Statement on Monetary Policy AUGUST 2011

Contents

	Overview	1
1.	International Economic Developments	7
	Box A: The Japanese Earthquake and Global Supply Chains	17
2.	International and Foreign Exchange Markets	21
3.	Domestic Economic Conditions	35
	Box B: Measuring the Mining and Non-mining Sectors	48
	Box C: Conditions in the Commercial Property Market	51
4.	Domestic Financial Markets	55
	Box D: Recent Trends in Short Selling	63
5.	Price and Wage Developments	65
6.	Economic Outlook	71



The material in this *Statement on Monetary Policy* was finalised on 4 August 2011. The next *Statement* is due for release on 4 November 2011.

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

Statement on Monetary Policy Enquiries

Information Department Tel: (612) 9551 9830 Facsimile: (612) 9551 8033 E-mail: rbainfo@rba.gov.au

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

Overview

The global economy is continuing its expansion, although the pace of growth has slowed recently. This moderation in growth partly reflects disruptions to global supply chains following the Japanese earthquake, but there has also been a broader slowdown in a number of economies. Growth remains robust though in most of Asia, including China, with domestic demand growing strongly and unemployment rates trending lower.

While the central scenario of most forecasters remains for growth to be at, or above, average over the next year or so, the downside risks to this outlook have increased. Over recent months, the economic data in the United States have been disappointing. In addition, while recent measures have reduced the near-term pressures on the public finances in the United States and in a number of European countries, significant concerns about debt sustainability remain. In contrast, in many emerging market economies, including those in Asia, the main concern is the increase in inflation and signs of overheating, including in some asset markets. In most of these economies, there has been further tightening of monetary policy since the previous Statement.

The recent softening in global growth and the increased focus on downside risks has seen most commodity prices decline a little since earlier in the year. Overall, though, commodity prices remain at very high levels, with demand still strong relative to global supply. The increase in commodity prices over the past year is flowing through into higher global prices for a range of goods, and this has pushed

up inflation in almost all countries, including those with high unemployment rates and considerable excess capacity.

Concerns about public finances in both Europe and the United States have had a significant impact on financial markets over recent months. Despite another EU/IMF assistance package for Greece, concerns about medium-term debt sustainability remain, and yields on Italian and Spanish debt have increased to their highest level since the euro was established. Equity markets have fallen, as have bond yields in the major countries. In currency markets, there has been a significant depreciation of the US dollar, especially during the debate regarding the raising of the debt ceiling. The Australian dollar in trade-weighted terms - and adjusting for differences in average rates of inflation across countries - is currently around its highest level since the mid 1970s. The strong global demand for lowrisk assets has contributed to a reduction in vields on Commonwealth Government Securities.

Conditions in global credit markets have remained generally favourable, notwithstanding the concerns about public finances in Europe and the United States. Credit spreads have, however, widened a little, although they remain low, and bond issuance globally has slowed somewhat. In Australia, credit markets continue to be relatively unaffected by the global uncertainty. Issuance by Australian banks, both secured and unsecured, has remained solid and pricing has not changed materially. The banks have also experienced strong deposit growth over the past couple of years. The Australian economy is continuing to benefit from the strong growth in Asia, with the terms of trade currently estimated to be at their highest level on record. Conditions are, however, quite uneven across industries, with the economy adjusting to what has been a very large change in relative prices. This change is to Australia's long-term advantage, although it is accelerating the pace of structural change at a time when the economy has relatively limited spare capacity.

The high level of commodity prices is contributing to particular strength in the resources sector. Mining investment, as a share of GDP, is already at historically high levels and is expected to increase further as large expansions take place in the LNG, iron ore and coal sectors. This growth in resources-sector investment is having positive spillovers to a number of other sectors, including a range of business services. High commodity prices have also provided a significant boost to real national income over recent years.

In contrast, a number of sectors are experiencing quite difficult conditions, with investment intentions outside the resources sector having been downgraded this year. There has been a fall in overall business confidence, although surveybased measures of business conditions remain around their long-term average. Business credit has been weak, with much of the resources-sector investment being financed through internal funds or global capital markets. Financing conditions for commercial property remain tight, although less so than in 2008 and 2009.

The high exchange rate is having a significant influence on a number of sectors, including manufacturing, tourism and tertiary education. Many firms facing international competition are re-evaluating their medium-term prospects and business strategies, given an assessment that the high exchange rate is likely to persist and is not just a temporary development. At the same time, the high exchange rate has lowered the Australian dollar cost of imported capital goods, which is supporting investment in plant and machinery in a number of industries.

Another important factor shaping the economy at present is the household sector's attitude to spending and borrowing. The household saving ratio has risen considerably over recent years as households return to more traditional saving patterns after more than a decade of very strong growth in consumption relative to income. Households remain cautious and retail spending is subdued, although growth in spending on services has been reasonably solid. Household confidence has fallen recently and there has been little growth in household net worth over the past year.

The change in household behaviour is also evident in borrowing decisions, with recent growth in housing and credit card debt the slowest for many years. Turnover in the housing market has declined, as have nationwide measures of housing prices, with notable weakness in the Perth and Brisbane markets after earlier large increases. In both Western Australia and Queensland, there has been an increase in loan arrears partly due to a deterioration in lending standards during the period of rapid price increases, similar to the experience in Sydney in the first half of the 2000s. Overall, though, loan arrears remain low.

The GDP outcomes over recent guarters have been significantly affected by the extreme weather conditions in late 2010 and early 2011, and these effects will continue for some time yet. In the March quarter, GDP declined by 1.2 per cent, with falls in iron ore and coal exports subtracting around 1¾ percentage points from growth. In contrast, domestic demand grew strongly in the guarter, underpinned by a lift in investment. Iron ore exports recovered in the June guarter and, while there has been a pick-up in coal production in Oueensland. the recovery is taking longer than expected due to the difficulties in removing large volumes of water from flooded coal pits. The increase in resources exports will boost GDP outcomes over coming quarters, although the rebound is likely to be more protracted than previously expected.

The unemployment rate has held steady at around 5 per cent since late 2010. Employment growth has slowed from the rapid pace of last year, partly reflecting lower population growth as a result of less inward migration. Employment has grown strongly in the mining sector and a number of business and household service industries, while it has been weak in the manufacturing and construction industries. The forward-looking indicators continue to point to modest employment growth over the months ahead, although businesses appear more uncertain about the outlook than they have been for some time.

Reflecting the relatively tight labour market, growth in labour costs remains firm at around rates seen before the 2008–2009 downturn. There has, however, recently been some slowing in wages growth in the public sector. At this point, reports of skills shortages remain relatively isolated and confined to the resources and related sectors.

CPI inflation over the year to the June quarter was high at 3.6 per cent. This outcome was affected by the earlier extreme weather events, with fruit and vegetable prices rising by 35 per cent over the year; the increase in the price of bananas has been especially large and is estimated to have added up to ½ percentage point to CPI inflation. Given the improved growing conditions recently, many of these prices have begun to normalise, and a large fall in banana prices is expected by the end of the year.

Inflation has also been boosted by increases in fuel and utilities prices. In addition, rent inflation has picked up a little, with some rental markets being relatively tight, as the number of dwellings has grown at a slower rate than the population for several years. In contrast, the prices of most consumer goods declined over the past year, although many of these goods experienced surprisingly large increases in the June quarter. It is possible that these increases simply reflect changes in the seasonal pattern of discounting, although global prices for many manufactured goods are rising and retailers face a range of domestic cost pressures. Over the year to the June quarter, the various measures of underlying inflation ranged between 2½ and 2¾ per cent. On a year-ended basis, this rate of inflation is consistent with the medium-term target, although quarterly rates of inflation have picked up from those in 2010. These recent outcomes confirm that the moderation in inflation that resulted from the 2008–2009 slowdown has now run its course.

From a longer-term perspective, an important influence on both costs and GDP growth is the rate of improvement in productivity. Since around the mid 2000s, the growth in output has been accounted for by growth in factors of production. The slower productivity growth has been offset by the rise in the terms of trade, so that it has not led to a slowdown in the growth of real incomes in Australia. With the terms of trade expected to decline somewhat over the next few years as additional global commodity supply comes on line, a return to faster rates of productivity growth is likely to be required if living standards are to continue to rise at the average rate of the past two decades.

In the short term, the GDP outcomes for the next few guarters are expected to be boosted by a recovery in coal production. The Bank's forecast for GDP growth in 2011 has, however, been lowered to 3¼ per cent. A little more than half of this downward revision reflects the slower-than-expected recovery in the Queensland coal industry, with most of the remainder reflecting slower expected growth in consumption. Domestic demand is, however, forecast to continue to grow strongly, with a large increase in mining investment expected. Overall, GDP growth is expected to be at, or above, trend in 2012 and 2013. The unemployment rate is expected to remain at around 5 per cent for some time, before declining a little towards the end of the forecast period.

Conditions are likely to remain very different across industries, as the Australian economy continues its structural adjustment to historically high commodity prices. Conditions are expected to remain very strong in the mining industry, as well as those parts of the economy benefiting from high rates of resourcessector investment and output, and from the income effects from high commodity prices. In other sectors, the high exchange rate and subdued levels of retail spending mean that the trading environment is likely to remain difficult. Another important factor affecting the outlook is the tightening in fiscal policy, with the Australian Government forecasting a turnaround in the budget position of around 4 per cent of GDP between 2010/11 and 2012/13.

In underlying terms, year-ended inflation is expected to pick up over the forecast period. While some moderation in guarterly rates of inflation is expected, it now looks likely that underlying inflation will be at, or above, 3 per cent in 2011. The high exchange rate and subdued consumer spending are putting downward pressure on some prices, although increases in global prices for food and manufactured goods as well as a range of domestic cost pressures are working in the other direction. Based on the central scenario for the Australian economy, and the technical assumption of unchanged interest rates, underlying inflation is expected to remain relatively high in 2012 and 2013, with the 2012 outcome boosted by around 1/4 percentage point by the introduction of a price on carbon.

In headline terms, inflation is expected to fall back below 3 per cent by early 2012 as the effects of the extreme weather events earlier in the year are reversed. It is then expected to pick up in the latter part of 2012, back to around current rates, with the carbon price estimated to add 0.7 per cent to the general price level. Provided that inflation expectations remain well anchored and that there are no second-round effects through higher wage claims, headline inflation is then expected to decline again in 2013 as the once-off effects of the introduction of the carbon price fall out of the figures.

While these forecasts represent the Bank's central scenario, at the global level the risks to economic activity are weighted to the downside. There remains

a possibility that the sovereign debt problems in Europe and the United States play out in a disorderly and disruptive manner, and that this leads to a marked rise in global risk aversion and uncertainty. While the exposures in the financial system are better understood than they were in 2008, the scope for easing monetary and fiscal policies in most major economies is very limited. In contrast to these concerns, there are upside risks to inflation in Asia, with the effects of high capacity utilisation and elevated commodity prices evident in a number of countries.

Domestically, the main uncertainty continues to relate to the behaviour of the household sector. The Bank's forecasts have been prepared on the basis that the current caution continues for a while, leading to a further modest increase in the household saving ratio over the next year. There are, however, plausible scenarios in which the saving ratio increases by a larger amount, and others in which it declines as confidence improves. Other important issues shaping the outlook are the rate of productivity growth, the response by businesses to the high exchange rate, and how wage outcomes evolve in a period in which the unemployment rate is expected to remain at relatively low levels.

Since November last year the Board has held the cash rate steady at 4.75 per cent. The various financial indicators suggest that this setting of monetary policy is exerting a degree of restraint on the economy. Interest rates on most loans are a little above average, credit growth is very subdued, asset prices have generally declined and the exchange rate is high. While each of these variables is affected by other factors as well, together they point to financial conditions being tighter than normal.

In view of the medium-term outlook for inflation, at its recent meeting the Board considered whether it was appropriate to tighten monetary policy further. On balance, its judgment was that it was prudent to maintain the current setting of the cash rate, particularly in view of the acute sense of uncertainty in global markets, which has contributed to heightened downside risks to global growth. In setting monetary policy over the months ahead, the Board will continue to look through the volatility in inflation resulting from the natural disasters at the start of the year, as well as any once-off effects from the introduction of a price on carbon. In what is a challenging environment, the Board is committed to ensuring that inflation remains consistent with the 2–3 per cent medium-term target that has served the Australian economy well over the past two decades. v

1. International Economic **Developments**

The global economy is continuing to expand, but the pace of growth has slowed recently, partly reflecting supply-chain problems from the earthquake in Japan. Conditions continue to vary significantly across regions, but the International Monetary Fund's central forecast for 2011 and 2012 is still for above-average global growth and for growth to be well above average in Australia's major trading partners (Table 1.1). However, the downside risks to growth remain prominent. Despite the recent financial assistance package for Greece and the agreement to lift the debt ceiling in the United States, sovereign debt concerns continue to weigh on global sentiment and a disorderly resolution of the current problems would lead to a considerably worse outcome for the global economy than suggested by the central forecast.



Table	1.1:	World	GDP	Growth
	Year-a	average	per cer	nt ^(a)

	2009	2010	2011	2012
			IMF forecasts ^(b)	
United States	-3.5	3.0	2.5	2.7
Euro area	-4.2	1.8	2.0	1.7
Japan	-6.3	4.0	-0.7	2.9
China	9.2	10.3	9.6	9.5
East Asia (excl China and Japan) ^(c)	0.1	7.7	5.2	5.0
India	6.8	10.1	8.2	7.8
World	-0.8	5.1	4.3	4.5
Australia's trading partners ^(d)	-0.2	6.8	4.7	5.5

(a) Aggregates weighted by GDP at PPP exchange rates unless otherwise specified

(b) Forecasts from the June World Economic Outlook Update

(c) Weighted using GDP at market exchange rates

(d) Weighted using merchandise export shares

Sources: CEIC; IMF; RBA; Thomson Reuters

Growth in Asia remains robust, particularly in China where GDP has continued to increase at around the same solid pace as seen over the past year and a half (Graph 1.1). Underlying growth in the rest of Asia (excluding Japan) also remains solid, with strong growth in domestic demand supported by expansionary macroeconomic policies, although production has been dampened by supply-chain disruptions from the Japanese earthquake (see 'Box A: The Japanese Earthquake and Global Supply Chains' for further details). Following a larger-thanexpected reduction in activity in Japan following the earthquake, economic activity has rebounded relatively guickly and output will be boosted by the rebuilding effort in the second half of 2011 and throughout 2012.

In most of the North Atlantic economies, conditions are softer compared with three months ago. In addition to the adverse effects on confidence from sovereign debt concerns on both sides of the Atlantic, high commodity prices have reduced the purchasing power of household incomes, households continue to repair balance sheets weakened by depressed housing markets and, in recent months, hiring by businesses in the United States has slowed. There has also been some effect on manufacturing production and consumption from the Japanese supply-chain disruptions.

Robust rates of global growth, particularly in Asia, have kept commodity prices high, despite a modest easing in some prices in recent months. The increase in commodity prices last year and earlier this year has pushed up headline rates of inflation in many countries and is flowing through to higher rates of core inflation. This is especially so in Asia where domestic demand is robust, but core inflation in the G7 economies has also picked up from low levels. With monetary policies globally still accommodative and many economies in Asia coming up against capacity constraints, the risks to inflation remain to the upside.

Asia

China's economy grew at a solid pace in the June quarter, with GDP expanding by 2.2 per cent to be 9½ per cent higher over the year. Exports growth has been weaker over the past few months after having picked up strongly in March, while domestic demand has continued to grow at a firm pace. Both fixed asset investment and real retail sales have grown solidly in recent months, despite the tightening of monetary policy that has occurred over the past year.

Notwithstanding recent volatility in the seasonally adjusted estimates, fixed asset investment has continued to grow strongly in recent months, albeit at a slower pace than recorded at the beginning of the year. Growth has been driven by real estate investment, which has been supported by the Government's efforts to boost the construction of affordable housing. Manufacturing investment has also expanded at a robust pace recently, consistent with the recent pick-up in industrial production, while growth in infrastructure investment has softened as spending related to the earlier fiscal stimulus package is phased out (Graph 1.2).



Growth in real retail sales picked up slightly in the June guarter, with urban and rural surveys of household expenditure suggesting that real consumption expanded by around 3 per cent in the guarter. Rural consumption, in particular, was supported by an ongoing subsidy provided by the Government for the purchase of home appliances and the boost to rural incomes from higher food prices. Household consumption is also likely to receive a boost in the second half of the year from changes to personal income taxes. The most important change is an increase in the monthly taxfree threshold from CNY 2 000 to CNY 3 500, which is estimated to reduce the number of wage earners paying income tax from 28 per cent to about 8 per cent. While there have also been increases in income taxes payable by very high income earners, the changes are expected to lower the Government's annual tax revenues by CNY 160 billion (0.4 per cent of GDP).

Growth in merchandise exports has softened in the past few months after having increased significantly in March. Exports to the rest of east Asia have contracted, although they have increased to Japan, while exports to the European Union and the United States have been broadly flat, reflecting weaker domestic demand in those economies. Weaker demand in the North Atlantic economies has also contributed to the weak growth in intra-regional trade, with China's imports of goods for processing and assembly broadly unchanged since January. The strength in merchandise import values recorded over recent months has reflected higher commodity prices, with import volumes having not grown in the past nine months, over which time crude oil imports have fallen.

Year-ended consumer price inflation reached 6.4 per cent in June, its fastest rate in nearly three years (Graph 1.3). Food price inflation picked up noticeably to 14.4 per cent, driven mainly by a 57 per cent increase in pork prices over the year (Graph 1.4). Pork prices have been driven higher by tight supply, with pork production falling in the first





half of the year, and higher feed grain costs driven by higher corn prices. Grain and fresh vegetable prices have been affected by extreme weather, with flooding in southern and eastern China damaging crops.

Non-food inflation has continued to increase, reaching 3 per cent over the year to June. This increase has been reasonably broad based reflecting second-round effects from higher commodity prices. For example, prices for building materials and furniture have increased as the cost of raw materials has risen, and utilities prices have been allowed to increase in some regions in response to higher thermal coal prices. Earlier increases in cotton prices





have contributed to a 2 per cent rise in clothing prices over the past year; this compares with an average fall of around 1.5 per cent per year over the past decade.

The People's Bank of China (PBC) increased its benchmark deposit and lending rates by a further 25 basis points in early July, with 1-year benchmark rates now having been raised by a cumulative 125 basis points since October. In addition, the PBC has raised banks' reserve requirement ratios by a further 100 basis points since the May *Statement* reflecting its efforts to manage liquidity, particularly from the ongoing accumulation of foreign exchange reserves. Combined with direct controls on lending, higher interest rates and reserve ratios have led to a moderation in credit growth, with credit expanding at an annualised rate of 13¾ per cent over the first six months of 2011, which is significantly slower than the 20 per cent growth recorded over 2010 (Graph 1.5). The slowing in credit may, however, overstate the extent to which total funding has slowed; 'entrusted' loans (where deposits are made for lending to a specific borrower), which are not included in the credit statistics, have expanded over the past two years, while the issuance of bank accepted bills has become an increasingly important source of funding in China.

In Japan, activity is recovering more quickly than anticipated from a greater-than-expected contraction following the mid-March earthquake and tsunami. After falling sharply in March and April, many economic indicators picked up in May and June; business surveys and industrial production are now only moderately below their February levels. After falling sharply in March, retail sales have picked up rapidly, supported by purchases of replacement household goods in the affected regions (Graph 1.6). In contrast, consumer sentiment has risen only modestly, with ongoing nuclear contamination concerns, uncertainty about employment and pressure to reduce electricity usage all weighing on confidence. With electricity supply still constrained, only relatively small further increases in activity are expected until the December guarter.

Government The has SO far approved expenditures of ¥6 trillion for rehabilitating the earthquake-affected prefectures, which it can fit within its current budget without needing to raise additional funds. Around one-half of the expenditures have been allocated to reconstruction - the remainder has been for clean-up, payments to households, temporary accommodation, etc with the funding approved to date only covering a fraction of the ¥16.9 trillion (31/2 per cent of annual GDP) in estimated total damages. Reconstruction efforts are expected to begin in earnest in the December quarter.

Outside of Japan, the global effects of the supply-chain disruptions from the Japanese earthquake have been most evident in east Asia (excluding China). Industrial production in the region fell sharply in April, leading to falls in export volumes in April and May (Graph 1.7). The motor vehicle sector has been most affected, with Japanese firms making up a large share of producers in the region (see 'Box A: The Japanese Earthquake and Global Supply Chains' for further details). In contrast, some particular segments of the electronics sector have benefited from substitution away from their Japanese competitors. The supply-chain effects, however, appear to have been relatively short-lived, with industrial production rising in May and June.

Notwithstanding the temporary softness associated with the supply-chain disruptions, the robust pace of economic growth in east Asia over the past year has led to an increase in inflationary pressures. The high level of global commodity prices partly reflects the strong growth in the region and has contributed to the pick-up in inflation in these countries over the past year or so (Graph 1.8). Notwithstanding some recent easing in monthly headline rates of inflation, core inflation rates have continued to rise, as high commodity prices have been feeding through to higher prices of other goods and services, unemployment rates have continued to fall and other measures of capacity utilisation have remained elevated. Monetary authorities in some countries have tightened policy significantly, but policy is generally still accommodative across the region.

Conditions in the Indian economy have softened over recent months. Timely indicators suggest that output growth has begun to slow from the rapid pace that saw GDP growing at an annualised rate of 9¼ per cent over the three quarters to March (Graph 1.9). Industrial production contracted in both April and May. Although merchandise trade values continued to grow strongly in the June quarter, much of this reflected higher commodity prices.







The services PMI suggests solid growth in activity in that sector. Conditions in the agricultural sector remain healthy, with rainfall in the first two months of the summer monsoon season around long-run average levels.

Inflation in India remains elevated, with the wholesale price index increasing by 9½ per cent over the year to June. In recent months, an easing in primary food inflation has been offset by higher inflation in non-food manufacturing and fuel & power prices. In response to persistently high inflation, the Reserve Bank of India has raised its policy rate by 325 basis points since March 2010 to 8 per cent.

North Atlantic

The pace of growth in the United States has eased significantly in 2011. Consumption growth has slowed noticeably, with higher oil prices, the reduced availability of motor vehicles as a result of supplychain disruptions from the Japanese earthquake, and increased uncertainty about public finances all playing a role (Graph 1.10). Consumer confidence has fallen further in recent months and remains well below average levels.

The weakness in the housing market also continues to weigh on household consumption. The stock of unsold homes remains high, house prices have continued to fall and house-building activity remains around historic lows. Household debt relative to income has continued to decline and the saving rate remains high compared with the past decade or so (Graph 1.11).

After picking up in the March quarter, the labour market recovery slowed in the June quarter. Non-farm payrolls rose by an average of around 20 000 in May and June; public payrolls continued to fall and growth in private payrolls eased back to the levels of a year earlier (Graph 1.12). The unemployment rate rose in June for the third consecutive month and initial jobless claims remain above their March quarter average.

-300

-600

-900

2005

2006

Source: Thomson Reuters

2007

2008

2009

2010





-300

-600

-900

2011

Conditions remain more positive in the business sector than in the household sector. Survey measures of business conditions are around their average levels, even with the manufacturing and non-manufacturing ISM indices having declined in recent months. High corporate profits, combined with government incentives, have led to a continued expansion in business investment, particularly in machinery & equipment. Non-residential construction has grown modestly over the past year, although it remains low as a share of GDP.

Net government debt, at around 55 per cent of GDP, is at its highest level since 1955. Notwithstanding the recent agreement to reduce government spending in conjunction with raising the debt ceiling, public debt in the United States is forecast to continue to rise as a ratio to GDP for some time yet. Over the medium term, major reforms to health care and social security entitlements are likely to be required to put public finances on a sounder footing.

Economic conditions remain very different across countries in Europe. The economic recovery continues in the larger euro area countries, especially in Germany where output is now above its pre-crisis peak (Graph 1.13). Activity has also largely recovered in France and the Netherlands. Growth continues to be supported by the external sector and firms in these countries are expanding investment, particularly in machinery & equipment. In contrast, consumption growth appears to have slowed in the June guarter after expanding solidly in the March guarter, despite these countries having experienced a decline in unemployment rates and relatively high levels of consumer confidence over the first half of the year. In the United Kingdom, growth is expected to strengthen somewhat after a period of subdued growth.

In contrast to developments in the countries to the north, the recovery in Italy and Spain is much less advanced, while economic activity remains depressed in Greece, Ireland and, to a lesser extent, Portugal. These latter economies face significant structural adjustment following a loss of competitiveness over the past decade and a buildup of public and private debt. Government debt levels were already elevated when public finances deteriorated sharply following the global economic downturn, in some countries partly in response to the costs of supporting their banking sector (Graph 1.14). This has led to a self-reinforcing cycle of concerns about the ability of these economies to service their debts, higher borrowing costs, and further increases in projected deficits. In response, governments have committed to substantial programs of fiscal consolidation as part of support

Graph 1.13 Euro Area – GDP March quarter 2008 = 100 Index Index Germany 100 100 France Spain Portugal 95 95 Italv Greece ٩n 90 Ireland 85 85 2009 2011 2009 2011 Source: Thomson Reuters



packages from international institutions. Although many of these programs were intended to address some of the structural problems hampering growth, in the short run, at least, there has been a further dampening in economic activity.

In the case of Greece, there have been two major developments since the May Statement. In late June, Greece's Parliament approved further fiscal consolidation efforts, securing the fifth disbursement of funds from the International Monetary Fund and European institutions under the initial bailout package. Then, in mid July the European Union agreed on the terms of a second financial assistance package for Greece, in response to widespread concerns about the sustainability of sovereign finances. The package also provides more favourable financing to Ireland and Portugal and will allow a greater role for the European Financial Stability Facility. With substantial fiscal consolidation efforts still required over many years, both in Greece and elsewhere, the outlook for these economies remains uncertain

Core inflation rates in a number of the North Atlantic economies have picked up over the past six months (Graph 1.15), despite considerable excess capacity in these economies. This partly reflects the indirect effects of higher commodity prices, which are evident in large increases in public transport prices earlier in the year and in clothing prices more recently, as well as some temporary effects on motor vehicle prices from the earthquake in Japan. The recent stabilisation in commodity prices should reduce some input price pressures in the period ahead, but the European Central Bank and the Federal Reserve Board both expect a gradual pick-up in core inflation over the next few years.





Commodity Prices

After rising earlier in the year, global commodity prices are a little off their recent peaks, in line with some moderation in the pace of global growth and improved supply for some commodities (Graph 1.16). Nonetheless, prices remain significantly higher than a year ago, with the IMF All Primary Commodities Index increasing by around 25 per cent since mid 2010. Prices have been supported by strong growth in emerging economies in Asia and elsewhere, which are currently in a particularly resource-intensive stage of their development (Graph 1.17). Contract prices for iron ore and coal increased sharply in the first half of 2011, driven in part by supply disruptions in Australia and elsewhere, combined with ongoing growth in global steel production (Graph 1.18). The spot price for iron ore has eased slightly over recent months, but remains significantly higher than a year ago.

Similarly, the coking coal spot price remains very high as the recovery in Australian coal production from the recent floods has proceeded more slowly than initially expected. As a result, contract prices for iron ore and coking coal in the September quarter are estimated to have been set only a little lower than the very high June quarter levels. Spot prices for thermal coal have also declined over recent months, in line with other energy prices, and remain below the current annual contract price; prices nevertheless remain significantly higher than in mid 2010.

Global food prices, as measured by the IMF Food Price Index, have fallen slightly over recent months, but remain higher than their peak in 2008 following strong growth through 2010. The high level of prices reflects strong income growth in emerging and developing countries, particularly as they switch towards higher protein food. Prices for some rural commodities have eased, with improved climatic conditions underpinning higher forecast wheat crops in the Black Sea region, and an expected large increase in global cotton production. In contrast, Australian wool prices have increased further, to be around 75 per cent higher than a year ago, owing to strong Chinese demand and the Australian sheep flock being around its lowest level since early last century.







The prices of crude oil and exchange-traded mineral commodities have generally fallen a little from the peaks recorded in April (Graph 1.19, Table 1.2). Prices eased in May and June reflecting general weakness in financial markets and sovereign debt concerns, although most prices remain higher than a year ago, reflecting the recovery in global demand and relatively tight supply situations for most commodities. In the crude oil market, the announcement of the release of oil from some International Energy Agency members' strategic reserves resulted in a temporary fall in prices in late June. The price of gold continues to trend higher, posting fresh record highs.

Table 1.2: Commodity Price Growth^(a) SDR terms, per cent

	Change since previous Statement	Change over the past year
Bulk commodities ^(b)	2	24
– Iron ore	-2	19
– Coking coal	5	32
– Thermal coal	12	26
Rural	0	25
– Beef	-3	14
– Cotton	-30	27
– Wheat	-2	21
– Wool	6	76
Base metals	3	12
– Aluminium	-4	8
– Copper	10	22
– Lead	9	8
– Nickel	-2	4
– Zinc	13	8
Gold	14	33
Oil ^(c)	-3	22
– US\$ terms	-5	27

(a) RBA Index of Commodity Prices components except oil; latest available

(b) RBA estimates for recent months

(c) Average of WTI and Tapis crude oil prices

Sources: Bloomberg; RBA

Box A The Japanese Earthquake and Global Supply Chains

The Japanese earthquake has had a significant effect on industrial production not only in Japan, but in a number of other countries as well, as losses to Japanese output have disrupted international supply chains. These problems have arisen from several sources: some firms in the affected region were damaged by the earthquake and tsunami; some firms halted production due to concerns about electricity supply; and others shut down temporarily to assist the recovery effort. Given the highly integrated nature of domestic production networks and the use of just-in-time inventory management, this loss of production spread quickly throughout Japan as the time taken for supplies to be delivered to manufacturers increased significantly (Graph A1). The Japanese Government has estimated that, in areas not directly affected by the earthquake, supplychain disruptions are likely to decrease GDP by 1/4 per cent in the first half of FY2011. The output loss was particularly severe in the electronics and motor vehicle industries as component producers were more concentrated in the earthquake-affected areas and both have particularly integrated production processes (Graph A2).

In the motor vehicle industry, factory shutdowns were widespread following the earthquake, although all plants owned by major automotive manufacturers were operational again by mid April. However, supply-chain disruptions have been significant, reflecting damage to factories producing particular components, such as those owned by the firm Renesas, which produces electrical components for major automakers. Domestic production of vehicles fell by over 50 per cent in March and remained weak in April, with Toyota and Honda each recording falls of around 80 per cent (Graph A3).





This loss of production led to a decline in exports of motor vehicles of 60 per cent over March and April.

The supply-chain disruptions in Japan also affected production elsewhere, since more than half of the global motor vehicle production of Japanese firms occurs outside of Japan and Japanese-produced



parts are integral to their production. With exports of motor vehicle parts from Japan declining by around 20 per cent between February and May, global motor vehicle production was also affected (Graph A4). The production effects were most evident in economies where Japanese manufacturers, especially Toyota and Honda, make up a significant share of production, such as in Thailand and Taiwan and, to a lesser extent, in Canada, the United Kingdom and the United States (Table A1). Production also fell

Graph A4 Japan – Export of Component Parts* Volumes В Mt Semiconductors Motor vehicle parts 27 5.5 20 4 0 1.3 2 5 1.0 0.6 2001 2006 2011 2006 2011 Seasonally adjusted by RBA Sources: CEIC; RBA

significantly in Australia, although this fall was partly due to an unrelated change to production levels at Ford. Nevertheless, while motor vehicle production fell by more than half in Japan over March and April, production by Japanese manufacturers outside Japan fell by less. This partly reflects the prioritisation of component production for export as Japanese firms sought to maintain market share in key export markets.

	Japanese vehicle brands in total domestic production	Imported Japanese vehicles in total sales	Motor vehicle production	Motor vehicle sales
	2009	2010	Growth over 2 months to May 2011	
Thailand	86	6	-38	-32
Taiwan	84	15	-14	-35
Australia	43	34	-13	-12
Canada	39	12	-12	-16
United Kingdom	50	5	$-8^{(a)}$	1
United States	37	13	-7	-10
Euro area	3	4	1	0

Table A1: Japanese Motor Vehicle Producers Market share and supply-chain effects, per cent

(a) Change from March to April; production rebounded in May

Sources: CEIC; European Automobile Manufacturers' Association; FCAI/VFACTS; International Organization of Motor Vehicle Manufacturers; RBA; Thomson Financial With production down significantly, the reduced availability of Japanese motor vehicles has affected sales in many countries. Sales fell by 7 per cent in the United States in the June quarter, and have fallen significantly in east Asia, Canada and Australia. In the United States, the reduced availability of motor vehicles led to a reduction in discounting, with the price of new motor vehicles in the CPI increasing by 2.5 per cent in the June quarter. Prices also picked up in a number of other countries.

Outside of the motor vehicle industry, with electrical components and electronics manufacturers also affected by the earthquake, there was a widespread expectation that production of such goods would be impeded both in Japan and throughout east Asia. However, in contrast to the motor vehicle industry, there is less evidence that global supply chains in the electronics sector have been significantly impaired. Production has certainly been affected in Japan itself, with production of electronic goods falling by 16 per cent over March and April and exports of semiconductors falling by almost 20 per cent. However, the opportunities for global substitution in the electronics sector appear to have supported production elsewhere. Production and exports of electronics in the rest of east Asia have

continued to grow, with production of some specific electrical components having risen noticeably. This substitution is also likely to have cushioned supplychain related falls in production of computers and consumer electronics in China. Despite a fall in Japanese exports of some electrical components to China, growth in Chinese production of computers and consumer electronics appears to have eased only a little in April and May, consistent with China substituting some of the loss in imported components from Japan.

With production in Japan rebounding in May and June, motor vehicle firms report that domestic production was back close to pre-earthquake levels in July and they expect to make up for lost production in the December quarter. Firms in other industries also report that production is normalising quickly. As a consequence, exports of component parts for motor vehicles increased in June, and have started to flow through to production elsewhere; motor vehicle production picked up in the United Kingdom, Thailand, Taiwan and Australia in June. Growth will be boosted modestly in the affected economies in the second half of 2011 as the international supply chains recover further and firms begin to make up for lost production.

2. International and Foreign Exchange Markets

Sovereign Debt Markets

Concerns about the euro area periphery intensified over recent months due to uncertainty about the form of a second assistance package for Greece, including possible private-sector involvement, and renewed fears of contagion to other countries in the region. Also weighing on investor sentiment was uncertainty about an agreement being reached to increase the US Government debt ceiling.

The fourth review of Greece's assistance program by the European Commission, European Central Bank (ECB) and International Monetary Fund (IMF) found that the Greek Government faced a funding shortfall from 2012, largely because Greece was unlikely to be able to access market funding as had been assumed under the program. To address part of the shortfall, in late June the Greek Parliament approved additional 'austerity' measures of €28 billion (12 per cent of GDP) and €50 billion in government asset sales by 2015. Subsequently, the IMF and the euro area countries together approved the disbursement of €12 billion to the Greek Government, bringing total official funding to date to €65 billion (€45 billion is still to be disbursed).

To further address the funding shortfall the European Union (EU) also announced additional official funding for Greece of €109 billion (around 45 per cent of GDP) until mid 2014 and private-sector funding until 2020. The main details of the package are listed below.

 Official funding will be provided by the European Financial Stability Facility (EFSF) and the IMF.
 EFSF loans to Greece will have a maturity of between 15 and 30 years (current Greek loans from euro area countries have an average maturity of 7½ years) and the average interest rate will be lowered (to around 3½ per cent under current conditions). These terms will also be applied to EFSF loans to Ireland and Portugal.

- The maturities of existing official loans to Greece will be extended substantially.
- Voluntary private-sector debt exchanges are expected to provide €54 billion of funding to Greece until mid 2014 (although Greece will pay €17 billion to provide credit enhancements to these bondholders). In total, debt exchanges until 2020 are estimated to provide €135 billion in gross funding. Around 90 per cent of private holders of Greek Government bonds are assumed to participate in the debt exchanges, with about 30 financial institutions already signing up.
- Private bondholders can choose between one rollover program for maturing bonds and three exchange programs for other bonds. Under certain assumptions, private investors would incur losses in excess of 20 per cent on their holdings in net present value terms. This is expected to reduce Greece's outstanding debt by €13.5 billion.
- Greece will use part of the official funding to buy back Greek debt from private investors at a discount, possibly resulting in a reduction in debt outstanding of around €13 billion.
- Up to €20 billion of the package will be used to recapitalise Greek banks if needed.





The major rating agencies have said that the package is likely to see Greece's debt downgraded to default, although possibly only temporarily. During this period, to ensure that Greek banks can continue to use Greek sovereign bonds as collateral to borrow from the ECB, euro area governments will indemnify the ECB for losses up to \in 35 billion on these bonds.

The International Swaps and Derivatives Association (ISDA) suggested that a 'credit event' on Greek sovereign credit default swaps is unlikely to be declared due to the voluntary nature of the debt exchange.

The EU also announced that the flexibility of the EFSF and its replacement in mid 2013, the European

Stability Mechanism (ESM), will be expanded, allowing them to:

- act on the basis of a precautionary program prior to official EU/IMF assistance;
- finance banking system recapitalisations; and
- purchase sovereign debt on secondary markets.

These measures could apply to countries not under formal assistance programs. European authorities had previously announced that ESM loans provided to Greece, Ireland and Portugal will not have preferred creditor status. All other bailout loans, however, will have preferred creditor status.

Mainly reflecting the Greek concerns, spreads between yields on German Bunds and other euro area sovereign bonds, including those of France and Belgium, widened to their highest levels since at least the adoption of the euro in 1999 (Graph 2.1). Italian and Spanish 10-year bond yields rose to more than 6 per cent, their highest levels since 1997 (Graph 2.2).

Standard & Poor's (S&P) and Moody's placed Italy's credit rating on review for possible downgrade, while Italy's Parliament passed 'austerity' measures of €48 billion (3 per cent of GDP), taking effect mainly in 2013 and 2014. Moody's also downgraded the credit ratings of Ireland and Portugal to below investment grade, citing a growing risk that, given developments in Greece, both countries will require a second round of official financing, which would increase the likelihood that private-sector creditor participation will be required.

Reflecting the increased risk aversion due to uncertainty about Greece, together with softer economic data, sovereign bond yields in the major advanced economies have declined in recent months. Notwithstanding the uncertainty about whether an agreement would be reached to increase the US Government debt ceiling, US and German 10-year government bond yields reached their lowest levels since November 2010 and the UK 10-year bond yield reached a multi-decade low (Graph 2.3). The 2-year US Treasury yield reached a record low in early August.



In July, Moody's and S&P placed the US credit rating on review for possible downgrade as concerns about raising the US Government debt ceiling intensified. An increase in the debt ceiling of at least US\$2.1 trillion over the next couple of years was approved on 2 August. Spending cuts of US\$0.9 trillion were also agreed, with a joint committee formed to identify a further US\$1.2 to US\$1.5 trillion in spending cuts or additional revenue. Following the increase in the debt ceiling, Moody's reaffirmed the US AAA credit rating but placed it on negative outlook. Fitch and S&P are still reviewing the US credit rating.

Despite the increased risk aversion, spreads on US dollar-denominated debt issued by sovereigns in emerging Asia and Latin America were little changed in recent months (Graph 2.4). However, spreads on emerging European sovereign debt widened but remain below levels reached during the initial Greek debt crisis in May 2010.

Central Bank Policy

Monetary policy tightening has continued in a number of economies over recent months (Table 2.1). The ECB increased its policy rate by 25 basis points to 1.50 per cent in July, following a similar increase in April. Amid concerns about the euro area periphery, however, financial markets have pushed back expectations of further ECB



policy tightening until at least the second half of 2012. Reflecting weaker economic data, there is no expectation of policy rate tightening in the United States and the United Kingdom in the period ahead.

The People's Bank of China raised its benchmark interest rates by 25 basis points in July and further increased banks' reserve requirement ratios. Policy rates were also increased in Brazil, India, Israel, Malaysia, Norway, South Korea, Sweden, Taiwan and Thailand.

In contrast, in response to the significant appreciation of the Swiss franc, the Swiss National Bank lowered its policy rate target to close to 0 per cent, and announced that it will substantially increase Swiss franc liquidity. On 4 August, the Bank of Japan announced further monetary easing through an increase of ¥5 trillion in its Asset Purchase Program to ¥15 trillion and a ¥5 trillion increase in its fixedrate liquidity-providing operations to ¥35 trillion. At the same time the Japanese authorities intervened to weaken the yen.

The US Federal Reserve completed its second round of large-scale asset purchases at the end of June, increasing its holdings of US Treasuries by US\$600 billion (Graph 2.5). The Fed will maintain the size of its aggregate securities holdings for some time by reinvesting principal payments on these holdings in US Treasuries. The Fed also outlined principles to

	Current level Per cent		Most recent change	Cumulative increase Basis points
Euro area	1.50	\uparrow	Jul 11	50
Japan	0.05	\downarrow	Oct 10	-
United States	0.125	\downarrow	Dec 08	-
Brazil	12.50	\uparrow	Jul 11	375
Canada	1.00	\uparrow	Sep 10	75
China	6.56	\uparrow	Jul 11	125
India	8.00	\uparrow	Jul 11	325
Indonesia	6.75	\uparrow	Feb 11	25
Israel	3.25	\uparrow	May 11	275
Malaysia	3.00	\uparrow	May 11	100
Mexico	4.50	\downarrow	Jul 09	-
New Zealand	2.50	\downarrow	Mar 11	-
Norway	2.25	\uparrow	May 11	100
Russia	8.25	\uparrow	Apr 11	50
South Africa	5.50	\downarrow	Nov 10	-
South Korea	3.25	\uparrow	Jun 11	125
Sweden	2.00	\uparrow	Jul 11	175
Switzerland	0.00	\downarrow	Aug 11	-
Taiwan	1.875	\uparrow	Jun 11	63
Thailand	3.25	\uparrow	Jul 11	200
Turkey	6.25	\downarrow	Jan 11	-
United Kingdom	0.50	\downarrow	Mar 09	_

Table 2.1: Policy Rates

Source: central banks



Graph 2.5 Federal Reserve Holdings of Securities guide its stance on normalising monetary policy. The first step would be to stop reinvesting principal payments in US Treasuries, with actual sales of securities not commencing until after the Fed begins increasing its policy rate. Once sales commence, the Fed expects that all holdings of agency securities will be sold within three to five years.

 ^{1 500} The ECB's balance sheet has been broadly unchanged over the past year. Despite the turmoil in the euro area periphery, the ECB has not purchased government securities since late March. Total lending to banks via its monetary policy operations has increased in recent
 ⁰ months, with lending to peripheral euro area banks



remaining elevated (Graph 2.6). While ECB lending to Irish banks, including through emergency loans, has fallen, this has been largely offset by funding from the Irish Government, reflecting funds received under the financial assistance package. The recent increase in liquidity to Greek banks has been to offset a sharp decline in deposit funding. At end May, Greek banks' domestic private-sector deposits were around €45 billion (19 per cent) lower than at the end of 2009 (Graph 2.7). The rate of deposit outflow in Greece has far exceeded that in Ireland and Portugal.

Financial Regulation and Policy

The European Banking Authority (EBA) released the results of its EU-wide bank stress tests in mid July. Under the two-year stress scenario, the 90 banks publishing results would incur losses estimated to be \in 471 billion (almost half of end-2010 core Tier 1 capital). When estimating capital positions under the stress scenario, the EBA allowed banks to include capital raisings and other measures announced up to 30 April 2011. Eight banks (five Spanish, two Greek and one Austrian) had stressed core Tier 1 capital ratios of less than the 5 per cent benchmark, with the aggregate capital shortfall of these banks being \in 2.5 billion. One German bank that pulled out of the stress tests also would have 'failed'. A further 16 banks had core Tier 1 capital



ratios of between 5 and 6 per cent under the stress scenario. If announced capital raisings up to end April 2011 were excluded, 20 banks would have fallen below the 5 per cent capital threshold, with an overall capital shortfall of around €27 billion.

The EBA recommended that national banking supervisors ensure that banks 'failing' the stress tests present plans within three months to remedy the shortfalls and implement these plans by the end of this year. Following the release of the stress test results, national supervisors of the failing banks indicated that these institutions would have core Tier 1 capital ratios well above 5 per cent under the stress scenario after including all additional mitigating actions taken or planned since end April, as well as other mitigating measures not recognised by the EBA. The EBA also encouraged supervisors to request all banks that only just 'passed' the stress tests, and have sizeable exposures to sovereigns under stress, to strengthen their capital positions by April 2012.

The stress tests did not allow for sovereign defaults but sovereign stress was included in the form of haircuts applied to sovereign debt held on banks' trading books. Banks also had to ensure that their provisions for sovereign debt held on their banking books met a floor based on conservative estimates of default probabilities and loss given





default. In addition, the EBA published detailed exposures of participating banks to peripheral euro area government debt in order to allow market participants to conduct their own analysis.

In the United States, several financial institutions have been involved in legal action or investigations by authorities. Bank of America has offered to pay around US\$8.5 billion to settle lawsuits relating to mortgage-backed securities issued by Countrywide Financial, which it purchased in 2008. The proposed settlement was agreed with the trustee and 22 investors, including the Federal Reserve Bank of New York. It requires court approval and has been challenged by other investors. Several other financial institutions are either under investigation, being sued or have reached settlements with authorities on mortgage-related matters.

Regulatory reforms regarding the standardisation and central clearing of derivatives contracts under the *Dodd-Frank Wall Street Reform and Consumer Protection Act* were postponed for six months, as new regulations had yet to be finalised approaching a 16 July deadline. Concerns had arisen about the enforceability of existing contracts had the new rules become legally binding before being sufficiently well-defined.

Credit Markets

Reflecting the increased tensions in financial markets, there has been some increase in the cost of US dollar funds (Graph 2.8). In the interbank lending market this has been reflected in higher spreads between US dollar forward rates and overnight indexed swaps (OIS), while in foreign exchange markets it can be seen in a higher cost – the 'basis' – to swap euros into US dollars. US dollar funding pressures, however, remain considerably less than in 2008.

US 'prime' institutional money market funds, which are significant providers of short-term US dollar funding to European banks, have experienced significant investor outflows since the end of May (Graph 2.9). These outflows have been faster than in the lead up to the Greek debt crisis in May 2010 but significantly smaller than those following the collapse of Lehman Brothers in September 2008. US money market funds had already reduced their holdings of debt issued by banks in Greece, Ireland, Italy, Portugal and Spain to zero or very small amounts. Money market funds have also recently been reducing and/or shortening their exposures to banks in other euro area countries. Regulatory changes since the financial crisis, however, including shortening the average maturity of funds' assets and requiring greater daily liquidity, should help to reduce the risk of indiscriminate selling of assets by US money market funds if the rate of investor outflows were to increase.





Heightened risk aversion has led to a widening in spreads between yields on lower-rated nonfinancial corporate and financial institution bonds and equivalent government bonds over the past few months (Graph 2.10). Reflecting this higher cost and reduced investor risk appetite, corporate bond issuance in the United States and euro area has moderated since May (Graph 2.11). Issuance by euro area financial institutions has been particularly weak relative to the average of the past two years.

Equities

Global equity prices have exhibited several sharp swings since the beginning of the year and in net terms have fallen over this period, reflecting soft economic data and sovereign debt concerns (Table 2.2, Graph 2.12). Euro area equity markets have significantly underperformed other major equity markets.

Table 2.2: Changes in International Share Prices

	Since end 2010	Since previous Statement
United States		
– Dow Jones	3	-7
– S&P 500	0	-6
– NASDAQ	2	-5
Euro area		
– STOXX	-11	-15
United Kingdom		
– FTSE	-5	-7
Japan		
– Nikkei	-6	-4
Canada		
– TSE 300	-5	-6
Australia		
– ASX 200	-9	-9
China		
– China A	-5	-7
MSCI indices		
– Emerging Asia	-4	-5
– Latin America	-16	-8
– Emerging Europe	-3	-6
– World	-5	-8
Source: Bloomberg		

Source: Bloomberg

Banks' share prices have declined more than the broader market, particularly in Europe (Graph 2.13). Apart from the ongoing concerns about the effect













on banks' profitability from regulatory changes, European banks' stock prices have fallen because of concerns about their exposures to peripheral euro area economies and generally weaker-thanexpected second-quarter earnings. Moody's placed several French and Italian banks' ratings on review for possible downgrade or on negative outlook.

In the United States, ongoing uncertainty surrounding potential costs associated with banks' mortgagerelated practices further contributed to weakness in banks' share prices. Large US bank earnings reported for the June guarter were mostly better than expected. Earnings were generally supported by investment banking revenue, although trading revenues were typically weaker; aggregate loan-loss provisions were unchanged in the guarter. Several banks continued to record large foreclosure and other mortgage-related costs. Most notably, Bank of America reported a large second-guarter net loss, reflecting US\$14 billion in provisions for mortgagerelated costs; the bank also recorded around US\$6 billion in other mortgage-related charges in the quarter.

Equity prices in emerging economies have, in aggregate, largely followed those in advanced economies lower in recent months (Graph 2.14). In emerging Asia and Latin America, actual or expected policy tightening in some economies has contributed to the decline in share prices.

Hedge Funds

Hedge funds returns were significantly lower than for global share markets over the year to June, recording an average investment return of 11½ per cent compared with a return of 22½ per cent for equities. Nevertheless, investor appetite for hedge funds has remained strong and in the first half of the year hedge funds received the largest injection of capital since the second half of 2007. Funds under management now stand at US\$2.0 trillion (Graph 2.15).



Foreign Exchange

Concerns about the European sovereign debt situation and the health of its banking systems dominated developments in the major foreign exchange markets over the past few months. More recently, concerns regarding US public finances and economic performance have weighed on the US dollar. Recurrent swings in risk sentiment and demand for safe-haven currencies meant that it was a volatile period for exchange rates, albeit less volatile than in 2008/09.



The US dollar remained close to historically low levels on a trade-weighted basis, having depreciated by around 7 per cent over the past 12 months (Table 2.3). The US dollar, however, has appreciated moderately against the euro since the previous *Statement*, as financial stresses in Europe weighed on the euro and were only partly offset by an increase in the ECB's policy rate. Intraday volatility in the euro remains elevated.

Table 2.3: Changes in the US Dollar against Selected Currencies

	Over past year	Since previous Statement
Swedish krona	-10	4
European euro	-7	4
South African rand	-7	2
Mexican peso	-6	2
New Taiwan dollar	-9	1
UK pound sterling	-3	1
Australian dollar	-15	1
Canadian dollar	-6	1
Malaysian ringgit	-6	0
Indian rupee	-4	0
Indonesian rupiah	-5	-1
Chinese renminbi	-5	-1
Thai baht	-7	-1
Philippine peso	-6	-1
South Korean won	-9	-2
Japanese yen	-8	-2
Singapore dollar	-10	-2
Brazilian real	-11	-4
New Zealand dollar	-14	-7
Swiss franc	-25	-10
Majors TWI	-7	1
Broad TWI	-7	0

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







safe-haven Reflecting strona demand and repatriation flows, the Swiss franc and Japanese yen have appreciated markedly against other currencies (Graphs 2.16 and 2.17). The franc reached a new high of 1.0797 francs per euro, although it has since depreciated modestly following the easing in policy by the Swiss National Bank (see section on Central Bank Policy). The franc has appreciated by 11 per cent over the past month and by around 25 per cent over the past year. The franc also posted a new high against the US dollar and has appreciated by around 35 per cent over the past 12 months.

The yen traded in a relatively narrow range following the coordinated G7 intervention in March. It then appreciated to be around its post-World War II highs both against the US dollar and in nominal effective terms; in real terms, however, it is not particularly high, reflecting the falling price level in Japan over a number of years (Graph 2.17). On 4 August, the yen depreciated after the unilateral intervention in the foreign exchange market.

The Chinese renminbi has continued to appreciate against the US dollar, albeit at a slower pace in recent months. It has appreciated by a little more than 2 per cent since the beginning of the year, with one-third of this appreciation occurring since the previous *Statement* (Graph 2.18). Pricing in the non-deliverable forward market currently embodies an appreciation of only 1 per cent over the next year, which is the lowest 12-month premium since June 2010. In trade-weighted terms, the renminbi has appreciated by around 1 per cent over the past three months but is 2 per cent lower over the past year.

Emerging market currencies have generally continued to appreciate over recent months against both the US dollar and the renminbi, although commodity price fluctuations and weaker risk sentiment have acted to moderate these pressures (Graph 2.19). While the potential effect of a higher exchange rate on their international competitiveness has been a cause of concern for many emerging market economies, some appreciation has been permitted to counter rising domestic inflation pressures. As a result, a number of Asian currencies remain near multi-year highs. The Korean won and Indonesian rupiah recently reached their highest levels against the US dollar in three and seven years, respectively, while the Singapore dollar reached a new record high in August. The Korean authorities introduced a levy on non-deposit foreign-currency liabilities of banks and cooperatives on 1 August. This is in addition to other measures introduced in June 2010 that were aimed at limiting Korean banks' foreign-currency exposures and were recently strengthened to further restrict banks' investment in foreigncurrency bonds issued domestically. This is part of an overall strategy to reduce short-term capital inflows and limit exposure to capital flow volatility.

In Latin America, the Brazilian real appreciated to reach a 12-year high against the US dollar in July, while the Chilean and Colombian pesos traded close to three-year highs. The Brazilian authorities responded by introducing a new tax on net short US dollar derivative positions, further restricting local banks' short US dollar positions and restoring a tax on foreign investment in private debt securities of less than 30 days.

The foreign exchange holdings of a number of countries in Asia and Latin America increased further over the June quarter, particularly in Chile and Brazil (Table 2.4). China's foreign exchange holdings rose to US\$3.2 trillion as at the end of June.

Emerging European currencies have been the main exception to this general appreciation. The Hungarian forint and Polish zloty reached record lows against the Swiss franc, with financial markets remaining concerned about the size of franc-denominated household debt in both countries, despite previously announced policy responses.

	Three-month	Three-month-ended change		
	US\$ equivalent (billions)	Per cent	US\$ equivalent (billions)	
China	153	5	3 197	
Japan	20	2	1 061	
Russia	18	4	472	
Taiwan	8	2	400	
Brazil ^(a)	18	6	327	
South Korea	5	2	299	
Thailand	2	1	177	
South Africa	0	1	41	
Chile ^(a)	3	11	33	

Table 2.4: Foreign Exchange Reserves

As at end June 2011

(a) RBA estimates of official reserve assets excluding gold

Sources: Bloomberg; CEIC; RBA

Australian Dollar

The Australian dollar is little changed on a tradeweighted basis compared with three months ago but is 10 per cent higher over the past year (Graph 2.20, Table 2.5). During the period, the Australian dollar reached a new post-float high of 1.1081 against the US dollar on 27 July, marginally surpassing the level reached in early May. In July, the Australian dollar also recorded its highest level against the British pound since 1984.



Along with most other currencies, the Australian dollar has depreciated considerably against the New Zealand dollar over recent months reflecting a stronger-than-expected recovery since the devastation of the Christchurch earthquake. Along with a sharp pick-up in inflation, this has fuelled speculation that the Reserve Bank of New Zealand will raise policy rates later this year.

Daily movements in the Australian dollar since the previous *Statement* have been predominantly influenced by developments in the euro area and the United States. Reflecting the broad uncertainty in the market, intraday volatility of the Australian dollar remained elevated.

Table 2.5: Australian Dollar against Selected TWI Currencies Per cent

	Change over past year	Change since previous Statement	Deviation from post-float average
European euro	8	3	13
South African rand	9	1	59
UK pound sterling	14	0	45
Canadian dollar	10	0	10
US dollar	17	-1	46
Malaysian ringgit	10	-1	42
Indian rupee	13	-1	75
Indonesian rupiah	11	-1	135
Chinese renminbi	11	-1	46
Thai baht	8	-1	34
South Korean won	6	-2	63
Japanese yen	8	-2	-10
Singapore dollar	5	-2	4
New Zealand dollar	1	-8	2
Swiss franc	-12	-10	-22
тwi	10	-1	29

Sources: Bloomberg; Thomson Reuters; W/M Reuters

Capital Flows

As has been the case for a number of quarters, net capital inflows in the March quarter 2011 predominantly took the form of foreign investment in government securities. The Australian private sector recorded a net capital outflow in the quarter, as it did during most of 2010 (Graph 2.21). Although the banking sector was the main source of private capital outflow in 2010, there was a net inflow in the March quarter, primarily in the form of long-term deposits, which was more than offset by a net outflow by other sectors.


3. Domestic Economic Conditions

The Australian economy continues to benefit from strong growth in Asia, with the terms of trade estimated to be at a record high in the June guarter. Conditions, however, are quite uneven across the economy. In the mining sector, conditions are very strong, notwithstanding the lingering effects of the floods on coal production. Work commenced on a number of major mining projects in the first half of the year and prices received for resource exports remain very high (see 'Box B: Measuring the Mining and Non-mining Sectors'). According to surveys, conditions in a number of service industries are generally at, or above, average levels, consistent with solid employment growth in these industries. In contrast, conditions are difficult in industries exposed to the high level of the exchange rate, including parts of manufacturing and tourism,

and continuing household cautiousness is having a notable effect on the retail sector. In aggregate, business conditions are around long-run average levels, while both consumer and business confidence have fallen to below-average levels. The pace of employment growth has slowed from the rapid pace seen in late 2010, though the unemployment rate has remained steady at just below 5 per cent.

Economic activity in the March quarter was significantly affected by the Queensland floods in late 2010 and early 2011. Output contracted by 1.2 per cent in the quarter with the decline in coal and iron ore exports subtracting around 1³/₄ percentage points from GDP growth (Table 3.1, Graph 3.1).

	March quarter 2011	Year to March quarter 2011
Domestic final demand	1.3	3.3
– Private demand	1.3	3.8
– Public demand	1.1	1.8
Change in inventories ^(a)	-0.5	-0.2
GNE	0.8	3.1
Net exports ^(a)	-2.4	-2.8
GDP	-1.2	1.0
Nominal GDP	0.7	7.1

Table 3.1: Demand and Output Growth

Per cent

(a) Contributions to GDP growth Source: ABS





In contrast, domestic demand recorded a solid increase in the quarter; growth was reasonably broad based across the major components, and particularly strong in business investment. Iron ore exports have recovered in the June quarter to be at around record highs, and the gradual recovery in coal exports should provide a boost to GDP growth through to early 2012.

Household Sector

Household consumption is growing at a slowerthan-trend pace, despite strong growth in disposable income. The volume of retail sales increased by 0.3 per cent in the June guarter to be 0.6 per cent higher over the year (Graph 3.2). Liaison with retailers suggests that consumers remain cautious, particularly regarding the purchase of non-essential items, and are often reluctant to buy products that are at full price. Accordingly, a number of retailers have scaled back their expectations for sales in the second half of 2011. Motor vehicle sales to households were affected by supply disruptions from the Japanese earthquake, but have rebounded early in the September guarter (see 'Box A: The Japanese Earthquake and Global Supply Chains'). Spending on services appears to have continued at a moderate pace, and households are also travelling overseas in record numbers, partly in response to the high level of the exchange rate (Graph 3.3). Overseas departures were 13 per cent higher over the year to the June guarter.

Household net worth is estimated to have fallen slightly in the June quarter to be 1³/₄ per cent higher over the year, with recent weakness driven by a fall in dwelling prices (Graph 3.4). This is in contrast to average annual growth in household net worth of almost 9 per cent over the past decade. Survey measures of consumer confidence have also fallen recently and are now at below-average levels. The weak growth in net worth, higher utilities prices, and the uncertainties about the global economy, amongst other things, are weighing on expectations of both the general economic outlook and household finances.



Reflecting these developments, the household saving ratio is estimated to have increased further in the March quarter, reaching 11½ per cent of disposable income, back to levels recorded in the mid 1980s. Consistent with this increase, credit card repayments have risen sharply over recent months, and are now around the levels of late 2008 and early 2009 when government stimulus payments facilitated some paying down of credit card debt (Graph 3.5).

The cautiousness of households is also reflected in slowing household credit growth and an increase in housing equity injection, which is estimated to have been the equivalent of around 4 per cent of household disposable income in the March quarter, compared to rates of equity withdrawal averaging 4 per cent over 2002 and 2003. Based on previous analysis showing that housing equity withdrawal tends to be associated with housing transactions, the increase in housing equity injection is likely to be partly related to the slowdown in housing market turnover (Graph 3.6).











The housing market has continued to ease over recent months. Nationwide housing prices are estimated to have fallen by around 1 per cent in the June guarter and by 2 per cent over the year (Table 3.2, Graph 3.7). Brisbane and Perth continue to be the weakest markets, with prices 5-6 per cent lower over the year, while Sydney is the only state capital to have recorded positive yearended price growth. The prices of more expensive dwellings have generally fallen by more than the prices of less expensive dwellings, with the most expensive 20 per cent of Australian suburbs experiencing falls of around 51/2 per cent over the year versus falls of 11/2 per cent in other suburbs. The ratio of median nationwide dwelling prices to household disposable income is currently around the average of the past decade and well below its peaks in 2003 and 2009. Auction clearance rates, which provide a timely indicator of housing market conditions, are currently close to decade-average levels in Sydney but well below decade-average levels in Melbourne (Graph 3.8). Demand for housing finance has slowed, following the increase in mortgage rates in November 2010 and flooding in Queensland and Victoria earlier in the year. Although loan approvals have picked up in recent months, they are still around 6 per cent lower over the year.

3 months to March 2011	3 months to June 2011	Year to June 2011
-1.1	-0.1	-1.9
-0.9	-1.5	-2.6
-1.8	-0.9	-2.0
-0.3	0.4	0.0
-1.7	-1.1	-2.4
	-1.8	-0.9 -1.5 -1.8 -0.9 -0.3 0.4

Table	3.2:	National	Housing	Price	Growth
		P	er cent		

(a) Detached houses only

(b) Quarter-on-quarter growth rate

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



Mortgage arrears rates - both for banks' on-balance sheet loans and securitised loans - picked up in the early part of 2011, though by international standards they are still low. Arrears rates have risen in all states, but most noticeably in Queensland. The worst performing loans in recent years have generally been those extended towards the end of earlier periods of strong local housing price growth and easier lending standards. In Queensland and Western Australia, these are the loans that were extended between 2006 and 2008, while in New South Wales, it was the loans made between 2003 and 2005 (Graph 3.9). In contrast, borrowers that purchased their home in 2009, including many first-home buyers, appear to be performing better than some previous cohorts, despite the increases in interest rates since 2009. The arrears rate for this cohort is only half the long-run national average, and likely reflects an improvement in loan quality due to the tightening in lending standards in 2008.

Indicators of dwelling investment have softened over the first half of 2011 (Graph 3.10). The number of building approvals for detached houses fell by 8½ per cent over the first half of 2011, to be well below decade-average levels. Apartment building activity remains relatively stronger, particularly in Victoria, reflecting work committed in 2010;









however, apartment approvals have also moderated over the first half of 2011. Adjusting for the downward bias inherent in initial estimates for these data, the current flow of residential approvals implies around 140 000 completions a year, which is below the average level of the past two decades.

The relatively slow pace of dwelling investment is likely to be one factor contributing to a tightening in the rental market. Over the March quarter, estimates from the state Real Estate Institutes suggest that the nationwide rental vacancy rate fell 0.4 percentage points to 1.7 per cent (Graph 3.11). This is above the low reached in early 2007 but well below decadeaverage levels of around 2½ per cent. The estimates suggest Sydney is the tightest market, with a vacancy rate of 1.2 per cent, and Brisbane tightened the most over the quarter, with the vacancy rate almost halving to 1.8 per cent as natural disasters reduced the stock of housing. Reflecting these developments, the pace of rental growth has increased slightly, although it remains well below rates reached in 2008.

Business Sector

Survey measures of overall business conditions have moderated in recent months to be around average levels, while confidence has deteriorated to be below-average levels (Graph 3.12). Conditions, however, vary significantly across sectors. Conditions in the mining sector are well above their historical average, and close to their high levels recorded prior to the onset of the global financial crisis (Graph 3.13). According to business surveys, conditions in the construction and manufacturing sectors are around their long-run average levels. Within these sectors there is considerable variation, with firms that service mining better placed than those that are exposed to the contractionary effects of the high exchange rate or to the fading of the public investment stimulus. For some time now, retail conditions have been guite weak, reflecting the ongoing subdued level of consumer spending on goods. Conditions in most service industries are generally stronger than those in the goods production or distribution sectors.

The outlook for mining sector investment remains very strong, reflecting the high level of commodity prices and the robust outlook for growth in emerging economies in Asia. The ABS capital expenditure survey of firms' spending plans points to a large rise in mining sector investment in 2011/12, which is broadly in line with the large stock of work in the pipeline as reported by liaison contacts (Graph 3.14). Work on the large Gorgon LNG project approved in late 2009 is well underway. A number of other LNG projects have either commenced construction or are expected to commence construction by the end of



the year, including the recently approved Australia Pacific LNG project worth \$US14 billion (Table 3.3). Production of LNG is expected to triple from current capacity when work finishes on projects underway or due to commence this year. In the iron ore sector, Rio Tinto and Fortescue Metals have recently announced plans to accelerate their capacity expansion programs in the Pilbara. Mineral and petroleum exploration as a share of GDP remained high in the June quarter, supporting the pipeline of future projects.

Outside the mining sector, investment intentions remain subdued, with the ABS capital expenditure survey pointing to little growth in non-mining sector investment in 2011/12 and other surveys of investment intentions generally at, or below, average levels (Graph 3.15). In the construction sector, the value of private-sector non-residential building approvals has increased a little from 2009 lows, but remains around levels last seen in the downturns in the early 1990s and







Table 3.3: LNG Projects Commencing in 2011 US\$ billion

Committed	
Gladstone LNG	16
Queensland Curtis LNG	15
Australia Pacific LNG (Phase 1)	14
Prelude LNG	12
Likely	
Wheatstone LNG	25

Source: publicly available information







2000s when measured relative to nominal GDP (Graph 3.16). Office building activity, in particular, has fallen sharply since 2008, which has seen the national CBD office vacancy rate decline recently (see 'Box C: Conditions in the Commercial Property Market' for a more detailed discussion of the commercial property market). Conditions are also subdued in the retail property market.

Company profits fell by 6½ per cent in the March quarter to be 7½ per cent higher over the year (Graph 3.17). Mining profits fell by 13 per cent in the quarter as adverse weather conditions affected production, but were still more than 30 per cent higher over the year. Non-mining profits fell by 3 per cent in the quarter, with the largest declines occurring amongst retailers, wholesalers and manufacturers. Over the year, non-mining profits were down by around 1½ per cent. Businesses continue to consolidate their balance sheets, with the gearing ratio (the ratio of debt to assets) falling a little to be slightly below its decade average.

Government Sector

Government budgets released since the start of May indicate that the stance of fiscal policy is set to tighten further. In the May Budget, the Australian Government budget deficit was forecast to narrow from 3.6 per cent of GDP in 2010/11 to 1.5 per cent of GDP in 2011/12, before moving to a small surplus in 2012/13 (Graph 3.18). The deficit for 2010/11 was revised upwards, partly reflecting government spending on repairs and rebuilding of public infrastructure and community programs following Cyclone Yasi and flooding, as well as the impact of the floods on government revenues.

In mid July, the Australian Government announced a carbon pricing scheme, under which there will be a fixed carbon price from July 2012 before the transition to an emissions trading scheme in 2015. The package also includes a range of other policies, including payments and tax cuts to compensate households and certain industries. The Government estimates that the new policy measures will have



a net cost to the budget of \$4 billion over the four years to 2014/15. The largest net impact on the budget balance is expected to occur in 2011/12, as some of the transfer payments to households and other spending measures will be paid out before the carbon tax takes effect in mid 2012.

Farm Sector

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimates that farm production increased by around 8 per cent in 2010/11, despite the disruptions from flooding in early 2011 across the eastern states and drought conditions in Western Australia. Winter crop production rose solidly, underpinned by an increase in the national wheat harvest. Summer crop production, which includes cotton and rice, is estimated to have risen to the highest level in almost a decade, despite damage from heavy rainfall in early 2011.

The outlook for the farm sector over the coming year is generally favourable. ABARES expects farm production to increase by a further 3 per cent in 2011/12, which is slightly stronger than earlier forecasts. Another large winter crop is expected, reflecting good subsoil moisture in the eastern states and an increase in area planted (Graph 3.19).



After a patchy start to the winter season, rainfall has improved recently, including some timely rain for the Western Australian cropping regions. Summer crop production in 2011/12 should again benefit from the high availability of water for irrigation, with water storage levels remaining high in the eastern states. Beef production is also forecast to increase this year, as herd rebuilding in response to improved pastoral conditions gradually slows.

External Sector

Australia continues to benefit from strong growth in export receipts, as contract prices for iron ore and coal have pushed the terms of trade to their highest level on record (Graph 3.20). The large rise in the terms of trade has contributed to a significant appreciation of the exchange rate, which in real terms is back around levels last recorded in the mid 1970s (Graph 3.21). While the high exchange rate is restraining export growth in some sectors, it has also lowered the price of imports. Higher commodity prices have also resulted in the trade surplus reaching levels not seen since the early 1970s (as a percentage of GDP), with the current account deficit declining to around 2 per cent of GDP over the past year (Graph 3.22).



* Trade-weighted index adjusted for relative price levels Sources: ABS; RBA; Thomson Reuters



Exports of iron ore and coal – Australia's two largest commodity exports – fell sharply in early 2011 owing to adverse weather events (Graph 3.23). Subsequently, iron ore export volumes have recovered strongly in the June guarter and are now back around previous highs. In contrast, the recovery in coal export volumes has been slower than expected at the time of the May Statement, with difficulties in removing water from flood-affected mines continuing to hinder production in Queensland. Coal exports were around 5 per cent of GDP in 2010; the large loss to exports in the March guarter subtracted around 1.4 percentage points off guarterly GDP growth. As at June, Queensland coal exports remained around 10 per cent below pre-flood levels, and liaison suggests that production may not return to normal until early 2012. Resource commodity exports are expected to increase strongly over coming years, driven by expansions in mine capacity and transport infrastructure.

Exports of rural commodities have risen over the past year, buoyed by the large 2010 wheat harvest. Growth in non-commodity exports remains subdued, with the high level of the exchange rate creating significant headwinds (Graph 3.24). Services exports have also been affected by tighter access to student visas, with exports of education-related services falling by around 13 per cent over the year to the March quarter.

Import volumes are estimated to have grown strongly in the first half of 2011, despite significant disruption to imports from Japan following the earthquake in March. Imports from Japan – which normally account for a little under 10 per cent of Australia's goods imports – fell sharply in April, driven by a drop in motor vehicle imports, although the fall was largely reversed in May and June. Capital and intermediate import volumes have risen strongly in the June quarter as import-intensive mining investment gathers pace (Graph 3.25). Services imports have risen strongly over the past year, as the high level of the exchange rate has encouraged more overseas travel.



Labour Market

After falling through 2010, the unemployment rate has stabilised around 5 per cent over the past six months (Graph 3.26). Looking through the monthly volatility, employment growth has slowed noticeably in comparison to the rapid pace of growth throughout 2010.

Despite the recent slowing, overall employment growth over the year to the June quarter remained firm. Growth in mining employment has been exceptionally strong (Graph 3.27). In the large household and business services sectors, increases in employment have been broad based and stronger than the average pace of growth over the past decade. Construction employment has also continued to expand but at a pace slower than the decade trend. Employment growth in the manufacturing, wholesale trade and transport industries has been weak compared with the past decade.

A number of developments suggest that the growth rate of labour supply has also slowed. Most recently, the participation rate has fallen slightly from its record peak in the December quarter; notwithstanding this, cohort effects suggest that the participation rate is likely to drift higher in the medium term as older workers remain in the labour market longer than













did previous cohorts. Perhaps more significantly in the short term, slower population growth, owing to a significant decline in the level of net immigration from the peak reached in 2008, has also reduced growth in labour supply (Graph 3.28). Most of the decline in immigration reflects lower numbers of new international students in response to a range of economic and policy factors including the high exchange rate, the effect of the global financial crisis on demand, and tighter access to student visas and changes to immigration rules.

Average hours worked have remained noticeably lower than prior to the onset of the global slowdown in 2008, despite the recovery in labour demand and employment since late 2009 (Graph 3.29). Although this partly reflects some firms hiring new staff in anticipation of stronger future demand, it is also likely to reflect developments in labour supply. Average hours worked were at a relatively high level in the tight labour market prior to the slowdown, and some workers may have chosen not to return to working as many hours as previously. Older workers in particular, who are growing in significance as the labour force ages, tend to work fewer hours on average than other workers.



Looking ahead, based on their historical relationships with employment growth, most leading indicators of labour demand point to moderate employment growth over coming months. The ABS vacancies survey and the ANZ job advertisement series remain at high levels as a share of the labour force despite having eased in the June quarter (Graph 3.30). Business surveys and the Bank's liaison suggest that firms' hiring intentions for the year ahead are lower than in 2010, but nevertheless also continue to point to moderate growth in employment.



Box B Measuring the Mining and Non-mining Sectors

Traditionally, fluctuations in agricultural production have contributed to significant short-term volatility in overall GDP, especially when the farm sector represented a large share of the economy. Accordingly, analysis of developments in the broader economy frequently focuses on non-farm GDP.

In a similar vein, the sharp weather-related falls in mining production around the start of the year are contributing to volatility in overall GDP. For example, on the expenditure side of GDP, while domestic demand growth was guite robust in the March guarter, the falls in exports of coal and (to a lesser extent) iron ore were estimated to have subtracted 1¾ percentage points from GDP growth, resulting in a fall of 1.2 per cent in guarterly GDP.¹ This effect will be reversed in subsequent guarters, with coal expected to provide a significant boost to GDP growth as water is removed from flooded pits and production recovers. In addition, the expected run-up in mining investment, most notably in the LNG and iron ore sectors, will significantly boost GDP growth over coming years.

This suggests that for some purposes it may be desirable to focus on separate measures of activity in the mining and non-mining sectors, with the mining sector defined reasonably broadly to include both current production and investment for future production. While there is at least one example of a country that does this – Norway estimates 'mainland' GDP, which excludes the 'offshore' economy comprising production of oil and gas, and shipping – at present, data are not published along these lines for Australia.

Measuring the output of any particular sector is difficult because of the numerous interconnections between sectors. In the production side of the national accounts, the ABS estimates gross value added (GVA, defined as gross output less nonlabour intermediate inputs) for the mining sector, which, at around 9 per cent of GDP, is the secondlargest single sector after finance and insurance (Graph B1). However, this estimate does not include the value of output in sectors closely linked to mining production: for example, when Queensland coal production fell around the start of this year, so too did output of rail transportation and port services partly because coal exports had fallen. Furthermore, this measure does not include most investment in mining, which is typically attributed to the value added of the construction (and other) sectors.



Graph B1 Growth in Gross Value Added

¹ The subtraction from growth implied by the measure of gross value added (GVA) on the production side of the accounts was, however, much smaller, at 0.6 per cent, though this does not include the effect of the wet weather on the GVA of other sectors providing 'inputs' to the mining sector, such as the transport sector.

Another approach uses data from the expenditure side. Based on a number of assumptions, it is possible to come up with alternative estimates of output in the mining and non-mining sectors, at least at the annual frequency. This is broadly the approach used by Statistics Norway in estimating 'offshore' and 'mainland' GDP. A simple estimate of output related to the mining sector can be obtained as follows²:

- the volume of resource exports, which is available at a quarterly frequency
- *plus* real investment by the mining sector, which is available on an annual basis in the annual national accounts
- *less* an estimate of the imported component of mining investment. Given that there are no official data for this, the estimates that follow are RBA staff estimates, based on data for total capital imports and information from liaison with mining companies.

Given the uncertainties, any results are best treated as illustrative. Overall, the estimates suggest that activity in the broadly defined mining sector represented around 14¾ per cent of GDP at current prices in 2010/11, with mining exports of 121/2 per cent of GDP and 'net' mining investment (excluding the imported component) around 21/4 per cent. These estimates also suggest that activity in the mining sector has grown at a faster pace than in the non-mining sector over the past three decades. Activity related to the mining sector has grown in real terms at an annual rate of about 51/2 per cent over this period, while activity in the non-mining sector has grown at an annual rate of about 3 per cent. The gap between growth in the mining sector and the rest of the economy has increased somewhat in recent years after narrowing in the first half of the



2000s. Over the six years to 2010/11, annual growth in non-mining sector activity is estimated at around 2¼ per cent, versus growth in mining activity of 6¼ per cent (Graph B2). There has also been significant divergence in the experience of industries outside the mining sector, with growth in some services sectors quite strong, but weaker growth in some trade-exposed sectors.

It should be stressed that these estimates are based on that part of output that is directly related to the mining sector and do not capture the broader income effects throughout the economy. As the Bank has noted frequently, recent developments in the mining sector and in commodity prices have had a range of flow-on effects throughout the economy, including via wealth effects, higher dividend flows to households, higher tax and royalty payments to governments, and effects on the exchange rate (which have reduced the price of imported goods and services for households and businesses).

² This abstracts from changes in mining inventories, which can probably be ignored at the annual frequency, although not at the quarterly frequency (for example, it is likely that there was a run-down in coal inventories in the December quarter 2010, so that the fall in coal exports was smaller than the fall in coal production). It also abstracts from mining production for domestic use, which – in national accounts terms – will mostly represent an intermediate good rather than a final good. In principle, it would be possible to obtain exact data for monthly or quarterly physical production of mineral commodities such as coal, iron ore and LNG, which would include domestic consumption and changes in inventories, but such data are not currently available on a timely basis.

Looking ahead, as mining investment and exports continue to increase, growth in the non-mining economy is likely to remain slower than growth in overall GDP. As the structure of the economy adjusts to the large change in global relative prices, the increased size of the mining sector means that overall GDP will be more affected by any volatility in mining sector activity. This highlights the importance of data that will allow more detailed analysis of the mining and non-mining sectors.

Box C Conditions in the Commercial Property Market

After a period of rising vacancy rates and falling property values and rents, conditions in the commercial property sector have improved somewhat over the past year. A further improvement is expected by most observers over the period ahead, with solid demand and only moderate additions to supply over the next few years leading to gradually declining vacancy rates and rising rents. Financing conditions, however, remain tight, albeit less so than in 2008 and 2009.

CBD Offices

Conditions in the office market began to recover in 2010, following a downturn in 2008 and 2009 that saw higher vacancy rates and large falls in market rents and property values. During the downturn, firms' demand for additional office space weakened considerably, while the supply of office space continued to grow guite strongly, reflecting projects that had been planned, financed and commenced a few years earlier when conditions were more favourable (Graph C1). This combination of unexpectedly weak demand and strong supply saw the national vacancy rate for CBD offices increase from 4 per cent in late 2007 to 8 per cent by the end of 2009 (Graph C2). Demand recovered in 2010, although supply continued to grow faster in the first half of the year, pushing the national vacancy rate slightly higher, to peak at around 81/2 per cent. Demand remained solid in the second half of 2010 while supply growth declined, causing vacancy rates to fall slightly.

This trend has continued, with the national CBD vacancy rate edging down to just over 7½ per cent in the June quarter 2011, slightly higher than its decade average. The largest falls in vacancy rates over the

Graph C1 Capital City CBD Offices*





past year have been in Brisbane and Perth, though vacancy rates in these cities remain much higher than in 2007 when these markets were exceptionally tight. In fact, despite recent falls, the vacancy rate in Brisbane is still above its decade average, as is the case in Canberra; vacancy rates in Perth, Adelaide, Melbourne and Sydney are below their respective decade averages. Conditions are weakest in Canberra, where the vacancy rate is 13 per cent, in part reflecting strong additions to office space in the first half of 2010. Outside of capital city CBDs the picture is mixed, with considerable spare capacity in certain areas such as the Gold Coast in Queensland and Chatswood in Sydney.

Rising vacancy rates over 2008 and 2009 saw market rents and property values fall significantly. Prime CBD office rents troughed in mid 2010 at around 25 per cent below their mid 2008 peak, with property values also falling by around 25 per cent from peak to trough (Graph C3). This downturn, while significant, was much shorter in duration and less severe than the downturn in the early 1990s, which saw the national CBD vacancy rate rise to over 20 per cent and prime CBD office values fall by around 50 per cent. In the past year, rents and property values have increased slightly, although they remain around 20 per cent lower than their recent peaks on a national basis, and are further below their peaks in Brisbane and Perth, where growth was exceptionally strong during 2006 and 2007.



Graph C3

Market rents are expected to gradually increase over the next few years, with market analysts generally anticipating solid growth in the demand for office space, including from expected employment growth in the financial and business services industries. At the same time, the supply of additional office space is likely to remain relatively modest for the next few years, having slowed considerably in the second half of last year, according to Property Council of Australia data (Graph C1). This period of modest supply reflects conditions in the aftermath of the 2008–2009 downturn, when rising vacancy rates, falling rents and very tight financing conditions saw fewer plans for new projects; the value of office building approvals fell sharply from mid 2008, and although approvals have picked up slightly since late 2009, they remain subdued. Based on the current pipeline of projects in the early stages of planning, supply is projected to grow at a faster pace by mid decade, although the extent and timing will depend on the outcomes of a number of proposed large developments. The Bank's liaison suggests that lenders' appetite for funding new office projects has improved a little over the past year, though funding conditions vary considerably across developers. Surveys also indicate that tighter pre-commitment requirements are contributing to funding constraints.

Index Industrial and Retail Property

In the industrial market, rents for prime property (based on selected areas in four capital cities) troughed in the September quarter 2009 to be around 6 per cent lower than at their peak a year earlier. Property values fell more substantially, having fallen by around 20 per cent from their peak (Graph C4). As in the office market, the fall in industrial property prices over 2008 and 2009 was not as severe as in the early 1990s, when prime industrial property values fell by more than 25 per cent. Since late 2009, prime rents and property values have increased by 4 per cent and around 10 per cent, respectively. In general, commercial property _{Index} research firms' outlooks for industrial property are positive, reflecting expected solid demand and, in some areas, modest near-term growth in supply.

Property values for speciality retail stores in large suburban shopping centres are estimated to have fallen by around 9 per cent over the two years from their peak in late 2007. Smaller centres (for example, those without department stores) fared worse, with property values having fallen by around 15 per cent from their peak (Graph C4). Over this period, vacancy rates increased and growth in gross market rents slowed, with growth in rents slightly firmer in CBDs and larger suburban locations than in smaller neighbourhood centres.

More recently, gross rents for CBD retail properties were flat over the year to June, although there have been reports of solid growth in rents in certain premium locations. Property values in suburban centres have recovered somewhat from their lows, having increased by around 2 per cent over the past year. Overall, the outlook for retail property remains subdued reflecting modest growth in retail spending. F



4. Domestic Financial Markets

Money Markets and Bond Yields

The Reserve Bank Board has maintained its target for the overnight cash rate at 4.75 per cent since November last year. At the time of the previous *Statement*, money market yields implied that the cash rate would increase towards the end of 2011. Subsequently, market expectations for policy have fluctuated in a wide range, reflecting changes in sentiment about US and European sovereign debt, the release of softer economic data – both domestically and overseas – and the stronger-than-expected CPI release. Currently, financial markets expect a reduction in the cash rate by the end of this year.

Despite the global volatility, there is little evidence of tension in domestic money markets. While bank bill rates did not initially decline to the same extent as overnight indexed swaps (OIS), spreads have remained narrower than they were either during the financial crisis or the emergence of sovereign debt concerns in 2010 (Graph 4.1). To maintain the cash rate at the Board's target, the Reserve Bank has kept aggregate exchange settlement (ES) balances around \$1¼ billion, although temporarily higher balances have been accommodated around balancing dates, such as month-end.

Long-term bond yields have declined sharply over the past three months, reflecting developments in major-economy bond yields associated with sovereign debt concerns, strong foreign demand for Commonwealth Government Securities (CGS) and the change in policy expectations (Graph 4.2). With yields on 3- and 10-year CGS falling by around 105 and 75 basis points, respectively, bond yields





now lie below the current level of the cash rate. The spread between yields on 10-year CGS and 10-year US Treasury bonds had narrowed since the beginning of June to below 200 basis points, but has widened more recently.



As is common in periods of heightened market uncertainty, the spreads between CGS and other highly rated debt (such as that issued by state borrowing authorities and supranational agencies) have widened appreciably over recent months (Graph 4.3). Notwithstanding this, the level of these yields has actually fallen.

Financial Intermediaries

Having undergone substantial changes in the period 2008–2010, the composition of bank funding has been stable since the beginning of the year and banks have not been adversely affected by the recent increase in volatility in financial markets (Graph 4.4). Deposits currently account for about half of banks' funding liabilities, compared with 40 per cent in early 2008. Short-term wholesale liabilities continue to account for about one-fifth of banks' funding while long-term wholesale liabilities account for a slightly greater share.

The average rate on major banks' term deposit 'specials', the most relevant rate for term deposit pricing, has remained little changed for more than a year and a half, even though the spread to equivalent duration market rates has widened over the past couple of months (Graph 4.5). On average, the smaller Australian-owned banks' special' term deposit rates are at similar levels to those offered by the major





banks. The average interest rate on the major banks' at-call deposits (including online savings, bonus saver and cash management accounts) has moved a little higher since the beginning of the year, and is slightly above 4½ per cent.

Australian banks have issued around \$24 billion worth of bonds since the May *Statement* (Graph 4.6). This issuance was evenly divided between the domestic and offshore markets, and over 80 per cent of it was issued by the major banks. As has been the case for the past year, much of this debt issuance has replaced maturing bonds, reflecting

the banks' modest funding task in an environment of strong deposit growth and slower credit expansion. Banks have also repurchased more than \$2 billion of their government-guaranteed bonds since April, as it remains more economic to replace this debt in the market than to pay the guarantee fee to the Federal Government. Reflecting continued efforts to lengthen the maturity of their funding, the banks have targeted a range of maturities in the bond markets spanning 2- to 7-year terms. There was good investor demand for these longer-term bonds, particularly in domestic markets.

Recent declines in cross-currency basis swap spreads have reduced the hedging costs of issuing offshore for Australian banks. These declines are partly the result of the significant pick-up in Kangaroo bond issuance since the beginning of the year, with issuance totalling over \$27 billion amid large redemptions and good investor demand. Reflecting this, non-AAA rated issuers such as Goldman Sachs (rated A) and Morgan Stanley (rated A) entered the Kangaroo market for the first time since the onset of the financial crisis. The intensification of sovereign debt concerns more recently has dampened investor appetite for non-AAA rated Kangaroo bonds and recent issuance has been from highly rated institutions, including two new issuers of AAA rated covered bonds. Bank of New Zealand and a Norwegian bank, DNB NoR Boligkreditt.

Australian branches of Asian banks have been more active in domestic bond markets in recent months. The Australian branches of Industrial and Commercial Bank of China (rated A) and Oversea-Chinese Banking Corporation (rated A+) issued \$900 million of long-term bonds. This follows the first bond issuance by United Overseas Bank's Sydney branch in April.

In the domestic market, while the spread of domestically issued bank bonds to CGS has increased, the yield on these securities has actually fallen and the spread to swap rates is little changed (Graph 4.7). The decision by Moody's to downgrade the four major Australian banks and their subsidiaries



by one notch to Aa2 from Aa1 had little impact on these spreads, as it was widely expected. The revision brings Moody's credit ratings of the major Australian banks broadly into line with those of S&P and Fitch.

In other credit rating developments, S&P revised Bendigo and Adelaide Bank's BBB+ rating outlook from 'stable' to 'positive' on better earnings. In contrast, Fitch downgraded Suncorp Metway's longterm credit rating by one notch from A+ to A. The downgrade reflected Fitch's concerns over Suncorp's asset quality, noting a high level of impaired assets coupled with relatively low provisioning compared with similarly rated peers. Citing similar concerns





over asset quality, S&P placed Bank of Queensland on negative credit watch with a one in three chance of a one notch downgrade from BBB+ if the level of non-performing loans is not stabilised.

Activity in the Australian residential mortgagebacked securities (RMBS) market reached a postfinancial crisis high in the June quarter with over \$10 billion of issuance (Graph 4.8). Over the past three months, seven prime RMBS transactions totalling just over \$7 billion have been issued by a diverse range of financial institutions, including five banks, a building society and a non-bank mortgage originator. Of particular note, almost one-quarter of a prime RMBS transaction by Bendigo and Adelaide Bank was denominated in Japanese yen. This was the first foreign currency RMBS transaction in over a year. Issuance of securities backed by assets other than residential mortgages has also picked up over the past few months.

Private sector demand for the longer-dated tranches of prime RMBS has continued to improve. The recent transactions were composed primarily of large 3-year tranches priced around 100 basis points over the relevant interest rate swap and the Australian Office of Financial Management (AOFM) supported only 11 per cent of transactions (Graph 4.9).

Fitch published an exposure draft on proposed changes to its Australian RMBS ratings criteria. The proposal follows a review that indicated households have become more sensitive to interest rate changes over the past decade owing to increases in household debt and property prices. The proposed changes are not expected to have a significant effect since issuers have been strengthening the credit quality of their securities by increasing subordination to provide more protection to investors holding the senior tranches. Moody's has also announced that it is undertaking a similar review.

Household Financing

Most lenders have left their indicator rates on standard variable-rate housing loans unchanged over recent months, although fixed rates have fallen, reflecting the decline in market yields (Table 4.1). Overall, the average interest rate on all outstanding housing loans (fixed and variable) remains a little above its post-1996 average. A pickup in competition has, however, been evident in other aspects of housing lending. In particular, the major banks have continued to increase the discounts offered on some products, by as much as 20 basis points. In addition, a number of banks abolished early exit fees prior to the introduction of the Government's ban from 1 July.

		ige since:	
	Level at end July 2011	May Statement	End July 2010
Cash rate	4.75	0.00	0.25
Housing loans ^(a)	7.04	-0.05	0.29
Personal loans	13.10	0.01	0.31
Small business			
Residentially secured			
– Term loans	8.99	0.00	0.40
– Overdraft	9.86	0.00	0.40
Average actual rate	8.81	0.00	0.27
Large business			
Average actual rate (variable and bill funding)	7.05	0.06	0.22

Table 4.1: Intermediaries' Variable Lending Rates

Per cent

(a) Average of the major banks' discounted package rates on \$250 000 full-doc loans Sources: ABS; APRA; Perpetual; RBA

The increase in competition within the mortgage market has contributed to an increase in refinancing activity in recent months: the value of housing loan approvals for refinancing purposes rose by 18 per cent over the three months to May. Demand for new housing finance, however, remains at a relatively low level, particularly from first-home buyers and investors (Graph 4.10).

In line with this, housing credit growth has eased further (Graph 4.11). Over the June quarter, housing credit grew by 1.2 per cent. On a year-ended basis, owner-occupier and investor housing credit are growing at around 6 per cent, well down on the double digit growth rates recorded earlier in the decade.

Financial institutions' interest rates on most variable personal loans – including credit cards, home equity loans and margin loans – have remained little changed since the beginning of the year. Personal credit fell modestly over the June quarter, as a pick-up in other personal lending was more than offset by declines in margin lending and credit card lending.

The ongoing declines in margin lending partly reflect unfavourable conditions in global equity markets. The number of margin calls increased slightly in the June quarter to almost one margin call per day per 1 000 clients.











Business Financing

Corporate bond issuance has totalled around \$41/2 billion since the previous Statement. Conditions have generally been favourable for Australian non-financial corporate borrowers, especially in the US dollar market where the bulk of issuance was executed. The large volume of issuance in the June guarter was partly driven by larger-thanusual maturities (Graph 4.12). A broad range of investment-grade Australian corporates placed bonds in the US dollar market spanning terms of between 5 and 29 years. These longer maturities are more difficult to achieve in the domestic corporate bond market. In the domestic market, activity remained subdued with under \$1 billion of issuance over the past three months. Spreads between corporate bond yields and CGS have increased a little over the past few months but remain well below the levels of the past few years.

Intermediated business credit contracted at an annualised rate of about 5 per cent over the June quarter, driven by a decline in credit extended to private trading corporations that was offset to some extent by growth in lending to unincorporated businesses (Graph 4.13). Commercial loan approvals have been broadly steady in recent months, after trending higher over the preceding 12 months.

There were 54 syndicated loan approvals worth \$25 billion in the June quarter. The number and value of approvals have generally been rising over the past few years, and both are currently around 2006 levels. Lending for capital and general corporate expenditure has been driving this trend increase.

There has been little change in the cost of intermediated business borrowing since the beginning of the year. Indicator rates on variable-rate business loans are unchanged, while indicator rates on fixed-rate business loans have fallen slightly, but by less than movements in market interest rates. The average rate on outstanding small business loans remains about 30 basis points above its post-



1996 average at 8.4 per cent (Graph 4.14). Similarly, the average interest rate on banks' outstanding lending to large business has been little changed at 7.0 per cent, approximately 20 basis points above its post-1996 average.

Reflecting these various developments, net business external funding declined marginally as a share of GDP in the June quarter (Graph 4.15). This was driven by weakness in business credit which was partly offset by corporate debt issuance and modest equity raisings. The latter was affected by BHP's \$6 billion buyback of its domestically listed shares in April.



Aggregate Credit

Total outstanding credit grew at an annualised rate of around 1 per cent over the June quarter, with modest growth in housing credit offset to some extent by declines in lending to businesses (Graph 4.11, Table 4.2). Growth in broad money has been more solid over the year, and has outpaced credit growth since the latter half of 2007, partly reflecting the more conservative attitude of households and business towards debt and a preference to hold a greater share of their assets as deposits.

Percentage change				
Average monthly growth				
March quarter 2011	June quarter 2011	Year to June 2011		
0.5	0.1	2.7		
0.5	0.4	6.3		
0.4	0.3	5.4		
0.3	-0.3	0.3		
0.5	-0.4	-2.4		
0.6	0.3	6.8		
	Average moi March quarter 2011 0.5 0.5 0.4 0.3 0.5	Average monthly growth March quarter 2011 June quarter 2011 0.5 0.1 0.5 0.4 0.4 0.3 0.5 -0.3 0.5 -0.4		

Table 4.2: Financial Aggregates Percentage change

Source: RBA





Graph 4.18 Share Price Indices



Equity Markets

The Australian share market has fallen in line with overseas equity markets (Graph 4.16). Concerns over European sovereign debt and the pace of the global recovery have weighed heavily on investor sentiment, as have domestic factors such as the weakness in consumer discretionary spending.

At the sectoral level, financial stocks have declined by more than the overall market, which is consistent with the underperformance of financial stocks globally (Graph 4.17). This decline has been associated with an increase in short selling of shares of the major banks (see 'Box D: Recent Trends in Short Selling' for more details). A number of insurance groups have also announced that they expect their margins to come under pressure as a result of prospective increases in reinsurance costs. Resource stocks have also declined and they are now 16 per cent below their two-year peak reached in April. The falls mostly reflect some levelling out in commodity prices and concerns that Chinese authorities may seek to slow growth amid rising inflationary pressures.

Consumer discretionary stocks have significantly underperformed the broader market (Graph 4.18). Worse-than-expected sales as well as lower profit guidance by some major groups in the sector have underscored the difficult operating environment, including aggressive discounting, consumer caution and increased competition from online shopping.

Despite the decline in the Australian share market, there has been a steady flow of takeover activity, with three major acquisitions announced over the past three months. BHP announced that it has agreed to buy Petrohawk Energy for US\$12.1 billion in an all-cash offer. Petrohawk's board of directors has unanimously recommended that its shareholders accept the offer. SABMiller announced a \$9.5 billion takeover bid for Foster's Group, which has rejected the offer on the grounds that it significantly undervalues the company. Finally, Peabody Energy and Arcelor Mittal announced a \$4.7 billion cash takeover bid for Macarthur Coal, although the bid has been rejected by the Macarthur Coal Board.

Box D Recent Trends in Short Selling

Short selling is the practice of selling a security that has been borrowed and purchasing the security at a later stage to repay the lender.¹ An investor will make a profit if the share price declines in the intervening period and a loss if the price increases. Short selling allows investors to profit from price decreases without needing to own the underlying shares and can contribute to market liquidity and efficiency.

The proportion of share turnover that is reported as short selling has averaged around 20 per cent for ASX 200 companies since the partial short-selling ban for financial shares was lifted in May 2009.² For the shares of the major banks, this proportion has averaged around 22 per cent, which is marginally higher than the 20 per cent proportion for nonfinancial companies (Graph D1).

While 20 per cent of turnover is accounted for by short selling, outstanding short positions at the end of each trading day are only around 1 per cent of total shares on issue for ASX 200 companies. The difference in the two metrics reflects two main factors. First, only a small proportion (around 0.5 per cent) of ASX 200 companies' outstanding shares are actually traded each day. That is, the denominator of the first measure (turnover) is much smaller than for the second measure (market



capitalisation). Second, short positions are typically held for only a brief period – about 12 days on average – before being closed out, with some being closed out on the same day they are entered into. Therefore, on average, only those short positions that have been recently established will still be outstanding.

The decline in share prices since the previous *Statement* has been accompanied by a pick-up in short-selling activity, particularly in the shares of the major Australian banks where the proportion of short turnover increased to over 30 per cent. Although the limited history of the data makes it difficult to assess how significant this pick-up has been, a number of factors may have contributed. These include concerns over the European sovereign debt situation, which has been associated with weakness in global banking stocks, Moody's decision to lower the major Australian banks' credit ratings by one notch to Aa2 and subdued growth in domestic housing and business credit.

A covered short sale is where the security has been borrowed before being sold (or the seller has arranged for it to be borrowed). This is generally the only type of short sale subject to reporting requirements. Naked short selling is where the borrower has not yet arranged to borrow the underlying security.

² The Australian short-selling ban took effect on 22 September 2008 in response to severe market turmoil. The initial ban restricted covered and naked short sales of both financial and non-financial listed stocks, with limited exceptions relating to arbitrage transactions, market making, hedging of certain positions, and exchange-traded options. The ban on covered short sales was lifted for non-financial stocks on 19 November 2008 and for financial stocks on 25 May 2009. The ban on naked short sales remains in place, subject to limited exceptions.



The proportion of outstanding short positions has typically been smaller for financials than for other sectors of the market (Graph D2). This reflects the fact that short positions for financials typically have a duration of around 10 days, compared with 14 days for non-financials (Table D1). The difference in duration across the different sectors can be partly explained by the higher level of share price volatility for financials, as higher volatility means there is a greater chance that short sellers will need to cover their positions. The pick-up in short-selling volume in the major banks' shares over the past few months has seen the average duration of short positions fall to around 8 days, indicating that there may have been an increase in trading activity by market participants with shorter investment horizons.

Table D1: Average Duration of Short Positions in ASX 200 Companies

By sector, number of days^(a)

	Since previous Statement	June 2010–April 2011
Financials	9.0	9.8
– Major banks	8.2	10.0
- Other financials	10.7	9.5
Non-financials	12.9	13.6
– Resources	10.9	11.7
– Other non-financials	15.7	16.8
ASX 200	11.6	12.4

(a) Outstanding short positions divided by short turnover Sources: ASIC; ASX; Bloomberg; RBA

5. Price and Wage Developments

Recent Developments in Inflation

Consumer price inflation picked up significantly over the first half of 2011, in part due to large increases in fruit and vegetable prices following the flooding and storms early in the year and to higher fuel prices. The consumer price index (CPI) increased by 0.9 per cent in the June quarter, which was a little higher than expected owing to surprisingly large increases in the prices of a range of retail goods (Graph 5.1, Table 5.1). CPI inflation rose to 3.6 per cent over the year. Measures of underlying inflation have also picked up somewhat, with the disinflationary effects of the 2008 slowdown now having waned.



Table 5.1: Measures of Consumer Price Inflation

Per cent

	Qua	rterly	Year-ended		
	March quarter 2011	June quarter 2011	March quarter 2011	June quarter 2011	
CPI	1.6	0.9	3.3	3.6	
– Tradables	1.8	1.3	3.3	3.6	
– Tradables (excl food, fuel and tobacco)	-0.6	0.5	-1.6	-1.0	
– Non-tradables (excl deposit & loan facilities)	1.1	0.6	3.3	3.5	
Selected underlying measures					
Trimmed mean	0.9	0.9	2.3	2.7	
Weighted median	0.8	0.9	2.2	2.7	
CPI excl volatile items ^(a) and deposit & loan facilities	0.7	0.5	2.6	2.4	

(a) Volatile items are fruit, vegetables and automotive fuel Sources: ABS; RBA





While quarterly inflation in non-tradable items (excluding deposit & loan facilities) was relatively low, as typically occurs in the June quarter, year-ended inflation for non-tradables picked up slightly to 3.5 per cent (Graph 5.2). The pick-up followed a 21/2-year period during which the rate of non-tradables inflation declined significantly from the very high pace seen in the September guarter 2008. Over the most recent year there were significant increases in the prices of utilities, rents, and a range of household services including education, insurance and child care. Housing cost inflation, the largest component of the CPI, has eased over recent guarters, partly owing to soft demand in residential building. Inflation in this component, however, is expected to pick up over coming guarters: the tightening of the rental market is expected to contribute to higher rent inflation and the pass-through of regulatory price increases will see inflation for utilities remain quite high.

Over the year, there have been notable price falls across a broad range of tradable goods reflecting the large appreciation of the exchange rate and subdued retail trading conditions (Graph 5.3). However, following two guarters of declines, tradables prices (excluding food, fuel and tobacco) rose by 0.5 per cent in the June guarter. Significant increases were reported for the prices of a range of items including furniture, clothing accessories, children's footwear, towels & linen, and kitchenware. While the increases in part reflect the usual seasonal pattern, the extent of price rises was somewhat surprising in light of the currency appreciation over recent guarters and the softness in retail demand. One possible explanation is that there has been some change in the timing of sales, while another is that the price increases reflect increasing upward pressure on the domestic costs of retailers and distributors. In addition, there is some evidence from inflation data in other countries that rising global manufactured goods prices are becoming a source of inflationary pressure.

Food prices rose by 1.4 per cent in the quarter to be 6.1 per cent higher over the year. This reflects the effects of bad weather earlier in the year. although for some affected items prices have declined as growing conditions have improved. Fruit prices rose by 27 per cent in the quarter owing to the ongoing effect of Cyclone Yasi on banana prices (which the ABS estimates were almost five times higher than before the cyclone), while vegetable prices declined by 10 per cent as the supply of crops affected by the floods recovered. Looking ahead, fruit and vegetable prices are expected to reduce headline inflation as the supply of bananas recovers to normal levels. Excluding fruit and vegetables, food prices rose by a modest 0.2 per cent in the quarter, to be 1.4 per cent higher over the year. Inflation in the price of restaurant meals picked up in line with the general strength in nontradables inflation, while the price of milk and bread continued to decline, with major supermarkets discounting these items heavily.

Following a sharp increase in the March quarter, automotive fuel prices rose by 4 per cent in the June quarter to be 11 per cent higher over the year (Graph 5.4). The appreciation in the Australian dollar has only partly offset the effect of strong global demand and geopolitical tensions on oil prices, which in US dollars were up by more than 50 per cent over the year to the June quarter.

Measures of underlying inflation ranged from 0.5 per cent to 0.9 per cent in the June quarter. On a year-ended basis, measures of underlying inflation were in the range of 2½–2¾ per cent, up from around 2¼ per cent six months earlier (Graph 5.5). While the current rate of underlying inflation is well below the levels of late 2008, it appears that the period of disinflation has passed, with the effect of labour market tightening, solid growth in unit labour costs and strengthening global inflation more than offsetting the disinflationary effects of soft consumer demand and the exchange rate appreciation.





Costs

Labour cost growth remains firm, in line with a relatively tight labour market. The wage price index rose by 0.8 per cent in the March quarter, to be 3.8 per cent higher over the year, leaving the pace of annual wage inflation broadly unchanged. Growth in private-sector wages was 3.9 per cent over the year to March, somewhat above the 3.5 per cent average pace seen since the series began in 1997 (Graph 5.6). Public-sector wage growth has slowed, with recent developments suggesting some prospect of further slowing. Year-ended wage growth was relatively uniform across





the states, with Western Australia recording the strongest growth. By industry, growth was strongest in the mining and professional, scientific & technical services industries.

Fair Work Australia (FWA) announced the outcome of its annual wage review in June, increasing award wages by a uniform 3.4 per cent from 1 July. The decision to grant a percentage increase, rather than a fixed dollar increase as in earlier years, was intended to preserve relativities in the award classification structure. The increase was toward the upper end of those proposed in submissions by major stakeholders, with FWA noting in its decision the relatively strong performance of the economy over the past year.

Data from the national accounts indicate that nonfarm unit labour costs – the average cost of labour per unit of output - rose strongly in the March guarter, although this mostly reflected the temporary fall in GDP associated with the fall in coal and iron ore production stemming from the adverse weather in the guarter. Nevertheless, smoothing through the volatility suggests that there has been a significant pick-up in unit labour costs growth recently, due in part to weak productivity growth outcomes (Graph 5.7). Estimates for both the market sector and the total economy suggest that labour productivity growth since 2003/04 has been around 11/2 percentage points below the rate seen over the preceding three decades (Table 5.2). Furthermore, with strong growth in the capital stock and hours worked over the recent period, multifactor productivity in the market sector is estimated to have fallen over this period.

Table 5.2: Productivity Growth

Annual average, per cent

2.2 1.0	2004/05–2010/11 ^(a) 0.9 –0.8
1.0	-0.8
2.0	0.6
	-0.1
	2.0

(a) Labour productivity includes estimates for 2010/11; multifactor productivity is calculated to 2009/10

(b) Market sector estimates of productivity are more reliable as industries for which productivity is most difficult to estimate are excluded. Data prior to 1994/95 are for 'selected industries', which is a slightly narrower definition of the market sector than the current ABS definition.

Sources: ABS; RBA

Producer prices rose solidly over the first half of 2011, with a pick-up in year-ended inflation across all stages of production but most notably in the earlier stages. Final stage producer prices (excluding oil, which rose strongly) rose by 3.0 per cent over the year to June, while preliminary prices (excluding oil) rose by 4.7 per cent over the year. The domestic component of the index drove the pick-up, with sizeable increases recorded over the year for construction, food-related items and utilities prices (Graph 5.8). Import prices continued to subtract from final-stage producer price inflation. However, at the preliminary stage, import prices rose modestly for the second consecutive quarter in June, indicating that stronger global prices for commodities and manufactured goods outweighed the disinflationary effect of the exchange rate appreciation.





^{**} Break-even 10-year inflation rate on indexed bonds Sources: Melbourne Institute of Applied Economic and Social Research; RBA

Inflation Expectations

Most measures of inflation expectations are broadly unchanged since the May Statement, remaining at, or a little above, their inflation-targeting averages. The Melbourne Institute's measure of consumer inflation expectations, which spiked in January following the floods, was broadly unchanged over the guarter at around the average level of the past two years (Graph 5.9). Financial market measures of mediumto long-term inflation expectations are also broadly unchanged, with the indexed-bond measure of inflation expectations around its inflation-targeting average. The inflation expectations of market economists for 2011 are unchanged from three months ago, but expectations for CPI inflation in 2012 have picked up reflecting the expected impact of the carbon price (Table 5.3). The survey measure of union officials' inflation expectations for 2011 and 2012 are broadly unchanged since the May Statement. Somewhat in contrast, business survey measures suggest that selling price inflation is likely to remain a little below average in the near term. 🛪

Table 5.3	3: Median In	flation Exp	ectations
	Per	cent	

	Year to December 2011			Year to Decem	nber 2012
	February 2011	May 2011	August 2011	May 2011	August 2011
Market economists ^(a)	3.3	3.4	3.4	3.0	3.7
Union officials ^(b)	3.2	3.3	3.4	3.1	3.1

(a) RBA survey

(b) Workplace Research Centre

6. Economic Outlook

The International Economy

The IMF forecasts published in June are for global growth to be a little above trend at around 4¼–4½ per cent over the forecast period, although since then downside risks have become more prominent (Graph 6.1). The forecast for GDP growth for Australia's major trading partners is higher, reflecting Australia's trade links with Asia, where strong growth is expected to continue. In contrast, fiscal consolidation is expected to weigh on growth in Europe and the United States. This central forecast is based on the assumption that the resolution of sovereign debt issues in a number of countries proceeds in an orderly manner. A more disorderly resolution is a key risk to these forecasts and is discussed in more detail below.

After rising earlier in the year, global commodity prices are mostly a little off their recent peaks, in line with the moderation in the pace of global growth and reflecting the easing of supply disruptions for some commodities. Nonetheless, following the run-up over 2010 and early 2011, prices for most commodities remain at elevated levels. The recent easing of commodity prices has reduced the upward pressure on headline rates of inflation globally, though core rates still appear to be trending higher.

Australia's terms of trade for the June quarter are estimated to have been at their highest level on record (Graph 6.2). This reflects the increase in contract prices for iron ore and coal over the first half of 2011, driven by ongoing strength in global steel production and supply disruptions in Australia and elsewhere. A further modest increase in the terms of





trade is expected for the September quarter, with a gradual decline thereafter as more global capacity in iron ore and coal comes on line.

Domestic Activity

Growth over 2011 has been revised downwards since the May *Statement*, due to a slower-thanexpected recovery in coal production and, to a lesser extent, a downward revision to consumer spending as domestic and international concerns have weighed on sentiment. The medium-term outlook continues to be characterised by the significant pipeline of resources-sector investment – with a number of large projects already underway – and by strong growth in resource exports. There is a large divergence between the mining and related sectors and the rest of the economy, with the cautious behaviour of households, the unwinding of the fiscal stimulus and the high exchange rate weighing on a number of industries.

As usual, a number of technical assumptions are employed in the preparation of the domestic forecasts. The exchange rate is assumed to remain at its current level over the forecast horizon (A\$ at US\$1.07, TWI at 77), broadly similar to the assumption in the May Statement. The price of Tapis oil – which is the most relevant for Australian fuel prices – is assumed to remain at US\$118 per barrel over the forecast period, a little lower than in May. The cash rate is assumed to be unchanged over the forecast period; this compares with the technical assumption in May of a 50 basis points rise by mid 2013. The forecasts also assume a slightly lower rate of population growth than was expected in May, with growth averaging around 11/2 per cent per year 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. Finally, as discussed below, the forecasts assume that a price for carbon is introduced from July 2012.

The profile of GDP growth over 2011 and early 2012 is being significantly affected by the flooding of late 2010 and early 2011. The decline in GDP in the March guarter was larger than earlier anticipated, with coal and iron ore exports estimated to have subtracted around 1³/₄ percentage points from growth. While iron ore exports have since rebounded to be around earlier highs, difficulties in removing water from flood-affected mines continue to hinder coal production. The recovery in coal exports has been slower than earlier expected by the staff and a range of external analysts, with the Queensland Resources Council now suggesting that a return to full production is not expected until early 2012. As a result, the boost to GDP growth from the recovery of coal production is now forecast to be spread into early 2012.

The updated central forecasts are summarised in Table 6.1. Growth over 2011 is forecast to be 3¹/₄ per cent, which is a downward revision relative to May. This revision largely reflects the slower-thanexpected recovery in coal exports, as well as slower forecast growth in consumption reflecting ongoing evidence of household caution. There is little change to the forecasts over 2012 and 2013, with growth still expected to be a little above trend, reflecting the strong medium-term outlook for the resources sector. The net effect of the revisions, including to population growth, is to lower the cumulative rise in GDP over the three years to end 2013 by around 1 percentage point. Overall, the build-up in the resources sector (both the growth in resource exports and the growth in mining investment, net of imports) is expected to contribute around two-thirds of GDP growth over the next few years. The risks around these forecasts are discussed below.

Table 6.1: Output Growth and Inflation Forecasts^(a)

Per cent

	Year-ended						
	Dec 2010	June 2011	Dec 2011	June 2012	Dec 2012	June 2013	Dec 2013
GDP growth	2.7	11⁄4	31⁄4	41/2	3¾	3¾	3¾
Non-farm GDP growth	2.2	1	31⁄4	41/2	3¾	3¾	3¾
CPI inflation	2.7	3.6	31/2	21/2	31/2	3¾	31⁄4
Underlying inflation	21⁄4	2¾	31⁄4	3	31⁄4	31⁄4	31⁄4
CPI inflation excl carbon price	2.7	3.6	31/2	21/2	3	3	31⁄4
Underlying inflation excl carbon price	21⁄4	23⁄4	31⁄4	3	3	3	31⁄4
	Year-average						
	2010	2010/11	2011	2011/12	2012	2012/13	2013
GDP growth	2.7	13⁄4	2	4	41/2	3¾	3¾

(a) Technical assumptions include A\$ at US\$1.07, TWI at 77 and Tapis crude oil price at US\$118 per barrel

Sources: ABS; RBA

Growth in household spending has been subdued over the first half of the year, despite solid growth in disposable income. There has been little growth in household net wealth given developments in the housing and equity markets, and measures of consumer confidence have fallen, with both domestic and international factors apparently weighing on households' perceptions of current and future conditions. With recent data pointing to an increase in housing and credit card repayments, the household saving ratio is assumed to increase a little over the second half of the year, implying that the profile for the saving ratio over the forecast period is higher than in May. However, with the mediumterm outlook for the economy remaining positive, consumption growth is expected to strengthen gradually over the forecast period, although it will remain below the strong rate seen in the decade to the mid 2000s.

The outlook for investment in the mining sector remains very strong, with prices received for the bulk commodities remaining at high levels and further announcements that mining projects in the pipeline have been approved. Overall, mining investment is expected to rise from around 4 per cent of GDP in 2009/10 to more than 6 per cent in 2012/13. Outside of the mining sector, business surveys suggest that, in aggregate, conditions are around long-run average levels while measures of confidence have recently fallen to below-average levels. However, this masks considerable divergence across industries. Conditions in the retail sector remain very weak due to subdued consumer spending, and parts of the construction industry not exposed to the mining boom are feeling the effects of weak residential and non-residential building as well as the fading of the fiscal stimulus. Liaison suggests that conditions in the trade-exposed parts of the manufacturing sector and tourism are also relatively soft. In contrast, conditions are stronger in many services industries, such as professional & administrative services, healthcare and education, consistent with employment growth in those areas. Overall, the forecast is for growth in non-mining investment to remain weak in the near term, but gradually pick up later in the forecast period.

Resource exports are expected to grow strongly over the next couple of years, as significant new capacity comes on line. Assuming no additional problems with weather, there will also be a boost in the near term as Queensland coal exports continue to recover. However, the high level of the exchange rate is having a dampening effect on many nonresource exports, with growth in these categories expected to be subdued. In contrast, imports growth is expected to be very strong, reflecting the large pipeline of mining investment and the appreciation of the exchange rate. Recent information from liaison suggests that the imported component of some of the major mining projects underway is likely to be a little higher than previously expected; if so, there would be somewhat less pressure on resource utilisation in the domestic economy.

The downward revision to the forecasts for domestic demand and output implies that employment growth is likely to be somewhat slower than previously forecast. The forecasts also incorporate a continuation of the trend increase in participation rates (particularly among older workers). The unemployment rate is forecast to remain around current levels for some time and then decline a little near the end of the forecast period.

Inflation

The various measures of underlying inflation were in the 2½–2¾ per cent range over the year to the June quarter. The effects of the easing in domestic demand and in capacity pressures associated with the late 2008 slowdown and the subsequent slowing in wage growth appear to have mostly passed, and the inflation data for the first two quarters of 2011 suggest more upward pressure on prices than in 2010. While this is partly the result of the spike in the prices of a number of volatile items, it is also likely to reflect some combination of the pick-up in the international prices of traded goods, second-round effects from increases in prices of utilities and oil, and the effect of ongoing poor productivity outcomes on unit labour costs.

The forecasts for inflation incorporate the planned introduction of a price on carbon (at \$23 per tonne of carbon dioxide equivalent emissions) from July 2012.¹ The major effect of this policy would be

an increase in the price level in 2012. The Federal Treasury estimates that the CPI will be boosted by 0.7 per cent, with around half of this effect representing the direct effect of higher electricity and gas prices for households and the remainder representing indirect effects on a wide range of goods and services. While the carbon price would increase again in mid 2013 by 5 per cent, the effect on overall inflation would be small. The forecasts assume that the full effect from the initial introduction of the carbon price occurs over the second half of 2012, implying that year-ended CPI inflation would be around 0.7 percentage point higher than otherwise in the December guarter 2012 through to the June guarter 2013, and unaffected thereafter. The price effects will also be reflected to varying degrees in a temporary increase in measures of underlying inflation. As the Bank has noted previously, monetary policy will look through any once-off effects and focus on the outlook for inflation in the medium term.

Overall, the medium-term outlook for underlying inflation is similar to that in the May *Statement*. Ongoing subdued retail trading conditions and the exchange rate appreciation are likely to exert some dampening effect over the period ahead. Further out, these effects are likely to wane and inflationary pressures are expected to increase a little as capacity in the domestic economy tightens. Accordingly, underlying inflation is expected, on the basis of the assumptions made, to be around or slightly above the medium-term target band over the period ahead.

It is likely that there will be significant volatility in headline CPI inflation over the next few years. In the near term, several volatile items – fruit, vegetable and fuel prices – are continuing to have a large influence on the headline inflation profile, with year-ended CPI inflation likely to remain above the target band for the remainder of 2011, before falling sharply in early 2012. There would subsequently be a temporary effect from the introduction of the carbon price. As in the past, measures of underlying inflation will be much less affected by large movements in particular items in the CPI.

¹ The Bank has previously discussed the economic effects and monetary policy implications of carbon pricing in 'Box C: Climate Change Mitigation Policy and the Macroeconomy' in the February 2009 Statement.

Risks

As always, there are both upside and downside risks around the central outlook described above. In the international economy, the upside risks relate mostly to the ongoing accommodative macroeconomic policies in many emerging economies in Asia and elsewhere, implying that growth could be stronger than in the central forecast, with further pressure on commodity markets and on inflation rates globally. The downside risks relate to the fiscal problems in many advanced economies, and have become more prominent over the past three months. Overall it seems easier to envisage significantly worse outcomes for global growth than it is for significantly stronger outcomes. The domestic risks, however, appear more balanced.

The central outlook incorporates an orderly resolution of the fiscal problems that a number of advanced economies are facing. However, for Greece, and some other euro area countries, it remains to be seen if the debt dynamics are stable. And in the case of the United States, there are still many hard decisions to be made following the debt ceiling agreement, for fiscal sustainability in the long run to be ensured.

Accordingly, there remains a probability that the fiscal problems in some advanced economies could play out in a disruptive way over the next year or so, which would have flow-on effects to global financial markets and economic activity. This remains a key downside risk to the forecasts. In the case of the problems in the euro area, the economic effects would be largest in Europe, where the banking sector has very significant exposures to the relevant countries, but these effects would spill over into other economies, particularly those where governments' financial positions are weak or where growth is heavily dependent on trade with Europe. One difference relative to the events following the collapse of Lehman Brothers in late 2008 is that markets for some time have been attaching a significant probability to further problems in Europe,

and sovereign debt exposures are better known, so banks, supervisors and markets should be more prepared. However, for most advanced economies there is very limited scope for easing of fiscal and monetary policy, given the low level of official interest rates and the stretched financial positions of many governments.

Outside these global risks, the risks stemming from domestic factors appear broadly balanced. As noted previously, there is some uncertainty over the pace of the expansion in the resources sector, which is expected to account for a significant share of the growth in the domestic economy. However, the main domestic uncertainty surrounding the forecasts concerns the behaviour of households. The central forecast assumes that the caution in the household sector continues for some time, with a modest increase in the saving ratio in the near term. However, it is certainly possible that there could be a more significant increase in the saving ratio, with households continuing to reduce debt or rebuild wealth. On the other hand, some of the factors affecting consumer confidence could abate and household spending could pick up pace faster than anticipated in the forecasts. These risks to demand mean that, other things equal, the path of inflation could be lower or higher than the central forecasts.

Another risk stems from the outlook for productivity. Growth in both labour and multifactor productivity over the past 5–10 years has been well below longerrun average rates and has contributed to the pick-up in the rate of growth of unit costs. Looking ahead, a risk is that continued weak productivity growth will put more upward pressure on costs and hence domestic inflation, possibly at a time when global inflation pressures are less benign than they have been over the past couple of years. On the other hand, a period of heightened structural adjustment could see productivity improve at a faster pace than has been the case in the recent past.