# Statement on Monetary Policy

NOVEMBER 2011

Contents

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# Overview

Over recent months the sovereign debt and banking problems in Europe have again taken centre stage. These problems have led to high levels of volatility in financial markets and an increased focus on the downside risks to global growth. While the recent announcements by European leaders initially led to some improvement in confidence, difficult decisions still lie ahead, with many European governments facing a major challenge in putting their public finances on a sounder footing. The governments in the United States and Japan also face major medium-term fiscal challenges.

These fiscal issues, together with the ongoing consolidation of private-sector balance sheets following the financial crisis, mean that the outlook for growth in many advanced economies remains subdued. Recent data in the United States, however, have been more positive than earlier in the year and are consistent with an economy that is experiencing a modest expansion, but with little inroad being made into the high level of unemployment. While the market turbulence has dented business and consumer confidence in the advanced economies, fears of a major downturn have not been borne out so far. At this stage, there are few signs of the widespread deferral of capital spending and disruptions to trade finance that caused so much damage to the world economy in 2008/09.

In Asia, including China, growth remains solid, although below the pace in 2010. This moderation in growth partly reflects a general tightening of macroeconomic policy over the past year or so in response to a pick-up in inflation in the region. There are also some indications that the troubles in the North Atlantic economies are having an effect, with growth in exports and industrial production in the region slowing over recent months. Inflation remains relatively high, although there are signs of it moderating in some countries.

The Bank's central scenario for global growth over the next couple of years has been revised lower since the previous *Statement* to around 4 per cent. Around three-quarters of this growth is expected to come from the emerging and developing economies; in comparison, these economies accounted for less than half of global growth during the period from 1990 to 2005. The risks to this central scenario continue to be tilted to the downside, with a very disruptive outcome in Europe still possible. If such an outcome did occur, the world economy would be considerably weaker than the central scenario, notwithstanding the ability of policymakers in Asia to respond to a slowdown in their own economies.

Commodity prices are lower than they were three months ago, although they have mostly risen over the past month. In contrast to the pattern for most other commodities, the price of iron ore, after being largely unchanged in August and September, fell sharply in October. This fall reflects, in part, increased global supply of iron ore and a slowdown in global steel production, including in China. Overall though, commodity prices are still at high levels.

The sovereign debt issues have contributed to large swings in financial markets over recent months. Both global equity prices and currencies, including the euro and the Australian dollar, have traded in unusually wide ranges. In bond markets, yields on long-term government securities in the major economies have moved lower and are at historically low levels. In contrast, yields on government securities in several countries in Europe, particularly Italy, have increased over recent months.

Central banks in a number of countries have responded to these recent economic and financial developments with further policy measures. The US Federal Reserve, the European Central Bank and the Bank of England have all announced further non-conventional policy easing, and the Swiss National Bank and the Bank of Japan have taken actions to limit the appreciation of their currencies. Policy rates have also been reduced in some emerging market economies.

Conditions in global credit markets are tighter than earlier in the year, but markets are open to good-quality borrowers. The Australian banks have successfully issued securities in a range of markets over recent months and continue to experience strong growth in deposits. In the euro area, banks' borrowing costs have risen and, globally, corporate bond spreads, particularly for lower-grade issuers, have increased.

The Australian economy is growing at a moderate pace, with conditions varying significantly across sectors. The terms of trade in the September quarter are estimated to have been at their highest level in at least 140 years, and this is boosting both national income and investment. The mining-related parts of the economy are growing strongly and are expected to continue to do so, notwithstanding the recent decline in commodity prices. In contrast, in a number of other industries, the high exchange rate, the fading injections from the earlier fiscal stimulus and changes in household spending and borrowing behaviour are contributing to subdued conditions. Domestic demand continues to grow at around average pace, though an increased share of demand is being met by imports due to the high exchange rate and the import-intensive nature of the mining investment.

Consistent with moderate growth in the economy, survey-based measures of business conditions are mostly around long-run average levels. Business confidence has, however, fallen noticeably since mid year, to be well below its average level, although there has been some improvement recently. Growth in business credit remains subdued, and credit conditions are still fairly tight, particularly in the commercial property sector.

The published GDP outcomes for 2011 continue to be affected by the weather-related disruptions earlier in the year. In the June quarter, GDP increased by 1.2 per cent, after a decline of 0.9 per cent in the March quarter as extreme weather events affected exports of iron ore and coal. Over recent months, there has been a strong recovery in exports of iron ore, but the recovery in coal production in Queensland is continuing to take longer than earlier expected due to the difficulties in removing water from flooded coal pits. However, an increase in coal production is still expected to boost the outcomes for GDP over the second half of 2011.

Over the past year, consumption growth has been broadly in line with growth in household incomes, with the household saving ratio steady at around 10 per cent. Many households appear to be increasing their expenditure on services, rather than goods, and this is contributing to the weak conditions in parts of the retail sector. Household confidence has fallen over the past six months, although there are some signs of an improvement recently, and measures of household wealth have declined this year.

The housing market remains subdued, with nationwide measures of housing prices declining over 2011. Perhaps not surprisingly, the weakest markets have been those that had the largest run up over the preceding few years. At the aggregate level, the ratio of housing prices to income has been broadly steady for almost a decade now after its earlier large increase. Growth in housing credit is noticeably slower than in earlier years and is running at a little below that in household disposable income.

Reflecting the moderation in overall economic growth, the unemployment rate has increased slightly from 5 to 5¼ per cent over recent months and employment growth has slowed from the rapid pace of last year. The Bank's liaison suggests that the general increase in economic uncertainty has led some firms to wait for evidence of stronger demand before hiring additional workers. Notwithstanding this, the forward-looking indicators of labour demand continue to suggest ongoing employment growth, with the ratio of job vacancies to the total labour force still at a high level.

Aggregate wage growth has been relatively firm, although the Bank's liaison suggests that the likelihood of a significant acceleration of aggregate labour costs in the near term has lessened. Outside of the mining sector and some related industries, most firms are not reporting unusual difficulty in finding suitable workers, and there has been a rise in households' concerns about higher unemployment. Unit labour costs, however, continue to increase at an above-average rate, with productivity growth remaining below average.

The recent CPI data indicate a moderation in underlying inflation in the September quarter, after it had picked up in the first half of 2011. On a year-ended basis, underlying inflation is running at a little below 2½ per cent, the midpoint of the target band. For the quarter, the various measures of underlying inflation were in the range of 0.3 to 0.5 per cent, after above-average outcomes in the first half of the year. While the quarter-to-quarter movements in inflation need to be interpreted with care, this moderation is consistent with the softer growth in the non-mining economy and liaison reports that many firms feel that they have limited pricing power.

Over the year to the September quarter, CPI inflation was 3.5 per cent, with the outcome boosted by the increase in fruit and vegetable prices (particularly the price of bananas) that occurred earlier in the year due to the Queensland floods. The quarterly outcome (on a seasonally adjusted basis) was 0.4 per cent, similar to that for the measures of underlying inflation. In the quarter, there was a large increase in the price of utilities, partly offset by a decline in new dwelling costs. The effects of the earlier exchange rate appreciation also continue to be evident, with the prices of tradable goods falling slightly in the quarter, although these effects appear to be waning.

Reflecting recent developments in both the domestic and global economies, the Bank's forecasts for Australian GDP growth over the next couple of years have been lowered. In 2011, growth is now expected to be around 2¾ per cent, with the slow recovery in coal production accounting for a significant part of the downward revision since earlier in the year. In 2012, growth is expected to be around 3–3½ per cent and to be a little stronger in 2013. Over most of the forecast period, domestic demand is expected to grow at an annual rate of around 4 per cent, with growth in imports running substantially faster than this. In the central scenario, the unemployment rate is expected to increase a little before moving lower again, to around its current level.

The mining boom remains a central element in these forecasts, with mining investment expected to increase very strongly over the next few years, particularly in the LNG sector. In contrast, growth in the non-mining economy is expected to remain below average. The household saving ratio is forecast to remain around its current level and growth in public demand is expected to remain subdued, given ongoing fiscal consolidation.

The inflation forecasts have also been lowered, reflecting both the lower starting point and the revisions to the growth forecasts. In underlying terms, inflation (excluding the effect of the carbon price) is expected to be around 2½ per cent in 2012, ½ percentage point lower than forecast at the time of the August *Statement*. In 2013, inflation is expected to pick up a little, but still be consistent with the inflation target. The year-ended rate of CPI inflation is expected to fall below underlying inflation in early 2012 as banana prices return to more normal levels. It is then expected to increase to around 3¼ per cent following the introduction of the price on carbon in mid 2012, before again easing back.

This general outlook for inflation is conditional on aggregate wage growth remaining at around its current pace. It is also conditional on a pick-up in productivity growth as firms respond to competitive pressures and take advantage of lower prices for capital goods.

The largest risk to these forecasts is the sovereign debt and banking problems in the euro area, as discussed above. The Bank's central scenario continues to be one in which the European authorities do enough to avert a disaster, but are not able to avoid periodic bouts of considerable uncertainty and volatility. A worse outcome in Europe would adversely affect the Australian economy, and underlying inflation would be likely to decline. The main upside risk to inflation comes from growth in unit costs turning out to be faster than is currently expected due to either a continuation of low productivity growth or a pick-up in wage growth.

Given the very high commodity prices, the strong growth in investment and the relatively limited spare capacity in the Australian economy, the Board has been concerned, for most of the past year, about the potential for inflation to be above the target band over the period ahead. Given these concerns, it has maintained a mildly restrictive stance of monetary policy, with most lending rates in the economy a little above their medium-term averages. Broader financial conditions have also been tighter than normal, with credit growth subdued, the exchange rate at a high level and asset prices lower than earlier in the year. These financial conditions have helped contain the inflationary pressures in the economy, with underlying inflation a little below the midpoint of the target band.

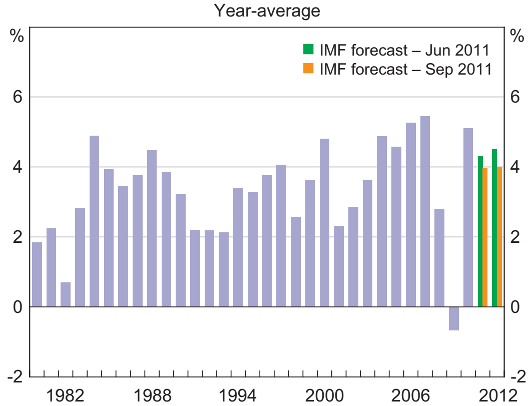
At its meetings over recent months, the Board has reviewed the improving outlook for inflation and ongoing moderate growth in the overall economy. At its November meeting, the Board judged that a more neutral stance of monetary policy was now appropriate given that, over the period ahead, inflation was likely to be consistent with the medium-term target and that economic growth remained moderate. As a result, after holding the cash rate steady at 4.75 per cent since last November, the Board reduced the cash rate by ¼ percentage point to 4.5 per cent. At its future meetings the Board will continue to set monetary policy so that it is consistent with achieving sustainable growth and 2–3 per cent inflation over time.

# 1. International Economic Developments

The recent intensification of concerns about sovereign debt problems in Europe has increased uncertainty about the outlook for the global economy. In the North Atlantic economies, there has been a sharp drop in measures of household and business confidence since August, and output growth in the second half of 2011 and in 2012 is expected to be slower than was earlier forecast (Graph 1.1). Nevertheless, there are few signs, at this point, of a repeat of the collapse in trade and investment that occurred in late 2008; moreover, the US economy is continuing to expand, albeit at a moderate pace. Asia continues to grow at a firm pace, supported by ongoing strength in domestic demand.

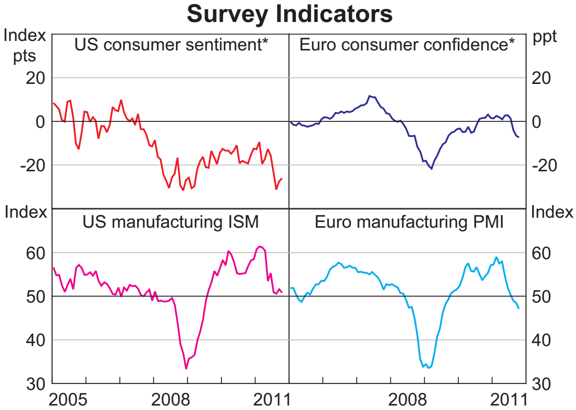
Notwithstanding the recent focus on downside risks, the IMF's central forecast for the global economy is for growth at around trend in 2012 (Graph 1.2). Of this growth, around three-quarters is expected to come from emerging economies and only one-quarter from the advanced economies (Graph 1.3). In particular, the IMF is forecasting growth in 2012 of around 9 per cent in China and 7½ per cent in India, while growth in the G7 economies is expected to be only around 1⅔ per cent.

**Graph 1.2**
**World GDP Growth***
Year-average



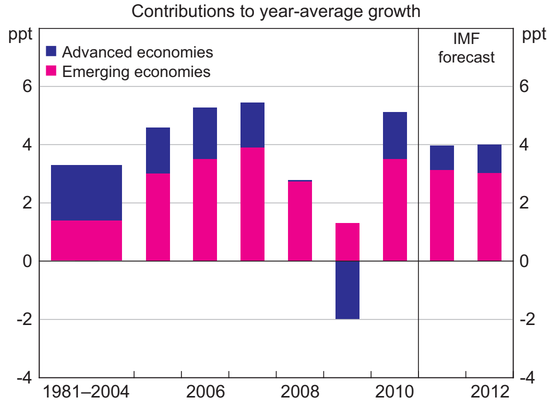

* Weighted by GDP at PPP exchange rates
Source: IMF

**Graph 1.1**
**Survey Indicators**




* Deviation from average since January 1990
Sources: Markit Economics; RBA; Thomson Reuters

**Graph 1.3**
**World GDP Growth**
Contributions to year-average growth

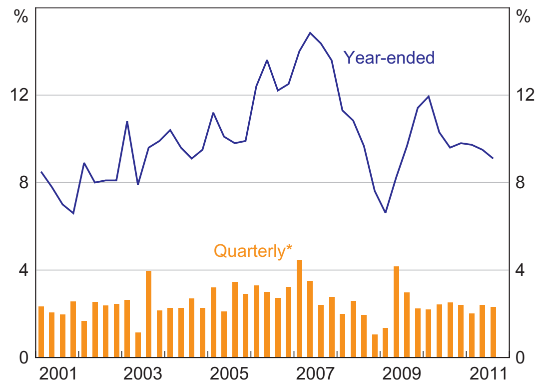



Sources: IMF; RBA

## Asia

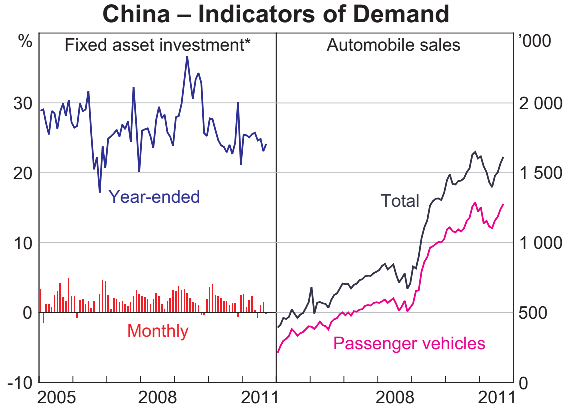
In China, the economy continues to expand at a firm pace, although recently the pace of growth has moderated a little. GDP is estimated to have increased by 2.3 per cent in the September quarter to be 9.1 per cent higher over the year, compared with growth of just under 10 per cent over 2010 (Graph 1.4). Some slowing in growth has been desired by the Chinese authorities to curb inflationary pressures and reflects, to some extent, tighter financial policy and the unwinding of earlier fiscal stimulus.

**Graph 1.4**
**China – GDP Growth**




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

**Graph 1.5**
**China – Indicators of Demand**




* Year-ended growth rates, and monthly growth rates prior to February 2011, are RBA estimates
Sources: CEIC; RBA

Growth in domestic demand remains strong, although it has eased from its earlier rapid pace. The withdrawal of fiscal stimulus has resulted in a significant slowing in infrastructure investment, while growth in both manufacturing and real estate investment has moderated from earlier in the year (Graph 1.5). Administrative measures have slowed the growth in turnover in the residential property market and have reduced property price inflation, with prices falling modestly in some cities. In contrast, automobile production and sales have increased strongly in recent months, returning to the levels recorded in late 2010, before the stimulus measures aimed at boosting passenger vehicle sales expired. Measures of activity also suggest that growth in overall industrial production and nominal retail sales continued at a solid pace. Furthermore, there has been strong growth in purchases of household appliances in rural areas, with government subsidies providing ongoing support to rural consumption.

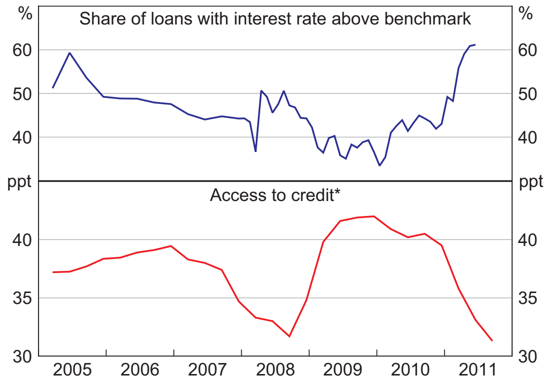
There are some signs that the weaker external economic conditions, particularly in the North Atlantic economies, are having an effect on Chinese exports, both directly and indirectly through supply chains in east Asia. While the value of Chinese exports to the North Atlantic has been broadly flat over the past six months, exports to east Asia (excluding Japan) peaked earlier in the year and have since contracted. Imports of goods for processing and assembly are also little changed since the beginning of the year, in part reflecting the moderation of east Asian exports of electronics to major developed economies. Nevertheless, imports of commodities remain at a high level.

Tighter financial conditions in China are having a significant effect on some parts of the economy, although the impact on other sectors is relatively limited. Growth in aggregate credit has slowed to around 16 per cent and the share of loans being charged interest rates above the relevant benchmark rate has increased to the highest level in six years (Graph 1.6). Some firms, including in the real estate sector, are reporting that the availability of credit has become as difficult as it was in mid to late 2008, prior to the monetary stimulus. However, enterprises engaged in the development of low-cost housing have been able to borrow more easily. There have also been reports that small- and medium-sized enterprises (SME) have had particular difficulty in accessing credit, which has resulted in the Chinese Government recently announcing measures to encourage lending to SMEs and reduce their tax burden.

Headline inflation appears to have peaked in China, due mainly to a moderation in food price inflation; after reaching 6.5 per cent in July, year-ended inflation eased to 6.1 per cent in September (Graph 1.7). Pork prices, which were a major contributing factor to the pick-up in inflation during late 2010 and early 2011, have fallen from their recent peaks. Excluding food, inflation looks to have stabilised at around 3 per cent in recent months, with much of the increase in earlier months reflecting second-round effects of increases in commodity prices. Clothing prices have recorded their highest rate of inflation in a decade, and earlier increases in agricultural prices have contributed to a pick-up in inflation for tobacco and liquor prices, while furniture prices are also increasing at a relatively rapid pace. Although inflationary pressures remain firm in China, the modest slowing in domestic demand and the fall in commodity prices over recent months are both likely to contribute to lower inflation outcomes over the period ahead.

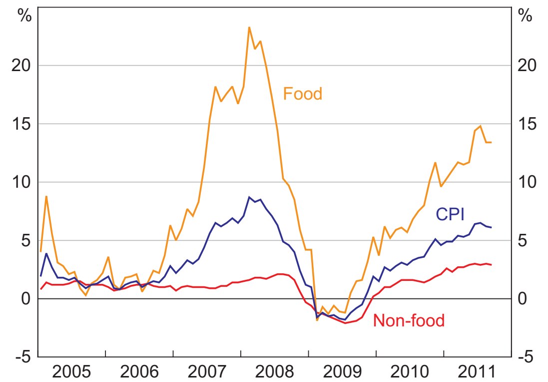
Inflation in India also remains high, although recently there has been some slowing in non-food manufacturing inflation (a measure of 'core inflation'). This moderation can be expected to continue as lower commodity prices begin to flow through into other prices. In response to high rates of inflation over recent months, the Reserve Bank of India increased its repo rate by 25 basis points in both September and October to bring the cumulative increase in interest rates since early 2010 to 375 basis points.

**Graph 1.6**
**China – Credit Conditions**




* Share of firms reporting relatively easy access to credit less the share of firms reporting relatively tight access to credit
Sources: CEIC; The People's Bank of China

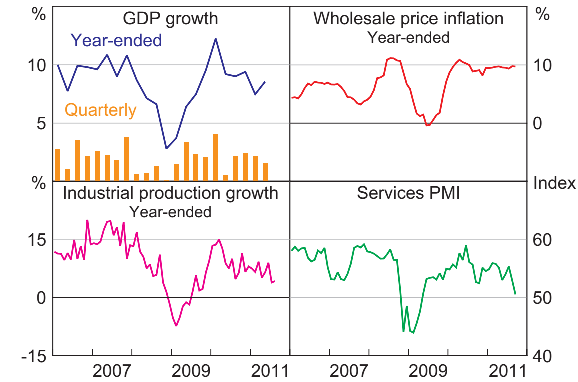
**Graph 1.7**
**China – Consumer Price Inflation**
Year-ended




Source: CEIC

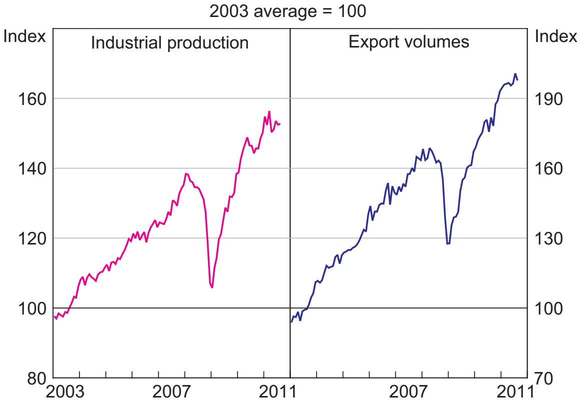
Some slowing in growth in the Indian economy is likely from the 7½–8 per cent pace expected for 2011. Growth in agricultural output is expected to ease, although the level of production will remain high following two consecutive years of around average summer rainfall. Growth in industrial production has slowed noticeably this year and, excluding capital goods, production is estimated to have contracted by 3 per cent between March and August (Graph 1.8). Recent data published by the Reserve Bank of India indicate that services exports grew strongly in the September quarter, suggesting that conditions in India's largest sector remain favourable, although the services PMI has fallen in recent months.

## Graph 1.8
### India – Economic Indicators




Sources: CEIC; Markit Economics; RBA

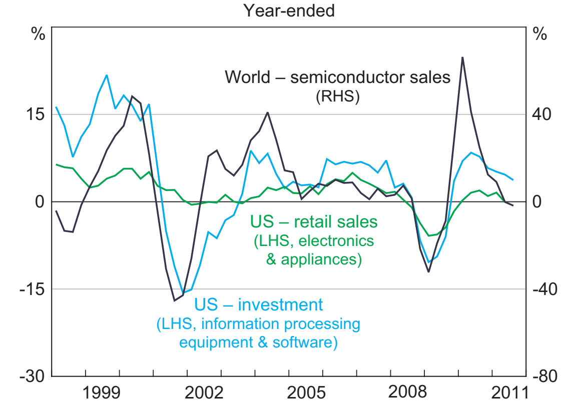
## Graph 1.9
### East Asia* – Production and Exports
2003 average = 100




* Excluding China and Japan; Hong Kong and Indonesia also excluded from industrial production

Sources: CEIC; IMF; RBA; United Nations

## Graph 1.10
### Electronic Goods Demand Growth
Year-ended




Sources: RBA; Thomson Reuters

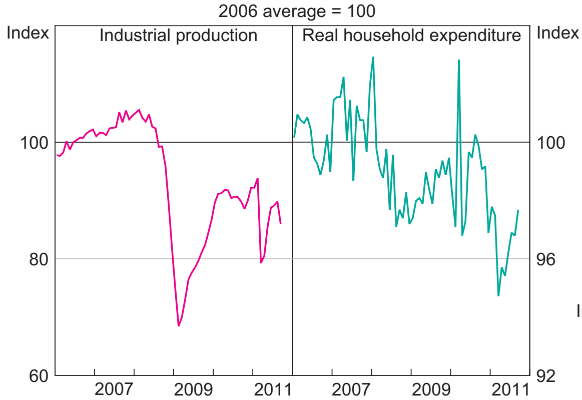
In east Asia (excluding China and Japan), industrial production has grown only modestly over 2011 (Graph 1.9). This partly reflects an easing in the pace of electronics production in the region, consistent with slowing investment in computing equipment and demand for consumer electronics in the euro area and the United States (Graph 1.10). After strong growth in July following the easing of supply-chain disruptions from the Japanese earthquake, exports fell modestly in August and values data suggest a further decline in September. Weakness in exports to the North Atlantic economies, primarily reflecting the subdued demand for electronics, has been partly offset by a noticeable pick-up in exports to other countries outside the region.

Domestic demand in the region grew strongly in the middle of the year, but timely data suggest that momentum has eased in recent months. Retail sales and indicators of investment in the higher-income economies have softened a little, reflecting the tightening of monetary policy in 2010 and early 2011 and the effects of weaker external demand. Nonetheless, retail sales grew at an above-average pace in the September quarter and consumer confidence has remained high in most countries in the region, despite concerns about global growth and significant falls in local share markets.

Headline rates of inflation in east Asia are lower than their rapid pace earlier in the year, as energy prices have fallen and food price inflation has eased. Monthly rates of core inflation have been above average for most of 2011, and measures of capacity utilisation, including employment rates, remain at high levels.

Following a relatively rapid rebound through the June quarter, the pace of recovery of the Japanese economy from earthquake-related disruptions has slowed. Consumption expenditure has only just reached its pre-earthquake levels, and industrial production fell in September after growing only modestly over July and August to be well below pre-earthquake levels (Graph 1.11). There has been an increase in imports of liquefied natural gas (LNG) to power thermal generators, since the majority of nuclear power stations across Japan are currently shut down. Looking through some policy-related volatility, housing starts in the earthquake-affected regions have increased and the rebuilding is expected to boost growth over the coming year.

**Graph 1.11**
**Japan – Economic Indicators**
2006 average = 100



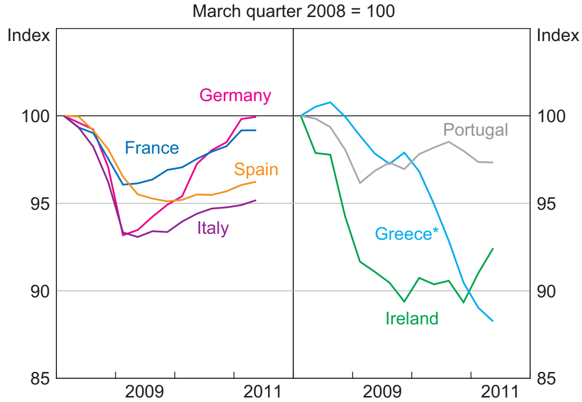

Source: Thomson Reuters

## United States and Europe

The pace of growth in the euro area has slowed and the outlook for Europe remains highly uncertain. The German economy has been benefiting from relatively low growth in unit labour costs over a number of years, which, combined with the depreciation of the exchange rate, a global recovery in investment and growing demand for consumer durables in China, has driven strong export-led growth. Recently, however, sharp declines in confidence, fiscal tightening and continued weak consumer demand have slowed the recovery in domestic demand. Retail sales in Germany fell by 2 per cent over the three months to September and forward-looking indicators of growth in exports and in machinery and equipment investment have moderated.

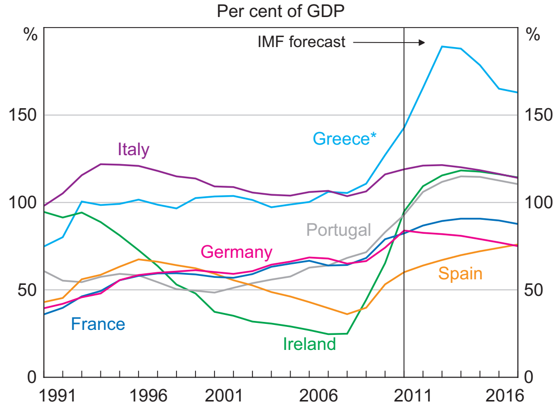
Elsewhere in the euro area, particularly in Greece, Ireland, Italy, Portugal and Spain, fiscal tightening, banking system issues, reduced confidence and high unemployment are weighing on domestic demand. Furthermore, the slowing in the northern euro area economies is likely to make economic conditions in the southern economies more difficult; Germany and France together account for over 20 per cent of merchandise exports from Greece, Ireland, Italy, Portugal and Spain. In Greece and Portugal, GDP has continued to contract, while growth remains weak in Italy and Spain (Graph 1.12). Activity is expected to remain weak in these economies for an extended period, as a result of ongoing fiscal consolidation to lower debt burdens and the substantial structural adjustments that are still needed to regain competitiveness (Graph 1.13). Outcomes in Ireland have been somewhat better; after a very large contraction in output, the Irish economy returned to growth in 2011, partly as a result of a marked improvement in competitiveness.

**Graph 1.12**
**Euro Area – GDP**
March quarter 2008 = 100




* Seasonally adjusted by RBA from March 2010
Sources: RBA; Thomson Reuters

**Graph 1.13**
**Euro Area – Gross Government Debt**
Per cent of GDP

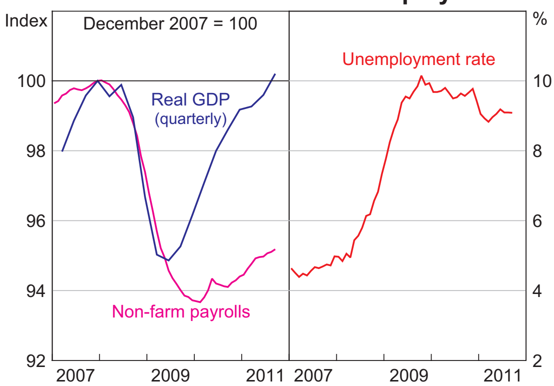



* Forecast does not incorporate policy and macroeconomic developments since September 2011
Source: IMF

Growth in the United States was subdued in the first half of 2011, reflecting the ongoing difficult adjustment in balance sheets following the financial crisis, as well as temporary factors including the supply-chain disruptions from the Japanese earthquake and high oil prices. Data for recent months have, on balance, been a little more positive. GDP grew by 0.6 per cent in the September quarter, driven by growth in consumption and business investment, and forward-looking indicators of activity continue to improve.

Despite the recent pick-up in growth, GDP has only just returned to its pre-crisis peak and the labour market is still soft (Graph 1.14). In early September President Obama proposed a fiscal stimulus package worth around 3 per cent of GDP, although it is uncertain which parts of the package might be passed by Congress. The Federal Reserve has also begun to increase the average maturity of its portfolio to put further downward pressure on long-term interest rates (see 'International and Foreign Exchange Markets' chapter for more details).

**Graph 1.14**
**United States – GDP and Employment**



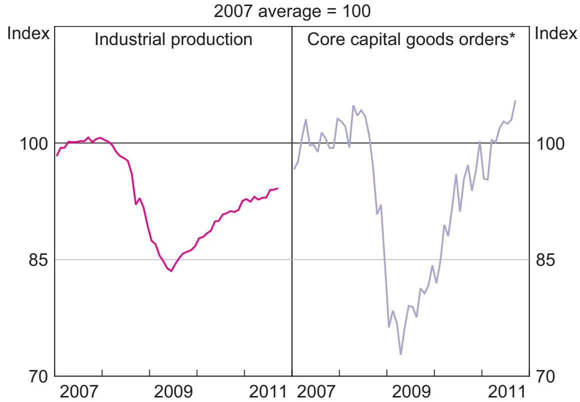

Source: Thomson Reuters

In contrast to the declines in consumption that followed the sharp falls in confidence and financial wealth in 2008, consumption growth picked up in the September quarter. Growth was driven by consumption of services, while consumption of motor vehicles contracted for the second consecutive quarter. The growth in consumption has been accompanied by a fall in the saving ratio, as the weak labour market has weighed on income growth. The unemployment rate remains high at 9.1 per cent, and recent data on employment growth and initial jobless claims suggest that the recovery in the labour market is proceeding very slowly. The private sector continues to hire people at only a modest pace, while public-sector employment is still declining, reflecting ongoing budgetary pressures at all levels of government.

The housing market also remains weak. The stock of unsold homes has not declined significantly and housing construction activity continues to be at very low levels. Population growth is, however, gradually reducing the underlying surplus of houses and there are some signs that house prices have stabilised, particularly in those areas that were less affected by overbuilding in the mid 2000s.

Despite falls in survey-based measures of business conditions, data on business activity have been more positive. Machinery & equipment investment grew by 4.1 per cent in the September quarter and forward-looking indicators of investment suggest continued expansion (Graph 1.15). Industrial production continues to recover from the soft patch in the middle of the year related to the Japanese supply-chain disruptions, while non-residential building activity has also picked up in recent months, although from low levels.

**Graph 1.15**
**United States – Production and Orders**
2007 average = 100



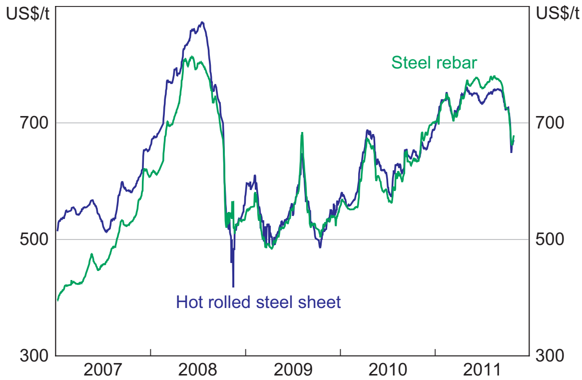

* New non-defence capital goods orders excluding aircraft
Source: Thomson Reuters

Headline inflation in the United States remains quite high, despite subdued activity. Core CPI inflation has picked up to 2.0 per cent in year-ended terms, although the monthly pace eased in September, while year-ended food price inflation reached 4¾ per cent. Although oil prices have moderated since April, retail energy prices have remained relatively high.

## Commodity Prices

Global commodity prices have mostly fallen over the past three months as concerns about global growth have escalated amid ongoing sovereign debt problems in Europe. Spot prices for iron ore and coking coal have declined sharply, pointing to some easing in global demand in addition to increasing supply (Graph 1.16 and Table 1.1). Some exchange-traded commodities, in particular base metals, have

**Graph 1.16**
**Chinese Steel Prices**



Sources: Bloomberg; RBA

**Table 1.1: Commodity Price Growth[(a)]**
SDR, per cent

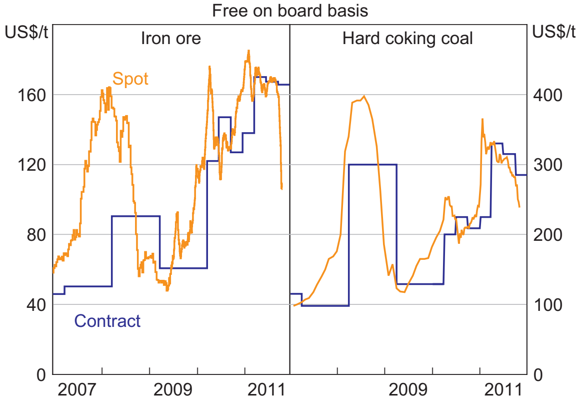
| | Change since previous *Statement* | Change over the past year |
|---|---|---|
| Bulk commodities[(b)] | | |
| – Iron ore | –34 | –20 |
| – Coking coal | –21 | 6 |
| – Thermal coal | –1 | 12 |
| Rural | –3 | 3 |
| – Beef | 4 | 10 |
| – Cotton | –3 | –28 |
| – Wheat | –4 | 3 |
| – Wool | –10 | 30 |
| Base metals | –14 | –11 |
| – Aluminium | –12 | –12 |
| – Copper | –14 | –5 |
| – Lead | –17 | –17 |
| – Nickel | –20 | –21 |
| – Zinc | –15 | –19 |
| Gold | 8 | 29 |
| Oil[(c)] | 6 | 23 |
| – US$ terms | 3 | 23 |
| RBA ICP | –4 | 19 |

(a) RBA Index of Commodity Prices components except oil and bulk commodities; latest available
(b) Spot prices
(c) Average of WTI and Tapis crude oil prices
Sources: Bloomberg; RBA

also recorded pronounced falls, in line with weaker sentiment in financial markets.

Spot prices for the steelmaking commodities – iron ore and coking coal – have fallen sharply over the past month or so, as have steel prices, reflecting a decline in the demand for steel. Weak demand has also led to a slowing in global steel production. Demand for iron ore in Europe appears to have weakened, which has led to some diversion of supply towards Asia, although reports suggest that demand from Asia has also eased. Increased global supply, owing to iron ore capacity expansions and the recovery in Australian coal production following the Queensland floods, may have also weighed on prices. The iron ore spot price has declined particularly rapidly, to around 30 per cent below the December quarter contract price, though it remains more than double the lows seen in 2009 (Graph 1.17). The coking coal spot price is around 16 per cent below the current contract price, but it remains above the levels seen prior to the sharp increase following the Queensland floods. Pricing mechanisms in the iron ore market continue to evolve. Terms for contract sales continue to shorten, with a significant proportion of sales now on a monthly basis, which is spurring the development of iron ore swaps and futures markets.

**Graph 1.17**
**Bulk Commodity Prices**
Free on board basis

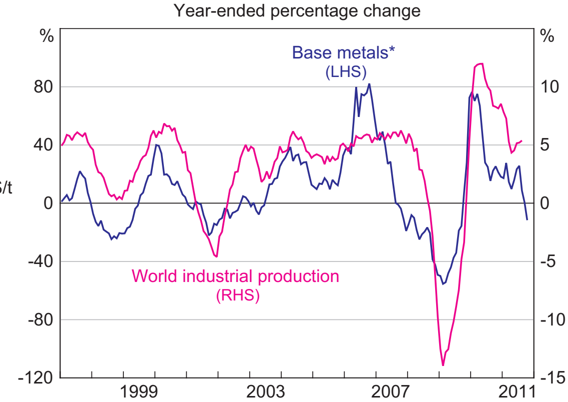



Sources: ABARES; Bloomberg; Citigroup; Energy Publishing; Macquarie Bank; RBA

The prices of energy-related commodities such as thermal coal and oil have been little changed over recent months. The resilience of the thermal coal spot price, relative to the other bulk commodities, may reflect different demand conditions; the shutdown of nuclear power generation capacity in several countries and relatively weak hydro-electricity production in China appear to be providing particular impetus to thermal coal demand. Global crude oil prices have been broadly steady over recent months, as the supply-demand balance remains relatively tight, owing partly to disrupted supplies from Libya.

Base metals prices, as measured by the RBA Index of Commodity Prices, have fallen by 14 per cent since the previous *Statement*, reflecting the reassessment of prospective global demand and production (Graph 1.18). The prices of precious metals have fluctuated significantly over recent months. The gold price posted a fresh record high in early September, before declining sharply; nonetheless, it remains at a high level.

**Graph 1.18**
**Base Metals Prices and Industrial Production**
Year-ended percentage change

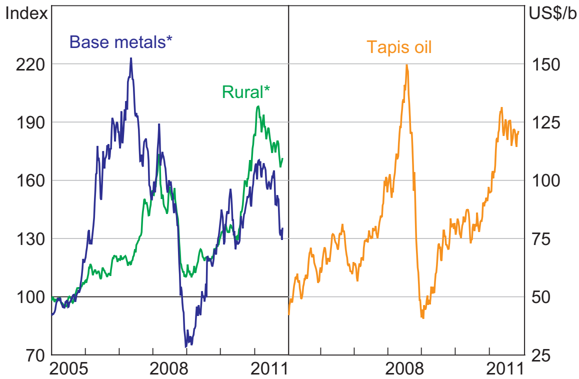



* SDR terms
Sources: CEIC; RBA; Thomson Reuters; United Nations

Global food prices have continued to fall over recent months, contributing to some moderation in global consumer price inflation. The price declines have been broadly based. Nonetheless, prices remain high, as strong income and population growth in developing countries, combined with their relatively high income elasticity of food demand, continue to support demand for grains and increasingly for high-protein foodstuffs such as meat. Poor climatic conditions have weighed on the outlook for supply of a number of rural commodities over recent months, including wheat, corn and cotton, but the impact on prices has been muted given the broader easing in commodity markets (Graph 1.19). Wool prices have also fallen over the past three months, which has been attributed to a softening in demand from Chinese wool mills, but they remain at high levels after an earlier strong run-up.

In aggregate, the RBA Index of Commodity Prices has fallen by 4 per cent over the past three months, although recent falls in spot prices for the bulk commodities are yet to be fully reflected in this index; other aggregate measures of commodity prices have also generally recorded falls over recent months (for more detail on alternative measures of commodity prices, see 'Box A: A Comparison of Commodity Indices').

**Graph 1.19**
**Commodity Prices**
Weekly



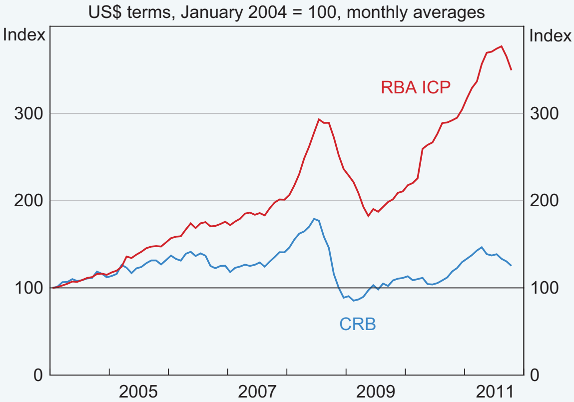

* RBA Index of Commodity Prices sub-indices; SDR terms; 2005 average = 100
Sources: Bloomberg; RBA

## Box A

# A Comparison of Commodity Indices

Some frequently reported commodity indices have diverged significantly over recent years (Graph A1). For example, the Reserve Bank's Index of Commodity Prices (RBA ICP) has increased strongly in recent years, in line with large rises in most individual commodity prices of relevance to Australia, whereas the Thomson Reuters/Jefferies CRB Index (CRB) is still around the same levels as it was in 2005. The divergent trends in these two indices reflect differences between price indices (primarily due to different weighting schemes) as well as differences between price and investor return indices.

**Graph A1**
**Commodity Indices**
US$ terms, January 2004 = 100, monthly averages



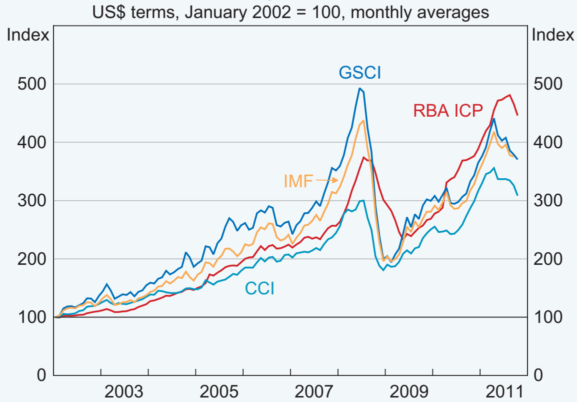
Sources: Bloomberg; RBA

## Differences between Price Indices

One group of commodity indices are price indices, which measure changes in the market value of a basket of individual commodities due to changes in the constituent prices. These price indices can diverge from each other if either the weights on individual commodities or the underlying price measures for the individual commodities differ, or through some combination of the two.[1]

Differences in the weights are a key source of divergence. For example, the S&P GSCI (GSCI) has around a two-thirds weight on energy commodities, while the Thomson Reuters Continuous Commodity Index (CCI) places equal weights on 17 different commodities (Graph A2). Indices with higher weights on energy commodities are designed to reflect the economic importance of this particular sector. Indices with more diversified weights are instead designed to capture broad-based trends in commodity prices. Other weighting schemes include trade weights, which are used in the IMF's All Primary Commodities Index (IMF).

**Graph A2**
**Commodity Price Indices**
US$ terms, January 2002 = 100, monthly averages



Sources: Bloomberg; IMF; RBA

1 There are also other generally less significant methodological differences among price indices, such as the frequency with which weights are updated.

While many commodity price indices use weights based on global factors, country-specific indices can also be constructed using weights that reflect the composition of a particular country's exports, such as the RBA ICP for Australia. The RBA ICP places relatively high weights on coal and iron ore reflecting their high share in Australia's exports.[2]

Market-based commodity price indices, such as the GSCI and CCI, are typically based on futures prices as these are often more relevant to financial investors. Indices based on futures prices are also usually produced on an 'investor return' basis (discussed below). In contrast to market-based indices, commodity price indices constructed by public institutions, such as the IMF index and the RBA ICP, also include spot prices and (in some cases) contract prices, as these can be more relevant for the real economy. The RBA ICP is intended to gauge developments in prices that are relevant for Australian exporters, which for some commodities have historically been substantially determined by contract prices. Contract and some spot prices, however, sometimes lag movements in futures prices and this can result in the RBA ICP lagging other measures of commodity prices.

## Differences between Price and Investor Return Indices

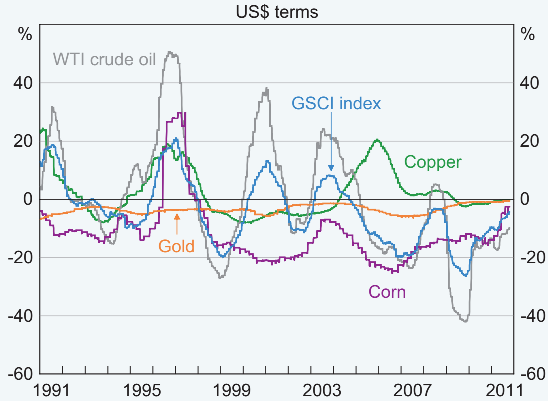
A second group of commodity indices measure investor returns. Typically, financial investment in commodities occurs through futures markets as this incurs no storage costs and only small funding costs. However, the effective return on these investments needs to take account of the return (or loss) that is made in moving from one futures contract to another, known as the 'roll return'. This roll return (or loss) arises because a futures contract approaching expiry needs to be rolled over if the investor is to maintain exposure without accepting physical delivery of the commodity. This is done by simultaneously closing out an existing position in a futures contract that is approaching maturity and entering into a new position in a contract with a longer term to maturity. The difference in the values of the two contracts creates roll return, which in turn contributes to (or in the case of a loss, subtracts from) the size of the investment. When the next futures contract price is above the spot price (to which the price of the current futures contract must converge) – a situation known as 'contango' – the roll return will be negative, whereas when the futures price is below the spot price – a situation known as 'backwardation' – the investor receives a positive roll return. Investor return indices that capture both movements in futures prices and roll returns are referred to as 'excess return' indices.

Until the mid 2000s, roll returns did not on average have a large effect on overall investor returns, although they were at times significant, particularly for some commodities, such as oil (Graph A3). However, since the mid 2000s, aggregate roll returns have been negative and have accounted for much of the divergence between price and excess return indices. This is part of the reason for the divergence between the RBA ICP (a price index) and the CRB (an excess return index) in Graph A1, alongside differences in the composition of the underlying commodity baskets.

The effect of negative roll returns is also evident from the GSCI, for which both (futures) price and excess return measures for the same underlying basket of commodities are published (Graph A4). Over the past 20 years, roll returns on the GSCI have on average been negative, which has offset cumulative price increases of around 200 per cent and resulted in a net excess return over this period of close to zero.

2 For more details on the RBA ICP, see Noone C and A Park (2009), 'Updating the RBA's Index of Commodity Prices', RBA *Bulletin*, October, pp 13–17 and 'Modifications to the Reserve Bank of Australia's Commodity Price Index', RBA *Bulletin*, September 1998, pp 1–4.

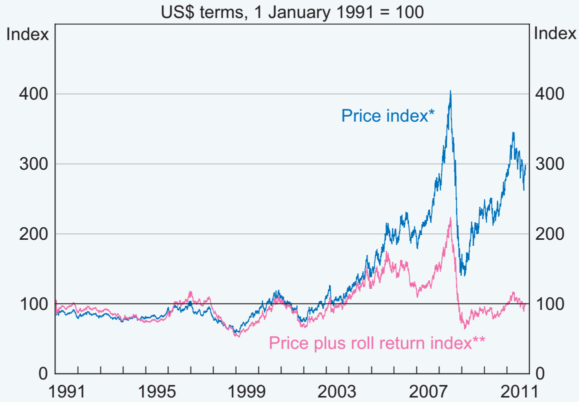
## Graph A3
### Selected Annual Roll Returns*
US$ terms




* The selected commodities are those with the highest weights in the energy, industrial metals, precious metals and agriculture sectors in the GSCI

Sources: Bloomberg; RBA

## Graph A4
### GSCI
US$ terms, 1 January 1991 = 100




* Officially called a 'spot' index

** Officially called an 'excess return' index

Source: Bloomberg

Although the investor return as measured by the GSCI and other broad-based excess return indices over a long period has been low, it is important to note that: only a small portion of a futures contract's value needs to be deposited as a margin, meaning that the funding cost of such an exposure is fairly small;[3] an investment in commodities through futures contracts avoids the storage costs of holding physical commodities, which in many cases can be significant; and other strategies for financial investment in commodities have been introduced to minimise negative roll returns. Such strategies include: investing further out along the futures curve; actively choosing to roll into the futures contract that provides the highest roll return; or placing lower weights on commodities in contango and higher weights on those in backwardation. ✠

3 Because investments in futures markets do not need to be fully funded, this creates what is known as 'collateral return' for financial investors. In addition to price and roll returns, so-called 'total return' indices also include this collateral return. It should be noted that neither excess return nor total return measures capture the potential broader benefits of investing in commodities, such as those related to portfolio diversification.

# 2. International and Foreign Exchange Markets

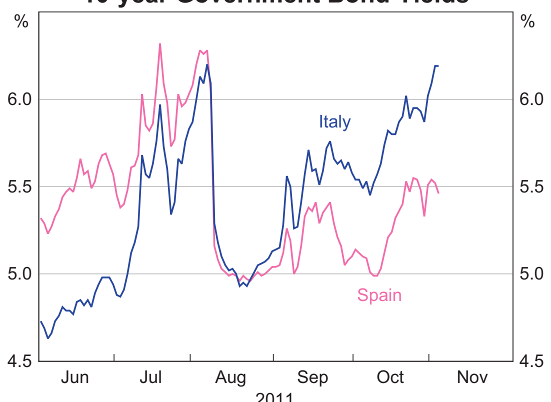
## Sovereign Debt Markets

Concerns about euro area government finances have intensified over the past year despite various policy responses. These responses have included financial assistance for Greece, Ireland and Portugal, comprising loans from other European countries and the IMF, and the purchase of these three countries' government bonds by the European Central Bank (ECB). To help fund these programs, in mid 2010 the euro area established the European Financial Stability Facility (EFSF), which had an initial lending capacity of around €250 billion, backed by guarantees from euro area countries.

Despite these measures, concern has spread from Greece, Ireland and Portugal to the government finances of Spain and Italy. Concerns rose in mid 2011 when it became clear that Greece would need additional external financial assistance, including from the private sector in the form of voluntary 'haircuts' on the value of outstanding Greek government bonds. At that time, these haircuts were expected to be around 20 per cent in net present value terms, and the additional official assistance was expected to be €109 billion.

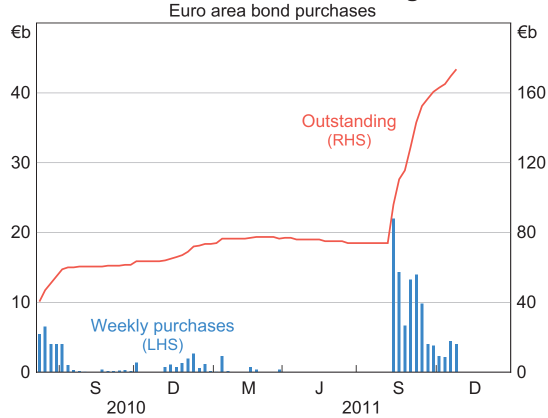
Yields on Italian government bonds rose particularly sharply in July and yields on Spanish sovereign bonds increased from already elevated levels (Graph 2.1). In response, the ECB extended its sovereign debt purchases in early August to include these bonds (Graph 2.2). This had an immediate effect of reducing the yields on these bonds but they have since increased again, particularly Italian yields. All major rating agencies downgraded Italy and Spain in recent months, some by multiple notches, due to fiscal sustainability and growth-related concerns. These downgrades were despite the Italian and Spanish Governments announcing additional austerity measures.

**Graph 2.1**
**10-year Government Bond Yields**




Source: Bloomberg

**Graph 2.2**
**ECB Securities Markets Program**
Euro area bond purchases

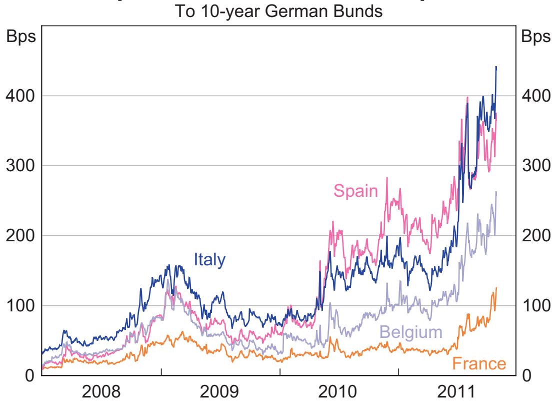



Source: European Central Bank

Due to the increased risk of contagion, European policymakers proposed changes to the EFSF in mid 2011, which were approved by all euro area countries by mid October. The facility will have an increased lending capacity of €440 billion (around €45 billion has already been allocated to the Ireland and Portugal programs and some will be committed to Greece), be able to buy euro area government bonds on primary and secondary markets, be permitted to lend to governments to finance bank recapitalisations, and may act on the basis of precautionary programs prior to official assistance.

France's government finances have come into focus, in part because France may need to provide additional support to other euro area governments. These concerns worsened after the French and Belgian Governments announced plans to break up and partly nationalise Dexia (see section on 'Financial Policy and Regulation') and due to broader concerns about the health of French banks, in part reflecting their exposures to the debt of the 'periphery' economies. Spreads between yields on French sovereign bonds and those on German Bunds widened significantly to more than 100 basis points, the highest since 1992 (Graph 2.3). Spreads on Belgian government bonds also widened.

**Graph 2.3**
**European Government Bond Spreads**
To 10-year German Bunds



Source: Bloomberg

Subsequently, European authorities proposed several measures aimed at restoring confidence in European sovereigns and banking systems. These include:

- a voluntary exchange of Greek government bonds involving a haircut of 50 per cent in nominal terms, intended to see Greece's government debt fall to around 120 per cent of GDP by 2020 from around 160 per cent of GDP currently;
- a new Greek assistance package of up to €130 billion, including up to €30 billion as credit enhancements for the bond exchange;
- banks marking their sovereign debt exposures to market and then increasing their core Tier 1 capital ratios to 9 per cent by mid 2012. Preliminary estimates by the European Banking Authority suggest a capital shortfall of €106 billion. Banks are expected to raise capital from the private sector and restrict dividends and bonuses if necessary. Any shortfall will be provided by national governments with, as a last resort, the funding coming from loans extended by the EFSF to member countries;
- providing government guarantees on banks' longer-term funding; and
- improving the effectiveness of the EFSF by leveraging its expected available lending capacity, by four or five times to around €1 trillion. Two broad options are being considered.

Details of many of these measures are yet to be finalised. Adding to the uncertainty about the plans, the Greek Prime Minister has proposed that Greece will hold a referendum to approve the new assistance package.

Officials from the European Commission, the ECB and the IMF (the 'troika') concluded their fifth review in October of the Greek Government's progress in meeting the targets under the first assistance program. Greece's budget deficit is expected to be well above target this year, on target in 2012 due to recently approved additional austerity measures, but then likely to exceed its 2013 and 2014 targets without further measures. European leaders and the IMF have both announced that should there be a referendum, there will be no further disbursements until after it is completed.

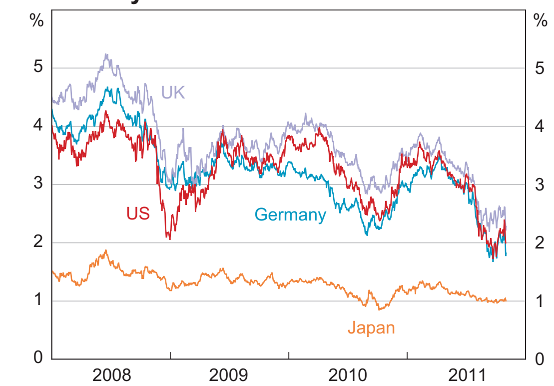
As a condition for Finland's participation in the second assistance package for Greece, an agreement was reached that will see Finland effectively reimbursed for losses of up to 40 per cent of its share of guarantees on Greek loans under the package. In return, Finland must make several concessions; no other countries have sought such an arrangement.

The troika's review of Ireland's economic program in October was favourable, with the Government meeting its commitments under the program, including comprehensive financial sector reforms. This has underpinned a significant narrowing in spreads on Irish government bonds.

Sovereign bond yields in most major economies declined sharply in recent months, with yields on US and German 10-year bonds falling to new multi-decade lows of well below 2 per cent (Graph 2.4). The declines occurred as investors switched funds towards these assets in the face of increased concerns about global growth prospects and European sovereign debt, and notwithstanding that yields were already at low levels. The US Federal Reserve's decision to increase its purchases of longer-term Treasuries also contributed to the decline in longer-term yields (see section on 'Central Bank Policy'). Yields were volatile in early August when Standard and Poor's (S&P) cut the US credit rating to AA+ but there was no lasting effect of this action.

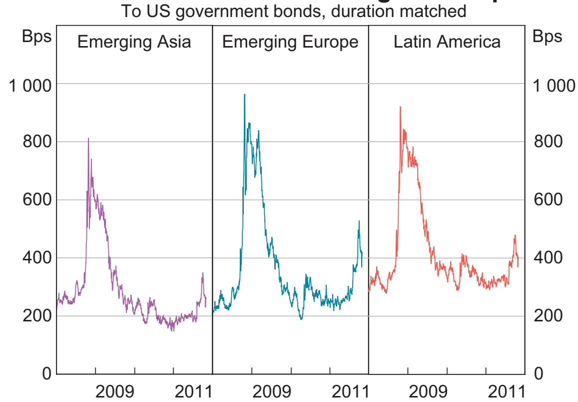
Through the first part of the year, spreads on US dollar-denominated debt issued by emerging market sovereigns had been relatively stable, notwithstanding the increasing concerns in Europe. These spreads widened between early August and early October reflecting the marked deterioration in financial market sentiment, but have recently narrowed (Graph 2.5).

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



Source: Bloomberg

**Graph 2.5**
**US Dollar-denominated Sovereign Debt Spreads**
To US government bonds, duration matched



Source: Thomson Reuters

## Central Bank Policy

Several central banks have eased monetary policy in response to the deterioration in financial market conditions and the weaker outlook for global growth. With their policy interest rates at, or close to, their effective lower bounds, the US Federal Reserve, ECB, Bank of England (BoE) and Bank of Japan eased policy via other means. Policy rates were lowered in Brazil, Indonesia and Israel in recent months (Table 2.1). In contrast, the Reserve Bank of India and the Bank of Thailand increased policy rates in response to ongoing domestic inflationary pressures.

### Table 2.1: Policy Rates

| | Current level<br>Per cent | | Most recent change | Cumulative increase<br>Basis points |
|---|---|---|---|---|
| Euro area | 1.50 | ↑ | Jul 11 | 50 |
| Japan | 0.05 | ↓ | Oct 10 | – |
| United States | 0.125 | ↓ | Dec 08 | – |
| Brazil | 11.50 | ↓ | Oct 11 | – |
| Canada | 1.00 | ↑ | Sep 10 | 75 |
| China | 6.56 | ↑ | Jul 11 | 125 |
| India | 8.50 | ↑ | Oct 11 | 375 |
| Indonesia | 6.50 | ↓ | Oct 11 | – |
| Israel | 3.00 | ↓ | Sep 11 | – |
| Malaysia | 3.00 | ↑ | May 11 | 100 |
| Mexico | 4.50 | ↓ | Jul 09 | – |
| New Zealand | 2.50 | ↓ | Mar 11 | – |
| Norway | 2.25 | ↑ | May 11 | 100 |
| Russia | 8.25 | ↑ | Apr 11 | 50 |
| South Africa | 5.50 | ↓ | Nov 10 | – |
| South Korea | 3.25 | ↑ | Jun 11 | 125 |
| Sweden | 2.00 | ↑ | Jul 11 | 175 |
| Switzerland | 0.00 | ↓ | Aug 11 | – |
| Taiwan | 1.875 | ↑ | Jun 11 | 63 |
| Thailand | 3.50 | ↑ | Aug 11 | 225 |
| United Kingdom | 0.50 | ↓ | Mar 09 | – |

Source: central banks

The US Federal Reserve announced it would increase the average maturity of its Treasuries portfolio by purchasing US$400 billion of longer-maturity securities at par value, funded by selling some of its existing holdings of shorter-maturity securities. The Fed also announced it will reinvest principal payments from its holdings of agency securities in agency mortgage-backed securities (MBS); previously these payments were reinvested in Treasuries. Although the total size of the Fed's balance sheet will remain largely unchanged, the policy is expected to provide mild stimulus to the broader economy by reducing longer-term bond yields. US 30-year fixed mortgage rates have declined to low levels but tighter lending standards since the crisis and reduced housing equity have curtailed this transmission channel of US monetary policy.

Around US$44 billion of longer-term Treasuries have been purchased since the Fed's program commenced in early October, largely matching sales of shorter-term securities. The Fed already holds around one-quarter of outstanding longer-term US Treasuries, with this share expected to rise to around two-fifths as a result of the latest program (Table 2.2). The Fed also stated that its policy rate is likely to remain at exceptionally low levels until at least mid 2013 and that an expansion of its large-scale asset purchases could be considered should additional monetary stimulus be required.

**Table 2.2: Federal Reserve Holdings of US Treasury Bonds[(a)]**
As at 28 September 2011, par values

| Residual maturity<br>Years | Federal Reserve holdings<br>US$ billion | Share of total outstanding<br>Per cent |
|---|---|---|
| 0 to 3 | 517 | 16 |
| 3 to 6 | 484 | 25 |
| 6 to 8 | 311 | 39 |
| 8 to 10 | 94 | 15 |
| 10 to 20 | 89 | 33 |
| 20 to 30 | 74 | 13 |
| **Total** | **1 569** | **21** |

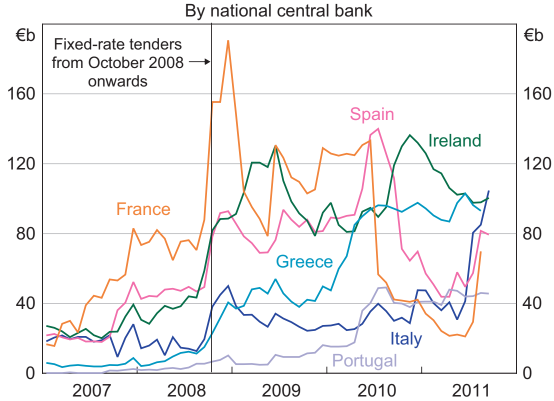
(a) Excludes Treasury Inflation Protected Securities
Sources: Bloomberg; Federal Reserve Bank of New York

The ECB's balance sheet has expanded markedly over recent months. In addition to the resumption of its sovereign debt purchases, ECB lending to banks has risen by nearly half since early April, with the bulk of this increase occurring since July. The latest available data show that a large share of this recent rise has been accounted for by lending to banks in Italy and France, although lending to the latter remained low relative to banking system assets (Graphs 2.6 and 2.7).

The ECB has also introduced additional measures to support bank funding and market liquidity. For the first time since late 2009, the ECB provided unlimited 12-month funding (against eligible collateral) at its policy rate in October and a 13-month operation, intended to span end 2012, will be conducted in December. Moreover, it will continue to provide unlimited shorter-term funding at its policy rate for as long as necessary, and at least until July 2012. The ECB also announced that it will purchase €40 billion of covered bonds over the next year in primary and/or secondary markets. The ECB already holds nearly €60 billion in covered bonds from an initial program that was completed in June 2010.

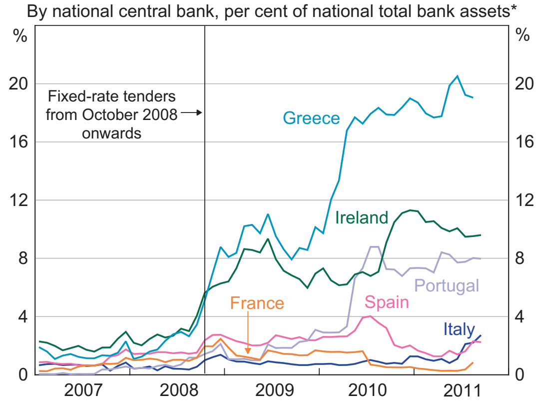
The BoE eased policy by renewing its purchases of government securities in October. It intends to purchase £75 billion of gilts over a four-month period; the BoE had purchased £200 billion of gilts between

**Graph 2.6**
**ECB Lending to Banks***
By national central bank




* Lending provided through monetary policy operations only
Source: central banks

**Graph 2.7**
**ECB Lending**
By national central bank, per cent of national total bank assets*




* Banks proxied by credit institutions for all countries except Portugal and France which use the broader category of monetary financial institutions
Source: central banks

March 2009 and January 2010. This will increase the BoE's holdings of outstanding gilts to around 30 per cent. Recent research by the BoE suggested that the policy easing effect of the £200 billion in gilt purchases may have been equivalent to a 150–300 basis points reduction in the policy rate.

## Financial Policy and Regulation

In Europe, the Belgian, French and Luxembourg Governments announced a plan to break up and partly nationalise Dexia. The bank had found it very difficult to access market funding, including for US dollars. The Belgian Government will acquire Dexia's Belgian retail operations for €4 billion and a 10-year €90 billion funding guarantee will be provided to the remaining privately held bank (Belgium will provide 60.5 per cent, France 36.5 per cent and Luxembourg 3 per cent). Dexia will also sell a number of subsidiaries to other investors. Following an earlier rescue in 2008, the Belgian and French Governments already own a significant stake in Dexia and have extended sizeable guarantees.

In the United States, the Federal Housing Finance Agency (FHFA) sued 17 large financial institutions in order to recover losses on MBS incurred by Fannie Mae and Freddie Mac. The lawsuits concern securities with a total face value of more than US$200 billion, although any losses for banks will be significantly smaller. Multiple other legal proceedings regarding banks' MBS issuance, mortgage lending and foreclosure practices have recently been launched or are ongoing.

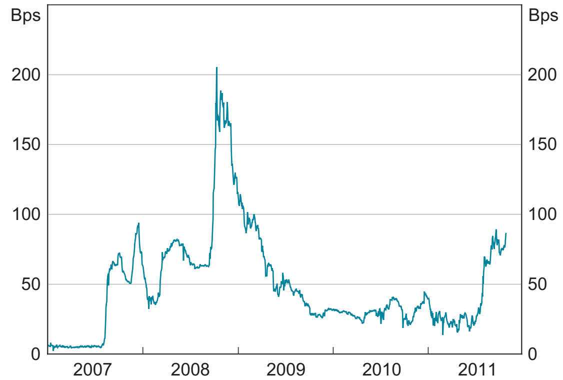
The FHFA also announced changes to its Home Affordable Refinance Program, introduced in 2009 to help borrowers to refinance mortgages owned or guaranteed by Fannie Mae and Freddie Mac. Mortgage modifications under the original program (895 000) were well short of initial expectations, in part because loan-to-valuation ratios (LVRs) could not be more than 125 per cent to qualify. Maximum LVRs will now not apply for fixed-rate loans, most fees for borrowers will be waived and banks will no longer need to meet certain loan representations and warranties. To qualify, borrowers must be current on repayments and not have had any late payments in the past six months. Borrowers will be encouraged to refinance into shorter-term mortgages so as to more quickly reduce loan balances and credit risk to Fannie and Freddie. The changes will become fully operational in the March quarter of 2012 and the program has been extended to end 2013.

US regulators also unveiled their proposal for the 'Volcker Rule' for banks, which forbids banks' proprietary trading activity and holdings in private equity and hedge funds. However, under the proposal banks may take trading positions on behalf of clients or as part of market-making activities, liquidity management and 'risk-mitigating hedging' (including of bank-wide portfolio risks). The proposal also introduces increased compliance and reporting requirements, to assist regulators in identifying permissible versus prohibited activities. Several regulatory agencies will be responsible for interpreting the rule and monitoring compliance in different markets.

## Credit Markets

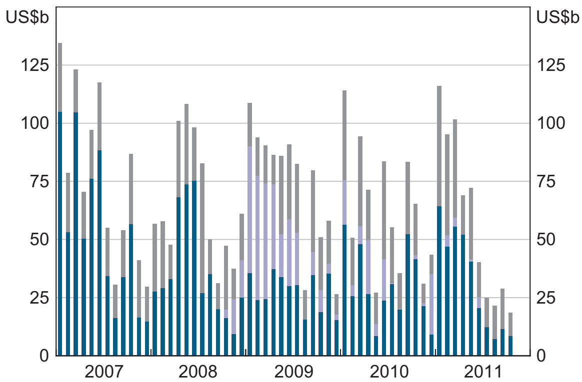
Credit market conditions have been stressed in recent months, particularly in unsecured lending markets, as concerns about fiscal sustainability in the euro area intensified. Funding pressures increased for some European banks and those in the 'periphery' countries remained largely locked out of funding markets. Reflecting heightened counterparty concerns, the cost to European banks of borrowing euros in the short-term unsecured market rose to its highest level since early 2009 (Graph 2.8). European banks' longer-term funding costs have also increased, while their bond issuance, even secured issuance in the form of covered bonds, has slowed sharply (Graph 2.9). However, the ECB's expansion of its liquidity provision described above means that banks are able to obtain funding in the period ahead, provided they hold sufficient acceptable collateral.

**Graph 2.8**
**Euro Interbank Borrowing Spread**
To overnight indexed swaps, 3-month maturity




Source: Bloomberg

**Graph 2.9**
**Euro Area Bank Bond Issuance**

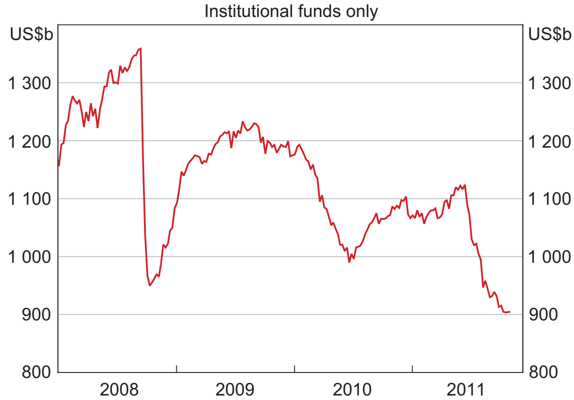



Sources: Bloomberg; Dealogic; RBA; Thomson Reuters

European banks also experienced a significant increase in the cost of borrowing US dollars to fund their US dollar obligations, which remain large in some cases. In part, this higher cost was because US money market funds have sharply reduced their holdings of European bank US dollar debt, by more than investor outflows from these funds (Graph 2.10). 'Prime' institutional funds have reduced their exposures to euro area banks by around half since May, with French bank exposures around three-fifths lower. As a result, European banks increasingly turned to foreign exchange markets to raise US dollars, with some banks also sourcing US dollars in repo markets. This increased the cost of swapping euros into US dollars relative to the cost of unsecured interbank funding (Graph 2.11). Some banks have also announced plans to further scale back their US dollar obligations.

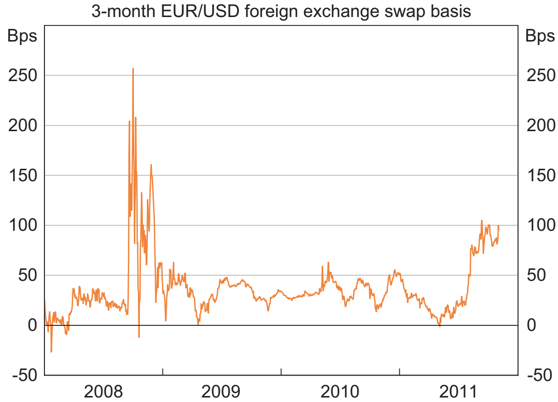
To alleviate banks' US dollar funding pressures around the end of the year, the major central banks announced that they will conduct US dollar liquidity operations with maturities of around three months in October, November and December. These are in addition to ongoing seven-day US dollar swap operations. However, recourse to these facilities has so far been negligible.

**Graph 2.10**
**US Prime Money Market Fund Assets**
Institutional funds only




Source: Investment Company Institute

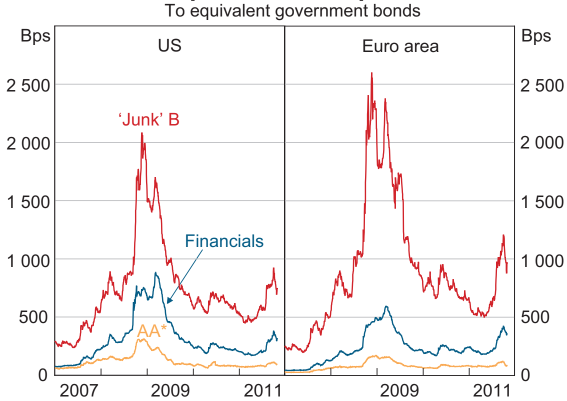
**Graph 2.11**
**Cost of Swapping Euros into US Dollars***
3-month EUR/USD foreign exchange swap basis




* Relative to the cost of unsecured interbank funding
Source: Bloomberg

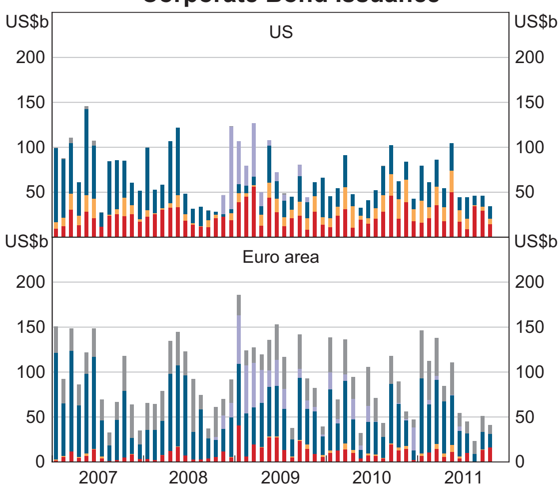
Reflecting the broader tensions in financial markets, corporate bond spreads in the United States and the euro area increased over the past few months (Graph 2.12). Spreads generally widened to the highest levels in around two years, with the increase for lower-rated companies and financial institutions most pronounced. However, yields on corporate bonds for highly rated non-financial companies fell modestly. Corporate bond issuance generally moderated in recent months (Graph 2.13).

**Graph 2.12**
**Corporate Bond Spreads**
To equivalent government bonds




* Non-financial corporates
Sources: Bank of America Merrill Lynch; Bloomberg; RBA

**Graph 2.13**
**Corporate Bond Issuance**




Sources: Bloomberg; Dealogic; RBA; Thomson Reuters

## Equities

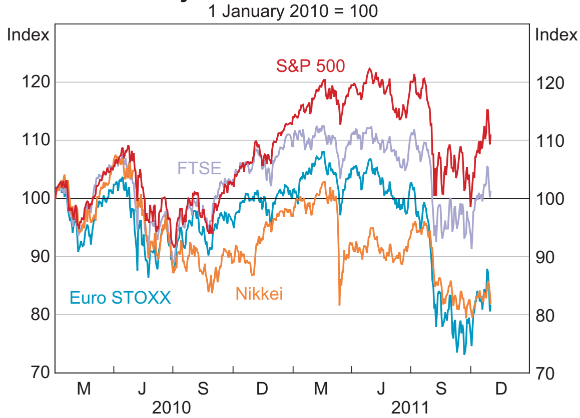
Global equity prices have exhibited sharp swings since mid year (Table 2.3, Graph 2.14). Share prices fell amid sovereign debt and global growth concerns, and in the euro area and Japan reached the lowest levels since early 2009. Although global equity prices increased with the announcement in October of plans to recapitalise European banks, they remain 13 per cent below the peak reached earlier this year. Share price volatility implied by options also remains elevated (Graph 2.15).

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

| | Since end 2010 | Since previous *Statement* |
|---|---|---|
| United States | | |
| – Dow Jones | 2 | –1 |
| – S&P 500 | –2 | –2 |
| – NASDAQ | 0 | –2 |
| Euro area | | |
| – STOXX | –18 | –9 |
| United Kingdom | | |
| – FTSE | –7 | –2 |
| Japan | | |
| – Nikkei | –16 | –10 |
| Canada | | |
| – TSE 300 | –9 | –4 |
| Australia | | |
| – ASX 200 | –12 | –3 |
| China | | |
| – China A | –11 | –6 |
| MSCI indices | | |
| – Emerging Asia | –12 | –8 |
| – Latin America | –14 | 2 |
| – Emerging Europe | –13 | –10 |
| **– World** | **–9** | **–4** |

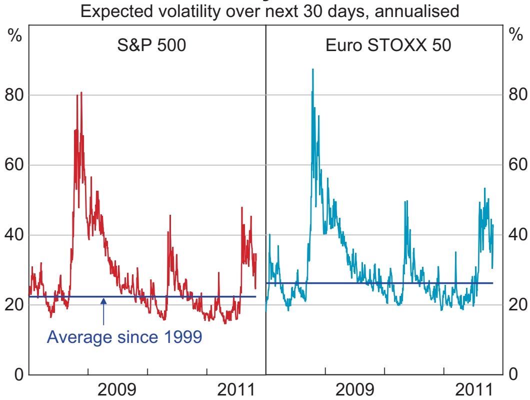
Source: Bloomberg

Graph 2.14
**Major Share Price Indices**
1 January 2010 = 100



Source: Bloomberg

Graph 2.15
**Volatility Indices**
Expected volatility over next 30 days, annualised

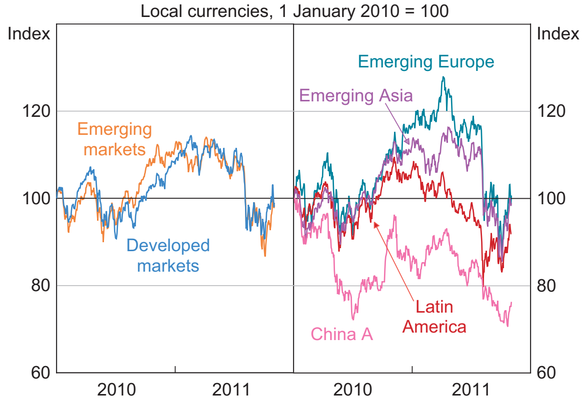


Source: Bloomberg

Banking sector share prices in the major economies continued to underperform, with the euro area banking index falling close to its March 2009 trough. Many banks are now trading at a significant discount to their book value. Earnings of large European and US banks reported for the September quarter were mixed both in absolute terms and relative to analysts' expectations. Investment banking revenues were generally weak and aggregate loan-loss provisions made in the quarter were modestly higher but remained well below those recorded between 2008 and 2010. In aggregate, about two-thirds of the six largest US banks' earnings were due to accounting gains on their own debt and derivatives positions; this also supported large European banks' earnings. The credit ratings of a number of large banks were downgraded in recent months, either due to downgrades of their sovereigns, a lower likelihood of government support and/or funding pressures. In addition, Fitch placed Goldman Sachs and Morgan Stanley on negative credit watch because these institutions' business models are particularly sensitive to market sentiment and regulatory changes.

Equity prices in emerging markets generally underperformed those in developed markets in recent months, a notable exception being Latin American equities (Graph 2.16). The decline in emerging Asia share prices partly reflected concerns by some about a possible sharp slowing in the Chinese economy and about the effect of slowing global growth on the region's exports. Some Asian equity markets experienced substantial selling by foreigners. Equity prices in Latin America rose in net terms over the past three months, supported in part by policy easing in Brazil, but have performed in line with other emerging equity markets since the start of the year.

Graph 2.16
**Share Price Indices**
Local currencies, 1 January 2010 = 100

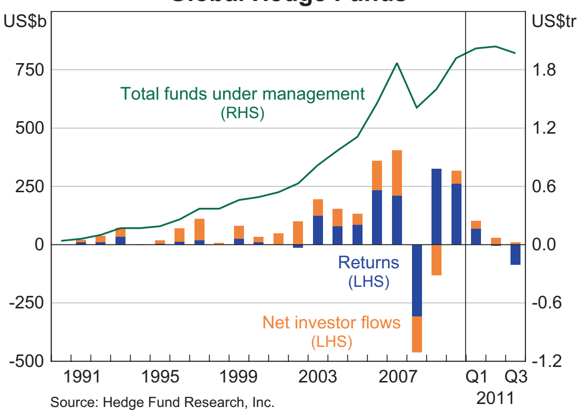


Sources: Bloomberg; MSCI

## Hedge Funds

Global hedge funds recorded a loss of 6.2 per cent over the three months to September, but nevertheless outperformed global equity markets over the same period (Graph 2.17). This is consistent with the tendency for global hedge funds to have experienced less volatile returns than global equity markets over recent years. Despite recent losses, global hedge funds have on average recouped the losses recorded during the 2008–09 global financial crisis, whereas the market value of global equities remains well below its 2007 peak. Funds under management fell over the September quarter to US$2.0 trillion, with recent losses outweighing relatively modest investor contributions.

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




Source: Hedge Fund Research, Inc.

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

| | Over past year | Since previous *Statement* |
|---|---|---|
| South African rand | 16 | 19 |
| Swiss franc | –10 | 15 |
| Mexican peso | 10 | 15 |
| Brazilian real | 2 | 12 |
| Indian rupee | 11 | 11 |
| New Zealand dollar | –3 | 9 |
| South Korean won | 1 | 6 |
| Indonesian rupiah | 1 | 6 |
| Singapore dollar | –1 | 6 |
| Malaysian ringgit | 2 | 6 |
| Canadian dollar | 1 | 5 |
| European euro | 2 | 4 |
| Swedish krona | 0 | 4 |
| New Taiwan dollar | –1 | 4 |
| Australian dollar | –3 | 4 |
| Thai baht | 3 | 3 |
| UK pound sterling | 1 | 3 |
| Japanese yen | –3 | 1 |
| Philippine peso | 0 | 1 |
| Chinese renminbi | –5 | –1 |
| **Majors TWI** | **0** | **4** |
| **Broad TWI** | **1** | **5** |

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

## Foreign Exchange

With market participants continually reassessing the prospects for an orderly resolution of the situation in Europe, frequent fluctuations in risk sentiment have translated into an increase in exchange rate volatility over recent months.

The US dollar has appreciated over recent months, and has retained its safe-haven status in the minds of many investors despite S&P's downgrade of the US sovereign credit rating in early August (Table 2.4). As market uncertainty increased towards mid September, funds invested in assets in offshore markets were repatriated to the United States, and to a lesser extent Japan. Profit-taking to cover losses on other asset holdings also appears to have been a motivation for the withdrawal of funds from offshore markets (with gold also being sold around this time despite the rise in global economic uncertainty). As a result, the US dollar appreciated by 7 per cent in trade-weighted terms between late August and early October. However, the US dollar has since retraced some of these gains and is currently around 5 per cent above the historical low it reached in

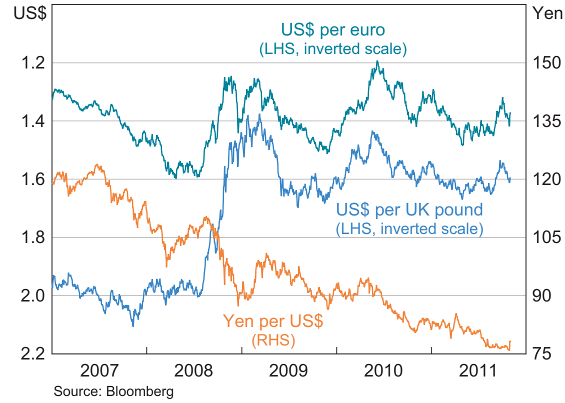
May, reflecting some improvement in risk sentiment after steps were taken by European policymakers to resolve the region's crisis.

The euro has traded in a relatively wide range over recent months, buffeted by the ongoing uncertainty. From late August and throughout September, growing scepticism regarding the Europeans' ability to resolve the debt crisis resulted in a 9 per cent depreciation of the euro against the US dollar over a five-week period, although the euro has reversed some of these losses since then. Overall, the euro has depreciated by 5 per cent against the US dollar since late August. Intraday volatility in the euro has risen to be currently around levels last seen in May 2010 (Graphs 2.18 and 2.19).

Amid the increase in market uncertainty, strong safe-haven demand saw the Swiss franc come under further appreciation pressure, posting record highs against the US dollar and the euro in mid August (Graph 2.20). The Swiss National Bank initially responded by introducing measures to increase franc liquidity and lower short-term interest rates, before imposing a ceiling of 1.20 Swiss francs per euro on 6 September. As a result, the Swiss franc has depreciated by around 15 per cent against the euro from its peak, but remains well above its long-run average. While intraday franc volatility has fallen from its exceptionally high levels in August, the franc is still sensitive to changes in market sentiment. With the attractiveness of the Swiss franc as a safe-haven asset now somewhat reduced, other perceived safe havens such as the US dollar and the Japanese yen have faced appreciation pressures.

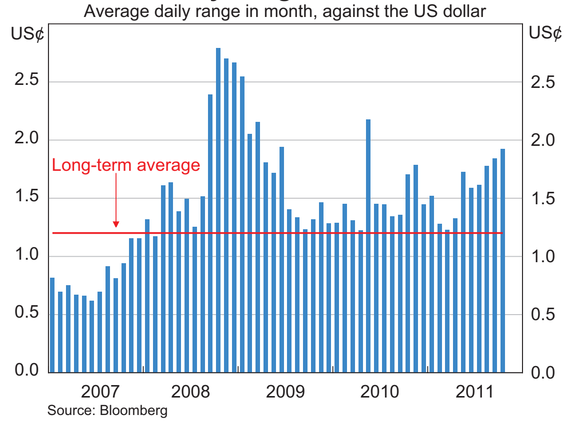
The yen initially appreciated to below 80 yen per US dollar in July on safe-haven demand and the repatriation of offshore investments. Between early August and mid October, it generally traded in a relatively tight range around 77 yen per US dollar. However, after the yen recorded a new post-World War II high of 75.32 yen per US dollar on 31 October, the Japanese authorities intervened for the fourth time in a little over a year. As a result, the yen has depreciated by around 3 per cent from the recent

**Graph 2.18**
**US Dollar**



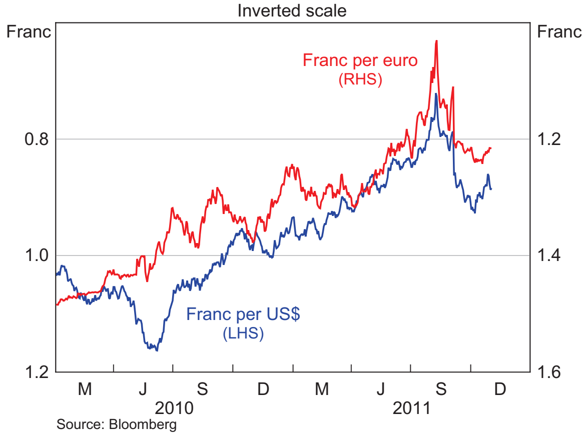

Source: Bloomberg

**Graph 2.19**
**Intraday Range in the Euro**
Average daily range in month, against the US dollar




Source: Bloomberg

**Graph 2.20**
**Swiss Franc**
Inverted scale



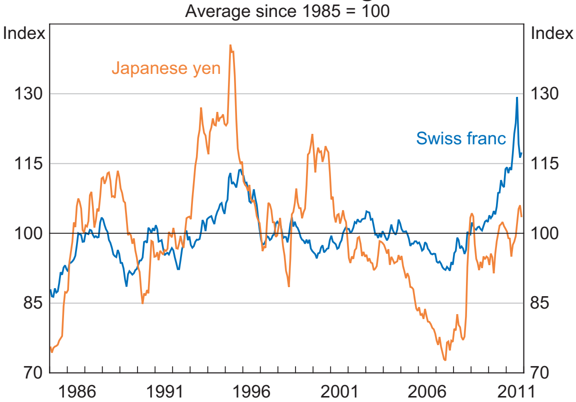

Source: Bloomberg

peak, and is currently trading around 78 yen per US dollar. The Japanese Government also recently proposed a package of measures that offers incentives for certain types of offshore investments in order to reduce appreciation pressures on the yen. The package includes some support measures for domestic exporters, which have become less internationally competitive as the exchange rate has strengthened.

While the yen has depreciated modestly against the US dollar over the past three months, it has appreciated by around 2 per cent in trade-weighted terms. In real terms, however, the yen trade-weighted exchange rate is not at particularly high levels, in contrast to the Swiss franc, which recently reached a new historical high in both real and nominal effective terms (Graph 2.21).

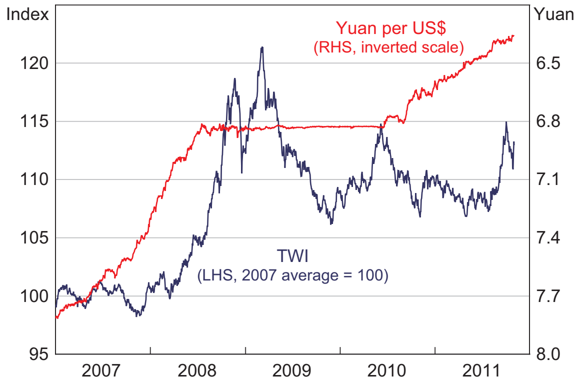
Despite the turbulent market conditions, the Chinese authorities have continued to gradually appreciate the renminbi over recent months. Overall, the renminbi has appreciated by around 4 per cent against the US dollar since the beginning of the year (Graph 2.22). In trade-weighted terms, the renminbi appreciated to a two-year high in early October, primarily reflecting the appreciation of the US dollar over the same period. It has since depreciated by 2 per cent from its peak.

**Graph 2.21**
**Real Effective Exchange Rates***
Average since 1985 = 100




* RBA estimates for October and November 2011
Sources: BIS; Bloomberg; RBA

**Graph 2.22**
**Chinese Renminbi***




* Onshore exchange rates
Sources: BIS; Bloomberg; RBA

The turbulent market conditions have been reflected, however, in the offshore renminbi exchange rate, which has traded at a discount to the onshore rate since late September. The negative market sentiment saw market participants sell renminbi in the offshore market, leading to a depreciation of the offshore exchange rate relative to the onshore exchange rate. The resulting spread between the onshore and offshore rates encouraged eligible firms to sell renminbi that had been acquired offshore through trade transactions at the higher onshore rate, with market reports indicating that this contributed to the exhaustion of the quarterly quota for renminbi conversion in late September. This quota applies to transactions undertaken by Bank of China (Hong Kong) (BoC(HK)), which operates the interbank renminbi market in Hong Kong and facilitates the settlement of renminbi-denominated trade transactions with the Mainland. The offshore rate is currently trading at a discount of around ½ per cent to the onshore rate, compared with an average premium of ¼ per cent since the offshore rate was introduced in September last year (Graph 2.23). The non-deliverable forward market currently embodies a small depreciation in the onshore renminbi exchange rate over the next year, for the first time since early 2009.

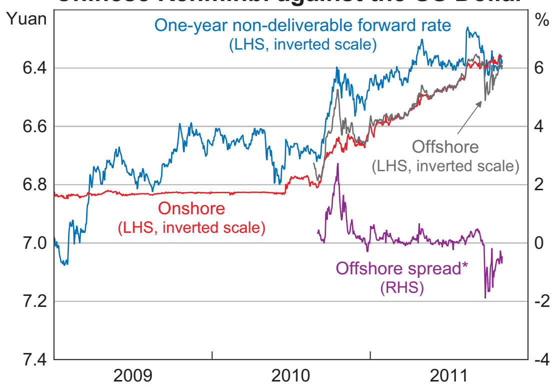
Through the first part of the year, emerging markets generally experienced strong capital inflows and upward pressure on their exchange rates, prompting intervention in foreign exchange markets and the introduction of various forms of capital controls to slow the pace of appreciation. However, since August, these trends have been reversed. Portfolio investment in emerging markets was reduced, particularly equity holdings, reversing some of the previous strong inflows. Emerging market currencies have generally depreciated against the US dollar over recent months, with the sharpest falls occurring in mid September as concerns about the outlook for the US economy added to the concerns about the euro area. Some of the falls in emerging market currencies, however, have since been partly retraced as sentiment had improved somewhat after steps were taken by the euro area authorities to resolve its regional debt crisis, notwithstanding an increase in market uncertainty more recently.

The South Korean won was particularly affected by the growing concerns in Europe, depreciating by as much as 12 per cent from its three-year high in early August. The Bank of Korea is reported to have intervened to support the won in late September by selling foreign exchange, with the won since appreciating by 6 per cent (Graph 2.24). In October, the authorities announced expansions in their currency swap arrangements with Japan and China.

Authorities in a number of other emerging Asian countries were also reported to have sold foreign exchange in larger-than-usual quantities. Consistent with this, the foreign exchange reserves of a number of emerging market economies declined over the September quarter, although valuation effects also played a role (Table 2.5). The declines in reserves were particularly pronounced in September, with Indonesia, Russia, South Korea, Taiwan and Thailand all recording large monthly falls in reserves. The Chinese reported a rare fall in their foreign exchange reserves – the largest fall in US dollar terms in at least 15 years. While valuation effects will have contributed to the fall, it seems that the Chinese authorities accumulated less foreign exchange than usual over the period. Nevertheless, China's foreign exchange reserves still exceed US$3 trillion.

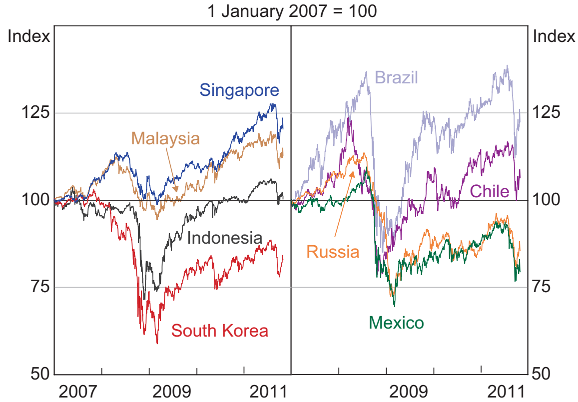
After reaching a 12-year high against the US dollar in late July, the Brazilian real had depreciated by almost 19 per cent by early October, though it has since recovered almost half of these losses. The Brazilian authorities responded by intervening in the foreign exchange swap market to support the real, a reversal of their previous strategy of introducing measures to dampen appreciation pressures.

**Graph 2.23**
**Chinese Renminbi against the US Dollar**




* Negative spread indicates one US dollar buys more yuan offshore than onshore
Source: Bloomberg

**Graph 2.24**
**Selected Currencies against the US Dollar**
1 January 2007 = 100




Source: Bloomberg

**Table 2.5: Foreign Exchange Reserves**
US$ equivalent (billions)

| | Monthly change | | Level |
|---|---|---|---|
| | Jul–Aug 2011 average | Sep 2011 | As at end Sep 2011 |
| China | 33 | –61 | 3 202 |
| Japan | 37 | –12 | 1 123 |
| Russia | 6 | –24 | 460 |
| Taiwan | 0 | –11 | 389 |
| Brazil[(a)] | 9 | –3 | 341 |
| South Korea | 3 | –9 | 296 |
| Thailand | 1 | –8 | 170 |
| Indonesia | 2 | –10 | 115 |
| South Africa | 0 | –1 | 40 |
| Chile[(a)] | 1 | 1 | 36 |

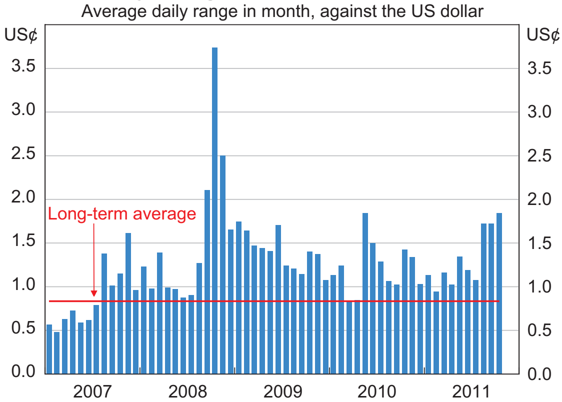
(a) RBA estimates of official reserve assets excluding gold
Sources: Bloomberg; CEIC; IMF; RBA

## Australian Dollar

Similar to most other currencies, the past three months have been a volatile period for the Australian dollar. Reflecting the market's broader uncertainty about the euro area debt situation, intraday volatility was elevated throughout the period, although liquidity in the market has remained satisfactory (Graph 2.25). From a recent high of more than US$1.10 in late July, the Australian dollar depreciated to an intraday low below US$0.94 on 5 October – its lowest level since September 2010 – but has since appreciated to be around US$1.02. On a trade-weighted basis, the Australian dollar is around 3 per cent higher than a year earlier and around 4 per cent below its recent high recorded in May (Graph 2.26, Table 2.6).

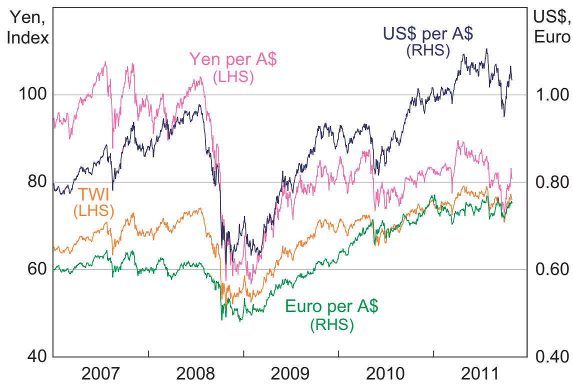
Through until mid September, the Australian dollar (and to a lesser extent, commodity prices) had remained relatively resilient in the face of large declines in global equity prices, in contrast to the experience in late 2008. However, as risk concerns broadened in September, the Australian dollar, and

**Graph 2.25**
**Intraday Range in the Australian Dollar**
Average daily range in month, against the US dollar




Source: Bloomberg

**Graph 2.26**
**Australian Dollar**




Sources: RBA; Thomson Reuters; WM/Reuters

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

| | Over past year | Since previous *Statement* |
|---|---|---|
| South African rand | 20 | 14 |
| Swiss franc | –7 | 10 |
| Indian rupee | 15 | 7 |
| New Zealand dollar | 1 | 5 |
| South Korean won | 4 | 2 |
| Indonesian rupiah | 4 | 2 |
| Singapore dollar | 2 | 2 |
| Malaysian ringgit | 5 | 2 |
| Canadian dollar | 4 | 1 |
| European euro | 6 | 0 |
| Thai baht | 7 | –1 |
| UK pound sterling | 4 | –1 |
| Japanese yen | 0 | –3 |
| US dollar | 4 | –4 |
| Chinese renminbi | –1 | –5 |
| **TWI** | **3** | **–1** |

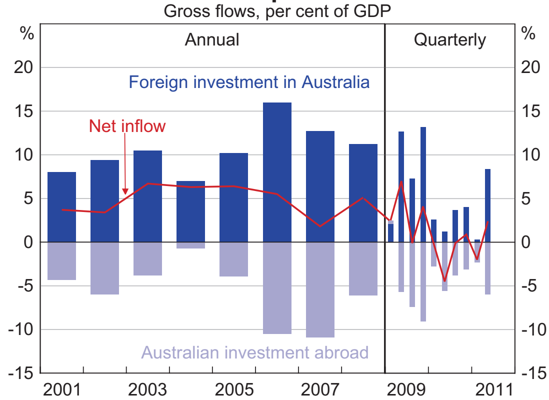
Sources: Bloomberg; Thomson Reuters; WM/Reuters

commodity indices, have reverted to moving more directly in line with swings in global financial market sentiment. (See 'Box A: A Comparison of Commodity Indices' for a discussion of why different commodity indices have diverged over recent years.)

## Capital Flows

Net capital inflows over the past two years have been dominated by inflows to the public sector. Net inflows of foreign investment into Federal Government securities continued in the June quarter although various offsetting outflows meant that the public sector overall made little net contribution. Instead, in the June quarter net capital inflows predominantly took the form of net foreign investment in the private sector, which recorded its largest net capital inflow since the December quarter 2009 (Graph 2.27). The net capital inflow to the private sector primarily reflected strong equity inflows to non-bank financial firms, who repatriated Australian equity investments from abroad as global equity prices declined. Foreign investors' net purchases of Australian bank debt securities remained subdued in the June quarter.

**Graph 2.27**
**Private Capital Flows***
Gross flows, per cent of GDP



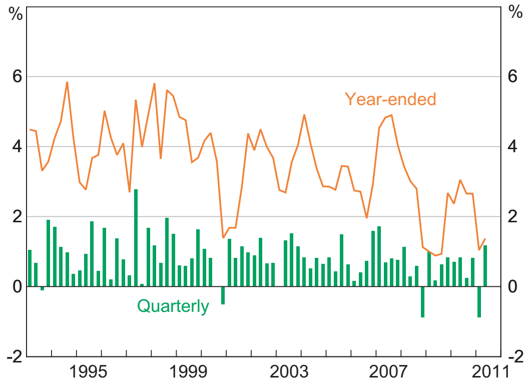

* Assumes all direct investment is private. Includes state government and public corporations, and adjusted for US dollar swap facility in 2008–2009
Sources: ABS; RBA

# 3. Domestic Economic Conditions

Recent economic data and liaison suggest that conditions continue to vary significantly across industries. The mining-related parts of the economy are performing strongly, with a number of large-scale mining projects underway and the terms of trade at very high levels. Overall, domestic demand continues to grow at a solid pace, although the high level of the exchange rate, fading impetus from Australian Government spending programs and changes in household spending and borrowing behaviour continue to weigh on activity in a number of industries. As has been the case in many other countries, the volatility in global financial markets resulted in noticeable declines in measures of consumer and business confidence in July and August, although confidence has since partially recovered.

GDP increased by 1.2 per cent in the June quarter to be up by 1.4 per cent over the year (Graph 3.1). For 2010/11 as a whole, GDP increased by 2.1 per cent, with the wet weather estimated to have subtracted around ½ percentage point from growth over this period (Table 3.1). Despite the large upswing in investment, mining sector activity is estimated to have grown below the pace of earlier years due to the flood-related decline in coal production and exports (Graph 3.2).[1] Growth in the non-mining part of the economy is estimated to have been below trend at around 1¾ per cent. Overall growth in labour productivity remains subdued, despite the strong growth in the capital stock, although recent outcomes have been affected by the disruptions in coal production (Graph 3.3).

**Graph 3.1**
**GDP Growth**



Source: ABS

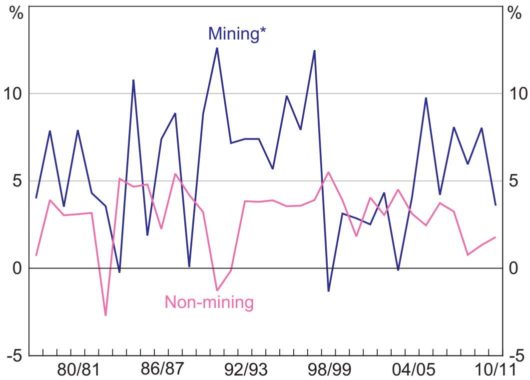
**Table 3.1: Output and Factor Input Growth**
Year-average, per cent

| | 2010/11 |
|---|---|
| Domestic final demand | 3.5 |
| – Private demand | 2.8 |
| – Public demand | 2.6 |
| Change in inventories[(a)] | 0.7 |
| GNE | 4.2 |
| Net exports[(a)] | –2.0 |
| GDP | 2.1 |
| Nominal GDP | 8.3 |
| Labour input | 3.2 |
| Capital stock | 3.8 |

(a) Contributions to GDP growth
Source: ABS

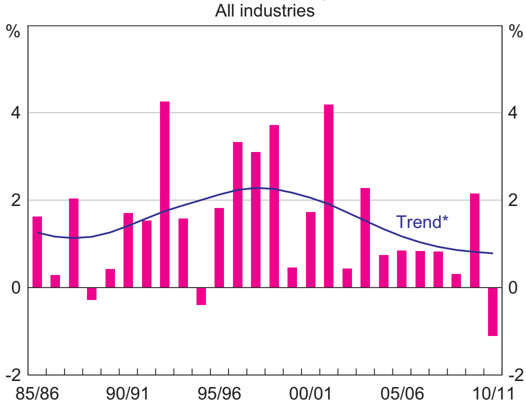
1 Mining output is estimated using the volume of resource exports and mining investment less its imported component. For more details, see 'Box B: Measuring the Mining and Non-mining Sectors' in the August 2011 *Statement*.

**Graph 3.2**
**Mining and Non-mining Activity**
Year-average percentage change




* Resource exports plus mining investment, less RBA estimate of the imported component of mining investment
Sources: ABS; RBA

**Graph 3.3**
**Labour Productivity Growth**
All industries



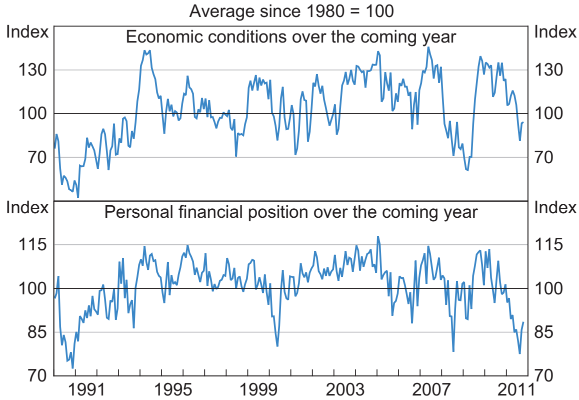

* Estimated using a Hodrick-Prescott filter, $\lambda = 50$
Sources: ABS; RBA

## Household Sector

Both household consumption and borrowing continue to grow at rates broadly in line with incomes, but below the average rates of the past decade. Recently, consumer confidence has been affected by events abroad, as well as a range of other factors, with consumers' expectations for their personal finances over the coming year falling sharply from the start of 2011 although recovering somewhat in recent months (Graph 3.4). Household spending on most types of goods, including clothing and electronics, has been relatively soft, with retailers reporting that larger-than-normal discounts have been required to stimulate sales (Graph 3.5). In contrast, other parts of household spending have been stronger: sales of motor vehicles have bounced back following a supply shortage caused by the Japanese earthquake, and there has been very strong growth over the past year in overseas travel. Consumption of a range of other services has also grown strongly over the past year, although liaison with service providers suggests that there has been some moderation in spending over recent months.

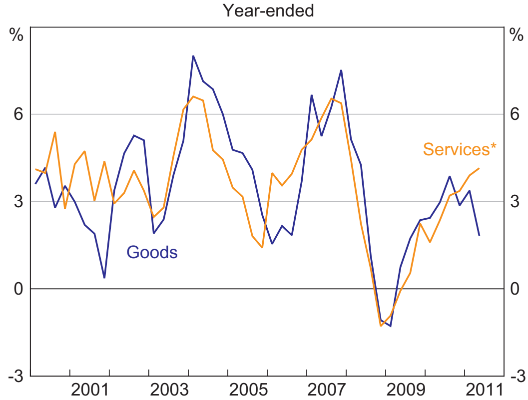
Real household disposable income is estimated to have increased by around 5 per cent over the year to the June quarter, mostly reflecting solid

**Graph 3.4**
**Consumer Sentiment**
Average since 1980 = 100




Source: Melbourne Institute and Westpac

**Graph 3.5**
**Household Consumption Growth**
Year-ended

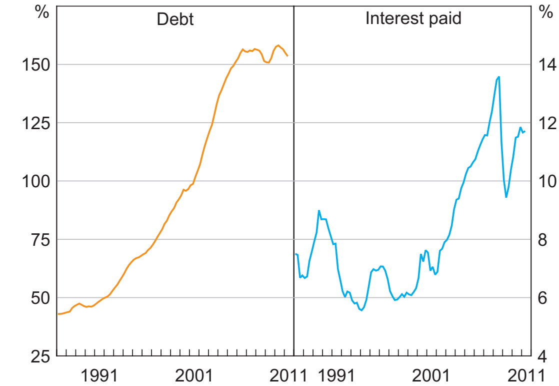



* Excludes housing
Sources: ABS; RBA

growth in labour income. In contrast, household net worth is estimated to have fallen by 2½ per cent over the September quarter to be 3 per cent lower over the year. The decline over the quarter reflects a fall in both the value of financial assets and house prices. At around 10 per cent, the household saving ratio remains well above the average level of the past two decades and more in line with levels of earlier decades. The household debt-to-income ratio declined over the quarter, but has remained between 150 and 160 per cent since 2006 (Graph 3.6). The interest burden was broadly unchanged over the year.

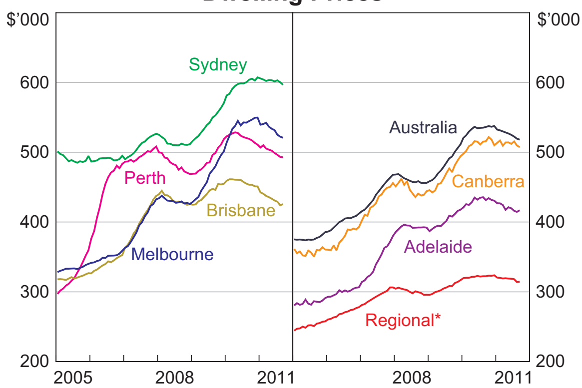
Nationwide housing prices are estimated to have fallen by around 1¼ per cent in the September quarter and by 3½ per cent over the year (Table 3.2). Brisbane and Perth have been the weakest markets over the year, with prices in these cities falling by around 5 per cent (Graph 3.7). Auction clearance rates are below decade-average levels in Sydney and Melbourne. Demand for housing finance has been subdued since the beginning of the year, although the value of loan approvals has picked up a little in recent months. While housing turnover rose in the June quarter, it remains at quite a low level.

**Graph 3.6**
**Household Finances***
Per cent of household disposable income




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

**Graph 3.7**
**Dwelling Prices**




* Excluding apartments; measured as areas outside of capital cities in New South Wales, Queensland, South Australia, Victoria and Western Australia
Sources: RBA; RP Data-Rismark

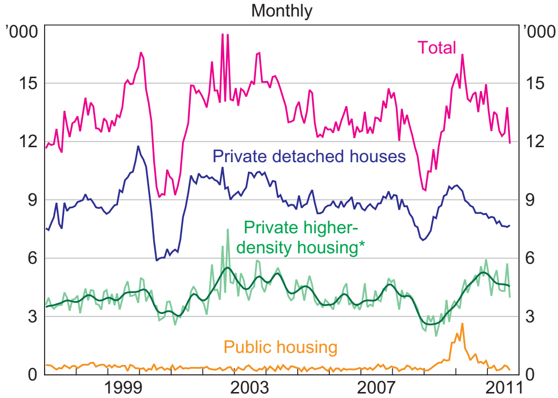
## Table 3.2: National Housing Price Growth
Per cent

| | 3 months to June 2011 | 3 months to September 2011 | Year to September 2011 |
|---|---|---|---|
| **Capital cities** | | | |
| ABS[(a)(b)] | –0.5 | –1.2 | –2.2 |
| APM | –2.2 | –0.9 | –4.3 |
| RP Data-Rismark | –0.9 | –1.3 | –3.4 |
| **Regional areas** | | | |
| APM[(b)] | 0.1 | –1.1 | –1.8 |
| RP Data-Rismark[(a)] | –0.1 | –1.3 | –2.4 |

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

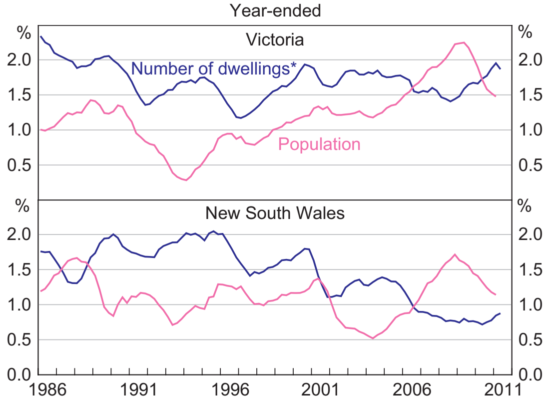
Indicators of dwelling investment have softened over the year, with builders reporting that households are cautious about committing to contracts. However, there are divergences in the level of activity by type of building and state. While the number of building approvals for detached houses has fallen since late 2010 to relatively low levels, the number of approvals for higher-density housing (mainly apartments) has been higher than over recent years (Graph 3.8). Growth in the dwelling stock is currently quite strong in Victoria, reflecting growth in the building of apartments. In contrast, the growth in dwellings in New South Wales has been soft, and well below the rate of population growth (Graph 3.9).

**Graph 3.8**
**Residential Building Approvals**
Monthly




* Smoothed line is a 13-period Henderson trend
Sources: ABS; RBA

**Graph 3.9**
**Dwelling and Population Growth**
Year-ended



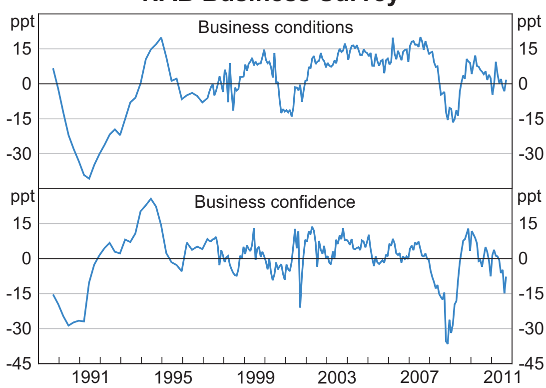

* Number of dwellings reported in the Census, interpolated using completions data
Sources: ABS; RBA

## Business Sector

Measures of business confidence have fallen noticeably recently, notwithstanding a partial recovery in September (Graph 3.10). However, most measures of business conditions remain around average levels, with the main exception being the Sensis survey of smaller- and medium-sized firms. There continue to be large differences in conditions across industries, with the retail, manufacturing and construction sectors all experiencing considerably weaker trading conditions than firms exposed to the mining boom; conditions in service industries remain around average (Graph 3.11). Business investment grew by 10 per cent over the year to the June quarter, driven by a 25 per cent rise in engineering construction activity, which was largely mining-sector related.

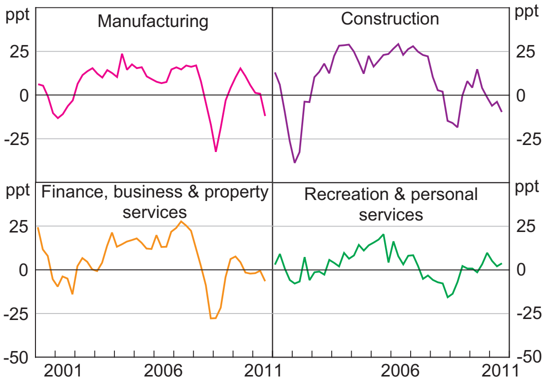
Firms exposed to the mining sector continue to experience strong conditions. Despite recent declines, commodity prices remain at elevated levels, supporting mining profits. Mining production is continuing to recover from the adverse weather earlier in the year. Iron ore exports have rebounded strongly to record-high levels, boosted by capacity expansions (Graph 3.12). However, coal production in Queensland remains constrained by restrictions on removing water from flood-affected mines,

**Graph 3.10**
**NAB Business Survey***



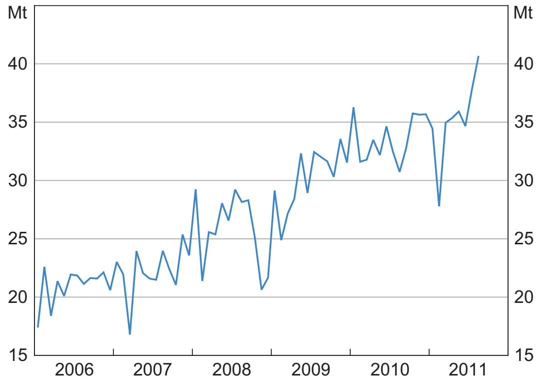

* Net balance; deviation from average since 1989
Sources: NAB; RBA

## Graph 3.11
## Business Conditions – Selected Industries*




* Net balance; deviation from average since 1989
Sources: NAB; RBA

## Graph 3.12
## Iron Ore Exports
Monthly

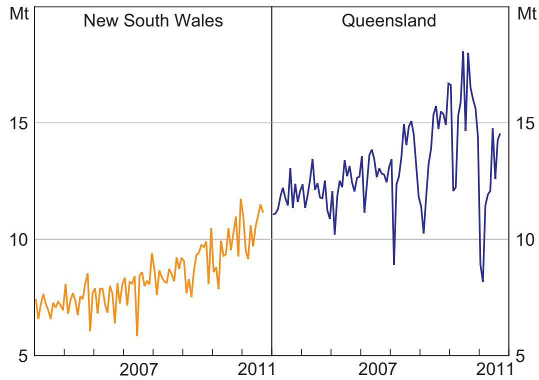



Source: ABS

with coal shipments in September still about 12 per cent below pre-flood levels (Graph 3.13). In total, coal exports are estimated to have subtracted around ¾ percentage point from GDP growth over the first half of 2011, with available data indicating a relatively modest contribution to growth in the September quarter. The Bureau of Meteorology's (BoM) latest analysis suggests that another La Niña event is developing, which increases the probability of above-average rainfall in the north and east of Australia over the summer. While this raises the prospect of further disruptions to coal production and exports, the BoM expects this La Niña event to be weaker than the one last year.

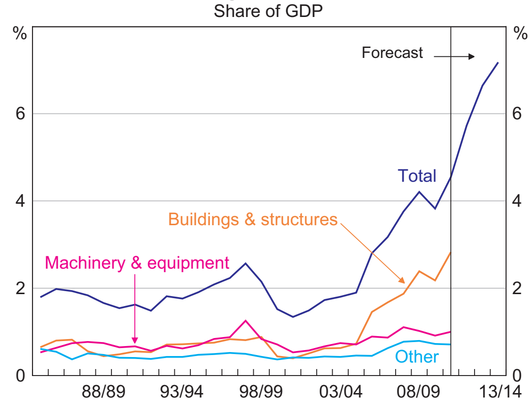
Mining investment grew strongly over the first half of the year. Since the August *Statement*, a final investment decision for the Wheatstone LNG project has been announced, lifting the total value of LNG projects currently underway or committed to around $146 billion (Table 3.3). With work done already at high levels, mining investment is likely to increase to around 7 per cent of GDP over the next few years (Graph 3.14). Consistent with the rise in mining-related investment, imports of capital goods have risen particularly strongly over the past year or so (see 'Box B: The Mining Sector and the External Accounts').

## Graph 3.13
## Coal Shipments*
Monthly




* Non-seasonally adjusted
Sources: ABS; RBA; various port authorities

## Graph 3.14
## Mining Investment
Share of GDP



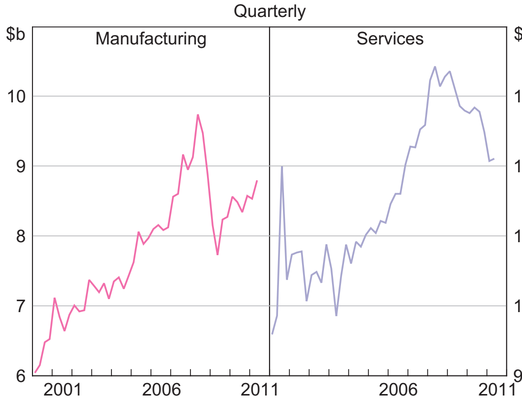

Sources: ABS; RBA

**Table 3.3: Value of LNG Projects Under Construction in 2011[(a)]**
A$ billion

| | |
|---|---|
| Gorgon | 43 |
| Wheatstone | 28 |
| Gladstone | 16 |
| Pluto | 15 |
| Queensland Curtis | 15 |
| Australia Pacific | 14 |
| Prelude (Floating) | 12 |
| North Rankin B | 5 |
| **Total** | **146** |

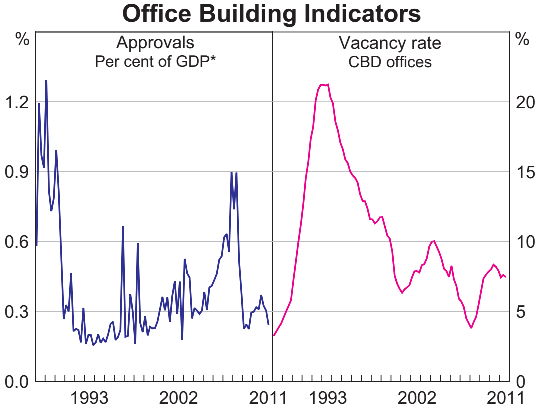
(a) US dollar-denominated project values converted to Australian dollars at US$1.03
Sources: RBA; publicly available information

**Graph 3.15**
**Non-commodity Exports***
Quarterly




* 2008/09 prices
Sources: ABS; RBA

**Graph 3.16**
**Office Building Indicators**




* RBA estimate for September quarter 2011 GDP
Sources: ABS; Jones Lang LaSalle; RBA

The high level of the exchange rate is having a contractionary effect on a number of non-mining industries, particularly manufacturing and some service industries, including tourism and education. Manufacturing and services exports remain well below their pre-crisis levels; exports of education-related services have been particularly weak over the past year, partly reflecting tighter access to student visas (Graph 3.15). The Bank's liaison suggests that the high level of the exchange rate is leading to a re-evaluation of business strategies in parts of the manufacturing industry, with some firms investing in capital equipment to remain competitive, while other firms are restructuring or closing facilities.

Activity in the non-residential building sector remains subdued, reflecting only modest growth in tenant demand and the unwinding of the government stimulus. While there has been some overall improvement in credit conditions facing developers, conditions remain tight, particularly for small to mid-tier firms. The value of non-residential building approvals has increased since 2009, but remains at low levels as a share of GDP. In the office market, with little new supply, the national CBD office vacancy rate ticked down in the September quarter to be around its decade average (Graph 3.16). Vacancy rates in Canberra, Melbourne and Perth fell in the quarter, with Perth recording a particularly large decline, while vacancy rates in Adelaide, Brisbane and Sydney rose slightly. National prime CBD office capital values are estimated to have risen by 7 per cent over the year to September, with values in Perth and Melbourne showing the strongest growth.

Overall, investment intentions outside the mining sector generally remain subdued; the ABS capital expenditure survey points to soft growth in non-mining investment in 2011/12, while business survey measures suggest non-mining investment intentions have softened, but remain above 2009 levels. Reports from liaison suggest that some firms have become more cautious in investing in additional capacity prior to clear signs that demand is strengthening.

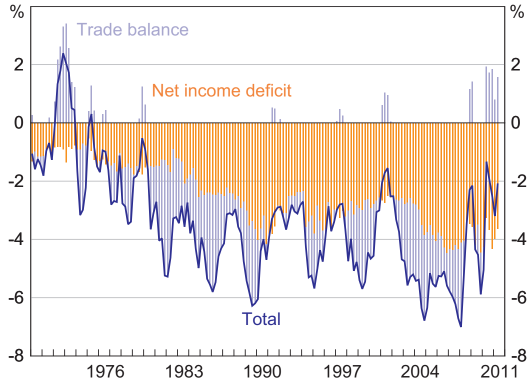
## Farm Sector

Exports of rural commodities have risen strongly over the past year and are expected to remain at high levels, as large winter and summer crops boost grain exports. The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimates a large winter crop in 2011, with production only slightly less than last year's bumper harvest. While some parts of NSW and southern Queensland have suffered from below-average rainfall, winter crop production in Western Australia is expected to recover strongly after experiencing drought last year. Summer crop production is also forecast to remain around decade highs in 2011/12, with elevated prices and the increased availability of irrigation water expected to underpin a record cotton crop. ABARES forecasts gross farm production, which includes both crops and livestock, to increase by 2½ per cent in 2011/12, which is a slight downward revision from earlier forecasts.

## External Sector

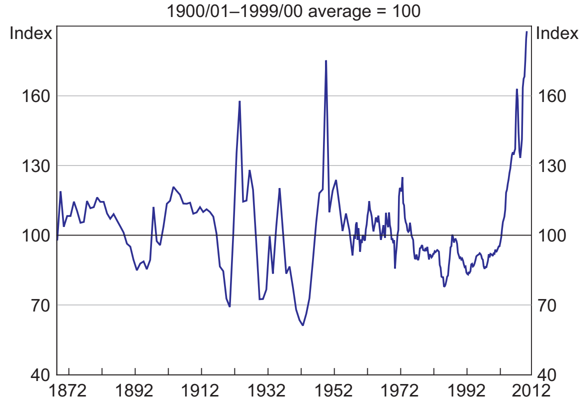
Large increases in bulk commodity contract prices over the year to September have significantly boosted Australia's export revenues. Growth in import volumes has remained strong through 2011, reflecting solid domestic demand growth and higher import penetration, as the high Australian dollar has lowered the relative price of imports. Capital imports have risen particularly strongly over the past year or so, in line with the sharp upswing in mining investment. Overall, the trade surplus is currently around its highest level as a share of GDP since the early 1970s (for further details on the impact of the mining sector on the trade balance, see 'Box B: The Mining Sector and the External Accounts'). The current account deficit has also narrowed, to around 2 per cent of GDP, which is well below the average of the past two decades (Graph 3.17). Higher commodity prices have also lifted the terms of trade to their highest level on record, although some decline appears to be now underway (Graph 3.18).

**Graph 3.17**
**Current Account Balance***
Per cent of GDP




* Excluding RBA gold sales
Source: ABS

**Graph 3.18**
**Terms of Trade***
1900/01–1999/00 average = 100

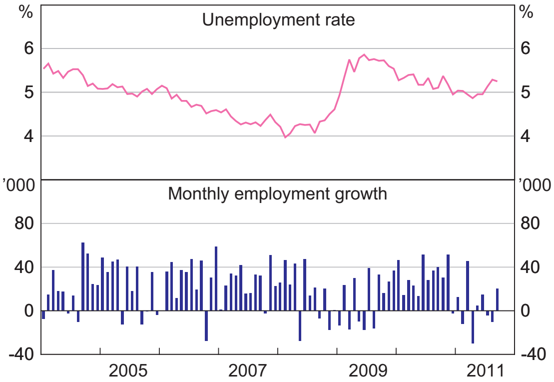



* Annual data to 1958/59, quarterly data thereafter with dates referring to December quarter; RBA estimate for September quarter 2011
Sources: ABS; RBA

## Labour Market

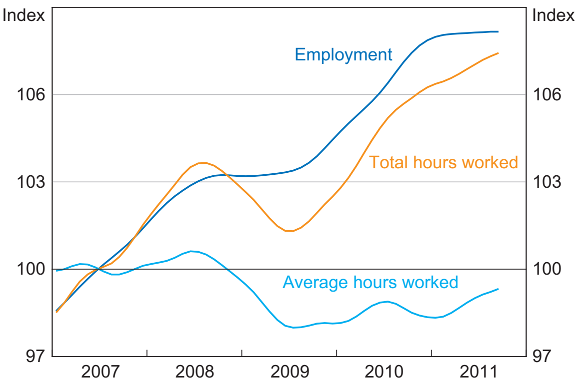
After remaining around 5 per cent over the first half of 2011, the unemployment rate has picked up in recent months, to 5.2 per cent in September, with little net employment growth over the past few quarters (Graph 3.19). While there has been a slowing in employment growth, total hours worked are estimated to have grown at a stronger pace, with a modest pick-up in trend average hours worked (Graph 3.20). The stronger growth in hours worked compared with employment is in contrast with developments in the second half of 2010 when

## Graph 3.19
### Labour Market



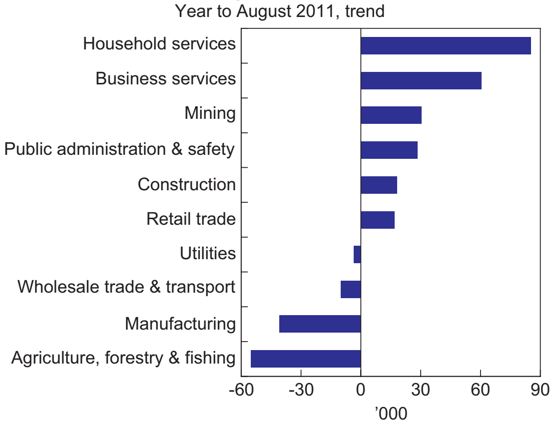

Source: ABS

## Graph 3.20
### Employment and Hours Worked
2007 average = 100, trend




Sources: ABS; RBA

## Graph 3.21
### Employment Growth
Year to August 2011, trend




Source: ABS

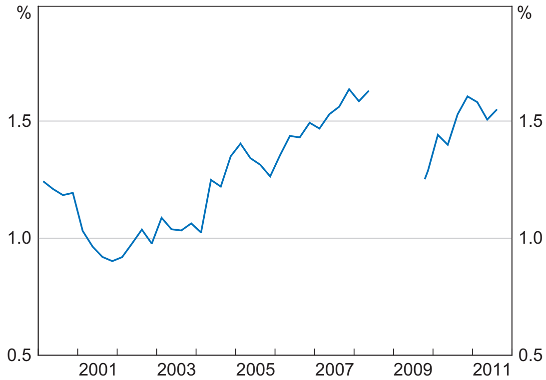
employment outpaced growth in hours worked. More recently firms appear to be making greater use of existing employees.

The slowing in employment growth has been broad based although there remains considerable divergence in the pace of employment growth across industries (Graph 3.21). Employment in the mining industry has grown by 14 per cent over the year, while manufacturing employment has fallen by around 5 per cent. Growth in services sector employment has slowed, although the large household and business services industries continue to make sizeable contributions to overall employment growth. Growth in business services employment has been supported by solid growth in employment in professional & scientific services and financial & insurance services. In the household services sector, growth in health care and hospitality employment remains firm but education employment has softened recently. The data on employment in agriculture, forestry and fishing have been very weak over the past year, which is difficult to reconcile with the generally positive conditions in the rural sector.

The slowdown in employment growth in the early part of the year was more pronounced than suggested by forward-looking indicators of labour demand such as job advertisements, vacancies and business surveys. These indicators have been mixed recently, though most are weaker than in early 2011. The ABS measure of job vacancies rose by 3.3 per cent over the three months to August and remains at a relatively high level (Graph 3.22). However, aggregate job advertisements, as reported by ANZ, have fallen in recent months and hiring intentions from business surveys eased in the September quarter, although they remain around average in the NAB survey.

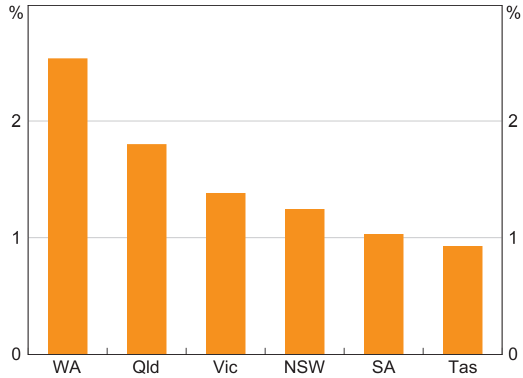
Consistent with the relative strength in the resources sector, the vacancy rate is high in Western Australia, where the unemployment rate has declined the most since the 2008/09 slowdown and the labour market is tightest (Graph 3.23). In most other states

**Graph 3.22**
**Job Vacancies***
Per cent of labour force




* This survey was suspended between May 2008 and November 2009
Source: ABS

**Graph 3.23**
**Job Vacancies by State**
Per cent of labour force




Source: ABS

the vacancy rate remains around the average of the past decade, with state unemployment rates generally clustered close to the national average.

Recent data confirm a slowdown in the trend growth of labour supply. This has been primarily due to slower population growth as a result of lower net migration (although the contribution of natural increase to population growth has also slowed in recent years). The slowdown in net migration largely reflects lower arrivals of international students, who typically participate in the labour market as part-time workers. The recent slowing in labour force growth has also reflected a small fall in the participation rate, which had risen sharply in late 2010 when the labour market was more buoyant.

Box B

# The Mining Sector and the External Accounts

The mining boom is having a significant effect on Australia's external accounts. Export receipts have been boosted by the sharp increase in commodity prices and higher resource export volumes. At the same time, strong growth in mining investment has provided considerable impetus to imports. The appreciation of the real exchange rate associated with the mining boom has increased demand for imports in the economy more generally, while weighing on non-commodity exports. Overall, the trade surplus has increased to its highest level as a share of GDP since the early 1970s.

The surge in mining profits has also increased income accruing to overseas residents in the form of dividends and retained earnings, reflecting the high share of foreign ownership in the mining sector. Notwithstanding the increase in income accruing to foreigners, the current account deficit (CAD) has narrowed significantly. From a saving-investment perspective, this recent narrowing has reflected national saving rising more quickly than national investment.

Inflows of foreign investment to Australia's mining sector remain relatively high, helping to fund the large expansion in mining capacity currently underway. Looking forward, the strong upswing in mining investment may lead to some widening in Australia's CAD over coming years. The resulting increases in mining production capacity will, however, eventually lead to significantly higher export volumes, led by liquefied natural gas (LNG), iron ore and coal exports.

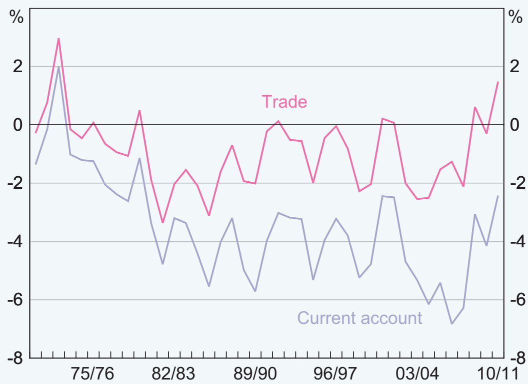
## Trade Account

Australia's resource export earnings have increased by almost 90 per cent in Australian dollar terms over the past five years to $47 billion in the June quarter 2011. This has been largely due to a 60 per cent rise in commodity prices in Australian dollar terms over this period (110 per cent in SDR terms), driven by Australia's largest commodity exports, iron ore and coal. Resource export volumes have also increased by almost 20 per cent due to expansions in mining capacity, notwithstanding the recent disruptions to coal exports following the Queensland floods. The strong growth in resource export earnings has resulted in a marked turnaround in the trade balance, from an average deficit of 1½ per cent of GDP over the first half of the 2000s to a surplus of the same magnitude, which is close to a 40-year high (Graph B1).

**Graph B1**

**Trade and Current Account Balances***

Per cent of GDP



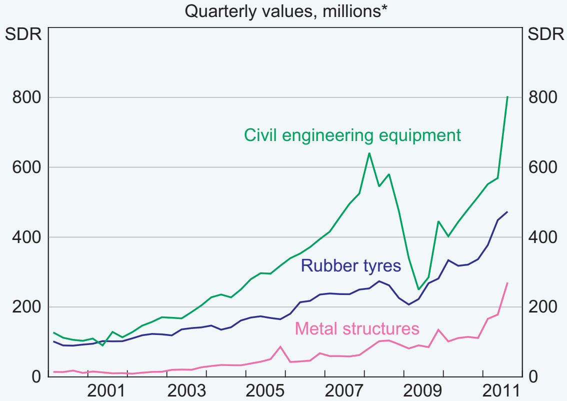

* Excluding RBA gold sales

Source: ABS

Looking ahead, growth in Australia's resource export earnings is likely to slow somewhat. While export volumes should increase significantly as a large pipeline of mining investment comes online, this is expected to be partly offset by an easing in commodity prices as global mining capacity expands.

Mining investment has been growing strongly over the past five years and is expected to increase to a record high of around 7 per cent of GDP over the next few years, with the construction phase of a large stock of mining projects expected to ramp up or commence over the coming year. A large share of the inputs used for these projects is imported rather than sourced domestically, due to the type and scale of the mining projects; for example, the $146 billion of LNG projects currently underway or committed will be relying extensively on imported large modularised components.[1] The surge in mining investment to date has been accompanied by a sharp increase in the volume of capital equipment imports, which has risen by almost 75 per cent over the past five years. While it is difficult to specifically identify capital imports that are used in mining investment projects, there has been rapid growth in several import categories that are likely to reflect capital spending by the mining sector. For example, imports of civil engineering equipment, like bulldozers and excavators, have increased very sharply over recent years, as have imports of rubber tyres and metal structures (Graph B2). The expansion in mining production, in addition to mining investment, is also likely to be contributing to stronger imports growth, as the sector tends to rely on imported intermediate inputs, such as fuel and machinery parts.

**Graph B2**
**Selected Imports by Category**
Quarterly values, millions*




* Seasonally adjusted by the RBA
Sources: ABS; RBA

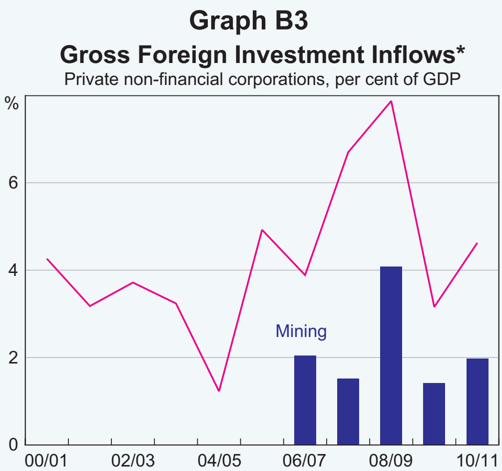
## Financial Account

To fund investment, mining companies can either use retained earnings from their local operations (internal funding), funding from offshore parent companies, or external funding (sourced either domestically or offshore, either intermediated or from the capital markets). Data for domestically listed mining companies suggest that over the past decade the share of internal funding has been higher than in other industries, as profits have been boosted by high commodity prices.

However, the foreign ownership share of the mining industry is also significantly higher than for other industries. Most estimates suggest that effective foreign ownership of current mining operations in Australia is around four-fifths, although this varies significantly by commodity and by individual mine. Accordingly, in the balance of payments much of the investment in this sector is treated as being financed from abroad. This includes retained earnings that

1 The mining boom is resulting in a large increase in imports of high-value capital goods, such as modularised LNG processing equipment. In the National Accounts and Balance of Payments, imports are recorded when ownership changes, which for high-value items often occurs over a number of quarters before the goods arrive in Australia (often approximated by progress payments made during the manufacture of the goods). As some imports of high-value capital goods will likely be identified only when the goods actually land in Australia, imports (and mining investment) may be underestimated in real time and subject to upward revision.

accrue to foreign direct investors.[2] In recent years, mining has accounted for a large share of the foreign investment inflows into Australia (Graph B3). Importantly, a number of committed LNG projects are wholly foreign-owned, which means much of the investment over the next few years will be funded entirely by offshore parent companies. This should see an increase in measured foreign direct investment flows into Australia.




* Excludes flows relating to the reincorporation of News Corporation in 2004/05. Mining data available from September quarter 2006
Sources: ABS; RBA

## Net Income

Australia's net income balance is the net sum of income flows associated with the stock of Australia's debt and equity assets and liabilities. Australia has a persistent net income deficit due to the large stock of net foreign liabilities and because foreigners are estimated to consistently earn higher yields on their investments in Australia than Australian residents receive on their investments abroad. The mining sector mainly affects the net income deficit via the share of mining profits that accrue to foreign investors (through dividend payments and/or reinvested earnings on direct investment). While such data are not available by industry, total reinvested earnings on foreign direct investment have steadily increased as a share of GDP, in line with strong mining profits in recent years. Given the outlook for the mining sector, this trend is expected to continue.

2 Direct investors are defined as foreign shareholders with at least a 10 per cent equity stake in the Australian company; all other foreign shareholders are defined as portfolio investors. In line with international practice, retained earnings that accrue to direct investors appear as a notional income flow out of Australia, along with an offsetting financial inflow item for the notional reinvestment of these earnings. In reality, these reinvested earnings remain on business balance sheets in Australia for internal funding purposes.

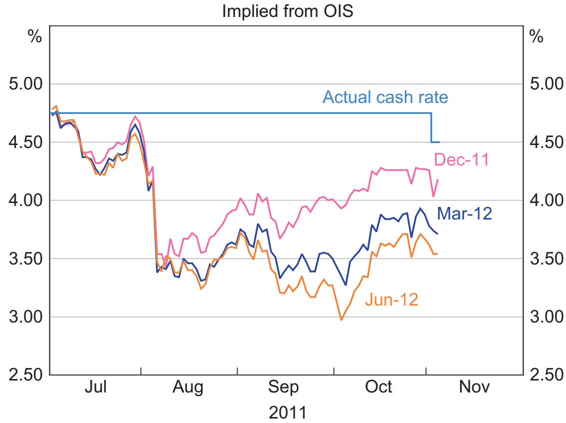
# 4. Domestic Financial Markets

## Money Markets and Bond Yields

The Reserve Bank Board lowered its target for the cash rate from 4.75 per cent to 4.50 per cent in November, the first change in the target since November 2010 (Graph 4.1). In recent months, there has been a significant reassessment of the outlook for domestic monetary policy by market participants, mainly reflecting uncertainty about how the sovereign debt and banking problems in Europe might be resolved and the effects on global economic activity. Market pricing at one point embodied an expectation of aggressive reductions in the cash rate – including possible moves between Board meetings – in the event of a sharply weaker world economy. Reflecting this, rates on overnight indexed swaps (OIS) fell significantly in August, although the volatility of these rates suggested that sizeable adjustments in derivative positions, at times, may have compromised the liquidity of the market. In subsequent months, the extent of expected easing has lessened, though OIS rates still imply that the cash rate will reach a low of 3½ per cent by the middle of 2012.

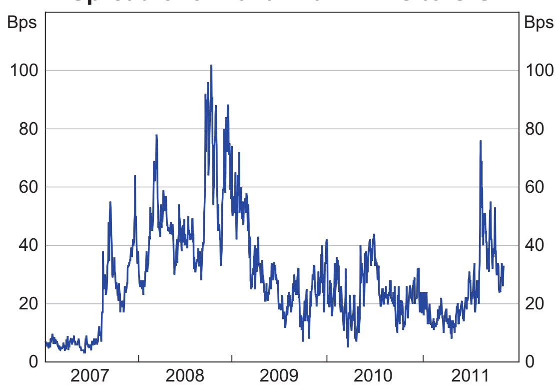
Interest rates on bank bills have also declined. As in previous periods of market turmoil, the spreads between bank bill and OIS rates widened (Graph 4.2). From 20 basis points at the time of the previous *Statement*, the spread between 3-month bills and OIS briefly rose to over 75 basis points in mid August but much of this reflected the large fall in OIS rates. As liquidity in the OIS market has improved, and volatility has abated, the 3-month spread on bank bills has settled back at around 30 basis points. More generally, the domestic interbank market has functioned smoothly in recent months and, in contrast to Europe where the European Central Bank has had to intermediate the interbank market to circumvent counterparty concerns, the Bank has not had to make any

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




Sources: RBA; Tullett Prebon (Australia) Pty Ltd

**Graph 4.2**
**Spread of 3-month Bank Bills to OIS**




Sources: AFMA; Tullett Prebon (Australia) Pty Ltd adjustments to the way it operates in financial markets. Through its open market operations, the Reserve Bank has kept the level of exchange settlement (ES) balances steady at around \$1¼ billion for more than 12 months, although temporarily higher demand for balances continues to be accommodated on key balancing dates, such as quarter-ends.

Government bond yields have been volatile, driven by developments offshore. Through to early October, long-term bond yields declined as global bond markets rallied and expectations for an easing in domestic monetary policy intensified (Graph 4.3). The yield on 10-year Commonwealth Government securities (CGS) reached a low of 4 per cent in early October, before rising with increased optimism for a satisfactory resolution of the problems in Europe.

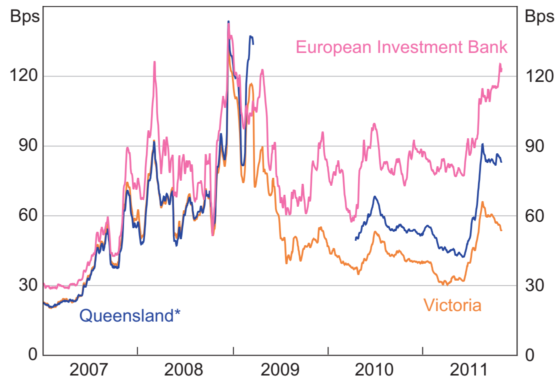
In mid October, the nominal CGS yield curve was extended by the issuance of a 15-year bond, the first time bonds of this maturity have been issued since the 1980s. (The Australian Office of Financial Management (AOFM) regularly issues inflation-indexed bonds with as much as 20 years to maturity.) The AOFM issued \$3.26 billion – a relatively large amount for a new line with a long maturity – at a yield that was 23 basis points above the yield on 12-year CGS. In contrast to many government securities overseas, yields on long-term CGS continue to trade at a significant margin below the equivalent swap rate, reflecting their relative scarcity.

Spreads between CGS and other government-related securities (such as those issued by the state borrowing authorities and the supranational agencies) widened appreciably during August (Graph 4.4). However, given the large decline in CGS yields, borrowing costs still declined in most cases, notwithstanding the widening in spreads. While primary issuance was curtailed for a short period, borrowers have subsequently returned to the market. Spreads have stabilised and, for certain issuers, have begun to decline. The spreads on supranational debt, particularly for European-based issuers, remain wide.

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


Source: RBA

**Graph 4.4**
**Spreads to 5-year CGS**




* State-guaranteed debt; from March 2009 to April 2010 all debt of this maturity was guaranteed by the Australian Government

Sources: RBA; Yieldbroker

## Financial Intermediaries

Continued strong growth in deposits and negative net bond issuance have contributed to a further shift in the composition of banks' funding towards deposits (Graph 4.5). This trend has been evident since 2008. Deposits currently represent just over 51 per cent of banks' funding, while long- and short-term wholesale funding each make up about one-fifth.

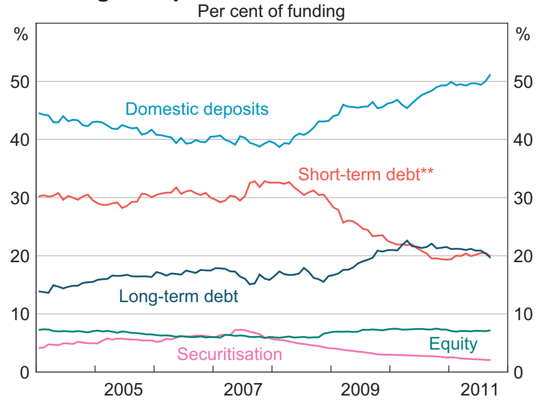
The average rate on major banks' new term deposit 'specials' fell by around 40 basis points over the past quarter, reflecting the decline in market benchmark rates (Graph 4.6). Banks have been bidding less aggressively for some forms of wholesale deposits, particularly deposits from other financial institutions. Nonetheless, the spread paid on term deposits continues to be well above spreads on wholesale funding at both shorter and longer maturities. The average interest rate on the major banks' at-call deposits (including online savings, bonus saver and cash management accounts) was broadly unchanged over the three months to the end of October.

Around $6.6 billion worth of Australian bank bonds have been issued since the August *Statement* compared with almost $25 billion in the previous three months. The bulk of this issuance was from the major banks and more than three-fifths was in offshore markets (Graph 4.7). The reduction in supply partly reflects volatile conditions in debt markets, but also a reduced need for wholesale funding due to the strength of deposit growth relative to credit growth (see below).

Bank bond yields have declined since the previous *Statement* and are currently around 90 basis points below their average for the first half of 2011 (Graph 4.8). Notwithstanding this fall, domestic secondary market spreads of bank bonds over CGS have widened by around 25 basis points since the previous *Statement*, primarily reflecting the deterioration of conditions in global debt markets.

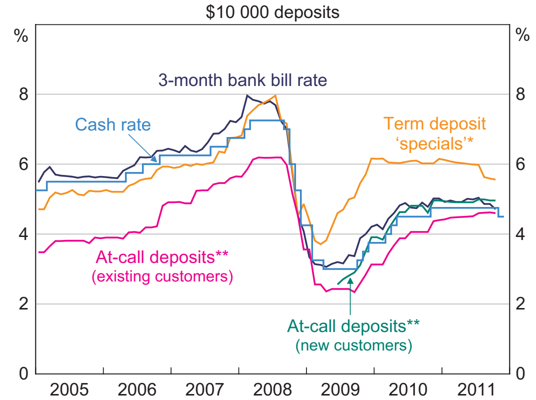
Credit default swap (CDS) premia for Australian banks have also risen over recent months, and to a greater extent than the rise in unsecured bank bond spreads (Graph 4.9). This reflects a broader trend across similarly rated banks elsewhere in the world and could be the result of market participants buying protection against the occurrence of unlikely but significant events, like the advent of a global recession. Although CDS contracts are more standardised than bonds and trading activity is concentrated in a small number of maturities (most notably 5 years), trading volume is very low and it is difficult to arbitrage the two markets, particularly when the CDS premium is above the bond spread.

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



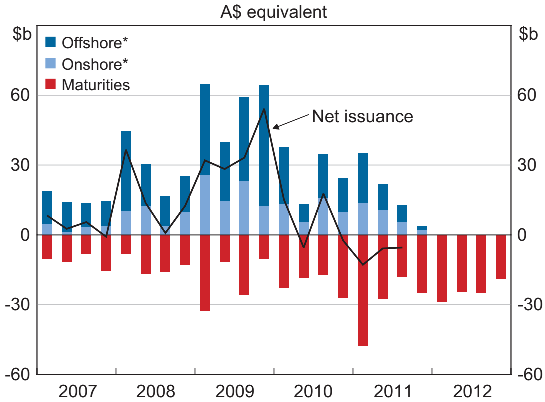

* Adjusted for movements in foreign exchange rates
** Includes deposits and intragroup funding from non-residents
Sources: APRA; RBA; Standard & Poor's

**Graph 4.6**
**Deposit Rates**
$10 000 deposits



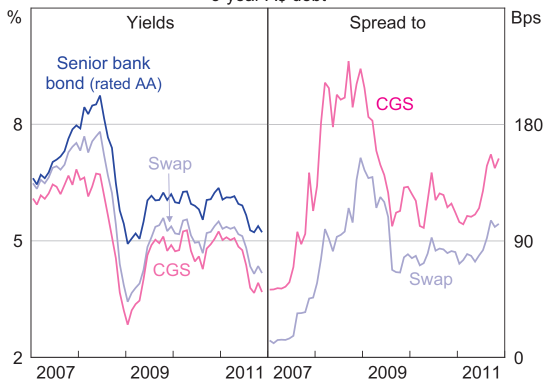

* Average of 1–12, 24-, 36- and 60-month terms at the major banks
** Average of online, bonus saver and cash management accounts at the major banks
Source: RBA

**Graph 4.7**
**Banks' Bond Issuance**
A$ equivalent



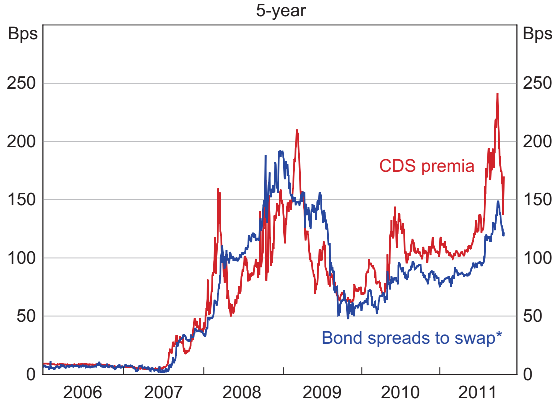

* Latest quarter issuance to date
Source: RBA

## Graph 4.8
### Major Banks' Bond Pricing
3-year A$ debt




Sources: Bloomberg; RBA; UBS AG, Australia Branch

## Graph 4.9
### Major Banks' Bond Spreads and CDS Premia
5-year

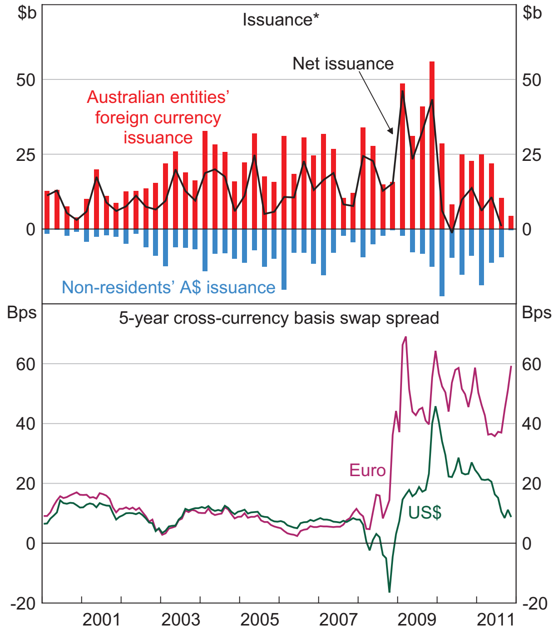



* Domestic secondary market spreads converted into US$ spreads
Sources: Bloomberg; RBA

Lower offshore issuance by the Australian banks placed downward pressure on the US dollar cross-currency basis swap spread for much of the past three months (Graph 4.10). This reduced the hedging costs of issuing offshore for Australian banks but made the Australian dollar market less advantageous for Kangaroo issuers swapping the funds raised out of Australian dollars.

Since the previous *Statement*, Kangaroo issuance has totalled $1.7 billion, slowing from the larger supply in the first half of the year. In recent months, heightened concerns over European sovereign debt have also weighed on investor sentiment in the Kangaroo bond market, where European issuers are quite

## Graph 4.10
### Bond Issuance and the Cross-currency Basis Swap Spread



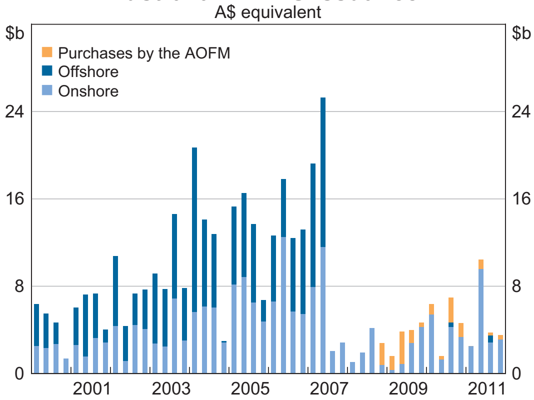

* Latest quarter issuance to date
Sources: Bloomberg; RBA

active. As a result, Kangaroo bond spreads in the domestic secondary market have remained elevated since mid 2011, further reducing the attractiveness of issuing in the domestic market.

Five prime residential mortgage-backed securities (RMBS) transactions totalling just over $5 billion have been issued over the past three months (Graph 4.11). Private investor demand continued to underpin these RMBS transactions, most of which included large 3-year tranches. The AOFM invested $391 million in two RMBS deals from non-major banks. Issuance spreads were around 25 basis points higher than those prevailing in the June quarter.

There were a number of other asset-backed deals in the quarter, including two commercial mortgage-backed securities (CMBS) and three asset-backed securities (ABS). CMBS worth $453 million in aggregate were issued, however issuance in this sector remains subdued as investors remain cautious towards commercial property. A total of $1.9 billion

## Graph 4.11
**Australian RMBS Issuance***
A$ equivalent



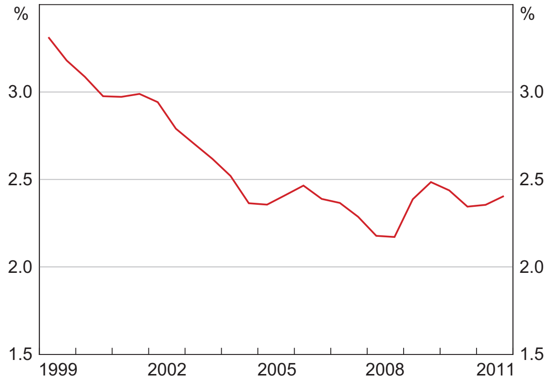

* Latest quarter issuance to date
Source: RBA

in ABS has been issued since the previous *Statement*. The underlying collateral backing the securities was mostly composed of auto loans and leases, as well as equipment leases.

Legislation allowing Australian authorised deposit-taking institutions (ADIs) to issue covered bonds was passed in Parliament. Eligible cover pool assets include commercial and residential property loans in Australia, as well as liquid assets such as at-call deposits convertible to cash within two business days and Commonwealth or state government bonds and notes. The total amount of covered bonds that can be issued by an ADI is capped at 8 per cent of the value of its Australian assets to ensure that ADIs' unsecured creditors, such as depositors, are not excessively subordinated by covered bondholders. A minimum over-collateralisation of 3 per cent is also prescribed, and is included in the 8 per cent cap. Broad prudential powers have been given to APRA and rules have been prescribed for independent cover pool monitors and the need for ADIs to maintain cover pool registers. Indications are that some of the major banks may tap this market before the end of the year.

The major banks have reported profit results for their 2011 financial years. Each bank reported a slight increase in its domestic net interest margin in the second half of the reporting period. In aggregate, the net interest margin of the major banks has fluctuated in a narrow range since 2004, of between 2¼ and 2½ percentage points (Graph 4.12).

## Graph 4.12
**Major Banks' Net Interest Margin***
Domestic, half-yearly




* From 2006 data are on an IFRS basis; prior years are on AGAAP basis; Excludes St George Bank and Bankwest prior to the first half of 2009
Sources: Banks' financial reports; RBA

## Household Financing

Most lenders left their indicator rates on new standard variable-rate housing loans unchanged over the three months to the end of October, although one major bank introduced a temporary offer to undercut the rates of the other major banks (Table 4.1). In contrast, rates on new fixed-rate mortgages continued to fall. Competition remained strong in other aspects of housing lending, with one major bank announcing a cash-back offer for new mortgages. Overall, the average rate on outstanding housing loans (fixed and variable) fell by about 9 basis points between the beginning of the year and the end of October, to be a little above its post-1996 average (Graph 4.13).

Most banks have announced reductions in their indicator rates on variable-rate housing loans following the decrease in the cash rate at the November Board meeting.

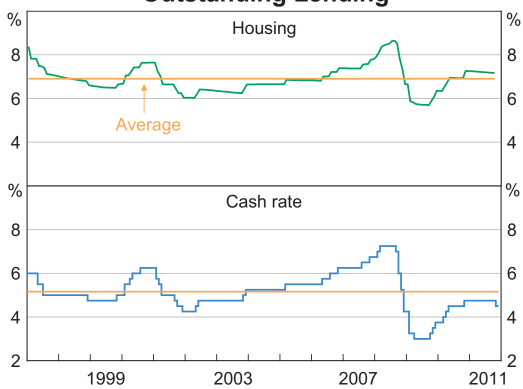
## Table 4.1: Intermediaries' Variable Lending Rates

Per cent

| | Level at end October 2011 | Change since: August *Statement* | Change since: End October 2010 |
|---|---|---|---|
| **Housing loans**[a] | 7.03 | –0.01 | 0.28 |
| **Personal loans** | 13.07 | –0.03 | 0.27 |
| **Small business** | | | |
| Residentially secured, advertised | | | |
| – Term loans | 8.99 | 0.00 | 0.40 |
| – Overdraft | 9.86 | 0.00 | 0.40 |
| Average rate[b] | 8.81 | 0.00 | 0.29 |
| **Large business** | | | |
| Average rate[b] (variable-rate and bill funding) | 6.86 | –0.17 | 0.07 |

(a) Average of the major banks' discounted package rates on $250 000 full-doc loans
(b) Rates on outstanding, as opposed to new, business lending
Sources: ABS; APRA; RBA

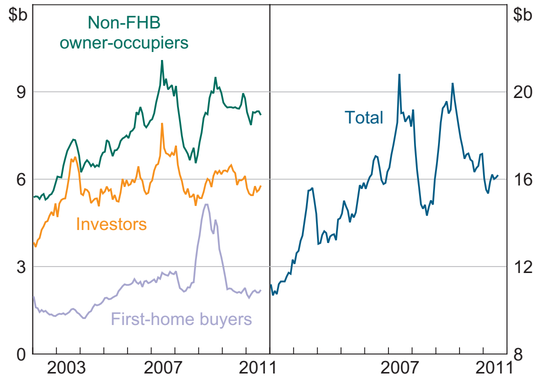
### Graph 4.13
### Average Interest Rates on Outstanding Lending




Sources: ABS; APRA; Perpetual; RBA

### Graph 4.14
### Value of Housing Loan Approvals

Net of refinancing



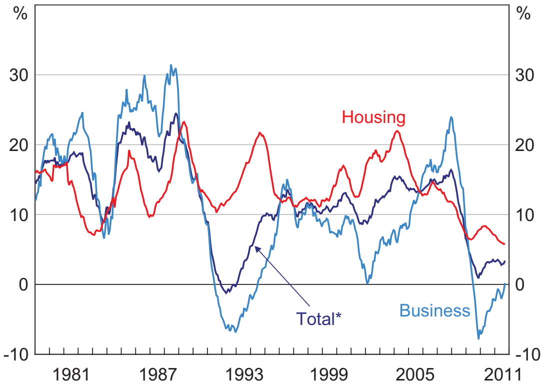

Sources: ABS; RBA

Competition in the mortgage market contributed to an increase in refinancing activity, with the value of housing loan approvals for refinancing purposes rising by 11 per cent over the three months to August, compared to a decade average of about 3 per cent. The value of housing loan approvals is currently around 6½ per cent below its level at the end of 2010 (Graph 4.14).

Housing credit grew at an annualised rate of 5.9 per cent over the September quarter. Investor housing credit is still growing less quickly than owner-occupier credit, as has been the case since early 2011. In year-ended terms, total housing credit is growing at its slowest rate in a couple of decades (Graph 4.15).

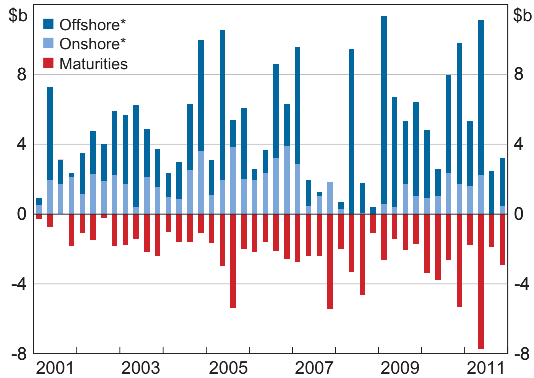
Personal credit continued to fall in the September quarter. This is largely the result of falls in margin lending as recent volatility in global equity markets has led to less demand for margin loans. Credit card lending has also fallen slightly since early in 2011.

**Graph 4.15**
**Credit Growth**
Year-ended




* Includes housing, personal and business credit
Source: RBA

**Graph 4.16**
**Australian Corporates' Bond Issuance**




* Latest quarter issuance to date
Source: RBA

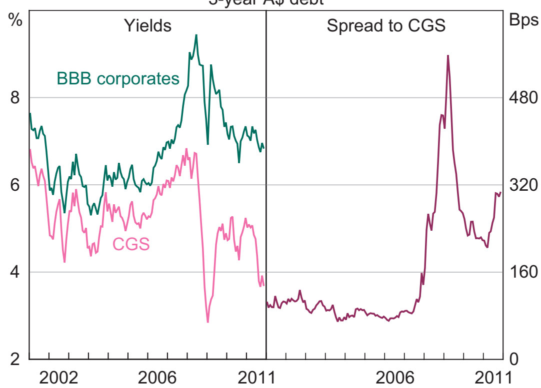
## Business Financing

Corporate bond issuance has picked up since August, when issuance was particularly affected by uncertainty arising from the European sovereign debt crisis (Graph 4.16). Around $5.7 billion has been issued since the previous *Statement*; bond maturities over recent months have been modest, reducing the refinancing task of Australian corporates.

A few investment-grade Australian corporates, such as Rio Tinto, placed bonds in the US dollar market for terms ranging from 5 to 29 years, which is difficult to achieve in the domestic corporate bond market. Origin Energy issued a 10-year bond, raising US$500 million that will be used to help fund the company's Australia Pacific coal seam gas to LNG project. Fortescue, which is below investment grade, raised US$1.5 billion in an 8-year private placement. Corporate bond spreads have widened by around 50 basis points since the previous *Statement* reflecting increased risk aversion (Graph 4.17).

Intermediated business credit grew at an annualised rate of around 2 per cent over the September quarter. The increase in business credit was driven by a rise in the value of foreign currency denominated lending, some of which was a consequence of the depreciation of the Australian dollar. Approvals for

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



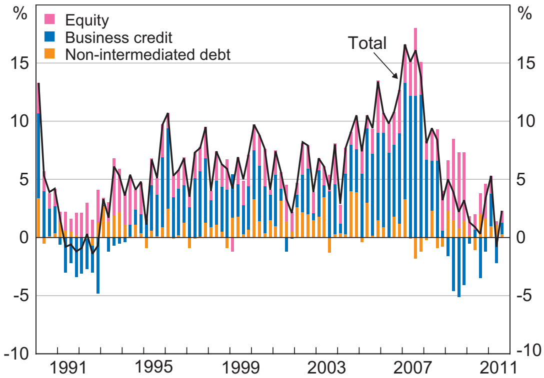

Sources: RBA; UBS AG, Australia Branch

syndicated loans were solid over the September quarter, at almost $24 billion. The number of syndicated loan approvals has been rising slowly since the end of 2008, although the value of approvals has remained steady. The majority of syndicated lending has been for capital and general corporate expenditure.

Net corporate external funding increased in the September quarter with small increases in all three components (Graph 4.18).

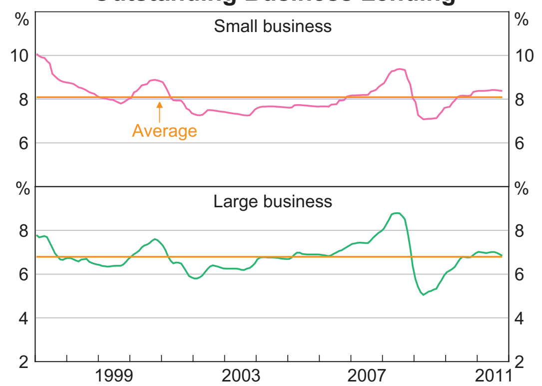
The cost of intermediated business borrowing has fallen over the past three months, mainly reflecting a decline in market benchmark rates. Indicator rates on

Graph 4.18
Business External Funding
Net change as a share of GDP



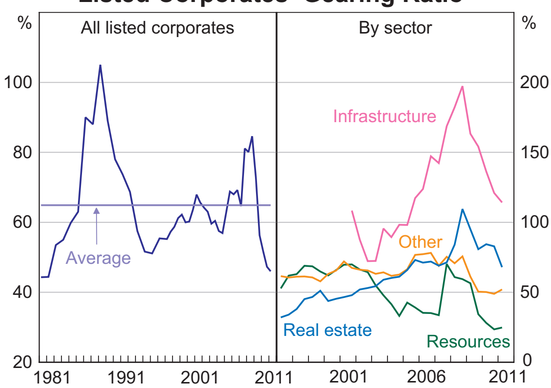

Sources: ABS; ASX; Austraclear Limited; RBA

Graph 4.19
Average Interest Rates on Outstanding Business Lending




Sources: APRA; RBA

Graph 4.20
Listed Corporates' Gearing Ratio*




* Excludes foreign-domiciled companies; includes real estate companies from 1997; book value debt over equity
Sources: ABS; Bloomberg; Morningstar; RBA; Statex; Thomson Reuters

new fixed-rate business loans have fallen by around 60 basis points since July, while indicator rates on new variable-rate loans were largely unchanged at the end of October. The average rate on banks' outstanding lending to large business fell by 16 basis points over the three months to the end of October, to be only slightly above its post-1996 average (Graph 4.19). The average rate on outstanding small business loans was little changed at 8.4 per cent, about 30 basis points above its post-1996 average.

Listed corporates' balance sheets continued to expand marginally in the June half of 2011 and gearing ratios declined further, to reach their lowest level since the early 1980s. Book value gearing – the ratio of debt to the book value of shareholders' equity – declined to 46 per cent, well below the cyclical peak of over 80 per cent in December 2008 (Graph 4.20).

The decline in leverage reflected a small rise in equity – due to higher retained profits – but was mainly driven by debt restructuring by some prominent real estate and infrastructure companies. The restructuring of Centro Properties Group contributed to a 15 percentage point reduction in the gearing ratio of real estate companies, which now stands at around the levels of the mid 2000s. Resource company gearing rose marginally as a result of acquisitions by Rio Tinto and Origin Energy that were partly funded by debt. BHP and Rio Tinto's buyback operations also contributed, as did BHP's purchase in cash of Chesapeake Energy for US$4.7 billion. Gearing in other sectors was marginally higher.

## Aggregate Credit

Total outstanding credit grew at an annualised rate of around 4 per cent over the September quarter, with moderate growth in household credit and a small increase in business credit (Table 4.2). Growth in broad money was considerably stronger than growth in credit, reflecting a preference by households and businesses to hold their assets in deposits, particularly given the uncertainty surrounding equity markets.

**Table 4.2: Financial Aggregates**
Percentage change

| | Average monthly growth June quarter 2011 | September quarter 2011 | Year to September 2011 |
|---|---|---|---|
| Total credit | 0.1 | 0.3 | 3.4 |
| – Owner-occupier housing | 0.5 | 0.5 | 6.4 |
| – Investor housing | 0.3 | 0.4 | 4.6 |
| – Personal | –0.3 | –0.3 | –0.9 |
| – Business | –0.4 | 0.2 | 0.2 |
| Broad money | 0.3 | 1.0 | 8.3 |

Source: RBA

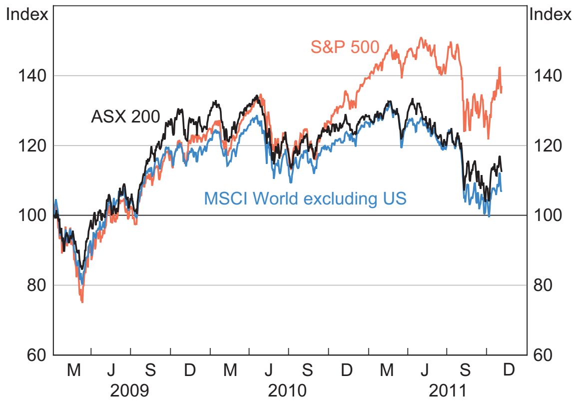
## Equity Markets

The intensification of European sovereign debt concerns and uncertainty over the pace of the global recovery weighed heavily on the local share market in August and September (Graph 4.21). Volatility increased significantly to levels last seen during the financial crisis. Resource stocks, which have a weight of around one-third in the ASX 200, fell by 18 per cent over August and September as commodity prices declined (Graph 4.22). However, with global growth concerns dissipating somewhat, resource stocks have subsequently rebounded and are now 10 per cent lower than they were three months ago. The ASX 200 is currently around 16 per cent below its peak in April this year.

Share prices of financials have risen by 4 per cent since the previous *Statement*. Share prices of commercial banks have led the financial sector, while diversified financials have fallen as analysts have downgraded their earnings forecasts for the larger institutions. Some insurance groups also experienced large falls on the back of concerns over the impact of lower domestic and global interest rates on future investment income.

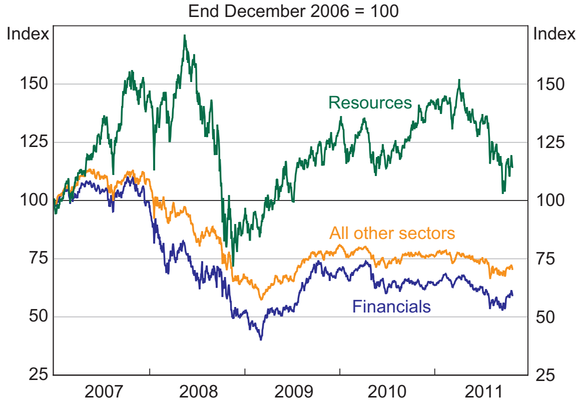
Profits announced by ASX 200 listed companies during the recent reporting season rose substantially over the year, broadly matching expectations. Underlying profits – which exclude significant items and asset revaluations/sales – rose by 20 per cent in the June half of 2011 from the corresponding

**Graph 4.21**
**Share Price Indices**
End December 2008 = 100




Sources: Bloomberg; Thomson Reuters

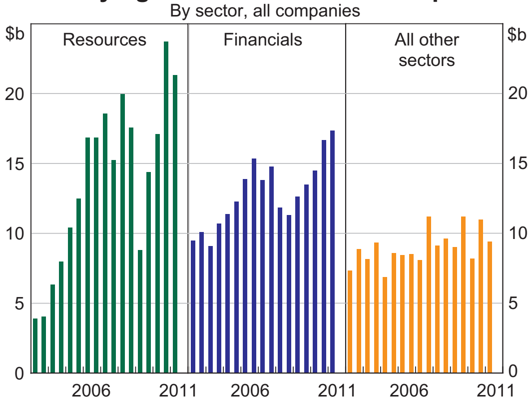
**Graph 4.22**
**Australian Share Price Indices**
End December 2006 = 100




Sources: Bloomberg; RBA

period in 2010. Profits were stronger across most sectors, although the resource sector made the largest contribution to the increase in aggregate profits. Bolstered by higher commodity prices, resource profits rose 25 per cent from the same period in 2010, but declined by 10 per cent from their record level in the December half of 2010, reflecting the impact of weather-related disruptions to production, cost increases and currency valuation effects (Graph 4.23).

**Graph 4.23**
**Underlying Profits of ASX 200 Companies***
By sector, all companies




* From December 2004 figures reported under IFRS
Sources: Morningstar; RBA; company reports

Financials' profits rose by 16 per cent from the June half of 2010, with real estate companies' profits rising by 34 per cent compared with their depressed levels in the June half of 2010. Profits at insurance companies increased by 28 per cent from the June half of 2010 with a few large companies driving most of the improvement on the back of acquisitions and a reassessment of claims such as those stemming from natural disasters. The profits of other companies rose by 15 per cent, but have been broadly steady for the past few years.

With share prices having declined and profits strong, price earnings ratios for Australian companies are well their below long-run averages. Similarly, dividend yields have risen. Aggregate dividends in the first half of 2011 were marginally higher than those over recent reporting periods. New announcements of buybacks, which were very large in the second half of 2010, declined sharply in the June half of 2011, causing a substantial decline in total shareholder distributions – the sum of buybacks and aggregate dividends. This was driven by the large mining companies. Rio Tinto announced that it would increase its buyback program by US$2 billion, while BHP did not announce any new buyback commitments as it proceeds with completing some large acquisitions.

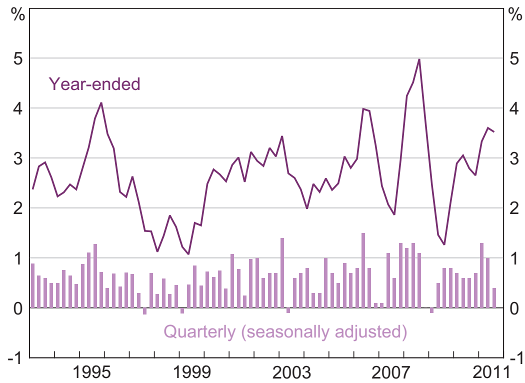
There has been around $10 billion of merger and acquisition activity announced over the past three months, comprised of a number of small deals. The board of Fosters has recommended that its shareholders accept an improved offer of $10.7 billion from SABMiller when they vote on the proposed takeover in December. Peabody Energy has acquired a majority stake in Macarthur Coal after shareholders accepted a $4.9 billion bid for the company.

# 5. Price and Wage Developments

## Recent Developments in Inflation

Consumer price inflation moderated in the September quarter following strong outcomes earlier in the year. The consumer price index (CPI) rose by 0.6 per cent in the quarter. On a seasonally adjusted basis, the CPI increased by 0.4 per cent in the quarter, similar to the various measures of underlying inflation (Graph 5.1 and Table 5.1). On a year-ended basis, headline inflation remained elevated at 3.5 per cent owing to the earlier increases in fruit and fuel prices. It is, however, expected to decline sharply over coming quarters as banana prices return to normal levels.

**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

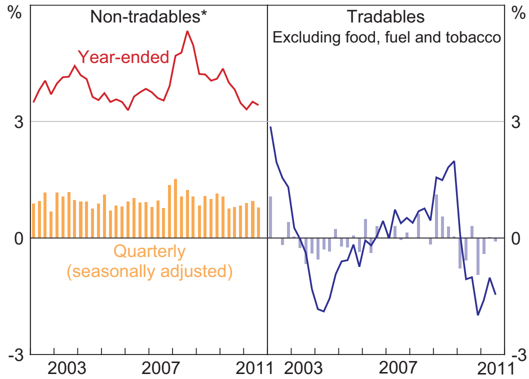
| | Quarterly | | Year-ended | |
|---|---|---|---|---|
| | June quarter 2011 | September quarter 2011 | June quarter 2011 | September quarter 2011 |
| CPI | 0.9 | 0.6 | 3.6 | 3.5 |
| Seasonally adjusted CPI[(a)] | 1.0 | 0.4 | 3.6 | 3.5 |
| – Tradables[(b)] | 1.0 | 0.0 | 3.6 | 3.3 |
| – Tradables (excl food, fuel and tobacco)[(b)] | 0.0 | –0.1 | –1.0 | –1.3 |
| – Non-tradables (excl deposit & loan facilities)[(b)] | 1.0 | 0.8 | 3.5 | 3.4 |
| *Selected underlying measures* | | | | |
| Trimmed mean | 0.8 | 0.3 | 2.6 | 2.3 |
| Weighted median | 0.8 | 0.3 | 2.9 | 2.6 |
| CPI excl volatile items[(b) (c)] | 0.7 | 0.5 | 2.5 | 2.3 |

(a) Year-ended inflation rates are based on non-seasonally adjusted data
(b) Quarterly data are seasonally adjusted by the RBA using ABS seasonal factors for individual components; year-ended inflation rates are based on non-seasonally adjusted data
(c) Volatile items are fruit, vegetables and automotive fuel
Sources: ABS; RBA

The September quarter marked the introduction of the 16th series CPI, following the CPI Review in 2010 (see 'Box C: The 16th Series Consumer Price Index'). The new CPI includes a reweighting of expenditure items based on the 2009/10 Household Expenditure Survey. Periodic reviews of CPI weights are necessary to ensure that the weights of individual goods and services included in the index reflect evolving consumption patterns. Fixed-quantity price indexes like the CPI are subject to positive 'substitution bias' that can lead to inflation being overstated when the expenditure weights are out of date, as the effective weight of goods with falling (rising) relative prices is likely to be too low (high) on average. As discussed in Box C, alternative calculations of inflation over the year to the June quarter using the updated 16th series weights suggest that headline and underlying inflation over the year to June were running at a somewhat lower rate than indicated by the 15th series data.

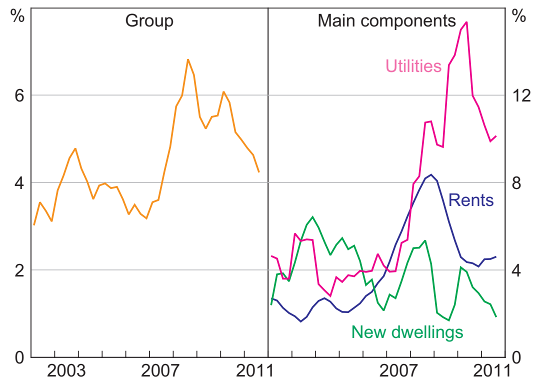
In seasonally adjusted terms, non-tradables prices rose by 0.8 per cent in the September quarter, a smaller increase than in the previous two quarters. In year-ended terms, however, non-tradables inflation has remained around 3½ per cent over the past year, a significant moderation from the pace seen immediately prior to the 2008–09 slowdown (Graph 5.2). Housing costs, the largest expenditure group in the CPI, continued to make a sizeable contribution to non-tradables inflation, although there have been divergent developments within this expenditure group (Graph 5.3). In the September quarter, there was a larger-than-usual seasonal increase in utilities prices, reflecting large increases in electricity charges in Sydney and water charges in Adelaide; utilities prices rose by 10 per cent over the year. Rents also rose solidly in the quarter, with the year-ended pace of rent inflation picking up to 4.6 per cent. However, the cost of purchasing new dwellings, the component with the largest individual weight in the CPI, fell slightly in the quarter with the year-ended rate of inflation moderating to 1.8 per cent. The weakness in residential building activity has seen a sharp slowing in inflation in new dwelling costs over the past year, with price growth particularly soft in Brisbane and Adelaide.

**Graph 5.2**
**Consumer Price Inflation**




* Excluding deposit & loan facilities to June 2011
Sources: ABS; RBA

**Graph 5.3**
**Housing Cost Inflation**

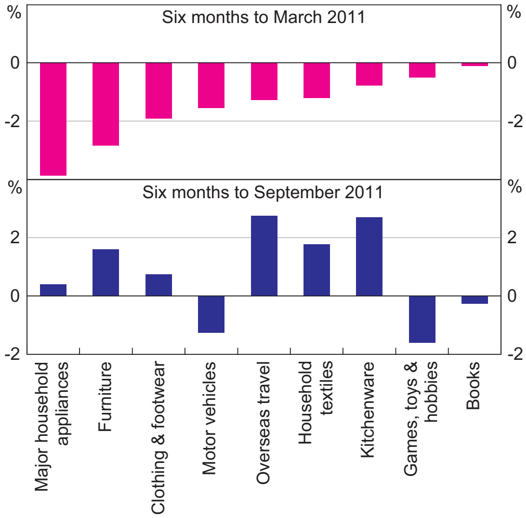



Source: ABS

In seasonally adjusted terms, tradables prices (excluding food, fuel and tobacco) have been broadly flat over the past two quarters. This follows a fall over the previous year associated with the appreciation of the exchange rate in 2009 and 2010, along with the effect of subdued retail trading conditions. However, with little net change in the exchange rate over the past half year, this disinflationary impetus appears to have waned for some items over recent quarters (Graph 5.4). In some cases, most notably textiles and clothing & footwear, the trend to higher inflation appears to be broadly consistent with a pick-up in

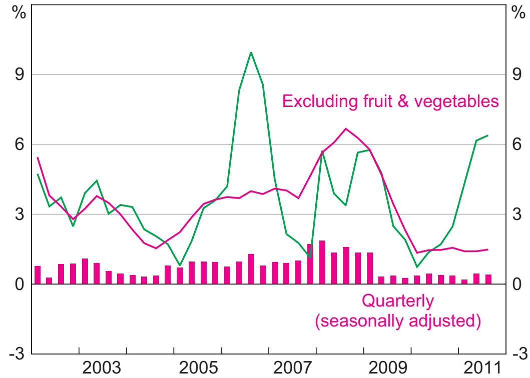
## Graph 5.4
### Price Inflation in Selected Tradables

Seasonally adjusted




Sources: ABS; RBA

## Graph 5.5
### Food Price Inflation




Sources: ABS; RBA

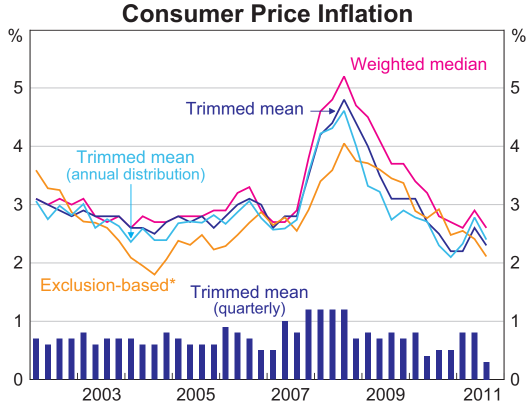
prices evident in data for some other countries. In contrast to earlier quarters, there was also a rise in the price of overseas travel and accommodation in the September quarter, reflecting the effect of higher airfares. Nevertheless, there were continuing price falls in the quarter for a range of other tradable goods, including: audio, visual and computing equipment; games and toys; and motor vehicles.

Food price inflation moderated in the September quarter following large increases earlier in the year as a result of the effect of the floods and Cyclone Yasi on fruit and vegetable supplies (Graph 5.5). Fruit and vegetables prices were broadly unchanged in the September quarter and are expected to decline sharply over the December and March quarters as banana supplies and prices return to normal. Excluding fruit and vegetables prices, food inflation has been low over the past 2½ years, most recently owing to strong price competition among retailers in several grocery categories. For some items, including bread, milk and eggs, prices have declined over the past year despite strength in global food commodity prices.

Automotive fuel prices fell modestly in the September quarter but have risen by 14 per cent in the past year. Over the year the appreciation in the Australian dollar has only partly offset the strong rise in global oil prices. Based on information for the December quarter to date, fuel prices are expected to rise slightly in the quarter.

The trimmed mean and weighted median measures of inflation were lower than expected in the September quarter at 0.3 per cent. Taking the available measures together, the published data suggest that over the year to September underlying inflation was running a little below 2½ per cent (Graph 5.6). However, as discussed in Box C, an assessment of

## Graph 5.6
### Consumer Price Inflation




* Excludes fruit, vegetables, automotive fuel (and deposit & loan facilities to June 2011)

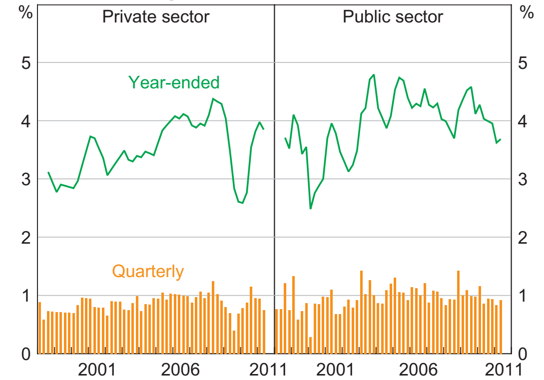
Sources: ABS; RBA

the pace of underlying inflation over the past year is complicated by the effect of substitution bias on the published data up to the June quarter, which means most of the available measures are likely to be slightly overstating underlying inflation over the year to September.

## Costs

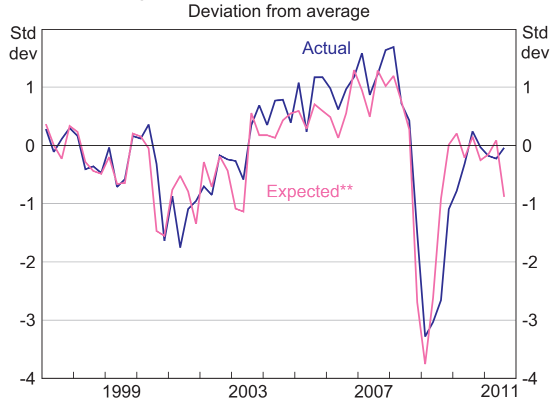
Labour cost growth remains firm but recent indications suggest the likelihood of a significant acceleration in labour costs has lessened. The wage price index rose by 0.9 per cent in the June quarter, to be 3.8 per cent higher over the year. Private-sector wage growth was relatively soft in the quarter, increasing by 0.7 per cent, the lowest quarterly outcome since late 2009. In year-ended terms private-sector wage growth remains relatively firm at 3.8 per cent, above the average for the series (Graph 5.7). In contrast, year-ended public-sector wage growth remained a little below average despite ticking up slightly in the quarter. Wage growth was strongest over the year in the wholesale trade and finance & insurance industries, both of which had seen a relatively pronounced slowing in wage growth in 2009. Wage growth for the September quarter will include the effect of the increase in award wages that came into effect at the beginning of July.

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




Consistent with a softening in the labour market, most firms are not reporting significant difficulty finding suitable labour. Nevertheless, there continue to be reports of skills shortages in certain mining-related industries and occupations. Business surveys and the Bank's liaison suggest a decline in momentum in labour costs growth in the September quarter, abstracting from some temporary strength in wage growth due to the award wage increase (Graph 5.8).

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

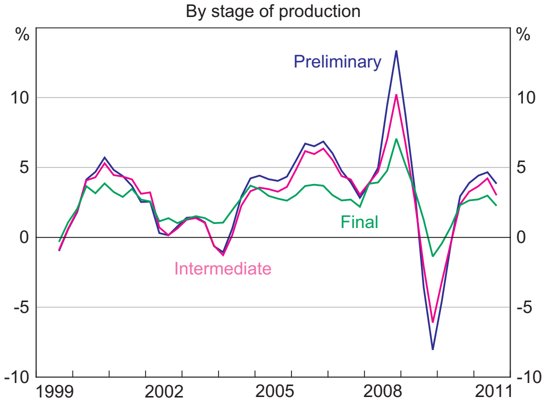



* Weighted average of data from various business surveys since 1994, with weights calculated by the RBA using the principal component method
** Expectation for following quarter
Sources: ACCI; NAB; RBA; Sensis

National accounts measures of unit labour costs – the average cost of labour per unit of output – have been affected by volatility in labour productivity over the first half of 2011, owing to the temporary decline in GDP associated with the effect on coal production of adverse weather events last summer. Nevertheless, given current rates of wage growth, the weak growth in trend labour productivity over recent years suggests that growth in unit labour costs remains relatively firm.

The September quarter producer price data point to some moderation in upstream inflation pressures (Graph 5.9). At the final stage of production (excluding oil), the year-ended rate of producer price inflation of 2.3 per cent was around the average pace seen over the past 12 years. There was a 0.7 per cent increase in final-stage prices in the quarter, with a seasonal increase in utilities prices and some evidence that the disinflationary effect of the earlier exchange rate appreciation is waning. Some easing in inflationary pressures was more apparent at the earlier stages of production, especially in the domestic component. Prices in the manufacturing and construction industries were particularly weak in the quarter.

**Graph 5.9**
**Producer Price Inflation***
By stage of production

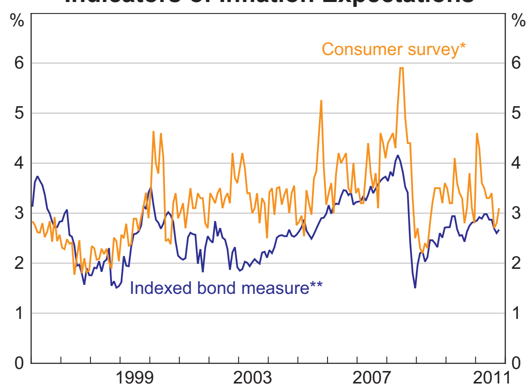



* Excluding oil
Sources: ABS; RBA

## Inflation Expectations

Most measures of inflation expectations have fallen over the past six months. The Melbourne Institute's measure of consumer inflation expectations has returned to its inflation-targeting average, after increasing sharply at the start of the year (Graph 5.10). Financial market measures of medium- to long-term inflation expectations have also fallen, with the indexed-bond measure now slightly below its inflation-targeting average. Market economists' near-term inflation forecasts are a little lower than three months ago, but expectations for inflation in 2013 have ticked up (Table 5.2). Market economists generally expect the carbon price to add 0.7 percentage points to inflation when it comes into effect on 1 Ju1y 2012. Union officials' inflation expectations for 2012 and 2013 have picked up slightly since the previous *Statement*. Business survey measures suggest that selling price inflation is likely to remain below average in the near term.

**Graph 5.10**
**Indicators of Inflation Expectations**




* Median expectation of average annual inflation over the next year
** Break-even 10-year inflation rate on indexed bonds
Sources: Melbourne Institute of Applied Economic and Social Research; RBA

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

| | Year to June 2012 | | | Year to June 2013[(a)] | |
|---|---|---|---|---|---|
| | May 2011 | August 2011 | November 2011 | August 2011 | November 2011 |
| Market economists | 2.7 | 2.6 | 2.5 | 2.7 | 2.8 |
| Union officials | 3.1 | 3.2 | 3.4 | 3.2 | 3.4 |

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

Box C

# The 16th Series Consumer Price Index

Following the review of the Consumer Price Index (CPI) conducted in 2010, the ABS has introduced an updated CPI from the September quarter 2011. Periodic reviews of this sort are necessary to ensure that the weights of individual goods and services included in the index accurately reflect evolving consumption patterns, with the weights last updated in 2005. The review also considered other aspects of the methodology relating to the CPI's compilation. In particular, the ABS has decided to exclude the indirect measure of the cost of financial intermediation services (which had proved difficult to measure) and reviewed the seasonal analysis of CPI components. While the headline CPI was not revised as a result of the CPI update, the seasonal analysis has resulted in small revisions to the statistical measures of underlying inflation. Taken together, the changes suggest that the year-ended rate of underlying inflation in the June quarter 2011 was around ¼ percentage point lower than indicated by the originally published data.

## Changes to the Weighting Scheme

The CPI aggregates the prices of around 1 000 different items into a single index, which is designed to measure changes in the price of the typical basket of goods and services acquired by households in capital cities. These prices are categorised into around 90 expenditure classes and then into 11 expenditure groups. The relative weights in the CPI are based on surveys of household expenditure patterns.

The CPI is a fixed-quantities (Laspeyres-type) index and is constructed on the basis of the assumption that, in the short run, consumers do not adjust the relative quantities of goods and services that they purchase. Although the quantity of each component of the CPI basket is held constant over the life of the CPI, the effective weights of components change between reweightings in line with relative price movements: the effective weights of components with above-average price rises increase over time, while the effective weights for components with below-average price rises decline over time.

In practice, however, households adjust the relative quantities of goods and services that they consume, reflecting changes in preferences and household incomes, the introduction of new products (such as tablet computers and e-book readers), and changes in relative prices. These changes require the weights to be updated periodically. Importantly, the tendency for households to purchase larger quantities of goods and services that have had declines in their relative prices means that fixed-quantity indexes like the CPI are subject to positive 'substitution bias'. This can lead to inflation being overstated when the expenditure weights are out of date (see below).

Table C1 shows the base-period expenditure weights for the 15th series CPI, which was introduced in June 2005, and the new 16th series CPI. The 16th series CPI weights are based on the latest Household Expenditure Survey conducted in 2009/10. Expenditure on housing – which includes rents, the cost of building new dwellings, utilities and maintenance costs – has the largest weight in the index, accounting for over 20 per cent of household expenditure. Food and non-alcoholic beverages account for around 17 per cent of the CPI basket, while transport and recreation & culture each account for a little more than 10 per cent.

**Table C1: Consumer Price Index – Base Period Expenditure Weights**
Per cent

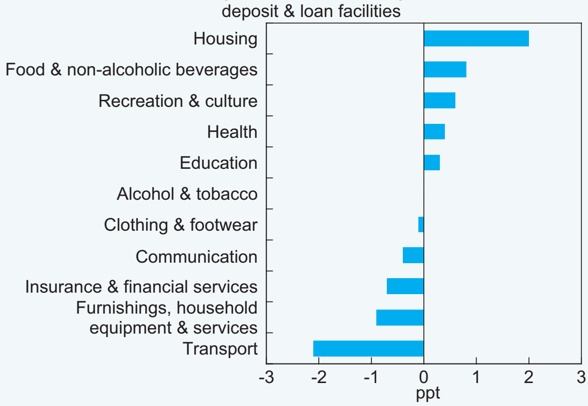
| Expenditure group | 15th series (2005) | 16th series (2011) |
|---|---|---|
| Housing | 19.5 | 22.3 |
| Food & non-alcoholic beverages | 15.4 | 16.8 |
| Recreation & culture | 11.6 | 12.6 |
| Transport | 13.1 | 11.6 |
| Furnishings, household equipment & services | 9.6 | 9.1 |
| Alcohol & tobacco | 6.8 | 7.1 |
| Health | 4.7 | 5.3 |
| Insurance & financial services | 9.3 | 5.1 |
| Clothing & footwear | 3.9 | 4.0 |
| Education | 2.7 | 3.2 |
| Communication | 3.3 | 3.1 |
| **Total** | **100.0** | **100.0** |

Source: ABS

The largest change in the weights between the 15th and 16th series is the 4.2 percentage point decline in the weight of insurance and financial services. This change reflects the decision to remove the indirect component of the price of financial intermediation services – a measure of the interest margin earned by financial institutions on deposit and loan facilities – which has proved difficult to measure accurately. The direct component of the price of intermediation services, which captures explicit fees for deposit and loan products, remains in the CPI.

Since the previous reweighting six years ago, the expenditure shares of housing and food & non-alcoholic beverages have increased significantly, while there has been a decline in the expenditure share of transport (Graph C1). ABS analysis shows that the increase in the share of housing reflects increased spending on rents, due to both rises in rents and increases in the size and quality of rental dwellings; the increase in the share of food primarily reflects increased expenditure on restaurant meals. The decline in the share of household expenditure on transport reflects a decline in expenditure on vehicles and fuel consumption, in part because of a fall in the relative price of motor vehicles.

**Graph C1**
**Changes in CPI Base Weights**
Excluding the effect of removing indirect deposit & loan facilities




Sources: ABS; RBA

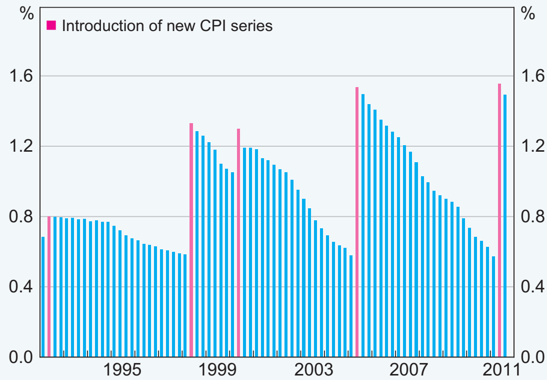
## Effective Weights and Substitution Bias

Turning to the items in the CPI, as noted above, the effective weights of particular goods and services change over time in line with changes in relative prices. This has been particularly the case for audio, visual and computing (AVC) equipment. Following the 15th series review, the base weight for AVC equipment was 1.5 per cent, but by the June quarter 2011 the effective weight for this component had declined by almost two-thirds to just 0.5 per cent, given the large price declines that had occurred for these goods (Graph C2). However, with the introduction of the revised weights in the 16th series CPI, the new weight is similar to that in 2005, reflecting the fact that households have purchased more AVC goods as prices have declined.

The new base weights of a number of other items have also changed materially from the effective weights at the end of the 15th series CPI (Graph C3). Weights for some items that had experienced relative price increases, such as tobacco and automotive fuel, have declined as households have substituted away from these goods. In contrast, for some items, such as rents and restaurant meals, the effective weights are larger in the new CPI, despite increases in the relative prices of these items. In part this reflects the tendency for spending on certain types of goods and services to rise as incomes increase.

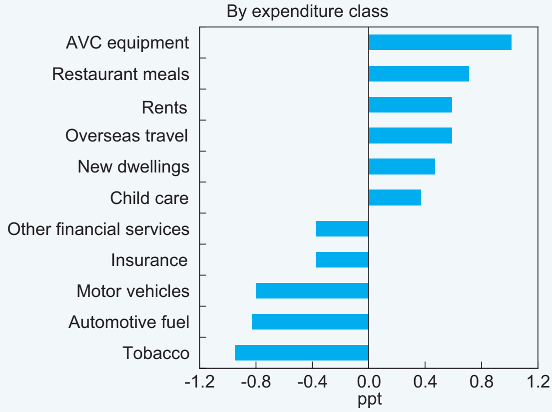
Given the fixed-quantities methodology used in the CPI, the effective weight of goods with falling prices – like AVC equipment – is likely to be too low on average. This 'substitution bias' becomes larger over time as CPI weights become more out of date and the effective weights increasingly diverge from the actual current expenditure shares. Analysis by the ABS of previous reweightings indicates that the average annual substitution bias in inflation is around 0.2 percentage points, but by the fifth year may be as large as ½ percentage point.[1] Consistent with this, the Bank estimates that substitution bias had reached around ½ percentage point for year-ended CPI inflation to the June quarter 2011, mostly reflecting the under-representation of AVC equipment.

**Graph C2**
**Effective Weight of AVC Equipment**
Share of CPI




Sources: ABS; RBA

**Graph C3**
**Largest Changes in Effective Weights***
By expenditure class




* 16th series base weight less effective weight in June quarter 2011; excluding the effect of removing indirect deposit & loan facilities
Sources: ABS; RBA

1 For details, see Appendix 7 of Australian Bureau of Statistics (2010), 'Outcome of the 16th Series Australian Consumer Price Index Review', ABS Cat No 6469.0, December.

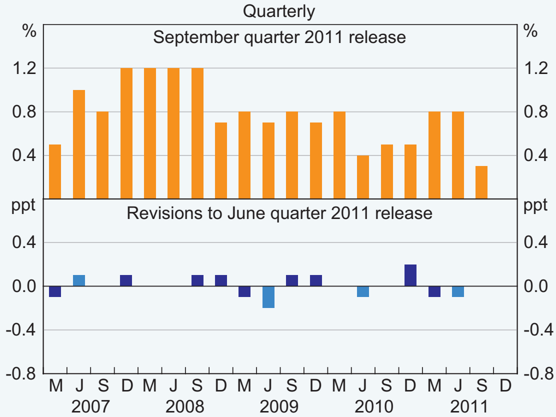
## New Seasonal Adjustment Methodology

As part of the CPI review, the ABS has also revised the seasonal adjustment of the individual CPI components used in calculating some of the underlying inflation measures.[2] In calculating the trimmed mean and weighted median measures, the ABS had previously adjusted 20 CPI components that were identified as seasonal in Roberts (2005). Under the updated approach, and with the benefit of additional data, the ABS will now seasonally adjust around 60 of the 87 expenditure classes.

The reanalysis – which has occurred in two steps[3] – has generally resulted in downward revisions to trimmed mean and weighted median inflation in June quarter estimates and upward revisions to December quarter estimates (Graph C4). The reanalysis has also resulted in small changes to the year-ended estimates of the underlying measures in history (Graph C5).

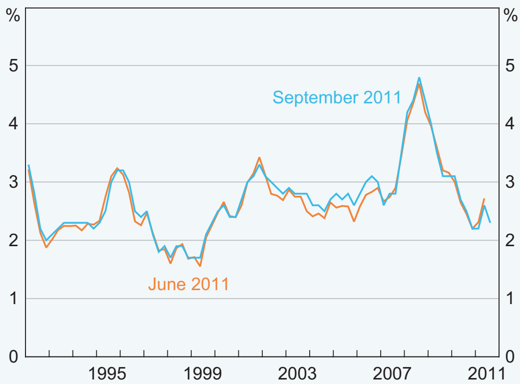
The ABS has also included a seasonally adjusted estimate of the headline CPI. The seasonal adjustments show that headline inflation tends to be seasonally low in December quarters (Graph C6). The seasonally adjusted CPI will be a useful analytical tool for assessing inflation trends quarter to quarter, with the seasonally adjusted components also allowing better analysis of inflation in particular components of the CPI, such as tradables and non-tradables.

**Graph C4**
**Trimmed Mean Inflation**
Quarterly




Source: ABS

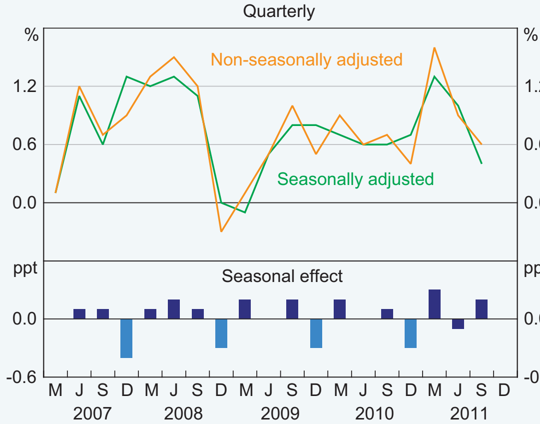
**Graph C5**
**Trimmed Mean Inflation***
Year-ended




* Excluding interest charges prior to the September quarter 1998 and adjusted for the tax changes of 1999–2000; prior to 2002, data are RBA estimates using ABS seasonal factors

Sources: ABS; RBA

**Graph C6**
**Seasonal Pattern in the CPI**
Quarterly




Source: ABS

2 Further information on these measures can be found in Roberts I (2005), 'Underlying Inflation: Concepts, Measurement and Performance', RBA Research Discussion Paper No 2005-05.

3 The ABS first published an information paper in September 2011 ('Seasonal Adjustment of Consumer Price Indexes', Cat No 6401.0.55.003) outlining the new approach to seasonal adjustment based on the June quarter 2011 data. The September quarter 2011 CPI release incorporated the extra quarter of data and also reflected the revised assessment by the ABS of which components are seasonal. Looking ahead, the updating of seasonal factors will occur every quarter whereas the reassessment of which components are seasonal will occur every September quarter.

## Effect on Assessment of Underlying Inflation

Using the updated 16th series weights together with the revised seasonal factors, it is possible to calculate alternative estimates of some of the underlying measures over the year to the June quarter. The use of the updated weights helps to remove the effects of substitution bias by providing an estimate of underlying inflation based on more representative weights (Table C2). In particular, Bank estimates suggest that the use of the more current weights reduces these measures by around ¼ percentage point, which is less than the effect of substitution bias on headline CPI inflation. Taken together these changes suggest underlying inflation – abstracting from substitution bias – was running at 2¼–2½ per cent over the year to the June quarter, lower than earlier assessments of around 2½–2¾ per cent.

**Table C2: Selected Underlying Inflation Measures**
Year to June 2011

| | Originally published (15th series weights, previous seasonal adjustment) | Most recently published (15th series weights, latest seasonal adjustment) | Estimates based on 16th series weights and latest seasonal adjustment[(a)] |
|---|---|---|---|
| Trimmed mean | 2.7 | 2.6 | 2.4 |
| Weighted median | 2.7 | 2.9 | 2.6 |
| CPI excl. volatile items and deposit & loan facilities[(b)] | 2.4 | 2.4 | 2.1 |

(a) RBA estimates
(b) Based on non-seasonally adjusted data
Sources: ABS; RBA

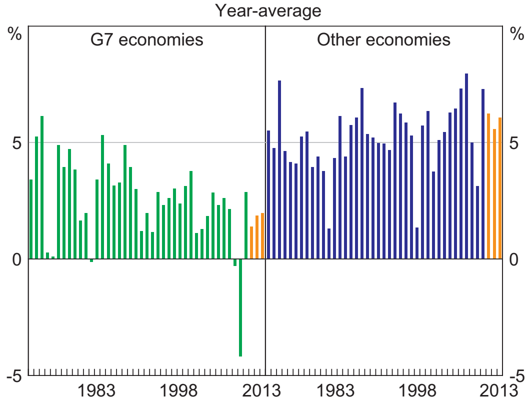
# 6. Economic Outlook

## The International Economy

The IMF's September forecasts were for global growth to be around trend in 2011 and 2012, with annual growth of around 4 per cent in each year. These forecasts are weaker than three months earlier, with the downward revisions largely reflecting a softer outlook for the euro area and the United States, where concerns about the sustainability of sovereign debt positions have increased uncertainty and lowered confidence. The Bank's central scenario is a little weaker than the IMF's forecasts, mostly reflecting a more pessimistic view on Europe (Graph 6.1). Growth in emerging economies is, however, expected to remain firm, contributing around three-quarters of total global growth, although it has also been revised down modestly given trade and financial market linkages to the advanced economies. This central scenario is based on the assumption that sovereign debt problems in Europe do not cause a marked further deterioration in financial and economic conditions there. The recent announcement by European leaders on a package of measures initially led to some improvement in confidence, although much work still needs to be done to put public finances in a number of euro area countries on a more sustainable footing; this is highlighted by the current political turmoil in Greece. Accordingly, the risks to the forecasts remain skewed to the downside, as discussed further below.

The Chinese economy has grown by around 9 per cent over the past year, with growth moderating slightly in line with the authorities' efforts to restrain demand and limit inflation. The Bank's forecasts assume some further moderation over the next year or so, with growth of 8–9 per cent expected over the next couple of years. Given current tight financial conditions, including restrictive measures affecting the property market, the authorities have scope to respond if the problems in the advanced economies threaten a more significant slowing in growth. A number of other emerging markets also have scope to ease monetary and fiscal policies should it be needed.

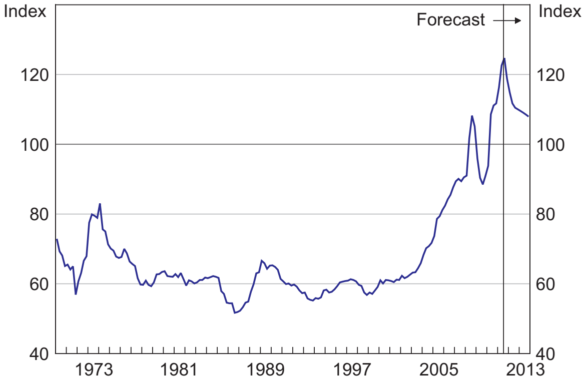
**Graph 6.1**
**Global GDP Growth***
Year-average




* Australia's major trading partners; weighted using output shares at market exchange rates
Sources: CEIC; IMF; RBA; Thomson Reuters

For some time, the Bank has been expecting that the terms of trade would gradually decline as global production of resources, including coal and iron ore, increases (Graph 6.2). The recent falls in commodity prices and the slowing in global demand suggest that the peak in the terms of trade has now been reached and indeed the recent significant falls in the price of iron ore suggest that the decline could be happening a little faster than earlier expected. However, assuming continuing solid growth in China, commodity markets are likely to remain quite tight and the terms of trade are forecast to remain at very high levels compared with recent decades.

**Graph 6.2**
**Terms of Trade**
2008/09 average = 100




Sources: ABS; RBA

## Domestic Activity

As usual, a number of technical assumptions are employed in the preparation of the forecasts. The exchange rate is assumed to remain at its current level over the forecast horizon (A$ at US$1.03, TWI at 76), which is a little lower than at the time of the August *Statement*. The price of Tapis oil – which is the most relevant for Australian fuel prices – is assumed to remain at US$116 per barrel over the forecast period, which is also a little lower than in August. The cash rate is assumed to be unchanged over the forecast period. Finally, the forecasts assume a slightly higher rate of population growth than was expected in August, with annual growth averaging around 1.6 per cent over the forecast period. This revision is based on the most recent data for population growth and forecasts from the Department of Immigration and Citizenship.

Growth over the forecast period has been revised lower since the August *Statement*. Momentum in the non-mining economy appears to have slowed somewhat, as evidenced by the softer-than-expected labour market outcomes over the past six months. In addition, the recovery in coal production appears to be occurring more slowly than expected. Accordingly, growth over 2011 is now expected to be around 2¾ per cent, a downward revision of around ½ percentage point since August (Table 6.1). GDP growth is then expected to pick up gradually to be around 3–3½ per cent over 2012 and a little stronger in 2013 (with the temporary increase to 4 per cent in mid 2012 reflecting the base effects of low coal exports in 2011). The downward revision relative to earlier forecasts reflects slightly weaker forecast growth in domestic demand plus a downward revision to the expectation for medium-term growth in coal exports. Growth in domestic demand, however, is still expected to be strong over the forecast period, with gross national expenditure

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

| | Year-ended | | | | | |
|---|---|---|---|---|---|---|
| | June 2011 | Dec 2011 | June 2012 | Dec 2012 | June 2013 | Dec 2013 |
| GDP growth | 1.4 | 2¾ | 4 | 3–3½ | 3–3½ | 3–4 |
| CPI inflation | 3.6 | 3¼ | 2 | 3¼ | 3¼ | 2½–3 |
| Underlying inflation | 2½ | 2½ | 2½ | 2¾ | 2¾ | 2½–3 |
| CPI inflation (excl carbon price) | 3.6 | 3¼ | 2 | 2½ | 2½ | 2½–3 |
| Underlying inflation (excl carbon price) | 2½ | 2½ | 2½ | 2½ | 2½ | 2½–3 |
| | Year-average[(b)] | | | | | |
| | 2010/11 | 2011 | 2011/12 | 2012 | 2012/13 | 2013 |
| GDP growth | 1.9 | 1¾ | 3¼ | 4 | 3¼ | 3¼ |

(a) Technical assumptions include A$ at US$1.03, TWI at 76 and Tapis crude oil price at US$116 per barrel
(b) Based on the quarterly national accounts release rather than the recent annual release
Sources: ABS; RBA

increasing at a rate of around 4 per cent. Part of this demand will be met through strong growth in imports, with the import content of resource projects expected to be gradually increasing, especially in the case of liquefied natural gas (LNG) projects.

Growth over the next few years is expected to be driven by mining-related activity, with below-trend growth in the non-mining economy. With the announcement of final investment approval for the Wheatstone LNG project, a pipeline of close to $150 billion in LNG projects is now approved or under construction. Significant expansions to iron ore and coal production capacity are also underway, and will contribute to solid growth in resource export volumes over the next few years.

The near-term outlook for the overall non-mining economy remains subdued, with conditions likely to continue to diverge across industries. Business surveys and liaison suggest that investment intentions for the next year have softened over 2011, reflecting the high level of the exchange rate, the unwinding of the earlier fiscal stimulus and the greater uncertainty about the outlook for global growth. Further out, a gradual recovery is expected in non-mining investment, although the recovery is forecast to be more muted than following previous downturns.

The household saving ratio is expected to remain at around current levels over the forecast period. In the near term, household spending is likely to be affected by the decline in net wealth from falls in equity and housing prices, the fall in sentiment and increased concerns about the risk of unemployment. Over the next few years, however, household spending is expected to grow broadly in line with income growth.

The unemployment rate is forecast to rise a little, before declining gradually as the economy gains momentum later in the forecast period. The weaker near-term profile for employment partly reflects the downward revisions to domestic activity outlined above. In addition, with growth in the non-mining economy, which accounts for the bulk of employment, expected to be more subdued than the anticipated rapid growth in the mining sector, the forecast for employment growth is lower than the usual relationship with aggregate output growth would suggest. Consistent with this, growth in the wage price index is expected to remain around its current pace at a little less than 4 per cent. Together with a forecast improvement in productivity growth, this is expected to result in some moderation in growth of unit labour costs.

## Inflation

There has been a downward revision to the inflation forecast, reflecting the revision to the forecast for economic activity and a reassessment of the recent pace of inflation in the wake of the September quarter data and the 16th series CPI review.

Underlying inflation is estimated at a little below 2½ per cent over the year to the September quarter. The disinflationary effect from the appreciation of the exchange rate since 2009 has contributed to falls in tradable goods prices over the year, although this disinflationary impetus appears to have diminished over the past two quarters. Inflation in non-tradables goods and services has stabilised at around 3½ per cent, a little below the average pace of the past decade. With the exchange rate assumed to remain at its current level, import prices are not expected to subtract significantly from inflation in the period ahead. However, domestically generated inflation is expected to pick up more slowly than previously expected. This is conditional on an improvement in productivity growth and wage growth remaining around its current pace. Overall, underlying inflation, excluding the impact of the introduction of a price on carbon, is expected to be consistent with the inflation target over the forecast period, although it is expected to pick up a little towards the end of the forecast period, with a greater likelihood that it will be in the top half of the target range than in the bottom half.

The headline rate of inflation is expected to continue to be influenced by some volatile items and the introduction of the carbon price. In the next few quarters, there will be an unwinding of the effects of the floods and Cyclone Yasi on the prices of fruit and vegetables, especially bananas. As prices return to more normal levels, headline inflation is expected to be below underlying inflation, at around 2 per cent over the year to June 2012. The introduction of the carbon price in July 2012 is then expected to result in headline inflation exceeding underlying inflation temporarily. As in the August *Statement*, the forecasts assume that the full 0.7 percentage point effect of the initial introduction of the carbon price occurs over the second half of 2012. Consequently, the year-ended rate of headline inflation is expected to be above 3 per cent for the first year after the introduction of the carbon price. Underlying inflation is expected to be temporarily boosted by around ¼ percentage point over the year following the introduction of the carbon price.

## Risks

For the global economy, the risks to the central forecast remain skewed to the downside, with the sovereign debt and banking problems in the euro area remaining the most prominent risks. The central forecast assumes that the European authorities do enough to avert extreme financial dislocation, but are unable to avoid periodic bouts of considerable volatility and uncertainty. Under this central scenario, confidence can be expected to remain weak and growth in the euro area is likely to remain subdued. However, a wide range of downside scenarios are possible, stemming from the interaction of the stretched fiscal situations of a number of sovereigns, the poor capital position of some banks and the weak growth outlook. A materialisation of the downside risks would likely be very disruptive for Europe and could result in a deep recession. There would also be flow-on effects to the rest of the world through financial, confidence and trade linkages.

Risks to the outlook for other parts of the world appear less skewed. While a further deterioration in global economic conditions would result in reduced demand for exports from China and other Asian economies, as noted earlier, policymakers in most of these economies have significant scope to ease monetary and fiscal policies in response to emerging signs of economic weakness, particularly to the extent that domestic inflation pressures appeared to be easing. Furthermore, if there is a sustained improvement in confidence in global financial markets, the healthy state of corporate balance sheets in the United States could see an acceleration of business investment and economic growth, a noticeable improvement in the labour market and some recovery in the housing market.

The possibility of a sharp economic deterioration in Europe represents a downside risk for the Australian economy. Given strong trade links with Asia, it is likely that Australia would be less directly affected than some other countries by a deterioration in Europe, although the economy would still be affected through falls in asset prices and weaker household and business confidence. Commodity markets could be expected to weaken and growth in domestic incomes would be lower. While there is a large pipeline of committed LNG projects that would be expected to continue, some planned expansions to coal and iron ore capacity could, in a downside scenario, be delayed. It is also likely that there would be a depreciation of the exchange rate, which would provide some offset for the economy. Overall, however, demand growth could be expected to be weaker than in the central forecast. An additional downside risk concerns the possibility of new rainfall-related disruptions to coal production, given the emerging La Niña weather pattern.

The possibility of a general improvement in global confidence represents an upside risk for the Australian economy. In addition, the forecasts envisage that the spillover effects from the mining sector to the non-mining sector are smaller than in previous resource booms, and it is possible that these effects will turn out to be stronger than currently expected as the mining boom continues to build.

The possibility of a significant global economic downturn is the main downside risk for inflation. The experience of 2009 shows that domestic cost pressures can ease quickly in the event of a major negative external shock. In such an event, inflation could be expected to be lower than in the central forecast. On the upside, while the central forecast is for inflation to remain consistent with the 2–3 per cent target range, there is some risk that the recent easing in wage pressure reported in business liaison may turn out to be temporary. More generally, the inflation forecast is conditional on some improvement in labour and multifactor productivity growth relative to the poor outcomes of the past 5 to 10 years, so that a continuation of the weak productivity performance would put pressure on domestic costs and inflation.