late 2000s, China overtook Japan as Australia's most significant destination for exports. China now accounts for over one-quarter of Australia's exports, up from around 6 per cent in 2001.

Even though China's GDP growth has slowed from rates of 10–12 per cent a few years ago to around 7½ per cent – still a very strong rate – over more recent years, Australia's MTP growth has remained around 4 per cent. This stability in MTP growth reflects two things. First, the Chinese economy continues to record faster growth than Australia's other major trading partners and, second, it accounts for an increasing share of Australia's exports.

The vastly increased size of the Chinese economy means that even with a slower rate of growth, it is making the same if not larger contributions to growth in global economic activity, and even more so to Australia's MTP GDP, than when it was smaller but growing more rapidly. For example, China grew by 12¾ per cent in 2006, which corresponded to a CNY1 054 billion increase (in constant 1998 prices) in its GDP, while growth of 7¾ per cent in 2013 corresponded to an even larger increase of CNY1 265 billion. Similarly, the increasing importance of China as a destination for Australia's exports means that China's growth of 7¾ per cent in 2013 made around the same percentage point contribution to Australia's MTP growth as growth of 10½ per cent in 2010, and a larger contribution than growth of 14 per cent in 2007 (Graph A3). ✈

* Aggregated using Australia's export shares
Sources: ABS; CEIC Data; RBA; Thomson Reuters

# 2. International and Foreign Exchange Markets

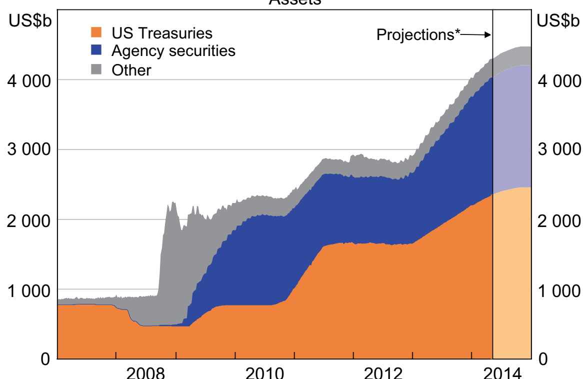
The prices of a range of risk-sensitive global financial assets have rallied strongly since early February, with global equity prices reversing the falls recorded in January, emerging market bond yields generally declining and the currencies of a number of Asian and emerging market economies paring back some of their depreciations against the US dollar that occurred over the latter part of 2013. Demand for corporate bonds globally remains strong, and has strengthened further for lower-rated securities, while yields on sovereign bonds of several euro area 'periphery' economies have fallen to their lowest levels in many decades. The other noteworthy feature of global financial markets in recent months has been historically low levels of volatility across most asset classes. These developments have occurred alongside continued central bank policy accommodation, with the US Federal Reserve recommitting to maintain accommodative policy for a considerable period of time, the Bank of Japan's balance sheet still growing rapidly and the European Central Bank (ECB) signalling its willingness to ease policy further if needed. While geopolitical tensions between Russia and Ukraine have affected markets, the impact has predominantly been confined to eastern Europe.

## Central Bank Policy

The US Federal Reserve has continued to scale back the size of its monthly asset purchases by US$10 billion at each of its recent meetings, to now be US$45 billion. A number of Federal Reserve officials have made clear that they expect to continue reducing asset purchases in similar increments at upcoming meetings, absent a notable change in the economic outlook. This would see asset purchases finish later this year. The Fed's balance sheet has expanded by US$275 billion since the start of the year as a result of these purchases and is likely to rise by a further US$175 billion to US$4.5 trillion before purchases end (Graph 2.1).

With asset purchases perceived to be largely on a preset course, the focus of policy has shifted to the timing of future policy rate rises. The Federal Open Market Committee (FOMC) revised its forward interest rate guidance at its March meeting, replacing the previous threshold-based guidance in favour of qualitative guidance that takes account of a wide range of information, including that related to the labour market, inflation pressures and expectations, and financial conditions. Under the new guidance, the FOMC currently states that it anticipates the federal funds rate will be unchanged for 'a considerable

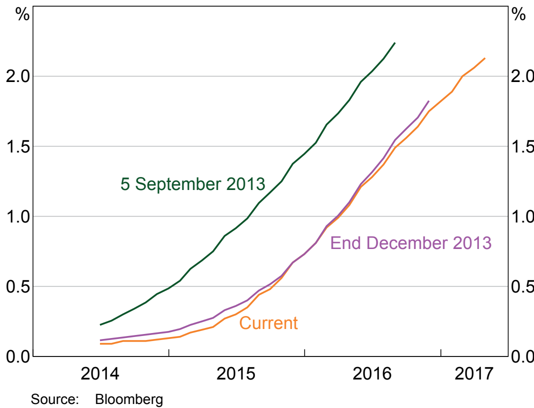
**Graph 2.1**
**US Federal Reserve Balance Sheet**
Assets




* Projections assume purchases decline by US$10 billion per meeting, evenly split between Treasuries and agency MBS, and finish in October 2014

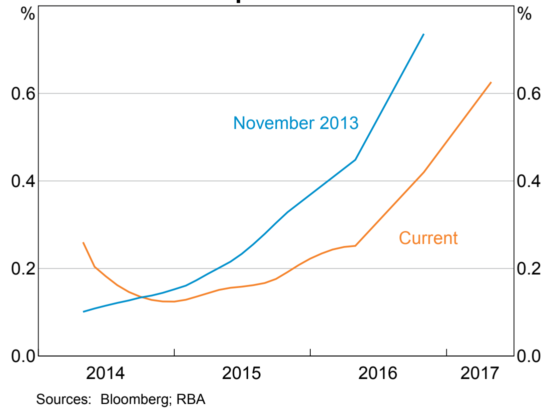
Sources: Board of Governors of the Federal Reserve System; RBA

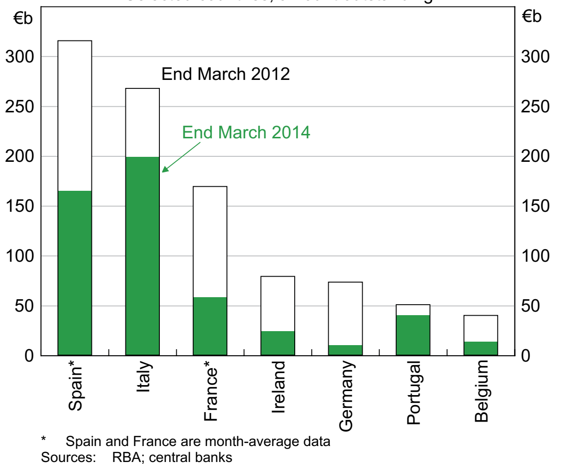
time' after asset purchases end, and will likely remain lower than historical norms for an extended period. Consistent with this, market implied expectations are for the first rise in the federal funds rate to occur around mid 2015 (Graph 2.2).




The ECB has left its policy settings unchanged since November, and continues to state that interest rates will remain at current or lower levels for an extended period. The ECB has committed to ease policy further if the medium-term outlook for inflation declines or if there is an unwanted tightening in money market conditions, including because of an appreciation of the currency. Given the already low level of interest rates, the ECB has said that it is prepared to use a range of unconventional instruments, including purchasing sovereign and corporate bonds or charging banks to hold excess reserves on deposit with the ECB. Reflecting such discussion, and recent weakness in actual and prospective inflation, markets are pricing in a chance of a policy easing later this year and no increase in rates until 2017 (Graph 2.3).

The ECB's balance sheet has continued to shrink in recent months, reflecting prepayment of funds extended under the 3-year long-term refinancing operations (LTRO) in late 2011 and early 2012. More than half of these loans have now been repaid. Spanish banks have accounted for much of the prepayment over the past six months, but still have large outstanding balances (Graph 2.4). Italian




banks have increased the rate at which they are repaying these loans over recent months, though around 75 per cent of their initial drawings remain outstanding, while Portuguese banks have repaid little of their initial drawings. The decline in the ECB's balance sheet has seen excess liquidity fall to around €100 billon, which has pushed the overnight interbank rate towards the main policy rate, after trading near the deposit rate floor since late 2011.

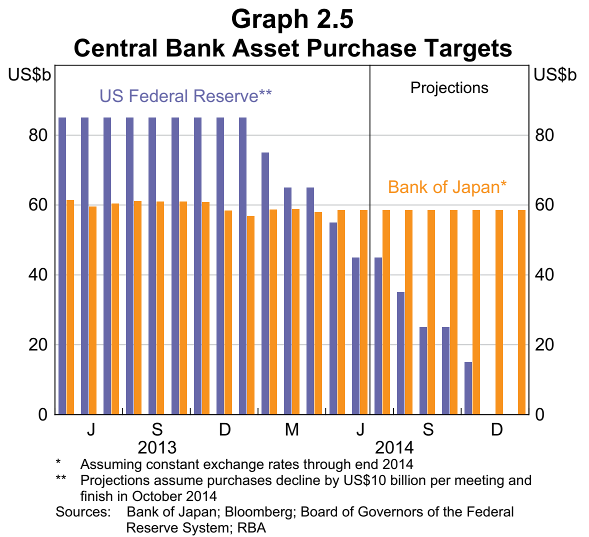
In contrast, the Bank of Japan (BoJ) has continued to expand its balance sheet rapidly, in line with the guidance given in April 2013. With asset purchases by the US Federal Reserve having been scaled back

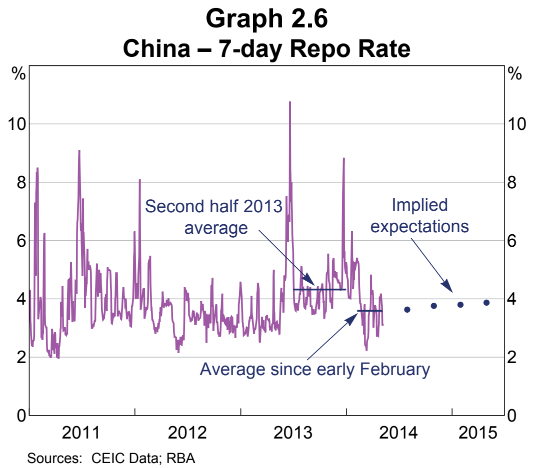
in recent months, the BoJ is now purchasing more assets than the Fed (Graph 2.5). Market pricing suggests that investors are not fully convinced that the BoJ will meet its target of sustainably raising inflation to 2 per cent, leading to a widespread expectation that the BoJ will expand its monetary stimulus in coming months. However, the BoJ maintains that it will reach this target in 2015, and that no further stimulus is required at this point.

Short-term money market rates in China declined notably in February and have generally remained low since then, despite the People's Bank of China (PBC) withdrawing liquidity over this period (Graph 2.6). The 7-day repo rate reached its lowest level in almost two years in March, following an eight month period of tighter conditions. Market commentators widely believe that the PBC has accommodated lower short-term rates as part of its effort to induce a modest currency depreciation, thereby deterring speculative capital inflows. Pricing of interest rate swaps imply that market participants expect rates to rise over the coming year, but to remain somewhat lower than in the second half of last year.

The Reserve Bank of New Zealand (RBNZ) increased rates by 25 basis points at each of its March and April meetings and signalled that rates need to continue rising to a more neutral setting. The RBNZ cited increasing inflationary pressures and considerable momentum in economic growth for its decisions.

In Denmark, the central bank ceased charging banks to deposit excess funds with it, having imposed a 10–20 basis point fee since mid 2012, in response to a reversal of earlier appreciation pressure on its exchange rate with the euro. The Bank of England (BoE) abandoned quantitative forward interest rate guidance as the unemployment rate fell below 7 per cent. Under the revised qualitative guidance issued in February, the BoE signalled that any rise in policy rates is expected to be gradual and that rates are likely to remain below longer-run norms for a considerable time. Market pricing currently indicates that the first increase in UK rates is expected mid next year, with a further 125 basis points of increase priced in over the subsequent 18 months.




Reduced external pressure has seen a number of emerging market central banks, including Indonesia, India, South Africa and Turkey, cease tightening policy in recent months (Table 2.1). However, the central bank of Brazil continued to tighten policy, raising rates by a further 25 basis points at each of its February and April meetings, though hinted in its most recent statement that it may have now reached the end of its tightening cycle. The central bank of Russia raised rates by 150 basis points in early March, in response to financial market volatility following military and geopolitical tensions between it and Ukraine, and by a further 50 basis points in late

## Table 2.1: Monetary Policy

| | Policy rate<br>Per cent | | Most recent change | Cumulative change in current phase[(a)]<br>Basis points |
|---|---|---|---|---|
| Euro area | 0.25 | ↓ | Nov 13 | –125 |
| Japan[(b)] | na | | na | |
| United States | 0.125 | ↓ | Dec 08 | –512.5 |
| Australia | 2.50 | ↓ | Aug 13 | –225 |
| Brazil | 11.00 | ↑ | Apr 14 | 375 |
| Canada | 1.00 | ↑ | Sep 10 | 75 |
| Chile | 4.00 | ↓ | Mar 14 | –125 |
| China[(b)] | na | | na | |
| India | 8.00 | ↑ | Jan 14 | 75 |
| Indonesia | 7.50 | ↑ | Nov 13 | 175 |
| Israel | 0.75 | ↓ | Feb 14 | –250 |
| Malaysia | 3.00 | ↑ | May 11 | 100 |
| Mexico | 3.50 | ↓ | Oct 13 | –475 |
| New Zealand | 3.00 | ↑ | Apr 14 | 50 |
| Norway | 1.50 | ↓ | Mar 12 | –75 |
| Russia | 7.50 | ↑ | Apr 14 | 200 |
| South Africa | 5.50 | ↑ | Jan 14 | 50 |
| South Korea | 2.50 | ↓ | May 13 | –75 |
| Sweden | 0.75 | ↓ | Dec 13 | –125 |
| Switzerland | 0.00 | ↓ | Aug 11 | –275 |
| Taiwan | 1.875 | ↑ | Jun 11 | 62.5 |
| Thailand | 2.00 | ↓ | Mar 14 | –150 |
| Turkey | 10.00 | ↑ | Jan 14 | 550 |
| United Kingdom | 0.50 | ↓ | Mar 09 | –525 |
| | **Current monthly asset purchases** | | **Most recent change** | **Assets on balance sheet**<br>Per cent of GDP |
| United States | $45 billion | | Apr 14 | 25.1 |
| Japan | ¥6 trillion | | Apr 13 | 51.2 |
| United Kingdom | 0 | | Jul 12 | 24.3 |

(a) Current rate relative to most recent trough or peak
(b) Since April 2013, the Bank of Japan's main operating target has been the money base; China does not have an official policy rate
Sources: RBA; Thomson Reuters; central banks

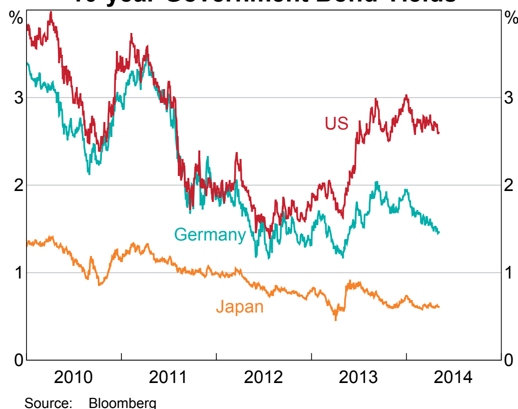
April to stem inflationary pressures ensuing from the depreciation of the rouble. The Ukrainian central bank also raised rates by 300 basis points in April to support its currency.

A number of other central banks in emerging economies have cut rates further in recent months, including Chile, Thailand and Israel.

## Sovereign Debt Markets

Yields on 10-year US Treasury bonds have been little changed since early February, after falling sharply over January as economic data disappointed and concerns about the outlook for economic growth resurfaced (Graph 2.7). Yields on 10-year Treasuries are currently 45 basis points below their end 2013 level. Yields on German Bunds have continued to

## Graph 2.7
### 10-year Government Bond Yields



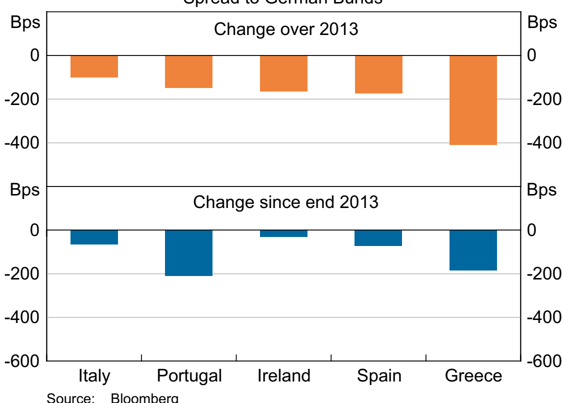

Source: Bloomberg

drift down over recent months to also be around 45 basis points lower than at the end of last year, while yields on 10-year Japanese government bonds have declined modestly. Japanese residents have been repatriating funds invested in foreign bond markets since the start of the year – with selling of US, German, French and UK bonds most pronounced – unwinding half of the increase in their foreign bond holdings over the second half of last year.

Spreads between yields on 10-year bonds issued by euro area periphery governments and those on German Bunds have continued to narrow in 2014, having declined significantly over 2013 (Graph 2.8). The persistent narrowing in spreads has occurred alongside ongoing speculation of further ECB policy action, including asset purchases. As a result, yields on Italian, Irish and Spanish bonds are at their lowest levels in many decades. Yields on Portuguese and Greek bonds are at their lowest levels since 2006 and 2010 (Graph 2.9).

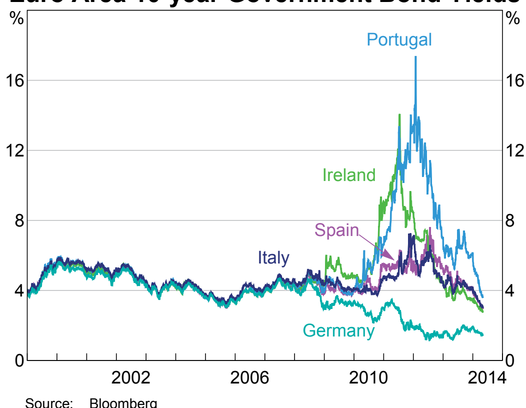
The fall in euro area periphery spreads has occurred alongside an increase in foreign investor demand for such bonds. The share of Spanish sovereign bonds owned by foreigners increased notably over the second half of 2013, unwinding two-thirds of the earlier fall in foreigners' share of outstanding bonds, and foreigners' share of Portuguese debt has also risen since November (Graph 2.10). Foreign participation in recent bond issues by governments of the euro area

## Graph 2.8
### Euro Area Periphery 10-year Government Bond Spreads
Spread to German Bunds



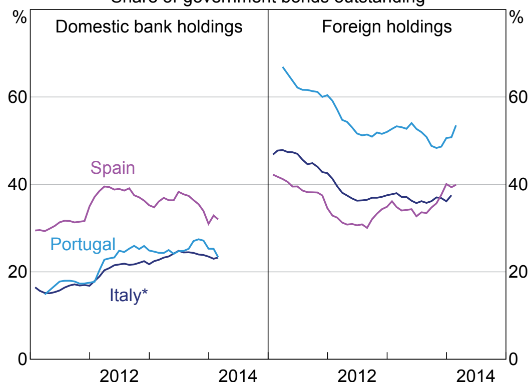

Source: Bloomberg

## Graph 2.9
### Euro Area 10-year Government Bond Yields




Source: Bloomberg

## Graph 2.10
### Holdings of Sovereign Debt Securities
Share of government bonds outstanding




* Domestic bank holdings include holdings of money market funds

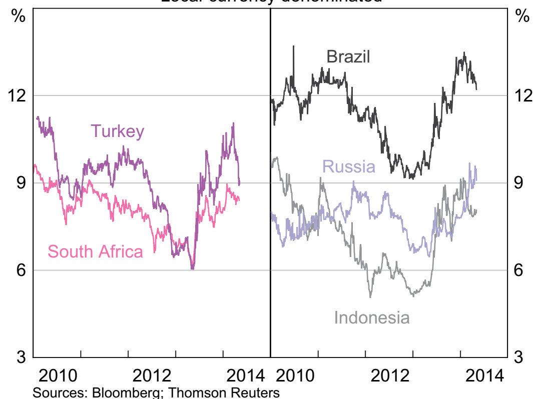
Sources: Bank of Italy; Bank of Portugal; European Central Bank; RBA; Spanish Treasury

periphery has also tended to exceed 75 per cent of total bids lodged. However, foreign holdings of Italian debt have increased only modestly, with their share of outstanding bonds little changed since early 2012.

Rising demand for euro area sovereign bonds has allowed a number of governments to return to bond markets in 2014. The Greek Government issued its first long-term bond in four years in April, with the €3 billion issue seven times oversubscribed. Ireland and Portugal also followed up their January bond issues with further issuance in March and April. Periphery banks that had been excluded from bond markets have also recently been able to raise funds for the first time in many years, with issues by a few Greek banks most notable.

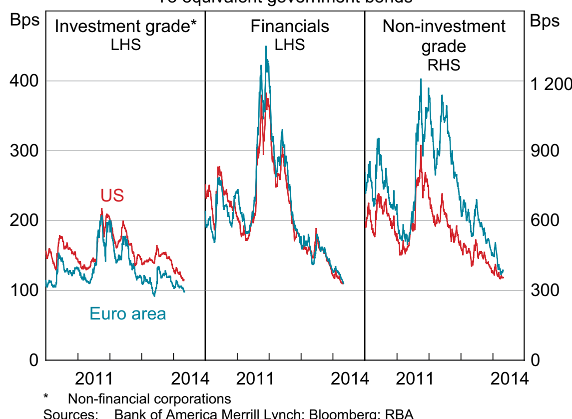
The European Banking Authority (EBA) released details of the adverse scenario underlying its upcoming bank stress tests, in conjunction with the ECB. It assumes that investor demand for all countries' long-term bonds falls sharply, resulting in a large rise in US and German bond yields and an even larger rise in yields on bonds issued by euro area periphery governments. The scenario also assumes a stalling in the process of euro area financial reform and bank balance sheet repair, alongside declining credit quality in some countries. Under such a scenario, it is projected that global demand declines notably, while in the euro area, GDP falls by a cumulative 6½ percentage points and the unemployment rate rises by over 2 percentage points, relative to the baseline forecast over 2014–16. The assumed shocks are also projected to result in a marked rise in short-term euro area interest rates and bank funding costs, while asset prices fall by varying amounts across countries (with declines of around 15–20 per cent for housing, equities and commercial real estate across the euro area). Banks that fail to meet the minimum 5.5 per cent Common Equity Tier 1 (CET1) capital ratio under the adverse scenario would have 9 months to raise additional capital, which can include a limited amount of Additional Tier 1 capital instruments that have unconditional conversion triggers set at a CET1 ratio of 5.5 per cent or higher.

Bond yields in emerging markets have also fallen since early February, after rising sharply over January, as concerns about the external vulnerability of emerging market economies abated (Graph 2.11). These declines have occurred alongside a return of foreign investors to many emerging bond markets. The decline over recent months has been pronounced for Indonesian government bonds, with yields on such securities falling by 110 basis points in response to perceptions that its economy is proving more resilient than previously thought. Yields on Brazilian and Turkish government bonds have declined by a similar amount as investors have scaled back expectations of future Brazilian policy tightening and local elections affirmed support for Turkey's ruling party, while those on South African bonds have also declined; in each case, though, yields remain elevated. The most notable exception has been yields on Russian and Ukrainian bonds, which have both risen by more than 100 basis points following escalating tensions between the two nations.



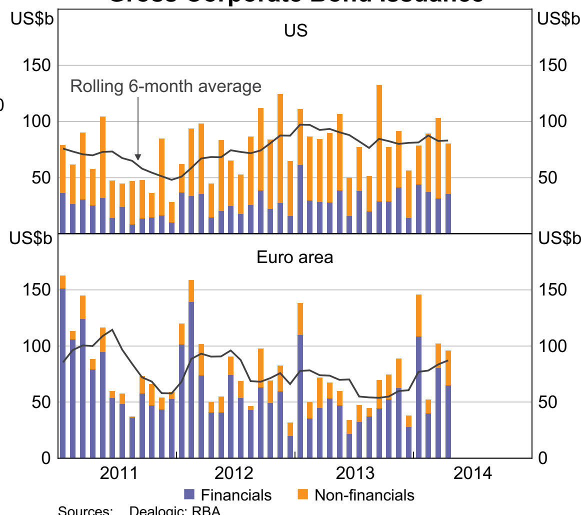

## Credit Markets

Corporate bond spreads in the United States and euro area have continued to narrow over recent months, to be around their lowest levels since 2007 (Graph 2.12). Spreads on non-investment grade corporate bonds have narrowed most sharply, particularly in the euro



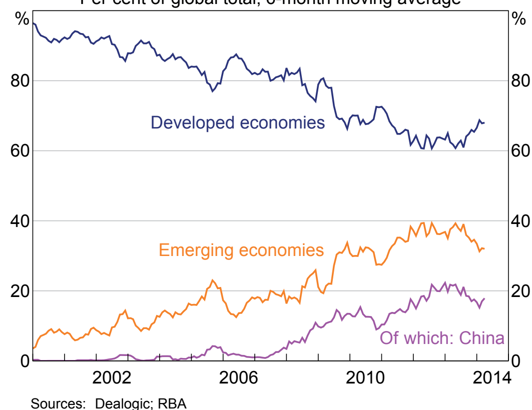

area where such spreads are more than 100 basis points tighter than in early February. Demand for such assets has been supported by the general improvement in investor sentiment, which in the euro area includes speculation that the ECB may decide to undertake a program of purchasing public and private assets. Spreads on non-investment grade bonds in the United States have narrowed by around 50 basis points since early February, while spreads on investment grade corporate bonds in both economies have narrowed modestly.

Banks in the euro area periphery have taken advantage of improved access to markets to issue bonds in recent months. Issuance by euro area non-financial corporations has also increased. Within this, demand for new non-investment grade bonds has been notably strong, as evidenced by French telecommunications company Numericable (rated B+ and BB- by ratings agencies) undertaking the largest ever issue of non-investment grade bonds in April. The company issued almost US$11 billion in medium- and long-term bonds after attracting offers around seven times larger than that. As a result of these and other raisings, total issuance by euro area corporations has picked up notably in 2014 (Graph 2.13). Issuance by US corporations has been steady, having remained more consistent than in the euro area over recent years. The largest issue in recent months has been by Apple, which




issued US$12 billion in new investment grade bonds following its then-record US$17 billion issue in April 2013.

Issuance by emerging market corporations remains well below that seen in the first half of last year. As a result, the share of global non-financial corporate bond issuance accounted for by emerging market borrowers has fallen sharply over the past six months, having increased steadily over several years (Graph 2.14). Both the recent decline and the preceding increase have largely been driven by Chinese non-financial corporations.



More recently, credit risk in the Chinese corporate bond market has received attention after the first corporate bond default in the onshore Chinese market occurred in early March. The missed coupon payment amounted to a fairly small sum, and the company had been in clear financial distress for some time, but the episode was notable in that authorities did not attempt to ensure support for the company to meet its payment. This raised concerns that the incident may lead to a marked reassessment of credit risk in the corporate bond market, which some believe is underpriced due to the perception that corporate bonds are implicitly guaranteed by the government (though spreads on lower rated bonds are sizeable). Spreads on corporate bonds rated AA- by local credit agencies (which in China are viewed as non-investment grade) widened by around 60 basis points in the weeks following the default.

## Equities

Share prices in advanced economies recovered strongly over February, fully unwinding the falls recorded over January as concerns about global economic growth resurfaced, and have since been broadly unchanged (Table 2.2; Graph 2.15). Share prices in most advanced economies are now slightly above their levels at the end of last year. The main exception has been Japan, with the Nikkei 14 per cent lower than at the end of last year. Nonetheless, this follows a rise of almost 60 per cent in 2013, and share prices are still around 70 per cent above their trough in mid 2012.

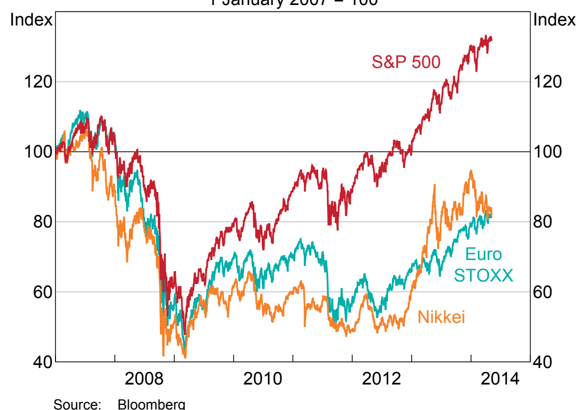
The share prices of US financial institutions have slightly lagged the broader market in recent months despite earnings being generally better than expected in the March quarter. For the six largest US banks, March quarter net income fell by almost US$1 billion compared with the previous quarter and by almost US$2 billion compared with the same period last year, though much of this reflects increases in charges for litigation expenses. Compared with a year earlier, most banks recorded declining revenue from mortgage origination and fixed income and

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

| | Over 2013 | Since end 2013 |
|---|---|---|
| United States | | |
| – S&P 500 | 30 | 2 |
| Euro area | | |
| – STOXX | 20 | 2 |
| United Kingdom | | |
| – FTSE | 14 | 1 |
| Japan | | |
| – Nikkei | 57 | –14 |
| Canada | | |
| – TSE 300 | 10 | 8 |
| Australia | | |
| – ASX 200 | 15 | 2 |
| China | | |
| – China A | –7 | –5 |
| MSCI indices | | |
| – Emerging Asia | 3 | –1 |
| – Latin America | –7 | 1 |
| – Emerging Europe | –2 | –6 |
| **– World** | **23** | **0** |

Source: Bloomberg

**Graph 2.15**
**Major Share Price Indices**
1 January 2007 = 100

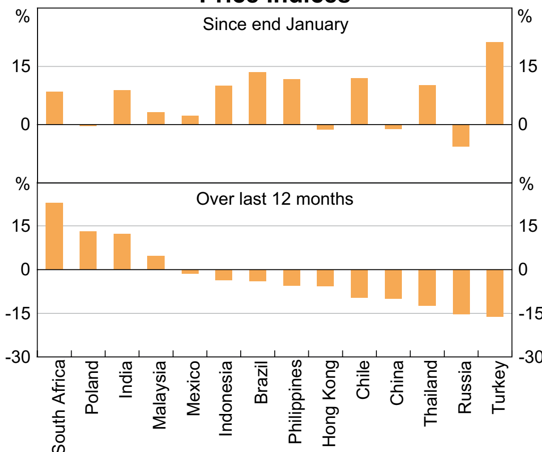



Source: Bloomberg

commodity trading, partly offset by strength in several banks' wealth management and equity underwriting businesses and reduced ongoing expenses. European banks' share prices have also risen by slightly less than the broader market, despite profits increasing significantly in the March quarter. Twelve of the largest European banks have reported March quarter income to date, with net income for these banks rising by €24 billion compared with the previous quarter – largely due to one-off changes last quarter – to be in line with the same period last year. Declining revenue from fixed income trading was also a theme of European banks' results, though was more than offset by a fall in loan-loss and litigation provisions and operating expenses.

Share prices in emerging markets have increased roughly in line with those of advanced economies since early February, though with considerable divergence across countries (Graph 2.16). Share prices have risen by 20 per cent in Turkey, and by around 10 per cent across a range of Asian economies, as concerns about the external vulnerability of Indonesia and India abated and foreign investors returned to these markets. Share prices in a number of commodity-producing nations have also rallied strongly, including Brazil, Chile and South Africa, despite commodity prices falling and mining stocks underperforming over much of this period as investor concerns about the Chinese economy increased. In contrast, Chinese stocks continued to underperform other markets. Russian share prices have also fallen heavily over concerns that economic sanctions imposed on it following its incursion into Ukrainian territory will hamper growth. Concerns about the impact of tensions between Russia and Ukraine have also weighed on other markets in eastern Europe, such as Poland and Hungary.

**Graph 2.16**
**Change in Emerging Market Equity Price Indices**

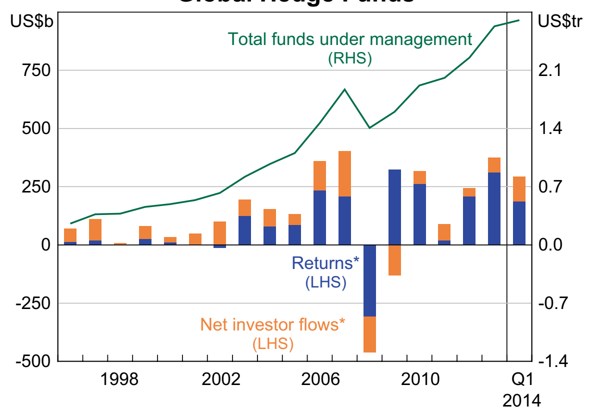



Source: Bloomberg

## Hedge Funds

Global hedge funds recorded an average return on investments of 6.5 per cent over the year to the March quarter. Hedge funds significantly underperformed the total return from a balanced portfolio of global bonds and equities over the past year, and have now underperformed for three years, though this has occurred alongside a considerable reduction in the volatility of hedge fund returns. Hedge funds continue to receive new inflows which, combined with positive investment returns, saw funds under management increase by US$75 billion over the March quarter to US$2.7 trillion (Graph 2.17).

**Graph 2.17**
**Global Hedge Funds**

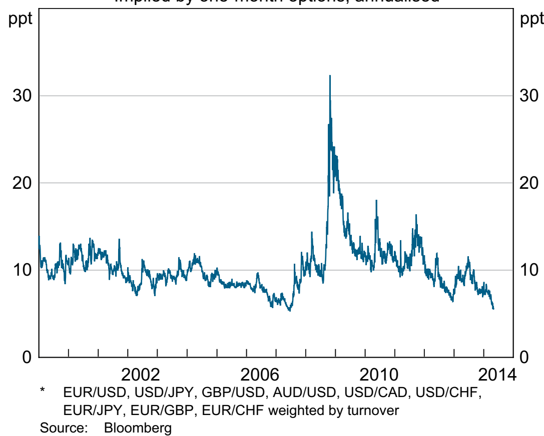



* Annualised for 2014:Q1
Sources: Hedge Fund Research, Inc.; RBA

## Foreign Exchange

Conditions in foreign exchange markets have been subdued in recent months, with volatility in the main developed market currency pairs around its multi-year lows (Graph 2.18). Emerging market and other 'growth-sensitive' currencies have generally appreciated against the US dollar since late January/early February, as market participants have reassessed the economic outlook for some countries and, in some cases, revised their assessments of perceived external vulnerabilities.

**Graph 2.18**
**Volatility in Developed Market Currencies***
Implied by one-month options, annualised



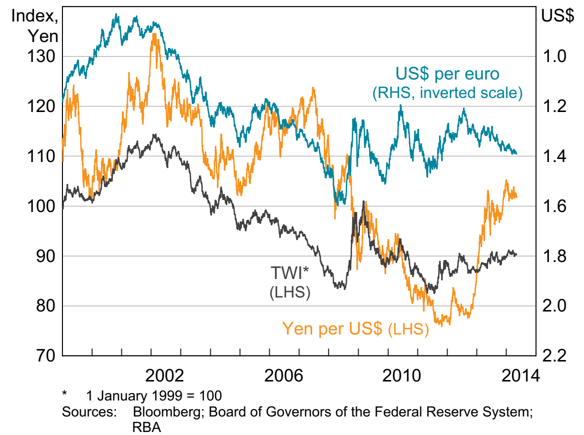

* EUR/USD, USD/JPY, GBP/USD, AUD/USD, USD/CAD, USD/CHF, EUR/JPY, EUR/GBP, EUR/CHF weighted by turnover

Source: Bloomberg

The US dollar has been little changed on a trade-weighted basis over 2014 to date, and indeed is little changed since mid 2012 (Graph 2.19). However, there have continued to be some divergent movements in the US dollar against individual currencies. Over 2014 to date, the US dollar has tended to depreciate against those currencies that it had appreciated most against in 2013, but has appreciated against the currencies of some of its major trading partners, including the Chinese renminbi (RMB) and the Canadian dollar (Table 2.3).

After having depreciated by around 20 per cent against the US dollar and on a trade-weighted basis over 2013, the Japanese yen has since appreciated by 3–4 per cent on both measures. In real effective terms, the yen is around 20 per cent below its average over the past 15 years. The euro has also appreciated

**Graph 2.19**
**US Dollar**




* 1 January 1999 = 100

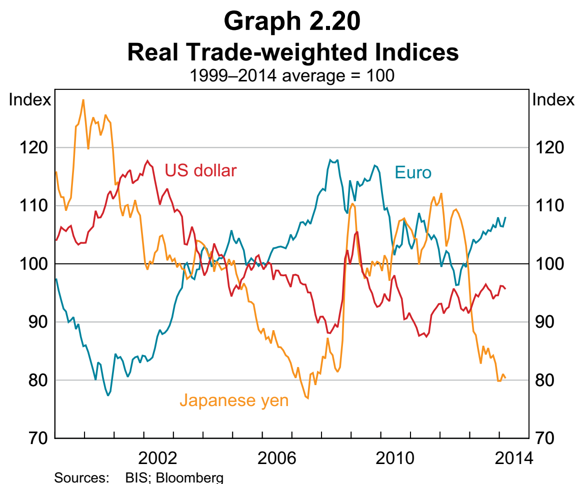
Sources: Bloomberg; Board of Governors of the Federal Reserve System; RBA

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

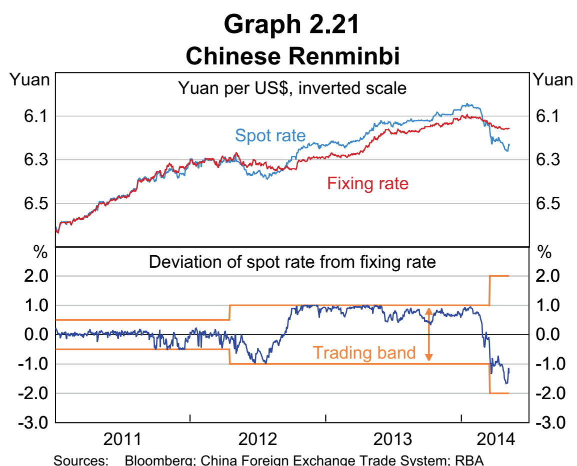
| | Over 2013 | Since end 2013 |
|---|---|---|
| Chinese renminbi | –3 | 3 |
| Canadian dollar | 7 | 3 |
| New Taiwan dollar | 3 | 1 |
| Swedish krona | –1 | 1 |
| Philippine peso | 8 | 0 |
| South African rand | 24 | 0 |
| Mexican peso | 1 | –1 |
| Thai baht | 7 | –1 |
| Singapore dollar | 3 | –1 |
| Malaysian ringgit | 7 | –1 |
| European euro | –4 | –1 |
| Swiss franc | –3 | –2 |
| UK pound sterling | –2 | –2 |
| South Korean won | –1 | –3 |
| Indian rupee | 13 | –3 |
| Japanese yen | 21 | –3 |
| Australian dollar | 17 | –4 |
| Indonesian rupiah | 26 | –5 |
| New Zealand dollar | 1 | –5 |
| Brazilian real | 15 | –6 |
| **TWI** | **3** | **0** |

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

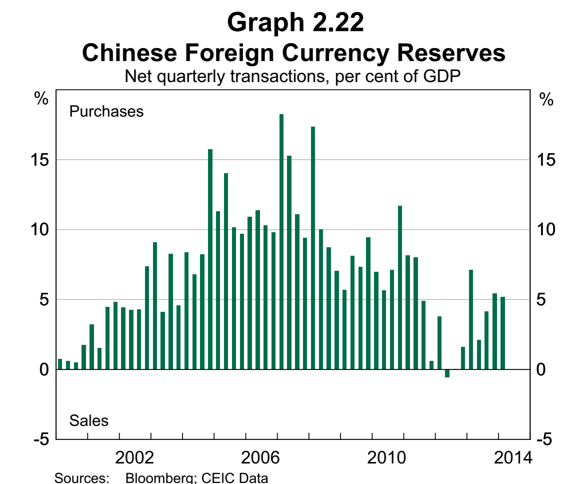
modestly on a trade-weighted basis over 2014 to date, with ECB President Draghi recently noting that further strengthening in the exchange rate could warrant additional monetary policy easing. On a nominal trade-weighted basis, the euro is currently around 4 per cent higher than its average since the introduction of the single currency in 1999, while in real effective terms it is around 8 per cent higher than its average over the same period (Graph 2.20).




The Chinese RMB has depreciated by around 3 per cent against the US dollar since mid January (Graph 2.21). This follows a period of sustained but gradual appreciation, with the RMB having appreciated by 6 per cent against the US dollar between mid 2012 and early 2014.




Consistent with China's plan to move towards a more market-determined exchange rate regime and, in particular, to encourage greater two-way volatility in the RMB, the PBC widened the RMB's daily trading band against the US dollar to +/-2 per cent around its daily fixing rate (from +/-1 per cent) in mid March. In the month leading up to the widening of the trading band, the RMB spot rate had depreciated by more than the PBC's daily RMB fixing rate. As a result, the spot rate had returned to around the centre of the trading band for the first time since late 2012 by the time the band was widened. The RMB spot rate has since depreciated further, and is currently trading around 1 per cent below the fixing rate.




The stock of Chinese foreign currency reserves increased by US$127 billion (around 3 per cent) over the March quarter, largely reflecting net purchases of foreign currency by the PBC (Graph 2.22; Table 2.4). This is broadly consistent with reports that the PBC intervened in the foreign exchange market in the lead-up to the widening of the RMB's trading band against the US dollar.

Chinese authorities have also continued to take steps towards internationalising the RMB. In particular, the PBC has signed a Memorandum of Understanding with both the Bundesbank and the Bank of England to establish official RMB clearing banks in Frankfurt and London. Once established, these clearing banks will have more direct access to onshore RMB liquidity,

## Table 2.4: Gross Foreign Currency Reserves[(a)]

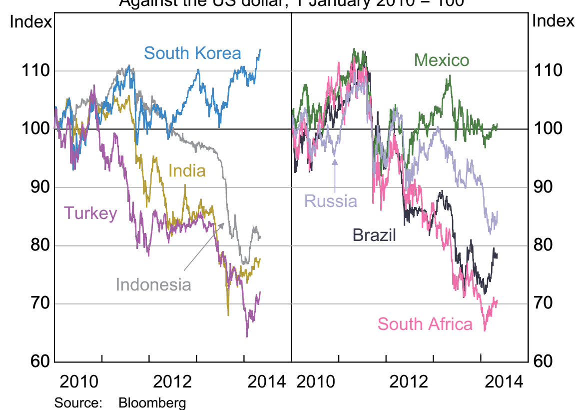
| | Percentage change: | | Level |
|---|---|---|---|
| | End April 2013 to end December 2013 | 2014 to date | US$ equivalent (billions) Most recent observation |
| China | 8 | 3 | 3 948 |
| Russia | –1 | –6 | 426 |
| Brazil | –5 | 2 | 356 |
| South Korea | 6 | 2 | 344 |
| India | 2 | 5 | 282 |
| Thailand | –6 | 0 | 158 |
| Turkey | –3 | –2 | 107 |
| Indonesia | –7 | 6 | 99 |
| South Africa | 1 | –1 | 41 |
| Argentina | –25 | –10 | 22 |
| Ukraine | –20 | –34 | 12 |

(a) Data to end March for China, South Africa, South Korea and Thailand; 25 April for India, Russia and Turkey; end April for Argentina, Brazil, Indonesia and Ukraine

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

including approval to transact in China's onshore foreign exchange market. In Australia, the Sydney branches of two Chinese banks both launched RMB clearing services in February. As neither of these banks are 'official' clearing banks, they will continue to make use of their existing Mainland Chinese and/or Hong Kong operations to facilitate cross-border RMB transactions. In early April, the Australian Treasurer announced that the RBA and the PBC are working together on potential future RMB clearing and settlement arrangements in Sydney.

Other Asian and emerging market currencies have generally appreciated against the US dollar since late January/early February, with the appreciation more marked for those currencies that had experienced the most pronounced depreciation pressure in mid to late 2013 (Graph 2.23). Nevertheless, most of these currencies remain 10–15 per cent below their end April 2013 levels, with the notable exception of the South Korean won, which has appreciated by 8 per cent against the US dollar over the same period. The recent appreciation of most Asian and emerging market currencies has coincided with improvements in some of these countries' economic outlooks and/or modest reassessments by market participants of their perceived external vulnerabilities.



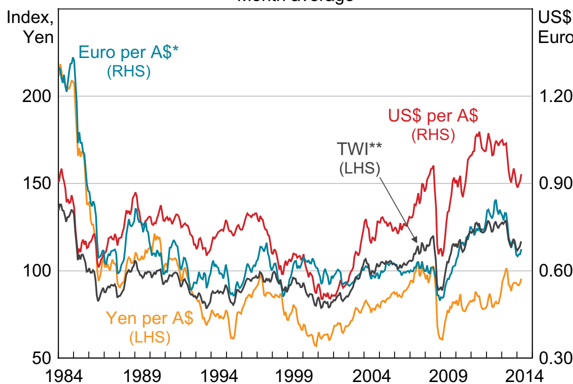

The key exception to the general trend of appreciation against the US dollar has been the Ukrainian hryvnia, which has depreciated by around 30 per cent since the end of 2013 in response to the geopolitical tensions and related concerns about the country's ability to service its external debt. The Russian rouble has depreciated by around 6 per cent since the beginning of the year, with the scale of the depreciation limited by sizeable foreign exchange market intervention by the Russian central bank. Other Eastern European currencies have been relatively unaffected to date.

Most Asian and emerging market central banks' foreign currency reserves have been little changed or increased modestly over the year to date (Table 2.4). The key exceptions were Argentina and Ukraine, whose reserves declined by 15–30 per cent over the March quarter, while Russia recorded a US$23 billion (5 per cent) decline in its foreign currency reserves over the same period. In all three cases, the declines reflected episodes of greater-than-usual sales of foreign currency by the local central banks to support their respective currencies. More recent data indicate that foreign currency sales in Russia and Argentina have since returned to more normal levels.

## Australian Dollar

The Australian dollar has appreciated by 4–5 per cent on a trade-weighted basis and against the US dollar since the previous *Statement* (Graph 2.24; Table 2.5). While the recent appreciation against the US dollar has been evident for a broad range of other currencies that had depreciated significantly over mid to late 2013, the Australian dollar has also been supported by improving local economic data. Although the Australian dollar is still around 10 per cent below its recent peak in April 2013, it nevertheless remains 16 per cent above its post-float average in nominal trade-weighted terms and around 30 per cent above its post-float average in real trade-weighted terms.

**Graph 2.24**
**Australian Dollar**
Month average




* Deutsche Mark spliced for observations prior to 1999
** Indexed to post-float average = 100
Sources: Bloomberg; RBA; Thomson Reuters

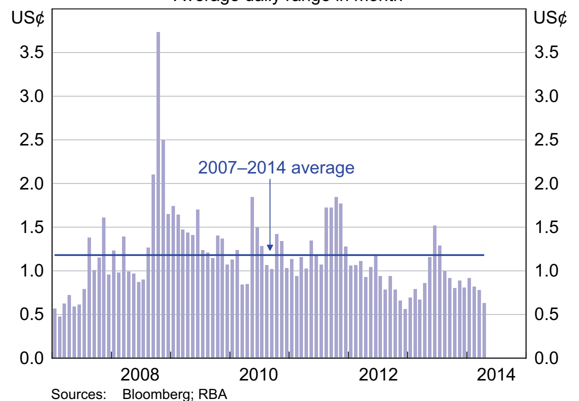
**Table 2.5: Changes in the Australian Dollar against Selected Currencies**
Per cent

| | Over 2013 | Since end 2013 |
|---|---|---|
| Chinese renminbi | –17 | 8 |
| Canadian dollar | –8 | 7 |
| US dollar | –14 | 5 |
| South African rand | 6 | 4 |
| Thai baht | –8 | 4 |
| Singapore dollar | –11 | 3 |
| Malaysian ringgit | –8 | 3 |
| European euro | –18 | 3 |
| Swiss franc | –16 | 3 |
| UK pound sterling | –16 | 2 |
| South Korean won | –15 | 2 |
| Indian rupee | –3 | 1 |
| Japanese yen | 4 | 1 |
| Indonesian rupiah | 8 | –1 |
| New Zealand dollar | –13 | –1 |
| **TWI** | **–11** | **4** |

Sources: Bloomberg; RBA

Consistent with developments in other currency markets, intraday volatility in the Australian dollar has moderated further, with the average intraday trading range for the AUD/USD exchange rate in April around multi-year lows (Graph 2.25).

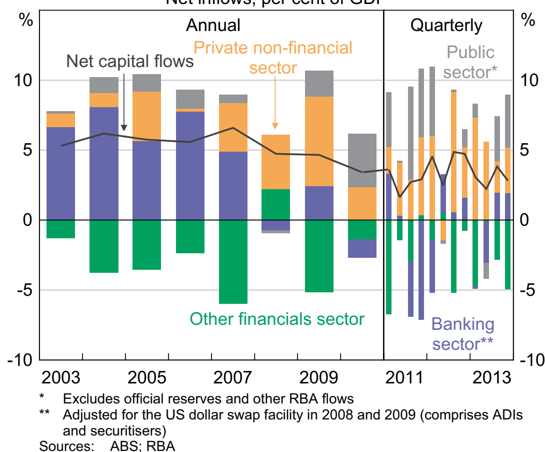
**Graph 2.25**
**Intraday Range in AUD/USD**
Average daily range in month




Sources: Bloomberg; RBA

## Capital Flows

Net capital inflows to the Australian economy were directed primarily to the public sector in the December quarter 2013. There was also a small net inflow to the private sector as a whole, with net inflows to the private non-financial sector and the banking sector largely offset by continued net outflows from other financial institutions (which include superannuation and other types of investment funds) (Graph 2.26).



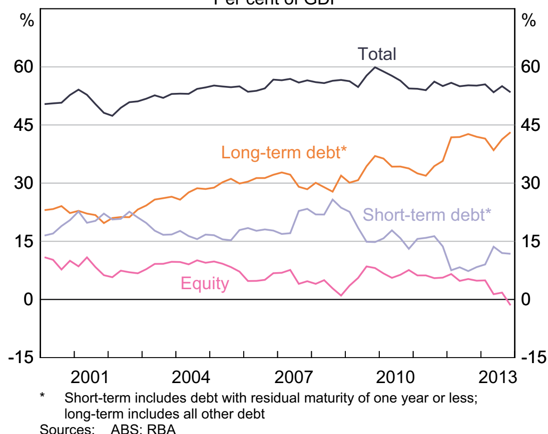

* Excludes official reserves and other RBA flows

** Adjusted for the US dollar swap facility in 2008 and 2009 (comprises ADIs and securitisers)

Sources: ABS; RBA

The net inflow to the public sector largely reflected foreign purchases of national government debt, but also included inflows to the state and local government sector. Net foreign purchases of Commonwealth Government securities (CGS) were again roughly proportional to net issuance in the quarter, leaving the foreign ownership share of CGS little changed at around 67 per cent. The net inflow to the state government sector contributed to a slight increase in the foreign ownership share of state government securities to 31 per cent, although this share remains low compared with recent years.

Within the private sector, a sizeable share of the net inflow of capital to non-financial firms continued to be directed to the mining sector. The net inflow to the banking sector largely reflected foreign purchases of Australian bank bonds. In contrast, the net outflow from the non-bank financial sector was driven by an increase in overseas equity investment by Australian institutions. This increase in foreign equity investment contributed to Australia recording a small net equity asset position for the first time since the series commenced in 1988, with positive valuation effects related to the depreciation of the Australian dollar in mid to late 2013 also playing a role (Graph 2.27).




* Short-term includes debt with residual maturity of one year or less; long-term includes all other debt

Sources: ABS; RBA

# 3. Domestic Economic Conditions

The Australian economy began to strengthen a little in the latter part of last year, although it continues to face headwinds, including the downturn in mining investment and planned fiscal consolidation. GDP growth picked up slightly in the December quarter, but remained a little below trend in 2013 (Graph 3.1; Table 3.1). The pick-up in growth was underpinned by strong growth of resource exports, and slightly stronger consumption growth despite weak growth in household income. In contrast, business investment – in both the mining and non-mining sectors – declined, with some of this reflected in lower capital imports as a large component of investment is imported. Quarterly growth in measured public demand has remained volatile, but its growth has been weak for several years and is expected to remain so for some time given planned fiscal restraint at both the state and federal levels of government.

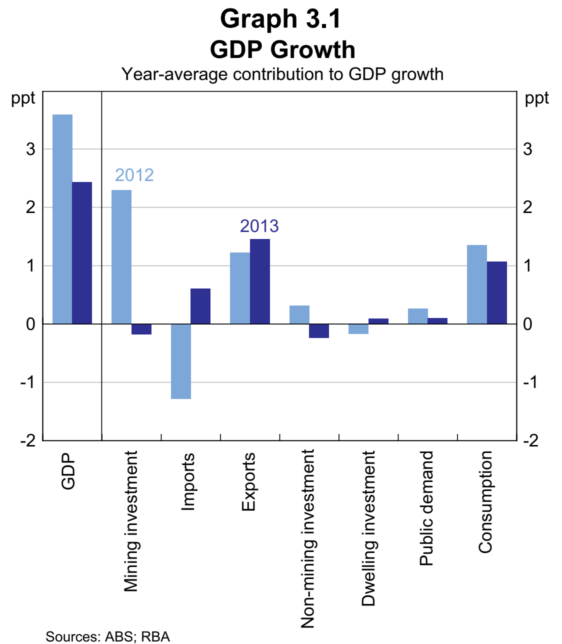



**Table 3.1: Demand and Output Growth**
Per cent

| | December quarter 2013 | Year to December quarter 2013 |
|---|---|---|
| GDP | 0.8 | 2.8 |
| Domestic final demand | 0.1 | 1.2 |
| – Private demand | –0.2 | 0.3 |
| – Public demand | 1.2 | 4.5 |
| Change in inventories[(a)] | 0.2 | –0.3 |
| Gross national expenditure | 0.3 | 0.9 |
| Exports | 2.4 | 6.5 |
| Imports | –0.6 | –4.6 |
| Nominal GDP | 1.6 | 4.8 |
| Real gross domestic income | 0.9 | 2.4 |

(a) Contribution to GDP growth
Source: ABS

More recent economic indicators and liaison are consistent with some improvement in the overall pace of growth. Some surveys suggest that current business conditions and business confidence have been at around average levels in recent months after increasing in late 2013. Retail spending grew strongly in the March quarter and measures of consumer sentiment also remain close to average levels, despite easing since late last year. Housing turnover and prices have continued to increase and forward-looking indicators of dwelling investment have remained at high levels. Also, exports rose sharply in the March quarter. However, growth of investment remains weak, with information from liaison and surveys of investment intentions continuing to suggest that mining investment is in the early stages of a pronounced downswing and investment intentions in the non-mining sector, at this stage, remain subdued.

Consistent with the slight pick-up in the pace of growth of economic activity from the latter part of last year, there has been some improvement in a number of labour market indicators (see 'Box B: Lags from Activity to the Labour Market'). In particular, employment growth has picked up this year following a year of only modest growth.

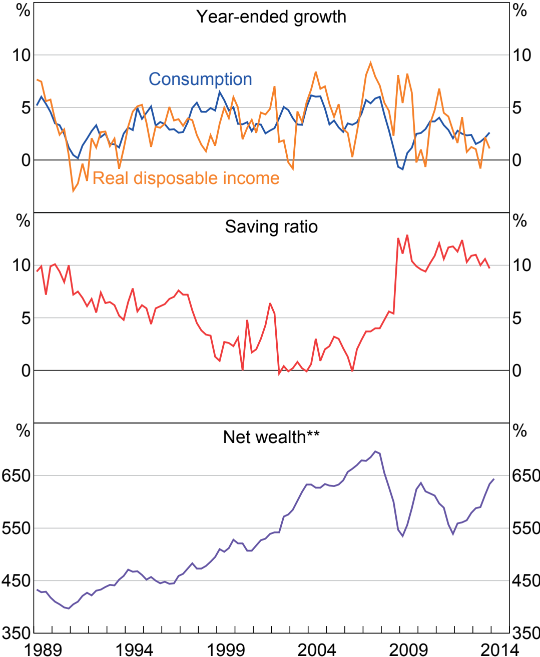
## Household Sector

Household consumption strengthened gradually over 2013 and grew at a pace consistent with trend GDP growth in the latter part of the year. However, growth of real household disposable income remained weak at just 1 per cent over 2013. Real labour income was little changed over the year, consistent with weak growth of employment and wages, while a fall in interest payments as mortgage rates declined has provided some support to disposable income growth.

Growth of spending on discretionary items, such as recreational goods and hotels & cafés, has picked up in recent quarters, although it has remained relatively low; spending on non-discretionary items has continued to grow at around the average pace of the past decade. While income growth has been weak, the pick-up in spending is consistent with the ongoing strong growth in household wealth. The household saving ratio appears to have trended down a little over the past two years, although it is still higher than it has been for most of the past few decades (Graph 3.2).

**Graph 3.2**

**Household Income, Consumption and Wealth***

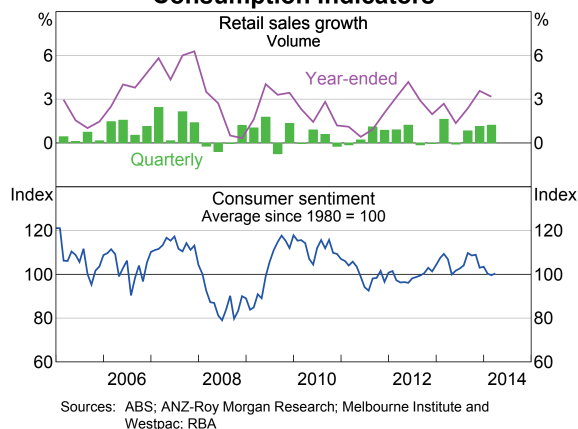



* Household sector includes unincorporated enterprises; disposable income is after tax and interest payments; income level smoothed with a two-quarter moving average between March quarter 2000 and March quarter 2002; saving ratio is net of depreciation

** Per cent of annual household disposable income, before the deduction of interest payments; RBA forecast for the March quarter 2014

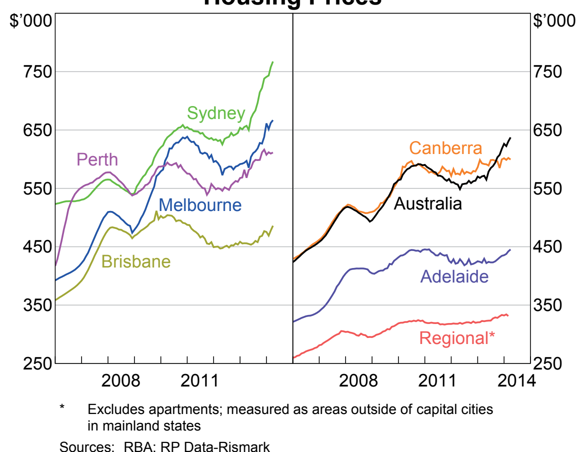
Sources: ABS; RBA; RP Data-Rismark

In the March quarter, growth of household consumption appears to have continued at a similar pace to the December quarter. Retail sales volumes increased by 1.2 per cent in the quarter (Graph 3.3). Sales increased strongly at cafés, restaurants and takeaway stores and household goods retailers, both in the quarter and over the year, while sales at department stores declined. Liaison with some retailers suggests that conditions have improved since last year. Similarly, liaison with some service providers facing foreign competition, such as




domestic tourism operators, also points to a pick-up in demand, in part owing to the depreciation of the Australian dollar over the past year. In contrast, sales of motor vehicles to households have fallen in recent months. Survey measures of consumer sentiment have eased over the past six months, but they have been around average levels. Consumers' concerns about future conditions in the labour market remain elevated. However, the share of consumers nominating debt repayment as the wisest place for savings has fallen over recent quarters, pointing to a somewhat less cautious approach to their finances, consistent with the decline in the saving rate.

Household wealth has continued to increase strongly, and is estimated to be around 10 per cent higher over the year to March 2014 (Graph 3.2). The increase has been driven mainly by higher equity and housing prices. Housing price inflation has remained strong – consistent with the current low level of interest rates – although nationwide it has eased a bit from the rapid pace seen towards the end of 2013 (Table 3.2). Price growth has been stronger in Sydney than in other capital cities, while it has slowed in Melbourne and Perth (Graph 3.4). Auction clearance rates, which typically move in line with housing prices, are a little lower in recent months, although they remain well above average in Sydney



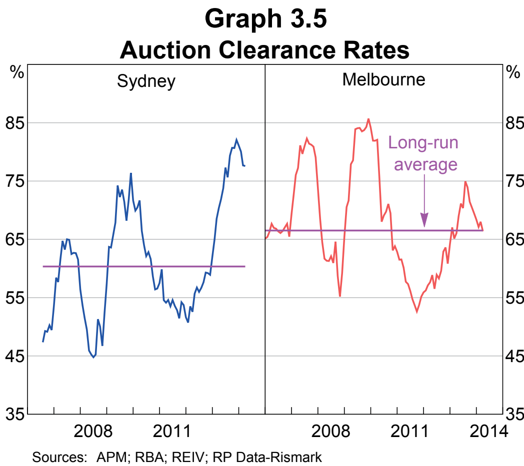

## Table 3.2: Housing Price Growth

Per cent

| | 3 months to April 2014 | 3 months to January 2014 | Year to April 2014 |
|---|---|---|---|
| Australia | 1.8 | 3.8 | 11.5 |
| Sydney | 3.6 | 3.7 | 16.8 |
| Melbourne | 0.8 | 5.3 | 11.7 |
| Brisbane | 2.2 | 1.7 | 6.6 |
| Perth | 0.6 | 1.5 | 7.6 |
| Adelaide | 2.3 | 1.7 | 3.7 |
| Canberra | –0.4 | 0.9 | 1.3 |
| Regional[(a)] | –0.6 | 1.3 | 2.6 |

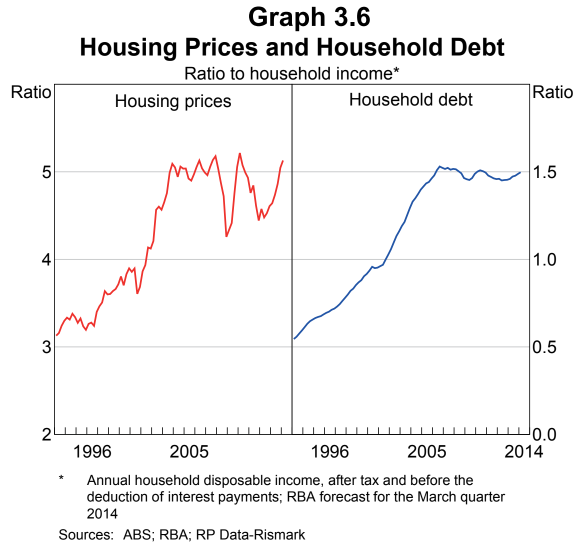
(a) Growth to March and December; detached houses only
Sources: RBA; RP Data-Rismark

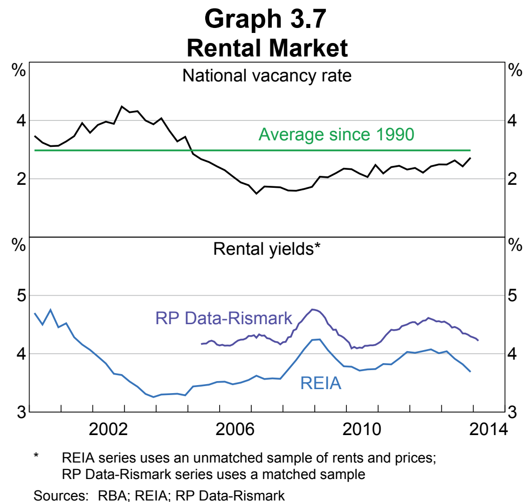
(Graph 3.5). Other indicators of conditions in the established housing market have remained strong: housing turnover has risen over recent quarters and was around the decade-average level in the December quarter, while average vendor discounts and the average time taken to sell a property have both remained close to their decade lows.




Strong housing price inflation combined with relatively weak growth of household incomes has led to an increase in the housing price-to-income ratio; in the March quarter, the ratio was around the levels seen over much of the past decade (Graph 3.6). With a pick-up in housing credit growth over the past year, the household debt-to-income ratio has also increased a little, although it too remains within the range of outcomes observed over the past decade. More recently, housing credit growth and the value of housing loan approvals have stabilised, in line with the recent moderation in housing price growth.

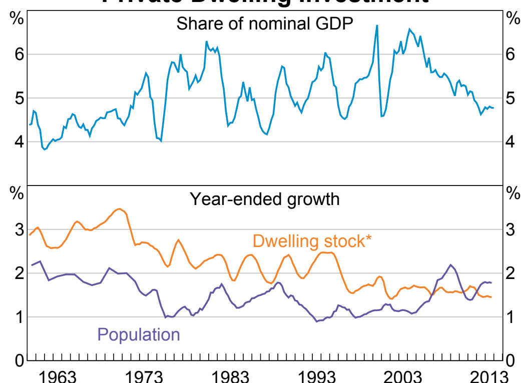
In contrast to the strength in the broader housing market, conditions in the rental market have eased somewhat in recent quarters. The nationwide rental vacancy rate increased in the December quarter to around 2¾ per cent, which is close to the long-run average (Graph 3.7). Rent inflation has also slowed to around 3 per cent annually, the slowest pace since the mid 2000s. With inflation in rents slowing and housing prices rising strongly, rental yields have

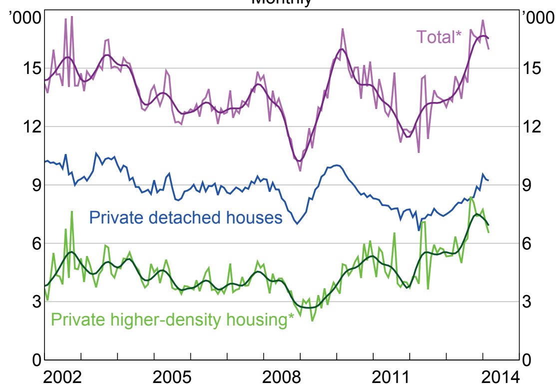



fallen over the past year to be around the average of the past decade.

Dwelling investment is beginning to pick up after having been quite weak for a number of years, both as a share of GDP and relative to population growth (Graph 3.8). The national accounts reported that dwelling investment increased by 1 per cent in the December quarter, to be 1½ per cent higher over 2013. Housing price growth, low lending rates, government assistance for first home buyers and strong population growth are expected to support a substantial increase in new dwelling construction




over the period ahead. Higher housing prices and the associated increase in housing turnover are also expected to underpin further increases in renovation activity.

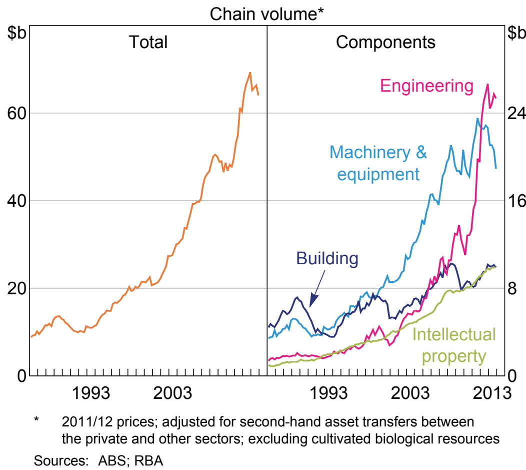
A range of timely indicators point to a strong pick-up in dwelling construction. The number of building approvals for new private dwellings rose by around 1 per cent in the March quarter, driven by detached house approvals, to be 27 per cent higher over the year (Graph 3.9). Higher-density approvals have eased a little in recent months; however, after rising substantially over the second half of last year, the trend number of approvals has remained near record highs in all mainland states except South Australia. Approvals for detached houses have been trending higher across all states. Other timely indicators of building activity, such as loan approvals and first home owner grants (FHOGs) for new dwellings, have also continued to increase, with the latter buoyed by the redirection of government assistance for first home buyers towards purchases of newly built dwellings (Graph 3.10).

Liaison suggests that demand for new dwellings remains strong in most markets, with industry participants reporting a pick-up in enquiries and visits to display centres in recent months. Demand from foreign investors for inner-city apartments in Melbourne and Sydney reportedly remains strong.

## Business Sector

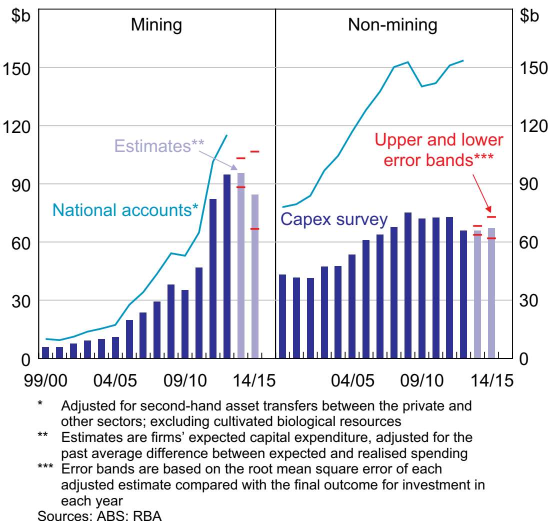
Business investment has continued to fall from its peak in late 2012, but it remains high as a share of GDP (Graph 3.11). The largest declines have occurred in machinery and equipment and, to a lesser extent, engineering investment.

The recent falls in machinery and equipment and engineering investment are consistent with a decline in investment in the mining sector. A range of investment indicators and the Bank's liaison suggest that mining investment has started to decline, following strong growth over the past decade.

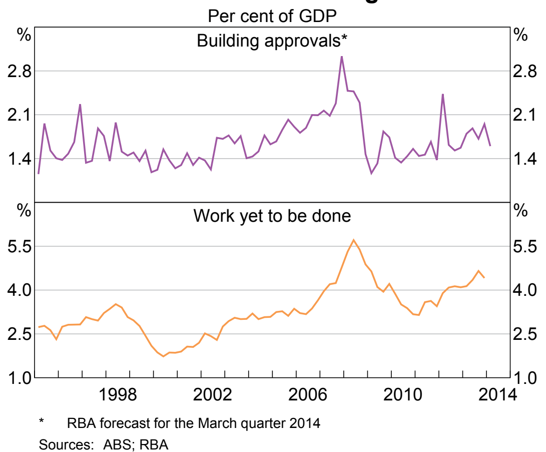



Significant falls are expected over the period ahead, with the latest ABS Capital Expenditure (Capex) survey of investment intentions, adjusted for historical realisation ratios, pointing to a significant decrease in mining investment in 2014/15 (Graph 3.12).

Non-mining investment is also estimated to have declined in the December quarter and is at a low level (as a share of GDP). Tentative signs of a modest pick-up in non-mining investment intentions in 2014/15 were evident in the Capex survey. While

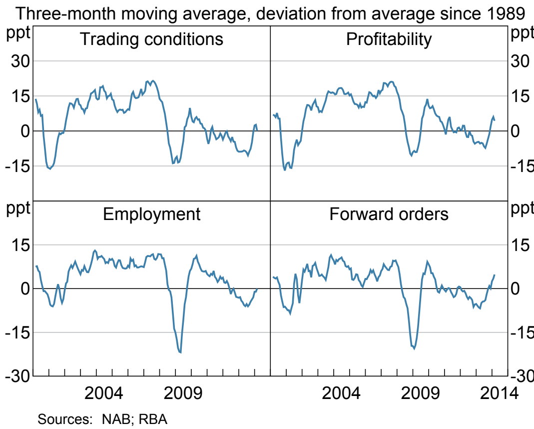



these estimates can be subject to considerable revision over time, they currently suggest that any pick-up in investment is likely to come from industries such as rental, hiring and real estate, information, media and telecommunications, construction and retail trade. This is consistent with other signs of a pick-up in demand, such as stronger growth of retail sales and evidence of a strengthening in building activity, including in the residential sector. Approvals for non-residential construction have been trending up gradually over recent years, and there is a large stock of work yet to be done, particularly for healthcare projects and office buildings, suggesting that there could be increases in non-residential construction for some time (Graph 3.13).




Consistent with these early signs of improving conditions in the non-mining sector, firms have reported a pick-up in trading conditions, profitability, employment and forward orders over the past six months (Graph 3.14). One survey indicates that firms' actual capital expenditure is now close to average levels after a couple of years of being below average. Surveys also suggest that capacity utilisation has edged higher over the past year or so. However, it remains around its long-run average and the Bank's liaison suggests that many firms remain reluctant to commit to major new investments until they see sustained increases in demand.

**Graph 3.14**
**NAB Business Conditions**
Three-month moving average, deviation from average since 1989




Sources: NAB; RBA

## Farm Sector

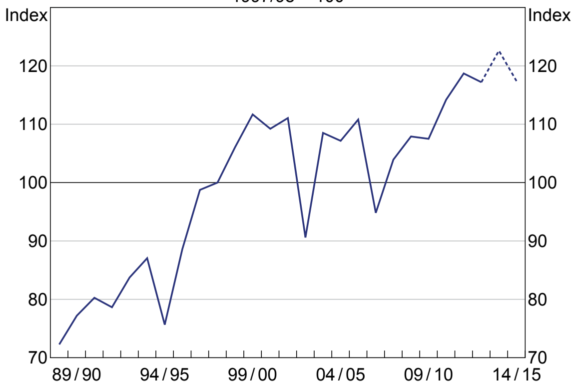
Slightly higher rainfall has helped to ease the extent of drought conditions in parts of Queensland and New South Wales. Overall, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) is forecasting farm production in 2013/14 to increase by nearly 5 per cent (Graph 3.15). This reflects increased winter crops in much of the country, as well as growth in livestock production due to high export demand and increased slaughter rates in response to the dry conditions in Queensland and parts of New South Wales. The increased slaughter rates will weigh on future farm production, however, as farmers will need to rebuild their stock levels over time. The dry conditions are also expected to reduce the area planted and, therefore, crop production in 2014/15. ABARES is forecasting that the prices received by farmers will rise in 2013/14 due to higher world prices for livestock and livestock products, as well as the depreciation of the Australian dollar over the past year.

## External Sector

Exports rose by 6½ per cent over 2013, contributing nearly 1½ percentage points to GDP growth. This largely reflected expansions to capacity for iron ore and coal, Australia's two largest exports by value (Graph 3.16). The depreciation of the exchange rate over the past year may have contributed to some growth in both manufactured and services exports over 2013, while rural exports have remained at a high level. More timely trade data suggest that iron ore and coal export volumes grew strongly in the March quarter, and rural exports increased sharply.

Imports fell over 2013, with significant declines in capital goods and services imports. The steep fall in capital goods imports suggests that some of the imported content of the large-scale liquefied natural gas (LNG) projects may have occurred already (or has at least been paid for). Import volumes are estimated to have declined modestly in the March quarter.

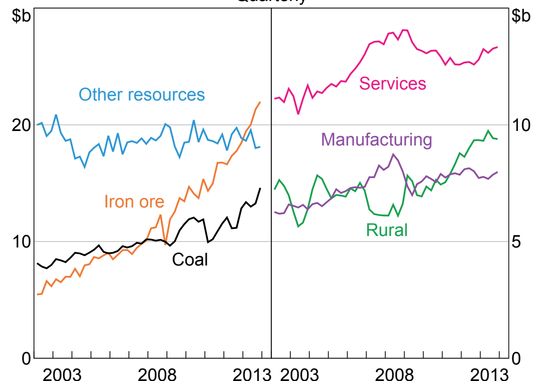
**Graph 3.15**
**Volume of Farm Production***
1997/98 = 100




* The solid line represents ABARES' estimate while the dotted line represents ABARES' 2013/14 and 2014/15 forecasts

Source: ABARES

**Graph 3.16**
**Export Volumes***
Quarterly



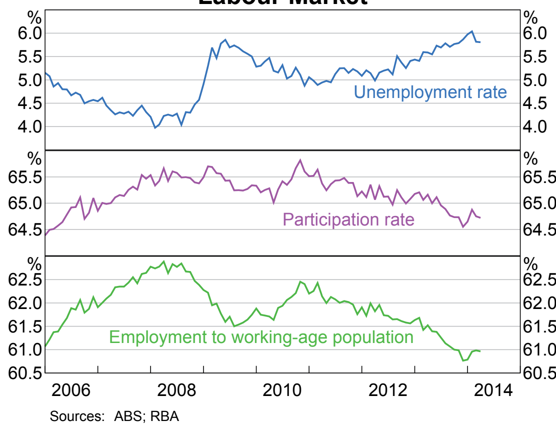

* 2011/12 prices

Sources: ABS; RBA

## Labour Market

Labour market conditions have shown some signs of improvement recently, in line with the pick-up in a range of indicators of economic activity since late last year. Employment has risen by nearly 1 per cent over the first four months of 2014, following only modest growth over 2013. Also, the unemployment rate has ticked down over recent months and the participation rate appears to have stabilised over the past six months after declining steadily since late 2010 (Graph 3.17).

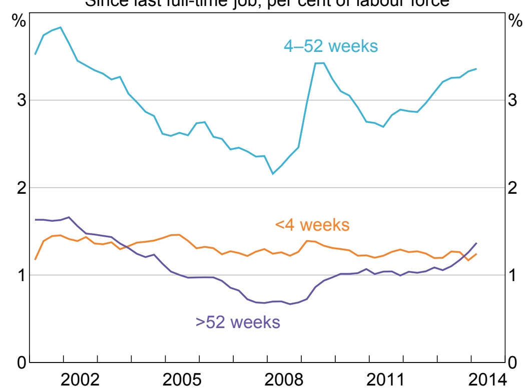
**Graph 3.17**
**Labour Market**




Notwithstanding these recent improvements, there is a fair degree of spare capacity in the labour market. In particular, the unemployment rate remains high relative to its recent history and the participation rate is around the lowest level of the past eight years. Also, broader measures of labour underutilisation remain relatively high. Measures of underemployment, which capture those employed who want to work more hours, remain close to their highest levels in the past decade despite declining slightly over the past couple of quarters. Since late 2010, there has also been a modest increase in the share of people marginally attached to the labour force. These are individuals who are recorded as not participating in the labour force because they are available to work but are not searching for work, or vice versa. However, the increase in marginal attachment explains only some of the decline in the participation rate over this period, with the evidence suggesting that part of the decline in participation is related to the ageing of the population, which is more structural in nature and, therefore, more enduring.

Most of the increase in the unemployment rate since mid 2012 can be attributed to individuals that have been unemployed for between 4 and 52 weeks and, therefore, may be more likely to be unemployed for cyclical reasons (see RBA (2013), 'Box B: The Increase in the Unemployment Rate', *Statement on Monetary Policy*, November, pp 39–41; Graph 3.18). Nevertheless, the rate of long-term unemployment – defined as those unemployed for more than one year – has increased somewhat over the past 12 months. This may indicate a pick-up in the rate of structural unemployment; individuals that experience longer durations of unemployment might be less well suited to available positions, possibly due to factors such as structural changes in the labour market or a deterioration of their skills owing to a long period out of work. The proportion of the labour force unemployed for less than 4 weeks, and so most likely to be temporarily between jobs, has remained relatively stable.

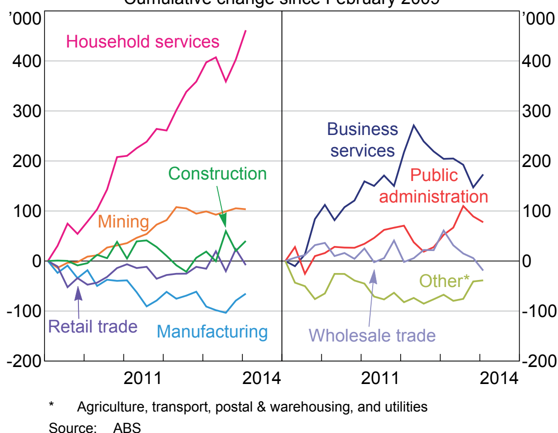
**Graph 3.18**
**Duration of Unemployment***
Since last full-time job, per cent of labour force




* Seasonally adjusted by RBA
Sources: ABS; RBA

Much of the recent increase in employment has been attributable to the household services sector, driven by the health and education industries (Graph 3.19). Construction employment appears to have trended a little higher over the past 18 months, consistent with the pick-up in residential building activity. There has also been an increase in manufacturing employment since mid 2013. In contrast, employment in wholesale trade has experienced a pronounced fall over the past year, possibly reflecting continued pressures to contain costs through the supply chain. While employment in the business services sector is reported to have increased over the three months to February, it remains well below levels reached in mid 2012, and there has been little change in mining employment since that time. Reports from Bank liaison suggest that part of the recent decline in business services employment can be attributed to firms that conduct work related to investment in the mining industry, although a number of these firms have indicated that major job cuts may now be complete.

## Graph 3.19
## Employment Growth by Industry

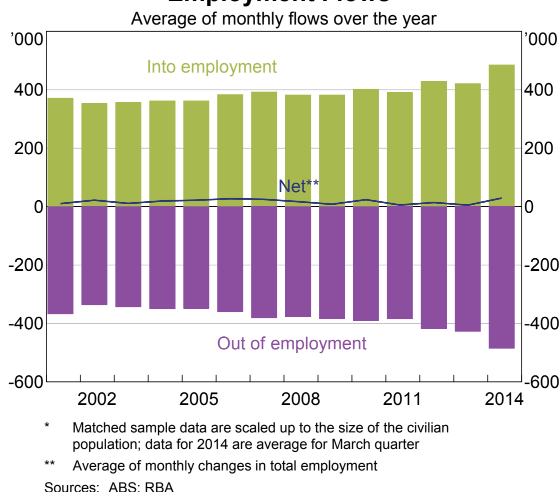



* Agriculture, transport, postal & warehousing, and utilities

Source: ABS

Labour force data are often reported in terms of the net change in employment. However, on average, around 400 000 people have exited employment each month over the past few years (Graph 3.20). A similar, or slightly larger, number of people enter employment each month, with the sum of these two gross flows typically resulting in a net increase in employment over time. These large gross flows into and out of employment each month are mostly accounted for by small changes in employment at many firms and so garner little public attention. In contrast, the recent high-profile announcements of job losses at some larger firms that are planned to be spread over coming quarters and years are small relative to the gross flows typically seen each month.

## Graph 3.20
## Employment Flows*




* Matched sample data are scaled up to the size of the civilian population; data for 2014 are average for March quarter

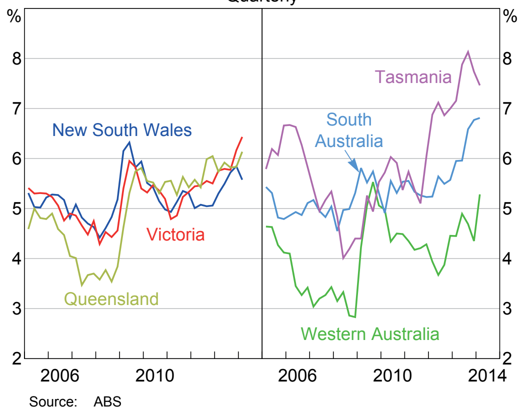
** Average of monthly changes in total employment

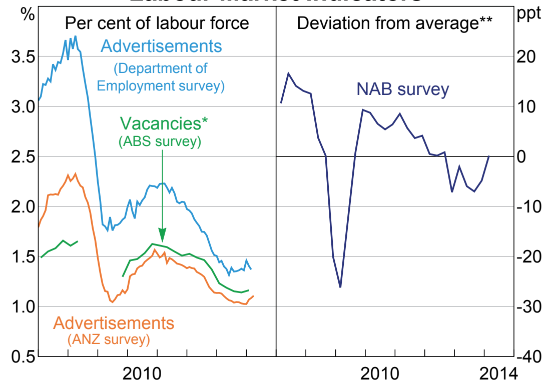
Sources: ABS; RBA

Recent labour market outcomes across the states have remained mixed (Graph 3.21). Employment in New South Wales has increased markedly since the beginning of the year, while the state's unemployment rate has been little changed of late. In Queensland, employment has trended higher over the past year and a half. In contrast, in Victoria employment has been relatively flat over the past year and the unemployment rate has risen steadily. The unemployment rate has also increased in Western Australia in recent months, while labour market conditions in South Australia and Tasmania have remained subdued.

Forward-looking indicators of labour demand have shown signs of improvement recently, although they remain at low levels following earlier declines. Overall, these indicators of labour demand are

consistent with relatively moderate growth of employment over the coming months (Graph 3.22). The ABS measure of job vacancies appears to have stabilised over the past few quarters, while measures of job advertisements have increased somewhat over recent months. Business survey measures and reports from the Bank's liaison also suggest that firms' employment intentions have improved in recent months, but remain below their historical averages. ✠



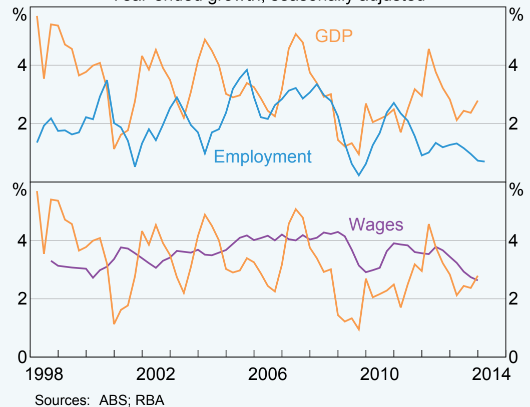
Box B

# Lags from Activity to the Labour Market

While a number of indicators of activity suggest that domestic economic conditions improved from the end of last year, signs of stabilisation in the labour market have become apparent only in recent months, with job advertisements, vacancies and employment picking up. One explanation for this is that labour market conditions tend to lag the cycle in economic activity. For instance, in the early 2000s and in 2008–09, the downturns in both employment and wage growth look to have been preceded by downturns in output growth, with growth of output then picking up ahead of that of employment and wages (Graph B1). Some explanations for why the labour market lags economic activity are considered below, and the typical length of those lags are examined based on historical data.[1]

There are several reasons why a change in economic activity may affect labour market conditions with a lag:

- Firms often take some time to decide to adjust the number of their employees in response to changes in demand for their output. Following a pick-up in economic activity, firms may initially seek to increase production by using their existing workforce more intensively, for example by increasing employees' hours or by making better use of underutilised capital. Because there are fixed costs to hiring new employees, such as recruitment and training, firms often wait until they are confident that demand for their product will be strong before they decide to hire new staff. Conversely, following a downturn in demand, firms will typically wait before they decide to retrench experienced employees.




- There are also lags between a shift in demand for additional employees and actual changes in the number of employees. This reflects the fact that it can take several months to advertise vacant positions and then find and interview candidates.[2] Similarly, the process of reducing the workforce can also take some time.
- Wages may take even longer than employment to adjust to economic activity. For instance, collective agreements, which underpin the employment contracts of around 40 per cent of workers, are typically renegotiated only every two to three years, and there can be a lag before a new agreement is implemented. Similarly, award wages and the national minimum wage are adjusted only once a year, while contract employees may have their wages set for a given period. Wage growth may also be 'sticky' in cases where firms think that slower wage growth

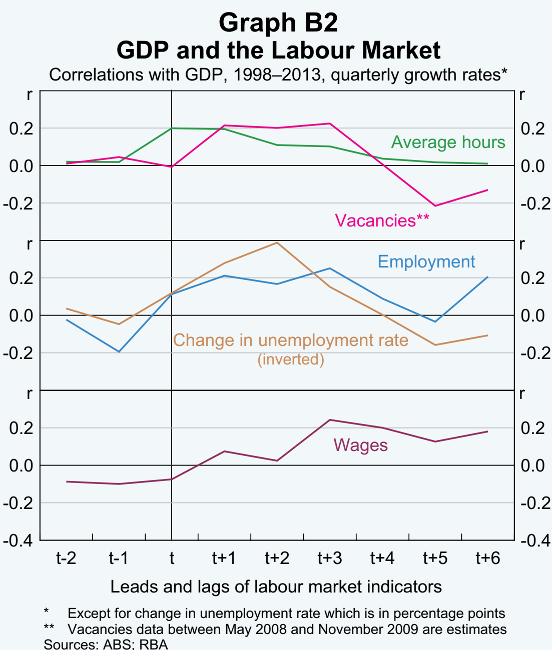
1 There are also likely to be feedback effects from developments in the labour market to activity.

2 For further discussion, see Edwards K and L Gustafsson (2013), 'Indicators of Labour Demand', RBA *Bulletin*, September, pp 1–11.

might reduce the motivation and productivity of existing employees, or if there are significant fixed costs associated with employing new staff at lower wages.

While the extent of the lag between changes in economic activity and changes in employment and wages may vary from one episode to the next, the historical data can provide some guide to the typical lags. The evidence for these lags can be assessed using three simple statistical methods: correlation analysis, turning-point analysis and vector autoregression (VAR) analysis.

Correlation analysis estimates co-movement between changes in GDP growth and changes in a range of labour market indicators at different leads and lags. Over the past 15 years, the highest correlation between quarterly growth of GDP and changes in various labour market series – average hours, job vacancies, employment and the unemployment rate – occurs when the labour market series are lagged by between one and three quarters (Graph B2). The peak correlation between quarterly growth of GDP and wages occurs at three quarters, with the co-movement between wage growth and GDP growth at shorter lags appearing to be weaker than it is for the other series.[3]




Turning-point analysis focuses on the differences in the timing of peaks and troughs in the cycles in different variables. This approach provides further evidence that labour market variables tend to lag the business cycle by several quarters, with wage growth again tending to have a somewhat longer lag (Table B1). This method can also identify apparent asymmetries in the lagged relationships, and suggests that the turning points in employment and wage growth tend to occur with a longer lag following a peak in GDP growth than following a trough in GDP growth, with the difference being up to two quarters. This asymmetric response of

## Table B1: Lags between Cycle Turning Points(a)

Average number of quarters lag from turning point in GDP growth, 1998–2013

| | Hours | Vacancies | Employment | Unemployment rate | Wages |
|---|---|---|---|---|---|
| Peak | +2 | +2 | +3 | +1 | +4 |
| Trough | +1 | +1 | +1 | +1 | +3 |

(a) Positive figures denote that the peak or trough in the labour market variable lags the peak or trough in activity; peaks and troughs are identified on the basis of the business cycle component of each series, which is extracted by taking the difference between the 7-quarter Henderson trend (which removes short cycles) and the 33-quarter Henderson trend (which removes long cycles); all variables are expressed in quarterly growth rates apart from the unemployment rate, which is expressed in quarterly changes

Sources: ABS; RBA

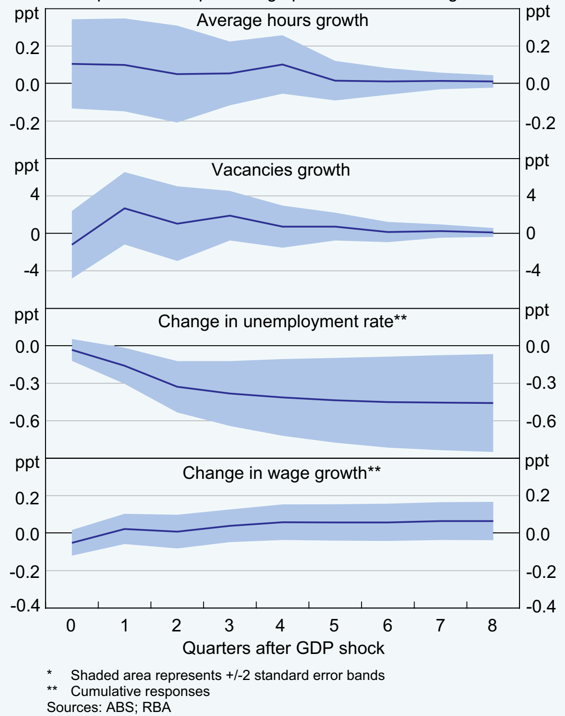
3 A number of the peak correlations are only marginally statistically significant.

the labour market is consistent with firms being quicker to hire new staff in an upturn than to reduce the number of existing employees in a downturn, perhaps because the costs of retrenchment – and then potentially re-hiring staff when conditions improve – are relatively large.

A drawback of both the correlations and turning point analyses is that neither quantifies the size of the links between changes in GDP growth and the various labour market indicators. One approach that can provide an estimate of the magnitude of these links is a VAR model, which captures the dynamic relationships between these variables. The results of VAR models can be interpreted using impulse responses, which trace out how quarterly changes in average hours, vacancies, the unemployment rate, and wages are linked to a change in GDP growth.[4] In general, this approach suggests similar lags to that of the first two methods. The impulse responses suggest that, following a 1 percentage point increase of quarterly GDP growth, growth in average hours worked increases immediately, while growth in vacancies increases one quarter later, although both these effects are relatively small and statistically insignificant (Graph B3). In contrast, the unemployment rate declines in the first and second quarters following the change in GDP growth and is around 0.4 percentage points lower a year later.

The VAR results imply that a change in GDP growth by itself has little relationship with subsequent changes in wage growth. In part, this may be because the model does not differentiate between changes in GDP growth caused by demand-side factors from those caused by supply-side factors.[5] More generally, the results from VAR models can be sensitive to the variables included and the structure of the VAR, as well as the sample period used for estimation, and so the results shown here should be considered as illustrative only.

**Graph B3**
**Response of Labour Market to a GDP Shock***




* Shaded area represents +/-2 standard error bands
** Cumulative responses
Sources: ABS; RBA

4 The results presented are those from a structural VAR specification with five variables, ordered as follows: GDP, average hours worked, vacancies, the unemployment rate and the wage price index. All variables are expressed in quarterly growth rates apart from the unemployment rate, which is expressed in quarterly changes, and wages, which are expressed as the change in quarterly growth. The model is estimated over the period September quarter 1998 to December quarter 2013. Impulse responses are derived from a structural decomposition using a recursive Cholesky ordering. GDP is assumed to be the most exogenous variable in the system, with the ordering of the other variables reflecting the relative speed at which they are assumed to respond to a shock to GDP. In turn, GDP is assumed not to respond contemporaneously to any of the labour market variables, but may respond with a lag.

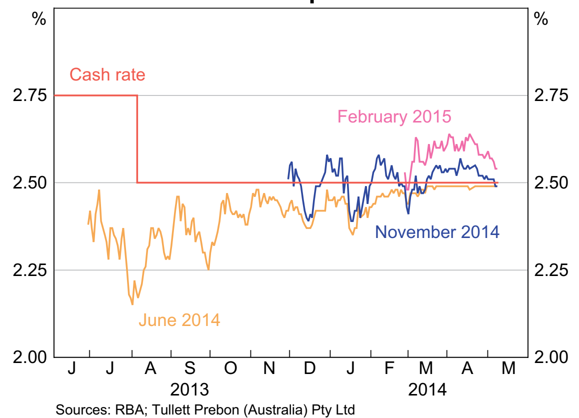
5 For instance, a negative aggregate demand shock would cause a fall in labour demand, an increase in the unemployment rate and a decline in wage growth. In contrast, a negative aggregate supply shock caused by an exogenous decrease in labour supply would also see a reduction in employment, but potentially an *increase* in wage growth as firms compete to hire the remaining pool of available workers.

# 4. Domestic Financial Markets

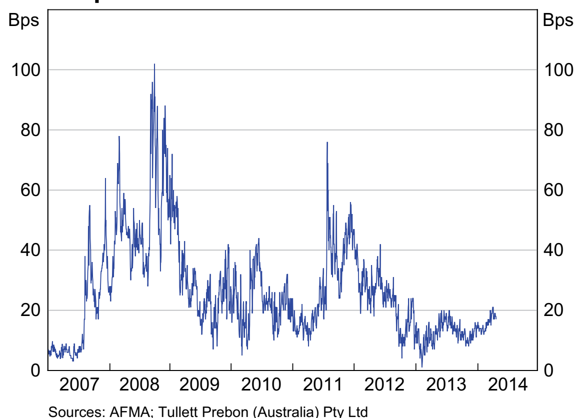
Australian financial markets have been relatively quiet over recent months. Money market rates imply that the cash rate is expected to remain unchanged over the remainder of the year. Longer-term government bond yields are lower than at the time of the previous *Statement* and demand for Commonwealth Government securities (CGS) has been very strong. Corporate bond spreads have remained around their lowest levels since 2007 and issuance has been readily absorbed by the market, including issuance by lower-rated corporations and at longer maturities. Intermediated lending has grown at a moderate pace, with housing credit growth steadying over recent months, while growth in business credit has picked up. Australian equity prices have risen over the period, broadly in line with global markets.

## Money Markets and Bond Yields

The cash rate target has been at 2.50 per cent since August last year (Graph 4.1). The pricing of money market instruments implies little likelihood of a change in monetary policy this year, although there is an expectation that the cash rate will be increased around the middle of 2015.



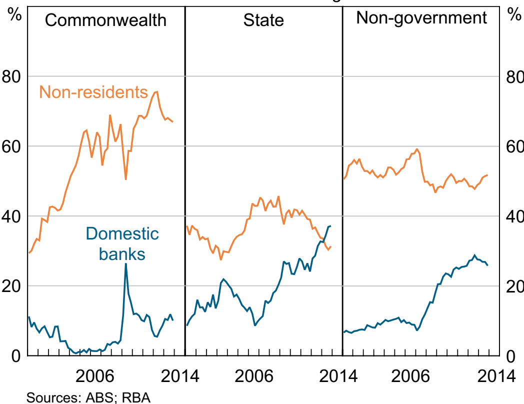

Rates on 3-month bank bills and certificates of deposit (CDs) are little changed since the previous *Statement*. Increased issuance of bills and CDs has contributed to a widening of the spread between these instruments and overnight indexed swaps (OIS) of around 5 basis points since the previous *Statement*. Nevertheless, the spread on 3-month bills remains low compared with levels experienced over recent years (Graph 4.2).




Yields on long-term CGS are lower than at the time of the previous *Statement,* mainly reflecting global developments as well as lower-than-expected domestic inflation. As a result, the spread between 10-year CGS and US Treasuries has narrowed by around 15 basis points since the previous *Statement*.

Demand for newly issued CGS has been very strong in 2014 to date. The Australian Office of Financial Management (AOFM) issued $7 billion of a new April 2026 bond in March, which was the largest initial Australian government bond issue on record. Much of the issue was initially purchased by domestic investors, though 30 per cent went to Asian accounts (excluding Japan). More generally, AOFM bond tenders have been clearing below yields prevailing in the secondary market at the time of the auction. The share of CGS held by non-residents was little changed in the December quarter at around two-thirds, though it is well below its peak in late 2012 (Graph 4.3).

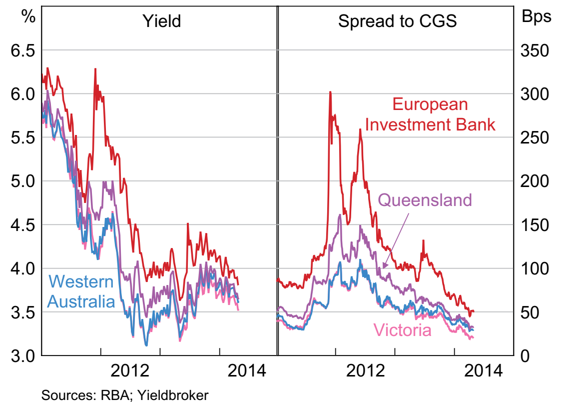
**Graph 4.3**
**Holders of Australian Bonds**



Sources: ABS; RBA

Net issuance of state government bonds ('semis') has totalled $7.8 billion since the previous *Statement*. Over half of this net issuance was comprised of floating-rate bonds, facilitating investment by Australian banks, which are increasing their holdings of high-quality liquid assets ahead of the implementation of the Australian Prudential Regulation Authority's (APRA's) Basel III liquidity reforms in 2015. Spreads between 5-year CGS and semis have generally narrowed by around 10 basis points since the previous *Statement*, and for some state issuers, spreads are at their lowest levels since 2006/07 (Graph 4.4).

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



Sources: RBA; Yieldbroker

Domestic bond issuance by non-resident entities ('Kangaroos') has totalled $9.4 billion since the previous *Statement*, and has been raised primarily by banks. Secondary market spreads for Kangaroo bonds have contracted by around 15 basis points, and are close to their lowest levels since late 2007. The cost of hedging Australian dollar issuance into US dollars remained mostly unchanged, while the cost of hedging into euro and yen has increased, mainly reflecting a narrowing in the US dollar/euro and US dollar/yen cross-currency basis swap rates.

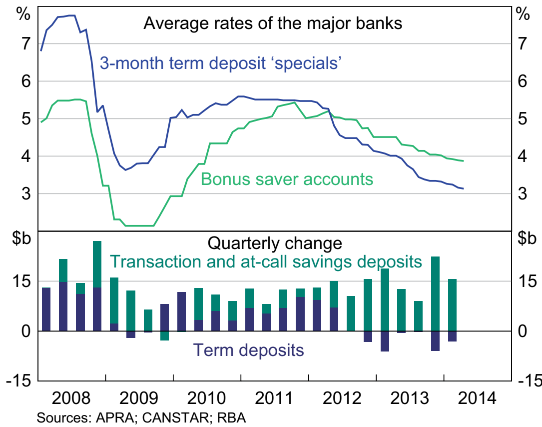
## Financial Intermediaries

Bank funding costs have been stable since the previous *Statement*, as the effects of a decline in deposit rates and favourable wholesale funding conditions have been offset by a change in the deposit mix towards transaction and at-call accounts.[1] This has been driven by banks reducing rates on term deposits relative to comparable at-call 'bonus saver' accounts, which have higher advertised rates (Graph 4.5).

The aggregate share of deposits in banks' funding has remained broadly stable over recent months. The share of long-term debt has been little changed as banks have tended to only replace maturing debt (Graph 4.6).

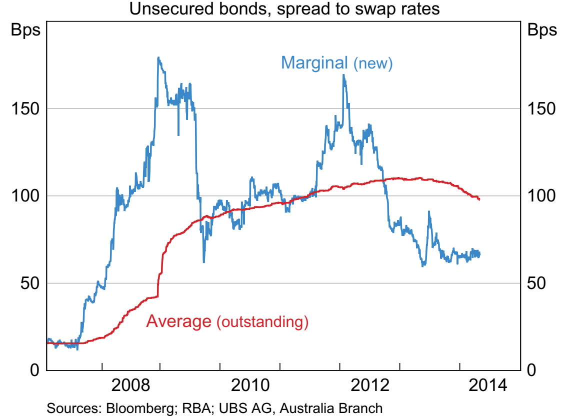
1 For more details on bank funding costs, see Berkelmans L and A Duong (2014), 'Developments in Banks' Funding Costs and Lending Rates', RBA *Bulletin*, March, pp 69–75.

## Graph 4.5
### Household Deposits



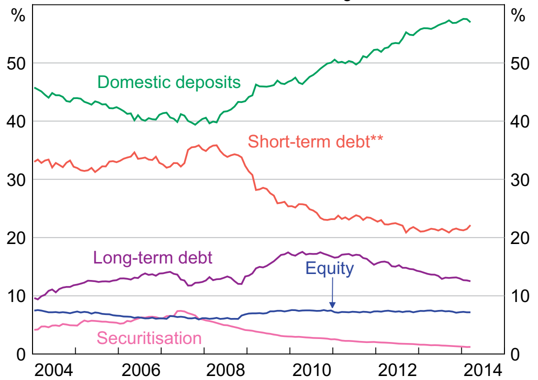
Sources: APRA; CANSTAR; RBA

## Graph 4.7
### Major Banks' Domestic Bond Spreads
Unsecured bonds, spread to swap rates



Sources: Bloomberg; RBA; UBS AG, Australia Branch

## Graph 4.6
### Funding Composition of Banks in Australia*
Share of total funding

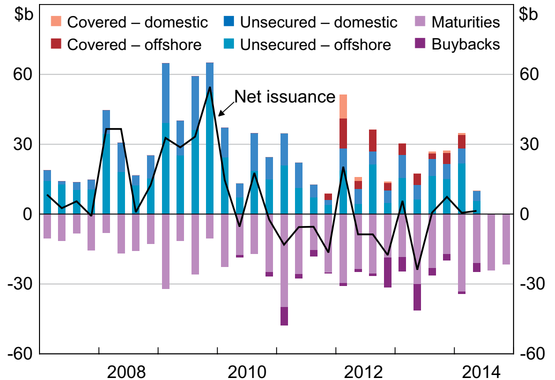


* Adjusted for movements in foreign exchange rates; tenor of debt is estimated on a residual maturity basis

** Includes deposits and intragroup funding from non-residents

Sources: APRA; RBA; Standard & Poor's

## Graph 4.8
### Banks' Bond Issuance and Maturities*
A$ equivalent



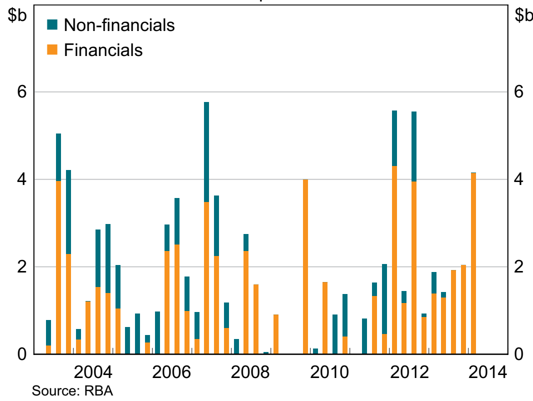
* Last quarter gross issuance and net issuance are quarter to date

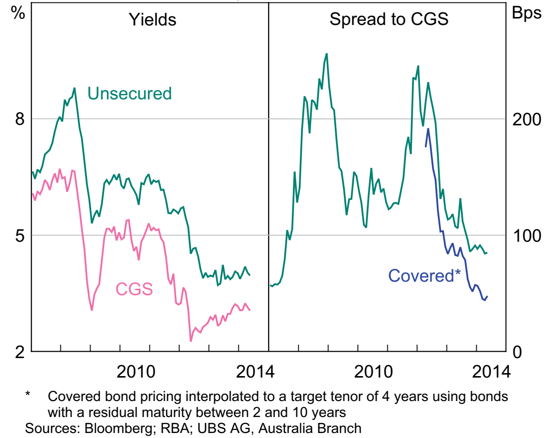
Source: RBA

The cost of issuing unsecured long-term wholesale debt remains at relatively low levels for banks (Graph 4.7). This, together with the maturing of debt issued in 2008 and 2009 at high spreads, has meant that the outstanding cost of wholesale debt has continued to decline over the past few months. This decrease in long-term wholesale funding costs has made only a small contribution to the decline in banks' overall funding costs, reflecting its small share of banks' total funding of around 12 per cent.

Australian banks have issued around $31 billion in senior unsecured and covered bonds since the previous *Statement*, around two-thirds of which was issued offshore (Graph 4.8). The stock of outstanding bonds has remained broadly unchanged, reflecting bond maturities and a small amount of government-guaranteed bond buybacks.

Hybrid issuance has picked up this year, with banks and other financial institutions raising more than $4 billion of Basel III compliant hybrid securities, including securities marketed solely to institutional investors (Graph 4.9). This was a departure from the retail-focused issuance of 2012 and 2013. Institutional demand has focused on Tier 2 capital compliant notes. These notes include an option for the security to be converted to equity or written off if APRA determines that the issuer has reached a point of non-viability.

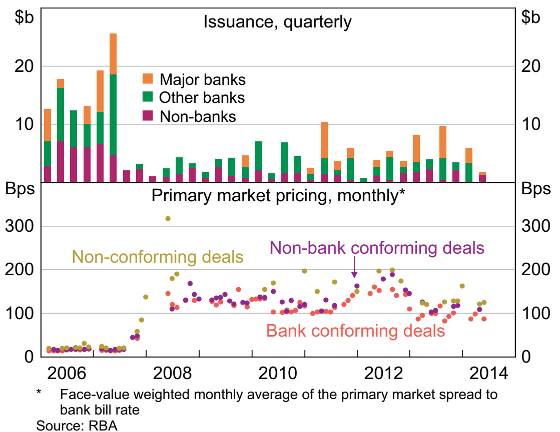



Relative to CGS, spreads on the major banks' bonds have declined since the previous *Statement* (Graph 4.10). Credit ratings activity over the period was generally positive, with Bank of Queensland's rating upgraded by one notch by one of the major credit rating agencies.

Banks have generally reported increases in underlying profit, reflecting ongoing declines in bad debt charges owing to improved asset quality, and increases in income due to balance sheet growth. For the major banks, net interest margins have narrowed, with banks attributing this to the ongoing effects of lower interest rates and strong competition in lending markets; this has been offset, in part, by reduced competition for term deposits. The banks generally increased their dividends compared with the same period in the previous financial year.

Issuance of residential mortgage-backed securities (RMBS) has been around $6.6 billion since the previous *Statement* (Graph 4.11). Mortgage originators accounted for around one-quarter of this, including three new deals involving 'non-conforming' mortgages. These mortgages typically involve borrowers with a history of credit impairment, higher loan-to-value ratios and/or reduced documentation. Issuance spreads on

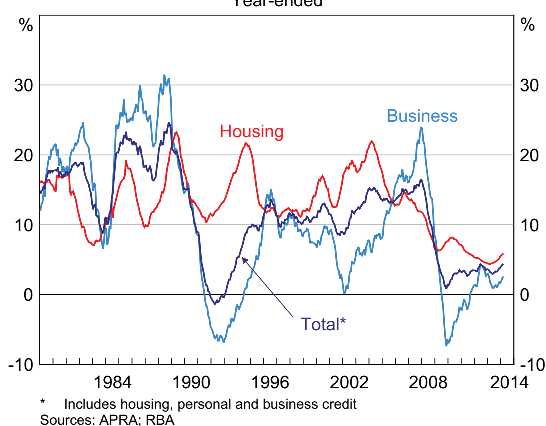



senior RMBS tranches have remained around their lowest levels since 2007/08. In response to the improved conditions in the RMBS market, the AOFM completed a full divestment of its mezzanine note holdings. Demand for these mezzanine notes from private investors has been strong, partly reflecting expectations that APRA's reform of securitisation standards will limit the future supply of mezzanine and other more junior notes.

## Financial Aggregates

Total credit increased at an annualised rate of around 5 per cent over the March quarter (Graph 4.12). This reflected a decline in personal credit and a pick-up in business credit growth, with housing credit growth little changed (Table 4.1). Growth in credit remains below growth in broad money, which increased at an annualised rate of around 7.8 per cent over the quarter.

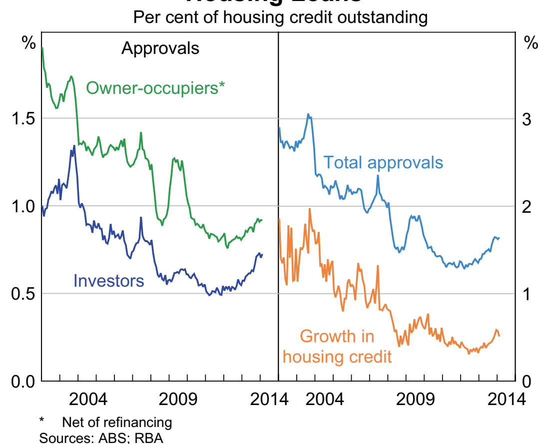
**Graph 4.12**
**Credit Growth by Sector**
Year-ended




## Household Financing

Housing credit continued to grow at an annualised pace of around 6.5 per cent over the March quarter, with growth in investor housing credit outpacing growth in owner-occupier housing credit. The value of housing loan approvals is little changed since November 2013, although it has increased by around 24 per cent over the past year (Graph 4.13). Consistent with this, housing credit growth for both investors and owner-occupiers has steadied in recent months following a pick-up during the second half of 2013. Higher levels of mortgage prepayments and a relatively low level of approvals to first home buyers are likely to be affecting housing credit growth.

**Graph 4.13**
**Housing Loans**
Per cent of housing credit outstanding



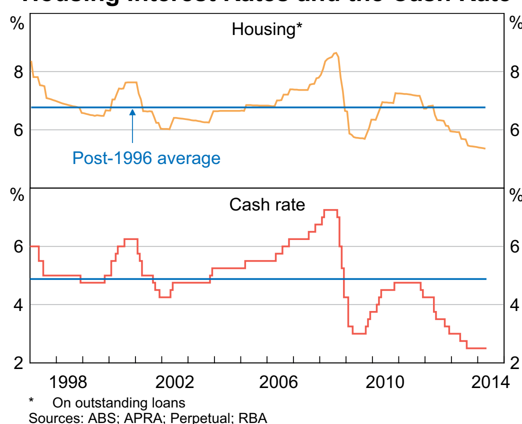

The average interest rate on outstanding housing loans has continued to fall as borrowers have refinanced at lower rates (Graph 4.14). The average interest rate on housing loans is now around 34 basis points below its previous trough in September 2009.

**Table 4.1: Financial Aggregates**
Percentage change[(a)]

| | Three-month ended December 2013 | Three-month ended March 2014 | Year-ended March 2014 |
|---|---|---|---|
| Total credit | 1.2 | 1.2 | 4.4 |
| – Owner-occupier housing | 1.3 | 1.3 | 4.9 |
| – Investor housing | 2.2 | 2.1 | 7.9 |
| – Personal | 0.1 | –0.3 | 0.4 |
| – Business | 0.6 | 0.9 | 2.6 |
| Broad money | 1.7 | 1.9 | 6.5 |

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

**Graph 4.14**
**Housing Interest Rates and the Cash Rate**




* On outstanding loans
Sources: ABS; APRA; Perpetual; RBA

Lenders' standard variable rates have remained largely unchanged since the previous reduction in the cash rate target in August, although some lenders have increased the interest rate discounts they offer on loans with low loan-to-valuation ratios (Table 4.2). In addition, some lenders have reduced their fixed rates this year, despite equivalent term swap rates being little changed. Lenders continue to advertise limited term special offers to new customers, including fee waivers and rebates for refinancing from another institution.

The value of outstanding personal credit fell slightly over the quarter, mainly driven by decreases in revolving credit.

## Business Financing

External business funding has risen by the equivalent of around 2 per cent of GDP in the March quarter, which was smaller than in recent quarters. Lower equity raisings and a fall in non-intermediated debt funding partly offset an increase in business credit (Graph 4.15).

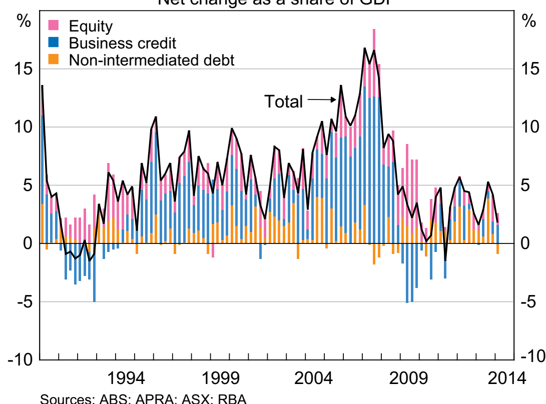
Corporate bond issuance has totalled around $3 billion since the previous *Statement* (Graph 4.16). The bulk of the issuance occurred in offshore markets; however, around one-quarter of the total was comprised of domestic bonds issued by lower-rated corporations (around BBB) at relatively longer tenors (around 7 years) than is usual for the domestic market.

**Table 4.2: Intermediaries' Fixed and Variable Lending Rates**

| | Level at 7 May 2014<br>Per cent | Change since January 2014<br>Basis points | Change since end October 2011<br>Basis points |
|---|---|---|---|
| **Housing loans** | | | |
| – Standard variable rate[(a)] | 5.93 | 0 | –186 |
| – Package variable rate[(b)] | 5.08 | 0 | –195 |
| – Fixed rate[(c)] | 5.20 | –9 | –131 |
| **Personal loans** | | | |
| – Standard variable rate | 11.56 | 0 | –85 |
| **Small business (variable rates)** | | | |
| – Term loans | 7.10 | 0 | –190 |
| – Overdraft | 7.97 | 0 | –188 |
| Average rate[(d)] | 6.71 | –2 | –192 |
| **Large business** | | | |
| Average rate[(d)] (variable rate and bill funding) | 4.58 | –2 | –245 |

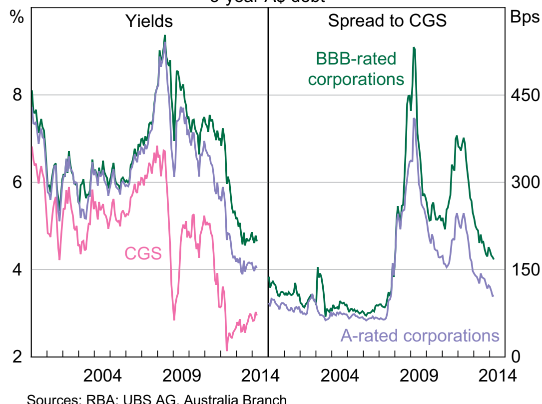
(a) Average of the major banks' standard variable rates
(b) Average of the major banks' discounted package variable rates on new, $250 000 full-doc loans
(c) Average of the major banks' 3-year fixed rates
(d) Rates on outstanding business lending (includes discount)
Sources: ABS; APRA; RBA

## Graph 4.15
### Business External Funding
Net change as a share of GDP



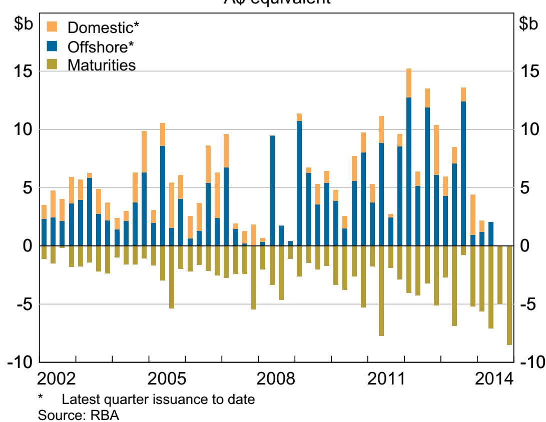

Sources: ABS; APRA; ASX; RBA

## Graph 4.17
### Australian Corporate Bond Pricing
3-year A$ debt



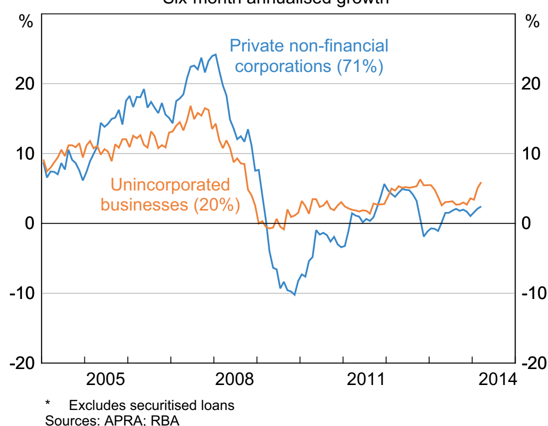

Sources: RBA; UBS AG, Australia Branch

## Graph 4.16
### Australian Corporate Bond Issuance
A$ equivalent




* Latest quarter issuance to date
Source: RBA

## Graph 4.18
### Business Credit by Borrower
Six-month annualised growth*




* Excludes securitised loans
Sources: APRA; RBA

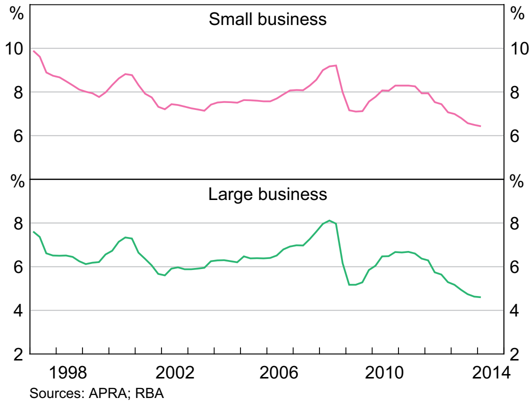
Secondary market spreads for Australian dollar corporate bonds over CGS have narrowed by around 15 basis points since the previous *Statement* for both the broad A-rated and BBB-rated entities. Spreads are at their lowest levels since 2007 (Graph 4.17).

Growth in business credit picked up in the March quarter reflecting an increase in lending to both private non-financial corporations and unincorporated businesses (Graph 4.18). The latter is likely to reflect an increase in lending to small businesses. The major banks accounted for a large share of the increase in business credit over the quarter, while credit extended by the Asian banks continued to rise. Most of the increase in business credit was driven by lending denominated in domestic currency.

The cost of intermediated business borrowing for both small and large businesses has been little changed over the past three months (Graph 4.19). Average rates on small and large business loans outstanding remain well below the previous trough in April 2009.

After a large increase in syndicated loan approvals in the December quarter, activity fell back in the March quarter, partly reflecting reduced refinancing activity, while financing for acquisitions remains at a very low level. This is consistent with the typical seasonal pattern of weak activity in the March quarter.

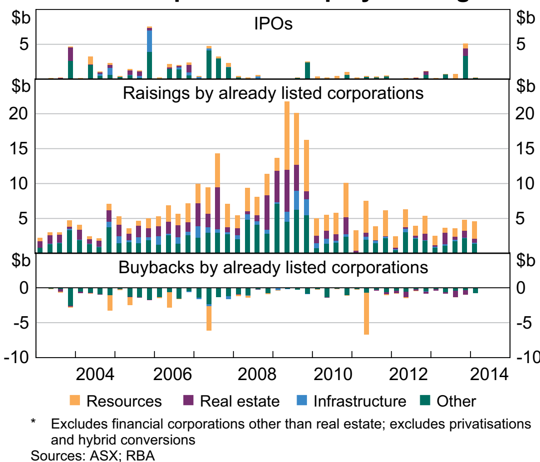
**Graph 4.19**
**Australian Business Lending Rates**
Average interest rate on outstanding lending



Sources: APRA; RBA

Equity raisings by non-financial corporations (including real estate companies) declined in the March quarter to $4 billion (Graph 4.20). This was mainly driven by a slowdown in initial public offerings (IPOs), following a sharp pick-up in the December quarter. Equity raisings are typically weak in the March quarter, and a number of large IPOs are expected later in the year. Equity raisings by already listed companies remained stable, with issuance totalling $4½ billion, as an increase in resource sector private placements offset a fall in real estate sector placements and rights issues. There were $760 million in share buybacks during the quarter.

**Graph 4.20**
**Listed Corporations' Equity Raisings***



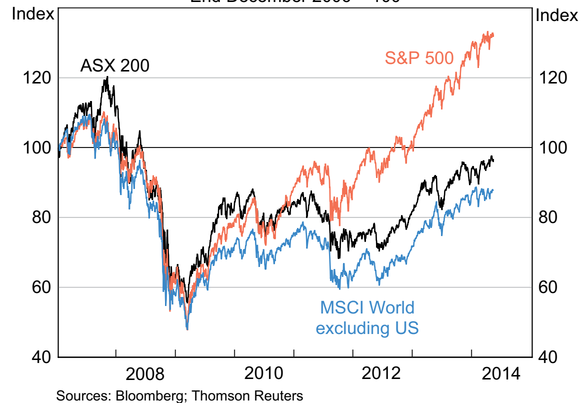
* Excludes financial corporations other than real estate; excludes privatisations and hybrid conversions
Sources: ASX; RBA

Merger and acquisition (M&A) activity has increased, with around $21 billion in deals announced by listed companies since the previous *Statement*. The largest deal was Transurban Group's $7 billion acquisition of a Brisbane-based portfolio of toll road assets. In addition, around $4 billion in deals were announced in the energy sector, mostly relating to oil and gas.

## Equity Markets

Australian equity prices have risen by 6½ per cent since the previous *Statement*, broadly in line with global equity markets (Graph 4.21). This partly reflected domestic economic data that was generally stronger than market expectations and positive company profit results.

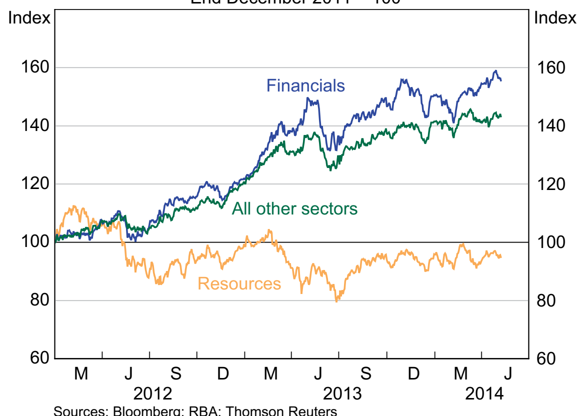
**Graph 4.21**
**Share Price Indices**
End December 2006 = 100

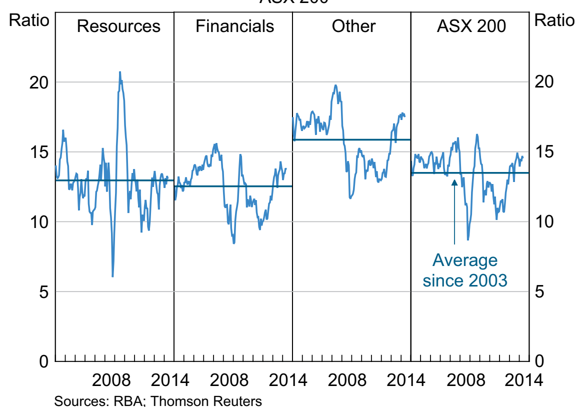


Sources: Bloomberg; Thomson Reuters

Resource sector share prices rose by 3 per cent, with a recovery in the reported profits of the major diversified miners for the December half partially offset by concerns about the outlook for Chinese economic growth and lower prices for iron ore and coal (Graph 4.22).

Financial sector share prices rose by 9 per cent, supported by strong bank profit results. Despite significant declines in the reported profits of some insurance companies, insurance sector share prices increased by 11 per cent as investors focused on the




more forward-looking aspects of the December half profit announcements, particularly among insurers' banking business units. Real estate companies lagged other financial companies but their share prices still increased by 7 per cent reflecting the improvement in residential real estate market conditions.

Shares prices in other sectors rose by 4 per cent, with cyclical sectors generally outperforming the broader market following positive profit results, some M&A activity and domestic economic data that was generally stronger than market expectations. In contrast, defensive sectors, such as consumer staples and healthcare companies, underperformed the broader market amid concerns about the outlook for their earnings.

Valuations of Australian equities, as measured by forward price-earnings (PE) ratios, have increased since the previous *Statement* and remain close to, or above, their decade averages for all of the broad sectors (Graph 4.23). The PE ratio of the resources sector rose alongside higher equity prices and lower consensus earnings forecasts for the sector based on concerns about the economic outlook for China. The PE ratio of the financial sector increased as the rise in equity prices outpaced the increase in expected earnings. For other sectors, PE ratios generally rose amid higher equity prices and as analysts scaled back earnings expectations, particularly for defensive firms.

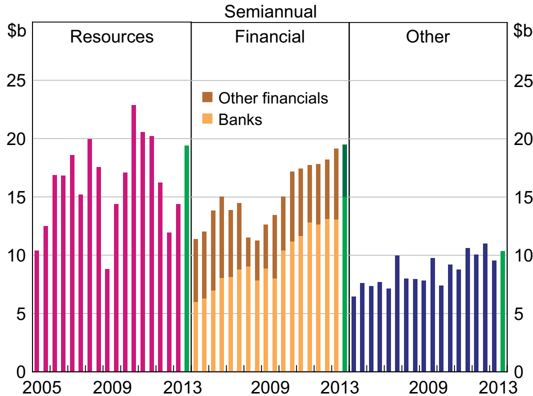
ASX 200 companies reported their December half 2013 results during February and March. Aggregate underlying earnings, which exclude the impact of non-recurring items, increased by 22 per cent compared with the same period last year.

The main driver of the rise in aggregate profits was a large increase in resource sector profits, as the major diversified miners began to transition from the investment phase towards increasing production volumes (Graph 4.24). There was also a recovery in iron ore prices over that period. Underlying profits in the financial sector rose by 7 per cent from the same period in 2013, primarily reflecting the strength of banks' earnings. Profits for real estate companies also grew, partly reflecting stronger activity in the residential housing market. Underlying earnings outside the resources and financial sectors declined by 6 per cent from the same period in 2013.

Listed corporations' balance sheets expanded by 4 per cent in aggregate over the second half of 2013 (Graph 4.25). The growth was funded in roughly equal parts by debt and equity, with both rising by around 5 per cent. The book value gearing ratio of listed corporations declined marginally to 55 per cent and remains well below its historical average. By sector, the net debt of the major diversified miners

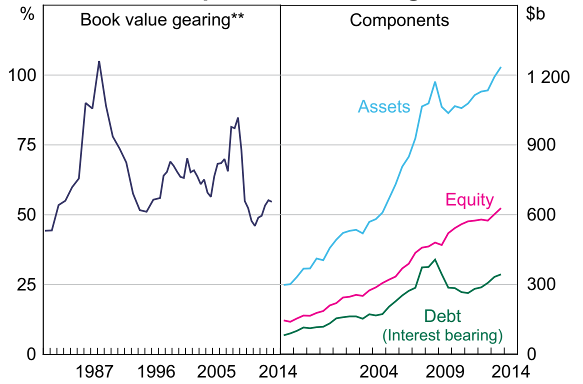
declined, driven by a substantial accumulation in cash balances as higher sales volumes supported revenues and profits. In contrast, energy companies increased their use of debt to fund their high levels of capital investment over the period. The gearing of firms across the other sectors was generally little changed. ✠

## Graph 4.24
## ASX 200 Underlying Profits*




* Figures are based on actual data for companies which have reported in the December half 2013. For companies which have not yet reported, current period earnings are based on company-level consensus expectations.
Sources: Bloomberg; Morningstar; RBA

## Graph 4.25
## Listed Corporations' Gearing Ratio*




* Excludes foreign-domiciled companies
** Data from 1997 includes real estate companies
Sources: Morningstar; RBA; Statex

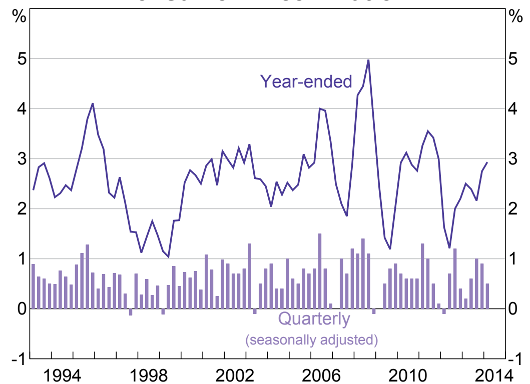
# 5. Price and Wage Developments

## Recent Developments in Inflation

Consumer price inflation declined in the March quarter, after picking up a little over the second half of 2013. The consumer price index (CPI) rose by 0.5 per cent on a seasonally adjusted basis in the March quarter, following an increase of 0.9 per cent in the December quarter, to be 2.9 per cent higher over the year (Graph 5.1; Table 5.1). While the decline in inflation in the quarter was broad based, non-tradables inflation has eased somewhat over the past year while tradables inflation has picked up.

Increases in the prices of volatile items added slightly to headline inflation in the March quarter, with fruit, vegetable and automotive fuel prices each rising by

**Graph 5.1**
**Consumer Price Inflation***




* Excluding interest charges prior to the September quarter 1998 and adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

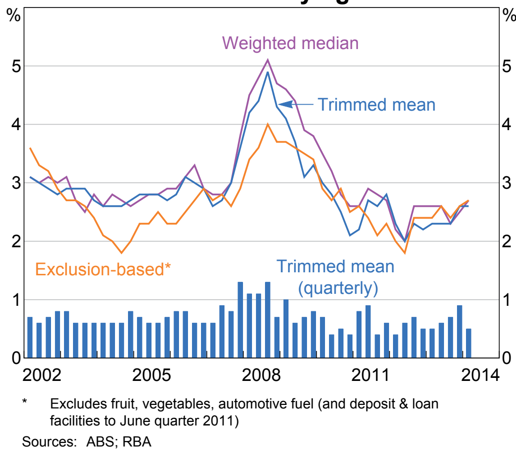
**Table 5.1: Measures of Consumer Price Inflation**
Per cent

| | Quarterly(a) | | Year-ended(b) | |
|---|---|---|---|---|
| | March quarter 2014 | December quarter 2013 | March quarter 2014 | December quarter 2013 |
| Consumer price index | 0.6 | 0.8 | 2.9 | 2.7 |
| Seasonally adjusted CPI | 0.5 | 0.9 | – | – |
| – Tradables | 0.7 | 0.8 | 2.6 | 1.0 |
| – Tradables (excl volatile items and tobacco)(c) | –0.1 | 0.5 | 0.8 | –0.1 |
| – Non-tradables | 0.4 | 0.9 | 3.1 | 3.7 |
| *Selected underlying measures* | | | | |
| Trimmed mean | 0.5 | 0.9 | 2.6 | 2.6 |
| Weighted median | 0.6 | 0.9 | 2.7 | 2.5 |
| CPI excl volatile items(c) | 0.4 | 0.9 | 2.7 | 2.6 |

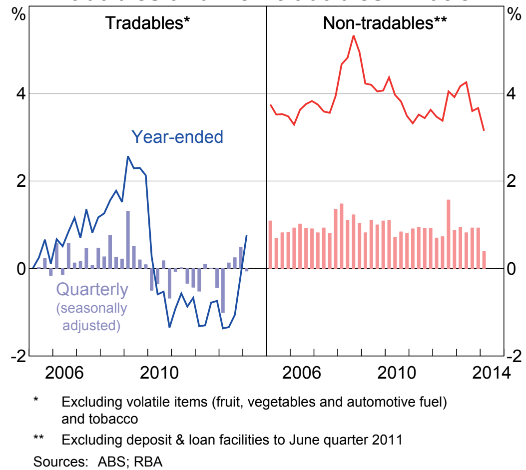
(a) Except for the headline CPI, quarterly changes are based on seasonally adjusted data; those not published by the ABS are calculated by the RBA using seasonal factors published by the ABS
(b) Year-ended changes are based on non-seasonally adjusted data, except for the trimmed mean and weighted median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

around 2 per cent. Inflation in tobacco prices has picked up in the past two quarters, largely reflecting the 12.5 per cent increase in the tobacco excise in December, which has contributed a little under ¼ percentage point to headline inflation over the past year.

The published measures of underlying inflation were around ½ per cent in the March quarter, which was around ¼–½ percentage point lower than underlying inflation recorded in the previous quarter. The pronounced decline in underlying inflation in the quarter may overstate the extent of slowing in inflationary pressures, just as the December quarter may have overstated the pick-up in inflationary pressures. Taken together, the quarterly average pace of underlying inflation over the past two quarters was a little under ¾ per cent, while over the year the various measures indicate that the pace of underlying inflation was between 2½ per cent and 2¾ per cent (Graph 5.2).



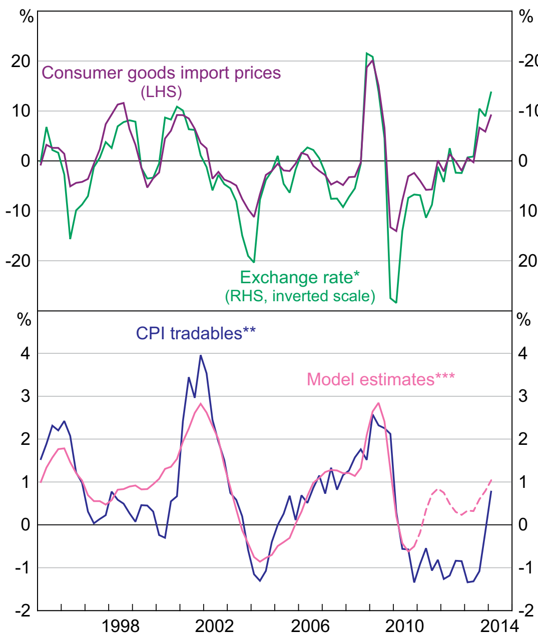

Prices of tradable items (excluding volatile items and tobacco) declined slightly in the March quarter, after rising in the previous three quarters (Graph 5.3). In the March quarter, lower inflation was observed across the basket of tradable items, with traded food and consumer durables prices declining in the quarter, and international travel & accommodation prices rising only modestly. In part, the decline in the quarterly rate could reflect statistical noise in the data. Alternatively, it could be that firms attempted to recoup higher imported costs or increase margins in the December quarter, but did not do so again in the March quarter.




Over the year, tradables prices rose by 0.8 per cent, consistent with the depreciation of the exchange rate since early last year. Because tradable items are either imported or exposed to international competition, their prices tend to be heavily influenced by movements in the exchange rate. Changes in import prices typically work their way through the domestic supply chain with a long but variable lag, owing to the effects of fixed contracts, hedging practices, firms' inventory management, and the ability of distributors and retailers to partially absorb the impact of exchange rate movements in their margins. Historical relationships suggest that in response to a 10 per cent depreciation, tradables prices will increase by around 2–3 per cent over a period of two to three years on average. Just as there is uncertainty about the overall magnitude of pass-through, there is uncertainty about the exact quarterly profile as pass-through does not necessarily proceed smoothly from one quarter to the next. In the Bank's liaison, retailers have generally indicated that they have been reluctant to pass on imported cost increases due to competitive pressures. This

reluctance may be no different to usual as the amount of pass-through to tradables prices over the past year or so from the depreciation of the exchange rate appears to have been consistent with the average historical relationship. This is indicated by tradables inflation over the year to March 2014 being close to model-implied estimates (Graph 5.4). In contrast, over the preceding few years, tradables prices experienced persistent declines despite a relatively stable exchange rate, possibly reflecting a compression of margins along the supply chain or improvements in the efficiency of distribution.

A decline in the pace of non-tradables inflation has helped to partially offset the pick-up in tradables inflation over the past year. In the March quarter, non-tradables inflation declined to 0.4 per cent and the year-ended rate was 3.1 per cent, the lowest rate in over a decade. This followed a number of quarters for which non-tradables inflation was recorded as



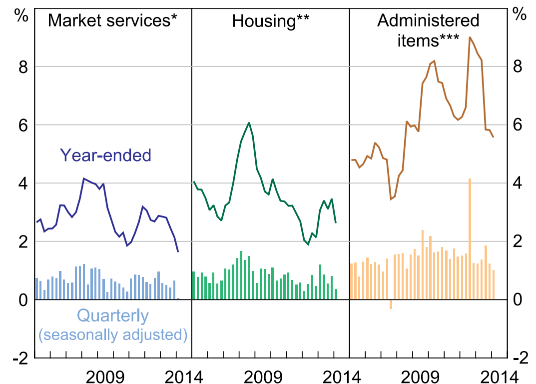

* Import-weighted index, quarter averages

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

*** The model is estimated from 1990:Q1 to 2010:Q4; model-implied estimates, using actual data for the independent variables (unit labour costs, import prices and inflation expectations), are shown from 2011:Q1 to 2014:Q1

Sources: ABS; RBA

being relatively stable, at around 0.9 per cent. While inflation slowed in the March quarter for the majority of non-tradable items, the largest effect was from market services and new dwelling costs (Graph 5.5).




* Includes most household and personal services, meals out & takeaway food and insurance & financial services; excludes deposit & loan facilities to June quarter 2011

** Includes new dwelling purchases, rents and dwelling repair & maintenance; excludes utilities and property rates & charges

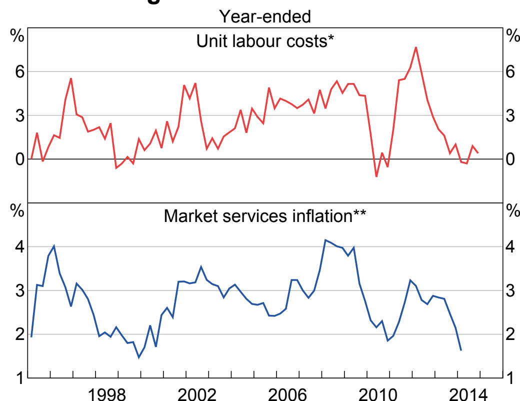
*** Includes utilities, health services & equipment, education, some motor vehicle fees, property rates & charges, child care, urban transport fares and postal services

Sources: ABS; RBA

Non-tradables prices tend to be less affected by movements in the exchange rate, and are quite dependent on domestic labour costs. However, the influence of labour costs is more pronounced for some non-tradable items than for others, and it often operates with a lag. Labour costs are likely to be a particularly important component of the cost of production for many types of market services – in particular, household services, meals out & takeaway food, and insurance & financial services. For these items, inflation was negligible in the March quarter and has declined over the past couple of years to be very low by historical standards, consistent with the slowing growth in unit labour costs over the past couple of years (Graph 5.6).

In contrast, inflation for non-tradables items other than market services has been quite elevated for some time, despite the slowing in wage growth and firms' efforts to improve productivity. For many of these goods and services, prices are likely to be significantly affected by factors in addition to

**Graph 5.6**
**Wage Growth and Inflation**



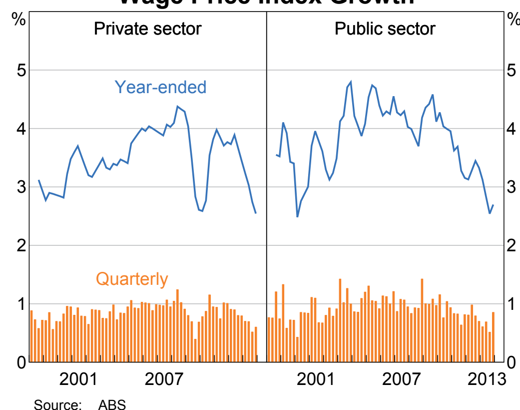

* Moved forward by four quarters
** Includes most household and personal services, meals out & takeaway food, and insurance & financial services; excludes deposit & loan facilities to June quarter 2011
Sources: ABS; RBA

domestic labour costs. For example, housing inflation appears to be only weakly related to changes in labour costs, with demand for new housing and the balance of supply and demand in the market for rental properties more important determinants. Inflation in the cost of new dwellings fell sharply in the March quarter, in part reflecting a surprising decline in new dwelling costs in Melbourne, which have been volatile of late. Nevertheless, new dwelling cost inflation remains somewhat higher than a year and half ago, consistent with recent strength in building approvals for detached houses. Similarly, the prices of some 'administered' items – those with regulated prices or for which the government is a significant provider – have historically been less sensitive to changes in labour costs. Inflation for these items, which include utilities, health and education services, has been well above that of other non-tradables in recent years.

## Costs

Wage growth remained weak in the December quarter, with the year-ended growth in the wage price index continuing to slow to 2.6 per cent, around 1 percentage point below its average of the past decade. In the December quarter, private sector wage growth remained weak, with reports from liaison continuing to suggest that labour is readily available and the rate of employee resignations is low (Graph 5.7). Public sector wage growth, while surprisingly strong in the December quarter, has also been weak over the year, consistent with ongoing fiscal restraint. Forward-looking indicators of wage growth, including surveys of firms' wage expectations and information from Bank liaison, indicate that wage pressures are likely to remain subdued over the next year.

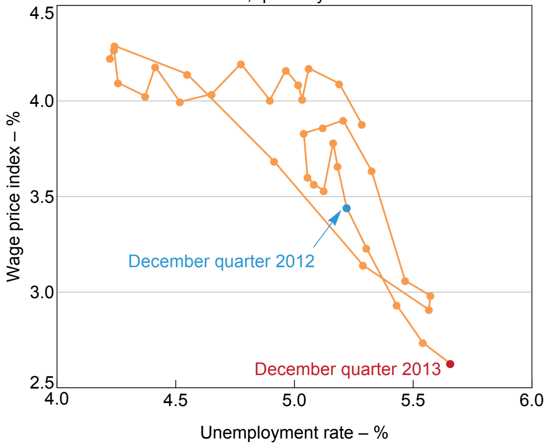
**Graph 5.7**
**Wage Price Index Growth**




Source: ABS

A number of factors are likely to have contributed to the significant moderation in wage growth over the past year and a half. First, there has been an increase in spare capacity in the labour market, as indicated by the increase in the unemployment rate (Graph 5.8). Second, consumer price inflation over the past year or so has been lower than the average of the preceding decade, and consumer and union inflation expectations have been relatively low; however, this can only explain part of the slowing in nominal wage growth observed in recent years, as evidenced by the fact that growth in the real purchasing power of wages from the perspective of consumers has also slowed (Graph 5.9). Finally, firms have faced continuing pressures to contain costs. From the perspective of producers, subdued trading conditions have limited the ability of firms to raise output prices. Accordingly, producer real wages (i.e. wages adjusted for firms' average output prices) have risen in recent years, after being little changed over the preceding decade.

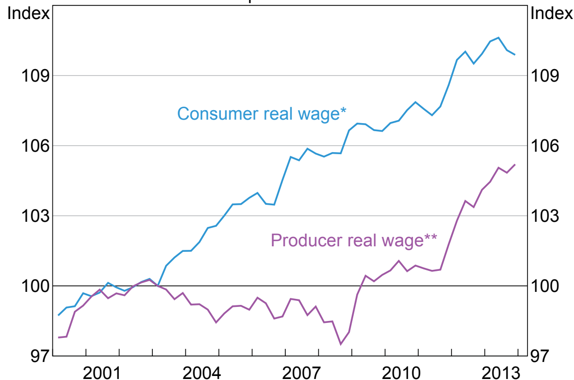
## Graph 5.8
## Wage Growth and Unemployment*
2005–2013, quarterly observations




* Wage price index growth (year-ended) and unemployment rate (year-average) from March quarter 2005 to December quarter 2013

Sources: ABS; RBA

## Graph 5.9
## Real Wage Price Index
March quarter 2003 = 100



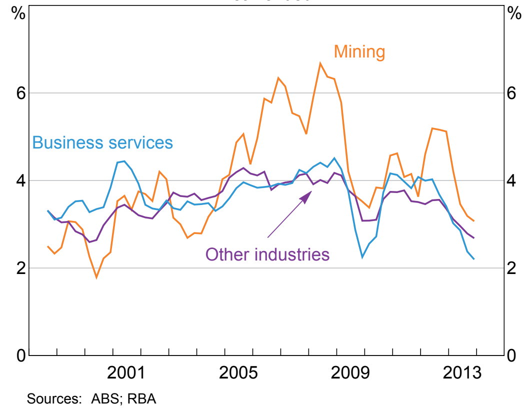

* Wage price index deflated by the consumer price index (excluding deposit & loan facilities to June quarter 2011 and adjusted for the tax changes of 1999–2000)

** Wage price index deflated by the producer price index (domestic, final stage of production, excluding exports and oil)

Sources: ABS; RBA

The slowing in wage growth has been broad based across industries; only 2 out of 18 industries – retail trade and health care & social assistance – have not experienced a reduction in year-ended wage growth since mid 2012. However, the slowing has been somewhat more pronounced in mining and business services, reflecting the marked reduction in demand for labour from these industries (Graph 5.10). Wage growth fell particularly sharply

## Graph 5.10
## Wage Growth by Industry
Year-ended




Sources: ABS; RBA

in the professional, scientific and technical services industry over the year to December, with a number of firms in this industry highly exposed to weaker resource investment activity.

Over the past year, the combinations of wage growth and unemployment rates in New South Wales, Victoria and Queensland have been quite similar (Graph 5.11). In contrast, wage growth remains relatively strong in Western Australia, consistent with the state having the lowest unemployment rate in the country, but it has slowed markedly since mid 2012, reflecting the downturn in mining investment and the spillovers to other parts of the state's

## Graph 5.11
## Wage Growth and Unemployment by State*
2013

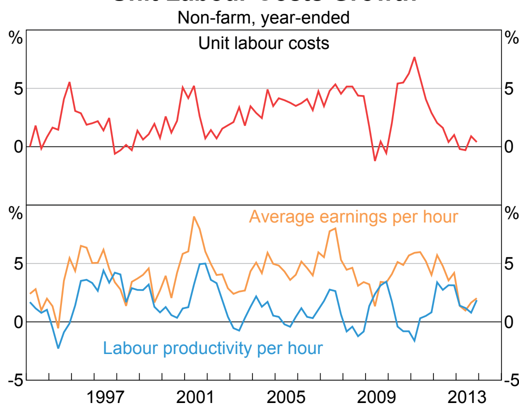
* Wage price index growth (year to December quarter 2013) and unemployment rate (2013 year-average)

Sources: ABS; RBA

economy. Wage growth was weakest in Tasmania over 2013, consistent with its high unemployment rate, while wage growth in South Australia has been relatively strong and has not slowed in recent years, somewhat at odds with the continuing weak labour market conditions in the state.

The national accounts measure of average earnings per hour picked up in the December quarter, after weak growth over the previous three quarters, to be 2.0 per cent higher over the year to December. Measured growth in labour productivity over the year was below its relatively fast pace in 2012. With average earnings growing at a similar pace to labour productivity in year-ended terms, growth in unit labour costs is estimated to have remained subdued (Graph 5.12).

**Graph 5.12**
**Unit Labour Costs Growth**
Non-farm, year-ended




Sources: ABS; RBA

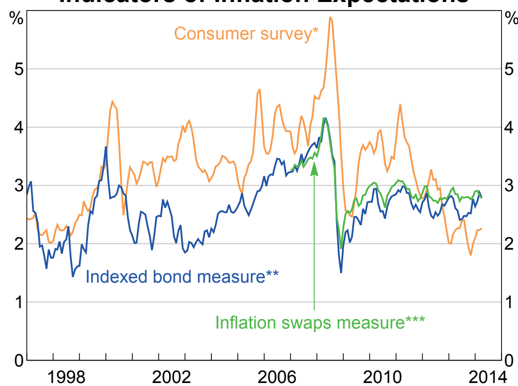
Producer price data suggest that domestic inflation pressures have remained relatively moderate across all stages of production over the past year, although import price inflation picked up in the March quarter.

ABS data indicate that the number of working days lost per employee as a result of industrial disputes has remained at a low level, notwithstanding a slight increase in the December quarter. The average number of employees involved per dispute increased in the quarter, but was partly offset by declines in the number of disputes and the average duration of disputes.

## Inflation Expectations

Measures of inflation expectations remain consistent with the inflation target, and are generally around or a little below their long-term averages (Graph 5.13; Table 5.2). Since the February *Statement*, market economists have revised down their expectations for inflation over 2014, while expectations for 2015 have been revised up a little, and union officials' forecasts for inflation have been revised up somewhat. Financial market measures of inflation expectations were little changed over the quarter and remain close to their historical average levels. The Melbourne Institute measure of consumers' inflation expectations for the year ahead has also increased modestly but remains low relative to its history.

**Graph 5.13**
**Indicators of Inflation Expectations**




* Three-month moving average of the trimmed mean expectation of inflation over the next year
** Break-even 10-year inflation rate on indexed bonds
*** Expectation of average annual inflation over the next 10 years

Sources: Bloomberg; Melbourne Institute of Applied Economic and Social Research; RBA

## Table 5.2: Median Inflation Expectations

Per cent

| | Year to December 2014 | | | Year to December 2015 | |
|---|---|---|---|---|---|
| | November 2013 | February 2014 | May 2014 | February 2014 | May 2014 |
| Market economists | 2.6 | 2.5 | 2.4 | 2.6 | 2.7 |
| Union officials | 2.5 | 2.8 | 3.0 | 2.8 | 2.9 |

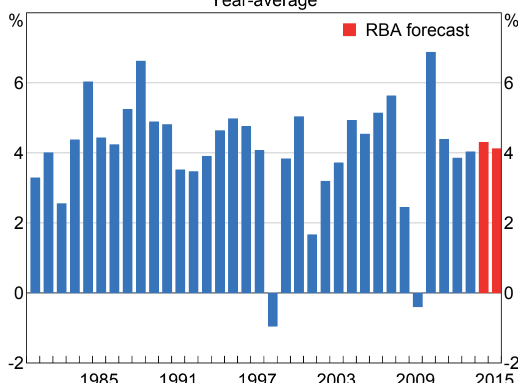
Sources: RBA; Workplace Research Centre

# 6. Economic Outlook

## The International Economy

Overall growth of Australia's major trading partners (MTP) is expected to be around its long-run average in 2014 and 2015 (Graph 6.1). This forecast is little changed since the February *Statement* and is similar to those of most other forecasters.

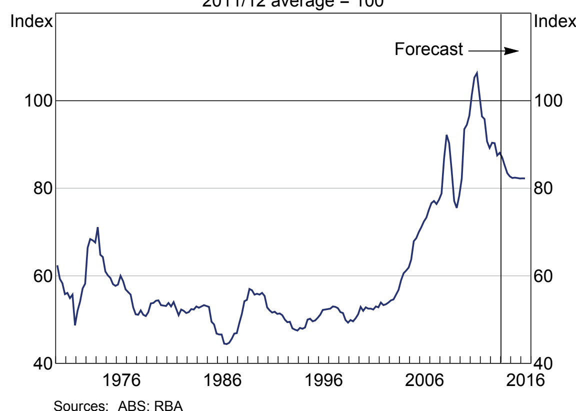
**Graph 6.1**
**Australia's Trading Partner Growth***
Year-average




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

Chinese growth in 2014 is expected to be in line with the Chinese Government's target of around 7½ per cent. Recent data indicate that growth slowed in early 2014, but monetary conditions appear relatively accommodative, and there are signs that the government will endeavour to provide some support to economic activity in the coming quarters – predominantly through investment – to achieve growth close to its target. In Japan, growth in 2014 and 2015 is expected to be a little weaker than the relatively strong growth seen over the past year. Activity is expected to contract in the June quarter following rapid growth in the lead-up to the consumption tax increase on 1 April, but in late 2014 and 2015 growth is likely to be close to the average of the past decade. In the rest of east Asia, the economic outlook is little changed, with growth expected to remain around its decade average. The US economy is expected to grow at a moderate pace, supported by stimulatory monetary policy and improvements in the labour market and household balance sheets. In the euro area, the gradual recovery in economic activity is expected to continue.

The outlook for the terms of trade is a little lower than at the time of the February *Statement*, mainly reflecting weaker-than-expected bulk commodity prices in recent months. The terms of trade are expected to be lower than in recent years reflecting increases in the supply of bulk commodities, although in mid 2016 the terms of trade are still expected to be around 50 per cent higher than their long-run average up to the mid 2000s (Graph 6.2). From 2015, a number of liquefied natural gas (LNG) projects are expected to move into the production phase. This is estimated to double the value of LNG exports to around 10 per cent of Australia's total exports by mid 2016. As a result, the price of LNG exports will begin to have a larger effect on Australia's terms of trade. In the Asia-Pacific market, LNG contracts are negotiated privately, so there is little public information to guide expectations about LNG prices, although they tend to be linked to the price of oil.




## Domestic Activity

In preparing the domestic forecasts, as usual a number of technical assumptions have been employed. The exchange rate is assumed to remain at its current level over the forecast period (TWI at 71 and A$ at US$0.93), which is around 4 per cent higher than was assumed in the February *Statement,* and close to the levels assumed six months ago in the November *Statement*. The forecasts are based on the price of Brent oil remaining at US$105 per barrel, a touch higher than the assumption in February. The cash rate is assumed to be unchanged over the forecast period at 2.5 per cent, which implies that borrowing rates remain at very low levels. The working-age population is assumed to grow by 1.8 per cent each year, drawing on forecasts by the Department of Immigration and Border Protection.

The starting point for the forecasts of the Australian economy is below-trend growth over 2013, but with slightly firmer growth in the final quarter of the year. Growth in 2013 was restrained by several headwinds, including a decline in both mining and non-mining investment, subdued growth in consumer spending, and the high level of the exchange rate. Over the past six months, however, growth looks to have strengthened a little, underpinned by very strong growth in resource exports, with production capacity continuing to expand as more projects reach completion. Activity related to the household sector has also picked up slightly, buoyed by the low level of interest rates and the associated strengthening in housing prices. A number of survey measures of current business conditions are around average levels after increasing over late 2013.

Nonetheless, the Australian economy continues to face several key challenges. The decline in mining investment has some way to run, and is expected to gather speed as large mining projects reach completion. At the same time, survey evidence suggests that growth in non-mining investment will remain subdued in the near term. In addition, while the exchange rate depreciated over the second half of 2013 and into early 2014, easing pressure on several trade-exposed sectors, it has since partly retraced this decline and remains relatively high. Furthermore, fiscal restraint at both the federal and state levels of government is expected to weigh on growth in public demand over coming years.

Over 2014/15, GDP growth is expected to be a bit below trend at close to 2¾ per cent. It is then expected to pick up to an above-trend pace over 2015/16 (Table 6.1). Average growth over the forecast period is little changed from the February *Statement,* although in comparison with the earlier forecasts, growth is expected to be a touch stronger in early 2014 and a bit weaker later in the forecast period. These minor revisions reflect the net effect of the rise in the exchange rate over recent months – which is expected, at the margin, to restrain exports and boost imports over the next two years – and a slightly stronger outlook for consumption and dwelling investment over the coming year. Growth is likely to dip a little in coming quarters, as the growth in resource exports eases back from the very strong pace of late.

The outlook for below-trend growth over 2014/15 balances the opposing forces of the substantial fall in mining investment and planned fiscal restraint against the stimulus to growth from expansionary monetary policy. Low interest rates are expected to continue to support the established housing market,

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

| | Year-ended | | | | | |
|---|---|---|---|---|---|---|
| | Dec 2013 | June 2014 | Dec 2014 | June 2015 | Dec 2015 | June 2016 |
| GDP growth | 2.8 | 3 | 2¾ | 2¼–3¼ | 2¾–3¾ | 2¾–4¼ |
| Non-farm GDP growth | 2.6 | 3 | 3 | 2½–3½ | 2¾–3¾ | 2¾–4¼ |
| CPI inflation[b] | 2.7 | 3 | 2¾ | 2½–3½ | 2¼–3¼ | 2–3 |
| Underlying inflation[b] | 2½ | 2¾ | 2½ | 2¼–3¼ | 2–3 | 2–3 |
| | **Year-average** | | | | | |
| | 2013 | 2013/14 | 2014 | 2014/15 | 2015 | 2015/16 |
| GDP growth | 2.4 | 2¾ | 3 | 2¼–3¼ | 2¼–3¼ | 2½–4 |

(a) Technical assumptions include A$ at US$0.93, TWI at 71 and Brent crude oil price at US$105 per barrel
(b) Based on current legislation for the price of carbon
Sources: ABS; RBA

the construction of new dwellings and household consumption. This pick-up in domestic demand is expected, in time, to flow through to stronger non-mining business investment and employment, and therefore higher GDP growth. Towards the end of the forecast period, a significant increase in LNG exports, as large plants currently being constructed commence production, will boost exports and GDP.

Household consumption is expected to be a bit stronger over 2014 compared with the February *Statement*, in light of the recent strengthening in consumer spending. The forecasts continue to embody consumption growth gradually rising to a bit above the trend pace of GDP growth by the end of the forecast period. This profile reflects some improvement in employment and wage growth, and rising wealth, and would see a further modest decline in the household saving ratio.

A pronounced increase in dwelling investment is underway, and recent information suggests that the upswing this year is likely to be a little larger than was forecast three months ago. Building approvals have been stronger than expected in recent months, remaining around their recent high levels. Other forward-looking indicators, such as loan approvals and first home owner grants for new construction, have continued to increase strongly. The increase in dwelling investment is being driven by a number of supportive factors: interest rates are very low, housing prices are rising, rental yields are still around the average of the past decade, and government incentives for first home buyers have been refocused on the purchase of new, rather than existing, dwellings. Stronger conditions in the established housing market, including a rise in housing turnover, are also expected to support renovation activity, which to date has been quite subdued.

With governments at both the federal and state levels planning to undertake fiscal consolidation over the next few years, the outlook for growth in public demand remains very weak. Consistent with the most recent budget projections, the contribution to GDP growth from public demand over the forecast period is expected to be around half of its long-term average.

Business investment overall is expected to continue contracting as a result of declining mining investment. The peak of the mining investment boom appears to have passed, and sharp falls in mining investment are expected as large projects are completed and few new large mining projects are expected to commence in the near term. Indeed, surveys of firms' investment intentions point to a sharp decline in investment in the mining sector.

The substantial increase in the size of the capital stock in the resource sector means that there is likely to be more ongoing investment to maintain these assets than has been the case historically, but this expenditure on maintenance is small relative to the investment that has been undertaken to build the capital stock.

Non-mining investment is expected to pick up gradually after a period of subdued growth. The Capex survey of investment intentions suggests a small increase in non-mining investment in 2014/15. The level of non-residential building approvals over recent quarters is consistent with the Capex survey, which points to growth in non-mining investment in buildings and structures. The non-mining sector is expected to be supported by the low level of interest rates, increasing activity in the housing sector and a gradual increase in the growth of consumption. Businesses have seemingly been waiting for a sustained improvement in demand before undertaking further investment. Such an improvement is in prospect and some business surveys have reported an increase in conditions, to around average levels.

The outlook for growth in export volumes has been revised a little lower since the February *Statement*. This reflects small downward revisions to manufactured goods and services exports in line with the recent appreciation of the exchange rate, and downward revisions to rural exports owing to drier conditions in Queensland and northern New South Wales. Resource exports are expected to grow strongly, with additional LNG production coming on line from next year.

Labour market conditions have shown some signs of improvement in recent months. This is consistent with the pick-up in a range of indicators of economic activity since late last year, as conditions in the labour market typically lag activity by a few quarters. A number of forward-looking indicators of labour demand have strengthened of late, and the participation rate looks to have stabilised after having declined since late 2010, while growth in employment has picked up in recent months. Similarly, recent liaison and business surveys suggest that the marked slowing in wage growth may have largely run its course.

Reflecting the signs of improvement in recent months, the forecasts now encompass less of an increase in the unemployment rate over the next year. However, the recovery in the labour market over the forecast period is expected to be fairly drawn out. GDP growth is not expected to rise above trend before mid 2015. Accordingly, the unemployment rate is not forecast to begin declining consistently until after this, and even then the decline in the unemployment rate towards the end of the forecast period is expected to be relatively modest. With a fair degree of spare capacity in the labour market over the forecast period, along with a continued focus by firms on containing costs, wage growth is expected to remain contained. Growth in wages (measured by the wage price index) is forecast to be around 2¾ per cent over 2014, thereafter picking up gradually to around 3 per cent – below its long-term average of 3½ per cent.

## Inflation

The starting point for the inflation forecast is lower than was anticipated three months ago, given the outcome for headline and underlying inflation in the March quarter. Headline inflation was 0.5 per cent in the quarter in seasonally adjusted terms and 2.9 per cent over the year, with the year-ended pace boosted by a little under ¼ percentage point from the increase in the tobacco excise late last year. Underlying inflation was ½ per cent in the quarter, compared with ¾–1 per cent in the December quarter. The recent quarterly profile of inflation appears to overstate any change in inflationary pressures and in this regard it is likely that the past two quarters of inflation data have reflected an element of statistical noise. The pace of underlying inflation over the past two quarters has averaged a little under ¾ per cent, which is somewhat higher than was the case a year or two ago.

The forecast profile for quarterly underlying inflation from the June quarter onwards is little changed and continues to be affected by two opposing influences. The exchange rate is noticeably lower than a year ago. Accordingly, higher import prices are still expected to exert an upward influence on inflation for several years, albeit by a bit less than had been anticipated a few months ago. While the prices of tradable items (excluding volatile items and tobacco) declined slightly in the March quarter, their increase over the past year is broadly consistent with movements in the exchange rate and import prices. This increase is in contrast to the period of deflation in tradables prices seen over the preceding three years. Overall, the depreciation of the exchange rate seen since early last year is expected to add around ¼ to ½ percentage point to underlying inflation in both 2014/15 and 2015/16.

Working in the other direction, domestic inflationary pressures are expected to remain subdued. As growth in output is expected to be below trend for a while yet, there is likely to be a degree of spare capacity in labour and product markets for several years. Over 2013, inflation in the prices of non-tradable items (which are affected more by domestic conditions and less by the exchange rate) had been surprisingly persistent, given slow growth in labour costs and little if any evidence of an expansion in firms' margins. However, the March quarter of 2014 saw a marked slowing in the pace of non-tradables inflation, bringing the year-ended pace to around 3 per cent, well below the decade average of nearly 4 per cent. Non-tradables inflation may well remain around 3 per cent over the next few years.

Aside from the influence of the exchange rate and labour costs, the inflation forecasts also reflect the effect of government legislation on some prices. The profile for headline inflation has been revised higher following the passage of legislation for further staged increases in the tobacco excise. These are expected to add around ¼ percentage point to year-ended headline inflation for the next three years. Meanwhile, the forecasts assume a price for carbon based on current legislation. This assumption, unchanged since the August *Statement* last year and based on last year's Budget, is for a floating carbon price to be introduced on 1 July 2015. This would be expected to result in the carbon price falling, to be similar to that of European permits, which is estimated to subtract a bit less than ½ percentage point from headline inflation, and around half that much from underlying inflation.

## Uncertainties

On the international front, for most economies the uncertainty surrounding the forecasts appears broadly balanced. In China, growth slowed in the first quarter, as it did in each of the past two years. In both of those years, growth picked back up later in the year, in part because of government actions but potentially also reflecting a stronger seasonal pattern. It remains to be seen whether growth will again strengthen through this year. Recently, Chinese officials have emphasised the importance of stable growth for continued job creation, and have signalled that investment would remain key to growth in 2014. If more substantial measures are taken to foster momentum in investment in the near term, it is possible that growth will be stronger than forecast. However, if the authorities were instead to redouble efforts to place financing on a more sustainable footing and deepen market reforms, activity could be weaker in the near term with the potential for stronger growth in future years.

In Japan, economic growth has picked up since the introduction of stimulatory monetary and fiscal policies in late 2012. The expected contraction in output in the June quarter following the increase in the consumption tax in April is a source of uncertainty. The government's stimulus package may mean that any downturn is short-lived, but this is not clear yet. Also, if economic conditions soften by more than expected or inflationary pressures ease, the Bank of Japan may embark on a new round of monetary easing, which could lower the yen further.

In the United States, much of the weakness recorded in March quarter GDP appears to have reflected a temporary response to unusually cold weather earlier in the year. It remains possible that growth in 2014 could be stronger than expected if business sentiment improves markedly, which, combined with firms' strong financial positions, could result in a sharper pick-up in investment. In the euro area, while the economy is recovering gradually, inflation has declined steadily since late 2011, falling to less than 1 per cent. If growth in demand proves insufficient, there is a risk that inflation stays below the European Central Bank's (ECB's) target for a prolonged period of time, and inflation expectations could drift lower. This would increase real interest rates and both private and public debt burdens. However, actions by the ECB, or an improvement in sentiment, could enable the current momentum in growth to build.

The key uncertainties for the domestic forecasts continue to relate to the decline in mining investment and the anticipated pick-up in non-mining activity. It is clear that mining investment will decline from its very high level over coming years; however, there is considerable uncertainty about the timing and magnitude of the decrease. There is increasing evidence that some parts of the non-mining economy, such as consumption and dwelling investment, are responding to expansionary monetary policy and other forces supporting growth. However, for some other parts, in particular non-mining business investment, the timing and magnitude of the projected increase in activity remains uncertain. There is little accurate survey or other information about investment plans beyond the coming year to guide this forecast. A pick-up in aggregate demand could see a stronger recovery in non-mining investment than expected, more like the substantial pick-up experienced in some past cycles. Alternatively, firms may remain reluctant to undertake significant new investment as business surveys indicate that they currently have some spare capacity.

With fairly large changes in sectoral growth rates anticipated, there is significant uncertainty as to whether the timing of stronger activity in some parts of the economy will coincide with weaker activity in other parts, and so whether aggregate growth will indeed increase gradually over the forecast period as predicted. Even if the transition of growth does proceed smoothly, the significant change in the composition of activity and growth could result in either excess demand for, or supply of, particular labour skills or types of capital. The composition of activity could have implications for employment, government revenue and expenditure, and for capital flows and so the exchange rate.

Further slowing in Chinese demand for steel would provide a downside risk to iron ore and coking coal prices, and hence the terms of trade. It could also lead to the closure of some higher-cost Australian coal producers and the cancellation of a number of coal investment projects. If the exchange rate was to depreciate with the decline in the terms of trade, there would be some offsetting boost to service and manufactured exports from a lower exchange rate, but any substantial weakening in Chinese steel production could be expected to reduce GDP growth over the forecast period.

How households respond to moderate income growth and higher wealth will have important implications for the growth of consumption. For the past few years, the household saving ratio has been higher than it had been for the previous two decades or so, but the saving ratio has declined a little over the past two years. Further changes in households' sentiment, and so their willingness to spend, could lead to either stronger or weaker consumption.

One area of potential shortages of capacity, which could have implications for both economic growth and inflation, is in dwelling construction. It is possible that capacity constraints could arise if the current number of building approvals, which is well above the levels of recent years, were to increase much further. While liaison indicates that there is little pressure on capacity at present, and the winding down of mining-related construction projects will increase labour availability, there remains some risk

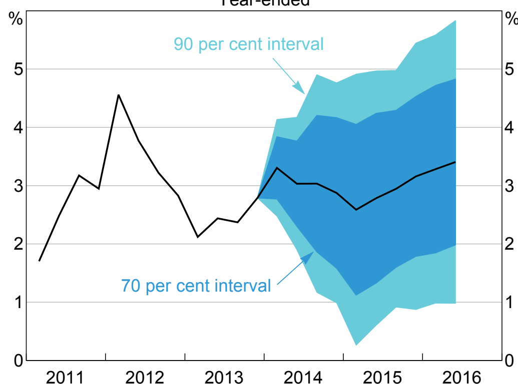
that a stronger recovery leads to capacity constraints and attendant wage and price pressures in the construction sector.

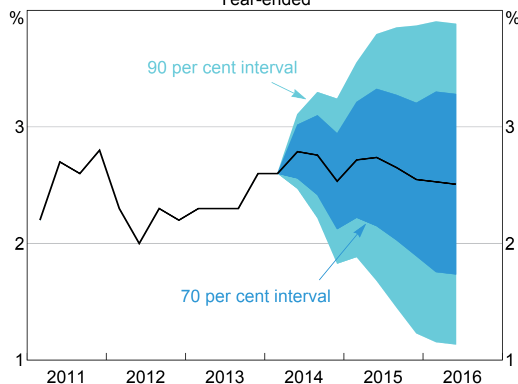
The forecasts have been prepared based on the most recent updates on the fiscal consolidation planned by state and federal governments. The federal and state budgets for 2014/15 will provide further detail on the likely profile for growth in public demand and the broader effects of fiscal actions over the next few years.

The path of the exchange rate presents a significant uncertainty for the forecasts of both economic activity and inflation. With resource prices, and so the terms of trade, expected to decline further, historical relationships suggest that the exchange rate could move lower over time. The increase in income payments to domestic and foreign owners accruing from strong growth in resource exports, as well as the conduct of monetary policy in major countries and associated capital flows, could also affect the exchange rate.

The pass-through of an exchange rate depreciation to consumer prices typically occurs over the course of several years because of the length of existing contracts, exchange rate hedging practices and businesses in the distribution chain temporarily absorbing currency fluctuations in their margins. The complexity of this process means that the size and speed of pass-through is highly uncertain. Pass-through in coming quarters could be faster than the historical average because retailers have increasingly sourced imported products directly rather than through domestic wholesalers. Working in the other direction, the soft state of demand might limit the extent to which firms are able to pass through higher imported costs.

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




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